

## CONTENTS

### Drugs : Auṣadha Dravya (K-N)

1.	Kadalī कदली	3-11
2.	Kadamba कदम्ब	11-17
3.	Kājutaka काजूतक	17-20
4.	Kākādāni-śakralatā काकादनी-शक्रलता	20-23
5.	Kākamāci काकमाची	23-28
6.	Kākodumbara काकोदुम्बर	28-33
7.	Kalā-khākasi <sup>1</sup> (khūbakalān) कला-खाकसी (खूबकलाँ)	33-36
8.	Kālamegha कालमेघ	36-39
9.	Kalāya कलाय	39-43
10.	Kālinda कालिन्द	43-45
11.	Kamala कमल	45-54
12.	Kampillaka कम्पिल्लक	54-59
13.	Kāñcanāra काञ्चनार	59-67
14.	Kañcaṭa कञ्चट	67-69
15.	Kaṅkola कङ्कोल	69-73
16.	Kāṇḍīra काण्डीर	73-76
17.	Kaṅguka कङ्गुक	76-79
18.	Kaṅkuṣṭha कङ्कुष्ठ	79-82
19.	Kaṇṭakāri कण्टकारी	82-96
20.	Kaṇṭakī karañja कण्टकी करञ्ज	96-105
21.	Kāphīka (Kāphī) काफीक (काफी)	105-108
22.	Kapikacchu कपिकच्छु	108-115
23.	Kapittha कपित्थ	115-123
24.	Karamarda करमर्द	123-127
25.	Karañja करञ्ज	127-136
26.	Kāravellaka कारवेल्लक	136-141
27.	Karavīra करवीर	141-147
28.	Karcūra कर्चूर	147-151



**COLLECTION OF VARIOUS**  
→ HINDUISM SCRIPTURES  
→ HINDU COMICS  
→ AYURVEDA  
→ MAGZINES

**FIND ALL AT [HTTPS://DSC.GG/DHARMA](https://dsc.gg/dharma)**

Made with



By

Avinash/Shashi

Icreator of  
hinduism  
server!

29.	Karīra करीर	151-157
30.	Karkaṭaśringī कर्कटशृङ्गी	158-162
31.	Karkoṭaka कर्कोटक	162-165
32.	Vandhyākarkoṭakī वन्ध्याकर्कोटकी	165-167
33.	Karmaraṅga कर्मरङ्ग	168-170
34.	Kārpāśī कार्पासी	170-177
35.	Karpūra कर्पूर	177-184
36.	Kāsa कास	184-185
37.	Kāsamarda कासमर्द	187-192
38.	Kāsanī कासनी	192-194
39.	Kaśeruka कशेरुक	194-197
40.	Kāṣṭhadāru-Āsapallava काष्ठदारु-आसपल्लव	198-200
41.	Kāṣṭhalatā-kalambaka काष्ठलता-कलम्बक	200-201
42.	Kaṭāha कटाह	202-204
43.	Kataka कतक	205-207
44.	Kaṭphala कट्फल	208-212
45.	Kaṭukā कटुका	212-218
46.	Kaṭunāhi-Māmajjaka कटुनाही-मामज्जक	218-221
47.	Kaṭvaṅga-Aralu कट्वङ्ग-अरलु	221-225
48.	Kaṭuvīrā-Laṅkā कटुवीरा-लङ्का	225-229
49.	Kemuka-Keb(v)uka केमुक-केबु(वु)क	229-232
50.	Ketakī केतकी	232-237
51.	(A) Khadira खदिर	237-247
	(B) Kadara कदर	247-248
52.	Kharbūja खर्बूज	248-251
53.	Kharjūra खर्जूर	251-256
54.	Khatmī खत्मी	256-259
55.	Khubbīja (Khubbājī) खुब्बीज (खुब्बाजी)	259-261
56.	Kirātatikta किराततिक्त	261-266
57.	Kīṭamāri कीटमारी	266-268
58.	(A). Kīṭamāri yavāni (Chauhāra) कीटमारी यवानी (चौहार)	268-271
	(B). Kīṭamāri Yavānī- कीटमारी यवानी- Tiktapatrā (Afsantin) तिक्तपत्रा (अफसन्तीन)	271-274

## Section Second

## VII

59.	Kokilākṣa कोकिलाक्ष	274-278
60.	Kolakanda-Vanapalāñdu कोलकन्द-वनपलाण्डु	278-281
61.	Kośāmra कोशाम्र	281-285
62.	Kośātaki-Dhamargava कोशातकी-धामर्गव	285-288
63.	Kośātaki-Kṛtavedhana कोशातकी कृतवेधन	288-293
64.	Kṛṣṇa vетra कृष्णवेत्र	293-296
65.	Kṛṣṇabīja कृष्णबीज	296-298
66.	Kubjaka कुञ्जक	298-301
67.	Kukundara कुकुन्दर	301-306
68.	Kulattha कुलत्थ	306-312
69.	Kumārī कुमारी	312-320
70.	Kumbhīka कुम्भीक	320-323
71.	Kumuda कुमुद	323-328
72.	Kunkuma कुङ्कुम	328-336
73.	Kupīlu कुपीलु	336-341
74.	Kuśa कुश	342-347
75.	Kuṣṭha कुष्ठ	347-353
76.	Kūṣmāñḍa कूष्माण्ड	353-361
77.	Kusumbha कुसुम्भ	361-369
78.	Kuṭaja कुटज	369-380
79.	Kutiktā-kunayana कुतिक्ता-कुनयन	380-382
80.	Lajjālu लज्जालु	382-388
81.	Lākṣā लाक्षा	388-394
82.	Lakuca लकुच	394-398
83.	Lāṅgalī लाङ्गली	398-407
84.	Latākastūrikā लताकस्तूरिका	407-409
85.	Lavaṅga लवङ्ग	409-415
86.	Lodhra लोध्र	415-424
87.	Lonikā लोणिका	424-428
88.	Lohavāṇa (LOBĀN) लोहवाण (लोबान)	428-431
89.	Madanaphala मदनफल	431-436
90.	Madayantikā मदयन्तिका	436-440
91.	(A) Madhūka मधूक	440-448
	(B) Madhūkapuṣpi मधूकपुष्पी	448-451

92. Madhūlikā मधूलिका	451-456
93. Madhuyaṣṭi मधुयष्टि	456-468
94. Mahābalā महाबला	468-471
95. Makhānna मखान्न	471-474
96. Mālaṅga (Tūtamalaṅgā) मालंग (तूतमलंगा)	474-477
97. Malayavacā मलयवचा	477-480
98. Mallikā मल्लिका	480-485
99. Māṁsarohinī मांसरोहिणी	486-489
100. Mānakanda मानकन्द	489-492
101. Maṇḍapī मण्डपी	492-494
102. Maṇḍūkaparṇī मण्डूकपर्णी	495-500
103. Manjiṣṭhā मञ्जिष्ठा	500-505
104. Marica मरिच	505-515
105. Māriṣa मारिष	515-517
106. Mārkaṇḍikā मार्कण्डिका	517-525
107. Marubaka मरुबक	525-530
108. Māṣa माष	531-540
109. Māṣaparṇī माषपर्णी	540-544
110. Mastakī (Rūmimastagī) मस्तकी (रूमीमस्तगी)	544-547
111. Masūra मसूर	547-553
112. Matsyākṣaka मत्स्याक्षक	553-556
113. Māyāphala मायाफल	556-562
114. Mayūraśikhā मयूरशिखा	562-564
115. Medāsaka मेदासक	564-568
116. Meṣaśṛṅgī मेषशृङ्गी	568-573
117. Methikā मेथिका	574-579
118. Miśreyā मिश्रेया	580-584
119. Mokṣaka मोक्षक	584-589
120. Mucakunda मुचकुन्द	590-593
121. Mudga मुदग	593-599
122. Mudgaparṇī मुदगपर्णी	599-607
123. Mūlaka मूलक	607-616
124. Muṇḍī मुण्डी	616-623
125. Muñjātaka मुञ्जातक	623-628

## Section Second

**IX**

126. Mūrvā मूर्वा	628-632
127. Muśali मुशली	633-636
128. Mustaka मुस्तक	636-649
129. Nādīhīngu नाडीहिङ्गु	649-653
130. Nāgabalā नागबला	653-657
131. Nāgadamana नागदमन	657-659
132. Nāgakeśara नागकेशर	659-665
133. Nala नल	665-669
134. Nāraṅga नारङ्ग	669-673
135. Nārikela नारिकेल	673-681
136. Natapuṣpikā- Adhaḥpuṣpī नतपुष्पिका-अधःपुष्पी	681-683
137. Nilī नीली	684-689
138. Nimba निम्ब (A) Kaiḍarya कैडर्य (B) Mahānimba महानिम्ब	690-710 695-696 696-710
139. Nimbūka निम्बूक	710-715
140. Nirguṇḍī निर्गुण्डी	715-724
141. Niṣpāva निष्पाव	724-728



## APPENDIX

Therapeutic Indication of Drugs	729-754
Technical-Medical Terminology	755-769
Pharmacological Glossary	770-793
Pharmacological Action of Drugs	794-798
Drugs in Siddha Medicine Terms	799-807
BIBLIOGRAPHY	808-811
<b>INDEX</b>	
Classical Names	812-816
Botanical Names	817-824



# KADALĪ

## **Botanical name**

Musa paradisiaca Linn. Syn. Musa sapientum Linn.

**Family :** Musaceae

**Classical name :** Kadali

**Sanskrit names**

Kadali, Mocā, Rambhā, Anśumatī, Ambusāra, Vāraṇā, Phala, Mocāphala, Dīrghapatrikā, Palāśikā, Bṛhat-puspa, Muktasāra

**Regional names**

Kela (Hindi); Banana (Eng.)

**Description**

A genus of perennial tree like herb. Stem 2.5-3.5 meters. Leaves 1.2-1.5 meters, bright green above, paler beneath. Inflorescence about as long as the leaves. Bracts ovate, more or less pruinose, lower 15-20 cm.; petals oblong, about half as long. Fruit oblong, trigonous 5-7.5 cm. in the wild form and full of seeds, tapering to the base and apex.

Stoloniferous plant, 2.5-3.6 meters tall. Leaves large, oblong, erect or ascending. Spikes drooping about as long as the leaves. Bracts many flowered, deciduous. Flowers 60 x 7 mm. Fruits oblong, yellowish - green when ripe, sweet, edible. Seeds brownish - black (if present).

**Flowering and fruiting time**

Plant flowers during summers, April to June; and fruiting during rainy season.

**Distribution**

It is cultivated throughout India. Planted by suckers in fruit orchards, garden shrubberies near houses, house or bungalow gates and premises (rural and sub-urban) specially farm houses. Farming of Banana in different regions, especially in the plains, Coastal regions and other various areas in country.

**Kinds and Varieties**

There are three kinds of Kadali which are described

in classical texts of *materia medica* (nighaṇṭu) viz. Kāṣṭhakadalī, Girikadalī and Suvarṇakadalī. In another context, some classical varieties of Kadali are indicated such as Kṛṣṇakadalī, Sugandhā and Śailarambhā. Presently several varieties are cultivated, prouduced and marketed in differeng regions of country under crop farming.

### **Chemical Composition**

The ripe fruit is rich source of carbohydrates and a fair source of minerals and vitamins, particularly of the B group. The composition varies with type and also the stage of maturity.

Analysis of the flesh (of 59 types of the ripe banana (from Madras), having percentage of flesh in fruit 52.1-91.8, gave the following values : moisture 60.6-79.8, protein 0.4 - 1.7, reducing sugars 3.6-24.6, non-reducing sugars 0.0-14.6, other carbohydratis, fat etc. 0.1-16.4 and ash 0.7-1.6/.; calorific val. 67-137 cal. 100g.

### **Pharmacodynamics**

Rasa	: Madhura, Kaṣāya
Guṇa	: Guru, snigdha, śīta
Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Pittahara Kaphakara (Variations to stage/kinds/state of fruit and other, parts in particular).

### **Properties and Action**

Karma	: Vṛṣya - śūkrala Rucikara Saṅgrāhi Mānsakara Br̥hmaṇa Hṛdaya Tr̥ṣṇanigrahaṇa Viṣṭambhi Dāhapraśamana Tṛptikara
Roga	: Kṣata Kṣaya Dāha

Sidhmakuṣṭha  
Vraṇa  
Somaroga  
Pradara  
Śvāsa  
Prameha  
Kṣudhā  
Netrāroga  
Dourbalya  
Atisāra-raktatisāra  
Jvara  
Rakta-pitta  
Kariṇaroga  
Grahaṇī.

**Therapeutic uses**

Externally, some parts of the drug plant are used in various diseases. The nature and clean leaves of Kadalī are externally applied to remove the hidden pus from wounds. In ear diseases, the tepid juice of Kadali is used for filling ear or as ear drops.

The leaves of Kadalī (*Musa paradisiaca* Linn.) are employed in some specific pharmaceutical process of drug formulation preparations; based on classical method; for the instance parpaṭī kalpanā, particularly Pancamṛta Parpaṭī. Thus, the leaves and juice of stem (patra and kāṇḍa swarasa) are used as an ingredient as well as adjutant or upakaraṇa (or sambhāra) item in Rasaśāstra and Bhaiṣajya kalpanā of Ayurveda.

Internally, various parts and commonly the fruits of plant drug are used in several diseases; and the ripe fruits are very popular edible fruit and the unripe fruits are used for cooking vegetable (phala śāka) and also preparing certain food items or dietary dishes. Stems and flowers are also eaten after cooking.

Unripe fruits of Kadli are steamed a little and made into bread which is taken with curd devoid of fatty layer for overcome Grahaṇī roga (intestinal disorder under type of chronic diarrhoea) and in diarrhoea, the fruits (ripe) are

considered among wholesome diet. In bronchial asthma, fruit of Kadali boiled in cows urine or fried (or roasted) on charcol, is orally given in excessive discharge of menstrual blood.

In juice of Kadali, Lesser cardamom (Elā) is mixed with honey and given in dysuria. In treatment of all kinds of udar roga (abdominal disorders) Kadali is indicated; kṣara (alkali) extracted from ash of banana tree leaves (Kadali patra) is mixed with flour and made into a paste; this preparation is taken orally for three days (minimum and also more days as needed) for checking udar rogas. In intestinal worms, the root of Kadali cooked with ghee and jaggery is internally taken, and it is also given in toothache, abdominal colic and pain in flanks.

In some roga (watery vaginal discharge in females with other symptoms), ripe fruit of banana (pakva kadali phala) is frequently recommended. Ripe fruit duly, mixed with juice of Āmalaki, honey and sugar, is orally given. There are also other recipes of banana fruits which are suggested to be taken by women patients suffering with some roga. Similarly Kadali fruits mixed with ghee is internally prescribed in meno-metrorrhagia (pradara roga) which is characterized by excessive discharge of menstrual blood.

In the ancient texts of Indigenous medicine; the medicinal as well as dietetic utility of different parts of Kadali and stages of fruit of Kadali, medicinal properties of (unripe) apakva, ardhapakva (semi-ripe) and pakva (ripe) are specified. Simultaneously the medicinal utility of Kadali kanda (root), Kādali kāṇḍa (stem or trunk), Kadali parṇa or patra (leaves), Kadali puṣpa (flowers) Kadali toyam (watery fluid) and Kadali puṣpa śaka (flowers vegetable) are mentioned.

### **Parts used**

Fruit (phala), flowers, leaves (puṣpa), stem (Kāṇḍa-stambha), root, (mūla), watery fluid or juice (rambhā toyarasa) Expressed juice (svarasa), Alkali (Kṣāra)

**Dose :** Juice 10-20 ml.

**Formulation :** Kadali kṣārā.

## KADALI ( कदली )

- क. कदली वारणा मोचाऽम्बुसारांशुमती फला ।  
 ख. मोचाफलं स्वादु शीतं विष्टम्भ कफकृत् गुरु ॥  
 स्त्रिगंधं पित्तास्त्रुङ्दाहक्षतक्षयसमीरजित् ।  
*Bhāvaprakāśa Nighaṇṭu, Āmrādiphala Varga, 33-34*

### पक्वफलम्

पक्वं स्वादु हिमं पाके स्वादु वृष्यञ्च वृंहणम् ।  
 क्षुत्रृष्णानेत्रगदहन्मेहन्मं रुचिमांसकृत् ॥

*Bhāvaprakāśa Nighaṇṭu, Āmrādiphala Varga, 34*

### कदलीभेदान् गुणनिर्देशपूर्वकम्—

माणिक्यमर्त्यमृतचम्पकाद्या भेदाः कदल्याः बहवोऽपि सन्ति ।  
 उक्तः गुणास्तेष्वधिका भवन्ति निर्दोषतः स्याकलधुता च तेषाम् ॥

*Bhāvaprakāśa Nighaṇṭu, Āmrādiphala Varga, 35*

### मोचा कदली ( वृक्ष )- शिलीन्धकम् ( पुष्प )

कालीरसा हस्तिवुसा रम्भा वीरांशुमतफला ।  
 चर्मण्वती कानुफला मोचा हस्तिविषाणिका ॥  
 बृहत्पुष्पा मुक्तसारा ग्रन्थिनी सुकुमारिका ।  
 काष्ठालिका हस्तिविषा कदली दीर्घपत्रिका ॥  
 पलाशिका मृत्युपुष्पा तस्याः पुष्पं शिलीन्धकम् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 280-282.*

### कदलीकाण्डस्य गुणाः

मोचा गुर्वी हिमा स्त्रिधा स्वाद्वी पित्तास्त्रनाशिनी ॥  
 योनिदोषहरास्त्रन्मी तत्काण्डं गुरु शीतलम् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 282-283.*

### कदलीकन्दः

बल्यः कदल्याः कन्दः स्यात् कफफित्तहरो गुरुः ॥  
 वातलो रक्तशमनः कषायो रुक्षशीतलः ।  
 कर्णशूलं रजोदोषं सोमरोगं नियच्छति ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, -283-284.*

### कदलीतोयम्

रम्भातोयं शिरोमज्जा मधुरो रसपाकयोः।  
वातपित्तास्त्रशमनः शुक्रशूष्मविवर्धनः॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 285.*

### कदलीकुसुमम्

कदलीकुसुमं तिक्तं कषायं ग्राहि दीपनम्।  
उष्णवीर्यं बलासन्नं तादृशास्तत् सटादयः॥

### कदल्यामफलम्

तृडरक्पित्ताक्षिगदप्रमेहान् फलं कदल्यास्तरुणं निहन्ति।  
साडग्राहिकं तिक्तकषायरूक्षं रक्तातिसारं शमयेज्जरञ्च॥

### कदल्यार्धपक्वं ( मध्यम ) फलम्

ईषत् कषायमधुरं मध्यमं कदलीफलम्।  
गुर्वग्निसादकृत् त्वक् तु कटुतिकरसा लघुः॥

### कदलीपक्वफलम्

मोचं पक्वं स्वादु पाके सकषायं हिमं गुरु।  
मांसलं श्रेष्ठम् रुच्यं वृष्यं विष्टम्भि वृंहणम्॥  
स्त्रिग्धं क्षतक्षयक्षुत्तरुडवातपित्तास्त्रदाहजित्।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, -287-290.*

### कृष्णकदलीफलम्

कृष्णरम्भाफलं रुच्यं कषायं मधुरं तथा।  
मेहं पित्तं तृष्णां हन्ति वातलं वृंहणं लघु॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga,, 290.*

### कदलीभेदाः

सुगन्धा कृष्णरम्भा च शैलरम्भा यथोत्तरम्।  
निन्दिताः फलमासां तु कषायं मधुरं गुरु॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga.,, 291.*

### कदलीपुष्पगुणाः ( पुष्पशाकम् )

कदल्याः कुसुमं स्त्रिग्धं मधुरं तुवरं गुरु।  
वातपित्तहरं शीतं रक्तपित्तक्षयप्रणुत्॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga, 49.*

### कदली भेदाः

क. काष्ठकदली

काष्टकदली सुकाष्ठा वनकदली काष्ठिका शिलारम्भा ।  
दारुकदली फलाढ्या वनमोचा चाश्मकदली च ॥

**गुणः**

स्यात्काष्टकदली रुच्या रक्तपित्तहरा हिमा ।  
गुरुर्मन्दाग्रिजननी दुर्जरा मधुरा परा ॥

**क. गिरिकदली**

गिरिकदली गिरिरम्भा पर्वतमोचाऽप्यरबहुबीजा  
वनरम्भा गिरिजा गजवल्लभाऽमिहिता ॥

**गुणः**

गिरिकदली मधुरहिमा बलवीर्यविवृद्धिदायिनी रुच्या ।  
तृट्पित्तदाहशोथप्रशमनकर्त्री च दुर्जरा च गुरुः ॥

**ग. सुवर्णकदली**

अन्या सुवर्णकदली सुवर्णरम्भा च कनकरम्भा च ।  
पीता सुवर्णमोचा चम्पकरम्भा सुरम्भिका सुभगा ॥  
हेमफला स्वर्णकला कनकस्तम्भा च पीतरम्भा च ।  
गौरा च गौररम्भा काञ्छनकदली सुरप्रिया षड्भूः ॥

**गुणः**

सुवर्णमोचा मधुरा हिमा च स्वल्पाशने दीपकारिणी च ।  
तृष्णापहा दाहविमोचनी च कफावहा वृष्ट्यकरी गुरुश्च ॥

*Rāja Nighantu, Āmrādi Varga, 40-46*

**अ. कदली**

कदली सुफला रम्भा सुकुमारा सकृत्कला ।  
मोचा गुच्छफला हस्ति-विषाणी गुच्छदन्तिका ॥  
काष्ठीरसा च निःसारा राजेष्टा बालकप्रिया ।  
उरुस्तम्भा भानुफला वनलक्ष्मीश्च षोडशः ॥

**ब. बालफलम्**

बालफलं मधुरमल्पतया कषायं  
पित्तापहं शिशिररुच्यमथापि नालम् ।

**पुष्टं कन्दपर्णञ्च**

पुष्टं तदप्यनुगुणं क्रिमिहारि कन्दं

पर्णञ्च शूलशमनं कदलीभवं स्यात् ॥

*Rāja Nighaṇṭu, Āmrādi Varga, 36-38*

### पक्षरम्भाकदलीफलम्

रम्भापक्षफलं कषायमधुरं बल्यञ्च शीतं तथा  
पितं चास्वविर्मदनं गुरुतरं पथ्यं न मन्दानले ।  
सद्यः शुक्रविवृद्धिदं क्लमहरं तृष्णापहं कान्तिदं  
दीसाग्रो सुखदं कफामयकरं सन्तर्पणं डुर्जरम् ॥

*Rāja Nighaṇṭu, Āmrādi Varga, 39*

‘कदल्याः कुसुमं स्निग्धं मधुरं तुवरं गुरु ।  
वातपित्तहरं शीतं रक्तपित्तक्षयप्रणुत् ॥’

*Bhāvaaprakāśa*

‘सपक्षं पनसं मोचं राजादनफलानि च ।  
स्वादूनि सकषायाणि स्निग्धानि च गुरुणि च ॥  
कषायविशदत्वाच्च सौगन्ध्याच्च रुचिप्रदम् ।’

*Cakradatta*

### सोमरोगे कदलीफलम्

कदलीनां फलं पक्षं धात्रीफलरसं मधु ।  
शर्करासहितं खादेत्सोमधारणमुत्तमम् ॥

*Bhāvaaprakāśa, Somarogādhikāra, 69-70.*

### दाहशान्त्यर्थं कदलीदलशस्या

चन्दनाम्बुजकणास्यन्दि-तालवृन्तोपवीजितः ।  
सुप्यादाहार्दितोऽम्भोज-कदलीदलसंस्तरे ॥

*Cakradatta, Dāha cikitsā, 19-4.*

### कर्णरोगे

‘कदल्याः स्वारसः श्रेष्ठः कटूष्णः कर्णपूरणे ।’

*Suśruta Saṃhitā, Uttara, 21-27.*

### ग्रहण्याम्

उत्त्वेद्य किमपि कदलीफलानि सन्नीय कल्पिता पोली ।  
सन्तानिका विरहिणा दध्ना सह सेविता जयेद् ग्रहणीम् ॥

*Siddha Bhaisajya Maṇimāla,*

### ब्रणे

‘परिणतपरिशुद्धं पत्रसंइपं कदल्याः

प्रहरति परिकोषोदभूतपूयं व्रणापहम् ।'

*Vaidya Manoramā, 16-105.*

मूत्रकच्छे

‘पिबेत् त्रुटिं क्षौद्रयुतां कदल्याः रसेन कैडर्यरसेन वापि ।’

*Caraka Samhitā, Cikitsa. 26-55.*

उदररोगे

विस्त्राव्य रम्भादलभस्ममध्यात् तोयं ततस्तेन कृता विलेपी ।

स्याद् भक्षिता सत्युदरामयानां नाशाय नूनं दिवसत्रयेण ॥

*Gadanigraha, 2-32-139.*

सिध्मकष्टे

‘क्षारेण वा कदल्याः रजनीमिश्रेण नाशयति ।’

*Gadanigraha, 2-36-125.*

श्वासे

रम्भाकुन्दशिरीषाणां कुसुमं पिप्पलीयुतम् ।

षिष्ठवा तण्डुलतोयेन पीत्वा श्वासमपोहति ॥

*Bhāvaprakāśa, Cikitsā. 14-37.*

श्वासायासविनाशार्थमाशयेत् कदलीफलम् ।

श्रुतं मूत्रेऽथवा भृष्टमथवाऽङ्गरपाचितम् ॥

*Vaidya Manoramā, 3-17.*

प्रदरे

‘योषिद्रजस्य नितरां समभिप्रवृत्तौ सर्पियुतानि

यदि              वा              कदलीफलानि ।’

*Rāja Martanda, 31-3.*

*Gada Nigraha, 6-1-50.*

## KADAMBA

### Botanical name

*Anthocephalus chinensis* (Lamk.) A. Rich.

*Anthocephalus indicus* Miq. Syn. *Anthocephalus cadamba* (Roxb.) Miq.

**Family :** Rubiaceae

**Classical name :** Kadamba

**Common name :** Kadamb, Kadam

**Sanskrit names**

Kadamba, Priyaka, Nīpa, Vṛttapuspa, Halipriya, Alipriya, Girikadambaka, Vṛttavihāraka, Prāvṛṣenya, Kutsitāmbha, Kādambari, Pulakī, Parvatāhva.

**Regional names**

Kadamb, Kadam (Hindi); Kadamgachh (Bengla); Rajakadamba (Marathi); Kadamba (Gujarati).

**Description*****Anthocephalus chinensis* (Lamk.) A. Rich.**

Large deciduous trees, up to 10 meters high. Leaves 12-25x5-10 cm. ovate or elliptic-oblong, coriaceous, acute, pubescent beneath, subcordate at base, stipules, caducous, lanceolate. Inflorescence a solitary terminal head.

Flowers small, pentamerous, orange, united, by the confluent calyx tube. Calyx segments oblanceolate. Corolla funnel-shaped on 7 mm. long. Stamens 5. Ovary 4 celled above, 2-celled below; stigma white. Pseudocarp large, fleshy, ca. 5-6cm diam., Seeds minute, angular.

***Mitragyna parviflora* (Roxb.) Korth. syns. *Nauclea parviflora* Roxb., *Stepheyne parviflora* Korth.**

Large branched trees up to 18 meters high. Leaves broadly ovate or sub-orbicular 5-9 cm. long, acute or obtuse, glabrous; stipules oblong, deciduous. Flowers heads globose, usually solitary, creamy- white, ca 2cm. across, shortly peduncled. Capsules in globose heads, black, persistent. Flowering in August and fruiting in September-January.

**Flowering and fruiting time**

Spring, summer and rainy seasons. Flowering May-July and fruiting persisting till next year.

**Distribution**

Plant is occurring from Himalayan terai and Nepal to Burma, and it is found in Mysore (Karnataka) and Western ghats. It is grown in Assam and Andamans islands.

**Kinds and Varieties**

There are three main kinds of Kadamba in classical texts (nighaṇṭus)viz. Dharakadama Dhulikadamba and Bhūmikadamba.

### **Chemical Composition**

Bark of Kadamba (***Anthocephalus indicus* Miq.**) an active principle resembling cinchotannic acid, and other alkaloids, steroids and reducing sugars.

### **Pharmacodynamics**

Rasa	:	Tikta, Kaśāya
Guṇa	:	Rūkṣa
Viryā	:	Śīta
Vipāka	:	Kaṭu
Doṣakrma	:	Tridoṣośāmaka

### **Properties and Action**

<b>Karma</b>	:	Vedānasthāpana Śothahara, Vraṇaśodhana-Vraṇaropanya, Dīpana-pācana, Grāhī, Trṣṇānigrahaṇa-Chardinigrahaṇa, Viṣṭambhi (Viṣṭambahakara-janana) Raktastambhana-śothahara, Kāsahara, Mūtrajanana-Mūtravirecjaniya, Aśmariśarkarā nāśana Śukraśodhana, Stanyaśodhana, Yonidoṣahara, Varṇya, Āmapācana-jvaraghna, Dāhapraśamana, Viṣaghna.
<b>Roga</b>	:	Vraṇa-vraṇaśotha-vedanā Netrābhiṣyanda, Mukharoga, Vedanā, Atisāra-Grahanī Jvarajanya pipāsā Raktatisāra Raktapitta Śotha, Kāsa

Aśmarī-śarkarā  
 Mūtrakṛchra  
 Śukrameha  
 Yonivyāpada,  
 Pradara,  
 Stanyakṣaya,  
 Kṣudraroga-vyaṅga-nyaccha  
 Jvara-jvaradāha,  
 Dourbalya-viṣa.

### **Therapeutic uses**

Externally the plant's parts are used in different ailments. The mature and clean leaves of Kadamba are warmed and put on local inflammation and painful organ. Leaves of Kadamba (Kadamba patra) are also used to cover wounds.

The bark of plant drug Kadamba is pasted around the eyes in conjunctivitis. Decoction of leaves of Kadamba is used as Vraṇas'odhana for washing ulcers and in stomatitis as mouth wash internally (mukhagaṇḍūṣa).

The decoction of bark is given in diarrhoea with blood or without blood. Root of Kadamba is suggested to use with warm water to alleviate the ailments of gravels and gravels.

In infestation of worms (Krimi), the cakes prepared with the leaves of Kadamba (Anthocephalus cadamba), Bhṛṅgarāja (Eclipta alba)and Nirguṇḍi (Vitex negundo). In discolouration of urine and dysuria (mūtravaivarna and mūtrakṛcchra). Powder or juice of bark of the drug Kadamba mixed with jīraka and sugar powder is orally given for checking vomiting. Juice of fruits is given to allay over thirst. Decoction of bark is used in calculus (as'marī). Leaves juice or decoction in leucorrhoea (pradara). In spermatorrhoea and vaginal complaints, the bark of kadamba is considered to be useful. As an antipyretic, the bark or powder of Kadamba is used to allay burning sensation and fever. Bark and leaves are useful in intrinsic haemorrhage (raktapitta) and oedema (śotha).

**Parts used :** Bark, leaves, fruits, root.

**Dose**

Decoction 50-100 ml., Bark Powder 3-6 gms., Fruit juice 3-6 gms.

**Guṇa**

Vedanāsthāpana, Śukraśodhana, Vamanopaga (Caraka Saṃhitā), Nyagrodhādi Rodhrādi, (Suśrut Saṃhita).

**KADAMBA ( कदम्ब )**

- क.** कदम्बः प्रियको नीपो वृत्तपुष्पो हलिप्रियः ।
- ख.** कदम्बो मधुरः शीतः कषायो लवणो गुरुः ।  
सरो विष्टम्भकृदूक्षः कफस्तन्यानिलप्रदः ॥

*Bhāvaprakāśa Nighaṇṭu, Puṣpa Varga, 36.*

**नीप-राजकदम्बः**

- अ.** सुगन्धिपुष्पः स्वादुम्लः पक्षसस्यो महोन्नतिः ॥  
मधूकपत्रसदृशपत्रो राजकदम्बकः ।

**राजकदम्बफलम्**

- ब.** फलं राजकदम्बं स्यान्नीपं राजकदम्बकम् ।
- स.** नीपं स्वादु कषायाम्लं गरदोषहरं परम् ।
- द.** तत्फलं मधुरं शीतं गुरु पित्तास्त्रवातजित् ॥

**कदम्बः**

- क.** कदम्बको वृत्तपुष्पः पुलकी पर्वताह्ययः ॥  
कादम्बर्यः कुत्सिताम्प्तो परो नृत्तविहारकः ।  
अलिप्रियः प्रावृषेण्यो नीपो गिरिकदम्बकः ॥
- ख.** कदम्ब शिशिरो ग्राही कषायो लवणो गुरुः ।  
निहन्ति योनिदोषास्त्रकृच्छ्र दाह विष व्रणान् ॥

**कदम्बपत्रम्**

- ग.** शीतवीर्यं तत्प्रवालं कषायं दीपनं लघु ।  
रक्तपित्तातिसारघ्नमरोचकविनाशनम् ॥

**कदम्बफलम्**

- घ.** अम्लं तस्य फलं रुच्यं वीर्योण्णं श्रेष्ठम्लं गुरु ।

पक्कं वातहरं साम्लं कफपित्तप्रकोपनम् ॥

*Kaiyadeva nighaṇṭu, Osadhi Varga, 955-959.*

त्रिकदम्बगुणः

त्रिकदम्बाः कटुर्वण्या विषशोफहरा हिमाः ।

कषाया: पित्तलास्तिक्ता वीर्यवृद्धिकरा: परा: ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 102.*

क. धाराकदम्बः

धाराकदम्बः प्रावृष्यः पुलकी भृङ्गवल्लभः।

मेघागमप्रियो नीपः प्रावृषेण्यः कदम्बकः ॥

ख. धूलीकदम्बः

धूलीकदम्बः क्रमुकप्रसूनः परागपुष्पो बलभद्रसंज्ञकः ।

वसन्तपुष्पो मकरन्दवासो भृङ्गप्रियो रेणुकदम्बकोऽष्टौ ॥

ग. भूमीकदम्बः

ग. भूमीकदम्बो भूनिम्बो भूमिजो भृङ्गवल्लभः।

लघुपृष्ठो वृत्तपृष्ठो विषद्धो ब्रणहारकः ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 99-101.*

## विकाराणं कदम्बप्रयोगः

क्रिमिरोगे

‘नीपमार्कवनिर्गुण्डीपल्लवेष्वप्ययं विधि: ।’

*Aṣṭāṅga Hṛdaya, cikitsā. 20-30.*

रक्तातिसारे

‘.....पिबेद् रक्तातीसारवान् ।

शुष्ठीकदम्बत्वकृक्षाथं पिबेद् रात्रौ दिनत्रयम् ॥

*Vaidya Manoramā*, 6-8.

३४

कदम्बार्जुननिम्बानां पाटल्याः पिप्पलस्य च ।

व्रणप्रच्छादने विद्वान् पत्राण्यर्कस्य चादिशेत् ॥

*Caraka Samhitā, Cikitsā. 25-95*

मूत्रवैवरण्ये मूत्रकृच्छे च

**विदारीभिः कदम्बैर्वा.....श्रुतम् ।**

घृतं पयश मूत्रस्य वैवर्ण्ये कृच्छ्रनिर्गमे ॥

*Caraka Samhitā, Cikitsā. 18-154.*

अश्मरीशर्करासु

अजमोदा कदम्बस्य मूलं बिल्वस्य चौषधम् ।

पीतानि शर्करा सिन्धुः सुखोष्ठोनोदकेन वा ॥

*Aṣṭāṅga hrdaya, Cikitsā. 11-29.*

## KĀJŪTAKA

**Botanical name :** *Anacardium occidentale* Linn.

**Family :** Anacardiaceae

**Classical names :** Kājūtaka

**Sanskrit names**

Kājūtaka, Gucchapuṣpa, Sītaphala, Aruṣkara,  
Vṛttapatra, Pārvatī, Kājūta, Pr̥thagbīja, Snigdhaphala

**Regional names**

Kaju (Hindi, Mar., Guj.); Kajukuli (Mevarh);  
Kajugurhi (Marwarh); Hijali Badam (Beng.); Badame  
phirangi (Pers.); Cashew-nut (Kernel). Cashew-nut tree  
(tree).

**Description**

Evergreen trees, up to 10 meters high; bark grey.  
Leaves  $3.5-12 \times 3-7.5$  cm., obovate-ob lanceolate, margin  
entire, apex rounded or emarginate, base attenuate; peti-  
ole 1-2 cm. long.

Flowers white or pale pink in terminal, up to 25cm.  
long, pubescent panicles. Sepals 3-4 mm. long, ovate-lan-  
ceolate. Petals 6.5-10 mm. long, linear-lanceolae, apex  
acute, deflexed. Stamens 9-10, one longer and always fer-  
tile, the rest often sterile. Ovary 2-3 mm. long, style lateral,  
stigma minute, ovule-solitary.

Drupes 2-3 cm. long, hypocarp 2.5 - 6 cm. long, yel-  
lowish-orange. Generally tree begins to produce fruit  
(drupe) after 3 years and in full swing at age of 10 years.

**Flowering and fruiting time**

Plant begins flowering in November-December and

fruiting in springs and onwards Fruits ripen by April-May. Generally the flowering and fruiting stages during the period from September to June. Fruits are collected during summer (May) season.

### Distribution

Plant is native of America (Mexico, Peru and Brazile). Introduced in India by Portugese. Presently it is planted frequently in Southern India specially western coastal regions Maharashtra, Mysore, Travencore-Cochine, Goa, Tamilanadu and other adjacent regions. Cultivated in Orissa, Madhya Pradesh, West Bengal and other states in India.

### Chemical Composition

Cashew-nut kernel contains protein 21.2% fatty portion 46.9%, carbohydrates 22.3% and minerals 2.4% (calcium, potassium, iron etc.). Kernel yields 40-50% fixed oil which contains obic acid 73%, linobic acid, stearic acid, palmitic acid glycerides. Pericarp of fruit (drupe) contains black vesicant oil (juice counter-irritant) containing chiefly anacardiac acid and cardol Cashew potency of tar is obtained Kernal remains for about two years but it is for longer period in case of oil. Tree trunk of Cashew-nut produces a gum also.

### Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Laghu, Snigdha
Viryā	: Uṣṇa
Vipāka	: Madhura
Dosakarma	: Vātakapha śamaka.

### Properties and Action

Karma	: Br̥nhāṇa - balya - dhātuvyādhikara Kṛmighna Vranaropāṇa Dīpana Kuṣṭhaghna Arśoghna Jvraghna Vedanāsthāpana
-------	---

	Raktaśodhaka
	Nāḍibalya-mastiṣkabalya
	Snehana
	Vṛṣya-vājīkarana
	Keśya
	Mūtrala
	Vescicant-counter irritant
<b>Roga</b>	: Dhātukṣaya-Dourbalya
	Kṛmi
	Vraṇa
	Agnimāndya-anāha
	Saṅgrahaṇī
	Arśa
	Kuṣṭha-śvetakuṣṭha
	Gulma-udararoga
	Nāḍidourbalya-mastiṣkadourbalya.

### **Therapeutic action**

The drug Kājūtaka is anabolic, anthelmintic, febrifuge and carminative. It is used in abdominal diseases ascites, colitis, dyspepsia, piles, tympanitis, vitiligo, weakness and worms.

Kājūtaka is cashew-nut obtained from fruits (drupes) which are roasted and hard, bright and smooth pericarp is removed and a reddish-white thin covering (testa) is also cleared up. Thus kidney-shaped whitish cashew-nut (kernel) Known as Kājūta or Kājūtaka (market or trade name Kājū) is made available for use as a common dry fruit and useful medicinal fruit-drug.

In addition to fruit or drupaceous nut (kernel of kidney-shaped nut), the peduncle and thalamus are swollen and become fleshy; and they are also eaten in ripen stage and some kind of alcoholie drink is also prepared (bewerage). Actually the kidney-shaped nut is joined or connected with peduncle and thalamus and the swollen and fleshy portion is also known as 'Cashew apple' which becomes yellow or reddish in colour in ripen stage.

**Parts used :** Kernel, oil.

**Dose :** Kernel 6-12 gm., Oil 3-6 gm.

## KAJUTAKA ( काजूतक )

काजूतको वृत्तपत्रो गुच्छपुष्पश्च पार्वती ।  
स्त्रिगधशीतफलश्चैव पृथग्बीजो ह्यरुष्करः ॥

*Sivadatta.*

काजूतकस्तु तुवरो मधुरोष्णो लघुः स्मृतः ।  
धातुवृद्धिकरो वातकफगुल्मोदरज्वरान् ॥  
कृमिव्रणाग्निमांद्यानि कुष्ठं च श्वेतकुष्ठम् ।  
सङ्ग्रहण्यर्शमानाहान् नाशयेत् इति कीर्तिम् ॥

*Nighantu Ratnāakara*

## KĀKĀDANI (ŚAKRALATĀ)

**Botanical name :** *Cardiospermum halicacabum* Linn.

**Family :** Sapindaceae

**Classical name :** Kākādanī, Śakralatā

**Sanskrit names :** Kākādanī, Śakralatā

**Regional names**

Kanphuta, Kanphuti (Hindi).

**Description**

Climbing, annual (sometimes perennial) herbs, up to 3 meters long. Stem and branches furrowed. Leaves 5-6.5 cm. long; petioles 2-3.5 cm. long. Leaflets opposite, 4 - 4.5 x 1.25 cm., ovate or ovate-lanceolate, apex acute to acuminate, base rounded.

Flowers white, in 3-4 flowered axillary cymes. Sepals two outer ca 2 mm. long, orbicular, ciliate, two inner ones 3-4 mm. long, oblongovate, glabrous. Petals two upper ones with a crested, inflexed appendage. Stamens 8; filaments hairy; pistillode present in male. Ovary 2-2.5 mm. long, ovoid, hairy; style 3-fid, segments bearing inner stigmatic surfaces; staminodes 8 in. the female.

Capsules 1-1.5 x 2-3 cm.; trigonous, angles winged, pyriform; each locule 1-seeded; seeds black, 4-5 mm. in diam., aril white, 3-4 mm. long, cordate.

## **Flowering and fruiting time**

Almost throughout the year.

### **Distribution**

Plant is commonly climbing on bushes and hedgerows along road-sides, forest-clearings, grasslands and in dry deciduous forests, also common in cultivated fields. It is distributed in all hotter parts of India and in Sri Lanka. Plant is 4,000ft. ascending parts on the western Himalaya; also in most other hotter, tropical and subtropical countries.

### **Pharmacodynamics**

Rasa	: Tikta,
Guṇa	: Laghu, rūkṣa
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphahara- Tridoṣaghna.

### **Properties and Action**

<b>Karma</b>	: Viṣaghna Kāsaḥara Jvaraghna Sannipatodaraḥara.
<b>Roga</b>	: Viṣa-Sthāvara Vṛddhiroga Khālitya Pāṇḍu Kāmalā Udararoga-sannipātodara Sarpa-mūṣikaviṣa-jārigamaviṣa. Jvara-Kāsa.

### **Therapeutic uses**

The roots of plant drug are pounded with sour gruel and this mixture is recommended as intake or local application against snake-poison. In rat poisoning, ghee processed with juice of Kākādani (*Cardiospermum halicacabum* Linn.) and Kākamācī (*Solanum nigrum* Linn.) is given.

The drug is an ingredient of Laśunādi Kaṣāya, Daśasvaraśa ghṛta, Nilibhringādi taila and Āṭaloṭakādi Kaṣāya which are chiefly prescribed in scrotal enlargement

(vṛddhi), Anaemia (pāṇḍu) and Jaundice (Kāmalā) and cough with fever (sajvarakāsa) respectively.

Various parts of the plant are used medicinaly. Leaves are cooked and eaten as vegetable.

**Parts used :** Root, leaves.

**Dose :** Powder 1-3gm.

**foumulations**

Āṭalaṭakādi kaṣāya, Dośasvarasa ghṛta, Nīlibhṛṅgādi taila, Laśunādi Kaṣāya.

## KĀKĀDANI (ŚAKRALATĀ)

काकादनी (शक्रलता)

सर्पविषे

अपहरति गण्डलिविषं पानेनालेपनेन वा सद्यः ।

काकादन्याः मूलं काञ्जिकपरिपेषितं पुंसाम् ॥

*Rājamārtanda*, 29-7.

मूषिकविषे

‘काकादनीकाकमाच्योः स्वरसेष्वथवा कृतम् ।’

*Suśruta Saṃhitā, Kalpa*, 7-31

पाण्डुकामलारोगयोः

‘दशस्वरसघृते’

*Sahasrayogah*, p.312.

सञ्चरे कासे

आटलोटकादिकषाये ।

*Sahasrayogah*, p.7

सात्रिपातोदरे

दद्यादापृच्छ्य तज्जातीन् पातुं मद्येन कल्कितम् ।

मूलं काकादनीगुञ्जाकरवीरकसम्भवम् ॥

पानभोजनसंयुक्तं दद्याद् वा स्थावरं विषम् ॥

*Aṣṭāṅga Hṛdaya, Cikitsā*. 15-78.

खालित्ये

नीलीभृङ्गादितैले ।

*Sahasrayogah, p. 264.*

वृद्धौ

लशुनादिकषाये ।

## KĀKAMĀCĪ

**Botanical name :** Solanum nigrum Linn.

**Family :** Solanaceae

**Classical name :** Kākamācī

**Sanskrit names**

Kākamācī, Dhvankh(kṣa)amācī, Kakamātā, Jaghanaphalā, Sarvatiktā, Bahuphalā, Vāyasī, Kakini, Rasāyanavarā, Gudaphalā, Sundarī, Gucchaphalā, Varā

**Regional names**

Makoy, Makoi (Hindi); Gudkamai (Bengla); Maki (Punjabi); piludi (Guj.); Munnatakali (Tam.); Kacchipundu (Tel.); Inbussalub, Khvah turbuk (Arab.); Black nightshade (Eng.).

**Description**

Diffuse much branched herbs up to 1m. high. Leaves ovate to ovate-lanceolate, sinuate or lobed. Flowers in umbelliform, extra-oxillary cyme; peduncle 1-5 cm. long, appressed hairy. calyx lobes ovate-rounded, puberulous. Crolla pubescent outside only lobes subacute. Berries round, smooth up to 6mm. across. Seeds minutely pitted, yellow.

**Flowering and fruiting time**

Greater part of the year.

**Distribution**

Plant is very common in agricultural fields, gardens, waste places and shady localities throughout India ascending to 7,000 ft. elevation.

**Chemical Composition**

Leaves contain protein 5.9, fat 1, mineral 2.1, carbohydrate 8.9 percent; calcium 410, phosphorous 70, iron

20.5 mg. (per 100 gm.). rivoflavin 0.59, nicotinic acid 0.92, vitamin c 11 and p - carotene 0.74 mg. (per 100 gm.)

Raw green fruits four stiroidy glyco-alkaloid, solamargine, solasonine and solanigrine A and B. First two principles are also found in leaves of plant. Total alkaloid is 0.101 - 0.431 percent. Ripe fruits contain glucose and fructose (15-20%), vitamin c and p-carotene. Seeds yield a greenish yellow oil (15-20%).

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, Snigdha
Vīrya	: Anuṣṭa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaghna

### **Properties and Action**

<b>Karma</b>	: Śothahara Hṛdaya Rāktaśodhana Raktabhārahrāsaka Vraṇaśodhana Vedanāsthāpana Savarṇikaraṇa Dīpana Yakṛduṭtejaka-pittasāraka-recana Kaphagāna-kāsaghna Śvāsaḥara Hikkānigrahaṇa Mūtrala Svedajanana-Kuṣṭhaghna Viṣaghna Jvaraghna-kaṭupauṣṭika.
<b>Roga</b>	: Śotha Hṛdroga Kuṣṭha Vātarakta Āmavāta Raktavikāra Sandhivāta Vṛṣaṇaśotha

Yakṛcchotha  
 Udararoga  
 Karṇaśūla  
 Nāsāroga  
 Netraroga  
 Kuṣṭha-śvitra  
 Angimāndya-chardi  
 Yakṛdvikāra-Yakṛdvṛddhi  
 Plihā vikāra-plihāvṛddhi  
 Arṣa  
 Jirṇa pravāhikā  
 Kāsa-śvasa-hikkā-svarabhedā  
 Vṛkkaroga-Pūyameha-Mūtrakṛchra  
 Jirṇajvara  
 Daurbalya  
 Viṣa-ahiphenaviṣa  
 Kṣayaroga.

### **Therapeutic uses**

In urticaria (*sītapiṭṭha*-koṭha), Šunṭhī (Zingiber officinale) pounded with juice of Kākamācī (Solanum nigrum) is used for alleviating urticarial patches (Koṭha). Vegetable of herb (Kākamācī śāka) is cooked without salt in water and oil and it is given in cases of urustambha. In combination some other suitable vegetable like Vāstuka (Chenopodium album) and other bitter vegetables (tikaśāka) are also useful.

The drug Kākamācī is antiallergic, antidiabetic, aphrodisiac, astringent, cordiotonic, febrifuge, laxative, restorative and diuretic.

It is used in anasarca, eye diseases, fever, heart diseases, hiccup, piles, skin affections, urinary tract diseases vomiting, oedema, liver complaints and rheumatic disorders. It is also used in cough, spleenic disorders and other ailments and cirrhosis of liver.

Kākamācī is recommended as Rasāyāna drug. The decoction of drug with jaggery (guḍa) and Marica (Piper nigrum) and Pippalī (Piper longum) is prescribed for promoting strength. Similarly Ghee (Ghṛta) is cooked with juice of herb Kākamācī and it is orally given as Rasāyana

**Yoga.** In condition of rat-poisoning, Ghee cooked with juice of Kākamācī or Kākāmacī ghṛta is used for countering rat-bite poison (mūṣikaviṣa). The paste of whole plant of drug (Kākamācī lepa) is applied in disease of Kuṣṭha.

**Parts used :** Whole plant, fruit.

### Doses

Expressed juice 10-20ml.; fruit powder 1-3 gms.; Aqua 20-50 ml.

### Formulations (Yoga)

Kākamācī Arka (Arka Makoya).

## KĀKAMĀCĪ ( काकमाची )

- क. काकमाची ध्वाङ्गमाची काकाहा चैव वायसी।
- ख. काकमाची त्रिदोषघ्नी स्निग्धोष्णा स्वरशुक्रदा॥  
तिक्ता रसायनी शोथकुष्ठार्शोज्वरमेहजित्।  
कटुर्नेत्रहिता हिकाछर्दिहद्रोगनाशिनी॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 246-247.*

- अ. काकसाहा काकमाची कामाता जघनेफला॥  
सर्वतिक्ता बहुफला स्वादुपाकफला स्मृता।  
कामाची काकिनी ज्ञेया कुष्ठघ्नी वायसी तथा॥  
ध्वाइक्षमाली गुयफला रसायनवरा कटुः।
- ब. काकमाची कटुस्तिक्ता सोष्णा स्निग्धा रसायनी॥  
हृद्या वृष्ट्या सरा स्वर्या त्रिदोषघ्नी लघुर्जयेत्।  
कुष्ठशोफप्रमेहर्शः श्वासकासारुचिज्वरान् ॥  
कटुर्नेत्रहिता हिकाछर्दिहद्रोगनाशिनी।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 708-712.*

### काकमाची

काकमाची ध्वाङ्गमाची वायसाहा च वायसी।  
सर्वतिक्ता बहुफला कट्टफला च रसायनी॥  
गुच्छफला काकमाता स्वादुपाका च सुन्दरी।  
वरा चन्द्राविणी चैव मत्स्याक्षी कुष्ठनाशनी।  
तिक्तिका बहुतिक्ता च नाम्रामष्टादशः स्मृताः॥

### कामकाचीगुणा:

काकमाची कटुस्तिका रसोष्णाः कफनाशनी ।

शूलार्शःशोफदोषग्री कुष्टकण्डूतिहारिणी ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 133-135.*

### शिवत्रकष्टे वायस्यादिगुटिका

*Cakradatta, Kuṣṭha Cikitsā, 50-66.*

#### कोठे

‘स्वरसेन काकमाच्याः पिष्टा शुण्ठी जयेत् कोठान् ।’

*Vaidya Monoramā, 16-140.*

#### मूषिकविषे

‘काकादनीकाकमाच्योः स्वरसेष्वथवा कृतम् ।’

*Suśruta Saṃhitā, Kalpa. 7-31.*

#### शोथे

सुवर्चला गुञ्जनकं पटोलं सवायसीमूलकवेत्रनिष्पम् ।

शाकर्थिनां शाकमिति प्रशस्तं भोज्ये पुराणश्च यवः सप्तालिः ॥

*Caraka Saṃhitā, Cikitsā. 12-63.*

#### उरुस्तम्भे

शार्करलवणैर्दद्याज्जलतैलोपसाधितैः ।.....

वायसीवास्तुकैरन्यैस्तिकैश्च कुलकादिभिः ॥

*Caraka Saṃhitā, Cikitsā. 27-26/27.*

#### रसायने

गुडेन पिप्पलीभिर्वा मरिचेनान्वितशृता ।

काकमाची भवेद् बल्या तद्रसेन हविः शृतम् ॥

*Vaidya Manoramā, 4-3.*

#### गर्भनिष्क्रामणे

श्यामापरूषकफलिनीकाकमाची शिफाः पृथक् ।

पिष्टा नाभेरयोलिसः गर्भनिष्क्रामणप्रदाः ॥

*Vaidya Manoramā, 13-28.*

#### वातजकासे

वास्तुको वायसी शाकं..... ।

शस्यते वातकासे तु स्वाद्वम्ललवणानि च ।

*Caraka Saṃhitā, Cikitsā. 18-81/82.*

### नेत्ररोग-पिले

काकमाचीफलैकेन घृतयुक्तेन बुद्धिमान् ।  
धूपयेत् पिलरोगार्तं पतन्ति कृमयोऽचिरात् ॥

Vṛndamādhava, 61-243.  
Baṅgasena, Netraroga, 546 61-243.

### गर्भस्थापने

काकमाची शिफां पुष्ये कामं निष्पीड्य कन्यया ।  
रसं स्नाता पिबेन्नारी लभेद् गर्भमनुत्तमम् ॥

Vaidya Manoramā, 13-12.

### मूषिकविषे

‘काकादनीकाकमाच्योः स्वरसेष्वथवा कृतम् ।’  
Suśruta Saṃhitā, Kalpa. 7-31.

### कुषे

शैरीषत्वक्, पुष्यं कार्पास्या राजवृक्षपत्राणि ।  
पिष्टा च काकमाची चतुर्विधः कुषनुल्लेपः ॥

Caraka Saṃhitā, Sūtra. 3-17, Cikitsā 7-16.

## KĀKODUMBARA

**Botanical name :** Ficus hispida Linn.f.

**Family :** Urticaceae

**Classical name :** Kākodumbara-Kākodumbarikā

**Sanskrit Names**

Kākodumbara, Kākodumbarikā, Phalugu, Jaghanephala, Kāṣṭhodumbara, Śvitrabhaiṣajya, Malayu-Malapu, Mūlakarkati, Stambhavṛttikā, Kharapatrī, Rājika, Ajākṣī.

**Regional names**

Kathumar, Kathgular (Hindi); Gobla Raksa, Ghegsha, Gebha (U.P. hills), Kakadumbar (Bengla); Bhuidambar (Marathi); Bokhada (Maharashtra); Dedadavari (Gujarati); Kattu-athith (Tamil); Adavi-alhith (Telugu); Tin basin (Arabic); Ajirdasti (Persian).

**Description**

Shrub or medium-sized trees small pubescent trees; all parts more or less hispid pubescent; bark grey,

pulling off in irregular flakes. Leaves up to 20 x 10 cm. usually opposite, ovate-oblong or subovate, dentate-serrate, hispid-sabrid above, hispid-pubescent beneath; petiole densely hispid. Dirty grey Branch or young shoots hollow.

Receptacle hispid, turbinate, obovoid or subpyriform yellow at age. Male flowers many, near the apex of the receptacle mixed with galls; perianth 3, concave, hyaline, filaments short, Gall flowers without perianth. Female flowers in lower part of receptacle; perianth absent; ovary glabrous, smooth; style lateral; stigma cylindric tubular.

### **Flowering and fruiting time**

New leaves appear in spring season (February-March). on April to May or summar season—Flowering and fruiting or round the year.

### **Distribution**

Plant occurs throughout India and it is generally found in Punjab, Bengal, Madhya Pradesh, Rajasthan, Southern India, Uttar Pradesh (Doab) and other areas specially in shady places and along rivers and Nallas. Plant is occasionally planted in gardens. Generally the plant is found all over the country.

### **Chemical composition**

Bark contains tannin, glucoside, wax and saponin.

### **Pharmacodynamic**

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu, rūkṣa
Viṛya	: Sīta
Vipāka	: Kaṭu
Doṣakarma	: Vātapiṭṭa śāmaka

### **Properties and Action**

Karma	: Kuṣṭhaghna Vraṇaśodhana Sothahara Vāmaka Recaka Pittasāraka Raktaprasādana-soktastambhana
-------	---

**Roga**

- Stanyajanana
- Jvaraghna-niyatakālikajvara-
- pratibandhaka,
- Balya-vṛṣya-brīṁhaṇa
- Stanyajanana
- Viṣaghna,
- Kaṭupouṣṭika
- : Kuṣṭha-śvitra-kilāsa
- Carmavikāra
- Kṣudraroga-dadru
- Vraṇa
- Mukharoga-upakuṣa
- Gaṇḍamālā
- Udararoga-ānāha
- Arṣa
- Atisāra,
- Vātavyādhi-avabāhuka
- Pāṇḍu-Kāmalā
- Raktavikāra
- Raktapitta
- Śotha
- Sutikāroga-stanyakṣaya
- Pradara-asṛgdara
- Viṣamajvara
- Dourbalya
- Viṣa-alrkaviṣa.

### Therapeutic uses

The juice of the fruits of Kākodumbara (*Ficus hispida*) is mixed with honey and same mixture is orally given to females suffering with pradara (asṛgdara). Such patients using Kākodumbarika phalarasa yoga are also advised to consume diet of cereals with milk and sugar. In rabies (alarka viṣa), the root of plant drug Kākodumbara is mixed with seeds of Dhattūra (*Datura metel*) and rice water (taṇḍula toya) is orally given.

The root of drug Kākodumbara is pounded with rice-water (taṇḍulodaka) and given in condition of intrinsic haemorrhage (raktapitta) from mouth, in order to check vocal haemorrhage effectively.

The drug is anabolic, antihistaminic, antiseptic, aphrodisiac and astringent. It is used in anaemia, diarrhoea, dysentery, emaciation, jaundice, skin diseases, vitiligo and wounds.

It is a medicine of vitiligo as used in traditional practices. The young fruits are made into curries. The leaves are lopped for cattlefodder. The bark of young shoots gives a strong fibre considered good for rope.

**Parts used :** Root bark, fruit, latex.

**Does :** Bark powder 1-3 gms., Decoction 50-100 ml.

## KĀKODUMBARA-KĀKODUMBARIKĀ ( काकोदुम्बर - काकोदुम्बरिका )

काकोदुम्बरिका फल्गुर्मलयूर्जघनेफला ।

मलयुः स्तम्भकृत्तिका शीतला तुवरा जयेत् ॥

कफपित्तव्रणश्वित्रकुष्ठपाण्डवर्शकामला ।

*Bhāvaprakāśa Nighaṇṭu, Vaṭādi Varga, 10.*

### काकोदुम्बरिका

क. कृष्णोदुम्बरिका चान्या खरपत्री च राजिका ।  
उदुम्बरी च कठिना कुष्ठघ्नी फल्गुवाटिका ॥  
अजाक्षी फल्गुनी चैव मलयूर्श्वित्रभेषजा ।  
काकोदुम्बरिका चैव ध्वाङ्क्षनान्त्री त्रयोदशः ॥

ख. काकोदुम्बरिका शीता पक्वा गौल्याऽम्लिका कटुः ।  
त्वग्दोषपित्तरक्तघ्नी तद्वत्कं चातिसारजित् ॥

*Rāja Nighaṇṭu, Āmrādiphala Varga, 132-134.*

### श्वित्रे

मथितेन पिबेच्छूर्णं काकोदुम्बर्यवल्गुजम् ।

शाइखेन्दुकन्दधवलं श्वित्रं संसेवितो हरेत् ॥

*Bhāvaprakāśa, Kuṣṭharogādhikāra, 54-155.*

### दन्तचिकित्सायां काकोदुम्बरिकापत्रे स्नावणम्

काकोदुम्बरीकागोजीपत्रैर्विस्तावयेदभिषक् ।

क्षौद्रयुक्तैश्च सङ्गृह्य कवलं तस्य प्रतिशोधयेत् ॥

*Cakradatta, Mukharoga cikitsā, 56-12.*

### प्रदररोगे काकोदुम्बरिकाफलरसः

क्षौद्रयुक्तं फलरसं काष्ठोदुम्बरजं पिबेत् ।

असृगदरविनाशाय सशर्करपयोऽन्नभुक् ॥

*Cakradatta, Asrigadara cikitsā, 9.*

### उपकृशे

(मुखरोगे)

*Vṛndamādhava, 63-9.*

‘काकोदुम्बरिकागोजीपत्रविस्रावयेदभिषक् ।’

*Vṛndamādhava, 58-98.*

### अपरायातने

चर्मपूतिकरञ्जस्य वायसीदुम्बरस्य वा ।

पिण्ठं तुषाम्बुना पीत मपरां पातयेत् क्षणात् ॥

*Vaidya Manoramā, 13-37.*

### अलर्कविषे

काकोदुम्बरिकामूलं धत्तूरकफलान्वितम् ।

पीतं तण्डुलतोयेन सारमेयविषापहम् ॥

*Rāja Mārtanda, 29-27.*

### रक्तपित्ते

काकोदुम्बरिकामूलं पिण्ठं तण्डुलवारिणा ।

पानान्निवारयत्याशु प्रवृत्तं वदनादस्कृ ॥

*Rāja Mārtanda, 5-3.*

### श्वित्रचिकित्सायां काकोदुम्बर (मलयूः) प्रयोगः:

भद्रासंज्ञोदुम्बरीमूलतुल्यं दत्वा मूलं क्षौदयित्वा मलय्वाः ।

सिद्धं तोयं पीतमुष्णे सुखोष्णं स्फोटज्ञित्रे पुण्डरीके च कुर्यात् ॥

*Suśruta Saṃhitā, Cikitsā, 9-95.*

श्वित्रे संसनमग्रं मलयूरस इष्यते सगुडः ।

तं पीत्वा सुस्निग्धो यथाबलं सूर्यपादसन्तापम् ॥

संसेवेत् विरिक्तस्त्रयं पिपासुः पिबेत् पेयाम् ।

शित्रेऽङ्गे ये स्फोटा जायन्ते कण्टकेन तान् भिन्द्यात् ॥

स्फोटेषु विसृतेषु प्रातः प्रातः पिबेत् पक्षम् ॥

मलपूमसनं प्रियङ्गुं शतपुष्णां चाम्भसा समुक्ताथ्य ॥  
पालाशं वा क्षारं यथाबलं फाणितोपेतम् ॥

*Caraka Saṁhitā, Cikitsā. 7-162/165.*

कासे श्वासे च

काकोदुम्बरपलवं शकलितं दुग्धे गवां पाचितम् ।  
किञ्चिन् मिश्रितमागधं दिनमुखे पीत्वा पयः तादृशम् ।  
कासश्वासमशेषमाशुः शमयेद् ।

*Vaidya Manoramā, 3-22.*

अवबाहके

काकोदुम्बरिदुग्धैः सरामठैहरित् सर्वयोगविच्च ।  
कपिकच्छुमूलयुक्तैर्नस्यैरवबाहुजां पीडाम् ॥

*Baṅgasena, Vātavyadhi. 121.*

## KALĀ-KHĀKASI (KHUBAKALAN)

**Botanical name :** Sisymbrium irio Linn.

**Family :** Cruciferae

**Classical name :** Kalā-Khākasi

**Common name :** Khumbakalan

**Sanskrit names**

Khākāsī, Sarṣapikā, Vanya Sarṣapa, Khāsabijā, Kalā.

**Regional names**

Khukhakalan, Khakasi, Khaksi (Hindi); Maktarusa (Sindh); Jangli sarson (Punj.) Parjan (Ma.); Rantikhi (Ma.); Khubb (Arabic); Khubkalan, Khākachi (Pers.); Hedge—mustard (Eng.).

**Description**

Erect 20-60 cm. tall, annual-biennial branched, glabrous herbs. Lower leaves petiolate, lyrate-pinnatifid or pinnatipartite, segments remote, toothed, upper one larger.

Racemes 50-80 flowered. Flowers up to 30 cm. long in fruit with pods over topping young flowers and buds.

Sepals 2-2.5 cm. long. Petals 3-4 × 1 mm. usually slightly longer than the sepals. Stamens about 2 or 3 mm. long; anthers about 0.5 mm. long.

Pods 30-45 × 1 mm. linear, often slightly, upcurved, faintly 3-nerved; style inconspicuous; seeds 20-40 in each locule, oblong, ellipsoid brown.

### **Flowering and fruiting time**

Plant flowers and fruits during the period from December to March.

### **Distribution**

It is found in different parts of country and plant grows in northern India from Rajasthan to Punjab. It occurs Afghanistan, Iran and Europe.

### **Chemical composition**

Leaves contain vitamin A and C, protein and minerals. Seeds contain isorhamnetin and an oil 18-20 percent.

### **Pharmacodynamics**

Rasa	: Kaṭu
Guṇa	: Snigdha, guru, picchila
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātaśāmaka Kaphniḥsāraka

### **Properties and Action**

Karma	: Chedana (śleṣmahara) Āmapācana-svedana Jvaraghna Brīhmaṇa-balya Vātānulomana Trṣṇānigrahaṇa Chardinigrahaṇa Śothahara-vedanāsthāpana.
Roga	: Kāsa-jīrṇakāsa-svarabheda-śvāsa Jvara-visphoṭa jvara-masūrikā Tvagdoṣa Ādhmāna-viṣūcikā Trṣṇā-viṣūcikā Netra-stanaśotha Dourbalya.

### **Therapeutic uses**

The drug Kalā or Khākasi, commonly known as khubkalan, is an expectorant (kaphaniḥsāraka or chedana) medicine which is given in cough, asthmā and horreness or sore-throat (Kāsa, śvāsa and svarabheda); it is taken in fever specially with cough and allied symptoms (vātakaphajvara). Drug is also specific in fevers particularly eruptive fevers (Visphoṭa jvara, masūrikā and other similar conditions) in order to early appearance of eruptions (in successive stages) and gradually lowering down the temperature in febrill condition of patient as the drug is diaphoretic (svedajanana) and digesting immature rasa (āmpācana).

The seeds of plants drug are externally as well as internally used. In flatulence and gastro enteritis, the seeds, powder mixed in aqua rose (gulab jal) is taken to cheek overthirst and vomiting. (viṣūcikājanya ṭṛṣṇā vamana and ādhmāṇa). It is tonic and strengthening to body tissues (balya-br̥hmaṇa).

It is useful in skin diseases (tvagdoṣa), vātakapha vikāra and kapha roga. (ailments caused by provocation of vāta Kapha doṣa). Externally the seeds are applied on inflammatory condition of eyes, breasts and other organs on account of anti-inflammatory (śothahara) and analgesic (vedanāsthāpana) properties of drug.

The minute, yellowish-red, mucilaginous (while macrated or soaked in water) and pungent seeds which are even smaller than white poppy seeds or khaskhas (ahiphenabīja) and mustard or sarron (sarṣapabīja). Seeds give taste somewhat like mustard when kept in mouth and become rancid after sometime. Taste of seeds may be pungent sweetish (kaṭu-rasa and anurasa madhura) and hence semi-hot in potency (uṣṇa or iṣaduṣṇa vīrya). Seeds are ingredient of tonic preparations (paka-majun in yunani medicine) and also of vanapsādi kvātha used in cough fever.

Seeds are also sprinkled on bed of patient of small pox and eruptive fever which is a traditional practice. Seeds are collected after they become matured. Seeds are

mostly collected in the manner of mustard seeds collection after cutting of plants, harvesting and procurement of seeds. Finally seeds material is kept and stored (in airtight containers in non-humid cold place) properly.

**Parts used :** Seeds.

**Dose :** Powder 3-6 gm.

## KĀLAMEGHA

### **Botanical name**

*Andrographis paniculata* (Burm.b.) Wall ex. Nees.

**Family :** Acanthaceae

**Classical name :** Kalamegha-Bhūnimba

### **Sanskrit names**

Kālamegha, Bhūnimba, Kalpanātha, Yavatiktā, Śāṅkhini.

### **Regional names**

Kalamegh, Kalmeg, Kiryat (Hindi); Palikirain (Mar.); Lilu Kariyatu (Guj.); Andrographis, Kiryat, Creat (Eng.)

### **Description**

Erect, weak, glabrous shrubs or herbs up to 1 meter or 30-90 cm; tall; Stems quadrangular. Leaves sessile or subsessile, ovate-lanceolate, acute; lvs.  $7.5 \times 1.25\text{--}2$  cm., narrow at both ends.

Flowers rose-coloured, I-nate, distant, in axillary and terminal racemes and panicles. Bracts lanceolate, bracteoles absent. Sepals linear-lanceolate, glandular pubescent. Corollas hairy outside; tube slightly enlarged below limb; upper lip 2-toothed at apex, lower deeply 3-lobed. Filaments flattened, hairy in the upper part; anthers bearded at base.

Capsule linear-oblong, tapering at ends. Seeds subquadrate, rugosely pitted.

### **Flowering and fruiting time**

Autumn to spring season. October-February.

### **Distribution**

Plant is found throughout India, in plantal or in

wild state; specially in West Bengal, Plant is abundantly scattered in rural areas. Generally it is found in gardens and waste places. Central India, Kerala, Assam, Andhra Pradesh, Bihar, West Bengal and other provinces in India.

### **Chemical composition**

Plant contains two crystalline form alkaloids including Kalmeghin, lactone, andrographolid, andrographide, tannin and volatile oil in little quantity.

### **Pharmacodynamics**

Rasa	: Tiktā
Guṇa	: Laghu, Rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittahara

### **Properties and Action**

Karma	: Yakṛduttejaka Pittasāraka Recana Kṛmighna Svedajanana Kuṣṭhaghna Jvaraghna-Viṣamajvara pratibanadhaka Kaṭupouṣṭika.
Roga	: Jvara-Viṣamajvara Jīrṇajvara Yakṛdvikāra Kṛmiroga Agnimāndya-Vibandha Raktavikāra Śotha Carmavikāra Dourbalya.

### **Therapeutic uses**

The drug Kālamegha is bitter, febrifuge, stomachic, anthelmintic, bitter tonic and anti histaminic. It is used in allergic condition, abdominal diseases, ansarea, ascites, cardiac disorders, helminthic manifestation and skin diseases.

Kālamegha is mainly acting drug on liver and it is used as a cholagogue and liver functions stimulant. It is blood purifier and given in ailments caused by blood impurity. The powder of Kālamegha plant mixed with Marica cūrṇa in malaria and chronic fever. The drug is taken in debility after recovery of fever. Liquid extract of Kālamegha is used in medicine.

Kālamegha is substitute of Kirātatikta on account of bitterness and it is also an adulterant of Kirātatikta.

**Parts used :** Whole plant

**Dose :** Powder 1-3 gm., Juice 5-10ml., Decoction 20-40ml., Liquid extract 1/2ml.

**Formulation :** Liquid Extract Kālamegh.

## KĀLAMEGHA ( कालमेघ )

शङ्खिनी तिक्तला चैव यवतिक्ताऽक्षिपीडकः ।

ते गुल्मगरहद्रोगकुष्ठशोफदरादिषु ॥

विकसितीक्ष्णमरुक्षत्वाद् योज्ये श्रेष्ठाधिकेषु तु ।

नातिशुष्कं फलं ग्राह्यं शङ्खिन्या निस्तुषीकृतम् ॥

*Caraka Samhitā, Kalpa.*

### यवतिक्ता

क. यवतिक्ता महातिक्ता दूषपादा विसर्पिणी ।

नाकुली नेत्रमीला च शङ्खिनी पत्रतण्डुली ॥

तण्डुली चाक्षपीडा च सूक्ष्मपुष्पी यशस्विनी ।

माहेश्वरी तिक्तयवा यावी तिक्तेति षोडश ॥

ख. यवतिक्ता सतिक्ताऽस्ला दीपनी रुचितत्परा ।

क्रिमिकुष्ठविषघ्नाम दोषग्नी रेचनी च सा ॥

*Rāja Nighaṇṭu, Guḍūcyādi Varga, 76-78.*

### यवतिक्तातैलम्

यवतिक्तोद्भवं तैलं किञ्चित्तिकं रसायनम् ।

मेधाकरं त्रिदोषग्नं पथ्यं लेखनदीपनम् ॥

*Kaiyadeva Nighaṇṭu, Taila Varga, 326.*

**शङ्खिनीतैलम्**

शङ्खिनी सम्भवं तैलं तीक्ष्णं कट्वस्तपित्तकृत् ॥  
अर्शः कुष्ठकृमिश्रेष्मशुक्रभेदोऽनिलापहम् ।

*Kaiyadeva Nighantu, Taila Varga, 333-334.*

**कालमेघ-भूनिष्वः**

कालमेघस्तु भूनिष्वो यवाकारफलस्तथा ।  
सुतिक्षः लघुरूक्षोष्णः कफपित्तविनाशनः ॥  
दीपनः स्वेदनो ज्येयः कृमिन्नः पित्तसारकः ।  
यकृदरोगे क्रिमौ कुष्ठे ज्वरे चासौ प्रशस्यते ॥

*Dravyaguṇa Vijñāna, Dvitiya bhāga, p.546..*

## KALĀYA

**Botanical name :** Lathyrus sativus Linn.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Kalāya-Tripuṭa

**Sanskrit names :** Kalaya, Tripuṭa, Khaṇḍikā.

**Regional names**

Khesari (Hindi); Khesra, Latri, Kassar Kansari, Batura (Common); Khesari (Beng.); Lakh (Mar.); Lang (Guj.); Khesra (Oriya); Khesari teora (Assam); Kesari (Bihar); Kissar, Chural, Karas, Karil (Punj.); Kesari (Nepal); Chickling Letch, Grass Pea (Eng.)

**Description**

An annual much branched glabrous herb with narrowly winged stem; glabrous or subglabrous, suberect or trailing herbs. Leaves paripinnately compound; leaflets 2, linear-lanceolate, acuminate, entire, 2-10 cm. long, 1-3 mm. broad; stipules semi-sagittate, lanceolate; rachis of median and upper leaves usually terminating in trifid tendrils. Leaflets linear lanceolate oblong, sharply acute, glabrous, upto 8 cm. long petiole up to 8cm. long.

Flowers solitary axillary on long peduncles, blue. Calyx 5-10 mm. long, teeth subequal or unequal. Corolla 10-

25 mm. long. fls. red blue or white 3-6 cm. long, on slender peduncle.

Pods 2.5-4 cm. long, winged on the back, 3-5-seeded.

### **Flowering and fruiting time**

Colder months or post-autumn to spring season.  
November to March or January to May.

### **Distribution**

It is cultivated for fodder and seeds as pulses in various regions in country. Farming as a crop in Bihar, Uttar Pradesh and Madhya Pradesh more or less and other provinces.

### **Chemical composition**

Analysis of seeds gave the following values: moisture 100, protein 28.2, fat (ether extract) 0.6, carbohydrates 58.2, and mineral matur 3.0 percent.

Seeds contain starch (34.8%), Sucrose 1.5%, pentosans (6.8%), phytin (3.6%), lignin (1.5%), stachyose, raffinose and pectins. The starch consists of amylose (30.3%) and amylopectin (69.7%).

### **Pharmacodynamics**

Rasa	: Kasāya, Madhura
Guṇā	: Laghu
Virya	: Sīta
Vipāka	: Madhura
Doṣakarma	: Vātajanana-Pittakaphaśāmaka.

### **Action and Properties**

Karma	: Dāhapraśamana Vātakara Śūlapraśamana
Roga	: Śūla Pariṇāmaśūla Vraṇa Amlapitta.

### **Therapeutic uses**

The seeds are uses as pulse but regular and excess consumption in humans is quite harmful and causing a disease known as lathyrism. It is also adulterated in pulses and other food articles. It has medicinal properties and used in

*parināmaśūla*, *vraṇa* and *amlapitta*. It allays burning sensation. It is strengthening to human body. It increases *vāta* *doṣa*.

**Parts used :** Seeds

**Dose :** Power 5-10gms.

**Formulation :** *Kalāya cūrṇa guṭikā*.

## A. KALĀYA ( कलाय )

कलायो वर्तुलः प्रोक्तः सतीनश्च हरेणुकः ।

कलायो मधुरः स्वादुः पाके रूक्षश्च शीतलः ॥

*Bhāvaaprakāśa Nighaṇṭu, Dhānya Varga, 57.*

**सतीनः**

- क. सतीनको वर्तुलको हरेणुः स्वल्पवर्तुलः ।
- ख. सतीनो मधुरः पाके रसे रूक्षो हिमो लघुः ।  
कषायो वातलो ग्राही कफपित्तनिषूदनः ॥

*Kaiyadeva Nighaṇṭu, Dhānya Varga, 65-66.*

**हरेणुः**

‘हरेणुको हिमो रूक्षः ग्राही समधुरो लघुः ।’

*Kaiyadeva Nighaṇṭu, Dhānya Varga, 67.*

कलायो मुण्डचणको हरेणुश्च सतीनकः ।

त्रासनो नालकः कण्ठो सतीनश्च हरेणुकः ॥

कलायः कुरुते वातं पित्तदाहकफापहः ।

रुचिपुष्टिप्रदः शीतं कषायश्वामदोषकृत् ॥

*Rāja Nighaṇṭu, Śālyādi Varga, 96-97.*

**कलायशाकम्**

‘कलायशाकं भेदि स्यालघु तिक्तं त्रिदोषजित् ।’

*Bhāvaaprakāśa Nighaṇṭu, Śāka Varga, 46.*

शूल (चिरकालीनपरिणामशूल) शमनाय कलाययूषस्य सक्तोश्च सेवनम्—

यः पिबति सप्तरात्रं सकूनेकान कलाययूषेण ।

स जयति परिणामरुजं चिरजामपि किमुत नूतनजाम् ॥

*Cakradatta, Parināmaśūla Cikitsā,*

*Vṛndamādhava, 27-9. 27-12.*

### दुर्जराम्लपित्ते कलायगुटिका

कलायचूर्णभागो द्वौ लोहचूर्णस्य चापरः ।  
कारवेलपलाशानां रसैनेव विमर्दितः ॥  
कर्षमात्रां ततश्चैकां गुडिकां भक्षयेन्नरः ।  
मण्डानुपानाज्जयति जरत्पितं सुदुर्जरम् ॥

*Cakradatta, Parināma Cikitsā, 27-80 81*

### कलायचूर्णगुटिका

*Vṛndamādhava, 27-50/51.*  
*Baṅgasena, Parināmasūla, 27-50-57.*

### व्रणे

‘कलायविदलीपत्रं कोशाप्रास्थि च पूरणात् ।’

*Vṛndamādhava, 44-44.*

## B. KALĀYA-TRIPUTA ( त्रिपुट )

- क. त्रिपुटः खण्डकोऽपि स्यात्कथ्यन्ते तदगुणा अथ ।
- ख. त्रिपुटो मधुरस्तिक्ततुवरो रूक्षणो भृशम् ।  
कफपित्तहरो बल्यो ग्राहकः शीतलस्तथा ।  
किन्तु खञ्जत्वपङ्कुत्वकारी वातातिकोपनः ॥

*Bhāvaaprakāśa Nighaṇṭu, Dhānya Varga, 58-59.*

### कलाय-त्रिपुटः

- अ. कलायः खण्डको शेषस्त्रिपुटः क्षुद्रखण्डकः ।
- ब. कलायो मधुरस्तिक्तः सकषायो विरुक्षणः ।  
कफपित्तहरः शीतं सङ्घग्राही प्रचुरानलः ॥

### त्रिपुटशाकञ्च

- स. तद्वत्रिपुटकस्तेषां शाकं पित्तबलासजित् ।

*Kaiyadeva Nighaṇṭu, Dhānya Varga, 67-69.*

### त्रिपुटकलायः

- त्रिपुटः खण्डकोऽपि स्यात् कथ्यन्ते तदगुणा अथ ।

*Bhāvaaprakāśa.*

## परिणाम शूले

यः पिबति सप्तरात्रं सकूनेकान् कलाययूषेण।  
स जयति परिणामरुजं चिरजामपि किमुत नूतनजाम्॥

*Vṛndamādhava, 27-9*

## कलायचूर्णगुटिका

*Vṛndamādhava, 27-50/5. Bangasena, Parināmaśūla, 111-112.*

# KĀLINDA

### Botanical name

*Citrullus lanatus* (Thumb.) Matsumara *Citrullus vulgaris* Schrad.

Syn. *Colocynthis citrullus* (Linn.) Kuntze.

**Family :** Cucurbitaceae

**Classical name :** Kalinda

### Sanskrit names

Kṛṣṇabīja, Suvartula, Kaliṅgaka, Kaliṅga, Māṁsaphala, Citraphala, Citru-vallika, Citravallika, Madhuraphala, Trṣṇāphala.

### Regional names

Tarbij, Kalinda (Hindi); Turbuj, Tarbuz, Tarmuj (Urdu, Beng. & Mar.); Water Melon (Eng.).

### Description

Annual herbs with angular villose stems. Leaves 8-20 × 5-15 cm; Triangular-ovate, cordate, trifid, lobes pinnatifid, terminal lobe acute, others round; tendrils bifid.

Male flowers: peduncles elongate, villous, 1-3 cm. long; calyx-tube broadly campanulate, villous; corolla greenish, villous, lobes ovate-oblate-oblong, obtuse, 10-15× 3-4mm. Female flowers: peduncles 2-6 cm. long; calyx and corolla as in male flowers; ovary oblong; style 4-5 mm. long. Fruits large, ca 25 cm. in diam; sub globose or ellipsoid, smooth, green or variegated; seeds black, red or variable.

### Flowering and fruiting time

Summers to Rainy season. April to July.

## Distribution

Plant is frequently cultivated in sandy soils in hotter parts of country. Seasonal farming for fruits in Uttar Pradesh, Rajathan, Madhya Pradesh and other regions, undertaking several cultivated forms which vary in size, shape, colour and sweatness of the pulp.

## Chemical composition

Analysis of the fruit gives the following values: moisture 95.7, protein 0.1, fat (ether extractives) 0.2, mineral matter 0.2, Carbohydrates 3.8, Ca 0.01 and P 0.01%, Fe 0.2 mg./100g., carotene, traces. The juice contains eitruline to the extent of about 0.17%. It is poor in pro-vitamin A and in vitamin C. Fruit is rich source of pectin.

## Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru
Vīrya	: Śīta
Vipāka	: Madhura Pittāśāmaka
Doṣakarma	: Pittajanana, Kaphavātaśāmaka (pakva-ripe).

## Action and properties

Karma	: Santarpaṇa Trṣṇānigrahaṇa Śramahara Balya Dāhapraśamana Vṛṣya-vīrya-puṣṭi vivardhna Grāhī
Roga	: Mutrakṛcchra-mūtrāghāta Dāha Trṣṇā Dourbalya.

## Therapeutic uses

Kälinda is edible and tasty fruit. The pulp of fruit and seeds have medicinal properties. It is refrigerant, diuretic, tonic, aphrodisiac, cooling and it allays burning sensation. Seeds are used as diuretic in urinary troubles. Ex-

cess use of fruit-pulp is heavy in digestion and it may cause abdominal discomfort or any other problem (including specific type of ajirṇa). Seed Kernel is also edible. Seeds are considered to be cooling and diuretic.

**Parts used :** Fruit, leaves, seeds.

**Dose :** 3-6gm. -Pulp edible, 1-3 gm. - seed powder (kernel).

## KĀLINDA ( कालिन्द )

कालिन्दं कृष्णबीजं स्यात्कालिङ्गम् सुवर्तुलम्।

कालिन्दं ग्राहि दृक्षितशुक्रहच्छीतलं गुरु॥

पक्वन्तु सोष्णं सक्षारं पित्तलं कफवातजित्॥

*Bhāvaprakāśa Nighaṇṭu, Āmrādiphala Varga, 43.*

### कालिङ्गम्

कालिन्दकं स्यात् कालिङ्गं कृष्णबीजं प्रकीर्तितम्।

कालिङ्गं ग्राहि दृक्षितशुक्रहच्छीतलं गुरु॥

पक्वन्तु पित्तलं सोष्णं सक्षारं कफवातजित्।

कालिङ्गपत्रं रुचिरं स्थापनं तिक्तमुच्यते॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 535-536.*

### कालिङ्गम् त्रपुसविशेषः

अ. मांसफलः कलिङ्गचित्रफलश्चित्रवल्लिकश्चित्रः ।

मधुरफलो वृत्तफलो तृष्णाफलो मांसलो नवधा॥

ब. कलिङ्गो मधुरः शीतः पित्तदाहश्रमापहः ।

वृष्यः सन्तर्पणो बल्यो वीर्यपुष्टिविवर्द्धनः॥

*Rāja Nighaṇṭu, Mūlakādi Varga, 167-168*

## KAMALA

### Botanical name

*Nelumbo nucifera* Gaertn.

Syns. *Nymphaea nelumbo* L., *Nelumbium speciosum* Willd.

**Family :** Nymphaeaceae

**Classical name :** Kamala

### Sanskrit names

Kamala, Padma, Nalina, Sahasrapatra, Šatapatra, Pankeruha, Tamarasa, Visaprasūna, Puṣkara, Ambhoruha, Rājīva, Sārasa, Mahotpala, Kušeśaya.

### Regional names

**Pādapa-puṣpa (plant-flower) :** Kamala, Purain (Hind.); Padma (Beng.); Kamal (Mar.); Kamal (Guj.); Tamarai (Tam.); Aiji Tamar (Tel.); Kamal (Kann.); Tamar (Mal.); Pamposha (Ka.); Katillunahal (Arabic); Sacred Lotus (Eng.).

**Navapallava :** Samvartikā. Pañcāṅga (Whole plant): Padminī, Kamalini.

**Kamalakanda :** Śāluka, Karahāṭaka' Lodha (Guj.);

**Kamalabījakośa :** Karnikā, Varāṭaka, Bījakośa; Kamal ke chhatta (Hindi); Dhangud, Dhanparhi (Mar.); Ghitelan (Guj.).

**Bija** (Seeds) : Padmabīja: Kamalākṣa; Kamalagatta (Hindi).

**Kamalanāla :** Mṛṇāla; Murar (Hindi).

**Bhoumika Kāṇḍa :** Bisa, Padmakarkatī; Bhen, Bhis, Bhansid, Bhanside, Bhinsad (Hindi); Bhinse (Mar.,Guj.), Kamal Kakarhi, Bhasinda (Mar., Guj.).

### Description

Perennial aquatic herbs with rhizomatic rootstock, plant floating in tank. Leaves orbicular, petate, up to 35 cm. across glaucous above; petioles and peduncles sparsely prickly. Flowers solitary, pinkish or white; petals numerous. many seriate, 4-12 cm. long. Fls. red, white, or rarely yellow; 4-10 in diam. Anthers appendaged. Carpels many, spongy torus, stigma peltate.

A large handsome aquatic herb with milky. Rootstock creeping, much branched. Peduncles and leaf-stalks 3-6 ft. long, full of spiral vessels, smooth or with small scattered prickles. Leaves 2-3 ft. in diam., orbicular, entire, membranous glaucous, cupped. Flowers solitary, 4-10 in.

in diam, white or rose. Petals elliptic concave. Torus in fruit 2-4 in in diam.

### **Flowering and fruiting time**

April to November (flowers) and December to January (fruits). August-October.

### **Distribution**

Plant grows throughout India in tanks, ponds, Jhils and marshes, as a major aquatic plant, popular for its beautiful flowers. It is often cultivated in aquatic habitat. It occurs throughout India, as far, as north as Kashmir; also in Persia, north Africa, Malay Islands, China, Japan and Tropical Australia. Warmer parts in India.

### **Kinds and varieties**

There are several popular varieties of flowers in different colours from plants cultivated or wild.

### **Chemical composition**

The rhizomes and seeds contain resin, glucose, metarbin, tannin, fat, nupharin and nupharine alkaloidal substance.

### **Pharmacodynamics**

Rasa	: Kaṣāya, madhura, tikta
Guṇa	: Laghu, snigdha, picchila
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittāśāmaka

### **Properties and Action**

Karma	: Dāhapraśamana Varṇya-tvagdoṣahara Medhya-śāmaka Chardinigrahaṇa Trṣṇānigrahaṇa Stambhana-raktastambhana Hṛdaya-śoṇitāsthāpana Prajāsthāpana Mūtravirecaniya-mūtravirajaniya Jvaraghna Balya Viṣaghna.
-------	--

<b>Roga</b>	:	Dāha Vraṇavikāra Mastiṣkadourbalya Mānasika udvega-anidrā Vamana-trṣṇā Atisāra-pravahikā Hṛdroga Raktatisāra-Pradara-Raktārśa Raktapitta Garbhassrāva Mutrakṛcchra-Paittika prameha Carmaroga Jvara-dāha-trṣṇā.
-------------	---	---

### Therapeutic uses

The drug Kamala (lotus) is sweet, astringent and bitter; and it is cold in potency (*śīta vīrya*). Drug is useful to pacify burning sensation, excessive thirst and nervous or mental tension. It is pacifying agent (*śāmaka auṣadhi*) in general. Kamala is haemostatic, cardiotonic, diuretic, tonic, anti-pyretic and galactogogue. It counters poison and checks vomiting. It promotes or preserves lusture or complexion of body. Drug is brain tonic and anti-dermatosis. Besides medicinal properties of Kamala is general, specific proportion and action alongwith medicinal utility of kinds (varieties) of Kamala as well as different parts of plant drug have been mentioned in classical texts (*maleria medica* and *medicine*) considering potentialities of Kamala and its medicinally useful parts, in addition to ornamental value for its most beautiful flowers of high aesthetic significance with socio-cultural and religious importance in country. Some parts of Kamala (lotus) are of vegetable and dietary utility. For the instance, the roots stem and receptacle (torus) are commonly used as vegetable.

The tender leaves (*samvartikā* or *navapatra*) of lotus (Kamala) are pounded and mixed with sugar. It is taken by patient of prolapse of rectum (*gudabhrāṁśa*). A regular use of butter mixed with sugar and lotus stamens (Kamala Kesara or *kiñjalka*) or sesamum (*tila-Sasamum indicum*) is

used to eradicate bleeding piles or haemorrhoids (raktārsa).

The powder of lotus seeds (padmabīja) mixed with honey is used in cough caused by pitta (pittaja kāsa) for prompt relief. Root of lotus (Kamala mūla) is indicated for chewing in condition of dental carries (Krimidanta). The lotus-stalk (Kamala-nāla or mṛnala) lotus-stem (kamala nāla), pippali (Piper longum) and Haritala (Termi-nalia chebula) are mixed with honey (madhu). It is taken with cold water or this mixture (with honey) is given followed with water, in condition of alcoholism (madātyaya). The leaves of Kumuda and Utpala are treated with sandal aqua (candanāmbu) or its water is sprinkled over leaves of two drug plants (both kinds of lotus) and the close contact or touch (saparśa) with body of patient of alcoholism (madātyaya) is suggested to be beneficial particularly in stage of excessive burning sensation ('dāhe madya-samutthite' : Caraka Samhita, Cikitsā. 24/156-157). Kamala and its allies are possessing the medicinal properties of pacifying burning sensation and also cold potency or sīta vīrya) and such drugs belong to dahapraśamana group of action.

**Parts used :** Whole plant specially flowers, seeds and roots.

**Dose :** Seeds powder 3-6 gms., Roots juice 10-20 ml.

**Formulation :** Aravindāsava

**Groups (gāṇa)**

Utpalādi (Suśruta) Mūtra virajenīya (Caraka).

## KAMALA ( कमल )

कमलं शीतलं तिक्तं स्वादु वर्णकृत् ॥  
कफपित्तास्थविस्फोटदाहतृष्णाविनाशनम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1445-1446.*

**नीलोत्पलं रक्तोत्पलञ्च**

तस्मादल्पान्तरगुणे विद्यात् कुबलयोत्पले ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1449.*

### नीलोत्पलकन्दः

क. कन्दस्तूत्पलजः पित्तनाशनो गुरुबृंहणः ॥  
असृगदरहरो गर्भ स्थापयेच्चापि तर्पणः ।

### रक्तोत्पलकन्दः

ख. रक्तोत्पलस्य कन्दस्तु मधुरः पित्तनाशनः ॥  
चक्षुष्यो रक्तविकृतिं हरेद् बलकरो गुरुः ।

*Kaiyadeva Nighantu, Oṣdhai Varga, 1449-1451.*

### पद्माक्षम्

पद्मबीजं हिमं स्वादु कषायं तिक्तकं गुरु ॥  
विषम्बि वृष्टं रुक्षञ्च गर्भसंस्थापकं परम् ।  
कफवातहरं पक्नं ग्राहि पित्तास्तदाहनुत् ॥

*Bhāvaprakāśa Nighantu, Āmraphladi Varga, 89-90*

### संवर्तिका (नवपत्रम्)

संवर्तिका हिमा तिक्ता कषाया दाहतृट्प्रणुत् ॥  
मूत्रकृच्छ्रगुदव्याधिरक्तपित्तविनाशिनी ॥

*Bhāvaprakāśa Nighantu, Puṣpa Varga, 9*

### कर्णिका (बीजकोशः)

पद्मस्य कर्णिका तिक्ता कषाया मधुरा हिमा ।  
मुखवैशद्यकृलघ्वी तृष्णाऽस्तकफपित्तनुत् ॥

*Bhāvaprakāśa Nighantu, Puṣpa Varga, 10*

### किञ्चल्कः (केशरः)

किञ्चल्कः शीतलो वृष्टः कषायो ग्राहकोऽपि सः ।  
कफपित्ततृष्णादाहरक्ताशोषिषशोथजित् ॥

*Bhāvaprakāśa Nighantu, Puṣpa Varga, 11.*

### कासे पद्मबीजचूर्णम्

‘मधुना मद्मबीजानां चूर्णं पैत्तिककासनुत् ।’

### गुदभ्रंशे पद्मिनीपत्रप्रयोगः

कोमलं पद्मिनीपत्रं यः खादेच्छर्कराऽन्विताम् ।  
एतत्रिश्चत्य निर्दिष्टं न तस्य गुदनिर्गमः ॥

*Cakradatta, 55-27.*

### उत्पलादिचूर्णम्

उत्पलं दाडिमत्वक् च पद्मकेसरमेव च ।

पीतं तण्डुलतोयेन ज्वरातीसारनाशनः ॥

*Bhāvaprakāśa, Jvaratisāra, 3-11.*

### वातरक्ते मृणालादिमिश्रकैलम्

*Bhāvamīśrasya Bhāvaprakāśa,  
Vātaraktādhikāra, 21/45-147.*

### गर्भस्वावे उत्पलादिगणम्

*Bhāvaprakāśa, Yonirogādhikāra, 70-75-76.*

### पद्मिनीकण्टकरोगे

‘पद्मनालकृतः क्षारः पद्मिनी हन्ति लेपतः ।’

*Cakradatta, Kṣudraroga cikitsā, 55-22.*

### मृणालं शालूकञ्च

मृणालं शीतलं वृष्यं पित्तदाहास्त्रजिद् गुरु ॥

दुर्जरं स्वादुपाकञ्च स्तन्यानिलकफप्रदम् ।

सङ्घ्राहि मधुरं रुक्षं शालूकमपि तदगुणम् ॥

*Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 12-13.*

### कमलभेदांस्तदगुणांश्च

क. विशेषतः सितं पद्मं पुण्डरीकमिति स्मृतम् ।

रक्तं कोकनं ज्ञेयं नीलमिन्दीवरं स्मृतम् ॥

ख. ध्वलं कमलं शीतं मधुरं कफपित्तजित् ।

तस्मादल्पगुणं किञ्चिद् यत्ररक्तोत्पलादिकम् ॥

*Bhāvaprakāśa Nighaṇṭu, Puṣpa Varga, 4-5.*

### कमलम्

अ. पाथोजं कमलनभञ्च नलिनाम्भोजाम्बुजन्माम्बुजं

श्रीपदमाम्बुरुहाञ्चपदमजलजान्यम्भोरुहं सारसम् ।

पङ्कजं सरसीरुहं च कुटपं पाथोरुहं पुष्करं

बीर्जं तामरसङ्गुशेशयकजे कञ्चारविन्दे तथा ॥

शतपत्रं विसकुसुमं सहस्रपत्रं महोत्पलं वारिरुहम् ।

सरसिजसलिलपङ्ककेरुहराजीवानि वेदवह्निमितानि ॥

ब. कमलं शीतलं स्वादु रक्तपित्तश्रमार्तिनुत् ।

सुगन्धिं भ्रान्ति सन्तापशान्तिं तर्पणं परम् ॥

*Rāja Nighaṇṭu, Karavīrādi Varga, 173-175.*

### पुण्डरीकम्

अ. पुण्डरीकं श्वेतपत्रं सिताब्जं श्वेतवारिजम् ।

- ब्र. हरिनेत्रं शरत्पद्यं शारदं शम्भुवल्लभम् ॥  
 युण्डरीकं हिमं तिकं मधुरं पित्तनाशनम् ।  
 दाहास्त्रमदोषघं पिपासादोषनाशनम् ॥

*Raja Nighaṇṭu, Karavīrādi Varga, 176-177.*

### कोकनदम्

- अ. कोकनदमरुणकमलं रक्ताभ्योजं च शोणपदमं च ।  
 रक्तोत्पलमरविन्दं रविप्रियं रक्तवारिजं वसवः ॥  
 ब्र. कोकनदं कटुतिकं मधुरं शिशिरं च रक्तदोषहरम् ।  
 पित्तकफवातशमनं सन्तर्पणकारणं वृष्यम् ॥

*Rāja Nighaṇṭu, Karavīrādi Varga, 178-179*

### उत्पलम्

- अ. उत्पलं नीलकमलं नीलाब्जं नीलपङ्कजम् ।  
 नीलपदमं च वाणाहं नीलादिकमलाभिधम् ॥  
 ब्र. नीलाब्जं शीतलं स्वादु सुगन्धि पित्तनाशकृत् ।  
 रुच्यं रसायने श्रेष्ठं केशयञ्च देहदाद्यर्थदम् ॥

*Rāja Nighaṇṭu, Karavīrādi Varga, 180-181*

मदात्यये, दाहं निवारणार्थं कुमुदोत्पलपत्राणां प्रयोगः

कुमुदोत्पलपत्राणां सिक्तानां चन्दनाम्बुना ॥  
 हिताः स्पर्शा मनोज्ञानां दाहे मद्यसमुत्थिते ॥

*Caraka Saṃhitā, Cikitsā. 24-156/157*

### विसर्पशमनाय पद्मिनीपङ्कादिलेपः

‘पित्ते तु पद्मिनीपङ्कं पिष्टं....।....घृतान्वितम् ॥’

*Cakradatta, 53-9.*

### केशकृष्णीकरणार्थमुत्पललेपः

उत्पलं पयसा सार्द्धं मासं भूमौ निधापयेत् ।  
 केशानां कृष्णकरणं स्नेहनञ्च विधीयते ॥

*Cakradatta, Kṣudraroga cikitsā 55-117*

### चिरकालीनदारुणरोगे नीलोत्पलादिलेपः

सह नीलोत्पलकेशरयष्टीमधुकतिलैः सदृशमामलकम् ।  
 चिरजातमपि च शीर्षे दारुणरोगं शमं नयति ॥

*Cakradatta, Kṣudraroga cikitsā, 55-87.*

## वाराहदंष्ट्रायाम्

राजीवमूलकल्कः पीतो गव्येन सर्पिषा प्रातः ।  
शमयति शूकरदंष्ट्रं दंष्ट्रीभूतं ज्वरं घोरम् ।

*Bhāvaprakāśa, Cikitsā. 61-114*

## बालरोगे

श्वेतकमलकिञ्चलकं समपिण्ठं तण्डुलाम्बुना ।  
मत्स्यपिण्डमधुसंयुक्तं क्षिप्रं हन्ति प्रवाहिकाम् ॥

*Baṅgasena, Bālaroga. 48.*

## नेत्ररोगे

एकं वा पुण्डरीकञ्च गवां क्षीरावशोषितम् ।  
रागासृग्वेदनां हन्यात् क्षतपाकाजकास्तथा ॥

*Baṅgasena, Netraroga. 200*

## गर्भपाते

सशर्करं नीलसरोजकन्दचूर्णं निपीतं सह माक्षिकेण ।  
गर्भस्यपाते शमनं व्यथायाः शीतैश्च तोयैः परिषेचनानि ॥  
पद्मेन्दीवरपत्राणि माक्षिकं शर्करा तथा ।  
परिस्त्रवत्सु गर्भेषु पयसा पानमुत्तमम् ॥

*Gadanigraha, 6-3-18*

## क्रिमिदन्तके

मूलानि.....कमलिन्या.....वा |  
यान्ति घुणं.....दन्तैः सञ्चर्व्यमाणानि ॥

*Rāja Mārtanda, 5-14.*

## रक्तार्शसि

शर्कराम्भोजकिञ्चलकसहितं सह वा तिलैः ।  
अृभ्यस्तं रक्तगुदजान् नवनीतं नियच्छति ॥

*Aṣṭāṅga Hṛdaya, Cikitsā 8-118*

## पित्तजकासे

चूर्णन्तु पद्मबीजानां मधुना सम्प्रयोजितम् ।  
पित्तकासार्दितां लिह्यात् स्वास्थ्यं स लभते क्षणात् ॥

*Gadanigraha, 2-10-35.*

## रसायने

पेत्र्यैर्मृणालबिसकेशरपत्रबीजैः सिद्धं सहेमशकलं पयसा च सर्पिः ।

पञ्चारविन्दमिति तत् ग्रथितं पृथिव्यां प्रभ्रष्टपौरुषबलप्रीतिभैर्निषेव्यम् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 39-48.*

### मूत्रकृच्छ्रे

तैलेन पद्मिनीकन्दं पक्कं गोमूत्रमिश्रितम् ।  
पिबेन् मूत्रनिरोधे तु सतीब्रवेदनान्विते ॥

*Hārīta Samhitā, 3-30-4.*

### गुदनिर्गमे

कोमलं पद्मिनीपत्रं यः खादेच्छकरायुतम् ।  
एतनिश्चित्य निर्दिष्टं न तस्य गुदनिर्गमः ॥

*Vṛndamādhava, 51-24.*

### मदात्यये

मृणालबिसकृष्णा वा लिह्यात् क्षौद्रेण साभयाः ।  
दुरालभां वा मुस्तां वा शीतेन सलिलेन वा ॥

*Aṣṭāṅga Hṛdaya, Cikitsā 7-10.*

## KAMPILLAKA

**Botanical name :** Mallotus philippensis Muell.-Arg.

**Family :** Euphorbiaceae

**Classical name :** Kampillaka

**Sanskrit names**

Kampillaka, Raktāṅga, Recana, Karkaśa,  
Raktacūrṇaka, Virekī, Raktaśamana, Vraṇaśodhana.

**Regional names**

Kabila (Hindi); Kamalagundi (Beng.); Rohini,  
Roini (U.P. hills); Kambel (Jaunsar hills, U.P.); Kapila,  
Shendari (Mar.); Kamilo (Guj.); Kungumam (Tam.);  
Kunkum (Tel.); Kunkundamar (Kann.); Kurmadakku  
(Mal.); Kunkumo (Uri.); Kapilo gundi (Orissa); Lokhan  
(Assam.); Kambil (Arabi.); Kamala tree (Eng.).

**Description**

Generally a small evergreen tee, but occasionally upto 50ft. high and 5ft. in girth. Bark thin, dark-grey, somewhat rough. Young branches rusty.

Wood smooth hard and close grained; sapwood white; heart wood light, red to darker, red towards the centre in large stems. Annual rings indistinct; weight 48 lbs. per c. ft. Tree coppices exceedingly well.

Leaves alternate, simple, very variable both in size and shape, usually 3-9 in long, ovate, ovate-oblong or lanceolate, entire or, if of luxuriant coppice-shoots, closely toothed, glabrous above, pubescent and with close-set red glands beneath, 3-nerved at the base; petiole about half the length of the blade, rusty-pubescent.

Inflorescence and flowers brown or brick-red. Calyx 3-cleft. Petals and disk none. Male flowers: clustered, anther-calls distinct and globose. Female flowers: solitary. Ovary 3-celled; cells 1-ovuled; styles 3; papillose inside.

Fruit a 3-lobed capsule, 3.5 in diam; covered with a crimson powder or brick red powder in dust form when ripe. Seeds about 1 in. diam.; globose, smooth, black.

### **Flowering and Fruiting time**

It flowers in September-November and fruits in March-May. Flowering and fruiting stages fall during postrainy season to summers.

### **Distribution**

Mostly tropical regions of Asia and Australia. In India, it occurs in the Himalayan regions from Kashmir to Nepal. It is growing wild in Himalayan terai in Uttar Pradesh (Uttarakhand region) and terai of Nepal. It is found in West Bengal, Orissa, Madhya Pradesh, Punjab, Himachal Pradesh, Maharashtra and Andaman Islands. It also occurs in Burma, Singapore and Sri Lanka.

### **Pharmacodynamics**

Rasa	: Katu
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Kaphavātaśāmaka.

### **Chemical composition**

Most of the part of Kamela fruit forms resinous colouring matter which mainly contains rottelerin. It is

red-yellowish crystal form which is fully insoluble in water and partially soluble in alcohol, but it is fully soluble in aqueous solution with alkalies. It gives red colour.

### **Properties and Action**

<b>Karma</b>	: Kṛmighna-kṛminiṣkāsaka (sphitakṛmi) Recana Raktaśodhaka Aśmarībhedana Gorbhanirodhaka Kuṣṭhaghna Jantughna Viṣaghna.
<b>Roga</b>	: Kṛmiroga-sphītakṛmi Udararoga Gulma Vibandha-Anāha Raktavikāra Kuṣṭha Aśmarī Prameha Carmavikāra-Kaṇḍu-Pāmā-Kuṣṭha Vraṇa-Kṣata.

### **Therapeutic uses**

The drug Kampillaka is pungent (Kaṭu in rasa or taste and vipāka) and hot (uṣṇa) in potency (vīrya). Its chief action is anthelmintic (Krimighna) against abdominal worms (udarakrimi). Being anthelmintic or vermifuge and virecaka or cathartic (laxative) in higher dose, it is used frequently in worms affections and abdominal disorders. In smaller or normal doses, it is useful in other some diseases.

The hairs over fruits or red dust with brownish or brownish shade (rakta raja) or brick colour powdery substance (collected from fruits possessing glandular and non-glandular hairs) forms the drug Kampillaka mainly which also contains sometimes smaller pieces or traces of fruit-coat. The drug material is admixed with red coloured

dust or soil and other similar substances collected from same plant. Such adulterated or admixed raw material when put into water leaves precipitate of undesirable soily portion; and actual drug part remains insoluble in water and it is light then weighty soil etc. Most content (part) of drug kampillaka is resinous colouring matter and leaves some red colour water and aqueous solution in of alkalines being soluble to some extent and soluble in alcoholic solution fully, giving red dark solution after mixing the drug material. The matured or ripe fruits are colected (generally in summers or summer-end) and red dust (powder) with brownish, minute crystalline (traces) powder which in almost inodorous and tasteless. It is insoluble in cold water, soluble to certain extent in warm water and quite soluble in alcohol and ether smelling melon-like odour. Besides the characteristic solubility of genuine Kamela or Rottlera (Kamala or Glandular Rottlerae) powdery raw drug, the drawing of line with drug-dust by wet finger on a white paper (surface) leaves bright yellow colour or mark sign (lining) or turns into smooth (masṛṇa) linear streak or band, straining yellow finally. The kamala powder is properly collected of genuine and standard quality which is properly stored in airtight containers.

The drug Kampillaka is anthelmintic, bitter, cathartic and styptic. It is used in worms affections, abdominal disorders, blood diseases, calculus, flatulence, leprosy and skin diseases. Traditionally it is used for expelling worms in children. Powder is useful to apply on herpes (zoster) vesicles, and it gradually checks herpetic nueralgia.

The powder of drug Kampillaka is orally administered in proper dose (child and adult) as an anthelmintic in suitable form and with vehicle (anupāna) for expelling mouns abdominal worms. Kampillaka is given with jaggery (guḍa) falls all the worms out at the bowels.

The bark is sometimes used for tanning. The crimson powder, Kamela or Kamila, which covers the ripe fruit. is used for dyeing silk, and also in medicine and Hindu religious ceremonnies.

**Parts used :** Fruit-hairs, flowers.

**Dose**

0.5-1 gm. (hairs); powder 1-3 gm., Vermifuge dose : 3-6 gm., Child dose: 625 mg.

## KAMPILLAKA ( कम्पिल्क )

काम्पिलः कफपित्तास्त्रकृमिगुल्मोदरव्रणान्।

हन्ति रेची कटूष्णश्च मेहानाहविषाशमनुत्॥

*Bhāvaprakāśa Nighaṇṭu, Harītakyādi varga, 147.*

क. काम्पिल्को रोचनको रञ्जनो रक्तचूर्णकः ॥

रक्ताङ्गी रक्तशमनो विरेकी ब्रणशोधनः ।

ख. काम्पिलो रेचनी दीपनो कटूष्णः कफवातजित्॥

ब्रणगुल्मोदरानाहमेहाशमविषजन्तुहा ।

### कम्पिल्कशाकम्

ग. तच्छाकं शीतलं तिक्तं वातलं ग्राहि दीपनम्॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 948-950.*

### कम्पिल्कम्

कम्पिल्को विरेची स्यात् कटूष्णो ब्रणनाशनः ।

गुल्मोदरविबन्धाधमश्रेष्ठकृमिविनाशनः ॥

*Dhanvantari Nighaṇṭu.*

### कृमिरोगे

कम्पिलचूर्णकर्षार्द्धं गुडेन सह भक्षितम्।

पातयेत् क्रिमीन्सर्वानुदरस्या न संशयः ॥

*Bhāvaprakāśa, Krmirogādhikāra, 7-22.*

### पैत्तिकगुल्मे कम्पिल्कचूर्णम्

‘विरेकाय सितायुक्तकम्पिलं वासमाक्षिकम्।’

*Bhāvaprakāśa, Gulmādhikāra, 32-26.*

### गुल्मे

द्राक्षामयरसं गुल्मे पैत्तिके सगुडं पिबेत्।

लिह्यात् कम्पिल्कं वापि विरेकार्थं मधुद्रवम्॥

*Caraka Saṁhitā, Cikitsā, 5-130.*

स्त्रिधोषो पित्तगुल्मे तु कम्पिलं मधुना लिहेत् ।  
रेचनार्थं रसं वाऽथ द्राक्षायाः सगुडं पिबेत् ॥

*Vṛndamādhava, 30-14.*

रक्तगुल्मे

गुण्डारोचनिका चूर्णं शर्करामाक्षिकान्वितम् ।  
विदधीताशु गुलिम्न्या मलसञ्चक्रमाय च ॥

*Bhāvaprakāśa, Cikitsā, 32-49.*

ब्रणे

दूर्वास्वरससंसिद्धं तैलं कम्पिलेन वा ।  
दार्वी त्वचश्च कल्केन प्रधानं ब्रणरोपणम् ॥

*Caraka Saṁhitā, Cikitsā. 25-93.*

प्रमेहे काम्पिलकप्रयोगः

*Caraka Saṁhitā, Cikitsā. 6-65/66.*

## KĀÑCANĀRA

**Botanical name**

Bauhinia variegata Linn.

Syn. Phanera variegata (L.) Benth.

**Family :** Caesalpiniaceae

**Classical name :** Kañchanāra

**Sanskrit names**

Kāñchanāra, Gaṇḍāri, Camarika, Jugapatraka,  
Karbudāra, Svalpakesarī.

**Regional names**

Kachnar (Hindi); Kachnal, Kularh (Punjabi);  
Kanchan (Beng.); Koral Koral (Mar.); Kapakati (Guj.);  
Mandare (Tam.); Devakanchanamu (Tel.)

**Description**

**Bauhinia variegata Linn.**

Small to medium-sized trees with hairy branches.  
Leaves 4.5-15 cm. long, as broad as or broader than long,  
cleft one-fourth to one-third way down, 9-15- nerved, lobes  
obtuse base cordate.

Flowers in lax corymbose racemes, from leafless axils or terminating lateral branches; bracts and bracteoles detoid. calys 2-2.7 cm. long, pubescent, spathaceous, 5-toothed at apex. Petals 4-5 cm. long, obovate-oblong, clawed, the uppermost darker with purple veins. Stamens 5 fertile; staminodes absent. Ovary pubescent.

Pods 15-30 × 15-25cm. flat, glabrous; seeds 10-15.

### **Bauhinia purpurea L.**

Mediumsized trees with greyish to dark brown bark and pinkred blaze; young parts pubescent. Leaves 7.5 × 20 cm. long, longer than broad, 9-11 nerved, cleft about half way down into two acute or rounded lobes. Flowers rose-purple, in a few flowered terminal corymbose or panisulate tomentose racemes. Calyx 2-2.5 cm. long, oblanceolate with purple claves and mouth; stipulate. Pods 15-25×15-2 cm., flat slightly falcate; seeds 12-15mm., flattened, roundish, dark brown. Flowering and fruiting from October to March.

### **Bauhinia racemosa Lamk.**

Syns. *Philiostigma racemosa* (Lamk.) Benth.

Small trees with spreading crown; bark greyish black with vertical cracks. Leaves broader than long, 2-5 × 2.5 cm., divided one-third to half way down into two lobes, glabrous above, hairy below, usually cordate at base.

Flowers white, in terminal or leaf opposed simple 5-10 cm. long racemes. Calyx tube 6-8 mm. long, spathaceous, reflexed. Petals about 1 cm. long oblanceolate, acute. Stamens 10, fertile; filaments hairy at base. Ovary hairy, stigma sessile.

Pods 10-25 cm. long, falcate; seeds 10-20, oblong, compressed black. Flowering and fruiting from April to August.

### **Flowering and fruiting time**

September to March (flowers) and October to April (fruits). Almost leafless trees *Bauhinia variegata* Linn. flower during springs and becomes in fruting stage by beginning of summers.

### Distribution

It occurs almost throughout India ascending to about 5,000 ft. elevation.

### Kinds and varieties

There are three varieties of Kāñcanāra on the basis of flower-colour viz. White (śveta), yellow (pīta) and red (rakta). White and red varieties of kāñcanāra are of Kovidāra which is botanically identified as *Bauhinia purpurea* Linn., commonly known as Koilar and also Kolar and Peddare. Kovidāra flowers in śarada ḗtu (autumn) and fruits in sītaṛtu (winter) which kāñcanāra (Karbudāra) flowers in spring (Basanta) as indicated in classical description (Cakrapāṇi annotating Caraka Samhitā, Cikitsā. 4-70 and other texts) specifying two varieties of Kovidāra.

Morphologically the flowers are showy more than 3 mm. long generally in three species of *Bauhinia* viz. *B. racemosa* Lamk., *B. variegata* L. and *B. purpurea* Linn. Besides other characteristic difference (stamens fertile 10 in *Bauhinia racemosa* Lamk. while in others fertile stamens 3-5), mainly the characters of leaves and also flowers differentiate both species: Leaves cleft to about half way down, hypanthium shorter than the calyx and fertile stamens three in *Bauhinia purpurea* Linn. when the leaves cleft to about one-third way down, hypanthium equalling the calyx and fertile stamens five in *Bauhinia variegata* Linn. Another kind of Kancanāra or Pīta Kancanāra is botanically identified as *Bauhinia tomentosa* Linn. that bears yellow flowers and it occurs in north-western India particularly and Sri Lanka.

### Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Viryā	: Sīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittasāmaka

### Properties and Action

Karma	: Gaṇḍamālānāśana Vraṇāśodhana-vraṇaropana
-------	---

	Kuṣṭhaghna
	Śothahara
	Stambhana
	Kṛmighna
	Vāmaka
	Raktastambhana
	Lasikāgranthiśothahara
	Kāsahara
	Mūtrasaṅgrahaṇīya
	Ārtavasrāvahrāsaka
	Lekhana-medāpanayana
<b>Roga</b>	: Galagaṇḍa-Gaṇḍamālā
	Granthi śotha
	Vraṇa
	Lasikā
	Granthi-Arbuda
	Kuṣṭha
	Carmavikāra
	Mukhapāka
	Atisāra-Pravāhikā
	Arśa-gudabhramśa-parikartikā
	Kṛmi
	Vibandha
	Raktapitta
	Prameha
	Raktapradara
	Medoroga
	Carmavikāra-dadru.

### **Therapeutic uses**

The drug Kāñcanāra is astringent, antiallergic and vermifuge. It is used in cough, menstrual disorders, glandular diseases and prolapse of the rectum. Drug is frequently used in traditional medicine in glandular ailments.

The drug Kāñcanāra (*Bauhinia variegata* Linn.) is an excellent medicine for galagaṇḍa, gaṇḍamāla, granthi and similar other ailments in Āyurveda. The fresh bark of Kāñcanāra mixed with Śuṇṭhi (ginger) is pounded with sour gruel and given in gaṇḍamālā (Cakradatta, 41-18).

The decoction of Kāñcanāra bark (tvacah), added with Śuṇṭhī powder is given in gaṇḍamālā. Decoction of Kāñcanāra bark added with three myrobalans or triphalā (Terminalia chebula, Terminalia belerica and Emblica officinalis) and pippalī cūrṇa (fruits powder of Piper longum Linn.) is recommended in gaṇḍamālā as well as galagandā (goitre). Besides these recipes, thrifhlā ghṛta, diet of barley (yava) and green gram (mudga) are advised in texts of clinical medicine in the management of gaṇḍamālā (cervical adenitis-chain of swollen glands in neck). Kāñcanāra bark is pounded in rice water (tandulodaka) and given to patient of gaṇḍamālā. Kāñcanāra guggulu is a prominent formulation in Indian medicine which is frequently administered for treatment of galagandā, gaṇḍamālā, granthi and allied diseases.

The plant drug Kovidāra (*Bauhinia purpurea* Linn.) is of almost similar medicinal importance. The powder of the Kovidāra root-bark may be taken with butter milk in arṣa or piles (Aṣṭāṅga Hṛdaya, Cikitsā, 8-31). It is recommended for treatment of raktapitta, (intrinsic haemorrhage). The powdered flowers of Kovidāra, Śālmali, Khadira and Priyaṅgu are given to patient (Caraka Saṁhitā, Cikitsā. 4-70). Similary another recipe contains two plants Kāśmarī and Śālmalī with Kovidāra. It is taken in some kind of ailment (s). Kovidāra also enters in a recipe containing śirīṣa, Arka and Kaṭabhī which is indicated against snake-poisoning or sarpaviṣa (Suśruta Saṁhitā, Kalpa. 5-18). The flowers of Kovidāra is specially indicated for raktapitta in medical texts as they have grāhi (saṅgrāhi) and other medicinal properties.

In pox (masūrikā), the decoction of Kāñcanāra bark added with svarṇamākṣikā bhasma is considered useful. Kāñcanāra is useful in various other diseases such as kāsa, śvāsa, pradara, kṣaya, kṛmi, kuṣṭha, gudabhrāṁśa, vrāṇa, mūtrakṛcchra, atisāra, pravāhikā, prameha, medoroga, carmavikāra, parikarttikā and other diseases.

**Parts used :** Bark, flowers.

**Doses**

Bark powder 1-6 gms. Decoction 40-80 ml., Flowers juice 10-20 ml.

**Formulations**

Kāñcanāra Guggulu, Kāñcārādi Kvātha, Kāñcana guḍikā.

**Gaṇa**

Vamanopaga (Caraka Saṁhitā), Urdhvabhāga hara, Kaśāyavarga (Suśruta Saṁhitā).

**A. KĀÑCANĀRA ( काञ्चनार )****B. KOVIDĀRA ( कोविदार )**

काञ्चनारो हिमो ग्राही तुवरः शेष्पित्तनुत्।

कृमिकुष्ठगुदभ्रंशगण्डमालाव्रणापहः ॥

*Bhāvaprakāśa Nighaṇṭu, Guducyādi-Varga, 101-102*

**काञ्चनारद्वयपुष्पम्**

कोविदारोऽपि तद्वत्स्यात्तयोः पुष्पं लघुस्मृतम्।

रूक्षं सङ्घ्राहि पित्तास्त्रप्रदरक्षयकासनुत्॥

*Bhāvaprakāśa Nighaṇṭu, Guducyādi Varga, 104*

**कोविदारगुणा:**

कोविदारो हिमो ग्राही कषायः कफपित्तजित्।

गण्डमालागुदभ्रंशव्रणकुष्ठकृमीन् जयेत्॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 934*

**काञ्चनार गुणाः ( काञ्चनारद्वयपुष्पम् )**

कषायं मधुरं पाके रसे सङ्घ्राहि रोचनम्॥

रूक्षं कासक्षयश्वासपित्तास्त्रप्रदरापहम्।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 936-937*

कोविदारः कषायः स्यात् सङ्घ्राही व्रणरोपणः।

दीपनः कफवातघो मूत्रकृच्छ्रनिवर्हणः॥

*Rāja Nighaṇṭu, Karavīrādi Varga, 25*

कोविदारः कषायस्तु सङ्घ्राही व्रणरोपणः।

गण्डमालागुदध्रंशशमनः कुष्टकेशहा ॥

*Dhanvantari Nighantu.*

### कोविदारपुष्पम्

‘कोविदारपुष्पाणि मधुराणि मधुरविपाकानि रक्तपित्तहराणि ।’

*Suśruta Saṁhitā.*

‘पुष्पं ग्राहि विशेषेण रक्तपित्तं प्रशस्यते ।’

*Caraka Saṁhitā.*

### गण्डमालायाम्

‘नित्यं (पिष्ठ्वा) ज्येष्ठाम्बुना पेयाः काञ्चनारत्वचः शुभाः ।

विश्वभैषजसंयुक्ता गण्डमालाहरः परः ॥’

*Vṛndamādhava, 41-19.*

*Cakradatta, Gandamālā Cikitsā, 41-18.*

### मसूरिकायाम्

‘काञ्चनारत्वचः कषायः ताप्यचूर्णावचूर्णितः ।’

*Bhāvaprakāśa Cikitsā 60-49.*

### रक्तपित्ते

‘कोविदारस्य पुष्पाणि..... ।

अन्नपानविधौ पाकं यच्चान्यद् रक्तपित्तनुत् ।’

*Caraka Saṁhitā, Cikitsā, 4-39.*

‘.....कोविदारस्य..... ।

पुष्पचूर्णानि मधुना लिह्याना रक्तपित्तकः ॥’

*Caraka Saṁhitā, Cikitsā, 4-38*

### मर्घदष्टे

‘कोविदारशिरीषार्ककटभोर्वाऽपि भक्षयेत् ।’

*Suśruta Saṁhitā, Kalpa. 5-17*

### मेधावर्धनार्थम्

सर्पिश्चतुः कुवलयं सहिरण्यपत्रं

मेध्यं गवामपि भवेत् किमु मानुषाणाम् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 39*

### अर्णःसु

‘कोविदारस्य मूलानां मथितेन रजः पिबेत् ।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 8.*

## कोविदारः

‘कोविदारोऽप्सरः शम्यः कोविदारश्च काञ्छनः ।

पूर्वः सितोऽपरो रक्तो युक्तपत्रावुभावपि ॥

*Ratnakosah.*

कोऽप्ययं दारुरित्याहुः अजानन्तो यतो जनाः ।

कोविदारस्त्विति ख्यातः ततः स तरुपुङ्गवः ॥

*Harivamsa.*

कोविदारः श्वेतपुष्पो सुशिष्म्बो युग्मपत्रकः ।

दृढकाष्ठो रक्तसारः पादपः पर्वते भवेत् ॥

*Sivadatta*

काञ्छनारो महान् किञ्चित् युग्मपत्रोऽयं शिष्म्बकः ।

कषायो रक्तपुष्पश्च काननादौ प्रजायते ॥

## कोविदार-कर्बुदारयोर्मध्ये पार्थक्यम्

‘कोविदारः स्वनामख्यातः स शरदि पुष्प्यति ।

कर्बुदारः काञ्छनारः स बसन्ते हि पुष्प्यति ॥’

*Cakrapāṇi, Caraka Saṃhitā, Kalpa. 2-14*

## रक्तपित्ते कोविदारपुष्पचूर्णम्

खादिरस्य प्रियङ्गुणां कोविदारस्य शाल्मलेः ।

पुष्पचूर्णनि मधुना लिह्यान्ना रक्तपित्तिकः ।

*Caraka Saṃhitā, Cikitsā. 4-70.*

## सर्पविषे

‘कोविदारशिरीषार्ककटभीर्वापि भक्षयेत् ।’

*Suśruta Saṃhitā, Kalpa. 5-18.*

## अर्णसि

‘कोविदारस्य मूलानां मधितेन रजः पिबेत् ।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 8-31.*

## कोविदारादिवृन्तवस्ति-परिकर्त्तिकानाशनार्थम्

कर्बुदाराढकीनीपविदुलैः क्षीररसाधितैः ।

बस्तिः प्रदेयो भिषजा शीतः समधुशर्करः ॥

परिकर्त्ते तथा वृन्तः श्रीपर्णी कोविदारजैः ।

(देयो बस्तिः सुवैद्यस्तु यथावद्विदितक्रियैः) ।

*Caraka Samhitā, Siddhi. 10-34/35.*

**गण्डमालाचिकित्सायां काञ्चनारः**

काञ्चनारत्वचः क्राथः शुण्ठीचूर्णेन संयुतः ।  
माक्षिकाद्यः सकृत्पीतः क्रायो वरुणमूलजः ॥  
गण्डमालां हरत्याशु चिरकालानुबन्धिनीम् ॥

*Bhāvaprakāśa, Madhyakhaṇḍa, 44-37.*

पलमर्ढपलञ्चापि पिष्टां तण्डुलवारिणा ।  
काञ्चनारत्वं पीत्वा गण्डमालां व्यपोहति ॥

*Bhāvaprakāśa, Madhyakhaṇḍa, 44-38.*

**गलगण्ड-गण्डमालाग्रन्थ्यर्बुद्धाधिकारे**

काञ्चनारसंगुलुयोगः

*Bhāvaprakāśa, Madhyakhaṇḍa, 44/39-44.*

**मसूरिकायां काञ्चनारत्वचः**

उत्थिता प्रविशेद्या च तां पुनर्वाह्नियो नयेत् ।  
काञ्चनारत्वचः क्राथस्तान्यचूर्णावचूर्णितः ॥

*Bhāvaprakāśa, Masūrikādhikāra 60-49.*

**गण्डमाला-चिकित्सायां काञ्चनारप्रयोगः**

काञ्चनारत्वचः कषायः शुण्ठी चूर्णेन नाशयेत् ।  
गण्डमालां तथा क्राथः क्षौद्रेण वरुणत्वचः ॥

*Vaidya Manoramā, 13-37.*

सकाञ्चनारत्रिफलाजले शृतः प्रशस्यते मागधिकावचूर्णिताः ।

सगण्डमाले गलगण्डरोगिणी फलत्रिकाज्यं यवमुद्गभोजनम् ।

*Cikitsā KalpaValli 1-83.*

## KAÑCATA

**Botanical name**

Ludwigia adscendens (L.) Hara

Syns. Jussiaea repens Linn., J. adscendens L.

**Family :** Onagraceae

**Classical name :** Kañcaṭa

**Sanskrit name :** Kañcaṭa

### Rigional names

Kesara-dam (Beng.); Dhabani, Kesariba (Bihar).

### Description

Aquatic or semi-aquatic herbs with a cruping stem rooting at the nodes, usually with pseudo-pneumatophores.

Leaves alternate, elliptic-oblong, 1-7 × 1-2.5 cm., glabrous, rounded at the apex, narrowed at base; petioles 6-16 mm. long, sparsely pubescent; bracteoles deltoid.

Flowers solitary, axillary, pentamerous. Sepals 5, deltoid-acuminate, 5-10 × 2-2-3.2, mm. Petals 5, white, obovate, 9-18 × 6-10 mm.

Capsules terete, sparsely pubescent or glabrous, thick-walled; irregularly dehiscent, 12-27 × 3-4 mm., 10-ribbed; seeds uniserial in each cell, pale brown, numerous.

### Flowering and fruiting time

Plant flowers and fruits in January to June or winters to summers.

### Distribution

Plant grows along margins of tanks, streams and lakes in Madhya Pradesh, Central India and her regions in country.

### Pharmacodynamics

Rasa	: Tikta, Kaṣaya
Guṇa	: Laghu
Vīrya	: Uṣṇa
Vipāka_	: Kaṭu
Doṣakarma	: Vātāpittahara.

### Properties and Action

Karma	: Saṅgrāhī, Atisāraghnā, Śūlahara.
Roga	: Atisāra Raktatisāra Grahanī, Udaraśūla.

### Therapeutic uses

The plant is considered an anti-diarrhoeal medi-

cine. Leaves are oally in cases of diarrhoea. Leaves of plant drug alongwith tender fruit of Bilva (Aegle marmelos Correa), mixed in butter, are given internally in condition of diarrhoea with blood and griping. It is also used in Grahaṇī diseases. Decoction of leaves is useful in abdominal and diarrhoeal disorders.

The herb is used as a paste or in poultice for applying on ulcers and skin complaints.

**Parts used :** Whole plant, leaves.

**Dose :** Juice 5-10 ml., Decoction 50-100 ml.

**Formulation :** Kañcaṭādi Kvāṭha

## KAÑCATA ( कञ्चट )

अतिसारे

कञ्चटजम्बूदाडिमशृङ्गाटकपत्रबिल्वहीवेरम् ।

जलधरनागरसहितं गङ्गामपि वेगिनी रुच्यात् ॥

*Cakradatta, 3-38.*

सुस्विन्नकञ्चटं बालबिल्वं सनवनीतकम् ।

लिह्याद् रक्तातिसारे च सशूले ग्रहणीगदे ॥

*Baṅgasena, Atiśara. 116.*

## KANKOLA

**Botanical name :** Piper cubeba Linn.

**Family :** Piperaceae

**Classical name :** Kaṅkola

**Sanskrit names**

Kaṅkola, Gandhamarica, Sthūlamarica,  
Kaṭukaphala, Sapucchamarica, Navapariṇītāvadhū phala,  
Mādhavocitam, Kolāka, Koṣaphala, Vṛttaphala, Katuphala,  
Kola, Bahuphala.

**Regional names**

Kababchini, Shitalchini (Hindi); Kababchini  
(Bengla); Hisimi (Mar.); Tadmire (Guj.); Valmilaku (Tam.

Mal.); Tokamiriyalu (Telugu); Bala menasu (Andhra.) Kababsini Habul-urus (Arab.); Kababchini (Persian); Cubeb (Eng.). Cubabae Fructus, Tailed Papper.

### Description

Perennial climber, stem tender, smooth, glandular at nodes, nodular; Leaves glabrous, ovate, oblong with coriaceous or rounded base, entire, peltate, obliquely cordate, coriaceous; venation clear (conspicuous). Male and female flowers on separate plants; fls. on spikes.

Fruits globose drupes resembling with fruits of Marica or black pepper (*Piper nigrum* Linn.); Fruit sub-globose, 6-8 mm. meridian somewhat appiculate, stalked; fruit almost globular; 3-6 mm. diam., with a slender stalk like portion upto 7mm., attached with its base (hence cubeb also known as stalked pepper); the upper part of the fruit globular covered with greyish brown raticulated pericarp (extended at the base into a straight stalk upto 7 mm. in length). Anatomically structure of paricarp distinguishes it from black peper and the adulterants. Pericarp thecaphore. Fruits form drug material of Kankola (known as Kababchini or Shital chini in trade). Fruits being stalked are also known as Tailed pepper.

### Flowering and fruiting time

Plant flowers and fruits during Autumn season.

### Kinds and varieties

The fruits of *Piper ribesioides* wall. and *Piper sumatrana* Dc. are similar to Kankola but larger in size. They are named Br̄hat kankola. The fruits of some species of *Piper* genus are taken as substitutes and adulterants viz. *Piper crassipes* karth, *P. cannum* Blume, *P. Baccatum* Blume, *Piper clussui* Dc. and *P. guineense* Dc. Fruits of *Litsea cubeba* Pers. are also admixture.

### Distribution

Plant is occasionally cultivated in certain regions. Exported from Singapore to Bombay market in India. Plant Grown and drug prouced in Sumatra, Java, Borneo, Malaya and other islands in South-east Asia. Cultivated at small seale in Southern India. Plant is also cultivated in Mysore (Karnataka).

### **Chemical composition**

The most characteristic constituent of Cubeb is the essential oil (Oil of Cubeb), the proportion of which varies from 5 to 20 percent. (13 ml. oil obtained from 100 gm. fruits material as per average or minimum calculation).

In addition the fruits contain resinous matter (6.4-8.5%), gum, colouring matter, fired oil, starch and nitrogenous substance. Resinous matter is composed of several acidic and neutral substances of undermined composition including cubebin having a bitter taste, cubebol and cubebic acid.

### **Pharmacodynamics**

Rasa	: Katu, tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Viryā	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Kaphavātaśāmaka

### **Action and Properties**

**Karma** : Rocana-Dīpana-Pācana-Anulomana  
Hṛdaya

Sleṣmanihśāraka-kaphaghna

Vājik, rāṇa-Ārtavajyanana

Raktotkleśaka-uttejaka

Śothahara

Durgandhanāśana

Vraṇaropāṇa

**Roga** : Śothavedanā (yukta vikāra)

Mukharoga-galaroga-dantaroga

Śiroroga-śirahśula

Dehadourgandhya

Agnimāndya-aruci-viṣṭambha

Arśa

Hṛddourbalya

Kāsa-śvāsa

Kaṣṭārtava-rajorodha

Dhvajabhaṅga-napumśakatā

Jīrṇa puyameha-Mutrakṛcchra.

### **Therapeutic uses**

The drug Kaṅkola is appetizer, aromatic, cardio-

tonic, carminative, emmenagogue, diuretic and urogenital antiseptic. It is used in cardiac weakness, constipation, cough, cystitis, dysmenorrhoea, gonorrhoea, lack of appetite, piles, respiratory disorders and urinogenital disorders.

The powder of fruits is given in cough, asthma, dyspepsia and haemorrhoids. The oil is applied on wounds. In dental ailments, the powder is mixed with dental powder (dantamanjana). It is snuffed in headache. The drug is orally taken or kept in mouth in ailments of mouth and throat.

The powder is externally applied to male genital organ (śīśna) for promoting sexual instinct and pleasure (kāmasampraharṣa janana) in coitus. Hence, it is known as Hajbul-urus (in Unani medicine) and 'Bridegroom Berry' accordingly. Drug is useful in impotency.

It is mixed with paste to be applied on body for checking foul smell. The drug is used in chronic gonorrhoea, dysuria, painful or scanty menses, heart troubles (Weakness), worms affections. Drug allays diseases caused by provocation of Kapha vāta dosa. Kankola is a sugandhi dravya (aromatic drug) in Indian medicine. Fruits are also used as spice. Phytochemically, the therapeutic value of cubeb is attributed to be largely due to cubebic acid present in fruits besides other active constituents.

#### **Parts used : Fruits**

**Dose :** Powder 1-3 gm., Oil 1-3 drops, (5-30 drops).

## **KANKOLA ( कङ्कोल )**

### **कङ्कोलं सुगन्धिद्रव्यम्**

कङ्कोलं कोलं प्रोक्तं तथा कोषफलं स्मृतम्।  
कङ्कोलं लघु तीक्ष्णोष्णं तिकं हृदयं रुचिप्रदम्।  
आस्यदौर्गन्ध्यहृदोगकफवातामयान्ध्यहृत् ॥

*Bhāvaprakāśa Nighaṇṭu, Karpurādi Varga, 116.*

**क.**    कङ्कोलं कटुफलं मारीचं माधवोचितम्।  
          कूलं बहुफलं कोलं कटुकं कटुकाफलम्॥

ख. कङ्गोलं लघुतिकोष्णं तीक्ष्णं हृदयं रुचिप्रदम्।  
कफानिलास्यदौर्गध्यहृदरोगकृमिमान्द्यजित् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1331-1332.*

### कङ्गोल-कङ्गोलम्

अ. कक्कोलकं कृतफलं कीलकं कटुकं फलम्।  
विद्वेष्यं स्थूलमरिचं कर्कोलं माधवोचितम्।

### कङ्गोलगुणाः

ब. कङ्गोलं कटु तिकोष्णं वक्त्रजाड्यहरं परम्।  
दीपनं पाचनं रुच्यं कफवातनिकृतम्॥

*Rāja Nighantu,, Candanādivarga, 79-80.*

कङ्गोलकं.....कटुतिकं कफापहम्।  
लघु तृष्णापहं वृष्यं वक्त्रदौर्गन्ध्यनाशनम्॥

*Suśruta Saṁhitā, Sūtra. 46.*

## KĀNDĪRA

**Botanical name :** Ranunculus Scalaratus Linn.

**Family :** Ranunculaceae.

**Classical name :** Kaṇḍīra, Jaladhanyaka

**Common name :** Jaldhaniya

**Sanskrit names**

Kāṇḍīra, Kāṇḍakāṭuka, Toyavallī, Sukāṇḍaka,  
Kārvallī.

**Regional name**

Jaldhaniya, Devkandar (Hindi); Palika (Bihar); Sim  
(Kumaon); Kabikajaj (Arabic); Karafs dashti (Persian);  
Celery-leaved crowfoot (English).

**Description**

Erect glabrous annual aherbs, 20-70 cm. tall, much branched. Lower leaves up to 15 cm. across with cuneate, obtusely-toothed segments, petiolate, upper leaves 3-fid, shortly stalked or sessile, uppermost usually simple, linear, sessile.

Flowers yellow, 0.6–1 cm. diam., numerous, termi-

nating the branchlets, and from the forks. Sepals spreading and reflexed.

Fruiting receptacle slightly hairy. Achenes many rather turgid, not margined, glabrous, on an oblong hairy receptacle.

### **Flowering and fruting time**

Winters to spring season. December to March.

### **Distribution**

Plant grows commonly along river beds, on moist river and along other aquatic and moist localities (nalias, ponds, tanks etc.). It generally occurs from Kashmir to Assam upto Tropical hilly rigions (up to 5,000 ft. elevation).

### **Pharmacodynamics**

Rasa	: Kaṭu, tikta
Guṇa	: Rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

### **Properties and Action**

Karma	: Bāhya Raktotkleśāka Sphoṭajanana Jantughna Ābhyanṭara Dīpana Pācana Kṛmighna Rasagrānthisothahara Ārtavajanana Viṣākta-atitikṣaṇa
Roga	: Udararoga Gulma Plihā Udaraśūla Agnimāndya Kṛmi Rasagrānthisotha Raktavikāra

Rajorodha  
Dhvajabhaṅga  
Carma vikāra  
Āmavāta.

### **Therapeutic uses**

It is very irritant, vesicant and toxic plant, hence precaution should be taken while using it orally, and due care is also desired when it is topically applied.

The plant drug is considered useful in plague since the same is externally applied as a paste on glandular swelling or swollen gland in plague. In general the paste is recommended for topical application on swollen lymphatic glands. In impotency the local application of drug is prescribed for which an oil prepared with leaves and other parts of drug plant may be used externally. In addition the drug is locally applied to skin affections, gout and rheumatic joints. It external application is suggested to made as germicidal.

The drug is recommended as preventive prophylactic as well as curative remedy in plague disease. The drug is useful in abdominal diseases, abdominal colic, splunic disorder, dyspepsia, worms and other ailments of digestive system. It is useful in case of dysmenorrhoea. Externally the drug is applied to ulcers and wounds, but precaution is required keeping the intense irritant nature in view.

Traditional practice of herbal drugs in rural and tribal regions is making uses of Kandīra or Jaldhaniya in some ailments and medicinal purposes. It also includes use of leaves or branches with leaves, flowers and fruits for preparing (cooking) an oil (in sesamum, mustard and coconut oil—anyone oil considered suitable) under normal process of oil preparation (tailapāka vidhi). This oil is suggested to be applied externally over penis (only on skin movable or foreskin) for limited time. in case of impotency in order to strengthen erectile power of male genital organ (dhavajotthāna vikṛti : Klaibya or napumsakatva), but a restricted application is avisable as its general external use always needs precautionary consideration.

**Parts used :** Whole plant, leaves.

**Dose :** 1-3 gms.

## KĀNDĪRA ( काण्डीर )

काण्डीरः काण्डकटुको नासासंवेदनः पटुः ।

उग्रकाण्डस्तोयवल्ली कारवल्ली सुकाण्डकः ॥

काण्डीरः कटुतिकोष्णः सरो दुष्टब्रणार्त्तिजित् ।

लूतागुल्मोदरप्लीहशूलमन्दाग्निनाशनः ॥

*Dhanvantari Nighaṇṭu, Rāja Nighaṇṭu,  
Guḍūcyādi Varga, 123-124.*

## KĀNGUKA

**Botanical name :** Setaria italica Beauv.

**Family :** Poaceae (Gramineae)

**Classical name :** Kaṅguka

**Sanskrit names**

Kāṅguka, Kaṅgu, Kaṅguni-Kaṅguṇī, Cinaka, Pitataṇḍula, Vātala, Sukumāraka.

**Regional names**

Kanguni, Koni (Hindi); Kangu (Beng.), Kangu (Mar.) Kang (Guj.), Korralu (Tel.), Tenai (Tam.), Millete (Eng.).

**Description**

An erect, often robust, tufted, annual grass with fasciculated and prominently jointed culms, 0.6-1.5 meters high, somewhat branching from the crown; stems sometimes decumbent near the base and rooting at the lower joints.

Leaves flat, linear or lanceolate, tapering to a setaceous point, 15-45 cm, long, 0.75-3.3 cm. broad, glabrous, panicles, erect or nodding, continuous and cylindric or more or less lobed, having 2-4 spikelets in each involucre.

Bristles 2-9, hairy, nearly smooth, twice as long as

the spikelets, sometimes bearing to extra spikelets at the tip in some cases; spikelets persistent, broadly-oblong to broadly elliptic, 2.0 - 3.5 cm. long, lower floret barren, upper floret hermaphrodite, caryopsis ellipsoidal or globose-ellipsoidal, 1.8×2.5 mm. long with persistent glumes, smooth, shining, with varying colours.

### **Flowering and fruiting time**

Forming season of millet crop.

### **Distribution**

It is under agro-farming of millet crop (with background of domestication suitability) for food grains, with cosmopolitan distribution in India. Italian millet (Kaṅguni) has been grown as a cereal crop from the time immemorial. The species is highly variable and also under hybridization process-rendering selected types for agro-cultivation of Italian millet grown in various states in India mainly as food crop well as fodder crop occasionally.

Millet is essentially a dry land crop and can be grown throughout the year. It is suited to tracts of low rainfall, ranging from 50 to 75 cm. and is cultivated in the Himalayas upto 1,800 meters and also sometimes upto 3,300 meters.

### **Chemical composition**

There is considerable variation in the composition of grains result from varietal differences, cultural practices, and environmental conditions. The figures of proximate composition reported are regarded as indicative.

Analysis of a dehusked sample (79% of whole grain) gave the following values (dry matter basis) : moisture 11.2, protein 12.3, fat 4.3, minerals 3.3, crude fibres 8.0 and other carbohydrates 60 to 9%; and with calories value 331.

The mineral constituent present in these grains follow : mg/100 g. dehusked material contains Ca 31, Mg 120, P. 290, phytin P. 193, Fr. 12.9 (ionizable Fe. 2.5), Na 4.6, K. 250, Cu. 0.35, S. 171 and Cl, 37. Iodine and Vitamins also present in the grains are part nutritive value of millet.

### **Pharmacodynamics**

Rasa : Madhura

Guṇa	:	Kaṣāya
Vīrya	:	Uṣṇa
Vipāka	:	Madhura
Doṣakarma	:	Vātakaphahara

### Properties and Action

Karma	:	Ropāṇa-Vraṇaropāṇa Balya Sāraka-anulomana Vedanāsthāpana
Roga	:	Vraṇa Nāḍīvraṇa Dourbalya Garbhasrāva Sūtikāroga Āmaवāta.

### Therapeutic uses

The roots of plant are obtained and ground duly mixed with equal quantity of sugar and the preparation (or in powder form) is recommended for orally use in cases of sinus (nāḍīvraṇa) specially with incessant discharge of thick pus. Another formulation is also prescribed for wound healing. Kaṅguka mixed with Triphala (three myrobalans), Lodhra (*Symplocos racemousus*), Śravaṇī or Mundī (*Sphaeranthus indicus*), bark of Dhava (*Anoegissus latifolia*) and Aślakarṇa and they are used in powder form in condition of wound.

Kaṅguka (millet) belongs to dhānya varga comprising food grains or cereals. Kaṅguka (Kanguni) is an article of food in rural and tribal belts; it is cooked as rice and consumed, besides other traditional uses as food of folks in villages, for routine preparations (such as roti, khir, bhat) and other dietary preparations under different conventions in rural areas in the plains and also in hills. Certain dietary items are considered wholesome in some ailing conditions such as ulcer, sinus, haemorrhage, pus formation and debility.

The plant drug is source of food grains which have medicinal value, and roots are also medicine. In general it

is considered to be sweet, acrid and aphrodisiac and it is used as sedative to the gravel uterus. It is a popular remedy of pain parturilion. Grains possess heating properties and when taken alone or excess can cause sometimes diarrhoea. It is astringent, diuretic and laxative. Grains are externally applied to rheumatic organs.

**Parts used :** Seed (Grains), roots.

**Dose :** Powder 3-6 gms., Food grains.

## KĀNGUKĀ-KĀNGUNĪ

( कङ्गुक-कङ्गुणी )

व्रणरोपणार्थम्

कङ्गुका त्रिफला रोधं कासीसं श्रवणाह्वय ।

धवाश्वकर्णयोस्त्वक् च रोपणं चूर्णमिष्यते ॥

*Suśruta Samhitā, Sūtra. 37-27.*

नाडीव्रणे

यः कङ्गुणीमूलसमांशखण्डमश्राति नित्यं पुरुषोऽभियुक्तः ।

नाडीव्रणे रोहति तस्य शीघ्रमनारतप्रस्तुतसान्द्रपूयः ॥

*Rajamārtanda. 26-15.*

## KĀNKUṢṬHA

**Botanical name**

Garcinia moralla Desv.

Syn. Hebradendron cambogioides Grahani.

**Family :** Gutiferae

**Classical names :** Kankuṣṭha

**Sanskrit names**

Kankuṣṭha, Raṅgadā (niryās; Tamala, resin), Tāpiccha (vṛkṣa-tree).

**Regional names**

Vṛkṣa-tree : Tamal (Hindi); Makki (Tam.); Revandchini (Tel.); Hagdal (Kann.); Chingiri (Mal.); Kuji

Thekera (Arabic); Indian Gambosa tee (Eng.). Niryāś-Resin: Ushare-revand (Hindi); Revancini Shri (Guj.) Phaphiram (Arabic); Gotaoganva, Usare revand (Arab.); Gambose.

### Description

A middle-sized tree, branchlets-quarangular. Leaves 3-5 in., thinly coriaceous, broadly lanceolate.

Flowers greenish-white, sessile in the axils of fallen leaves. Mala flowers: 2-3, together; anthers 3-celled dehiscing transversely, filaments short, on a central thick 4-sided column. Female flowers; staminodes 12, connate at base in a ring round the globular 4-celled ovary, stigma peltate, irregularly lobed and tubercled.

Fruit 3/4 in. diam., seeds 4.

### Flowering and fruiting time

Plant flowers in November, and its fruiting in February-March.

### Distribution

Plant occurs in North Kanara, evergreen forests, South Kanara, moist forests of the plains and ghats to 3,000 ft. Kankustha is also imported to India, procured from *Garcinia hanbury* Hook. J. in Indochina

Generally Kaṅkuṣṭha drug forms resinous substance of red-yellowish or orange colour, smooth, cylindrical, odourless and pungent with slight acid taste.

### Chemical composition

The raw drug material contains three resinous acids known as garcinolic acids responsible for activity of kaṅkuṣṭha (*Garcima morella* Desu.) Seedcoat, stem and leaves contain an yellow colouring matter morellin which is germicide. Seeds contain 30% fat like kokam water.

### Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa,
Virya	: Uṣṇa (Karma)
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

## Properties and Action

<b>Karma</b>	: Recana-tīvra virecaka (higher dose) Jantughna-Vraṇahara (śodhana-ropaṇa) Śothahara-raktabhārahṛāsaka Krmighna
<b>Roga</b>	: Koṣṭhagātavāta-Koṣṭhabaddhatā- Vibandha Vibandhajanya gulma-udavarta-śūla Śotha Raktabhāra Vraṇa.

## Therapeutic uses

The drug Kaṅkuṣtha is a drastic purgative. It is anthelminthic, germicide, wound healing, anti-inflammatory and hypotensive drug. It is used both as externally as well as internally in medicine.

The drug in the form of resinous substance is orally used within limit of doses which is normally given in constipation and its presence as symptom in other abdominal diseases such as colic, flatulence and gulma, its use in higher dose is acting as drastic cathartic causing vomiting, nausea and griping etc.

It is used in oedema and hypertension (high blood pressure). Its ointment is locally applied on wounds and ulcers. The drug is useful in diseases caused by vāta pitta doṣa and ailments of abdominal origin and vāta provocation.

The drug is often adulterated with certain vegetable or plant material (i.e. wheat, rice, starch or even sand etc.). In case of bad effect or complication after use of this drug, the suitable drugs and other diet articles (śīta vīrya, madhura and snigdha dravya). The intake decoction of root of Babbula (*Acacia arabica* Willd.) mixed with Jīraka and taṅkaṇa is suggested.

Another Kankuṣha is also incorporated in the group of uparasa in context of rasaśāstra. Probably Kaṅkuṣha (of plant origin) had been resin of Svarṇakṣīrī and than extract of Rheum emodi or revandchini and af-

terwards resinous substance of *Garcinia morella* Deauv has come in vague.

**Parts used :** Resin

**Dose :** 50-125 mg.

## KANKUṢṬHA ( कङ्कुष्ठ )

क. कङ्कुष्ठं तिक्कटुकं वीर्ये चोष्णं प्रकीर्तिम्।  
गुल्मोदावर्तशूलन्नं रसरजं ब्रणापहम्॥  
हिमवत्पादशिखरे कङ्कुष्ठमुपजायते।  
तत्रैकं नलिकाख्यं हि तदन्यद्रेणुकं मतम्।  
ख. पीताभं गुरु स्निग्धञ्च श्रेष्ठं कङ्कुष्ठमादिमम्।  
श्यामपीतं लघु त्यक्तसत्वं नेष्टं हि रेणुकम्॥  
कङ्कुष्ठं तिक्कटुकं वीर्योष्णं चातिरेचनम्।  
ब्रणोदावर्तशूलार्तिगुल्मप्लीहगुदार्तिनुत् ॥

*Rasaratna Samuccaya.*

## KANTAKĀRĪ

### Botanical name

*Solanum surattense* Burm. f.

Syn. *Solanum xanthocorpum* Sebr. & wende.

### Family : Solanaceae

### Classical name : Kanṭakārī

### Sanskrit names

Kanṭakārī, Kṣudra, Duḥsparsā, Vyāghrī,  
Nidigodhikā.

### Regional names

Kateli, chhoti Kateli, Rengoni (Hindi); Kandiyari (Punj.); Bhuringini (Marathi); Bhoyaringani (Guj.); Kantikari (Beng.); Kandanakatiri (Tamil); Kuda (Telugu); Badjan Barri (Arabic); Bardgan barri (Persian); Yellow-berried night shade (English).

### Description

A very prickly diffused bright-green perennial herb,

somewhat woody at the base, stem somewhat zig-zag, branches numerous; the younger ones clothed with dense stellate tomentum, prickles compressed, straight, yellow, glabrous and shining, often exceeding 1.3 cm. long.

Leaves 5-10 × 2.5-5.7 cm., ovate or elliptic, sinuate or subpinnatifid, obtuse or subacute, usually rounded and unequal sides, stellately hairy on both sides, sometimes becoming nearly glabrous in age, armed on the midrib, and often on the nerves with long yellow sharp prickles, petioled 1.3-2.5 cm. long, stellatly, hairy and prickly.

Flowers extra-axillary, few-flowered cymes, sometimes reduced to a single flower; peduncles short, pedicels short, curved stellately hairy, Calyx up to 1-3 cm. long densely, hairy and prickly; tube short, globose, lobes 5 each upto 11mm. long, linear-lanceolate acute, prickly outside. corolla purple 2 cm. long, lobes 5 deltoid, acute, hairy outside. Staamens 5 free, filaments 1.5 mm. long, glabrous; anthers 8 mm. long, oblong- lanceolate opening by small pores. Ovary ovoid, glabrous, style glabrous.

Fruits berry 1.3-2 cm. diam. fleshy, yellow or white with green veins, surrounded by enlarged calyx. Seeds 2.5 mm. diam. glabrous, numerous, embedded in fleshy mucilaginous mass, flattened round with a curved and measuring 2-3 mm. in diam. and glabrous.

### **Flowering and fruiting time**

Winters to summers.

### **Distribution**

Plant occurs wild almost throughout India, Sri Lanka, South-east Asia, Malaya and tropical Australia.

### **Kinds and varieties**

The drug Kanṭakārī is of two types viz. Nīla puṣpā (blue- flowered variety) and śveta puṣpā (White flowered variety). Nīla puṣpā Kanṭakārī is commonly available in natural state, while Śvetapuṣpā Kanṭakārī is very rarely found and the plant is also claimed to be another classical drug Lakṣamaṇā which is a valuable drug known for its anati-sterility (specific to promote conception of male child) effect. White flowered variety plant is of similar

habit, but strikingly and only differs in flower colour (White). The fruits in mature state are collected and their seeds are obtained which are sown (in pots or beds) for raising new and more plants and their seeds are particularly recommended for oral use in sterility cases. There is specific mode of administration and also method of collection of drug (seeds, root and plant). Laksamanā, by keeping the time factor and sanctity of collector (nakṣatra, tithi, śuci and abhimantraṇa) in view, as incorporated in classical texts of medicine. It is specifically indicated in Pūmsavana Karma. White-flowered variety or Śveta Kanṭakāri is also useful therapeutics in general.

### **Chemical composition**

The roots and fruits of plant contain solanine and solanidine, besides waxy substance, fatty acid and other constituents.

The phytochemical analysis finds that some nonprotoplasmic cell contents like alkaloid, tannin, sugar, starch, fat, oil, protein, mucilage, lignin, cutin and calcium oxalate present in the plant react positively with different concentrations of acids, alkalies, salts and dyes. Diosgenin is isolated from the fruits. The chromatographic studies have been conducted and observations in regard to various important constituents are recorded.

### **Pharmacodynamics**

Rasa	: Tika, Kaṭu
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

### **Properties and Action**

Karma	: Kāsahara-kaṇṭhya-śvāsahara Hikkānigrahaṇa Mūtrala Garbhāśayasankocaka Vājikaraṇa Garbhasthāpana -Pūmsavana (Śvetakanṭakārī) Jvaraghna
-------	--

	Sajñāprovodhana-Vātahara
	Raktaśodhaka-śothahara
	Vedanāsthāpana
	Kṛmighna
	Dīpana-pācana-recana
<b>Roga</b>	: Kāsa-śvāsa-pārśvaśūla
	Svarabheda-hikkā
	Āśmarī-puyaṁeha-mūtrakṛcchra
	Rajorodha-Kaṣṭaprasava-Klaivya
	Garbhasrāva
	Agnimāndya-vibandha
	Kṛmi
	Raktacāpa-raktavikāra
	Kuṣṭha-phiraṅga-āmavāta
	Carmavikāra
	Jvara.

### **Therapeutic uses**

The root is pungent, bitter, appetiser, laxative, stomachic and anthelmintic. It is useful in bronchitis, asthma and fever. The drug is useful to check provocation of Kapha and Vāta doshas (body humors.) Roots are used in lumbago, pain, piles, thirst, urinary infection and diseases of the heart. Root is an expectorant forming an ingredient of well-known combination (group or formulation of ten drugs) Daśamūla in Ayurveda.

It is recommended frequently in treatment of cough, chest pain and vātavikāra (diseases caused by provoked vāta); it is commonly given to mothers after delivery in view of efficacy (Daśamūla kvātha) of decoction in sūtikā roga (puerperal stage and its ailments).

The root and whole plant are recommended effective remedy against cough, asthma and other diseases of respiratory system. Root is aphrodisiac. A decoction of the root is given with the addition of clove (Lavaṅga), Pepper (Pippalī) and honey (Madhu), in cough and catarrh, and rock salt (lavaṇa višeṣa) and asafoetida (Hiṅgu) in spasmodic cough.

The pounded root mixed up with wine is given to check vomiting. The drug Kaṇṭakārī is classically

recognised anti-cough drug in Ayurved system of medicine. There are number of formulations in Indian medicine prescribed in treatment of various diseases respiratory system. The formulations based on drug Kaṇṭakārī as principal component as well as with other ingredients are incorporated in management of cough, asthma, bronchial asthma and similar ailments. Besides respiratory diseases several classical formulations or compounds (yoga) are mentioned in medical texts such as Kaṇṭakārī ghṛta, Kaṇṭakāryāvaleha, Vyāghrī harītakī, Kaṇṭakāryādi kvātha, Laghu pañcamūla kvātha, Daśamūla kvātha, Bhṛgu harītakī, Kaṇṭakārī taila, Kaṇṭakāryādi kaṣāya, Bṛhatyādi kaṣāya-kvātha and several other formulations are recommended in various other kinds of diseases which are covered under therapeutic utility of drug Kaṇṭakārī.

Besides the roots and whole plant, other parts of plant drug viz. stem, flowers and fruits etc. are medicinal useful. Stem, leaves, flowers and fruits are bitter and carminative. They are recommended for relief in burning sensation in the feet (also soles) by vesicular watery eruptions. Leaves are applied locally to relieve pain and also useful in local application for piles.

The fruit is promotion digesting and is improves appetite; the fruits are good and useful in heart diseases, pruritis, asthma and fever. It is anthelmintic, aphrodisiac and it causes biliousness. The juice of fruit (berries of plant) is useful in sore throat and throat affections.

The plant drug has diuretic properties and it is used in treating dropsy. The juice of herb mixed with other suitable drugs is given in fever. The juice of leaves, mixed with black pepper is orally given in rheumatism. Roots are considered an anti-dote of chicken pox in some regions.

In the treatment of piles, the drug Kaṇṭakārī is prescribed. The buttermilk (mathita) is kept overnight in a vessel pasted inside with Kaṇṭakārī fruit, and this kind of liquid is orally given to patient for elimination of piles. The post-drink processed with Kaṇṭakārī and Dhānyaka (*Coriandrum sativum*) is given to act as carminative and laxative medicine in the cases of piles.

Barley alongwith equal quantity of Kanṭakārī fruits is boiled in water and it is reduced to half quantity (erude drug 640 gm., water 2.56 litres and decoction 320ml.) and mixed with asafoetida (Hingu), it is given in condition of Udāvartta.

The water boiled with Kanṭakārī (fruit or other suitable part) is orally given in condition of overthirst or Kanṭakārī Kaṣāya (water) allays thirst. The juice of Kanṭakārī fruit is snuffed (nāvana) in case of epilepsy (apasmāra) which eliminates the attacks of epilepsy (epileptic stage) and helps restore consciousness to epileptic patient.

The drug Kanṭakārī is prescribed in fever, calclus, retention and supression of wine, alasa (lichen), eye diseases (conjunctivitis specially vātaja netrābhishyanda), ear disease, chronic cough in children (jīrṇa bāla kāsa) and cardiac ailments in various forms.

The whole plant (Kanṭakārī pañcāṅga) is cooked by closed heating; the juice is obtained and added with Pippali (piper longum) powder, and it is orally given for alleviating cough, bronchial asthma and other kapha disorders. The soup of green gram (mudga yūṣa.) prepared in decoction of Kanṭakārī, duly added with green ginger (ārdraka) and sours (amla) is prescribed to use in all types of cough (kāsa roga). The decoction of Kanṭakārī (*Solanum surattense*) alongwith Guḍūcī (*Tinospora cordifolia*) and Śuṇṭhī (*Zingiber officinale*) is prepared and powder of Pippali (Piper longum) is added. This recipe has been recommended in cases of cough, asthma, facial paralysis, chronic coryza, anorexia, hoarseness of voice, abdominal pain, indigestion and fever. In chronic coryza (pīnasa), Vyāghrī taila is prescribed in the texts. Several uses and recipes are given in medical texts of medicine which have therapeutically been formulated in different contexts of management of various diseases.

The white flowered variety of plant drug, named as śveta kantakāri (or śveta bṛhatī also) and rarely available, has specially been prescribed in pūṁsavarna karma (classical measures for reversal of sex in foetus during preg-

nancy) in Indian midical science for the purpose of sex change after conception or at the time of conception as this specific variety is similarly recommended to render concieve (by expecting females particularly sterile or having habitual aborting tendency and also extraordinarily delaying conception). There is classical method and prescription carrying ancient textual base and appreciation in this context, which is unique of its kind.

The root of white Kanṭakārī is pounded with milk and then instilled into rightside nostril (*nāsārandhra dakṣiṇa*) for want of son or male child and the same is put into leftside nostril (*vāma nāsārandhra*) for desire of daughter or female child.

Since Śveta Kanṭakārī (white-flowered variety of *solanum surattense*) is considered to be Lakṣamaṇā, another most rare and wonderful drug (but undetermined identity from botanical point of view), this drug has been recommended generally in clasical texts. The root as well as seeds are prescribed for oral used (under special mode of use etc.) for conception in women.

The drug plant Kanṭakārī (*Solanum surattense* Burm. f.) is chemically potent. The dried plant gives ash 10.8% and soluble ash 7.6% consisting mainly of potassium nitrate, carbonate and sulphate. It contains 1.6% total sugar (reducing sugar as glucose 0.3%). Alcoholic extracts of the plant contains fatty and resinous substances. Solasodine is present in the fruits and the glycoalkaloidal content of fruits (plants from Jammu and Kashmir region) is reported to be 3.5% with total alkloid percentage 1.1. The presence of diosgenin in plant is reported, besides solasodine. It is estimated that the alkaloids can form a source for cortisone and sex harmone. Seeds (20.7% of fresh wt. of the fruit) yield 19.3% of a greenish yellow, semi-drying oil with characteristics odour. The component fatty acids of the oil are oleic, inoleic, plamitic, stearic and arachidic. The unsaponifiable matter contains two sterols one of which is carpesterol. Methods have also been evolved modifying phytochemical estimation and process for getting high alkaloidal yield. Experimental studies on

this aspect have been found to be suitable; and for the instance, they yield pure solasodine, a steroid alkaloid, (5 gm.). Solasodine contents of *solanum surattense* (0.028%) and some other *Solanum* species (*Solanum viarum* 0.54%, diploid *solanum nigrum* 0.04% tetraploid s. *nigrum* 0.06%). Modified acid-dye method for detection of solasodine was found suitable in isolation of solasodine from *solanum* species. A single step method involving extraction and hydrolysis with acid (followed by basification of the alkaloidal salt to give free base from the powdered berries of *Solanum surattense*) was also evolved with determining optimum conditions of hydrolysis of the glucoside linkage.

Certain chemical constituent of the plant drug are quite medicinally active and the pharmacological action of drug. Pharmacologically, the aqueous and alcoholic extracts of the plant possess hypotensive effect which is partly inhibited by atropine, the more persistent secondary fall in the blood pressure and broncho-constriction are inhibited by antihistaminic drugs. Both glycoalkaloid and fatty acid fractions of the extract cause liberation of histamine from chopped lung-tissue. The beneficial effect of the drug on bronchial asthma may be attributed to the depletion of histamine from bronchial lung-tissue.

The gluco-alkaloid saponin fraction was active in much smaller doses (0.5-2 mg./Kg.) in increasing cardiac contractility and tension of isolated ventricular and papillary muscles of cat in  $0.4 \times 10^{-5}$  concentration, indicating a positive inotropic effects. The glucoalkaloidal fraction of the drug seems to possess cardiotonic effect which are important extra of clinical investigation.

The alcoholic leaf extract, resinous and crystalline fractions caused contraction of dog tracheal chain while gluco-alkaloid and alcoholic stem extract after initial potentiation caused refractoriness to the constrictor responses of acetylcholine and histamine. Extracts of the whole plant show antiviral activity against Ranikhet disease virus and also against sarcoma 180 in the mice. Extracts of the plant shoot and fruit of drug Kanṭakārī has been micro-

biologically studied and their observations indicate anti-bacterial activity against *Staphylococcus aureus* and *Escherichia coli* in phosphate buffer, Ph 9.0. Antibacterial studies and activity of the drug have considerable relation with clinical potentiality since some plant parts carry antimicrobial efficacy against certain micro-organisms or pathogens.

Further, the pharmacological studies have found that solasodine alkaloid isolated from plant drug Kanṭakārī (*Solanum surattense* Burm. f.) caused a significant inhibition in the motility of human and bovine spermatozoa as evident from the reduction in motile sperm count, in a dose-dependent and duration-dependent manner. The effects of crude alcoholic extract of the seeds of plant at dose of 20, 60 and 100 mg./kg. body wt. per day for 30 and 60 days on fertility, epididymal sperm profile, serum testosterone levels and androgenic parameters of reproductive organs of adult male rats. The probable androgen deprivation effect of the extract is explained by decreased levels of circulatory testosterone levels, seminal vesicles fructose, prostate acid, phosphate and an elevated cholesterol in treated rats under biological experimental process for assessing pharmacological action of drug.

Various studies on different aspects of phytochemical, biochemical, pharmacological and biological areas have been conducted on drug Kanṭakārī and the results are helping to understand pharmacotherapeutic profile and clinical efficacy of this common drug for its medicinal uses of wide range in medicine.

Generally the drug Kanṭakārī is useful as an expectorant, febrifuge, laxative, cardiotonic, diuretic and stimulant. It is very useful in asthma, cough, bronchitis and enteric fever. The drug is a valuable therapeutic agent for dislodging tenacious phlegm. It is widely given in influenza, cough fever and allied complaints in traditional practice of medicine in rural regions of country.

**Parts used :** Whole plant, roots.

**Dose :** Decoction 40-80/50-100 ml.

**Formulations**

Vyāghriharitakī, Vyāghrītaila, Kanṭakārīghṛta,  
Nigidhakādi kvātha, Daśamūlāriṣṭa.

**Guṇa**

Kāsahara, Kaṇṭhya, Hikkānigrahaṇa, Śothahara,  
Śītaprasāmana, Āṅgamardaprasāmana (Caraka Saṁhitā),  
Bṛhatyādi, Varuṇādi, Tvakpañcamūla (Suśruta Saṁhitā),  
Daśamūla, Laghupañcamūla.

**KANTAKĀRĪ ( कण्टकारी )****कण्टकारीगुणः:**

कण्टकारी कटुस्तिका रूक्षोष्णा भेदनी लघुः ॥  
दीपनी पाचनी हन्यात् कफवातज्वरारुचीः ।  
हृद्रोगश्वासकासाशमपार्श्वरुक्तच्छ्रीपीनसान् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 54-55.*

**( द्वे ) कण्टकारीफलम्**

तयोः फलं विपाके च कटुकं कटुकं रसे ।  
भेदनं रोचनं हृद्यं तिक्तं पित्ताग्निकृलघु ॥  
हन्यात् श्वेषमरुत्कण्ठूकासमेहकृमिज्वरान् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 56-57*

तयोः फलं कटु रसे पाके च कटुकं भवेत् ।  
शुक्रस्य रेचनं भेदि तिक्तं पित्ताग्निकृलघु ॥  
हन्यात्कफमरुत्कण्ठूकासमेदःकृमिज्वरान् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 42.*

**श्वेतपुष्पाकण्टकारी**

क. सितसिंही चन्द्रपुष्पा क्षुद्रमाता प्रियङ्करी ॥  
दुर्लभा वनजा क्षुद्रा दूतिका श्वेतलक्ष्मणा ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 53-54.*

ख. श्वेताफलं भेदि निहन्ति कासश्वासक्षयार्शःकृमिवातरोगान् ।  
पित्तप्रदं वह्निकरं कटूष्णं क्षारं कषायं कटुकं कफन्नम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 62.*

ग. ‘तद्वत्प्रोक्ता सिता भुद्रा विशेषाद् गर्भकारिणी ।’

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 43.*

### कण्टकारी

कण्टकारी सरा तिक्ता कटुका दीपनी लघुः ।

रुक्षोष्णा पाचनी कासश्वासज्वरकफानिलान् ।

निहन्ति पीनसं पार्श्वपीडाकृमिहदामयान् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 40-41.*

कण्टकारी कटूष्णा च दीपनी श्वासकासजित् ।

प्रतिश्यायार्तिदोषग्नी कफवातज्वरार्तिनुत् ॥

*Rāja Nighaṇṭu, Śatāhvādi Varga, 32*

### सितकण्टकारिका

श्वेतकण्टकारिका रुच्या कटूष्णा कफवातनुत् ।

चक्षुष्णा दीपनी ज्येया प्रोक्ता रसनियामिका ॥

*Rāja Nighaṇṭu, Śatāhvādi Varga, 36*

( द्वे ) कासचिकित्सायां व्याघ्री हरीतकी ( अवलोहयोगः )

*Cakradatta, Kāsa Cikitsā, 11/66-69.*

### कासे चिकित्सायां बृहत्कण्टकारीघृतम्

*Cakradatta, Kāsacikitsā, 11/51-54.*

### शिशोः कासे

व्याघ्री कुसुमसञ्जातकेसरैरवलोहिकाम् ।

जगध्वपि चिरतो जातं शिशोः कासं व्यपोहति ॥

*Bangasena, Bālaroga, 59.*

### श्वासे

निदिग्धिकाञ्चामलकप्रमाणां हिङ्गवर्धयुक्तां मधुना सुयुक्ताम् ।

लिहेन्नरः श्वासनिपीडितो हि श्वासं जयत्येव बलात् ऋहेष्ठ ॥

*Suśruta Samhitā, Uttara 51-55.*

*Aṣṭāṅga Hṛdaya, Uttara, 51.*

### अश्वरीभेदनार्थम्

‘.....बृहतीद्वयञ्च ।

ओलइम दध्ना मधुरेण पेयं दिनानि सप्ताश्मरिभेदनाम् ॥’

*Caraka Samhitā, Cikitsā 26-62.*

‘निदिग्धिकारसो वापि सक्षौद्रः कृच्छ्रनाशनः ।  
कण्टकारीरसे सिद्धो मुग्दयूषः सुसंस्कृतः ।  
सगौरामलकः साम्लः सर्वकासभिषग्नितम् ॥’

*Caraka Samhitā, Cikitsā 18-184.*

### कासे कण्टकारीघृतम्

समूलफलपत्रायाः कण्टकार्या रसाढके ।  
घृतप्रस्थ.....रास्नागोक्षुरकैः पचेत् ॥  
कल्कैस्तत् सर्वकासेतु हिक्काशवासेषु शस्यते ।  
कण्टकारीघृतं ह्येतत् कफव्याधिनिसूदनम् ॥

*Caraka Samhitā, Cikitsā. 18-125/128.*

### कासचिकित्सायाम् अपरकण्टकारीघृतम्

*Cakradatta, Kāsa. 11-50.*

### कण्टकारीघृतम्

*Caraka Samhitā, Cikitsā. 18-35.*

### कण्टकार्यादियुषः

*Caraka Samhitā, Cikitsā 18-184.*

### कण्टकायादिकषायः

*Caraka Samhitā, Chikitsā. 6-62.*

### बृहतीकाकमाचीलेपः

*Caraka Samhitā, Cikitsā 12-73*

### बृहत्यादिकषायः

*Caraka Cikitsā 30-210; Cikitsā. 3/2/3/214*

### बृहत्यादि योग

*Caraka. Cikitsā 7/128-129*

### बृहत्यादिवर्तिः

*Caraka. Cikitsā. 26-240.*

### बृहत्यादिबस्तिः

*Caraka. Siddhi. 10-38.*

### बृहत्यादिबस्तिः ( यापना )

*Caraka. Siddhi. 12-16.*

### कासे

कण्टकारीकृतः क्राथः सकृष्णः सर्वकासदा ।

कण्टकार्यः कणायाश्च चूर्णं समधुं कासहृत् ॥

*Bhāvaprakāśa, Kāsarogādhikāra, 12-34.*

कण्टकार्यावलेहम्

*Bhāvaprakāśa, Kāsarogādhikāra, 12-43/47.*

**पित्तजकासे कण्टकारीद्वयाद्ययोगः**

कण्टकारीयुग्द्राक्षा-वासाकचूरबालकैः ।

नागरेण च पिप्पल्या क्वथितं सललं पिबेत् ॥

**कासे भृगुहरीतकी ( अवलेहयोगः )**

*Bhāvaprakāśa, 24; Kāsarogādhikāra, 12-43/47.*

पीनसे व्याघ्रीतैलम्

*Śāringadhara Samhitā 2-9-180.*

**मूत्रकृच्छ्रे कण्टकारीस्वरसः**

निदिग्धिकायाः स्वरसं कुडवं मधुसंयुतम् ।

मूत्रदोषहरं पीत्वा नरः सम्पद्यते सुखं ॥

*Bhāvaprakāśa, Mutakṛcchrādhikāra, 35-39.*

**नासारोगे ( पीनसे ) व्याघ्रीतैलम्**

व्याघ्रीदत्तीवचा शिग्मुसुरसाव्योषसिन्धुजैः ।

सिद्धं तैलं नसि क्षिसं पूतिनासागदापहम् ॥

*Bhāvaprakāśa, Nāsārogādhikāra, 65-40.*

**बन्ध्यत्वनिवारणाय गर्भधारणे लक्ष्मणा ( श्वेतपुष्पाकष्टकारी )**

पुष्पोदधृतं लक्ष्मणाया मूलं दुधेन कन्यया ।

पिष्टं पीत्वा त्रष्टुस्नाता गर्भं धत्ते न संशयः ॥

*Bhāvaprakāśa, Yonirogādhikāra, 70-27.*

**सर्वकासे कण्टकारीक्वाशः**

‘कण्टकारीकृतः क्वाथः सकृष्णः सर्वकासहा ।’

*Cakradatta, Kāsacikitsā, 11-25.*

कासे कण्टकारीघृतम्

कण्टकारीगुहूचीभ्यां पृथक् त्रिंशत्पलाद्रसे ।

प्रस्थः सिद्धो घृताद्वात् कासनुद्विहिदीपनः ॥

*Cakradatta, Kāsacikitsā, 11-49.*

**त्रिदोषजन्यमूत्रकृच्छ्रे बृहत्यादिक्राथः**

बृहतीधावनीपाठायष्टीमधुकलिङ्गकः ।

पाचनीयो बृहत्यादिः कृच्छ्रदोषत्रयापहः ॥

*Cakradatta, Mūtrakṛcchra Cikitsā, 32-15.*

**अजगल्लिकाचकित्सायां कण्टकारीकण्टप्रयोगः कण्टकबेधनार्थम्**

नवीनकण्टकार्यास्तु कण्टकैर्वेधमात्रतः ।

कठिनां क्षारयोगैश्च द्रावयेदजगल्लिकाम् ॥

*Cakradatta, Kṣudraroga-cikitsā, 55-2.*

**दन्तनाडीरोगे कण्टकव्यादितैलम्**

*Cakradatta, Mukharoga Cikitsā, 56-24.*

**गर्भधारणार्थं श्वेतकण्टकारीमूलप्रयोगः**

सिंह्यास्तु श्वेतपुष्पाया मूलं पुष्पसमुद्धृतम् ।

जलपिष्ठमृतुस्नाता नस्यादगर्भन्तु विन्दति ॥

*Cakradatta, Yonivyāpaccikitsā, 35.*

**श्वेतकण्टकारी पुंसवनकर्मे**

क्षीरेण श्वेतबृहतीमूलं नासापुटे स्वयम् ।

पुत्रार्थं दक्षिणे सिञ्चेद् बामे दुहितृवाञ्छया ॥

*Aṣṭāṅga Hṛdaya, Śārīra. 1-40.*

**कासे**

कासे निदिग्धिका ।

*Aṣṭāṅga Hṛdaya, Uttara - 40 - 56.*

**कासचिकित्सायां कण्टकारीघृतम्**

‘कण्टकारीकृतः क्राथः सकृष्णः सर्वकासहा ।’

*Vṛndamādhava, 11-21. Vaidyajīvanam, 3-9.*

**कासे श्वासे च**

पचेत् क्षुद्रां सपञ्चाङ्गां पुटपाकेन तद्रसः ।

पिप्पलीचूर्णसंयुक्तः कासश्वासकफापहः ॥

*Śāringadhara Saṃhitā, 21-35.*

निदिग्धिकामृताशुण्ठीकषायां पाययेद् भिषक् ।

पिप्पलीचूर्णसंयुक्तं स्वासकासार्दितापहम् ।

पीनसारुचिवैस्वर्यशूलाजीर्णज्वरच्छिदम् ।

*Śāringadhara Saṃhitā, 2-2-48.*

## उदावर्त्ते

यवप्रस्थं पलैः सार्धं कण्टकार्याः जलाष्टके ।

पक्त्वार्धप्रस्थशेषं तु पिबेद्धिङ्गुसमन्वितम् ॥

*Suśruta Saṃhitā, Uttara. 1-55.*

## ज्वरे

बस्तिपार्श्वशिरःशूली व्याघ्रीगोक्षुरसाधितम् ।

*Aṣṭāṅga Hṛdaya, Cikitsā. 1-28.*

## नेत्ररोगे वाताभिष्ठन्ते

‘कण्टकार्याश्च मूलेषु सुखोष्णं रोचनं हितम् ।’

*Suśruta Saṃhitā, Uttara. 9-12.*

## अलसे

‘सिद्धं रसे कण्टकार्यास्तैलं वा सार्षपं हितम् ।’

*Suśruta Saṃhitā, Uttara. 9-12.*

## तृष्णायाम्

‘तृष्णते सलिलं चास्मै.....कण्टकार्याऽथवा शृतम् ।’

*Caraka Saṃhitā, Cikitsā. 12.*

## मूत्राधाते

‘कण्टकारिकास्वरसं वा समाक्षिकम् ।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 13-5.*

*Aṣṭāṅga Hṛdaya, Cikitsā. 11-11, Gadanigraha 2-28/29.*

## अपस्मारे

नावनं स्वरसैः खर्वकण्टकारीफलोद्भवैः ।

अपस्मारं विनिर्धूय सद्यो बोधाय कल्पते ॥

*Siddhabhaiṣajya manimālā, 4-456.*

## अशासि

मथितं भाजने क्षुद्रबृहतीफललेपिते ।

निशां पर्युषितं पेयमिच्छद्धिः गुदजक्षयम् ॥

*Aṣṭāṅga Hṛdaya. Cikitsā. 8-44.*

कण्टकार्या शृतं वापि शृतं नागरधान्यकैः ।

अनुपानं भिषक् दद्याद् वातवर्चोऽनुलोमनम् ॥

*Caraka Saṃhitā, 14-129.*

# KANTAKI KARANJA

Botanical name : Caesalpinia crista Linn.

Syn. *Caesalpinia bonduc* (L.) Roxb., *C. bonducella* (L.) Flem.

**Family :** Caesalpiniaceae

**Classical name :** Karañja-Kaṇṭakī karañja (kuberākṣa)

**Sanskrit names**

Kaṇṭakī Karanja, Kuberākṣa, Karanja, Karanjī, Latā karanja.

**Regional names**

Kantakaranj, Karanjuva (Hindi); Natakaranj (Bengla); Sagargota (Marathi); Kankach (Guj.), Kajichikay (Tamil); Gacchakaya (Tel.); Kanjanchikkuru (Mal.); Gajkkayi (Kann.); Fever Nut (Eng.).

**Description**

A prickly climber. Leaves leafless many, small, with stipules. Flowers in disk-linked tube, lobes 5, imbricate, the uppermost is the innermost, stamens 10, free, declinate, filaments glandular at base, anthos uniform, ovary sessile, base free from the disk, few-ovuled, style terete, stigma terminal, minute, turncate. Fruits oblong pod, armed with abundant wiry, prickles; seeds ovate, transverse and exalbuminous.

**Seed-drug**

It is stony hard, more or less rounded, slightly flattened measuring 2-2.5cm. in diam., greyish green, smooth and with macropyle at one end. Cracked seeds as differentiated into stony hard seed-coat and hard cream-coloured obovate nut consisting of two thick cotyledons with undulated surface showing an embryo in between the two.

**Flowering and fruiting time**

Plant flowers during rainy season and fruits winters or spring season.

**Distribution**

It occurs throughout the hotter parts of India up to 2,000ft. in hilly regions; it is also commonly growing West Bengal and South India.

**Chemical composition**

The cotyledons of the seeds contain besides starchy matter, 25.15% of a fixed oil, 1.925% of a non alkaloid bit-

ter principle soluble in alcohol and chloroform called natin, but the active principle occurs more in the bark of the root. Seeds consist of 58% hard outer shell and 42% of kernel. Fatty oil from the seeds has been found to contain the glycerides of some acids. two phytosterols, one m.p. 122°-123° and the other sitosterol and hydrocarbon m.p. 58°-59°.

A non-alkaloidal bitter principle was obtained from the kernels as white powder (Bonducin) to which the physiological properties were attributed. It was found to be insoluble in water but soluble in oils. The bitter principle bonducin of the kernels was found to be the mixture of complex resinous bodies. An alkaloid present in the seeds was suggested to be the same natin for it.

The seeds kernel yielded 0.080% of diosgenin, though the yield of the diosgenin is less, but its recurrence is of chromatotaxonomic importance. Seeds contain palmitic, stearic lignoceric, obic and inobic acids.

Phytochemical screening generally finds that the kernal of seeds of *Caesalpinia crista* Linn. contain a bitter glycoside bounducin, fixed oil 20%, alkalies 23.4%, protein 20% and starch 35.5%; the seeds oil also contains various chemical constituents.

Some nonprotoplasmic cell contents like alkaloid, tannin, sugar, starch, fat, protein, mucilage, cutin and gum resin are present in both the root-bark and saponin in present in the seed. These contents react positively with different concentrations of acids, alkalies, salts and dyes.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu, Rūkṣa
Vīrya	: Uṣṇa
Vipaka_	: Kaṭu
Doṣakarma	: Tridoṣaśāmaka.

### **Properties and Action**

Karma	: Jvaraghna-Viṣamajvaraghna Kuṣṭhaghna-Kaṇḍūghna Śothahara Vedanāsthāpana
-------	--

	Raktaśodhaka
	Garbhanirodhaka
	Pramehaghna
	Kaphaghna-śvāsaḥara
	Dīpana-yakṛduttejaka-
	chardinigrahaṇa
	Grāhi
	Śūlapraśamana
	Kṛmighna
<b>Roga</b>	: Jvara-viṣamajvara
	Kaṇḍū-kuṣṭha
	Carmavikāra
	Raktaduṣṭi-raktavikāra
	Śotha-vedanā
	Āmavāta-sandhivāta
	Prameha
	Agnimāndya-Gulma-Śūla-Pravāhikā-
	chardi
	Arṣa
	Ykṛtplihāvikāra
	Kṛmi

### Therapeutic uses

The seed-kernel of Kanṭakī karanja with sour-gruel in morning is recommended for alleviating dysentery with mucus, blood and gripping. Seed-kernel is commonly prescribed alongwith other suitable adjutants for treatment of malarial fever and cases of fever. Seeds powder mixed with Marica (Kalimirca) is given in malarial fever. The drug is major ingredient in anti-malarial formulations.

Young leaves of karañja alongwith Śunṭhi (Ginger) and Hiṅgu, mixed with rock salt are suggested to be given in morning in conditions of anorexia, vomiting and excessive saturation.

Pharmacologically speaking, the nut of Karanja has antidiarrhoeal activity and anti-inflammatory activity, and the seeds also have effect on reproductive system. The ethanolic extracts of the defatted seeds kernels of plant drug shows promising antimarial activity.

The leaf extract of plant drug shows some

fungitoxic activity against Curvularia tuberculata, a casual organism of die-back disease of citrus.

The seeds of Kaṇṭaka Karanja are used as antiperiodic, antipyretic, tonic and febrifuge. It is also used in asthma and snake-bite. Tender leaves are used in disorders of the liver. Leaves and bark are used as febrifuge and anthelmintic. The water extract of root bark of plant drug is often given orally in the early stage of small pox. The seeds and leaves are generally used as poultice in inflammation. Leaves and bark possess emenagogue properties and useful in menstrual trouble.

Seeds are recommended as a good remedy in fever, specially malarial fever and for this purpose, the seeds of Kaṇṭaka karanja alongwith other suitable drugs are often given in the form of powder pills or any other recipe therapeutically considered to be prescribed in various febrile conditions particularly viṣama jvara.

As an anti-malarial drug, the seeds kernel of plant drug Kaṇṭaka Karanja is frequently prescribed; the powder of seeds kernel is orally given with worm water in Viṣama Jvara or periodic fevers. In malarial fever, the seeds kernel of Kaṇṭaka Karanja, bark of Saptaparna, root of Kātuka and whole plant of Kirātatikta are mixed suitably and recommended as an effective remedy for oral use in cases of malaria. Seeds kernel of Kaṇṭaka karanja is also given alongwith one or two herbal drug (s) depending on requirement of febrile conditions and patients.

**Parts used :** Seeds-seed, kernel, Leaves.

**Dose :** Seed (Kernel powder 1-3 gms.)

**Formulation :** Viṣamajvaraghni vati, Saptaparṇaghana vati, Kuberākṣa vati.

## KANTĀ(KA)KARAṄJA KANTAKIKARAṄJA (KUBERĀKṢA)

कण्ट( क )करञ्ज-कण्टकिकरञ्ज ( कुबेराक्ष )

निर्गन्धी तुवरा तिक्ता सतिक्ता सोषणा जयेत् ॥

बलासपित्तशोफार्शः शूलाध्मानव्रणकृमीन् ।

*Kaiyadeva Nighantu, Osadhi Varga, 972-973.*

करञ्जः कटुकस्तीक्ष्णो वीर्योष्णो योनिदोषहत् ।

कुष्ठोदावर्तगुल्मार्शो व्रणक्रिमिकफापहः ॥

*Bhāvaprakāśa Nighantu, Guḍūcyādi Varga, 120.*

करञ्जपत्रम्

तत्पत्रं कफवातार्शः कृमिशोथहरं परम् ।

भेदनं कटुकं पाके वीर्योष्णं पित्तलं लघु ॥

*Bhāvaprakāśa Nighantu, Guḍūcyādi Varga, 2.*

करञ्जफलम्

तत्फलं कफवातग्नं मेहार्शः कृमिकुष्ठजित् ।

घृतपूर्णकरञ्जोऽपि करञ्जसदृशो गुणैः ॥

*Bhāvaprakāśa Nighantu, Guḍūcyādi Varga, 122.*

करञ्ज....फलं जन्तुप्रमेहजित् ।

रूक्षोष्णं कटुकं पाके लघुवातकफापहम् ॥

*Suśruta Samhitā, Sūtra 46.*

‘करञ्ज तैलानि तीक्ष्णानि लघूत्यूष्णवीर्याणि

कटूनि कटुविपाकानि सराण्यनिलकफकृमि-

कुष्ठप्रमेहशिरोरोगहराणि च ।’

*Suśruta Samhitā, Sūtra, 45.*

प्रवाहिकायाम्

यक्षलोचनमज्जानं काञ्जिकेन पिबेत् प्रगे ।

सशूष्मरक्तातीसारं कोष्ठशूलं जयेद् द्वितम् ॥

*Vaidyamanoramā, 6-6.*

अग्निमान्द्ये

यक्ष्याक्ष्यस्तरुणाग्रकाण्डमगुशशिछत्वा जले पाचयेत् ।

तासां तदद्विगुणे तदम्भसि गते प्रस्थेन युक्तं पटोः ॥

दुग्धप्रस्थमजस्य तेन विपचेत् तस्मिन् रसोनोषणम् ।

तैलाज्यं च पलद्वयं प्रतिवपेत् तद् दीपनं स्यात् परम् ॥

*Vaidyamanoramā, 6-31.*

शूलापहरणार्थम्

करञ्जमज्जो द्वितयं त्रयं वा विभज्यं साकं पटुना निगीर्णम् ।

शूलं समूलं हरति प्रसह्य कूलं यथा निर्जरिणी प्रवाहः ॥

*Siddhabhaiṣajya maṇimālā*, 4-510.

### पूतिकरञ्ज-कुबेराक्षीगुणकर्मणी

संसनं कटुकं पाके लघु वातकफापहम् ।

शोथमुष्णवीर्यं च यत्र पूतिकरञ्जकम् ॥

*Suśruta Saṃhitā, Sūtra. 46*

‘विरेचने प्रयोक्तव्या पूतिकः ।’

*Caraka Saṃhitā, Sūtra.*

कुबेराक्षी यकृत्स्लीहावातम्ब्री व्रणरोपणी ।

पत्रं पुतिकरञ्जस्य लघु वातकफापहम् ॥

भेदनं कटुकं पाके वीर्योष्णं शोफनाशनम् ।

*Śodhala Nighantu.*

### शरीरदौर्गम्भ्ये

‘....परिणततिन्तिडीकान्विपूतिकरञ्जोत्थबीजं वा ।’

*Śodhala Nighantu.*

### कफजश्लीपदे

‘पिबेत्.....श्लीपदानां निवृत्तये ।

पूतिकरञ्जपत्राणां रसं वापि यथाबलम् ॥

*Śodhala.*

### अपरायातनार्थम्

‘चर्म पूतिकरञ्जस्य..... ।

पिण्ठं तुषाम्बुना पीतमपरां पातयेत् क्षणात् ॥’

*Vaidya Manoramā.*

### जलोदरे

‘....पूतिकरञ्जबीजम् ।

काञ्जीकपीतं शमयेज्जलोदरम् ॥’

*Baṅgasena.*

### अम्लपित्ते

‘पूतिकरञ्जशुङ्गनि रोगिणे ।

निवेद्य भोजने कार्यं वमनं सोष्णवारिणा ।’

*Baṅgasena.*

## मसूरिकायाम्

रसं पूतिकरञ्जस्य चामलक्याः रसं तथा ।  
पिबेत्सर्शर्कराक्षौद्रं शोफनुत् कफपैत्तिके ॥

*Baṅgasena.*

## ज्वरचिकित्सायां कुबेराक्षः

करञ्जमज्जा प्रसूतिप्रमाणो गद्याणयुग्मं घुणवल्लभायाः ।  
सितासहायान्यनयोः रजांसि वल्लद्वयानि ज्वरमुज्जयन्ति ॥

*Siddhabhaiṣajya maṇimālā*, 4-108.

करञ्जमज्जातिविषे मरीचं छडैस्तुलस्यास्त्रिगुणैर्विमर्द्या ।  
चणप्रमाणा गुटिका हिनस्ति ज्वरातिसारानलमार्दवानि ॥

*Siddhabhaiṣajyamaṇimālā*, 4-105.

## छर्द्यादिषु

प्रयान्ति तद् भक्षयतां प्रभाते कुबेरनेत्राभिनवं प्रवालम् ।  
नुरां शमं छर्द्यरुचिप्रसेकाः ससैन्धवं नागरामठं वा ॥

*Vaidyamanoramā*, 4-7.

## कफपित्तज्वरे

मज्जः करञ्जस्य कणामतल्ख्याः भाषाः पृथग् द्वादश कल्पनीयाः ।  
बबूलपत्रं जरणो विलक्षो गद्याणगद्याणमितावुभौ स्तः ॥  
जलेन वस्तून्यखिलानि पिष्ठ्वा परुषकल्पा वटिका विधेयाः ॥  
बलासपित्तज्वरजर्जराय प्रातस्तथा सायमपि प्रदेयाः ॥

*Siddhabhaiṣajya maṇimālā* 4-106/107.

## करञ्जभेदाः

### क. करञ्जः

करञ्जः कटुरुष्णश्च चक्षुष्यो वातनाशनः ।  
तस्य स्नेहोऽतिस्त्रिग्राथश्च वातघ्रः स्थिरदीसिदः ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga*, 62.

### ख. घृतकरञ्जः

घृतकरञ्जः कटुष्णो वातहृद व्रणनाशनः ।  
सर्वस्त्वगदोषशमनी विषस्पर्शविनाशनः ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga*, 64.

## ग. महाकरञ्जः

महाकरञ्जस्तीक्ष्णोष्णः कटुको विषनाशनः ।  
कण्डूविचर्चिकाकुष्ठत्वगदोषब्रणनाशनः ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 67.*

## घ. पूतिकरञ्जः

प्रकीर्यो रजनीपुष्पः सुमनाः पूतिकर्णिकः ।  
पूतिकरञ्जः कैडर्यः कलिमालवः ससधा ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 68*

## ङ. गुच्छकरञ्जः

करञ्जः कटुतिकोष्णो विषवात्तर्तिकृन्तनः ।  
कण्डूविचर्चिकाकुष्ठस्पर्शलगदोषनाशनः ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 70.*

## च. रीठाकरञ्जः

रीठाकरञ्जस्तिकोष्णः कटुः स्निग्धश्व वातजित् ।  
कफघ्नः कुष्ठकण्डूति-विषस्फोटवि नाशिनः ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 72.*

## सर्वश्रीपदे करञ्जपत्ररसप्रयोगः

पिबेत् सर्षपतैलेन श्रीपदानां निवृत्तये ।  
पूतिकरञ्जच्छदजं रसं वाऽपि यथाबलम् ॥

*Cakradatta, Ślipada cikitsā, 42-10.*

## मसूरिकाप्रथमाविर्भावकाले

'....सोषणा वाथ पूतिः ।  
प्रथमस्थ गदे दृश्यमाने प्रयोज्या ॥'

*Cakradatta.*

## शूले

एक एव कुबेरक्षः सर्वशूलापहारकः ।  
किं पुनः स त्रिभिर्युक्तः पथ्यारुचकरामठैः ॥

*Hārīta Saṁhitā, 3-7-58.*

## श्रीपदे

'पिबेत्..... ।

पूतिकरञ्जपत्राणां रसं चापि यथाबलम् ।'

*Suśruta Samhitā, Cikitsā 19-60.*

उदरे

‘पूतिकरञ्जक्षारं वा अम्लशृतं विडङ्गलवणपिप्पलीयुक्तम् ।’

*Suśruta Samhitā, Cikitsā 19-60.*

कृमिरोगे

‘पूतिकस्वरसैर्वाऽपि पिबेद्वा मधुना सह ।’

*Suśruta Samhitā, Uttara. 42.*

गुल्मे

‘खादेद्वाऽङ्गुरान् भृष्टान् पूतिकनृपवृक्षयोः ।’

*Suśruta Samhitā, Uttara. 42.*

गुल्मादिषु

यक्षदृग्विश्वलशुनैर्वेदवृगृतुभागिकैः ।

क्राथो गुल्मोदरानाह शूलोदावर्तवृद्धिहा ॥

*Vaidyamanoramā, 8-16.*

दुष्टव्रणेषु

करञ्जपूतिकस्नेहाः दुष्टव्रणेषूपयुज्यन्ते ।

*Suśruta Samhitā, Cikitsā. 6.*

शरीरदौर्गन्ध्ये

‘परिणतपिडिकाश्चापि पूतीकरञ्जोत्थीजं वा ।’

*Bhāvaprakāśā, Sthoulyādhikāra, 39-71.*

यकृद्रोगे पूतिकक्षारः

क्षारं वा विडकृष्णाभ्यां पूतिकस्याम्लविसृतम् ।

प्लीहयकृतशान्त्यर्थं पिबेत् प्रातर्यथाबलम् ॥

*Cakradatta, Ptihayakrcikitsā 38-5.*

## KĀPHĪKA-KĀPHĪ

**Botanical name :** Coffea arabica Linn.

**Family :** Rubiaceae

**Classical name :** Kāphīka-kāphī

**Common name :** Kaphi-Coffea

**Sanskrit names :** Kāphī, Hṛdyapeya.

**Regional names:**

Kaphi, Kaphi. (Hi., Beng.); Bund, Bundadana (Mar., Guj.); Kapikottai (Tam.); Kapivittutit (Tel.); Kahava, Kahaba, Bunn (Arabic, Pers.); Arbian Coffee (Eng.).

**Description**

**Coffea arabica Linn.**

A glabrous evergreen shrub or small tree. Leaves elliptic-oblong, 5-7 in. long, narrowed into short petiole. Calyx-limb, Truncate; Corolla funnel-shaped, tube 1/4-1/3 in. long, lobes oblong, as long as tube, filaments shorter than anthers. Berry fleshy, purple when ripe.

**Flowering and fruiting time**

Flowering during the period from March to June.

**Distribution**

Plant is cultivated. Indigenous in Abyssinia and the Sudan.

**Coffea bengalensis Roxb.**

A deciduous shrub, youngest shoots slightly pubescent. Leaves membranous, not shining 2-6 in., suddenly contracted into the short petiole, stipule subulate from a broad basis.

Flowers pure white, fragrant, solitary or in parts, calyx with 5 broad often indistinct teeth, divided into numerous linear segments; corolla one to one and half inches across, tube 1/4-1 in.

Fruits 1/2 in. long, black.

**Flowering and fruiting time**

Plant flowers in February-April.

**Distribution**

Plant grows in subhimalayan tract and outer hills from the Jamuna eastwards, Sikkim Terai, Assam, Sylhet, Chittagong, Tenasserin and Upper Burma. Native of Abyssinia.

**Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa

Vīrya	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Kaphavātāśāmaka, Pittavardhaka.

### Chemical composition

Seeds contain caffeine which is an important constituent of coffee and the one responsible for the stimulating effect of the coffee drink. It is present in the bean.

### Properties and Action

Karma	: Hṛdayottejaka-hṛdaya balya Śothahara Śvasanottejaka-Kāsahara-śvāsahara Tīvramūtrala Dipana-Vātānulomana-grāhī Agnimāndyakara-Viṣṭambhi (higher dose or excess use) Vātāśāmaka-nādyuttejaka-sphūrtidā Nīdrānivāraka Śrama-avāśāda nivāraka-soumanasyajanana Vatavardhana (higher dose or excess use) Śarīra-dhātu poṣaṇa Dhātuśoṣaṇa-dhātukṣayakara-viṣaghna (higher dose or excess use) Jvaraghna.
Roga	: Hṛddourbalya-hṛdrogajanya śotha Mānasikāvasāda-śaithilya-pralāpa Śirahśūla-apatānaka-ākṣepaka Vātajaroga-sandhivātā-āmavāta Kāsa-Kukkurakāsa Mūtrakṛcchra-aśmarī Viśucikā (Bālaroga) Viṣamajvara-ātiśāra-pravāhikā Dantakṛmi-mukhadurgandhi.

### Therapeutic uses

It is most popular drink taken infusion mixed with milk and sugar alike tea. It is medicinaly useful.

It is a cardiac stimulant and cardio tonic. It is stomachie digestive, carminative, astringent and respiratory stimulant. It is febrifuge and countering poison. It is active diuretic and hypertensive agent.

In excess or higher dose, it is flatulent or loss of appetite (digestive fire) and increasing (provoking) Vāta doṣa and causing loss of body tissues (dhātukṣaya).

It is suggested to be intaken as medicine or helping drink in various ailing conditions within normal dose and use. Higher dose intake as well as excess or regular use may cause toxic symptoms and adverse effets, and also developing an addiction.

**Parts used :** Leaves (Coffee)

**Dose**

Leaves decoction 20-40 ml., Seeds (caffeine) 120-300 mg., Common hot drink (coffee)

## KĀPHĪKA-KĀPHĪ ( काफीक-काफी )

काफी तिक्ता कटु पाके हृद्योष्णा कफवातनुत् ।

स्फूर्तिदा श्वासकासघ्नी परं निद्रानिवारणी ॥

*Dravyaguna Vijñāna, part II, p.218.*

## KAPIKACCHU

**Botanical name :** Mucuna prurita Hook.

**Family :** Fabaceae (Papilionaceae).

**Classical name :** Kapikacchu-Kapikacchū.

**Sanskrit names**

Kapikacchu, Kapikacchū, Vānarī, Ātmaguptā, Kaṇḍurā, Markaṭī, Śūkaśimbī, Svayamguptā, Lāṅguli, Kuṇḍalī, Caṇḍā, Durabhigrahā.

**Regional names**

Kebanch, Kaunch (Hindi); Alkushi (Punj). Khūjkuhili (Mar.); Kauncha, Kavach (Guj.); Punaik kali (Tamil); Piliyadugu (Telugu); Namukunni (Kann.).

Nikorna (Mal.); Baikhujni (Uriya); Cowhage, Cowitch (English).

### Description

Annual hairy pea-like climber (twining herb) on shrubs and trees. Branches tomentose when young. Stipule deciduous; petiole 10-15 cm. long; leaflets up to  $19 \times 16$  cm., pubescent on both sides; lateral leaflets very oblique and shorter than flowered raceme. Calyx campanulate, cleft half way down, clothed with shining hairs. Corolla violet-purple Keel exceeding standard and wings. Pods sigmoid, 5-8 cm. long, 5-6 seeded; irritating bristles caducous. Pods turgid, turned upto the end, longitudinally ribbed, covered with dense pale-brown bristles.

### Seed drug :

Seeds are matured, blackish white or black (mottled with black) abruptly hooked at the tip and smooth which are obtained from ripe or matured pods. The collection of pods for procurement of seeds is tedious job which requires careful precaution consequent to intense irritating nature of pods. Certain traditional method of plucking the pods from hanging (rather in drying stage) on trees and shrubs, and further eliminating seeds from pod-covers are followed by the plant drugs collectors (handling them with trained skill and practice) in order to avoid contact of skin with pod. Pods are covered with dense-pale brown bristles, clothed with very pungently irritating subpersistent pale-brown or grey bristles in combage of falted moss of hairs. Hairy bristles 1mm. or (upto) 2.5 mm. long, pointly, sharply, 60-100 mm. diam.

### Flowering and fruiting time

Colder monthes to hot months January-April. Climber growes during rainy season and flowers in September-November and fruiting afterwards, in January-April.

### Distribution

Plant is occurring throughout tropical regions in India. It is found throughout country from Himalaya to Ceylon and Burma plain regions in wild state. Plant is also cultivated.

### Kinds and varieties

Kolaśimbī or Śūkaraśimbī (Madanādi Nighaṇṭu, 7-33) is referred in this context.

**Mucuna nigricans (Lour.) Steud.** Syns. Citta nigricans Lour., Mucuna imbricate DC., Mucuna monosperma Wall.

Kolaśimbī, Śūkaraśimbī (Sanskrit), Gauchi (Garhwali, U.P. hills); Kasi (Beng.); Kaosa (Nepal); Dangyamirk (Lepcha); Mekuri-ghila (Assam); Bhainslagalo (Hindi, U.P. hills)

Large woody climber with slender follow glabrescent branches. Leaves pinnately 3-foliate, 9-15 in. Long stipules linear 1/4 in. long. Leaflets 5-7 in. long, membranous, glabrous or with a few appressed hairs beneath, ovate-oblong, cuspidate, rounded at the base, the lateral ones obliquely so; stipels subulate, setaceous, .15 in. long. Racemes usually axillary, laxly flowered, on long, slender, pendulous, peduncles upto 12 in. or more in length; pedicels .5 in. long, in the axils of large, roundish, inbricating concave, deciduous bracts, 1-3 flowered. Calyx .7-1 in. long, velvety and with a few scattered brown bristles; teeth nearly as long as the tube. Corolla 2-2.5 in. long, dull purple; standard about half as long as the abruptly infixed keel; wings .5 in. broad, as long as the keel. Pod oblong, 4-6 in., long by about 2 in. broad, clothed with deciduous brownish-yellow irritating bristles, obliquely paited on the faces and winged along both surfaces. Seeds 2-4.

### Chemical composition

Seeds contain humidity 9.1, protein 25.03, fibres 6.75, and minerals 6.95 percent. Seed also contains 0.16, phosphorus 0.47, iron 0.02 percent, sulphur and manganese. Seeds yield Dopa (1.5%), glutathione, lecithin, gallic acid, a glucoside, and several alkaloids (total 0.53%), nicotin, prurianine, prurianidine and other substances. Seeds Kernel yield a viscid white oil.

### Pharmacodynamics

Rasa : Madhura, tikta

Guṇa	: Guru, snigdha
Vīrya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Vātaśāmaka Kaphapittavardhaka

**Properties and Action**

Karma	: Vṛṣya Balya-Bṛīhaṇa Nāḍibalya Ārtavajanana Yonisaṅkocaka Mūtrala Kṛmighna Vātahara Vraṇa viśodhana Garbhadhāraka
Roga	: Klaivya-śukrakṣaya-kāmaśaitya Kṣaya-Kārṣya-dourbalya Kaṣṭāratava Mūtrakṛcchra-mūtrāghāta Vṛkkaroga Kṛmi-gaṇḍūpadakrimi Vātavyādhi Nāḍidourbalya Atisāra Raktapitta Duṣṭavraṇa.

**Therapeutic uses**

The decoction of seeds of kapikacchu (seeds of Mucuha prurila Hook.) is prescribed to use orally for a month for regaining the strength in arms (vātavyādhi : Cakradatta, 22-27) Māśabalādi kvāṭha is also indicated in these group of disorder.

Being excellent an aphrodisiac drug, kapikacchu is frequently used in different forms as single drug as well as a major ingredient of compounds. Vānari vaṭikā is an important classical formulation esteemed as an aphrodisiac (Vājikaraṇa rativardhana yoga mentioned in Bhāvaprakāśa, Cikitsā. 72/71-75 with method of prepara-

tion and administration). The powder of kapikacchu and Ikṣuraka (*Astercantha longifolia* Nees.) mixed with sugar, is taken along with milch-warm milk (dhāroṣṇa dugdha) by a person suffering from deficiency of semen (śukravardhana yoga) as prescribed in medical text (*Suśruta Saṃhitā, Cikitsā.* 26-30). The wheat-flour (godhūma cūrṇa) is mixed with powder of Kapikacchu seeds and cooked with milk which is also mixed with ghee (practically fried). This preparation is eaten followed by intake of milk, for good effects as aphrodisiac medicine. The hairs or irritating bristles on pod or fruit (śimbīroma) are yet within the pulps and mouth with ghee. This recipe is useful in worms, gastro-enteritis and haematemesis (*Siddha Bhaisajya Maṇimālā*, 4-280). Precaution is desirable while collecting and using pods hairs which are good anthelmintic (Kṛmighna). The root of plant drug is useful as yonisaṅkocaka (vaginal constrictive medicine). Yonisaṅkīrṇa yoga as single drug application is given (by *Bhāvaprakāśa*) which recommends external use of decoction of root of drug.

For treatment of Vātavyādhi, Māṣabalādi kvātha containing Kapikacchu is prescribed. The paste of kapikacchu root is taken in diarrhoea (pakvātisāra). Dietary articles processed with root of Kapikacchu is also suggested to the patient of diarrhoea. Seeds of drug are useful in raktapitta. Ātmagupta bija tailam is mentioned with medicinal utility in text of *materia medica*.

In case of Unmāda (insanity), Vānari or kapikacchu is suggested to be used externally as rubbing measure (gharṣaṇam). Svayamguptādi cūrṇam (*Cakradatta*, 33/17-18) is prescribed for dysuria. The root of kapikacchu is recommended for use to concieve male child (*Bhāvaprakāśa*, 70-31). Traditional use of root of kapikacchu as effective aphrodisiac is practiced in tribal medicine. A piece of root is kept in mouth during coitus by male partner enjoying with delayed ejaculation.

**Parts used :** Seeds, Roots, Pod-hairs.

**Dose**

Seed powder 3-5 gms., Pod-hairs 125-250 ml., Root decoction 50-100 ml.

**Formulations**

Vānarī Guṭikā, Māśabalādi Pācana, Vānarī Vaṭikā

**Gana**

Balya, Madhuraskandha (Caraka Saṁhitā),  
Vidarigandhādi, Vāta samśamana (Suśruta Saṁhitā).

**KAPIKACCHU ( कपिकच्छु )**

कपिकच्छुः स्वादुतिका वातपित्तकफास्त्रजित्।

शीतलं बृंहणं वृष्यं माषतुल्यं तयोः फलम्।

*Kaiyadeva Nighanṭu, Oṣadhibhāṣya, 608.*

कपिकच्छूरात्मगुसा स्वयंगुसा महर्षभी।

लाङ्गूली कुण्डली चण्डा मर्करी दुरभिग्रहा॥

*Rāja Nighanṭu, Guḍūcyādi varga, 53.*

**कपिकच्छुफलम्**

कपिकच्छुफलं वृष्यं शीतं स्वादुरसं गुरु।

रक्तपित्तानिलहरं दुष्टव्रणविशोधनम्॥

*Kaiyadeva Nighanṭu, Oṣadhi varga, 609.*

कपिकच्छुर्भृशं वृष्या मधुरा बृंहणी गुरुः।

तिक्ता वातहरी बल्या कफपित्तास्त्रनाशनी॥

*Bhāvaprakāśa Nighanṭu, Guḍūcyādi Varga, 130.*

**कपिकच्छुबीजम्**

‘तद्बीजं वातशमनं स्मृतं बाजीकरं परम्।’

*Bhāvaprakāśa Nighanṭu, Guḍūcyādi Varga, 131.*

**कपिकच्छुगुणाः**

कपिकच्छुः स्वादुरसा वृष्या वातक्षयापहा।

शीतपित्तास्त्रहन्त्री च विकृता व्रणनाशनी॥

*Rāja Nighanṭu, Guḍūcyādi Varga, 53*

कपिकच्छु रसे स्वादुस्तिका शीतानिलापहा।

वृष्या पित्तास्त्रहन्त्री च दुष्टव्रणविनाशनी॥

*Dhonvantari Nighanṭu.*

### योनिसङ्कीर्णकरणे

कपिकच्छूभवं मूलं क्राथयेद्विधिना भिषक् ।

योनिः सङ्कीर्णतां याति क्राथेनानेन धारयेत् ॥

*Bhāvaprakāśa.*

### वातव्याधौ

माषबलादिक्राथे ।

*Cakradatta, 22-24.*

‘.....तथाऽत्मगुसास्वरसं पिबेद्वा..... ।

.....मासाद् भवेद् वज्रसमानबाहुः ॥’

*Cakradatta, Vāta vyādhi cikitsā. 22-27.*

### वाजीकरणार्थम्

क्षीरं पक्षास्तु गोधूमानात्मगुसाफलैः सह ।

शीतान् कृतयुगान् खादेत्ततः पश्चात्पिबेत्पयः ॥

*Suśruta Samhitā, Cikitsā. 26-30*

### पुत्रजन्मार्थम् (गर्भधारणार्थम्)

शूकरशिम्बी मूलं मध्यं वा दधिफलस्य सपयस्कम् ।

पीत्वाऽथो भवलिङ्गी बीजं कन्यां न सूते स्त्री ॥

*Bhāvaprakāśa, Yonirogādhikāra, 70-31.*

### अतिसारे

कच्छुरामूलकल्कं वा ह्यदम्बरफलोपमम् ।

.....पक्षातिसारयोगोऽयं जयेत्पीतः सशोणितम् ॥

*Suśruta Samhitā, Uttara. 40-74.*

‘भोजने च हितं कच्छुरामूलसाधितम् ।’

*Suśruta Samhitā, Uttara. 40-110.*

### रक्तपित्ते

‘शूकशिम्बभवं धान्यं रक्ते शाकं च शस्यते ।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 2.*

‘काकाण्डोलाऽत्मगुसानां माषबत्फलमादिशेत् ।’

*Caraka Samhitā, Sūtra. 27-32.*

### आत्मगुसाबीजतैलम्

‘गुरुष्वां स्त्रिरधमधुरं कषायमात्मगुसजम् ।’

*Dhanvantari Nighaṇṭu.*

### उन्मादे वानरीघर्षणम्

‘कपिकच्छवाऽथ वा तसैलोहतैलजलैः स्पृशेत्।’

*Bhāvaprakāśa, Unmādādhikāra, 22-39.*

### रतिवर्द्धनार्थं वानरीवटिका

बीजानि तु कपिकच्छवाः कुडवमितानि च स्वेदयेच्छनकैः ।  
प्रस्थे गोभवदुधे तावद् यावद् भवेद् गाढम् ॥  
त्वग्रहितानि च कृत्वा सूक्ष्मसम्पेषयेत्तानि ।  
पिष्ठिकया लघुवाटिकाः कृत्वा गव्ये पचेदाज्ये ॥  
द्विगुणितशर्करया ता वटिकाः सम्पक्ता लेप्याः ।  
वटिका माक्षिकमध्ये मज्जनयोग्येऽखिला याप्याः ॥

*Bhāvaprakāśa, Vājīkaraṇādhikāra, 72/71-75.*

### मूत्राघातचिकित्सायां स्वयङ्गुसादिचूर्णम्

*Cakradatta, Mūtraghāta cikitsā, 33/17-18.*

### वाजीकरणार्थं स्वयङ्गुसादिचूर्णम्

स्वयङ्गुसेक्षुरकयोर्बीजचूर्णं (फलचूर्ण) सशर्करम् ।

धारोष्णेन नरः पीत्वा पयसा न क्षयं ब्रजेत् ॥

*Cakradatta, Vṛṣyādhikāra, 66-6.*

*Suśruta Saṃhitā, Cikitsā, 26-33*

### क्रिमिरोगे

गर्भे गुडस्य पिहितानि तनुत्र शिंख्यो रोमाणि वक्त्रमभितो हविषा विलिप्य ।

द्विलिर्गिलेत् क्रिमिजरुक्षु विसूचिकायामुद्रिरक्तवमथावपि शर्मकामः ॥

*Siddhabhaiṣajya maṇimālā 4-280.*

## KAPITTHA

### Botanical name

Limonia elephantianum (Correa) Panigrahi. Syn.  
Feronia limonia (Linn.) Swingle., F. limonia correia, F.  
acidissima L. Feronia elephantum Correa.

### Family : Rutaceae

### Classical name : Kapittha

### Sanskrit names

Kapittha, Kapipriya, Dadhiphala, Surabhicchada,  
Puṣpa phala, Dadhittha, Grāhiphala, Mälūra, Granthi-

phala, Kucaphala, Kapīṣṭa, Vṛttaphala, Dantaśaṭha, Karavallabha.

### **Regional names**

Kainth, Kait, Kavit (Hindi); Kathabel (Beng.); Velaga (Tel.); Byala (Kan.), Kambath (Mar.); Kothu (Guj); Elephant Wood-apple (Eng.).

### **Description**

A small deciduous glabrous trees, or medium sized up to 30 meters tall, armed with strong straight axillary thorns. Leaves alternate, imparipinnate thick. Bark dark grey or poorly black, wrinkled, and with longitudinal shallow furrows. Leaflets subsessile, entire cuneate to obovate, rachis sometimes narrowly winged. Flowers dull red to whitish. Sepals minute. Petals imbricate. Filaments subulate from a broad base. Seeds many, not covered by mucilage, embedded in sour, tasty, fleshy, pulp. Fruits globose, grey, rough, 2-3 in. diam., rind hard, woody, fruit pulp edible.

### **Flowering and fruiting time**

Plant flowers during summers or April-May and becomes in fruiting stage during cold season.

### **Distribution**

Plant occurs in Indian sub-continent and Java. Generally it is planted in gardens, along avenues or house premises and sometimes in forest composition, particularly in hotter regions. It is wild in Southern India.

### **Chemical composition**

Fruit pulp contains plenty citric acid and mucilage. Dried pulp of fruit contains citric acid ranging up to 15 percent. Ash contains potassium, calcium and iron salts. Ash is deliquescent in humidity. Leaves contain 0.73% volatile oil which is also present like leaves of Acgle marmelos (L.) Correa. (Bilva).

### **Kinds and varieties**

Kapittha patrā (Kaideva Nighaṇṭu, 1-421) --  
Kapitthapatrī (Aṣṭāṅga Nighaṇṭu, 135), Kapitthaparṇī (Hemādri, Aṣṭāṅga Hṛdaya, Sūtra. 15-30 and some other Sanskrit names of kapitha patrā or Kapitthapatrī deserve-

ing reference in this context, is an independant and separate drug mentioned in texts of indigenous medicine. 'Kapitthapatrā' has resemblance with 'Kapittha' in regard to leaves mainly and also odour etc. The botanical sources of both drugs belong to same genus (*Limonia*) and family (Rutaceae).

Kapittha is botanically known as *Limonia elephantianum* (Correa) Paniagraghi Syn. *Feronia limonia* (Linn.) Swingle and it is a well familiar plant particularly growing common in tropical areas. Kapitthapatrā is suggested to be botanically identified as *Limonia crenulata* Roxb. Syn. *Limonia acidissima* W. & A. which is a Himalayan plant and also in southern, eastern and western India (ascending to 4,000 ft. in hills).

Difference in stages and types (unripe and ripe as well as taste) of fruit.

### **Pharmacodynamics**

Rasa	: Kaṣāya, amla
Guṇa	: Laghu, rūkṣa
Vīrya	: Sīta
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara-Vātapitta śāmaka.

### **Properties and Action**

Karma	: Lekhana Grāhī Durjara-viṣṭambhi Rocana-hṛdyā Trṣṇānigrahaṇa Kaṇṭha viśodhana-kāsaḥara Viṣaghna Hikkānigrahaṇa
Roga	: Aruci-agnimāndya Kāsa-śvāsa-hikkā Viṣa-mūṣakadarmaṇa-kaṇṭhagatavīṣa Kaṇṭhavikāra-svarabheda Mūtradoṣa Vraṇa Trṣṇā

Atisāra-pravāhikā  
Arśa  
Vyaṅga-nyaccha-nīlikā  
Chhardi.

### **Therapeutic uses**

The drug Kapittha is acidic or sour, astringent and sweet in (taste) and cold (in potency) which differ to unripe (āma) and ripe (pakva) stages as well as taste (rasa) of madhurāmla (sweet-acid) and madhura (sweet) with kaśāya (astringent) type of fruits possessing distinction in medicinal properties. Unripe fruit allays kapha and increases vāta pitta doṣa, while ripe fruit allays tridoṣa or vāta pitta doṣa and accordingly the medicinal properties differ with their action as considered in texts. Specific medicinal effects of other parts of Kapittha are also indicated such as seeds (bijā), leaves (patra), flowers (puṣpa), bark (tvak) oil (taila) and gum (niryāsa) which are medicinally useful, in addition to common utility as edible fruit. Generally the pulp of fruit is eaten as tasty (suādu or madhurāmla) item and used in different forms as household food article.

Kapittha is useful in several ailments and it enters in various medicinal reciped recommended in treating different diseases by utilising fruit (pulp) and also some other parts of plant drug. The drug plant has both modes of administration orlly and externally as medicine.

The soup of Kapittha (*Ferronia limonia correia*) and (or) Bilva (*Aegla marmelos corr.*) is given in piles which is recommended by Caraka (Caraka Saṁhitā, Cikitsā, 14-93). Kapittha with trikaṭu is taken with honey for checking and vomiting (chardi) hiccough (hikkā). The powder of Pippalī fruit (*Piper longum Linn.*) impregnated with Kapittha juice and it is taken after mixing with honey to check vomiting (Chhardi); it needs be taken frequently (murmuhu) for immediately controlling vomiting as prescribed in texts (Suśruta saṁhitā, Uttara, 49-27; Aṣṭāṅga Hṛdaya, Cikitsā, 6-12) In hiccough (hikkā), the juice of Kapittha and Āmlaka (*Emblica officinalis Gaertn.*) is mixed with pippali powder in honey. It is given to patient for promptly checking it.

Another recipe of Kapittha is prescribed for treatment of hiccough (Vaidyamanorama, 3-26). The powder of Kapittha leaves or a clod heated in the sun and then sprinkled with cold water Hribera; it is for inhaling to check hiccough.

The fruit-pulp of Kapittha, mixed with trikaṭu, honey and sugar, is given in diarrhoea (atisāra). In dysentery (pravāhikā), kapittha with dhātakī, badarī leaves, is mixed together with curd and it is given to patient (Bhāvaprakāśa, Cikitsā, 2-120) Kapittha and several other plant drugs are mentioned for using after processing with curd (dadhi) in cases of diarrhoea (Suśruta Saṃhitā, Uttara, 40-113).

In conditions of poisoning (viṣa), Kapittha is suggested to be used in different types. The ghee (ghṛta) processed with five parts of kapittha is given in rat-poisoning or ākhu viṣa (Aṣṭāṅga Hṛdaya, Uttara, 38-25).

**Parts used :** Fruit, leaves, flowers, bark, root, gum.

**Dose :** Decoction 50-100 ml.

**Formulation :** Kapithāṣṭaka cūrṇa.

## KAPITTHA ( कपित्थ )

**अ. कपित्थः:**

कपित्थको दधित्थः स्यात् तक्रचित् सुरभिच्छदः ।

अक्षिसस्यो दधिफलो ग्राही ग्राहिफलो दधिः ॥

हृद्यः कषायाम्लफलश्चिरपाकी कपिप्रियः ।

**कपित्थगुणाः:-आमफलम्**

आमं कपित्थं सङ्ग्राहि कषायं लघु लेखनम् ॥

रुक्षाम्लं विषकण्ठघां कफजित् वातपित्तकृत् ।

*Kaiyadeva Nighanṭu, Oṣadhi Varga, 413-415.*

**कपित्थः पक्वफलम्**

पक्वं गुरु कषायाम्लं स्वादु हिक्कात्रिदोषजित् ॥

वमिकासतृष्णाश्वासशमनं कण्ठशोधनम् ।

सङ्ग्राहि रोचनं हृदयं दुर्जरं मूत्रदोषजित् ॥

*Kaiyadeva Nighantu, Osddhi Varga, 415-416.*

### कपित्थबीजम्

कपित्थबीजं गरहत् तन्कृपालविसर्पनुत् ।

### कपित्थपत्रम्

कपित्थपत्रं हिक्काग्रं धर्यतीसारनाशनम् ॥

### कपित्थपुष्पम्

पुष्पाखुविषं हन्यात् कपित्थस्य विशेषतः ।

*Kaiyadeva Nighantu, Osddahi Varga, 417-418.*

### कपित्थतैलम्

कषायं स्वादु कापित्थं तैलमाखुविषापहम् ।

कफित्थहरं ग्राहि वमिहिक्काविषापहम् ॥

*Kaiyadeva Nighantu, Taila Varga, 337.*

### कपित्थः

कपित्थस्तु दधित्थः स्यात्तथा पुष्पफलः स्मृतः ।

कपिप्रियो दधिफलस्तथा दन्तशठोऽपि च ॥

### कपित्थगुणाः

कपित्थमामं सङ्ग्राहि कषायं लघु लेखनम् ।

पक्षं गुरु तृष्णाहिक्काशमनं वातपित्तजित् ॥

स्यादम्लं तुवरं कण्ठशोधनं ग्राहि दुर्जरम् ॥

*Bhāvaprakāśa Nighantu, Amradiphala Virga, 61-62.*

### कपित्थः

मालूरस्तु कपित्थो मङ्गल्यो नीलमलिका च दधि ।

ग्राहिफलश्चिरपाकी ग्रन्थिफलः कुचफलो दधिफलश्च ॥

गन्धफलश्च कपीष्टे वृत्तफलः करभवलभश्चैव ।

दन्तशठः कठिनफलः करण्डुफलकश्च सप्तदशसंज्ञः ॥

### कपित्थगुणाः

क. कपित्थो मधुराम्लश्च कषायस्तिक्षीतलः ।

वृष्टः पित्तनिलं हन्ति सङ्ग्राहि व्रणनाशनः ॥

ख. आमं कपित्थमम्लोष्णं कफसङ्ग्राहि वातलम् ।

दोषत्रयहरं पक्षं मधुराम्लरसं गुरु ॥

*Rāja Nighantu, Āmrādi Varga, 179-182.*

**पक्षापक्षतो विभिन्नावस्थतया विशेषगुणाः**

- अ. आमं कण्ठरुजं कपित्थमधिकं जिह्वाजडत्वावहं  
तद्वेषत्रयवर्द्धनं विषहरं सङ्ग्राहकं रोचकम्।
- ब. पक्षं श्वासविमिश्रमक्लमहरं हिक्काऽपनोदक्षमं  
सर्वं ग्राहि रुचिप्रदं च कथितं सेव्यं ततः सर्वदा॥

*Rāja Nighaṇṭu, Āmrādi varga, 183.*

**कपित्थतैल गुणाः**

- कषायं स्वादु कापित्थं तैलमाखुविषापहम्।
- कफपित्तहरं ग्राहि वमिहिकाविषापहम्॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 418-419.*

**कपित्थफलगुणाः**

- मधुराम्लकषायत्वात्सौगन्ध्याच्च रुचिप्रदम्।
- परिपक्वं सदोषघ्नं विषघ्नं ग्राहि गुर्वपि॥

*Caraka Saṃhitā.*

**कपित्थः**

- कपित्थमामस्वर्यं कफघ्नं ग्राहि वातलम्।
- कफानिलहरं पक्षं मधुराम्लरसं गुरु॥
- श्वासकासारुचिहरं तृष्णाघ्नं कण्ठशोधनम्।

*Dhanvantari Nighaṇṭu.*

**प्रवाहिकायाम्**

- धातकी बदरीपत्रं कपित्थं.....।
- ..... एकतो दध्ना पिबेत् प्रवाहिकार्दितः॥

*Bhāvaprakāśa, Cikitsa, 2-120.*

**अर्शःसु**

- ‘दधित्थबिल्वयूषं वा.....।’

*Caraka Saṃhitā, Cikitsā. 18-93.*

**व्यङ्गन्यच्छनीलिकासु**

- ‘कपित्थराजादनयोः कल्के वा हितमुच्यते।’

*Suśruta Saṃhitā, Cikitsā. 20-36.*

**छद्याम्**

- ‘खादेत् कपित्थं सव्योषं मधुना वा दुरालभाम्।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 6-21.*

दधित्थरससंयुक्तां पिप्पली माक्षिकान्वितम् ।  
मुहुः मुहुर्नरो लीढवा छर्दिभ्यः प्रविमुच्यते ॥

*Suśruta Saṃhitā Uttara. 49-27.*

विषे

विषसंसृष्टाङ्गने

क. कपित्थमेषशृङ्खयाश्च पुष्पं भल्लातकस्य वा ।  
एकैकं कारयेत् पुष्पं बन्धुकाङ्कोटयोरपि ॥

*Suśruta Saṃhitā, Kalpa. 1-71.*

कण्ठगतविषे

ख. ‘कपित्थमामं ससिताक्षौद्रं कण्ठगते विषे ।’

*Caraka Saṃhitā, Cikitsā. 23-184.*

मूषिकदंशजविषे

ग. ‘आस्फोतमूलसिद्धं वा पञ्चकपित्थमेव वा ।’

*Suśruta Saṃhitā, Kalpa. 7-40  
Aṣṭāṅga Hṛdaya, Uttara. 38-25.*

‘कपित्थगोमयरसे मधुमानवलेहम् ।’

*Aṣṭāṅga Hṛdaya, Uttara. 38-24.*

अतिसारे

कपित्थमध्यं लीढवा तु सव्योषक्षौद्रशर्करम् ।  
कट्फलं मधुयुक्तं वा मुच्यते जठरामयात् ॥

*Caraka Saṃhitā, Cikitsā. 19-112.  
Aṣṭāṅga Hṛdaya, Cikitsā. 9-106.*

हिक्कायाम्

कपित्थपत्राणि विमर्दितानि हिक्कायाम् जिग्रेदथवाऽकर्तसम् ।  
मृत्पिण्डमत्यन्तसुशीततोयैः सितां तु ह्रीवेरकवारिणाक्तम् ।

*Vaidyamanoramā. 3-26.*

ब. कपित्थपत्रा

कपित्थपत्रा सरसा फणिजा रूपपत्रिका ॥  
कूलजा वनजा ज्ञेया निर्जरा पुष्पपत्रिका ।  
तुम्बपत्रिका चारुपत्री विरूपा चित्रपत्रिका ॥

कपित्थपत्रागुणाः

कपित्थपत्रिका तिक्ता कषाया कटुपाकिनी ।

तीक्ष्णोष्णा नाशयेत् श्लेष्ममेदोमेहविषकृमीन् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 419-421.*

## KARAMARDA

### Botanical name

*Carissa congesta* W. Syn. *Carissa carandus*.

**Family :** Apocynaceae

**Classical name :** Karmarda

### Sanskrit names

Karamarda—pāṇimarda, Karāmla, Suṣeṇa,  
Kṛṣṇapāka.

### Regional names

Karonda, Karouna, Karwand (Hindi); Garna, Garaunda (Punjabi); Karanda (Mar.); Kavali, Garji (Kan.); Kalivi, Kalli (Tel.).

### Description

**Carissa carandas** Linn. A large erect evergreen shrub or small tree, glabrous except the inflorescence. Bark yellow-brown, scaly. Branchlets usually alternate, armed at their base with a pair of about glabrous spreading spines, 1-1.5 in. long, the branches generally unarmed. Wood suitable for turnery and branches make excellent hedges.

Leaves shortly petioled, 1.5-3 in. long by 1-2 in. wide, elliptic or obovate, obtuse or shortly mucronate, cuneate at the base, coriaceous dark green and shining above.

Flowers white or pinkish, faintly scented, arranged in terminal sessile or peduncled pubescent corymbose cymes; bracts linear, pubescent. Calyx pubescent, divided more than half way down into lanceolate ciliate segments, Corolla tube about 1/2 in. Long, dilated upwards; lobes lanceolate, acute, about half as long as the tube, pubescent and ciliolate. Ovary glabrous; cells 4-ovuled.

Berry 4-or more-seeded, 1/2-1 in. long, ellipsoid, smooth, purplish when ripe, white-yellowish in unripe or raw state, sometimes blackish in ripen state.

### **Flowering and fruiting time**

Plant flowers in during the period from January to April; and fruiting begins afterwards.

### **Distribution**

It is wild or cultivated throughout India and in Ceylon, extending to Burma and Malaya. Central India, Uttar Pradesh, Madhya Pradesh and other provinces.

**Carissa opaca** Stapf. syn. **C. spinarum** Auct. Bl. non Linn. *Carissa villosa* Roxb., *Carissa diffusa* Roxb., *C. hirsuta* Roth.

A small thorny evergreen shrub with light-grey bark and green branches, spines 5-1 in. Long, often forked, generally at the base of the branches. Wood hard, smooth and close-grained.

Bushy, diffuse shrubs; thorns up to 5 cm. long, simple or forked. Leaves broad-ovate, elliptic or suborbicular, 1.5-4.0 cm. long. Flowers white in corymbose cymes. Calyx divided near to the base, lobes lanceolate ciliate. Corolla hypocrateriform, 1; lobes lanceolate shorter than tube. Stamens included, anther apiculate. Berry subglobose or ellipsoid, 2-seeded, up to 7 mm. across.

Leaves opposite, 1-1.5 by 7.1 in., ovate, acute, mucronate, glabrate or pubescent, beneath, coriaceous, dark-green and shining above.

Flowers white, scented, in few-flowered corymbose cymes at the ends of the branches. Calyx-teeth 5; lanceolate, ciliate. Corolla-tube 0.5 in. long, cylindrical; tubes 5, elliptic lanceolate, slightly shorter than the tube. Stamens included in the corolla-tube. Ovary 2-celled, ovules 2 in each cell.

Berry sub-globose or elliptic, 2-3 in. long, shining in pruinose, dark-purple and juicy when ripe. Seeds 2, concavo-convex, not hairy.

### **Flowering and fruiting time**

Flowering in January-May. Leaves generally renewed in March. Plant flowers in April-June and it fruit during cold season.

### Distribution

It occurs in various parts of country; It is found in northern and central India. It is extremely common and gregarious in scrub jungles along the foot of Sivaliks and in open glades and stony-soils and in the lower valleys up to 4,000 ft. in Uttar Pradesh hilly region. Trans-Indus. Sub-Himalayan tract and outer valleys, ascending to 3,000 ft. Plains of northern India, Bengal, Central Provinces, western Peninsula. Dry regions of the Irawady valley from upwards.

### Pharmacodynamics

Rasa	: Amla
Guṇa	: Guru, Sara
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātaśāmaka, Pittakaphakara.

### Chemical composition

Fruits contain moisture 18.2, protein 2.3, fat 9.6, carbohydrate 67.1 and mineral matter 2.8 percent.

### Properties and Action

Karma	: Rocana-hṛdaya Pācaka Trṣāśāmaka Pittaśāmaka Balya.
Roga	: Aruci Agnimāndya Raktapitta Praśitāda Pittavikāra Yakṛdvikāra Kāsa-śvāsa Viṣamajvara Dourbalya Trṣā Pāṇḍu.

### Therapeutic uses

The fruits are edible as acidic fruit and used in dif-

ferent forms for eatable purposes. Fruits and roots have medicinal properties.

Karamarda is stomachic, digestive, tonic and it allays thirst (overthirst) and countering poison. It is rucivardhana (increasing and stimulating desire for food or relishing food). Different stages (ripe, unripe and semiripe: pakva, āma or apakva and ardhapakva) of fruit as well as tastes (rasa : amla, madhurāmla, satiktāmla, atymla) make variation in medicinal properties suggesting their suitable medicinal activity and therapeutic use accordingly.

Karamarda is causing rakta and pitta (acidic fruit used in excess), but normal use of ripe fruit is tasty of acidic kind useful as stomachic (dīpana) and promoting desire of food intake (rocana).

The half-ripe fruit is eaten as a pickle, and the ripe fruit is also much eaten both raw and as a preserve.

Wood is economically useful; it is utilised for turning and for making combs. It is an excellent fire-wood. The branches are in great demand for dry fences, and the leaves are greedily eaten by sheep and goats. The ripe berries have a sub-acid sweet taste, and are much eaten by men and birds.

**Parts used :** Fruits, roots.

**Dose :** 1-3 gm., Fruits edible.

## KARAMARDA ( करमर्द )

**क.** करमर्दः सुषेणः स्यात्कृष्णपाकफलस्तथा ।  
तस्माल्घुफला या तु सा ज्ञेया करमर्दिका ॥  
*Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi Varga, 81.*

**ख.** करमर्दद्वयं त्वाममास्लं गुरु तृष्णाहरम् ।  
उष्णरुचिकरं प्रोक्तं रक्तपित्तकफप्रदम् ॥  
तत्पक्तं मधुरं रुच्यं लघु पित्तसमीरजित् ।  
*Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi Varga, 82.*

करमर्दः सुषेणश्च कराम्लः करमर्दकः ।  
अविग्रः पाणिमर्दश्च कृष्णपाकफलो मुनिः ॥

करमदः तिक्तकाम्लो वान्तो दीपनपाचकः ।  
पक्षास्त्रिदोषशमनोऽरुचिन्नो विषनाशनः ॥

*Rāja Nighaṇṭu, Āmrādiphala Varga,-207-208.*  
तच्छुष्कं पक्षसदृशं गुणैर्जयं विचक्षणैः ।

*Nighaṇṭu Ratnākara.*  
गुरुष्णवीर्यं वातघ्नं सरञ्च करमदकम् ।  
नातिपित्तकरं पक्षं शुष्कं च करमदकम् ॥  
अम्लं तृष्णापहं रुच्यं पित्तकृत् करमदकम् ॥

*Aṣṭāṅga Hṛdaya.*

## KARAŃJA

### Botanical name

Pongamia pinnata (L.) Pierre.

Syns. Derris indica (Lam.) Benn. Cytisus Pinnatus L. Pongamic glabra Vent.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Karanja-Ghṛtakaranja

### Sanskrit names

Karanja, Naktāmāla, Udakīrya, Ghṛtapūra,  
Snigdhapūra, Gucchapuṣpaka.

### Regional names

Paper, Kanji, Kanja (Hindi); Karanj (Oudh.);  
Honge (Kan.); Kanuya (Tel.); Ponga (Tam.); Thinwin  
(Burmese).

### Description

Moderate-sized spreading trees, up to 25 meters tall; wood yellowish white; bark smooth or soft. Leaves imparipinnate, glabrous. up to 35 cm. long; leaflets ovate or elliptic sharply acuminate, bright green. Flowers 2-4-nate in simple, long-peduncled racemes. Bracts caducous. Calyx teeth obsolete. Corolla purple to white; vexillum auricled at base, wings slightly adherent to keel. Pod indehiscent; turgid, almost woody, seeds reniform; pods more or less falcate; 1-seeded, 1-1.5 or 2 in. long, seeds only.

### **Flowering and fruiting time**

It flowers in March-May and fruits in rainy months.

### **Distribution**

Plant occurs central and eastern Himalayas ascending to 4,000 ft., Himalayan terai, foothill (Siwaliks and others) and gangetic plains. It is found in southern India and Sri Lanka especially the coastal regions. It is also planted in gardens.

### **Kinds and Varieties**

Generally there are two kinds of Karanja in classical texts (Samhitas and nighaṇṭus) viz. Karaṇja and Kanṭakī Karaṇja which are botanically known as *Caesalpinia crista* Linn. and *Pongamia pinnata* Pierre. The term 'Karanja dvaya' indicates Pūtīka and Naktamāla. Pūtīka and Naktamāla are considered to be Cirabilva and Karanja respectively. Later 'Karanja dvaya' has become 'Karanja traya' after addition of Kanṭakī Karaṇja. Cirabilva is botanically named as *Holopteba integrifolia* Planch.

### **Chemical composition**

Seeds contain viscid yellow oil 27 percent which is known as Pongamia oil and the oil becomes solid at 8° centigrade. Bark yields a bitter alkaloid which is soluble in ether, alcohol and water. Pongamia oil (Karanja taila) is 27-29 percent. It contains karanjin which an active constituent and germicidal agent. Pongamol is also found.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṣāya
Guṇa	: Tīkṣṇa
Viryā	: Uṣṇa
Vipaka	: Kaṭu
Doṣakarma	: Kaphavāta śāmaka

### **Properties and Action**

Karma	: Arśoghna Kṛmighna Kuṣṭhaghna-Kaṇḍūghna Dīpana-pācana Śothahara
-------	--

	Grāhī
	Chardinigrahaṇa
	Viṣaghna
	Medohara
	Vranaśothana-ropaṇa
	Bhūtaghna
	Romasanjana
<b>Roga</b>	: Kaṇḍū-pāmā-kacchu-vicarcikā
	Kuṣṭha-śvitra
	Raktapitta
	Vājikaraṇa
	Upadarma
	Vraṇa-vidradhi(antarbhāyaja)-nādīvraṇa-visphoṭa
	Kṛmi
	Arṣa
	Yoniroga
	Bhūtavādha-Bālaroga-ahipūtanā
	Udāvarta-Gulma
	Śiroroga
	Prameha
	Medoroga
	Netraroga
	Granthi
	Visarpa
	Viṣa-vṛścikadamśa
	Kṣudraroga
	Urustambha
	Udararoga-plihodara
	Keśaroga.

### **Therapeutic uses**

The drug Karaṇja is anthelmintic, antidiabetic and carminative. It is used in allergic conditions, anorexia, dyspepsia, flatulence, piles, inflammation, morbid conditions of vagina, skin diseases and worms.

In traditional practices of medicine, the plant drug is used in various ailments; it is used in malarial fever, night blindness and glandular diseases.

The seeds oil is externally on skin affections, ulcers and vātavyādhi. Bark and leaves are used as germicidal, antipruritis and anti-inflammatory drug. The oil is an anthelmintic medicine and given in worms affections. The juice of bark and leaves in loss of appetite, dyspepsia, indigestion, haemorrhoids and abdominal disorders.

The drug is used in rheumatic disorders, blood impurities, oedema. Seeds powder is given in whooping cough and only seeds rubbed in water, are also used. The garland of seeds is also prepared to be used by children suffering from whooping cough.

This drug is given in prameha, iksumeha (specially flowers) and various skin diseases.

**Yoga :** Krañjādi cūrṇa, Karanjādyā ghṛta, Karanjādi taila.

#### Guna

Kaṇḍughna, Virecana, Katukaskandha, Tiktas-kandha (Caraka Saṁhitā), Śyāmādi, Sirovirecana, Kapha-saṁśamana, Āragvadhādi, Varuṇādi, Arkādi (Suśrutā Saṁhitā).

**Parts used :** Fruit, seeds, seed Kernel leaves, oil, root.

#### Dose

Powder 3-5 gms., Oil (seeds)- External use., Decoc-tion 50-100 ml.

## KARAŃJA-UDAKIRYA(NAKTAMĀLA)

### करञ्ज-उदकीर्य ( नक्तमाल )

करञ्जः कटुकः पाके रसे तिक्तः कषायकः ।

कटुको गुणतस्तीक्ष्णो वीर्योष्णो विनियच्छति ॥

बलासपित्तकुष्ठास्वव्रणमेदोदरक्रिमीन् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 966-967.*

#### करञ्जपत्रम्

तत्पत्रं कटुकं पाके वीर्योष्णं पित्तलं लघु ।

भेदनं कफवाताशौजन्तुशोफव्रणान् जयेत् ॥

*Kaiyadeva Nighantu, Oṣdhai Varga, 967.*

*Kaiyadeva Nighantu, Oṣdhai-Varga, 967-968.*

**करञ्जाङ्कुरम्**

अङ्कुरः कटुकः पाके रसे दीपनपाचनम् ॥

कफवातापहः शोफविषार्शः कृमिकुष्ठजित् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 968-969.*

**करञ्जिका**

करञ्जिका कटुः पाके सतिका तुवरा कटुः ॥

बीर्योष्णा ग्राहिणी हन्ति मेहकुष्ठवमिकृमीन् ।

*Kaiyadeva Nighantu, Oṣadhi Varga 970-971.*

**करञ्जी**

करञ्जी स्तम्भनी तिक्ता तुवरा कटुपाकिनी ।

बीर्योष्णा वमिपित्तार्शः कृमिकुष्ठप्रमेहजित् ॥

*Bhāvaprakāśa Nighantu, Guḍūcyādi Varga, 124.*

करञ्ज.....फलं जन्तुप्रमेहजित् ।

रुक्षोष्णं कटुकं पाके लघु वातकफापहम् ॥

*Suśruta Saṃhitā, Sūtra. 46.*

‘करञ्जतैलानि तीक्ष्णनि लघून्यूष्णावीर्याणि कटूनि कटुविपाकानि सराण्यनिलकफकृमिकुष्ठप्रमेहशिरोरोगहराणि च ।’

*Suśruta Saṃhitā, Sūtra. 45.*

**करञ्जतैलम्**

करञ्जतैलं नयनार्त्तिनाशनं वातामयध्वंसनमुष्णतीक्ष्णकम् ।

कुष्ठार्त्तिकण्डूतिविचर्चिकापहं लेपेन नानाविधिचर्मदोषनुत् ॥

*Rāja Nighantu, Kṣīrādi Varga, 115.*

करञ्जोश्वोष्णतिक्तः स्यात् कफपित्तास्तदोषजित् ।

ब्रणप्लीहकृमीन् हन्ति भूतग्ने योनिरोगहा ॥

*Dhanvantari Nighantu.*

करञ्जः कटुकस्तीक्ष्णो बीर्योष्णो योनिदोषहत् ।

कुष्ठोदावर्त्तगुल्मार्शोब्रणकृमिकफापहः ॥

*Nighantu Ratnākara.*

**पत्रं फलञ्ज**

तत्पत्रं कफवातार्शः कृमिशोथहरं परम् ।

भेदनं कटुकं पाके बीर्योष्णं लघुः पित्तलम् ॥

तत्फलं कफवातग्रं मेहार्शः कृमिकुष्ठजित् ।

*Nighantu Ratnākara. Cakradatta, 44/80-82.*

व्रणचिकित्सायां करञ्जाद्यधृतम्

Cakradatta, 44/80-82.

अर्शासि

प्रागभक्तं यमके भृष्टान् सकुभिश्वावचूर्णितान्।  
करञ्जपलवान् दद्याद् वातवर्चोऽनुलोमनम्॥

*Caraka Samhitā, Cikitsā. 14-101.*

*Aṣṭāṅga Hṛdaya, Cikitsā. 8-53.*

विद्रध्याम्

करञ्जास्थीनि सम्पेष्य वितुषीकृत्य चूर्णयेत्।  
स्नुगदलस्वरसेनैव मृदित्वा रविसन्निधौ॥  
तैलं गृहीत्वा तत्तैलं बाह्याभ्यन्तरुपयोजयेत्।  
अन्तर्विद्रधिमाश्वेव नाशयेद् बाह्यजं तथा।

*Vaidya Manorama 8-2/3.*

वाजीकरणार्थं करञ्जबीजप्रयोगः

बीजं बृहत्करञ्जजस्य कृतमन्तः सपाददम्।  
सुवेष्टितं न्यस्ते बद्धे बीजधृक् मतम्॥

*Cakradatta, Viṣyādhikāra, 66-50.*

अर्शःसु

प्रागभक्तं यमके भृष्टान् सकुभिश्वावचूर्णितान्।  
करञ्जपलवान्दद्याद्वातवर्चोऽनुलोमनम् ॥

*Caraka Samhitā, Cikitsā, 14-101.*

*Aṣṭāṅga Hṛdaya, Cikitsā. 8-53.*

कुष्ठे

'.....कुटजकरञ्जयोः फलम्।  
.....लेपः कुष्ठापहः सिद्धः ॥'

*Caraka Samhitā, Cikitsā, 7.*

'कुष्ठे करञ्जबीजान्येडगजः कुष्ठसूदनो लेपः।'

कुष्ठे क्रिमिरोगे च

.....पिप्पली करञ्जफलम्।  
नस्यं स्यात् सविडङ्गं क्रिमिकुष्ठकफप्रकोपनम्॥

*Caraka Samhitā, Cikitsā, 7-48.*

'.....करञ्जनिम्बखदिराश्च।

स्नाने पाने लेपे कृमिकुष्ठनुदः सगोमूत्राः ॥'

*Caraka Samhitā, Cikitsā, 7-48.*

कुष्ठचिकित्सायां विषतैलम्

*Cakradatta, 50/46-149*

रक्तपित्ते

‘करञ्जबीजमेवं वा सिताक्षौद्रयुतं पिबेत्।’

*Suśruta Samhitā, Uttara. 45-25*

छद्याम्

‘पिबेद् यवागूमथवा सिद्धां पत्रैः करञ्जजैः।’

*Suśruta Samhitā. 49-29.*

कच्छुपामाविचर्चिकासु

‘तैलं वा नक्तमालजम्।’

*Suśruta Samhitā, Cikitsā. 27*

उपदंशे करञ्जाद्यधृतम्

*Bhāvaprakāśa, Madhyakhaṇḍa, 51-38.*

पुष्पहरी करञ्जादिवर्त्ति:

पलाशपुष्पस्वरसैर्बहुशः परिभावितम्।

करञ्जबीजं तद्वर्त्तिर्दृष्टेः पुष्पं विनाशयेत्॥

*Bhāvaprakāśa, Netrarogādhikāra, 63-205.*

उपदंशचिकित्सायां करञ्जाद्यधृतम्

*Cakradatta, Uppadamśa cikitsā, 47-14.*

कुष्ठं (श्वित्र)-ब्रणार्शनाडीब्रणञ्चोपचारार्थं पूतिकादिलेपः

*Cakradatta, Kuṣṭha Cikitsā, 67.*

अलसकप्रतिकारार्थं करञ्जादिप्रलेपः

‘करञ्जबीजं.....लेपोऽयमलसे हितः।’

*Kṣuudra-roga cikitsā, 55-15.*

अर्शःसु

तक्रभुक् नक्तमालस्य गोमूत्रपरिपेषितम्।

अर्शसां नाशनं मूलमापिबेद्विवसत्रयम्॥

*Śodhala, Gadanigraha.*

## वृश्चिकदंशे

करञ्जार्जुनशेलूनां कटभ्याः कुटजस्य च ।  
शिरीषस्य च पुष्पाणि मस्तुना दंशलेपनम् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 37-36.*

## अरुचौ

कारञ्ज दन्तकाष्ठं च विधेयमपचौ सदा ।

*Sodhala, Gadanigraha, 2-13-31.*

## विस्फोटके

करञ्जतरुबीजानि युक्तानि तिलसर्षपैः ।  
एरण्डफलयुक्ता वा दुग्धिका स्फोटनाशिनी ॥

*Sodhala, Gadanigraha, 2-40-39.*

## नेत्ररोगे

‘बहुशः पलाशकुसुमस्वरसैः परिभाविता जयत्यचिरात् ।  
नक्ताह्वाबीजवर्त्तिः कुसुमचयं च दृक्षु चिरजमपि ॥’

*Cakradatta, Netraroga cikitsā.*

## विसर्पे

‘सुखोष्ण्या प्रदिह्यात्..... ।  
.....नक्तमालत्वचाऽपि वा ।’

*Caraka Saṁhitā, Cikitsā. 11-123.*

## उरुस्तम्भे

‘अग्निमन्थकरञ्जौ च जलेनोत्काथ्यं सेचयेत् ।  
प्रलेपो मूत्रपिष्ठैर्वाऽप्यूरुस्तम्भनिवारणः ॥

*Caraka Saṁhitā, Cikitsā. 27-57.*

## कुष्ठे

‘कारञ्जं वा सार्षपं वा क्षेतेषु क्षैप्यं तैलम्.... ।’

*Suśruta Saṁhitā, Cikitsā. 9-53.*

## ग्रन्थिविसर्पे

शुष्कपूलकल्केन नक्तमालत्वचाऽपि त्वा ।  
.....विभीतकत्वचां वापि कल्केनोष्णेन लेपयेत् ॥’

*Caraka Saṁhitā, Cikitsā. 21-124.*

## प्लीहोदरे

अम्लस्तुतं विडकणाचूर्णाद्यं नक्तमालजम् ।

शोभाञ्जनस्य क्राथं सैन्धवाग्निकणाचितम् ॥  
.....युञ्जति च यथाबलम् ।

*Aṣṭāṅga Hṛdaya, Cikitsā. 15-87/88*

### विद्रधौ ( अन्तर्बाह्यजं च )

'करञ्जास्थीनि सम्पेष्य वितुषीकृत्य चूर्णयेत् ।  
स्तुगदलस्वरसेनैव मृदित्वा रविसन्निधौ ॥  
तैले गृहीत्वा तत्तैलं बाह्यान्तरुपयोजयेत् ।  
अन्तर्विद्रधिमाश्वव नाशयेद् बाह्यजं तथा ॥'

*Vaidya Manoramā, 8-2/3.*

करञ्जबीजविश्वोग्राकरञ्जकाथपेषिताः ।  
पीताः प्रभाते निःशेषं घन्त्याभ्यन्तरविद्रधिम् ॥

*Vaidya Manoramā, 8-1.*

### उरुस्तम्भे

वल्मीकमृत्तिकामूलं करञ्जस्य फलं त्वचम् ।  
इष्टकानां तसश्चूर्णैः कुर्यादित्सादनं भृशम् ॥

*Caraka Saṃhitā, Cikitsā. 27-49.*

### नाडीब्रणे

'प्रक्षालने चापि करञ्जनिम्बजान्यक्षपीलुस्वरसः प्रयोज्यः ।'

*Suśruta Saṃhitā, Cikitsā. 17-24.*

### ब्रणे

'करञ्जाद्यघृतम् ।'

*Suśruta Saṃhitā, Cikitsā. 16-16/21.*

'करञ्जारिष्टनिर्गुण्डीरसो हन्याद् ब्रणक्रिमीन् ।'

*Vṛndamadhava, 44-43.*

### रोमसञ्जनने

कासीसं नक्तमालस्य पल्लवांश्चैव संहरेत् ।  
कपित्थरसपिष्टानि रोमसञ्जननं परम् ॥

*Suśruta Saṃhitā, Cikitsā. 1-103.*

### रक्तपित्तोपचारार्थम्

सुखोष्णं लवणं बीजं करञ्जं दधिमस्तुना ।  
पिबेद् वापि त्यहं मत्येऽरक्तपित्ताभिर्पीडितः ॥

*Suśruta Saṃhitā, Uttara. 45-26.*

‘करञ्जबीजमेव वा सिताक्षौद्रयुतं पिबेत्।’

*Suśruta Saṃhitā, Uttara. 45-25.*

### क्षुद्ररोगे

वचादार्वासर्षपैर्वा तैलं वा नक्तमालजम्।

सारतैलमथाभ्यङ्गे कुर्वीत कटुकैः शृतम्॥

*Suśruta Saṃhitā, Cikitsā. 5-37*

### बालरोगे अहिपूतने च

‘करञ्जत्रिफलातिकैः सर्पिःसिद्धं शिशोर्हितम्।’

*Vṛnda Mādhava, 57-22.*

## KĀRAVELLAKA

**Botanical name :** Momordica charantia Linn.

**Family :** Cucurbitaceae

**Classical name :** Kāravellaka

**Sanskrit names**

Kāravellaka-Kāravella, Kāravellī, Kāravellaka-suṣavī, Pītāpuṣpā, Maṇḍapī, Cīritacchadā, Cīripatrā, Karillaka, Sūkṣmavallī, Kanṭaphalā, Ambuvālīka.

**Regional names**

Karela (Hindi); Karala; Ucche (Bengla); Karle (Marathi); Kareli (Guj.); Pakka pakal (Tamil); Kakar (Tel.); Kaippa (Mal.); Hagal (Kaann.); Bitter Gourd (Eng.).

**Description**

Plants monoecious; stems branched, puberulous. Leaves prominently nerved, up to 12 cm. long and almost equally broad, reniform or suborbicular, glabrous; lobes ovate-oblong; tendrils simple, slender, pubescent. Male flowers solitary, peduncles slender; corolla up to 2 × 1 mm. yellow; segments obovate, obtuse or emarginate. Female flowers ovary fusiform, retrat, muricate.

Fruits oblong, 8-20 cm. long, muricate-tuberculate, trivalved, dehiscent at apex, tapering at both ends; seeds compressed, ca 12 × 8 mm., subtridentate at both ends, sculptured, corrugate, in red aril (ripe fruit).

### **Flowering and fruiting time**

Its flowering and fruiting stages are from July to October generally and in also other months depending on crop season.

### **Distribution**

Plant is commonly cultivated for fruit-vegetable. Generally two crops for producing fruits as market vegetable.

### **Kinds and varieties**

*Momordica charantia* L. var. *muricata* (Willd.) Chakravarty. is similar to var. *charantia* except for faintly nerved leaves and smaller fruits not tapering at both ends.

There are two crops cultivating it on large scale for supply as vegetable fruits to the summer markets viz. rainy season (barasati) and summer season (sowing in February-March) and known as Vaisakhi). Two types are generally found: large variety (Kāravellaka) and small variety (Kāravelli), besides other some varieties. White or whitish variety is also found in certain regions (e.g. Malawa and Rajsthan) and it is quite longer fruit. Plants grown wild in forests produce smaller and very bitter fruits called Kareli or Vana Karela, having other morphological variations.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka.

### **Properties and Action**

Karma	: Pittasāraka Rocana-dīpana-pācana- āmadoṣapācana Kṛmighna Raktaśodhaka-śothahara Hṛdaya Avṛṣya Kaphaghna Madhurikahrāsaka Ārtavajana
-------	--

	Stanyaśodhana
	Kuṣṭhaghna
	Jvaraghna
	Viṣaghna
	Medohara
	Vraṇaśodhana-ropana
	Dāhapraśamana.
Roga	: Kuṣṭha-Udarda-Koṭha
	Vraṇa-gambhīravraṇa
	Arśa
	Dāha
	Aruci-Agnimāndya-Vibanda
	Āmadoṣa-viṣūcikā
	Yakṛdvikāra
	Kṛmi
	Śotha-raktavikāra
	Kāsa-śvāsa
	Rajorodha
	Stanyavikāra
	Prameha-Madhumeha
	Jvara
	Pāṇḍu
	Vātarakta
	Netravikāra
	Yonibhramśa
	Masūrikā-romāntikā

### Therapeutic uses

Kārvellaka or bitter gourd is anthelmintic, hypoglycaemic (antidiabetic), antipyretic, cardiotonic, carminative, diuretic and depressant of sexual urge. It is used in anorexia, heart troubles, cough, diabetes, fever, intestinal worms, renal calculus, respiratory diseases and skin affections.

The plant drug Kārvellaka is one of the most common fruit-vegetable in country and it is highly medicinal. Fruits and other parts are used in medicine.

The fruits are well-known anti-diabetic drug. The juice of fruits is recommended for oral use in diabetic patients. It is an effective hypoglycaemic agent which is fre-

quently prescribed in treatment of diabetes; and the same is commonly suggested and used as wholesome vegetable (pathya śāka) as well as vehicle or adjutant (anupāna or ghaṭaka-sahāyaka) medicinal item. The fruits as well as fruit juice are used for these purposes, besides the same is utilised in pharmaceutical preparation of many anti-diabetic formulations. Fruits are preventive and curative in diabetes (madhumeha).

**Parts used :** Fruit, whole plant, leaves, roots.

**Dose :** Juice 10-20 ml. or 5-10 ml.

**Gaṇa**

Tiktaskandha (Caraka Saṁhitā), Śākavarga (Suśruta Saṁhitā).

## KĀRAVELLAKA ( कारवेलक )

‘कारवेली पीतपुष्पा मण्डपी चीरितच्छदा ।’

*Sivadatta.*

क. कारवेलं सकटुकं कटुपाकमवातलम् ।  
दीपनं भेदनं तिक्तमवृष्ट्यमहिमं लघु ॥  
हन्त्यरोचकपित्तास्त्रकफपाण्डुव्रणक्रिमीन् ।  
श्वासकासप्रमेहाश्मकोठकुषज्ज्वरानपि ॥

**वन्यकारवेलीफलम्**

ख. कारवेलीफलं वन्यं ज्वरार्शःकृमिनाशनम् ।  
कासघ्नं दीपनं हृदयं सतिकं कफवातजित् ॥

*Kaiyadeva Nighaṇṭu.*

**कारवल्ली-कारवेली**

अ. करका कारवल्ली च चीरिपत्रः करिलका ।  
सूक्ष्मवल्ली कण्टफला पीतपुष्पाऽम्बुवालिका ॥

**कारवल्लीगुणाः**

ब. कारवल्ली सुतिक्तोष्णा दीपनी कफवातजित् ।  
अरोचकहरा चैव रक्तदोषहरी च सा ॥

*Rāja Nighaṇṭu, Mūlakādi Varga, 185-186.*

‘कोलकं कार्कशं...कफपित्तहरं तिक्तं शीतं कटु विपच्यते ।’

*Caraka Saṁhitā, Śāka Varga.*

‘कारवेलमवृष्टश्च रोचनं कफपित्तजित् ।’

*Rājaballabha Nighaṇṭu*

‘तद्वत् कर्कोटकं विद्यात् कारवेलकमेव च ।’

*Suśruta Saṁhitā*

### विषूचिकारोगे

‘सतैलं कारवेलयम्बु नाशयेद्धि विषूचिकाम् ।’

*Bhāvaprakāśa, Jāṭharāgnivikārādhikāra, 6-110.*

### मसूरिकाशान्त्यर्थं रोमान्तिकानिवारणार्थं च सुषवीपत्रस्वरसः

सुषवीपत्रनिर्यासं हरिद्राचूर्णसंयुक्तम् ।

रोमान्तीज्वरविस्फोटमसूरीशान्तये पिबेत् ॥’

*Vṛnda Mādhaba, 26-3*

*Cakradatta, Maśurikā cikitsā, 54-3.*

### अन्तःप्रविष्टयोनिबहिर्निगमनार्थं सुषवीमूललेपम्

‘सुषवीमूललेपेन प्रविष्टान्तर्बहिर्भवेत् ।’

*Cakradatta, Yonivāpac Cikitsā, 16.*

### योनिभ्रंशे

‘योनिः स्त्रीणां निर्गतापि प्रवेशप्राप्नोत्वन्तः

कारवेलीजटाभिः ।’

*Rāja Mārtanda, 31-43.*

### विरेचनार्थम्

‘स्वरसे कारवेलिका ।’

*Suśruta Saṁhitā, Sūtra. 44-2*

### ज्वरे

कारवेलककर्कोटकबालमूलकपर्पटैः ।

वार्तार्किनिष्वकुसुमपटोलफलपल्लवैः ॥

अत्यन्तलघुभिर्मासैर्जाङ्गलश्च हिताः रसाः ।

*Aṣṭāṅga Hṛdaya, Cikitsā. 1-75.*

### गम्भीरव्रणे

सुषवीपत्र धन्त्रूरकर्णमोटकुठारकाः ।

पृथगेतेन लेपेन गम्भीरव्रणरोपणाः ॥

*Vṛnda Mādhaba, 44-36.*

**नेत्ररोगे**

मूलेन कारवेलवास्तुरङ्गमूत्राचितेन पिष्टेन।  
परिपूरितनयनानां नीलीदोषः शमं याति ॥

*Gadanigraha, 3-3-368.*

**वातरक्ते**

‘कारवेलकक्षाथमात्रसिद्धं वा ।’

*Suśruta Saṃhitā, Cikitsā. 5-12.*

## KARAVĪRA

**Botanical name :** *Nerium indicum* Mill.

**Family :** Apocynaceae

**Classical name :** Karavīra

**Sanskrit names**

Karavīra, Aśvamāraka-Hayamāraka, Aṅgulipatraka.

**Regional names**

Kaner, Kanail (Hindi); Karavi (Beng.); Kanher (Mar.); Kaner, Karena (Guj.); Alari (Tam.); Jamerat (Tel.); Sammulhisar (Arab.); Kharjahara (Pers.); Indian oleander (Eng.)

**Description**

***Nerium indicum* Mill.**

Syn. *Nerium odorum* Soland.: Karavīra (Śveta and Rakta) An evergreen shrub with silvery-grey bark.

Leaves usually in whorls of 3,4,6 by .5-1 in., linear-lanceolate or oblong, thickly coriaceous, acuminate, smooth, dark-green and shinning above, rough and dotted beneath; midrib stout; lateral nerves numerous, parallel and transverse; petiole short.

Flowers 1.5 in. diam., red, white or rose-coloured generally sweet-scented, double under cultivation, in large terminal racemose cymes. Sepals broad-subulate. Corolla funnel-shaped; lobes spreading, overlapping to the right. Corona-appendages laciniate into numerous irregular segments. Stamens near the top of the stigma; calls with long twisted appendages.

Fruit 6-7 by 3-4 in-, rigid. Seeds linear, ribbed, villosus with and having a coma of greyish-brown hairs.

### **Flowering and fruiting time**

Plant flowers in April-June or summer season and flowering often throughout the year. Fruiting during cold season.

**Thevetia peruviana** (Pers.) K. Schum. : Karavira (pīta) Syns, Cerbera peruviana Pers., Thevetia nerifolia Juss ex Steud. Shrubs or small trees, up to 7 meters high. Leaves linear, up to 15cm. long, revolute, dark-green above, paler beneath. Flowers pure yellow or suffused with red, in sub-terminal, few flowered cymes. Sepals long-acuminate, spreading. Corolla funnel-shaped, lobes overlapping to left. Stamens 5, inserted in the corolla throat. Anthers incumbent on the stigma. Fruit an indehiscent fleshy drupe, angular, broader than long.

### **Flowering and fruiting time**

Major part of the year.

### **Distribution**

It is commonly grown in gardens, parks and house premises including temples and religious campus in the plain as well as hills. Plant occurs throughout neotropics.

### **Pharmacodynamics**

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

### **Kinds and varieties**

Classically the drug Karavira is botanically known as *Nerium indicum* Mill. having white or red flowers in variation. Another plant *Thevetia peruviana* Pers. is later considered Pita.

### **Properties and action**

Karma	: Hṛdaya
	Raktaśodhana
	Śvāsaghna

	Kuṣṭhaghna-Svedajanana-
	Kaṇḍūghna
	Jvaraghna-Viṣamajvarapratibandhaka
	Vraṇāśodhana-ropañā
	Śothahara
	Dīpana-Vidāhī-bhedana
	Tivraviṣa
<b>Roga</b>	: Kaṇḍu-pāmā-Kikkisa-kacchu
	Vraṇa-duṣṭvraṇa-nādīvraṇa
	Bhagandara
	Pālitya-Indralupta
	Upadomśa-Phiraṅga
	Aśmarī-śarkarā
	Netrābhiṣyanda-netrakopa
	Hṛdroga-raktavikāra
	Śvāsaroga
	Udararoga-agnimāndya-vibandha
	Jvara-viṣamajvara
	Tvagdoṣa-carmavikāra-Kṣudraroga.

### Chemical composition

Whole plant or all the part of plant drug are toxic or poisonous. Several glycosides have been isolated from the root, bark and seeds of plant *Nerium indicum* Mill. Roots of red or white flowered-variety of *Karavīra* (*Nerium indicum* Mill.) contain an active substance meriodorein which is insoluble in water, and another substance is meriodorein. Both are bitter and non-crystalline active principles which are severe toxicant to heart. Another active constituent is nariene.

The seeds and bark of *Thevetia nerifolia* Juss. (*Pīta Karavīra* or *Pila Kaner*) Contain thevetin which is a very toxic glucoside (more toxic or poisonous). It is considered fatal even to animals (horse).

### Therapeutic uses

The plant drug *Karavīra* is toxic and piosonous to fatal extent if consumed in excess or overdose which most adversely effects heart and respiration resulting into death. Hence, the drug is advised to be used medicinally within

strict posological consideration specially for oral use. The drug belongs to Upaviṣa varga (group of auxillary poisons in classical texts of Indian medicine) which normally requires purification (śodhana) and other precautions before clinical use of the drug Karavīra (*Nerium indicum* Mill.) with white and red flowered varieties (śveta and rakta Karavīra).

Besides the cardiotonic effects, the drug Karavīra is antianthelmintic, antipyretic and antiseptic. It is used cardiac asthma, circulatory disorders, fever, leprosy, respiratory disorders, skin diseases and worms.

The drug Karavīra is medicinally useful in various diseases by administering different parts of the plant both externally and internally. Karavīra has been recommended in various ailments in classical texts of indigenous medicine. The oil cooked with root of Karavīra and aconite along with cow's urine destroys carmadala, siddhma, piḍikā, krimi and kiṭibha belonging to group of Kṣudra roga or minor skin diseases. The oil cooked with Karavīra should be applied to eczeema or pāmā. Karavīra and Dugdhikā are pounded together with milk and this paste is applied over head (skull) in the condition of grey hairs (pālitya) after removing grey hairs. The juice of Karavīra is recommended for external application in baldness (Indralupta). Oil (cooking leaves) is applied on skin affections.

**Parts used :** Root, root-bark, leaves.

**Dose :** Powder 30-125 mg.

#### Formulations

Karvīrādya taila, Karvīra yoga, Śveta Karvīrādya taila, Śveta Karvīra pallavadya taila.

#### Gaṇa

Tiktakandha, Kuṣṭhaghna (Caraka Saṁhitā), Lakṣādi, Śirovirecana (Suśruta Saṁhitā).

## KARAVĪRA ( करवीर )

क. रक्तः रक्ताश्वस्रः कटुः पाके तिक्तश्लोष्णो विषापहा ।

चक्षुष्यः कृमिकण्डूघ्रः प्रलेपाद् विषमन्यथा ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1544.*

ख. पीतः पाटलिकातिशीता स्यात् श्रौष्मवातशिरोऽर्तिनुत् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 1545.*

ग. श्वेतः करवीरः कटुस्तिक्तो वीर्योष्णस्तुवरो लघुः ।

भक्षितो विषरूपोऽक्षिकम्पकण्डूव्रणापहः ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1541.*

### करीरद्वयं श्वेतरक्तकरवीरौ

करवीरद्वयं तिक्तं कषायं कटुकञ्च तत् ।

ब्रणलाघवकृत्रेत्रकोपकुष्ठब्रणापहम् ॥

वीर्योष्णं कृमिकण्डूघ्रं भक्षितं विषवन्मतम् ।

*Bhāvaprakāśa Nighantu. Guḍuci-yādi Varga, 83-84.*

### करवीरः

करवीरः कटुस्तीक्ष्णः कुष्ठकण्डूतिनाशनः ।

ब्रणार्तिविषविस्फोट-शमनोऽश्वमतिप्रदः ॥

*Rāja Nighantu, Karavīrādi Varga, 13.*

### रक्तकरवीरः

रक्तस्तु करवीरः स्यात्कटुस्तीक्ष्णो विशोधकः ।

त्वग्दोषब्रणकण्डूति-कुष्ठहारी विषापहः ॥

*Rāja Nighantu, Karavīrādi Varga, 15.*

### चतुर्विधकरवीरजातयः

पीतकरवीरकोऽन्यः पीतप्रसवः सुगच्छिकुसुमश्च ।

कृष्णस्तु कुसुमश्चतुर्विधोऽयं गुणे तुल्यः ॥

*Rāja Nighantu, Karavīrādi Varga, 16.*

### श्वेतकरवीरपलवाद्यतैलम्

श्वेतकरवीराद्यतैलम्-

*Caraka Samhitā, Cikitsā. 105/107.*

### पलिते

भिषजा क्षीरपिष्टौ वा दुष्टिधकाकरवीरकौ ॥

उत्पाट्य पलिते देयौ तावुभौ पलितापहौ ।

*Caraka Samhitā, Cikitsā. 26-266/267.*

करवीरः कटुस्तिक्तो वीर्यं चोष्णो ज्वराहपहः ।

चक्षुष्यः कुष्ठकण्डूभ्रः प्रलेपाद् विषमन्यथा ॥

करवीरदृयं तिक्तं सविषं कुष्ठजित्कटु ।

*Dhanvantari Nighantu.*

### उपदंशे

करवीरस्य मूलेन परिपिष्टेन वारिणा ।

असाध्याऽपि व्रजत्यस्तं लिङ्गोत्था रुक् प्रलेपनात् ॥

*Bhāvaprakāśa, Madhyakhaṇḍa, 51-35.*

### नेत्रकोषे

करवीरतरुणकिशलयच्छेदोद्भवो बहुलसलिलसम्पूर्णम् ।

नयनयुगं भवति दृढं सहसैव तत्क्षणात् कुपितम् ॥

*Cakradatta.*

### पामायाम्

‘लेपाद् विनिहन्ति पामां तैलं करवीरसिद्धं वा ।’

*Cakradatta.*

### व्रणदारणार्थम्

‘.....चित्रकौ हयमारकः.....दारणम् ॥’

*Cakradatta, Vraṇaśotha Cikitsā.*

### पालित्ये

‘.....क्षीरपिष्टौ वा दुर्गिधकाकरवीरकौ ।

उत्पाटय पलितं देयौ ताबुभौ पलितापहौ ॥’

*Caraka Saṃhitā, Cikitsā. 26-263.*

### कुष्ठे

‘स्नाने पाने च मताः तथाऽष्टमश्चाश्वमारस्य ।’

*Caraka Saṃhitā, Cikitsā. 7-95.*

### उपदंशे

‘.....करवीरस्य पत्राणि..... ।

प्रक्षालने प्रयोज्यानि..... ॥’

*Sūrṣuta Saṃhitā, Cikitsā. 15-19.*

### भगन्दरचिकित्सायां करवीरादितैलम्

*Bhāvaprakāśa, Bhagandarādhikāra, 50-32.*

*Cakradatta, Bhagandara Cikitsā, 46-25.*

### उपदंशे करवीरमूलप्रयोगः

लेपः पूगफलेनाश्वमारमूलेन वा तथा ।

सेवेन्नित्यं यवान्नञ्च पानीयं कौपमेव च ॥

*Cakradatta, Upadamśa Cikitsā, 47-11.*

**नेत्राभिष्ठन्दे करवीरद्रवक्षुरणम्**

करवीरतरुणकिशलयच्छेदोद्धवबहुल-सलिलसम्पूर्णम् ।

नयनयुगं भवति दृढं सहसैव तत्क्षणात् कुपितम् ॥

*Cakradatta, 59-7.*

**अश्मर्या शर्करायां च**

‘करवीरस्य क्षारं पेयोऽविमूत्रेण शर्करानाशनः परः ।’

*Aṣṭāṅga Hṛdaya, Uttara. 24-29.*

**इन्द्रलुमे**

‘प्रलेपयेत्.....करवीररसेन वा ।’

*Aṣṭāṅga Hṛdaya, Uttara. 24-29.*

**गर्भिण्याः कण्डूकिक्षिसनाशनार्थम्**

‘अश्वघ्नपत्रसिद्धेन तैलेनाभ्यज्य मर्दयेत् ।’

*Aṣṭāṅga Hṛdaya, Śarīra. 1-61.*

## KARCŪRA

**Botanical name :** Curcuma zedoria Rosī.

**Family :** Zingiberaceae

**Classical name :** Karcūra

**Sanskrit names**

Karcūra, Vedhamukhya (Ka), Draviḍa, Kalpaka, Karśa, Gandhamūlaka, Gandhasāra, Jaṭila, Durlabha.

**Regional names**

Kachura, Narakachura (Hindi); Kachora (Mar.); Satkachuro, Kachuro, (Guj.); Kachuram (Tel.); Jharambad (Arab.); Zedoary (Eng.). Jurambad, Jarambad (Pers.), Urukul Kaphur (Arabic); Shati, Konchur, Shodi (Beng.); Kachuri (Kath.).

**Description**

Herbaceous plant, about 45 cm. tall (height upto 1.5 feet); plant resembling with turmeric plant (*Curcum domestica*: Haridrā) in apperance (but entirely differs in rhizome as well as habitat).

Leaves 4-6 in number; 30-60 cm. long (1-2 feet); oblong, acuminate, narrowed to the base; petiole longer than the blade; veins brownish-bluish or reddish.

Spikes vernal  $15 \times 7.5$  cm. broad; flowering bracts 3.75 cm., ovate green, often slightly tinged with red; bracts of the coma many, spreading bright red. Flowers yellow in colour or pale yellow, rather shorter than the bracts; calyx whitish, obtusely toothed, scarcely half as long as the corolla tube; corolla tube funnel shaped; lateral segments oblong upper rather longer ovate, convex, lip 1.25 cm. broad orbicular, deflexed. obscurely 3 lobed, emarginate.

Capsule ovoid, trigonous, smooth, dehiscing, irregularly; seeds oblong, aril, lanceolate, white.

Root-stock ovoid; tubers many, some 2.5 cm. in diam., sessile cylindric and many oblong terminating fibres. Tubers white, bitter, pungent and aromatic (camphor-like).

#### Rhizome drug :

Transection shows a few layers of periderm, well differentiated wide cortex with scattered large and small vascular bundles, thin walled suberized endodermoid layer, followed immediately by a plaxus of irregular congested vascular bundles at the periphery of the central cylinder. The parenchymatous ground tissue is studded with scattered tannins containing cells and large conspicuous oil ducts. Parenchyma cells are deeply packed with simple starch grains pointed end and escentric hilum.

#### Distribution

Plant occurs in Himalayan region. Eastern Himalayan, Terai and Chittagong (Bangladesh). Ceylon. Cultivated in some parts of south India.

#### Chemical composition

The tuber of plant contains volatile oil, resin, curcumin and other substances 3.79%, resin, sugar 0.90%, gum and organic acid 15.22%, starch 17.20%, crude fiber 1.92%, ash 6.06% and albuminoides. The oil obtained from the tubers is yellowish-white, viscid or sticky camphoraceous in odour and taste. Tuber yields zedorin.

**Pharmacodynamics**

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, Tīkṣṇa
Viryā	: Uṣṇa
Vipaka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka.

**Properties and Action**

Karma	: Kaphaghna-Śvāsaḥara Uttejaka-śothahara-raktaśodhaka Śothaśāmaka-vedanāsthāpana- Kuṣṭhaghna Rocana-dīpana-pācana-anulomana Yķrduttejaka Kṛmighna Ārtavajanana-Vājikaraṇa Mūtrajanana Jvaraghna
Roga	: Śvāsa-Kāsa-hikkā Sandhivāta-Śotha Carmaroga Aruci-agnimāndyā-adhmaṇa-śūla Udara-roga-gulma Arśa Kṛmi Hṛddourbalya-śotha-raktavikāra Rajorodha-Kaṣṭārtava-dhajabhaṅga Prameha-mūtrakṛcchra Vraṇa-nāḍīvraṇa Kaphavātavikāra.

**Therapeutic uses**

The drug Karcūra is anthelmintic, aromatic, cardiotonic, carminative, cooling, deuretic, stomachic and stimulant.

It is used in cough (Kāsa), hiccough (hikkā), piles (arśa), respiratory disorders, skin diseases (tvagvikāra), spleenic disorders (plīha vikṛti), worms (Kṛmi) and wounds (Vraṇa).

The matured of tuberous roots are collected from

plants are dried up which form drug karcūra. Leaves of green plant (*Curcuma zedoria Roscoe.*) are also medicinally useful. Tubers are chiefly used in medicine (śugandhi kanda-višeṣah': Kaiyadeva Nighaṇṭu, 1-1388). Root (rhizomatous portion) possessing campor-like odour, bitter, pungent (intense) in whitish or greyish-buff colour and in the form of cut-pieces are available in market as raw drug material of drug Karcūra, generally known in trade as Kachur (northern region). Tuberous root is used for medicinal purposes in indigenous system of medicine in different forms.

Karcūra taila (oil) is also madicinally useful which has been prescribed in sinus or nāḍīvraṇa, duṣṭavraṇa and visarpa (Bhāvaprakāśa, 49-26). Expressed juice of Karcūra is cooked in mustard oil (Kaṭutaila or sāṛṣapa taila) and mixed with sindūra for preparing oil (tailapāka vidhi). Karcūra taila is indicated for external use in ulcer, sinus, chronic dirty or foul ulcers and wounds.

The drug karcūra is bitter and pungent (in taste) and hot in poteney (Uṣṇa vīrya). It allays vātakapha doṣa. Drug is carminative, stomachic, analgesic, stimulant, aphrodisiac, liver stimulant and emmenagogue. It is mainly anti-inflammatory and anti-asthmatic; and it is also used in śotha (inflammatory conditions), kāsa (cough), śvāsa (asthma), hikkā (hiccough) and sandhigata śotha (inflamed joints). The drug is useful in worms affections, urinary menstrual troubles and, liver complaints, abdominal disorders (udararoga, gulma), heart trouble (hṛddourbalya), oedema (śotha), skin diseases and ailments caused by kapha vāta doṣa in general. The rhizomatous roots are employed by medicinal purpose and their powder and infusion (cūrṇa and phāṇṭa) are used as single as well as poly herbal preparations (as an ingredient). It is also useful in galagaṇḍa (goitre) and piles (arṣa).

**Parts used :** Rhizome, leaves

**Dose**

Poder 3-6 gms. or 1-2 gms., Juice 10-20 ml. (Lvs.).

**Formulations :** Karcūra taila.

## KARCIURA ( कर्चूर )

- क. कर्चूरो वेधमुख्यश्च द्राविडः कल्पकः शटी ।  
 ख. कर्चूरो दीपनो रुच्यः कटुकस्तिक्त एव च ॥  
     सुगन्धिकटुपाकः स्यात्कुष्ठार्शोन्नश्य कासनुत् ।  
     उष्णो लघुहरिदधासं गुल्मवातकफक्रिमीन् ॥  
     *Bhāvaprakāśa Nighaṇṭu, Karpurādi Varga, 94-95.*
- अ. जीमूतमूलं कर्चूरो द्राविडो वेधमुख्यकः ॥  
     काश्यः काष्यो गन्धमूलः कल्पको दुर्बलः शटी ।  
 ब. कर्चूरः कटुकस्तिक्तः सुतीक्ष्णो दीपनो लघुः ॥  
     रोचनः कटुपाकोऽस्प्रितकृत् कफवातजित् ।  
     श्वासकासकुमिलीहकुष्ठार्शोन्नश्यगुल्मनुत् ॥  
     *Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1388-1390.*

**कर्चूरः**

कर्चूरो द्राविडः काशो दुर्लभो गन्धमूलकः ।  
 वेधमुख्यो गन्धसारो जटिलश्वाष्टनामकः ॥

**कर्चूरगुणः**

कर्चूरः कटुतिक्तोष्णः कफकासविनाशनः ।  
 मुखवैशद्यजननो गत्तगण्डादिदोषनुत् ॥

*Rāja Nighaṇṭu, Pippalyādi Varga, 117-118.*

**नाडीव्रणे कर्चूरतैलम्**

कर्चूरकस्य स्वरसे कटुतैलं विपाचयेत् ।  
 सिन्दूरकल्कितं नाडीदुष्टव्रणविसर्पनुत् ॥

*Bhāvaprakāśa, Nāḍīvraṇādhikāra, 49-26*

कर्चूरकरसे तैलं पुरसिन्दूरकल्कितम् ।  
 पामादुष्टव्रणं नाडीं हन्यात्सर्वव्रणान्तकृत् ॥

*Bhāvaprakāśa, Nāḍīvraṇādhikāra, 29-27.*

## KARIRA

**Botanical name**

*Capparis decidua* Edgew.

Syns. *Capparis aphylla* Roth., *Sodala decidua* Forsk.

**Family :** Capparidaceae

**Classical name :** Karīra

**Sanskrit names**

Karira, Krakarīpatra, Granthika, Marubhūruha, Mṛduphala, Tīkṣṇasāra, Hutaśana, Ganthila, Krakaca, Tīkṣṇakanṭaka, Suphala, Śākapuṣpa, Apatra, Kanṭakivṛkṣa.

**Regional names**

Karil (Hindi); Tent, Tenti (Brijbhumi, U.P.); Kari (Punj.); Nevati (Mar.); Kair (Guj); Sengam (Tam.); Kariramu (Tel.); Chippuri (Kann.).

**Description**

Nearly leafless glabrous shrubs or small trees; much-branched, glaucous; branches slender; bark corky, greyish-white longitudinally furrowed; thorns in pairs, straight.

Leaves only on young shoots, glabrous pungent, linear-oblong with spinescent apex, caducous; 1/4-1/3 in. long; buds pubescent.

Flowers red or scarlet, about 2 cm. across, in short corymbs on short lateal shoots. Outer sepals subvalvate, ciliate; inner very saccate. Stamens 18-20. Fl. in. in diam.; red, brown or scarlet; in many flowered corymbs.

Fruits 0.8-1.5 cm., globose, smooth, red when ripe; ft. globose or ovoid, glabrous.

**Flowering and fruiting time**

Plant begins flowering in February-March and April. It bears fruits during summers to rains or May-July. New leaves on young shoots appear from November to March.

**Distribution**

Plant occurs in drier and warmer regions of country. It is found in Uttar Pradesh (Western and Southern Doab, Brijbhumi, Bundelkhand), Madhya Pradesh (Madhya Bharat), Rajasthan, Punjab and other regions of similar geographical conditions. Central India and the Deccan, extending westward to Arabia; Nubia and Egypt.

### **Chemical composition**

Bark contains two alkaloids and other substances. Flowers and fruits contain various substances. Seeds contain glucocapparis-glucocide. A neutral bitter principle is isolated from the root bark of plant (which is resembling to senegin found in senega plant). Buds (and unripe or raw fruits) contain capric acid and glucoside.

### **Pharmacodynamics**

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa
Viryā	: Uṣṇa
Vipaka	: Vipāka
Doṣakarma	: Kaphavātaśamaka

### **Properties and Action**

Karma	: Arśoghna Rocana-pācana-bhedana Kṛmighna Jantughna-Vraṇaśodhana- Vedanāsthāpana Uttejaka-śothahara Śvāsahara Svedajanana Kaṭupouṣṭika-viṣaghna.
Roga	: Arṣa-raktārsa Aruci-āmadoṣa-vibandha Udararoga-śūla Kṛmi Hṛddourbalya-śotha Āmavāta-sandhivāta-vātarakta Śvāsaroga Carmaroga Dourbalya Visa Pādapraharṣa.

### **Therapeutic uses**

The drug Karīra (*Capparis decidua* Edgew.) is digestive, laxative and it increases digestive fire. It is anthelmintic, germicide, stimulant and bitter tonic. It is

diaphoretic, analgesic, anti-inflammatory and wholesome for eyes. Drug is anti-haemorrhoidal and antipruritis. It is useful against poison.

The fruits of Karīra are powdered and taken for alleviating oedema (śotha). The tender fruits of Karīra are steamed and then dried in sunlight. It may be taken with supernatant fatty layer of curd in morning which is useful to pacify bleeding piles or haemorrhoids. Karīra fruits along with salt, Arka patra (leaves of Calotropis gigantea) are mixed with wine and sours; and this mixture is burnt is closed heating in order to prepare alkali (kṣāra). The alkali is taken with tepid water (sukhodaka), wine (madya) or sour juice (amla rasa), in case of piles for their eradication. Karīra fruits are processed in closed heating and are mixed in curd along with salt (lavaṇa), yavakṣāra, Jīraka, Yavāni, Trikaṭu and Hīṅgu and then dried in the sun. They are swallowed in night for effect as laxative.

The flower-buds (pasi) and young fruits are cooked are eaten as a pot-herb and also preserved as a pickle. The ripe fruit is also pickled. Achar prepared of fruits (tenti) is used in rural areas.

The vegetable of Karīra and some other suitable medicinal plant are cooked in ghee and they are beneficial (wholesome) for eye-sight (drṣṭihita). The oil extracted of the fress stem of Karīra (by pātāla yantra) is indicated to applied and rubbed on the affected part in disease of Vātarakta, for alleviating tingling sensation and disorders caused by blood impurities.

**Parts used :** Root bark, fruits, stem-oil.

**Dose :** Decoction 50-100 ml., Powder 1-3 gms.

## KARĪRA ( करीर )

क. करीरः क्रकरीपत्रो ग्रथिको मरुभूरुहः ।

ख. करीरः कटुकस्तिक्तः स्वेद्युष्णो मेहनः स्मृतः ॥  
दुर्नामिकफवातामगरशोथव्रणप्रणुत् ॥

- अ. करीरको मृदुफलः तीक्ष्णसारो हुताशनः ॥  
 शाकपुष्पो गूढपत्रः करीरो ग्रन्थिलो मतः ।  
 सुफलः क्रकचस्तीक्ष्णकण्टकः कटुतिक्कः ॥
- ब. करीरः कटुकस्तिकः स्वेद्युष्णो भेदनो जयेत् ।  
 दुर्नामकफवातामगरशोफकृमिव्रणान् ॥

**करीरपुष्पम्**

- स. तस्य पुष्पं तु तुवरं वातकृत् कफपित्तजित् ।

**करीरफलम्**

- द. फलं तिक्कं कषायोष्णं कटुकं रसपाकयोः ।  
 विकासि मधुरं रुक्षं सङ्ग्राहि कफपित्तजित् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 376-380.***करीरकुसुमम्**

‘करीरकुसुमानि कटुविपाकानि वातहरणि सृष्टमूत्रपुरीषाणि च ।’

**करीरफलम्**

‘करीरफलानि च स्वादुतिक्ककटूष्णानि कफवातहरणि च ।’

*Suśruta Saṃhitā, Sūtra. 46.***करीरगुणाः**

- करीरः कटुको भेदी तीक्ष्णोष्णः कफवातजित् ।  
 ब्रणशोथविषाशोर्णं तत्पुष्पं कफपित्तजित् ॥  
 फलं ग्राहि कषायोष्णं मधुरं श्वेष्मपित्तहत् ।

*Madanapāla Nighaṇṭu.*

करीरं कटुकं ग्राहि फलमुष्णं रुचिप्रदम् ।

कफपित्तकरं किञ्चित्कषायं वातहृद्धरम् ॥

*Kṣemakutūhalam.*

‘करीरो गूढपत्रो मरुदेशे जातप्रसिद्धः कण्टकिवृक्षः ।’

*Dalhana, Suśruta Saṃhitā.*

करीरमाध्मानकरं कषायं, कटूष्णमेतत् कफहारि भूरि ।

श्वासानिलारोधकसर्वशूलविच्छिद्धिखर्जूव्रणदोषहारि ॥

*Rāja Nighaṇṭu.***सुखविरेचने**

निरुद्धधूममुत्स्वेद्य फलानि मरुशाखिनः ।

लवणक्षारजरणदीप्यत्रूषणहिङ्गुभिः ॥  
मर्दिते दधि निक्षिप्य शोषयेदातपे चिरम्।  
सायं तानि निगीर्णानि प्रातः साधु विरेचयेत्॥

*Siddha Bhaisajya Maṇimālā,  
Udāvariādhikāra. 4-519/579.*

### अर्शःसु वातार्शसि

लवणं ह्यक्षपत्राणि करीरतरुजान्यपि ।  
मद्यैरम्लैश्च युक्तानि युक्त्या क्षारं दहेत्पुटे ॥  
सुखोदकेन मद्यैर्वा रसैरम्लैश्च पाययेत्।  
पीतः क्षारो ह्यायं हन्याद्वातार्शास्यचिरेण तु ॥

*Gada Nigraha, Arśorogādhikāra, 2-4-50/51.*

### दृष्टे: हिताय

'.....करीरजानि ।  
शाकानि..... ।'

*Suśruta Saṃhitā, 3-17-51.*

### पादप्रहर्षे

नूतनकरीरकाष्ठोतनकं बलिनिकाययन्त्रेण ।  
अभ्यङ्गतोऽस्त्रजनिते निहन्ति पादप्रहर्षकालुष्ये ॥

*Siddha Bhaisajya Maṇimālā.*

### शोथे

पलमानानि वानानि शलादूनि मरुद्रुतः ।  
जर्जरीकृत्य गीर्णानि निघन्ति स्वयथुं क्रमात् ॥

*Siddha Bhaisajya Maṇimālā,  
Sopharogādhikāra, 4-671.*

### रक्तार्शसि

संस्वेद्य कोमलकरीरशलादुकानि क्षिप्त्वा कटे खरतरातपतः प्रशोष्य ।  
भुज्ञीत भेदुसरेण सुजातदघ्ना रक्तार्शसां प्रशमनाय वशी प्रभाते ॥

*Siddha Bhaisajya Maṇimālā, 4-220*

### वातरक्ते

नूतनकरीर काष्ठाच्योतनकं बलिनिकाययन्त्रेण ।  
अभ्यङ्गतोऽस्त्रजनिते निहन्ति पादप्रहर्षकालुष्ये ॥

*Siddha Bhaisajya Maṇimāla, 4-490.*

### चक्षुष्प्रयोगे

पटोल.....करीरजानि ।

शाकानि शिग्रवार्तगलानि चैव हितानि दृष्टैर्घृतसाधितानि ॥

*Suśruta Saṃhitā, Uttara. 17-51.*

### प्रजास्थापने

कार्पासशलाटूनां कल्कं क्षीरे पिबेतु सप्तहम् ।

वन्ध्या पुत्रोत्पत्तिं वाञ्छन्ती पुष्पदिवसेषु ॥

*Vaidya Manoramā 13-9.*

### मदात्यये

‘कार्पासिनीमथ च नागबलां च तुल्यां  
पीत्वा सुखी भवति साधु सुवर्चलां वा ।’

*Suśruta Saṃhitā, Uttara. 47-34.*

### शुक्राभिघातजे मूत्रकृच्छ्रे

‘कार्पासामूलं..... क्रमः स्यात् ।’

*Caraka Saṃhitā, Cikitsā. 26-69/71.*

### कासे

‘कार्पासास्थ्यश्वगन्धा च धूमः कासविनाशनः ।’

*Caraka Saṃhitā, Cikitsā. 18-75.*

### वनकार्पासी

### अपच्याम्

वनकार्पासीकामूलं तण्डुलैः सह योजितम् ।

पक्त्वा पूपलिकां खादेदपचीनाशनाय च ॥

*Vṛndamādhava, 41-21. Baṅgasena, Gaṇḍamālā, 6.*

### मसूरिकायाम्

उत्तुण्डिकस्य मूलं पिबन्ति तण्डुलजलेन ये पिष्टम् ।

गोजिहिंकाजटां वा तेषां न भवन्ति शीतलिकाः ॥

*Rājamārtanda, 30-2.*

### स्तन्यवृद्धये

वनकार्पासिकेक्षूणां मूलं सौवीरकेण वा ।

विदारीकन्दं सुरया पिबेद् वा स्तन्यवर्धनम् ॥

*Vṛndamādhava, 65-32/33.*

# KARKAṬĀŚR̄NGĪ

**Botanical name :** Pistacia integerrima Stewart ex Brandis.

**Family :** Anacardiaceae

**Classical name :** Karkaṭāśr̄ngī

**Sanskrit names**

Karkaṭāśr̄ngī, Ajasṛngī, Kulīraśr̄ngī, Śr̄ngī,  
Kulīravīṣāṇikā.

**Regional names**

Kakrhasingi (Hindi); Kankrhasringi (Beng., Tam.,  
Tel.); Kakrhasing (Mal.)

**Description**

A middle-sized deciduous tree with rough, grey, bark. Sapwood white, heartwood mottled with yellow and green streaks. It is very hard and durable, valued for ornamental timber, weight 54 lbs. per c. ft.

Leaves alternate, pair or imparipinnate, 6-9 in. long. Leaflets 4-6 pairs, subopposite, minutely petioluled, 3-6 by 1-1.7 in., lanceolate, long-acuminate, entire, hard, coriaceous, glabrous; main lateral nerves about 20 pairs, slender, base oblique.

Inflorescence a lateral panicle. Flowers small apetalous, dioecious. Male flowers: panicles 2-4 in. long, compact, pubescent; calyx gamosepalous, 3-5-fid; stamens 5-7 on a small disk; anthers large, red. Female flowers: panicles 6-10 in. long, lax, thyrsoid; sepals 4, free, linear, deciduous; ovary sessile, 1-celled; styles 3, cohering only near the base.

Drupe .25 in. diam., oblique, broader than long, glabrous, rugose.

Galls, produced by Hemipterous insect, galls in shape of a horn attaining 3-6 in. length, dull-red in colour, galls produced on branches. Galls used as drug Karkaṭāśr̄ngī.

**Flowering and fruiting time**

New foliage appears along with flowers during the period from spring to summer seasons, and plant becomes in fruiting stage during a period from June to October.

## Distribution

Plant occurs in western Himalaya and Indus valley to Kumaon region. It is found wild in Uttar Pradesh hilly region at 3,000-6,000 ft. altitude.

## Chemical composition

It contains essential oil 1.3%, tannin 60%, mastic gum 5%, a resinous substance, crystalline acids and also crystalline form hydrocarbons 3-4 percent.

## Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu, rukṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

## Properties and Action

Karma	: Kāsaḥara-kaphaghna- kaphaniḥsāraka-Hikkanigrahaṇa Śothahara-raktarodhaka Vraṇa-Kṣata ropaṇa Dīpana-Vātānulomana-grāhi Garbhāśayāsotha-srāvarodhaka Jvaraghna Kaṭupouṣṭika.
Roga	: śvāsa-kāsa-hikkā-galaśotha Kṣaya-rājayakṣmā Dantamūla raktasrāva-vikāra Vraṇa-kṣata Agnimāndya-Udāvarta-aruci-chardi Atisāra-pravāhikā Bālaroga-dantodbheda janya vikāra Pradara-pūyameha Jvara-vātaślaiṣmikajvara.

## Therapeutic uses

The drug Karkaṭaśṛṅgī is quite effective medicine for diseases of respiratory system. It is an important plant drug for cough, hiccup, asthma, and allied diseases. The drug is also useful in children diseases particularly cough, diarrhoea, hiccup, teething troubles (dantod-

bhedajanya vikāra) and similar oilments. Karkaṭaśṛṅgī is useful in yakṣmā (tuberculosis), pārśvaśūla (chest pain), vomiting, excessive thirst, diarrhoea, loss of appetite, leucorrhoea, gonorrhoea, influenza and throat complaints (galaśotha-galaroga). It is also useful in garbhāśaya śotha, śotha and raktasrāva. The drug is useful as an aphrodisiac (Vājikarṇa). The paste of Karkaṭaśṛṅgī galls dissolved in milk is orally given to a person (keeping him on diet of cereals with sugar, ghee and milk) for attaining strong sexual power (sambhoga śakti) as prescribed in medical text.

The powder of drug Karkaṭaśṛṅgī (galls powder) is used in cough, asthma, hiccough, vātakaphajvara, throat and chest complaints and vomiting. Powder is given orally with honey or lukewarm water (sukhoṣṇa jala) and any other suitable vehicle or adjutant. The gruel cooked with Karkaṭaśṛṅgī is useful for giving for those suffering from asthma and hiccough as recommend in medical texts of indigenous medicine (Caraka Saṁhitā, Cikitsā. 17-101). The powder of Karkaṭaśṛṅgī and seeds of readish are mixed with honey and ghee and this recipe is prescribed in children for alleviating asthmā (Baṅgasena, Bālaroga, 62). The powder of Karkaṭaśṛṅgī is licked with oil for alleviating vātaja kāsa (cough caused by vāta). It is leha (in licking mode of administration) prayoga of Karkaṭaśṛṅgī. The powder of Karkaṭaśṛṅgī is mixed with ghee, sugar and honey, and the same is licked by patient of cough, by following intake of milk (Aṣṭāṅga Saṅgraha, Cikitsā. 4-32). The powder of Karkaṭaśṛṅgī mixed with mustaka (root of Cyperus rotundus) is used for checking vomiting caused by kapha (Caraka Saṁhitā, Cikitsā. 20-38).

**Parts used : Galls**

**Dose :** Powder 1-3 gms.

**Formulations**

Śṛṅgyādi cūrṇa, Karkaṭādi cūrṇa, Bālacāturbhadra.

**Gaṇa**

Kāsahara, Hikkānigrahanā (Caraka Saṁhitā), Kākolyādi (Suśruta Saṁhitā).

## KARKATAŚRNGĪ ( कर्कटशृङ्गी )

शृङ्गी तिक्ता कषायोष्णा कफवातक्षयज्वराम्।  
श्वासोदर्ध्ववातटकासहिष्मारुचिवमीर्जयेत् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1133.*

शृङ्गी कषाया तिक्तोष्णा कफवातक्षयज्वरान्।  
अजशृङ्गी च चक्रा च कर्कटाख्या च कीर्तिता॥  
श्वासोदर्ध्ववाततृट्कासहिष्मारुचिवमीन्हरेत् ।

*Bhāvaprakāśa Nighantu, Hārītakyādi Varga, 179.*  
तिक्ता कर्कटशृङ्गी तु गुरुश्चोर्ध्वसमीरजित्।  
हिष्मातीसारकासग्नी श्वासपित्तास्वनाशनी॥

*Rāja Nighantu, Pippalyādi Varga, 157.*  
कुलीरशृङ्गीचूर्णश्च मूलकस्य फलं तथा।  
युक्तोऽयं मधुसर्पिभ्यां लेहः श्वासापहः शिशोः॥

*Baṅgasena.*  
तिक्ता कर्कटशृङ्गी च गुरुश्चोर्ध्वसमीरजित्।  
कासश्वासार्त्तियक्षमग्नी वान्तितृष्णारुचीर्जयेत्॥

*Dhanvantari Nighantu.*  
'शृङ्गी कफानिलश्वासकासहिष्माज्वरापहा।'

*Śodhala, Gadanigraha.*  
कर्कटस्य च शृङ्गी स्यात् तिक्तोष्णा तुवरा गुरुः।  
वातहिष्मातिसारग्नौ बालानां च हिता वहा।  
कासं श्वासं रक्तदोषं पित्तं जूर्तिकफं क्षयम्।  
वान्ति हिष्मां चोर्ध्ववातं कृमितृष्णाक्षतक्षयम्॥  
अरुचिं नाशयत्येव ऋषिभिः परिकीर्तिता॥

*Nighantu Ratnākara.*

शिशोः श्वासे

कुलीरशृङ्गीचूर्णश्च फलं तथा।  
युक्तोऽयं मधुसर्पिम्यां लेहः श्वासापहः शिशोः॥

*Baṅgasena, Bālaroga Cikitsā, 62.*

वातजे कासे

'लिह्यात् कर्कटशृङ्गी च कासे तैलेन वातजे।'

*Caraka Saṁhitā, Cikitsā. 18-50.*

### कफच्छर्दिनिग्रहणार्थम्

‘.....मुस्तायुतां कर्कटस्य शृङ्गीम्।

.....मधुसम्प्रयुक्ताम्।’

*Caraka Samhitā, Cikitsā. 20-36.*

### रतिवर्धनार्थम्

कुलीरशृङ्गीचूर्णञ्च मूलकस्य फलं तथा।

युक्तोऽयं कुलीरशृङ्गच्चायः कल्कमालोद्दय पयसा पिबेत्।

सिताधृतपयोऽन्नाशी स नारीषु वृषायते॥

*Aṣṭāṅga Hṛdaya, Uttara 40.*

### दन्तशब्दरोगे (दन्तरोगे) कर्कटशृङ्गी (घृत) प्रयोगः

कर्कटादिग्रक्षीरपक्वघृताभ्यङ्गेन नश्यति।

दन्तशब्दः कर्कटादिग्रलेपाद्वा दन्तयोजितात्॥

*Cakradatta, Mukharoga (Dantaroga) Cikitsā, 56-6.*

(केचित् ‘कर्कटादिग्र’शब्दे ‘कर्कटपादम्’ इत्यर्थः)

*Cakradatta, Mukharoga (Dantaroga) Cikitsā 56-6.*

### वाजीकरणे

कुलीरशृङ्गच्चायः कल्कमालोद्दय पयसा पिबेत्।

सिताधृतपयोऽन्नाशी स नारीषु वृषायते॥

*Aṣṭāṅga Saṅgraha, Uttara. 50-44.*

## KARKOTAKA

### Botanical name

Momordica dioica Roxb. ex willd.

Syn. Momordica balsamina (wall.) W. & A.

**Family :** Cucurbitaceae

**Classical name :** Karkoṭaka-Karkoṭakī

**Sanskrit names :** Karkoṭkakī, Pītāpuṣpā, Mahājālinī.

**Regional names**

Kokorha (Hi.); Bankarela, Murela, Kakora (Hindi).

**Description**

**Momordica dioica R. ex. W.** Dioccius climbers with tuberous roots, perennial, Stem glabrous. Leaves 5-10.

across, membranous, glabrous, broadly ovate, cordate, entire or shallowly 3-5-lobed, scabrid, remotely denticulate, cordate and base; short petioled. Male flowers solitary, peduncle 5-13 cm. long; corolla 2.5-3.0 cm. long; lobes lanceolate, acuminate. Female flowers peduncle minutely bracteate at base or ebracteate. Fruit ovoid, marrowed at ends, muricate 2.5-5.0 cm. long, densely covered with short spines. Seeds broadly ellipsoid, slightly compressed, numerous, 6-7 mm. long, corrugated on margin, nearly smooth on the faces.

### **Flowering and fruiting time**

Plant is in flowering and fruiting during rainy season to winter season.

### **Distribution**

Plant is occasionally found on shrubs. Throughout India to Ceylon ascending to 5,000 ft. on the Himalaya. It is commonly found in Upper Gangetic Plains and Siwalik and adjoining sub-Himalayan tracts.

### **Kinds and varieties**

There are two kinds i.e. Karkotaka or Karkotakī and Bandhyakarkotarī, botanically known as *Momordica dioica* Roxb. ex Willd. and male plant of *Momordica dioica* Roxb ex Willd. *Momordica cochinchinensis* Spreng. is also referred as Vandhyā Karkotakī.

#### ***Momordica cochinchinensis* Spreng.**

An extensively climbing perennial with a tuberous root. Leaves 1-5 in. in diam., suborbicular in outline, cordate, ovate, usually 3-lobed, glabrous or nearly so, entire or undulate dentate, firm, pubescent beneath; petiole glandular.

Flowers dioecious, large, whitish. Male peduncle 3-6 in., usually shorter than the leaves; bract embracing the expanded flower, often hairy. Calyx teeth large, oblong-lanceolate, acute, coriaceous, dark-green. Petals 1-2 in. white tinged with yellow, 3 with black spots, 2 with yellow glands. The 3 anthered filaments not 3-fid. Female peduncle 1-2 in., bracts small, near the middle.

Fruit 4-5 in., ovate, pointed, bright-red, fleshy, not ribbed, aculeate with conical points. Seeds many, com-

pressed, black, corrugate on margin, sculptured on the faces.

### **Flowering and fruiting time**

Rainy season.

### **Distribution**

It is found in central and northern India, Bundelkhand, U.P.. Plant occurs in Southern India, Burma; also in Malaya, China and in the Philippines.

### **Pharmacodynamics**

Rasa	:	Kaṭu, tikta
Guṇa	:	Rūkṣa, laghu
Vīrya	:	Uṣṇa
Vipāka	:	Kaṭu
Doṣakarma	:	Tridoṣaghna, Vātapiṭṭahara-Kaphahara Pittakaphahara (Phala-fruit).

### **Properties and Action**

Karma	:	Dīpana-pācana Pittasāraka Kaṭupouṣṭika Raktaśodhana Anulomana Vāmaka Kuṣṭhaghna Keśya Vraṇaśodhana
Roga	:	Gulma Śūla Pittavikāra Prameha Kāsa-śvāsa Jvara Viṣa Vraṇa

### **Therapeutic uses**

The root of Karkoṭaka is used as snuff (nasya) in jaundice (Kāmalā). Karkoṭaka (*Momordica dioica* Roxb. ex Willd.) is taken with milk for ten days and it breaks and expels calculi and gravels (aśmari-aśmaśarkarā) as mentioned in texts. In fever (jvara), Karkoṭaka and some other

plant drugs (e.g. parpaṭa, gojihvā, tender radish and guduci leaves) are used as vegetable. The roots and fruits are used in other diseases.

The root of Bandhyā Karkoṭakī is pounded with breast-milk (stanya) and the same is used as snuff (nasya karma) which alleviates filaria (ślipada). The root of Bandhyakarkoṭakī is given with ghee for alleviating both types of poison (viṣa). The root is soaked in goat's urine and then pounded with sour gruel. It is used as snuff which is useful in poisoning.

Roots are used as emetic, Fruits are commonly household vegetable (śāka).

**Parts used :** Root, fruit.

**Dose :** Root powder 3-5 gms.

**Gaṇa :** Fruit vegetable (śāka)

## KARKOTAKI B. BANDHYAKARKOTAKI ( अ. कर्कोटकी ब. बन्ध्याकर्कोटकी )

कर्कोटीमूलिका पीता दशाहं पयसा सह ।

भित्त्वाऽश्मशर्कराः शीघ्रं पातयत्येव खण्डशः ॥

*Sodhala.*

कर्कोटकी कटूष्णा च तिक्ता विषविनाशिनी ।

वातघ्नी पित्तहच्छैव दीपनी रुचिकारिणी ॥

*Rāja Nighaṇṭu.*

### कर्कोटकी

क. कर्कोटकी पीतपुष्पा महाजालीति चोच्यते ।

ख. कर्कोटी मलहत् कुष्ठहल्लासरुचिनाशनी ।

श्वासकासज्वरान् हन्ति कटुपाका च दीपनी ॥

*Bhāvaprakāśa Nighaṇṭu, Sāka Varga, 86.*

### बन्ध्याकर्कोटकी

बन्ध्याकर्कोटकी तिक्ता कटूष्णा च कफापहा ।

स्थावरादिविषघ्नी च शस्यते सा रसायने ॥

*Rāja Nighaṇṭu, Guḍūcyādi Varga, 63.*

### कर्कोटकीपत्रम्

- अ. कर्कोटक्या: कृमिन्नं दलममृतरसं सर्वदोषापहारि ।  
रुच्यं वृष्यं ज्वरग्रन्थं क्षयकसनहरं श्वासहिक्षार्शसां च ॥
- ब. कर्कोटकफलं गुल्मशूलपित्तकफापहम् ।  
त्रिदोषकुष्ठमेहघमीषन्मधुरतिक्तकम् ॥  
श्वासकासज्वरहरं मारुतग्रं परं लघु ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 598-600.*

- क. बन्ध्याकर्कोटकीदेवीं विषप्रशमनीं स्मृता ॥  
कुमारिका नागारिपुर्विषकट्टकिनीं तथा ।  
निष्फला मज्जदमनीं मनोज्ञा विषकण्टका ॥
- ख. (बन्ध्या कर्कोटकी लघ्वी कफनुत् व्रणशोधिनी ।)  
बन्ध्या तिक्ता कटुस्तीक्ष्णा लघुव्रणविषास्त्रनुत् ॥  
बलाससर्पदर्पन्नी विसर्पविषहारिणी ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 595-598.*

‘तद्वत्कर्कोटकं कुष्ठकिलासारुचिनाशनम् ।’

*Madanapāla Nighaṇṭu.*

- अ. बन्ध्यादेवीं बन्ध्यकर्कोटका स्यान्नागरातिर्नागहन्त्री मनोज्ञा ।  
पथ्या दिव्या पुत्रदात्री सुकन्दा श्रीकन्दा सा कन्दवल्लीश्वरी च ॥  
सुगन्धा सर्पदमनीं विषकट्टकिनीं वरा ।  
कुमारी भूतहन्त्री च नान्त्रमित्यूनविंशतिः ॥
- ब. बन्ध्याकर्कोटिकी तिक्ता कटूष्णा च कफापहा ।  
स्थावरादिविषग्री च शस्यते सा रसायने ॥

*Rāja Nighaṇṭu, Guḍūcyādi Varga, 61-63*

### कर्कोटकी

- कर्कोटक्या: कृमिन्नं दलममृतरसं सर्वदोषापहारि ।  
रुच्यं वृष्यं ज्वरग्रन्थं क्षयकसनहरं स्वासहिक्षार्शसां च ॥

### कर्कोटकीफलम्

- कर्कोटकफलं शूलगुल्मपित्तकफापहम् ।  
त्रिदोषकुष्ठमेहघमीषन्मधुरतिक्तकम् ॥  
श्वासकासज्वरहरं मारुतग्रं परं लघु ।

*Nighaṇṭu Ratnākara.*

**कामलायाम्**

नस्यं कर्कोटमूले स्याद् घ्रेयं वा..... ।

*Sodhala, Gadanigraha, Pāñdurogādhikāra. 2-7-52.*

**सर्पविषे**

‘शिफां.....’

‘बन्ध्याककर्कोटकी वाऽपि पिबेत्फणिविषापहम् ।’

*Sodhala, Gadaningraha, Sarpaviśādhikāra.*

‘बन्ध्याककर्कोटकजं मूलं छागमूत्रेण भावितम् ।

नस्यं काञ्जिकसम्पिष्टं विषोपहतचेतसः ॥’

*Sodhala, Cakradatta, Viśacikitsā, 9 Sarpaviśādhikāra.*

**शर्करायाम्**

कर्कोटीमूलिका पीता दशाहं पयसा सह ।

भित्त्वाऽश्मशर्करां शीघ्रं पातयत्येव खण्डशः ॥

*Sodhala, Gadanigraha, Mūtrakṛcchādhikāra, 2-27-46*

**स्तनरोगे**

‘लेपो निहन्ति मूलं बन्ध्याककर्कोटिकीभवं शीघ्रम् ।’

*Bhāva-prakāśa, Yonirogā (strīrogā) dhikāra, 70-175.*

**श्रीपदे**

बन्ध्याककर्कोटकीमूल स्तन्येव परिपेषितम् ।

नाशयत्याशु दुर्वारं श्रीपदं नस्यकर्मणा ॥

*Sodhala, Gadanigraha, Śrīpadādhikāra, 4-22-33.*

**ज्वरे शाकार्थम्**

‘कर्कोटकं पत्रं..... ।

शाकार्थं ज्वरितानां प्रदापयेत् ॥’

*Suśruta Samhitā, Uttara. 39-158.*

**विषे बन्ध्याककर्कोटकी**

बन्ध्याककर्कोटिकामूलं पाटलायाः जटा यथा ।

घृतेन बिल्वमूलं वा द्विविधं नाशयेद् विषम् ॥

*Sāringadhara Samhitā 2-5-24*

बन्ध्या कर्कोटकीमूलं छागमूत्रेण भावितम् ।

नस्यं काञ्जिकसम्पिष्टं विषोपहतचेतसः ॥’

*Vṛndamādhava, 68-12 Gadanigraha, 7-3-26.*

# KARMARĀNGA

**Botanical name :** Averrhoa carambola Linn.

**Family :** Oxalidaceae

**Classical name :** Karmaraṅga

**Sanskrit names**

Karmaraṅga, Śirāla, Karīmāra, Karmaraka,  
Pittaphala, Karmara, Karmāraka, Mudgaraka,  
Mudgaraphala, Dharaphala.

**Regional names**

Kamrakh (Hindi); Kamarak, Kamaranga,  
Kamarakh (Common); Pulichi (Mal.); Soung gya (Burm.);  
Carambola (Eng.).

**Description**

Densely leafy trees up to 20 meters tall; or small handsome evergreen tree 15-30 feet. high branches often drooping. Leaves 5-6 jugate; leaflets entire, sub-opposite; lvs. sensitive. Leaflets ovate, acuminate, 2-5 pair.

Flower heterodistylous; small, variegated, white and purple; in scattered thyrses; bracts small, caducous. Calyx glabrous. Sepals bright red, fading to yellow brown. Petals clawed tinged with pink. Shorter stamens antheriferous; filaments subulate, often with swollen base. Ovary elliptic adpressed puberulous mainly on ribs. Fls. springing from the bark.

Fruits yellow or greenish (colour differs in stages); a rich amber or golden yellow colour) ellipsoid, 3 in. long, with 5 prominent ridges. Funicle of seed dilated into a fleshy bilabiate, irregularly on arillus, Ft. oblong, fleshy, indehiscent, very acidic in taste; slightly furrowed; Seeds without arillus, when green fruits are astringent but on ripening, develop a sweetish acid taste.

**Flowering and fruiting time**

Plant flowers in June-September and fruits during cold season, often up to April.

**Distribution**

It is often planted in gardens. Plant is found in India

and China. Largely cultivated all over the hotter parts of India for the sake of fruit cultivated also in Burma.

Some authorities of taxonomy prefer to keep the genus under family Averrhoaceae instead of Oxalidaceae.

Generally the fruits obtained from the plants found or cultivated in various parts of country are very acidic; but there is a Bengal variety, which is of sweetish or sweet fruits.  
**Kind and Varieties**

Another plant species with very acidic fruits is *Averrhoa bilimbi* Linn., known as Bilimbi (Hindi). and belonging to same family Geraniaceae, It is also cultivated and planted in gardens and it runs wild in tropical India. Naturalised as an escape. in hotter parts of India.

### **Pharmacodynamics**

Rasa	:	Amla, madhura
Guṇa	:	
Viryā	:	Śīta
Vipāka	:	Madhura
Doṣakarma	:	Kaphavātaśāmaka

### **Properties and Action**

Karma	:	Rucivardhana Hṛdaya-rocana Grāhī
	:	Raktaśodhaka Arśoghna
Roga	:	Aruci Atisāra Raktaduṣṭijanya vikāra.

### **Therapeutic uses**

Fruits of Karmaraṅga are very acidic or sour usually, and there is, however, sweet variety (in certain regions). Fruits are liked of acidic sweetish taste as edible fruits. They are astringent (*Kaṣāya rasa*) in taste when they are green or raw state and fruits become of sweetish acid taste (madhurāmla rasa). Fruits are watery and juicy.

The reddish purple flowers appear during the hot season and the very acid or sour fruits ripen during the rainy season. Ripe fruits are pickled and often used in curries, or preserved in sugars. Though these no established

horticultural varieties, the two forms, sour and sweet, are sometimes distinguished, the latter is being frequently found in Bengal. Propogation of both varieties of plants is done by seed, but budding and grafting are also possible. Fruits of *Averrhoa bilimbi* Linn. are acidic or sour, edible and pickled.

The fruits of sweet variety have been found to contain moisture 93.0, protein 0.5, fat 0.2, carbohydrate 4.8, mineral matter 0.2%, iron 0.6mg. and vitamin A.

The fruits are made into stews, curries, puddings and tarts. The sweeter ones are eaten as desert. The slightly unripe one are made into jams, jellies, pickles and preserves. The flowers of drug plant karmaraṅga or carambola are also sometimes made into preserves. Carambola crush can be a refreshing drink. The acid fruits are often used for cleaning metal surfaces, especially for removing rust stains.

The fruits are medicinally useful and they are given to allay kapha and vāta doṣa. It is used in haemorrhoids or piles, diarrhoea, anorexia, scurvy and diseases caused by impurities of blood. It helps to normalise taste, as a tasty drug, for alaying tastelessness. It has blood purifying properties. Ripe fruits are eaten and used as household fruits vegetable in various forms.

**Parts used :** Fruit

**Dose :** Fruits edible; 3-6 gm. Juice 5-7 ml.

## KARMARĀṄGA ( कर्मरङ्ग )

रक्त

कर्मरङ्गं शिगलं च बृहदम्लं रुजाकरम्।

कर्मरङ्गं हिमं ग्राहि स्वाद्मलं कफवातहत्॥

*Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi Varga, 141.*

## KĀRPĀSĪ

**Botanical name :** *Gossypium herbaceum* Linn.

**Family :** Malvaceae

**Classical name :** Kārpāsī-kārpāsa

**Sanskrit names**

Kārpāsa, Kārpāsī, Tuṇḍikeri, Samudrāntā, Ācchādanaphalā, Bhadrā, Sthūlā, Picu, Badarī-Badara, Bandhaphala, Nagnā. Cavya.

**Regional names**

Kapas (Hindi); Kapasi (Mar.); Kapas, Vina (Guj.); Kapas (Punj.); Panji (Tam., Mal.); Hani (Kann.); Karpasimu (Tel.); Cotton Plant (Eng.).

**Description**

**Gossypium herbaceum Linn.** An annual or perennial erect shrub, nearly glabrous or more or less hairy, and with a few scattered glandular points.

Leaves cordate, 3-5, rarely 7-lobed, usually with a gland on the under surface of the mid rib; stipules ovate, lanceolate, entire or slightly toothed.

Peduncle shorter than the petiole; bracteoles equaling the capsule. Calyx truncate or absolutely crenulate, much shorter than the bracteoles; petals obovate or cuneate.

Capsule ovate, globose, mucronate, 3.5 valved. Seeds 5-7 in. each cell, ovoid, cotton white, rarely yellowish, overlying a greenish or greyish down.

**Distribution**

Plant is commonly cultivated in different regions (of suitable soils, climate and land) particularly hot and dry areas. Extensive cotton forming on commercial scale (Gossypium species and several varieties) Gujarat, Madhya Pradesh, West Bengal and Maharashtra and states in India for economic utility.

**Gossypium hirsutum** L. Annual or perennial bushes, sometimes small trees, branches often purplish. Leaves broadly ovate-orbicular, cordate, palmately 3-5 (-7)-lobed with the central lobe usually much larger, upper leaves sometimes entire.

Flowers usually terminal. Epicalyx lobes ovate-or-

bicular with long acuminate teeth, auricled at base. Calyx cupular; truncate or toothed. Corolla pale yellow, usually with a purple centre; petals obovate. Staminal column erect.

Capsules ovoid-fusiform, beaked, pitted; black seeds ovoid, with long white fine floss, usually with fuzz only at the hilum.

#### **Flowering and fruiting time**

January to April.

#### ***Gossypium arboreum* L.**

Shrubs or undershrubs, 1-2 meters high with slender, often prostrate-decumbent branches.

Leaves ovate or orbicular, palmately 3-7-lobed, frequently with an extra tooth in the sinuses, usually hairy. Epicalyx lobes broadly ovate; cordate, 1.5-3.5 cm. long, entire or toothed. Calyx cupular, truncate or minutely 5-toothed, ca 5 mm. long. Corolla mostly light yellow, with or without a purple centre, sometimes red-purple; petals 3-4 cm. long. Staminal column 15-20 mm. long. Capsules subglobose, beaked, pitted seeds with floss and fuzz; floss copious, fairly long.

#### **Flowering and fruiting time**

January to April.

#### ***Gossypium barbadense* L.**

Annual or perennial bushes, sometimes small trees, branches often purplish. Leaves broadly ovate-orbicular, cordate, palmately 3-5 (-7)-lobed with the central lobe usually much larger, upper leaves sometimes entire.

Flowers usually terminal. Epicalyx lobes ovate-orbicular with long acuminate teeth, auricled at base. Calyx cupular, truncat or toothed. Corolla pale yellow, usually with a purple-centre; petals obovate. Staminal column erect. Capsules ovoid, beaked, 2-5 cm. long, pitted; seeds with white floss and with fuzz. throughout or only at the hilum.

#### **Flowering and fruiting time**

December to April.

**Pharmacodynamics**

Rasa	: Kaṭu, Kaṣāya (mulatvak-rootbark); Madhura (bīja-seeds)
Guṇa	: Laghu, Tīkṣṇa (Rootbark); snigdha (seeds)
Vīrya	: Anuṣṭa-kiicit uṣṇa
Vipāka	: Kaṭu (root bark); Madhura (seed)
Doṣakarma	: Vātapiṭṭaśāmaka (bīja-seeds) Vātapiṭṭavardhaka (mūlatvak-rootbark)

**Properties and Action**

Karma	: Garbhāśaya saṅkocaka-ārtavajanana (root bark) Vedanāsthāpana Vraṇaropana Nāḍī pouṣṭika-balya (seeds) Uttejaka-soumanasyajanana (flowers) Snehana-sramsana (seeds) Picchila (leaf juice) Yakṛduttejaka (flowers) Stanyajanana-vṛṣya (seeds) Mūtrajanana (seeds and leaves) Viṣamajvaraghna (seeds) Balya-Viṣaghna (seeds) Raktavardhaka (leaves) Viṣaghna (flowers)
Roga	: Kaṣṭārtava-naṣṭārtava (root) Stanya kṣaya (seeds)-Padara Klibatva (seeds) Mūtrakṛchra (seeds and leaves Juice) Dāha-śrama-bhrānti-mūrchā Śītajvara (seeds) Vibandha (seeds) Pravāhikā (leaves juice) Yakṛdvikāra-kāmalā (flowers) Mānsikavikāra-nāḍīdourbalya unmāda-apasmāra (seeds)

Mānasaroga (flowers)  
 Dourbalya (seeds)  
 Pāṇḍu (leaves)  
 Hṛdaya  
 Viṣa-Sarpaviṣa (seeds); Dhatturaviṣa  
 (flowers and seeds); Vṛścikadaṁśā  
 Śotha-vedanā (seeds)  
 Vraṇa-Kṣata-agnidagdha-viṣa  
 (seeds)  
 Sandhivāta-sirahśūla (seeds oil)  
 Vraṇa-kṣata (cotton)  
 Karṇavikāra (leaves)-Karṇa srāva  
 Apaci  
 Kuṣṭha-Kapālakuṣṭha  
 Madātyaya  
 Masūrikā.

### **Therapeutic uses**

The drug Kārpāsa is an aphrodisiac, astringent, diuretic, emmenagogue and febrifuge. It is used in all types of uterus disorders, anaemia, genito-urinary diseases, inflammation of poisoning of Dhatura or dhatura and snake bite.

The drug is useful in different types of uterus disorders, anaemia, genito-urinary diseases, inflammation and poisons in various forms and modes by different parts of plant drug. Besides internal uses of plant, the cotton is applied as dressing material in surgical and other ailments.

**Parts used :** Root, Root-bark, flowers, seeds, cotton.

**Dose :** Decoction 50-100 ml., Seeds powder 3-6 gms.

### **Gana**

Bṛhmaṇīya (Caraka Saṁhitā), Vātaśaiṁsamna (Suśruta Saṁhitā).

## **A. KĀRPĀSĪ B. VANAKĀRPĀSĪ**

( अ. कार्पासी ब. वनकार्पासी )

कार्पासी तुण्डकेरी च समुद्रान्ता च कथ्यते ।

कार्पासकी लघु तीक्ष्णं मधुरा वातनाशिनी ॥

*Bhāvaprakāśa Nighantu, Guḍucyādi Varga, 150.*

तत्पत्रबीजयोर्गुणाः

तत्पलाशं समीरघ्नं रक्तकृन्मूत्रवर्द्धनम् ।

तत्कर्णपिडिकानादपूयास्त्राविनाशनम् ॥

*Bhāvaprakāśa Nighantu, Guḍucyādi Varga, 151.*

तद्बीजं स्तन्यदं वृष्यं स्त्रिघ्नं कफकरं गुरु ।

*Bhāvaprakāśa Nighantu, Guḍucyādi Varga, 152.*

अ. कार्पासी सरिणो चैव चव्या स्थूला पिचुस्तथा ।

बदरी बादरश्वैव गुणसुस्तुण्डकेरिका ।

मरुद्वा समुद्रान्ता ज्ञेया एकादशाभिधा ॥

ब. कार्पासी मधुरा शीता स्तन्या पित्तकफापहा ।

तृष्णादाहश्रमभ्रान्तिमूच्छाहृदबलकारिणी ॥

*Rāja Nighantu, Śatāhvādi Varga, 188-189.*

अरण्यकार्पासी

वनजाऽरण्यकार्पासी भारद्वाजी वनोद्भवा ।

भारद्वाजी हिमा रुच्या ब्रणशस्त्रक्षतापहा ॥

*Rāja Nighantu, Śatāhvādivarga, 190.*

कार्पासी

क. कार्पास्याच्छादनफला ग्राह्या नग्रावपन्यपि ॥

पटदाल्याः बन्धफलाः भद्रा कार्पासिकापि च ।

कार्पासः पटदस्तूलं पिचव्यो बादरः पिचुः ॥

कार्पासी गुणाः

ख. कार्पासिका किञ्चिदुष्णा कषाया मधुरा लघुः ।

कार्पासीपत्रम्

ग. तत्पलाशं समीरघ्नं रक्तहृत् मूत्रवर्धनम् ॥

कार्पासीबीजम्

घ. तद्बीजं श्रेष्ठलं वृष्यं स्त्रिघ्नं स्तन्यविवर्धनम् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1095-1098.*

‘भारद्वाजी हिमा रुच्या ब्रणशस्त्रक्षतापहा ।’

*Rāja Nighantu.*

कार्पासफलमत्युष्णं कषायं मधुरं गुरु ।  
वातश्रेष्ठहरं रुच्यं विशेषेणस्थिवर्जितम् ॥

*Kṣemakutūhalam.*

### पुत्रोत्पत्तिलाभे

कार्पासशलाटूनां कल्कं क्षीरि पिबेत् ससाहम् ।  
बध्या पुत्रोत्पत्तिं वाञ्छन्ती पुष्पदिवसेषु ॥

*Vaidya Manoramā.*

### शोथे

समूलतूलं संशुष्कं कार्पासभस्मसात्कृतम् ।  
तद्भस्म द्विगुणं शालितण्डुलं पयसोदनम् ॥  
घृतेन सह भुज्ञीत सर्वश्वयथुनाशनम् ॥

*Vaidya Manoramā, 11-2.*

### लिङ्गलूताविकारे

‘कार्पासस्यास्थिभिः पिष्टैः साधितं तिलसम्भवम् ।  
लिङ्गलूताविकाराणां प्रतीकारो विलेपनात् ॥’

*Vaidya Manoramā, 18-3.*

### कपालकुषे

मूलत्वक्पत्रपुष्पाणां कार्पासस्य रसे शृतम् ।  
तैलंमकपालजान् कुष्ठान् जयेत्तक्राम्लसाधितम् ॥

*Vaidya Manoramā.*

### अपचीचिकित्सायां वनकार्पासपूपिकाप्रयोगः

वनकार्पासिकामूलं तण्डुलैः सह योषितम् ।  
पक्ख्वा तु पूपिकां खादेदपचीनाशनं च ॥

*Cakradatta, Galaganḍādi Cikitsā, 41-28.*

### स्तन्यवर्द्धनार्थम्

वनकार्पासकीक्षूणां मूलं सौवीरकेण वा ।

*Cakradatta, 63-45.*

### वृश्चिकदंशे

कार्पासकीक्षूणां फलैः सम्यग्लेपयेत् शूक्ष्मपेषितैः ।  
दंशवृश्चिकदंशस्य शमार्थ घृतमित्रितैः ॥

*Śoḍhala, Gadanigraha, 7-5-2.*

प्रदरे

‘.....मूलं कार्पासेव वा ।  
पाण्डुप्रदरशान्त्यर्थं पाययेत्तण्डुलाम्बुना ॥’

*Bṛndamādhava, Pradarādhikāra, 63-4.*

कफजातिसारे

‘....तद्वत् कार्पासपर्कटयोः स्वरसः समधुर्मतः ।’

*Bṛnda, Atīśāracikitsā, 3-38.*

कुष्ठे

‘..... त्वक् पुष्टं कार्पास्याः ।  
पिष्ठवा चतुर्विधः कुष्ठनुल्लेपः ॥’

*Caraka Saṃhitā, Cikitsā, 7-96.*

वाते

‘कार्पासास्थिकुलत्थानां रसे सिद्धे च वातनुत् ।’

*Caraka Saṃhitā, Cikitsā, 28-136.*

क्षतजतृष्णायाम्

सुतुण्डकेराण्यथवा                    पिबेतु ।  
पिष्ठानि                                    कार्पाससमुद्दवानि ॥

*Suśruta Saṃhitā, Uttara, 48-27.*

कर्णस्नावे

सर्जत्वक्चूर्णसंयुक्तः कार्पासीफलजो रसः ।  
योजितो मधुना वापि कर्णस्नावे प्रशस्यते ॥

*Suśruta Saṃhitā, Uttara, 21-43.*

## KARPŪRA

**Botanical name :** *Cinnamomum Camphora* Nees & Eberm.

**Family :** Lauraceae

**Classical name :** Karpūra

**Sanskrit names**

Karpūra, Ghanasāra, Candra, Himāhva.

**Regional names**

Kapur (Hindi); Kapur (Guj); Karpur (Beng.);

Karpuram (Tam., Tel.); Kaphur (Arabi); Kapur (Pers.); Camphor (Eng.); Camphor tree (source plant).

### Description

A small tree with aromatic bark. Leaves long, acuminate, blade 2-4. Petiole 1.5 to 4 cm. Secondary nerves 2-3 paired, lowest proceeding from leaf base. Flowers small, bisexual in cymes. Fruit a berry. Fruits are dark green, ovoid, rather dry, globose and about 0.3 inch. in diam.

A large handsome tree, evergreen, attaining a height of 100 ft. and a girth of 6-8 ft. in natural habitat.

### Flowering and fruiting time

Trees shed during February-March simultaneously with appearance of new leaves. Fruits ripen in October and turn black after ripening (not fertile).

### Kinds and varieties

There are many forms of *Cinnamomum caphora* Nees & Eberm; some of them are morphologically differentiated but physiologically distinct since a few contain camphor while others produce only an aromatic oil (so they are considered merely forms having no importance as camphor tree).

There are various kinds and other sources of karpūra. Synthetic camphor is now available and used. Various kind and varieties of karpūra or camphor are considered and named on the basis of occurrence (habitat or source), production and colour of camphor.

Some other plants are sources of Karpūra such as *Ocimum kilimandascharicum* Guerke and *Blumea* species.

### Distribution

It is cultivated to a limited extent at Nilgiris, Mysore and northern Malabar. Japan. Camphor tree; China, Japan and grown in gardens in India. It is planted as ornamental tree commonly; also planted as a source of camphor.

### Chemical composition

All parts of tree contain Camphor which is obtained by distillation of wood chips, leaves etc. Camphor is crystalline ketonic substance obtained from the wood.

**Pharmacodynamics**

Rasa	: Tikta, Kaṭu, madhura
Guṇa	: Laghu, Tīkṣṇa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara

**Properties and Action**

<b>Karma</b>	: Hṛdaya-hṛdayottejaka-raktavahiniśaṅkocaka-raktabhara-vardhaka Kaphaniḥsāraka-Kasaghna-śvāsaḥara-Kaṇṭhya Medhya-Vedanāsthāpana Kothapraśamana-Raktotkleśaka Cakṣusya Mukhadourgandhyahara-mukhaśodhaka Trṣāśamanakara Jantughna-ākṣepahara Anulomana-tīkṣṇa-lekhana-Vāntikara Nādī avasādaka-śaityakara Mūtrajanana Vajikaraṇa-Kāmottejaka (and also Kāmāvāsādaka) Svedajanana-Dāhapraśamana Dāhapraśamana Viṣaghna Stanyakṣayakara
<b>Roga</b>	: Hṛdroga-hṛdayaśaithilya Sannipātajvara-hṛdayasamrakṣaka Āmavāta-sandhiśūla Kāsa-śvāsa-pārśvaśūla-Kaṇṭharoga Carmavikāra-Vicarcikā-dāha-kṣata Netravikāra Nādīśūla-vedanā Dantaśūla-dantapūya Jirṇapratīṣyāya Mastiķadourbalya

Vātavyādhi-apatantraka-Kampa-  
 ākṣepa  
 Mukharoga  
 Aruci-agnimāndya-ādhmāna  
 Atisāra-visūcikā  
 Vṛkkaroga  
 Klāivya-Atikāmottejanā  
 Medoroga  
 Viṣa.

### **Therapeutic uses**

The drug karpūra is anodyne, aromatic, antihelminthic, antispasmodic, antipyretic, aphrodisiac, carminative, diuretic, diaphoretic, cardiac stimulant, cooling, depressant, expectorant, insecticidal and rubefacient.

It is used in asthma, bronchitis, diarrhoea, eye diseases, fever, female diseases, headache, inflammatory conditions, pneumonia, skin diseases, toothache and urino-genital disorders.

**Parts used :** Exudate (extract)-Solid form of Camphor oil.  
 Camphor and oil.

**Dose :** 125-375 mg.

### **Formulations**

Karpūra rasa (karpūra vaṭī), Karpūrāsava,  
 Arkakarpūra, Amṛtabindu, Pancaguṇa taila.

## **KARPŪRA ( कर्पूर )**

कर्पूरो मधुरस्तिक्तः सुरिभः शीतलो लघुः ॥  
 चक्षुष्यो लेखनो वृष्यः कफमेदोविषापहः ।  
 दाहत्रृष्णास्यवैरस्यमलदौगन्ध्यनाशनः ॥

*Kaiyadeva Nighaṇṭu, Osadhi Varga, 1278-1279.*

### **अपक्र कर्पूरः**

**क. त्रिविधः**

ईशावासो हिमसंज्ञः पोलाख्य इति त्रिधा ।

**ख. लक्षणम्**

अपक्रे कथ्यते भेदः कर्पूरे तु भिषग्वरैः ॥

ईशावासो भृशं श्वेतो हिमसंज्ञस्तु पाण्डुरः ।  
श्वेतः पीताश्रयः सर्वे रसवीर्यविपाकतः ॥

गुणा

ग. प्रभावेनापि ते प्रोक्ता पूर्वे पूर्वे गुणाधिकाः ।  
तत्रापि यो न चक्षुः स्यात् स्फटिकाभः स उत्तमः ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1280-1282.*

ईशावासः कर्पूरः

ईशावासो मदोन्मादश्रमतृष्णामादाहनुत् ।  
कृमिकासक्षयस्वेदहरो भेदोः वृषात्वकृत् ॥  
तृडदाहमोहशमनः स्वेदलः कटुको रसे ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 1283-1284.*

हिमकर्पूरः

वृष्यश्च धबलः शीतः कर्पूरो हिमसंजकः ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 1284.*

पीताश्रयः कर्पूरः

पीताश्रयस्तु कर्पूरस्तृष्णादाहास्त्रपित्तनुत् ।  
श्रैष्मग्नः शीतलो वृष्यः सुस्वादुः कटुतिक्ककः ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1285.*

पक्वापक्वभेदेन द्विविधः कर्पूरः

(कर्पूरः द्विविधः प्रोक्तः पक्वापक्वभेदतः ।  
पक्वात्कर्पूरतः प्राहुरपक्वं गुणवत्तरम् ।)  
पक्वस्तु द्विविधः प्रोक्तः सदलो निर्दलस्तथा ।  
दृढश्च पीतवर्णश्च विशेषालघुतां गतः ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1286.*

भास्करः कर्पूरः

भास्करो विशदः श्रैष्म वातग्नोष्णाश्रियावहः ।  
कटुः कृमिग्नः कण्डूघः सरो मेदो विषापहः ॥  
जलस्त्रुतिं कृमीन् हन्ति दीपनः पित्तकोपनः ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1287-1288.*

पर्णकर्पूरः

तिक्तः शुद्धिकरो मूत्रकरश्चोन्मादकारकः ।

पीनसं नाशयत्येव कर्पूरः पर्णसंजकः ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga 1289.*

### चीनाककर्पूरः

चीनाकः कृमिन्नः सर्वकर्पूरः व्याधिनाशनः ।

कुष्ठकण्डूवमिहरोकृमिन्नस्तिक् उच्चन्ते ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1290.*

चीनाकसंजकः कर्पूरः कफक्षयकरः स्मृतः ।

कुष्ठकण्डूवमिहरस्तथा तिक्तरसश्च सः ॥

*Bhāvaprakāśa Nighaṇṭu, Karpūrādi Varga, 4*

### कर्पूरस्य सामान्यतो गुणकर्मणि

कर्पूरः शीतलो वृष्यश्वक्षुष्यो लेखनी लघुः ।

सुरभिर्मधुरस्तिकः कफपित्तविषापहः ॥

दाहतृष्णाऽस्यवैरस्यमेदोदौर्गन्ध्यनाशनः ।

*Bhāvaprakāśa Nighaṇṭu, Karpūrādi Varga 2-3.*

### द्विविधकर्पूरः गुणत्वञ्च

कर्पूरो द्विविधः प्रोक्तः पक्वापक्वभेदतः ।

पक्वात्कर्पूरतः प्राहुरपक्वं गुणवत्तरम् ॥

*Bhāvaprakāśa Nighaṇṭu, Karpūrādi Varga, 3.*

कर्पूरो नूतनस्तिकः स्निग्धश्वोष्णोऽस्तदाहत् ।

चिरस्यो दाहदोषग्रः स धौतः शमकृत्परः ॥

*Rāja Nighaṇṭu, Candanādi Varga, 63.*

कर्पूरलक्षणानि—कर्पूरभेदाः चीनाकः ( कर्पूरविशेषः )

*Rāja Nighaṇṭu, Candanādi Varga, 62-69.*

### तृष्णायाम्

कर्पूरचूर्णं तृष्णायां वदने धारयेत् सदा ।

*Kāsyapa Samhitā, Viśeṣakalpa.*

### कुष्ठब्रणे

कुष्ठोदूभवं ब्रणमपोहति शीघ्रमेव कर्पूरतैलमसकृत्

पिचुना निषिक्तम् ।

*Vaidya Manoramā, 16-115*

श्वासे

‘गुडकपूरवटिका श्वासं सद्यो व्यपोहति ।

*Siddha Bhaisajya Maṇimālā.*

नेत्ररोगे शुक्रे

वटक्षीरेण संयुक्तं शूक्षणं कर्पूरजं रजः ।

क्षिप्रमञ्जनतो हन्ति शुक्रं चापि घनोन्नतम् ॥

*Vṛndamādhava, 61-97 Bāñgasena, Netraroga. 175.*

सद्यःक्षते

सद्यः कर्पूरपिंथ्यां पूरितो वस्त्रयन्त्रितः ।

शस्त्रप्रहारः संरोहत्यपूयः पाकवर्जितः ॥

*Rājamārtanda, 26-1. Cakradatta, 44-55.*

मूत्राधाते

कर्पूररसजा युक्ता वस्त्रवर्त्तिः शनैःशनैः ।

मेद्वामार्गान्तरे न्यस्ता मूत्राधातं व्यपोहति ॥

*Bhāvaprakāśa, Cikitsā. 36-67.*

मूत्रे विबद्धे कर्पूरचूर्णं लिङ्गे प्रवेशयेत् ।

*Cakradatta, 33-13.*

घनसारस्य चूर्णेन बाहस्याथा विकाम्बुना ।

गुण्डयित्वा ध्वजे क्षिप्त्वा मूत्ररोधो जहाति तम् ॥

*Bhāvaprakāśa, Cikitsā. 36-32.*

परिलेहितकर्णपालीरोगे

बहुशो गोमयैस्तसैः स्वेदितं परिलेहितम् ।

घनसारैः समालिम्पेदजामूत्रेण कल्कितैः ॥

*Yoga Ratnākara, p. 382.*

स्वच्छं भृङ्गारपत्रं लघुतरविशदं तोलने तिक्ककं चेत्

स्वादुं शैत्यं सुहृद्यं बहुलपरिमलामोदसौरभ्यादपि ।

निःस्लेहं दादर्यपत्रं शुभतरमिति चेद्राजयोग्यं प्रशस्तं

कर्पूरं चान्यथा चेद्वहुतरशमने स्फोटदापि व्रणाय ॥

*Rāja Nighaṇṭu.*

मूत्राधाते कपूरवर्त्तिः

मूत्रकृच्छ्रेऽश्मरीरोगे भेषजं यत्प्रकीर्तितम् ।

मूत्राघातेषु कृच्छ्रेषु तत्कुर्याद् देशकालवित् ॥  
 कर्पूररसजा युक्ता वस्त्रवर्त्तिः शनैः शनैः ।  
 मेद्रमार्गान्तरे न्यस्ता मूत्राघातं व्यपोहति ॥

*Bhāvaprakāśa, Mūtrāghātādhikāra, 39-67.*

नेत्रशुक्रे कपूरयोगः

वटीक्षीरेण संयुक्तं शूक्षणं कपूरजं रजः ।  
 क्षिप्रमञ्जनतो हन्ति शुक्रञ्चापि घनोन्नतम् ।

*Cakradatta, Netraroga Cikitsā, 59-77.*

## KĀŚA

**Botanical name :** *Saccharum spontaneum* Linn.

**Family :** Poaceae (Gramineae)

**Classical name :** Kāśa-Kāśa

**Sanskrit names**

Kāśa, Kāśa, Śvetacāmara, Kāsekṣu, Ikṣura, Ikṣvālika, Poṭagala, Daṇḍekṣu, Svādukāṇḍa, Ikṣupuṣpaka, Vāyasekṣu, Ikṣuvālikā.

**Regional names**

Kasa, Kans (Hindi); Kasai (Beng; Mar.); Kansarho (Guj.); Thatch-grass (Eng.).

**Description**

Tough grass with extensive, creeping rhizomes and erect; 1-2 meters tall culms hairy on modes.

Leaves up to 50 cm. long, linear, filiform, often reduced to sheaths; ligule a scarious rim; sheath auriculate, glabrous except hairy throat.

Panicle up to 45 cm. long. Sessile and pedicelled spikelets similar, up to 4 cm. long, lanceolate, sharply acute; upper glume 4 mm. long, boat shaped, acuminate; lower lemma 3 mm. long, oblong, ciliate, empty epaleate; upper lemma 3 mm. long, linear-elliptical pointed, palea about 1 mm. long, fringed at apex; grain subglobose, 1.25 mm. long.

**Flowering and fruiting time**

Plant flowers and fruits in September to December.

## Distribution

Plant occurs in pantropics. It is commonly growing wild along river beds, ponds, ditches or canals in open country and fallow land, in different regions in India ascending to 5,000ft. elevation.

## Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Laghu, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśamaka

## Properties and Action

Karma	: Mūtravirecanīya-aśmarībhedana Stanyajanana Dāhapraśamana Balya Raktapittaśāmaka
Roga	: Mūtrakṛcchra-Aśmarī Raktapitta-Urahkṣata Ajīrṇa (paittika)-raktātīsāra Raktārsa Stanyakṣaya Raktapradara Dāha Kṣayaroga.

## Therapeutic uses

The cold decoction of Kāsa, Kuśa, Gokṣura, Śatāvari etc., added with honey and sugar is taken in dysuria caused by pitta doṣa (mūtrakṛcchra). Kāsa is an ingredient of the group of five drugs known as Ṭṛṇa-pañcamūla (consisting Kuśa, Kāsa, Darbha, Śara and Ikṣu) which is an effective medicine as diuratic and most useful in dysuria particularly caused by pitta doṣa. In epilepsy (apasmāra) the milk processed with decoction of Kāsa, Viḍāri, Ikṣu and Kuśa is useful.

The roots are used in diarrhoea with blood (raktātīsāra) haemorrhoids (raktārsa), leucorrhoea, menorrhagia, lactation problems (as galactagogue),

dysuria, calculus, burning sensation, consumption or phthisis (Kṣaya), urahkṣata (chest wound) and some other disease.

**Parts used :** Root

**Dose :** Decoction 50-100 ml.

**Formulations**

Tṛṇapañcamūla Kvātha, Kuśāvaleha, Kuṣādya ghṛta.

**Gaṇa**

Mūtraviracanīya, Stanyajanana (Caraka Saṃhitā), Tṛṇapañcamūla (Suśruta Saṃhitā).

## KĀSA-KĀŚA ( कास-काश )

**क.** कासः कासेक्षुरद्विष्टः सस्यादिक्षुरसस्तथा ।

इक्ष्वालिकेक्षुगन्धा च तथा पोटगलः स्मृतः ॥

**ख.** कासः स्यान्मधुरस्तिक्तः स्वादुपाको हिमः सरः ।

मूत्रकृच्छ्राशमदाहास्तक्षयपित्तास्त्रोगजित् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍucyādi Varga, 191-192.*

**अ.** काण्डेक्षुः कासः कासेक्षुः दण्डेक्षुः श्वेतचामरः ।

हषीकेक्ष्वालिका स्वादुकाण्डेक्षुश्वेक्षुपुष्पकः ॥

इक्षुकाण्डो वायसेक्षुः सुकाण्डश्वेक्षुबालिका ।

**ब.** कासेक्षुर्मधुरस्तिक्तः स्वादुपाको हिमो जयेत् ॥

मूत्रकृच्छ्राशमरीदाहरक्तपित्तक्षयक्षयान् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1237-38.*

**काश-कासः:**

काशः काण्डेक्षुरिक्ष्वारिः काकेक्षुर्वायसेक्षुकः ।

इक्षुरस्चेक्षुकाण्डश्च शारदः सितपुष्पकः ॥

नादेयो दर्भपत्रश्च लेखनः काण्ड-काण्डकौ ॥

कण्ठालङ्कारकश्चैव ज्ञेयः पञ्चदशाह्वयः ॥

**काशगुणाः:**

काशश्च शिशिरो गौल्यो रुचिकृत् पित्तदाहनुत् ।

तर्पणो बलकृदवृष्य आमशोषक्षयापहः ॥

*Rāja Nighaṇṭu, Śālmalyādi Varga, 87-89.*

### अशिरी-काशभेदः:

अन्योऽशिरो मिशिर्गण्डा अखालो नीरजः शरः ।

मिशिर्मधुरशीतः स्यात् पित्तदाहक्षयापहः ॥

*Rāja Nighaṇṭu, Sālmalyādi Varga, 10.*

### मूत्रकृच्छ्रे

‘शतावरीकाशकुश स्वदंष्ट्रा.....युक्तं पिबेत् पैत्तिकमूत्रकृच्छ्री ।’

*Caraka Saṃhitā, Cikitsā, 26-50.*

पञ्चतृणमूल ।

*Cakradatta, 32-4.*

### अपस्मारे

‘तद्वत् काशविदारीक्षुकुशक्वाथशृतं पयः ।’

*Aṣṭāṅga Hṛdaya, Uttara. 7-28.*

## KĀSAMARDA

**Botanical name :** Cassia occidentalis Linn.

**Family :** Caesalpiniaceae

**Classical name :** Kāsamarda

**Sanskrit names**

Kāsamarda, Arimarda, Kāsāri, Karkaśa, Kāsaghna, Kāsamardikā, Kāla, Kanaka, Janīṇa, Dīpaka.

**Regional names:**

Kasondi, Kasouji (Hindi); Kesenda (Beng.); Kasvinda (Mar.); Dongatakche (Ka.); Ponnaviram (Mal.), Kasondari (Guj.); Peyaviri (Tam.); Kasind (Tel.); Negro Coffee (Eng.).

**Description**

Branches diffuse, subglabrous, furrowed, often purplish. Leaves foetid; leaflets ovate lanceolate, usually acuminate, 2.5-7.5 cm. long. Petiolar gland ovoid or sub-globose.

Racemes few-flowered, axillary, and also forming terminal panicle; bracts caducous. Calyx glabrous, whitish or slightly tinged with pink. Petal nerve orange. Lower 3 stamens longer and with anthers larger than those of lat-

eral pairs; 3 upper reduced to staminodes. Stigma plumose on one lateral side.

Pad torulose, 20-30 seeded, seeds areolate, pointed at end and blunt at the other.

### **Flowering and fruiting time**

June to November. Autumn to winters.

### **Distribution**

Plant occurs throughout tropical regions. It is growing wild and very common along roads railway tracts, waste places and other areas in country.

### **Kinds and varieties**

Another species is *Cassia sophera* Linn. The plant is larger and its leaves and flowers are also bigger. Remarkably the gland on petiole is not swollen. Branches are purplish (twigs). Root bark is black that appears to be somewhat burnt; it smells like musk.

### ***Cassia sophera* Linn.**

A diffuse subglabrous shrub, 8-10 ft. high, annual or sub-perennial; resembling with *Cassia occidentalis* Linn. But stouter and with more numerous leaflets. Leaves 8-10 in. long, foetid, rachis with a single gland at the base. leaflets 8-12 pairs (or 6-10 pairs), lanceolate, acuminate, 1-3 in. long by .3-.75 in. broad, cuneate at the base, glabrous and glaucous. Flowers in axillary, distinctly peduncled corymbose; bracts green, caducous. Petals subequal, yellow, hardly at all veined. Stamens as in *c. occidentalis*. Fls. colour orange-yellow.

Pods .3 by .4 in., straight or very slightly curved, subterete. Seeds 30-40, dark. brown.

Plant occurs throughout India and Ceylon and Malay Peninsula, but much less abundant than *C. occidentalis* Linn. Central India and other provinces in country.

Both species in question differ mainly of number of leaflets (3-5 pairs in *C. occidentalis* while 8-12 pairs in *C. sophera*).

### **Chemical composition**

The leaves of the plant drug contains cathartine

(like senna), Some colouring matter and salts. Seeds contain tannic acid, fatty acids 2.5%, mucilage 36%, emodine, chryserobin, sodium sulphate, phosphate, magnesium sulphate and a toxic principle toccalbomin.

### **Pharmacodynamics**

Rasa	: Tikta, madhura
Guṇa	: Rūksa, laghu, tīkṣṇa
Virya	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Kaphavātaśāmaka, Pittasāraka.

### **Properties and Action**

Karma	: Kāsaghna-Kaphaghna Mūtrala Kuṣṭhaghna Jvaraghna Viṣaghna Ākṣepaśamana-Vedanāsthāpana Dīpana-Vātānulomana-pittasāraka- recana
Roga	: Kāsa-śvāsa-hikkā-kukkurakāsa Agnimāndya-udararoga-pittavikāra- vibandha Apasmāra-apatantraka-ākṣepaka Kuṣṭha-visarpa-ślipada Vraṇa-dadru-carmavikāra Mūtrakṛchra-Ikṣumeha.

### **Therapeutic uses**

The drug, Kāsamarda is recommended for treatment of skin diseases (tvag vikāra). Root of plant (*Cassia occidentalis* Linn.) is pounded with sour gruel and the same is applied as paste. It is useful for eradicating ring-worm, Kitibha and other skin diseases as mentioned in texts of indigenous therapeusis. The seeds of Kāsamarda and radish mixed with sulphur is an excellent remedy for sidhma. The paste of Kāsamrda root pounded with Jambīra juice (*Citrus limon* (Linn.) Burm. F. is an effective medicine for all types of eczema (Vicarcikā). An external application of drug Kāsamarda is made in different skin diseases.

The paste of root of plant drug (Kāsamarda) is mixed with cows urine (gomūtra) or cows ghee (goghṛta) is suggested to be used in filaria (ślipada) orally, specifically vātajanya ślipada. In scorpion-sting (Vṛścika damśa viṣa), Kāsamarda is useful. There is a classical indication. After keeping the root of plant drug in mouth, one should blow the ear of the patient for overcoming the scorpion poison.

Kāsamarda is effectively useful in diseases of respiratory system. The poup of Kāsamarda leaves, Śobhāñjaṇa (*Moringa oleifera* Lam.) and Bṛhatī (*Solanum indicum* Linn.) is added with honey (madhu) is given for alleviation of cough caused by Kapha. (kaphaja kāsa). The soup of Kāsamarda leaves, Śigru, Bhṛṅgarāja and dried radish is taken to alleviate hiccough and asthma.

**Parts used :** Seeds, leaves and roots

**Dose**

Leaves juice 10-20 ml., Seeds powder 3-6 gms., Root decoction 40-80 ml.

**Gaṇa :** Surasādi gaṇa (*Suśruta Samhitā*).

## KĀSAMARDA ( कासमर्द )

- क. कासमर्दोऽरिमर्दश्च कासारिः कर्कशस्तथा ।
- ख. कासमर्ददलं रुच्यं वृष्यं कासविषास्तनुत् ।  
मधुरं कफवातप्रं पाचनं कण्ठशोधनम् ।  
विशेषतः कासहरं पित्तप्रं ग्राहकं लघु ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga, 43-44.*

**कासमर्दः:**

- कालङ्कतकः कासारि कासमर्दोऽरिमर्दकः ।
- कासग्रः कर्कशो ज्येः सूषाऽन्या कासमर्दिका ।
- कासमर्दः कटुस्तको मधुरः कण्ठशोधनः ।
- पाचनो रोचनो रुक्षो दोषकासविषापहः ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 682-683.*

**कासमर्दः:**

- कासमर्दोऽरिमर्दश्च कासारिः कासमर्दकः ।

कालः कनकः इत्युक्तो जरिणो दीपकश्च सः ॥  
**कासमर्दगुणाः:**

कासमर्दः सतिक्तोष्णो मधुरः कफवातनुत् ।

अजीर्णकासपित्तघ्रः पाचनः कण्ठशोधनः ॥

*Rāja Nighaṇṭu, Śatāhvādi Varga, 171-172.*

**कासमर्दः:**

कासमर्दः सुतिक्तः स्यान्मधुरः कफवातजित् ।

विशेषतः पित्तहरः पाचनः कण्ठशोधनः ॥

*Dhanvantari Nighaṇṭu.*

**विचर्चिकायाम्**

जम्बीरस्वरसे पिष्टकासमर्दाङ्ग्ललेपनम् ।

विचर्चिकानां सर्वेषां परमौषधमुच्यते ॥

*Vaidya Manoroma, 11-54 (6.26).*

**वातजश्लीपदे**

कासमर्दशिफाकल्कं गव्येनाज्येन यः पिबेत् ।

श्लीपदं वातजं तस्य नाशमायाति सत्वरम् ॥

*Baṅgasena, Ślīpada, 10.*

**वृश्चिकदंशे**

यः कासमर्दमूलं वदने प्रक्षिप्य कर्ण फूत्कारम् ।

मनुजो दधाति शीघ्रं विषं वृश्चिकानां सः ॥

*Cakradatta, Viṣacikitsā, 20. Vṛṇdamādhava, 68-17.*

**द्रुकिङ्गिभकुष्ठेषु कासमर्दप्रलेपः:**

कासमर्दकमूलञ्च सौबीरेण च पेषितम् ।

द्रुकिङ्गिभकुष्ठानि जयेदेतत् प्रलेपनात् ॥

*Cakradatta, Kuṣṭha Cikitsā, 50-25.*

**सिध्मकुष्ठे कासमर्दप्रदेहः:**

कासमर्दकबीजानि मूलकानां तथैव च ।

गन्धपाषाणमिश्राणि सिध्मानां परमौषधम् ॥

*Cakradatta, Kuṣṭha Cikitsā, 50-28.*

**कासे**

‘कासमर्दाश्विट्..... ।

सक्षौद्राः कफकासग्नाः..... ॥’

*Caraka Saṃhitā, Cikitsā, 18-117.*

हिक्काश्वासयोः

‘कासमर्दपत्राणां यूषः.....।  
.....हिक्काश्वासनिवारणः ॥’

*Caraka Samhitā, Cikitsā. 17-99,*  
*Vṛndamādhava, 12-15.*

कुष्ठे (सिध्मे) कासमर्दप्रयोगः

कासमर्दकबीजानि मूलकानां तथैव च।  
गन्धपाषाणमिश्राणि सिध्मानां परमौषधम् ॥

*Cakradatta, Kuṣṭha Cikitsā, 50-28. Vṛndamādhava, 51-19.*

त्वग्विकारे

कासमर्दकमूलं तु सौवीरेण च पेषितम्।  
दद्वुकिटिभकुष्ठानि जयेदेतत् प्रलेपनात् ॥

*Vṛndamādhava, 49-11. Baṅgasena, Kuṣṭha. 61.*

## KĀSANĪ

**Botanical name :** Cichorium intybus Linn.

**Family :** Asteraceae (Compositae)

**Classical name :** Kāsanī.

**Regional names**

Kasani (Hindi); Hinduba (Arabic); Kasani (Pers.); Endive chicory, Bunk, Wild Endive, Wild Chicory, Wild Succory (English).

### Description

A perennial herb, 1-3 ft. high, with a fleshy tap root up to 2.5 ft. in length. Flowers blue, peduncle swollen in middle. Fruits ligh coloured. Roots about 2.5 feet long.

It is grown either for fodder or more often for the roots which form an article of commerce.

### Kinds and varieties

There are two kinds of Kāsanī viz. wild and cultivated (vanya and grāmya respectively) which botanically known as Cicerium intybus Linn. and Cichorium endivia Linn. respectively. Latter species is planted in gardens.

**Flowering and fruiting time**

Farming seasons.

**Distribution**

Plant is a native of the temperate parts of the old world. It is found wild in Punjab, N.W.F.P. and Hyderabad (Dn.) Plant cultivated in Gujerat and Maharashtra.

**Chemical composition**

Seeds yield an oil. Roots contain cichorin, lactucin and intybin.

**Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, Rūkṣa
Vīrya	: Uṣṇa
Vipaka	: Kaṭu
Doṣakarma	: Kaphapittahara

**Properties and Action**

Karma	: Yakṛduttejaka-pittasāraka Dīpana-trṣṇānigrahaṇa Hṛdaya-raktaśodhaka Mūtrala Jvaraghna-dāhapraśamana Kaṭupouṣṭika Śāmaka-nidrājanana Śothahara
-------	--

Roga	: Yakṛdvikāra-Kāmalā Raktavikāra Hṛdroga-hṛddrava Dāha-trṣṇā Paittika jvara-jīrṇajvara Mūtrakṛcchra Rajorodha Agnimāndya-pittodara Dourbalya Mastiskōdvega-anidrā.
------	---

**Therapeutic uses**

The drug Kāsanī is useful as a liver stimulant, cholagogue, purgative and sedative drug. It is blood puri-

fier, diuretic febrifuge, diaphoretic, bitter-tonic, and allaying burning sensation. It is also externally useful for headache, urticaria, gout, inflammation (caused by pitta) and inflammation of liver.

The drug is useful as an emmenagogue and it has specific use internally in liver and spleenic disorders. Seeds are used in insomnia and over excitement in brain complaints (mastiṣkodvega) as sedative or depressant. Seeds and roots are used in mutrakṛchra (dysuria). Root is used orally in menstrual problem especially paniful and scanty menses. It is used in chronic fever, pitta jvara and dāha (burning sensation). It is also useful for alleviating general debility.

**Parts used :** Leaves, roots and seeds.

**Dose**

Leaves juice 10-20 ml., Roots powder 3-6 gm., Seeds powder 3-6 gm., Arka (Aqua) 50-100 ml.

**Formulation :** Arka Kāsanī.

## KĀSANĪ ( कासनी )

कासनी लघुतिक्तोष्णा कफपित्तहरी कटुः ।

यकृदविकारे हृद्रोगे मूत्रकृच्छ्रे च शस्यते ॥

*Dravyaguṇa Vijñana, Part II, P. 550.*

## KAŚERUKA

**Botanical name**

Scirpus grossus Linn.

Syn. Scirpus kysoor Roxb.

**Family :** Cyperaceae

**Classical name :** Kaśeruka

**Sanskrit names**

Kaseruka, Kaśeruka, Mustakṛti, Svalpakanda, Vṛṣaparvā, Cicotaka.

**Regional names**

Kaseru (Hindi); Keshur (Beng.); Kasra, Kachera

(Mar.); Gundari (Guj.); Gundatungogatti (Tel.); Gudati-gagaddi (Tam.).

### Description

A large, perennial, glabrous herb, 0.9-2.2 meters high. Leaves radical 60-50 × 13 mm. Spikelets sub-globosely ovoid, 4-10 mm. long in corymbiform, decompound. terminal umbels. Nut obovoid, 2mm. long, ash grey or black.

Rootstocks stout, sometimes soloniferous, producing in dry season, dark coloured, hard, globose tubes, clothed and matted with fibers.

### Distribution

Plant grows throughout India upto an altitude of 700 meters especially in swamps. Plants are propogated by means of stolons.

### Chemical composition

Tubers contain carbohydrate 62-79% and protein 7.5-11.5 percent.

### Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Guru, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphavātavardhaka, Pittaśāmaka.

### Properties and Action

Karma	: Śukrastambhana-vṛṣya Prajasthāpana-stanyajanana Mūtrala Dāhapraśamana Balya Hṛdaya-raktastambhana Trṣṇānigrahaṇa-Chardinigrahaṇa Viṣṭambhi-stambhana Cakṣuṣya-dāhapraśamana-vraṇaśothahara
Roga	: Šukradourbalya Garbhasrāva-stanyakṣaya Mūtrakṛcchra

Dāha-trṣṇā-pittajvara  
 Dourbalya  
 Hṛddourbalya  
 Trṣṇā-chardi-atīsāra-visūcikā  
 Netravikāra  
 Dāha-visphoṭa-Vraṇaśotha.

### **Therapeutic uses**

The drug Kaśeruka is sweet, astringent and cold (in potency). It pacifies provoked pitta humor (pittadoṣa prakopa) and burning sensation. Being an anti-emesis (chardinigrahaṇa), it checks vomiting, thirst and nausea, specially bilary kind (pittaja chardi). It allays diarrhoea, intrinsic haemorrhage (raktapitta), heart weakness (hṛddourbalya) and general debility. It is useful as galactogogue (stanyajanana) and stabiliser of conception (garbhasthāpana). Drug is aphrodisiac (Vṛṣya) and useful to check semen discharge (śukrastambhaka) and also as semen-promoting in seminal and sexual disorders.

**Parts used :** Tuber.

**Dose :** 5-10 gms.

**Formulations :** Kaśervādi paya.

## **KAŚERU - KASERUKA** **( कशेरु-कसेरुक )**

**कसेरु चिचोढं च**

कसेरु द्विविधं ततु महाराजसेरुकम्।  
 मुस्ताकृति लघु स्याद्यतच्चिचोडमिति स्मृतम्॥

**कसेरुद्वयगुणाः**:

कसेरुद्वयं शीतं मधुरं तुवरं गुरु।  
 पित्तशोणितदाहग्रं नयनामयनाशनम्।  
 ग्राहि शुक्रानिलश्रूषारुचिस्तन्यकरं स्मृतम्॥

Bhāvaprakāśa Nighaṇṭu, Śākavarga, 112-113.

**कसेरुकम् स्वरूपः भेदाश्च**

मुस्ताकृति स्वल्पकन्दं वृषपर्वा कसेरुकम्।

चिचोटकं कसेरुः स्यात् बृहद् राजकसेरुकम्।

*Kaiyadeva Nighantu, Oṣadhi Varga, 1617.*

**कसेरुकगुणः:**

कसेरुकं हिमं रूक्षं मधुरं तुवरं गुरु।

सङ्ग्राहि शुक्रलं स्तन्यकफमारुतवर्ढनम्॥

पित्तशोणितदाहघ्रं नयनामयनाशनम्।

वृष्णं मेहतृषां हन्याद् विष्टम्भि कृमिकारि च।

**कसेरुकपुष्पम्**

कसेरुकस्य पुष्पं तु पित्तघ्रं कामलापहम्।

*Kaiyadava Nighantu, Oṣadhi Varga, 1618-1619.*

**पित्तजह्नद्रोगे कशेरुकादिघृतम्**

कशेरुकाशैवलशृङ्गवेरप्रपौण्डरीकं मधुकं विसस्यम्।

ग्रन्थिश्च सर्पिः फ्यसा पचेत्तैः क्षौद्रान्वितं पित्तहदामयघ्रम्॥

*Caraka Saṁhitā, Cikitsā. 26-94.*

**गर्भपाते**

‘कशेरुत्पलशृङ्गाटकलंकं वा पयसा पिबेत्।’

*Bhīṣvapratkāśa, Yonirogādhikāra, 70-83*

**पित्तजविसर्पे कशेरुकादिलेपः:**

*Cakradatta, 53-7.*

**नेत्राभ्यानामाश्च्योतनम्**

कसेरुमधुकानाञ्च चूर्णमम्बरसंयुतम्।

न्यस्तमप्स्वान्तरीक्षासु हितमाश्च्योतनं भवेत्॥

*Cakradatta, Netraroga cikitsā, 59-30.*

**गर्भस्त्रावे**

‘कशेरुशृङ्गाटकशालूककलंकं वा शृतेन पयसा।’

*Suśruta Saṁhitā, 10-57. Śārīra. 10-57.*

**नेत्ररोगे**

कशेरुमधुकाभ्यां वा चूर्णमम्बरसंवृतम्।

न्यस्तमप्स्वान्तरीक्षासु हितमाश्च्योतनं भवेत्॥

*Suśruta Saṁhitā, Uttara. 12-10. Vṛndamādhava, 61-37.*

# KĀṢṬHADĀRU-ĀSAPALLAVA

## **Botanical name**

Polyalthia longifolia Thw.

Syn. Uvaria longifolia Sonner.

**Family :** Annonaceae

**Classical name :** Kāṣṭhadāru

**Sanskrit names**

Kāṣṭhadāru, Kūrcavṛkṣa, Vīthitaru, Subṛkṣa-sutaru,  
Taraṅgitapatra, Haritapatrā, Chatravṛkṣa, Āsapallava.

## **Regional names**

Asopalava, Nakli ashok, Devdari (Hindi); Asopalava (Guj.); Naranamidi (Tel., Tam.) Nettilingam (Tam.); Arana (Mal.); Ubbina (Kann.); Asupal (U.); Mast tree (Eng.)

## **Description**

Evergreen straight and handsome, tall glabrous trees. Leaves 8-20 cm. long, narrowly-lanceolate, glabrous, long acuminate, margins undulate, shining, undulate, pel-lucid dotted.

Flowers numerous, fascicled, green. Petals lanceolate, acuminate, 0.7-1.25 cm. long. Sometimes the flowers are racemed on short, special lateral branches or elongated tubercles, with slender pedicels up to 2.5 cm. long. Fls. yellowish green on long slender pedicels.

Carpels 1-2 ovuled, 1-seeded; ripe carpels ovoid; stalked.

## **Flowering and fruiting time**

April to August. Flowers appear with new leaves (foliage) in spring season, around February. Spring to summers.

## **Distribution**

It is planted as avenue tree. Plant is considered native of Sri Lanka. It is planted almost throughout India.

## **Kinds and varieties**

It is known as Nakali Ashok, being a substitute or

adulterant of Asali Ashok which is prominent drug Aśoka and botanically identified as Saraca asoca Roxb. De Wilde. syn. Saraca Indica auct non, L.

### **Chemical composition**

A new diterpene acid, polyalthic acid has been isolated from the stem bark in a yield of about one percent in another species of Polyalthia i. e. Polyalthia fragrans Bedd.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, rūkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittasāmaka

### **Properties and Action**

Karma	: Jvaraghna Āmadoṣapācana Kṛmighna Anulomana Raktabhāraśāmaka Pramehaghna Kuṣṭhaghna
Roga	: Jvara Āmadoṣa Vibandha Kṛmiroga Raktabhārādhikya Prameha Carmavikāra.

### **Therapeutic uses**

The drug Kāṣṭhadāru or Āsapallava is antipyretic (Jvaraghna). It is useful in hypertension, constipation, worms and skin affections. It is given in urinary anomalies (prameha) and condition of āmadoṣa.

The bark is employed for medicinal purposes. It bark is an adulterant or substitute to an important plant drug Aśoka (Saraca indica) which is a specific medicine against female disorders (strīroga).

The fruits are reported to be eaten in times of scar-

city. Leaves are somewhat aromatic and are commonly used for decoration. The bark is also used as a febrifuge is often employed as substitute or adulterant of the bark of Saraca indica. The can be distinguished from one another by macroscopical and microscopical characters and by the behaviour of the bark powders when treated with chemical reagents and by their florescent characters.

In experimental animals, the aqueous extract of the bark stimulates the isolated ileum and uterus; it depresses the heart, lowers blood pressure and stimulates respiration.

The bark of plant drug is used in constipation (Vibandha), āmadoṣa and worms (kṝmiroga). It is useful in prameha, hypertension, skin diseases and kaphapittaja ailments. Drug is antipyretic agent.

**Parts used :** Bark

**Dose :** Decoction 50-100 ml.

## KĀSTHADĀRU ( काष्ठदारु )

काष्ठदारुः लघू रूक्षस्तिक्तः सकटुकोऽहिमः ।

दीपनः कृमिहन् मेहे ज्वरे कुष्टे च शस्यते ॥

*Dravyaguna Vijñāna, Part III, p. 702.*

## KĀSTHALATĀ - KALAMBĀKA

**Botanical name :** Coscinium fenestratum Colebr.

**Family :** Menispermaceae

**Classical name :** Kāṣṭhalatā-Kalambaka

**Sanskrit names**

Kalambaka, Dārvīlatā, Haridrāvallī, Hāridralata, Pītakāṣṭhā, Kāṣṭhalatā.

**Regional names**

Kalamba, Calamba (Common); Kalamba, Jharh haldi (Hindi); Manapasupu (Tel.); Mormanjal (Mal.); Marada arshina (Kann.); False Calamba (Eng.), The Turmeric Tree.

**Description**

A woody climber, young shoots and underside of leaves yellow-tomentose.

Leaves broadly ovate or cordate, in young plants, peltate; blade 4-8. Petiole 8-4 in.

Flowers dioecious, in dense, globose heads; sepals 6; petals 8; stamens 6, the 3 inner Cohering half way up.

Drupes 1-8; about 1/2 in. diam. Cotyledons orbicular, thin laciniate.

**Flowering and fruiting time**

Post-rains and onwards or different seasons.

**Distribution**

It is found in Peninsular India. Western coasts, Nilgiris, Travancore and also in Sri Lanka.

**Kinds and varieties**

It became in use as a substitute of *Jateorhiza palmata* (Linn.) Miers. (in Europe) and it is also known 'Nakli Kalamba' (or inferior quality *Columba*.). The drug plant is used as substitute of botanical source of important drug Dāruharidra or Daruhaldi. (*Berberis* species).

**Cemical composition**

Stem contains berberine up to 3.5% other alkaloids, if present at all, need to be characterised. Ceryl alcohol, hentriaccontane, sitosterol, plamitic and oleic acids, sitosterol glucoside and saponin together with some resinous material reported to be present in the stem.

**Pharmacodynamics**

Rasa	: Tikta
Gunा	: Laghu, rūkṣa
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

**Properties and Action**

Karma	: Dīpana-pācana-anulomana Pittasāraka Anulomana Raktavardhaka-Raktaśodhaka
-------	---

	Jvaraghna
	Kaṭupouṣṭīka
Roga	: Agnimāndya-ajirṇa-ādhmāna
	Yakṛdvikāra
	Kṛmiroga
	Raktālpatā-raktavikāra
	Jvara-Jirṇajvara
	Dourbalya (Jvara-grahaṇī)

### Therapeutic uses

The drug Kalambaka is stomachic, digestive, carminative, cholagogue and anthelmintic. It is blood purifier, antipyretic and bitter tonic.

The roots are given in fevers specially chronic fever, debility after relieving fever and grahanī. Decoction is taken in worms and also in enema. It is used in anaemia, loss of blood, blood diseases, liver disorders, dyspepsia, flatulence and other abdominal complaints.

**Parts used :** Root

**Dose :** 1-3 gm.

## KATĀHA

**Botanical name :** Sterculia villosa Roxb.

**Family :** Sterculiaceae

**Classical name :** Kaṭāha

**Sanskrit name :** Kaṭaha

### Regional names

Gadgudala, Udar (Hindi.); Udal (Trade); Sardal (Mar.), Kummarī-poliki (Tel.), Murattham (Tam.), Saraya (Kan.); Vakka (Mal.), Gulkndar (Punj); Ganishera (Bihar), Udal (Assam).

### Description

A small or medium-sized tree, upwards of 10 ft. high. moderate-sized deciduous tree. Bark pale-grey or brown. Young portions tawny-tomentose. Branches marked with large scars., branches few, spreading branchlets stout.

Wood very soft and light, about 20 lbs. per C. ft of no use. Timber bark yields a coarse strong fibre (employed for making ropes). White clear gum exudes from cuts made in the bark.

Leaves approximate at the branches, 9-18 in. diam., cordate, nearly glabrous above, tomentose beneath, deeply 5-7-lobed; lobes ovate-oblong, acuminate, entire toothed or cleft; petiole 12-24 in. long, hollow, downy outside; stipules lanceolate, deciduous. Lvs. deeply palmately lobed, crowded at the ends of branches.

Panicles 6-12 in. long, from the axils of the previous year's leaves, drooping; branches many flowered, tomentose. Bracts linear, caducous.

Flowers yellow, in much-branched rusty-pubescent drooping panicles which are crowded at the ends of leafless branches. Male flowers the most numerous; bracts linear, caducous. Calyx campanulate, pinkish within, downy outside. Anthers inserted on a membranous ring which is adnate to the short gynophore. Ovary globose. Staminal column bearing 10 nearly sessile anthers. Calyx stellately hairy outside, glabrous inside.

Fruit follicular, follicles 1.5-2.5 in. long, oblong, spreading, coriaceous, rusty-villous, red within; seeds black. Follicles 2-7, sessile, spreading upto 3 in. (about 1 in.) long, tapering at both ends, bright red when ripe, coriaceous, rough with stellate pubescence outside, smooth and shining inside. Seeds oval, smooth.

### **Flowering and fruiting time**

Plant becomes leafless during the period from January to May. It flowers in March-April and fruiting in June-July.

### **Distribution**

It occurs in outer Himalayas from Kumaon westward to the Indus, up to 3,50 ft. elevation. Salt range (Punjab), Bengal, western and southern India, and in the Andaman Islands. Plant fairly common in Siwalik and foothills forests (Uttar Pradesh), generally on sandy or gravelly soil.

### Kinds and varieties

The gum is exuded from the bark of trees *Sterculia villosa Roxb.* which is medicinally useful and sold in market under the name of Katira. This gum is similar to that of gum katira obtained from trees of *Sterculia urens Roxb.* which is actual and major source of gum or Gond Katira also known as Kullugm, Karai, Karaya, Kuli, Ber). The gum of *Sterculia villosa Roxb.* is considered to be substitute or adulterant to gum of *Sterculia urens Roxb.* Another species *Sterculia pallens Will.* has also economic uses similar those of *S. villosa Roxb.*

### Chemical composition

The pericarp (What burnt) yields a dye. Whitish gum, somewhat resembles with gum of *Sterculia urens Roxb.* (Gum Karaya). Seeds are also containing proteins etc. like *Sterculia urens* seeds which are also edible.

### Pharmacodynamics

Rasa	: Tikta. Kaṣāya
Guṇa	: Laghu
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphahara

### Therapeutic uses

The gum exuded from the bark of *Kaṭāha vṛkṣa* (*Sterculia villosa Roxb.*) is medicinally useful. This gum is almost similar to gum of *Sterculia urens Roxb.* which is commonly known as Gond Katira or Kullu gum.

The seeds are eaten, cooked or roasted. The pericarp, when burnt yields a dye. The exudes a whitish gum, somewhat resembling that of *Sterculia urens Roxb.*, which though not commercially collected, is reported to be used in veterinary practice.

Bark, wood and gum are of economic utility.

**Parts used :** Gum (exudate)

**Dose :** 1-3 gm.

## KATĀHA ( कटाह )

'कटाहः ।'

*Śodhala Nighaṇṭu* 2-529.

## KATAKA

**Botanical name :** *Strychnos potatorum* Linn.

**Family :** Loganiaceae

**Classical name :** Kataka

**Sanskrit names**

Kataka, Payahprasādi, Cakṣuṣya, Ambuprasāda, Guḍaphala, Chedanīya, Marīca, Katephala.

**Regional names**

Nirmali (Hindi); Nirmali (Beng., Punj.); Tetan-Kottai (Tam.); Chirallachettu (Telugu); Clearing nut (Eng.).

### Description

A moderate-sized glabrous tree attaining 13 meters height. Stem fluted, lenticillate branches, swollen nodes. Bark black, trunk often irregularly dotted; wood yellowish grey.

Leaves elliptic, 5-12 cm. long, 2.5-5 cm. breadth, acute, nearly sessile, glabrous and shining, 3 or 5 nerved; petiole short.

Flowers rather large to the genus, nearly sessile cymes. Calyx 2 mm. long; 5-segments ovate, acute; corolla .4-6 mm. long; 5-lobed oblong acute; stamen carpel 1 or 2. Flower 0.8 cm. long, white, hairy within.

Fruit berry black when ripe 1.7 cm. diam.; seeds 1 or 2 circular 8 mm. diam., bluntly lenticular, yellowish, round, compressed, 1.3 cm. across in white pulp.

### Flowering and fruiting time

Plant is flowering in February-April and fruiting in November-March.

### Distribution

It is found in deciduous forests of West Bengal, Central and Southern India up to 12,00 meters. It also occurs in Burma. It occurs in Konkan, Karnataka to Travancore, Central India and Bengal.

### Chemical composition

Seeds do not contain strychnine, but it has brucine in little quantity. Seeds contain brucine.

**Pharmacodynamics**

Rasa	: Madhura, Kaṣāya, tikta
Guṇa	: Laghu, Viśada
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātakaphaśāmaka

**Properties and Action**

Karma	: Cakṣuṣya Jalaśodhka (Vāriprasādana) Vraṇaśothapācana Dīpana-rucivardhaka-stambhana-chedana-vāmaka Mūtrajanan-aśmarībhedana Kuṣṭhaghna.
Roga	: Netravikāra-Jīrṇābhiṣyanda-śukra Agnimāndya-aruci-atīsāra-gulma Mūtrakṛchra-puyameha-aśmarī-śarkarā Kuṣṭha sarvakuṣṭha Trṣā Viṣa Kāmalā Pratiṣyāya Prameha.

**Therapeutic uses**

The drug Kataka is astringent, diuretic and emetic. It is used in anasarca, burning sensation in the body, eye diseases, gastro-intestinal disorders, jaundice, genito-urinary diseases, piles, rhinitis and skin diseases.

In traditional practices of health and medicine in rural areas, the seeds are used extensively to purify the water and they are used in eye complaints.

**Parts used :** Seeds

**Dose :** 1-3 gms., 6 gm. (emetic).

**KATAKA ( कतक )**

क. पयःप्रसादी कतकः कतकं च तत्।

- ख. कतकस्य फलं मेध्यं जलनिर्मलकारकम् ॥  
 वातश्लेष्महरं शीतं मधुरं तुवरं गुरु ॥  
*Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi Varga, 108.*
- अ. कतकोऽम्बुप्रसादश्च कतस्तिक्तफलस्तथा ।  
 रुच्यन्तु छेदनीयश्च जेयो गुडफलः स्मृतः ॥  
 प्रोक्तः कतफलस्तिक्तः मरीचश्च नवाह्न्यः ॥
- ब. कतकः कटुतिक्तोष्णश्वक्षुष्यः कृमिदोषनुत् ।  
 रुचिकृच्छूलदोषग्नी बीजम्बुप्रसादनम् ॥

*Rāja Nighaṇṭu, Āmrādiphala Varga, 196-197.*

नेत्रामयानां प्रयोगार्थं सुखावती वर्त्ति:

कतकस्य फलं शङ्खः सैन्धवं त्र्यूषणं सिता ।  
 फेनो रसाञ्जनं क्षौद्रं विडङ्गानि मनःशिला ॥  
 कुकुटाण्डकपालानि वर्तिरेषा व्यपोहति ।  
 तिमिरं पटलं काचं मलं चाशु सुखावती ॥

*Caraka Saṃhitā, Cikitsā. 26-252/253.*

स्वेहनरसक्रियां कतकफलम्

कतकस्य फलं पिष्टवा घृष्टवा मधुना नेत्रमञ्जयेत् ।  
 ईषत्कर्पूरसहितं ततस्यानेत्रप्रसादनम् ॥

*Bhāvaprakāśa, Netrarogādhikāra, 63-206.*

*Śāringadhara Saṃhitā, 3-13-103.*

अशमर्याम्

घृतं श्वदंष्ट्रास्वरसेन सिद्धं क्षीरेण चैवाष्ट गुणेन पेयम् ।  
 स्थिरादिकानां कतकादिकानामैकैकशो वा विधिनैव तेन ॥

*Caraka Saṃhitā, Cikitsa. 26-74.*

नेत्ररोगे-अर्जुने

सैन्धवक्षौद्रकतकाः सक्षौद्रं वा रसाञ्जनम् ।  
 कासीसं मधुना वापि योज्यमत्राञ्जने सदा ॥

*Suśruta Saṃhiā, Uttara. 12-23 Cakradatta, 59-206.*

प्रमेहे

कर्षप्रमाणं कतकस्य बीजं तक्रेण पिष्टवा सह माक्षिकेण ।  
 प्रमेहजालं विनिहन्ति सद्यो रामो यथा रावणमाहवेषु ॥

*Yoga Ratnākara, p. 287.*

## KATPHALA

**Botanical name :** Myrica esculenta Buch-Ham.

**Family :** Myricaceae

**Classical name :** Kaṭphala

**Sanskrit names**

Kaṭaphala, Kaṭphala, Mahāvalkala.

**Regional names**

Kayaphal (Hind., Mar., Guj.); Kaychal, Katphal (Beng.); Marudam (Tam.); Kaidaryumu (Tel.); Kirishivani (Kann.); Marut (Mal.); Ajuri, Udulvark, Kandul (Arb.); Darshish an (Pers.); Box myrtle (Eng.).

**Description**

A small or moderate-sized evergreen tree up to 5 feet girth and 40 feet high. Bark dark brown or blackish, rather rough exfoliating in irregular small woody scales. Wood pale-brown, heavy, compact and hard. Blaze .5-1 inch., soft not fibrous, deep reddish-brown, often with paler streaks, juice turning dark purple on the blade of a knife.

Young shoots, petioles and inflorescence brown-tomentose. Leaves 4-8 by 1.2-2 inches, oblanceolate or oblanceolate-oblong, acute, entire, undulate, base gradually narrowed, coriaceous glabrous or nearly so when mature, dark green above, rather glossy on both sides (surfaces), dotted beneath with minute risen dots, lateral nerves 10-16 pairs with small ones between. Petiole 2-3 inches long.

Male spikes .3-.5 inch long, arranged racemously on a common axillary stalk 1.5-4 inches long, bracts orbicular, stamens 3-6. Female spikes axillary erect.5-1 inch long.

Drupe .4 inch long sessile, ellipsoid, ovoid, stone red, wrinkled, scaly, succulent, flesh red when ripe and pitted stones.

**Flowering and fruiting time**

Plant generally flowers in October to December (autumn and pre-winters) and its fruits ripen during summer season.

## Distribution

It is occurring throughout the Himalayan zone generally in the regions falling between 1,000 to 2,300 meters (approximately) altitudes.

## Chemical composition

Bark contains a yellow colouring matter and it is rich in tannin which are useful for dyeing and tanning purposes. The yellow colouring matter, myricetin (hexahydroxy flavone) occurs in the bark in the form of glycoside myricitrin. A second glycoside, the aglycone of which is possibly querctetin is present in traces. Bark has moisture 10.5%, tannins 32.1% and other contents.

## Pharmacodynamics

Rasa	: Kaṣāya, tikta, kaṭu
Guṇa	: Laghu, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

## Properties and Action

Karma	: Śukraśodhana Tīvra śirovirecana Kaṇḍūghna-śothahara- Kothapraśamana- Garbhāśayasaṅkocaka Vedanāsthāpana-nādibalya Dīpana-grāhī-sūlapraśamana Sandhānīya-śothahara Kaphaniḥsāraka-śvāsahara Mūtrasaṅgrahaṇīya Śukraśodhana Tvag doṣahara. Sandhānīya-Hṛdaya
Roga	: Śiroroga-Nāsāroga-kaphaja śiroroga Kāsa-śvāsa-pratiṣyā Aruci-agnimāndya-udaraśūla Jvara Galagaṇḍa Atisāra

Netraroga-pittābhīṣyanda  
 Mūrcha  
 Šukradoṣa-klībatā  
 Prameha  
 Vedanāsthāpana-nādībalya  
 Ardita-pakṣāghāta-vātaroga  
 Arṣa  
 Hṛdayaśaithilya-raktaṣṭhivana  
 Mukharoga-mukhapāka-dantaśūla  
 Šothahara-kothapraśamana  
 Dehāvasāda  
 Vraṇa śodhana-ropāṇa  
 Kṛmighna  
 Carma roga  
 Garbhaśaya-yonivikāra.

### **Therapeutic uses**

The drug Kaṭphala is astringent, antiseptic, antipyretic, carminative and rubefacient. It is used as snuff in fainting, nasal congestion, headache and rhinitis. Drug is useful in anorexia, fever, piles and others.

The fine powder of the bark of drug Kaṭphala (tvak sūkṣma cūrṇa) is effective as mūrcchahara (removing fainting) and mūrdha virecana or śirovirecana (head-evacuation). It is applied as snuff (nasya).

The powder of drug kaṭphala is used as snuff (nasya-kavala) and it is specially recommended in head-disease caused by kapha (kaphaja śiroroga). Kaṭphala is employed in the formulation (consisting puṣkaramula, karkaṭaśringī and pippalī with honey: Vṛṇḍamādava, 1-112) prescribed in fever caused by kapha or kaphaja jvara and this leha preparation (Kaṭphalādi leha) is taken to alleviate kapha and its associated symptoms-dyspnoea, cough and fever. The drug Kaṭphala powder mixed with honey is prescribed in abdominal disorders i.e. diarrhoea (Caraka, Saṁhitā, Cikitsā, 19-112). The aqueous solution of Kaṭphala (ambu) is prescribed in conjunctivitis caused by pitta or paittika nertābhīṣyanda (Suśruta Saṁhitā, Uttara, (10-12). In goitre (galagaṇḍa), the powder of Kaṭphala is suggested to

be rubbed (Kaṭphala cūrṇa gharṣaṇam) as per medical texts.

In condition of fainting (mürchhā) caused by different reasons or ailing stages (āghata or trauma, apasmāra or epilepsy, pakṣāghāta or paralysis etc.), the Kaṭphala cūrṇa (bark fine powder or dust) is given to patient for inhaling into nose-nostrils (nasya or pradhamana). This kind of use (mode of administration) as Kaṭphala Nasya is an important medicinal utility of the drug prescribed in texts as well as therapeusis. It is also used in traditional folk practices in rural regions particularly in the hilly areas (where Katphala trees grow abundantly in nature). The ripe or matured fruits are eaten and relished there.

**Parts used :** Bark, flowers.

**Dose :** Powder 3-5 gms.

#### Formulations

Kaṭphalādi Kvātha, Kaṭphala nasya, Kaṭphalādi cūrṇa.

#### Gāna

Śukraśodhana, Sandhāniya, Vedanāsthāpana (Caraka Saṃhitā), Lodhrādi, Surasādi (Suśruta Saṃhitā).

## KATAPHALA ( कट्फल )

कट्फलं कटुकं तिक्तं कषायं कफवानुत्।

निहन्ति मेदगुल्मार्शश्वासकासारुच्चरान्॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 11/38-39*  
कट्फलस्तुवरस्तिक्तः कटुर्वात कफञ्चरान्।

हन्ति श्वासप्रमेहर्शःकासकण्ठामयारुचीः॥

*Bhāvaprakāśa Nighaṇṭu, Haritakyādi Varga 181.*

कट्फलः कटुरुष्णश्व कफश्वासञ्चरापहः।

प्रतिश्यायहरो वृष्टो मुखरोगशमप्रदः॥

*Rāja Nighaṇṭu,*

कट्फलचूर्णान्तर्गलघर्षो गलगण्डमपहरति।

*Cakradatta, 41-9.*

‘कट्फलं मधुयुक्तं वा मुच्यते जठरामयात्।’

*Caraka Saṁhitā, Cikitsā, 10.*

### श्रैष्मिकज्वरे

कट्फलं पौष्ट्रं शृङ्गी कृष्णा च मधुना सह।

श्वासकासज्वरहरः श्रेष्ठो लेहः कफान्तकृत्॥

*Vrindamādhava, 1-12.*

### रक्तपित्ते

प्रियङ्गुकाकट्फलशङ्खगैरिकाः पृथक्-पृथक् चन्दनतुल्यभागिकाः।

सशर्करास्तण्डुलधावनाप्लुताः रक्तं सपित्तं शमयन्ति योगाः॥

*Caraka Saṁhitā, Cikitsā, 4.*

### पित्ताभिष्यन्दे

‘तद्वच्चाहुः कट्फलश्चाम्बुनैव।’

*Suśruta Saṁhitā, Uttara, 10-12.*

### अतिसारे

कपित्थमध्यं लीद्वा तु सव्योषक्षौद्रशर्करम्।

कट्फलं मधुयुक्तं वा मुच्यते जठरामयात्॥

*Caraka Saṁhitā, Cikitsā, 19-12.*

### कफजे शिरोरोगे

‘घ्रेयं कट्फलचूर्णं वा कवलाश्च कफापहाः।’

*Suśruta Saṁhitā, Uttara, 26-21.*

### कासे कट्फलादिक्वाथः

*Cakradatta, Kāsa Cikitsā, 11/23-24.*

### गलगण्डे कट्फलचूर्णघर्षणम्

‘कट्फलचूर्णान्तर्गलिघर्षो गलगण्डमपहरति।’

*Cakradatta, Galaganda-gandamāla-Apacī-granthyārbuda-cikitsā, 41-9 (1)*

## KATUKĀ

**Botanical name :** Picrorhiza kurroa Royle ex Benth.

**Family :** Scrophulariaceae

**Classical name :** Kaṭukā

**Sanskrit names**

Kaṭuka, Kaṭukī, Tikta, Kaṭurohiṇī, Kṛṣṇabhedā, Matsyaśakalā, Patrāṅgī, Kāñḍaruhā, Cakrāṅgī.

**Regional names**

Kutaki, Katuki, Katki (Hindi); Katki (Beng.); Kourh (Punj.); Kali Katuki, Balkadu (Mar.); Kadu (Guj.); Kadugurohini (Tel., Mal. & Tamil); Kharbake Hindi (Arab., Pers.); Picrorhiza (Eng.).

**Description**

A ground clasping hairy herb with perennial root stock, as thick as the little finger, 15-25 cm. long clothed with withered leaf bases.

Leaves 5-20 cm. rather coriaceous, tip rounded, base narrowed into a winged sheathing petiole; flowering stems or scapes ascending stout longer than the leaves, naked or with a few bracts below the inflorescence.

Spikes 5-10 cm. long, subcylindric, obtuse, many flowered, sub-hirsute; bracts oblong or lanceolate as long as the calyx; sepals 0.6 cm. long, ciliate; corolla of short stamens from 0.60-0.80 cm. long with longer filaments 0.8 cm. long of the longer stamens from 0.6 cm. with filament 1.75 long. Capsule 1.25 cm. long.

**Rhizome Drug morphology :**

The drug Kaṭukā consists of dried rhizome which are greyish brown in colour, cylindrical and surrounded by a tufted crown of withered leaf bases. The drugs are longitudinal pieces of the rhizome measuring 4.0-8.0 cm. in diameter. The surface of the rhizome has longitudinal wrinkles, transverse cracks, dotted scars with annulations of bud scales and stem remnants. The rhizome breaks with short fracture exhibiting black lacunar surface with whitish xylem ring on transverse plane of broken ends. The odour is pleasant and taste is later.

**Flowering and fruiting time****Distribution**

Alpine Himalayas from Kashmir to Sikkim; north-west Himalaya to eastern (Sikkim) Himalayas. Plant grows

wild in Uttar Pradesh, Himachal Pradesh and Kashmir at 2,627 -5,569 meters (9,000-15,000 ft.) altitudes.

### **Chemical composition**

Rhizome contains picrorhizin 26.6 %, a bitter, crystalline glycoside which is medicinally potent and active chief substance. It is soluble in aqua, alcohol (90%), acetone, ethylacetate and other solvents. It also contains cathartic acid. Kutkin was found to be a potent choleric agent.

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Sīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittahara.

### **Properties and Action**

Karma	: Pittasāraka-Yakṛduttejaka Rocana-dīpana-recana Kṛmighna Raktaśodhaka-śothahara Kaphniḥśaraka-Kaphaghna Pramehaghna Stanyaśodhana Kuṣṭhaghna Dāhapraśamana Jvaraghna-viṣamajvara-pratibandhaka Kaṭupouṣṭika-lekhana
-------	--

Roga	: Yakṛdvikāra Kāmala-pittavikāra Aruci-agnimāndya Vibandha-ānāha-Udararoga Hṛdroga-raktavikāra-śotharoga Kāsa-śvāsa Prameha Stanyavikṛti Carmaroga-Kuṣṭha Dāha-Jvaradāha
------	---

Jvara-viṣmajvara  
Dourbalya  
Medoroga

### **Therapeutic uses**

The rhizome-drug Kaṭuka is described as bitter, anthelmintic, antiperiodic, aperient, appetizer, blood-purifier, cardiac, cathartic, cholagogue, expectorant, febrifuge, stomachic and tonic. It is useful in asthma, cold and cough, bile trouble, constipation, gastric trouble, fever, heart trouble, jaundice, leprosy and worms. It chiefly improves appetite and stimulates gastric secretion.

The drug Kaṭuka is a reputed and prominent herbal drug of Indian medicine as classical text of Ayurveda appreciate its medicinal potentiality and importance in therapeutics. Kaṭuka is incorporated as an ingredient in a number of classical formulation (śāstriya yoga) such as Jīrakādi modaka, Trāyantyādi Kvātha (Cūrṇa), Poṭolādi Kvātha (cūrṇa), Punarnavādi Kvātha (cūrṇa), Bṛhanmañjiṣṭhādi cūrṇa, Väsāguḍūcyādi Kvātha (cūrṇa), Mahāyogarāja guggulu, Jātyādi ghṛta, Tiktaka ghṛta, Triphalā ghṛta, Pañcatikta guggulu, Pañcatikta ghṛta, Nimbādi cūrṇa, Grahaṇīmīnira taila, Karcūrādi cūrṇa lepa, Ārogavardhinī guṭikā, Sarvajvara louha and also some other formulations. Besides the classical formulation of Ayurveda, the drug Kaṭukā or Kaṭuki (Kaṭakī) in the crude form of rhizome of *Picrorhiza kurroa* Royle ex Benth. is employed in various other pharmaceutical preparations (patent medicines) among a good number herbal products in drug market.

The drug Kaṭukā is considered to have similar medicinal properties as Gentian which is known as Trāyamāṇa, particularly Indian Gentian botanically indentified as *Gentiana Kurroa* Royle. The drug is used either as an adulterant or substitute for Indian Gentian (*Gentiana kurroa* Royle.) and true Gentian (*Gentiana lutea* Linn.). Trāyamāṇa drug is mentioned and prescribed in Ayurveda independantly.

The drug is mainly obtained from natural resources

as the source plant thrives well at higher altitudes in the Himalayas between 9,000 and (to) 15,000 ft.. Small scale cultivation of drug plant is also reported on experimental basis by propogating rhizome and seeds, different localities in hill regions, but the plant is extensively colected from rhizoms of the Himalayas during winter season and raw drug supplies are made for meeting the good requirement of this effective plant drug.

The drug Kaṭuka is recommended in fever, leprosy, liver complaints, spleenic disorders, loss of appetite, respiratory ailments and urogenital diseases. Antispasmodic action has been recorded in alcohol extract. Regression of transaminase and serum alkaline phosphatase values in experimentally induced abnormalities of liver have also been shown during investigations on Kaṭuki.

**Parts used :** Root (rhizome)

**Dose**

Powder 1-3 gms., Powder .5- 1 gm. (bitter tonic) and 3-6 gms. (purgative).

**Formulations**

Ārogavardhīnī vaṭī, Kaṭukādya louha, Tiktādi Kvātha ghṛta.

**Gana**

Bhedaniya, Lekhaniya, Stanyaśodhana, Tiktakandha (Caraka Samhitā), Paṭolādi, Mustādi, Pippalyādi (Suśruta Samhitā).

## KATUKA ( कटुका )

कटुका शीतला तिक्ता कटुपाकरसा लघुः ॥  
भेदिनी दीपनी रूक्षा कफपित्त ज्वरापहा ।  
प्रमेहश्वासकासार्शः दाहकुष्ठकृमीन् जयेत् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1123-1124.*

कट्टवी तु कटुका पाके तिक्ता रूक्षा हिमा लघुः ।  
भेदिनी दीपनी हृद्या कफपित्तज्वरापहा ।

प्रमेहश्वासकासास्त्रदाहकुष्ठ क्रिमिप्रणुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Harītakyādi Varga, 152.*

कटुकाऽतिकटुस्तिक्तः शीतपित्तास्त्रदोषजित् ।

बलासामारोचकश्वास ज्वरहृद्रेचनी च सा ॥

*Rāja Nighaṇṭu, Pippalyādi Varga, 132.*

‘मम द्वयं विस्मयमातनोति तिक्ताकषायो मुस्ततिक्तनाधनः ।’

*Vaidya Jīvanam.*

कटुका पित्तजित्तिक्ता कटुः शीतास्त्रदाहजित् ।

बलासामारोचकान् हन्ति विषमज्वरनाशिनी ॥

*Dhanvantari Nighaṇṭu.*

कण्ठरोगे कटुकादि क्लाथम्

कटुकातिविषापाठादार्वी मुस्तकलिङ्गकाः ।

गोमूत्रक्रथिताः पेयाः कण्ठरोग विनाशनाः ॥

*Caraka Saṁhitā, Cikitsā, 26-201.*

पाण्डुरोगे कण्टुकाद्य घृतम्

*Caraka Saṁhitā, Cikitsā, 16/47-49.*

पित्तकफज्वरे कटुकी कल्कम्

शर्करामक्षमात्राञ्च कटुकीं चोष्ण वारिणा ।

पीत्वां ज्वरं जयेज्जन्तुः पित्तश्लेष्मसमुद्भवम् ॥

अत्र वासारसोऽर्द्धपलपरिमितो देयः ।

मधुसितयोः प्रत्येकंटङ्क प्रक्षेप्यः ॥

*Bhāvaprakāśa, Madhyakhaṇḍa, Jvarādhikār 1-435/436.*

बालानां हिक्कावमित्रं कटुरोहिण्यावलेहम्

कटुरोहिण्या मधुना सह योजयेत् ।

हिक्कां प्रशमयेत्क्षिप्रं छर्दि चापि चिरोत्थिताम् ॥

*Bhāvaprakāśa Bālarogādhikāra, 164.*

त्रण चिकित्सायां तिक्तकाद्य घृतम् ।

*Cakradatta, Vraṇaśotha Cikitsā, 44-85.*

पित्तज्वरे

‘पित्तज्वरघ्नी कटुका शूक्ष्म पिष्टाशर्करा ।’

*Aṣṭāṅga Saṅgraha, Cikitsā, 1-76.*

पाचयेत् कटुकां पिष्ट्वा कर्पेरऽभिनवे शुचौ ।

निष्पीडितो घृतयुतस्तद्रसो ज्वरदाहजित् ॥

*Aṣṭāṅga Hṛdaya, Cikitsā. 1-5.*

चूर्णेकदुरोहिण्याः पत्रैर्वा छिन्नरोहजैः ।

स्वरसैः सहदेव्या वा सिद्धं तैलं ज्वरं जयेत् ।

*Vaidya Manoramā, 1-22.*

### पाण्डुरोगे

सितया कटुकीकर्षो द्रोणपुष्पी रसाञ्जनम् ।

देवदालीरजोनस्यं पाण्डुरोगं व्यपोहति ॥

*Siddha Bhaisajya Maṇimāla, 4-282.*

### कुषे

‘सातिविषा च ससेव्या सचन्दना रोहिणी कटुका ।’

*Caraka Saṁhitā, Cikitsā. 7-132*

### हद्रोगे

‘कट्वीमधुककल्कञ्च पिबेत् स सितम्भसा ।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 6-44.*

### स्तन्यशुद्धये

‘पाययेताथवा स्तन्यशुद्धये रोहिणीबृतम् ।’

*Caraka Saṁhitā, Cikitsā. 30-261/262.*

### हिक्कायां कटुरोहिणी प्रयोगः

*Susruta Samhitā, Uttara. .50-27/28.*

### अम्लपित्ते

कटुकासिताऽवलेह्या पटोलविश्वं च क्षौद्रसंयुक्तम् ।

रक्तस्तुतौ च युक्त्या खण्डं कूष्माण्डकं श्रेष्ठम् ।

*Vṛnda Mādhava, 53-14.*

## KATUNĀHĪ

### Botanical name

Enicostema hyssopifolium (Willd.) I.C. Verdoorn.

Syn. Enicostema littorale Blume., Exacum hyssopifolium willd.

Family : Gentianaceae

Classical name : Katunāhī-māmajjaka

**Sanskrit names**

Kaṭunāhī, Nāhī, Māmajjaka, Nāgajihvā,  
Tikaṣṇapatrā, Vitikṣīṇikā.

**Regional names:**

Karhvinai (Mar.); Manejava- (Guj.); Vallari (Tam.,  
Mal.)

**Description**

Erect or procumbent, glabrous herbs, up to 20 cm.  
tall. Leaves decussate, ovate-lanceolate to linear.

Flowers white. Bracts narrowed at base. Calyx lobes  
fleshy, ovate-lanceolate, acute to gradually acuminate; mar-  
gins narrowly hyaline, nor overlapping. Corolla lobes ± 3-  
angular, acute. Apex of connective acute to apiculate, not  
filiform. Stigma large 2- lobed.

Capsule sub-globose. Seeds minute, brown,  
foveolate.

**Flowering and fruiting time**

July to October, Plant flowers in rains and fruits af-  
terward during autumn season.

**Distribution**

Plant occurs in Africa, Malesia, West Indies, India  
and ceylon. It is found occasionally along moist banks of  
ravinous nallahs in gardens and on ridges in different re-  
gions in India, ascending to 1500 feet elevation and spe-  
cially plant is growing in coastal regions of country.

**Chemical composition**

Plant contains ophaleic acid, a bitter glycoside and  
another substance swertiamarine.

**Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, Rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittanāśana

**Properties and action**

Karma	: Viṣamajvaraghna
	Dipana-āmapācana-sāraka
	Yokṛduttejaka

	Kṛmighna
	Raktaśodhaka
	Śothahara
	Kuṣṭhaghna
	Pramehaghna
	Lekhana
	Viṣaghna
<b>Roga</b>	: Visamajvara
	Pramcha-madhumeha
	Carmaroga
	Medoroga
	Viṣa.

### Therapeutic uses

The drug Kaṭunāhi (nāhī) is a specifically effective antidiabetic phytoagent which is also good antimarial remedy. It is considered a substitute of Kirātatikta or Bhunimba (*Swertia chirayita* (Roxb. ex. Flom) Karst.

Whole plant (Pancāṅga) of drug-plant is used for medicinal purposes. It is used in constipation, liver disorders, worms and āmadoṣa. Drug is suggested to be useful in blood impurities, oedema, skin affections, obesity and dermatosis.

The drug is frequently recommended in diabetes mellitus in powder, decoction or anyother form of ricide or compound (generally pill or tablet) as the plant drug is quite bitter and also after preparing solid extract (ghana).

The drug is emaciating and useful in medoroga (obesity) and it allays vāta and pitla doṣa.

**Parts used :** Whole plant

**Dose :** 1-3 gm. powder, 50-100 ml. Decoction.

**Yoga :** Māmajjaka ghana Vaṭi.

## KATUNAHI कटुनाही

नारी तु कथिता तिक्ता लघ्वी पित्तकफापहा ।

मधुमेहे तथा कुष्टे शस्यते विषमज्वरे ॥

नाहौ च नागजिह्वाख्या तीक्ष्णपत्रा वितीक्षिणका।

कृमिहत् क्षारकर्मा च तथा मामजकः स्मृतः ॥

*Sodhala Nighantu*

## KATVANGA-ARALU

**Botanical name :** *Ailanthus excelsa* Roxb

**Family :** Simaroubaceae

**Classical name :** Aralu-Katvanga

**Sanskrit name :**

Aralu, Mahāvṛkṣa, Pūtivṛkṣa, Aśvanimba,  
Dirghhevṛṇta, Aśvakaranja, Katvanga.

**Regional names :**

Arhu, Ghorhanim, Ghodakarañj, Arua (Hindi);  
Maharuk (Mar.); Aradusi (Guj.); Perimaram (Tam.);  
Padde manu (Tal.); Doddamar (Kann.); Matti pongilyam  
(Mal.).

### Description

A tree, 60-80 ft. high. Wood commercial useful (for lightarticles, such as drums, sword-sheaths and flots for fishing nets).

Leaves 1 root or more, glandular haisy; leaflets very many, on long stalks, ovate or falcate-lanceolate, unequal at the base, coarsely toothed, often lobed.

Flowers yellowish, in large lax often much-branched panicles; filaments half the leanght of the anthers.

Samaras 2 in. long, tapering to each end, twisted at the base, copper-red.

### Flowering and fruiting time

Plant flowers in April and May, and fruiting stage afterwards.

### Distribution

It occurs in west Bengal, central and Southern India, wild or cultivated. It is planted in Uttar Pradesh and

Delhi states, and also other areas, sometimes wild in northern and central India.

### Kind and Varieties

Kaṭvaṅga-Arlu is identified as *Ailanthus excelsa* Roxb. and its another species *Ailanthus malabarica* Dc. which occurs in western ghats.

Generally the drug Aralu has been considered rather mistaken as synonymous to Śyonāka. There are two distinct drugs Aralu and Śyonāka in classical texts of Ayurveda. For the instance, Caraka, in a context, mentions Aralu and Śyonāka clearly as two distinct drugs (Caraka Saṁhitā, cikitsā, 15-134). Initially Kaṭvaṅga, Dīrghavṛṇta and Mahānimba are some of the classical (Sanskrit) synonymous terms of Aralu. Later Aralu and Śyonaka terms have been cognated and they become gradually synonymous. Rājanighaṇṭu describes ‘Śynāka yugala’ (two kinds of Śyonāka) which probably indicated Aralu and Śyonāka both and with independent status of these two drugs. Hence, presently Aralu and Śynāka are botanically identified as *Ailanthus excelsa* Roxb. and *Oroxylum indicum* Vent. respectively, and they are also recommended accordingly in current practice.

### Pharmacodynamics

Rasa	: Tikta, Kaṣāya
Guṇa	: Rūkṣa
Vīrya	: Sīta
Vipāka	: Katu
Doṣakarma	: Kaphapittasāmaka

### Properties and action

Karma	: Āmahara (upaśoṣana) Dīpana-pācana-grāhī- Jīvānuniṣūdana (atisāra-pravāhikā) Raktaśodhaka-raktastambhana Raktabhārahrāsaka Kāsaḥara Sandhāniya Mūtrālpatvakara Yonidoṣahara
-------	--

	Tvagdoṣahara
	Jvaranāśaka-
	viṣamajvaraprativandhaka
	Vraṇasodhana
	Lekhana-mādhuryanāśana
	Viṣaghna
	Mānasadoṣahara
Roga :	Atisāra-pravāhikā-grahaṇī
	Jīvānujanya pravāhika-atisāra
	Arṣa-bhagandara
	Kṛmi
	Raktavikāra-Raktapitta-raktavāta
	Jirṇakāsa-uraḥkṣata-kṣaya-sarakta kāsa
	Pramcha-kṣoudrameha
	Yonivyāpada
	Carmavikāra
	Medoroga-madhumeha
	Viṣa.

### **Therapeutic uses**

The drug Aralu-Kaṭvaṅga is specific āmadosa pācana-upaśoṣaṇa herbal agent (pacifying or digesting āma) which is considered one of the efficacious medicines in the group. It is stomachic, digestive, astringent, anthelmintic and antihaemorrhoidal drug which is recommended in treatment of diarrhoea (atisāra), grahaṇī, piles-haemorrhoids (arṣa), fistula-in-ano (bhagandara); and worms (kṛmi); and specially it checks blood and mucous in stool in diarrhoeal and dystenteric conditions. Drug is very potent for amebic (amebic dysentery and giardiasis. For therapeutic administration of Aralu in these diseases, the juice of bark (obtained through puṭāpāka vidhi) as well as a solid extract or ghanasatva (through rasakriyāvidhi) are useful.

The drug is useful as blood purifier, wound-cleansing and healing, antidermatosis antipyretic (antimalarial, emaciating and union-promoting (sandhāniya). It allays yonidoṣa (vaginal ailments) mānasadoṣa (mental disorders), skin diseases (tvagdoṣa), cough (Kāsa), prameha-

madhumeha (diabetes), medoroga (obesity), raktapitta, rakatavikāra (blood impurity), pthysis, epilepsy, bālaroga (children diseases) including bālagraha and earache (karṇaśūla).

**Parts used :** Bark

**Dose**

Juice 10-20 ml., Extract 1 gm., Powder 1-3 gm., Decoction 50-100 ml.

**Yoga :** Aralu putapāka.

## KATVĀNG-ARALU ( कट्वङ्ग-अरलु )

दीर्घवृन्तो महानिष्ठो कट्वंगोऽरलुतिक्तकः ।

*Aṣṭāṅga Nighaṇṭu. 18-44.*

निष्ठाकारदलो विष्वक् भलूकः पंक्तिपत्रकः ।

प्रसिद्धो भङ्गुरोऽसारत्वङ्गसो देशभाव्या ॥

कट्वंग सांग्राहिक पाचनीयदीपनीयानाम् ।

*Caraka Saṁhitā, Sūtra. 25.*

**बालरोगे**

कपोतवंकाऽरलुको वरुणः पारिभद्रकः ।

आस्फोता चैव योज्याः स्युः बालानां परिषेचने ॥

*Suśruta Saṁhitā Uttara. 32-3.*

**अतिसारे**

कट्वंगात्वग्धृतयुता स्वेदिता सलिलोष्णा ।

सक्षौद्रा हन्त्यतीसारं बलवन्तमपि द्रुतम् ॥

*Aṣṭāṅga Hṛdaya, Cikitsā, 9-80.*

दीर्घवृन्तत्वचं पिष्टवा महौषधसमन्वितम् ।

पीतं तण्डुलतोयेन पक्वातीसारनाशनम् ॥

*Baṅgasena, Atisāra, 89.*

**दीर्घवृन्त पुटपाकः**

त्वक्पिण्डं दीर्घवृन्तस्य.....पाययेतोदरामये ।

*Suśruta Saṁhitā, Uttara, 40-81.*

*Vṛnda Mādhava, 3,45-51.*

अरलुत्वक् कृतश्वैव पुटपाकोऽग्निदीपनः ।  
मधुमोच रसाभ्याञ्च पुनः सर्वातिसारनुत् ॥

*Śārāṅgadhara Sāṁhitā, 2-1-29.*

विषे

क्षारागदे दुन्दुभिस्वनीये

*Suśūta Saṁhitā, Kalpa. 6-3.*

कर्णशूले

रसैः कवोष्णौस्तद्वच्च मूलकस्यारलोरपि ।

*Aṣṭāṅga Hṛdaya, Uttara. 18-3.*

## KATUVĪRĀ-LAṄKĀ

### Botanical name

*Capsicum annum* Linn.

*Capsicum annum* Linn. var. *acuminatum* Fingh.

Family : Solanaceae

Classical name : Kaṭuvīrā-Laṅkā

Sanskrit names

Laṅkā, Kaṭuvīrā, Raktamarica, Pittakāriṇī, Ujjvalā.

Regional names

Lalmirchi, lalmiracha (Hindi); Lalmirchi (Mar.); Marachi (Guj.); Lankamarich Gachh marich (Beng.); Silonge (Tam.); Micha Kaya (Tal.); Menasinakai (Kann.); Muluk (Mar.); Fichile ahmar (Arali); Filile surkh (Pers.); Red chillies Red pepper (Eng.).

Description

A shrubby, annual-herb 2-3 feet high. Peduncles solitary. Leaves long, linear lanceolate. Flowers white, in leaf axil, solitary drooping. Berries 5-10 cm. long, much longer than broad, reflexed, red or yellow, mildly pungent, ft. green in unripen stage and fruits become red, yellow and other colours or shades; sizes also variable. Seeds many, minute, flat, size and shape similar to vrntāka bija (seeds of (*Solanum melongena* Linn.)). Fruits (berry) very pungent with variation in taste, intensity and shape, size

depending upon the varieties, cultivars, kinds and ecological (agro-producing) zones etc.

### **Distribution**

Plant is cultivated throughout India. Some provinces are specially chillies producing regions. Farming on commercial scale for produce as a most common spice of wide utility.

### **Chemical composition**

Berry contains a crystalline bitter active principle capsaicin which is responsible of pungency, bitterness and intensity (extent of taste making quality). The percentage of main active constituent is 0.1 normally in fruit. Green (unripe) fruit contains moisture 82.6, protein 2.9, fat 0.6, carbohydrate 6.1, fibres 6.8, minerals, calcium 0.03, phosphorous 0.08, iron 0.0012, vitamin c. 111mg., carotene 454 i.u. per 100 gm. The contents in dried fruits differ and also vitamin E 2.4 mg/100 gm. Chillies also contain aluminium, barium, copper, lithium, silicon, manganese, titanium in minor quantity. Dry chilies yield a red coloured fixed oil 9-31% and also a volatile oil (0.16-0.39 percent).

### **Flowering and fruiting time**

June-October. Farming season. seedlings in September and fruits ripen for harvesting during January-February.

### **Kinds and Varieties**

There are several varieties of Chillies are produced in country some cultivars grown are Colossal, Spanish Giant, Golden Queen, Ruby King, Bull Rose, Sunny Brook and Pimento.

### **Distribution**

Cultivated during the rainy season for its fruits in the urban areas. Large scale cultivation for vegetable and specially spice purpose for trade, in various regions of country. There are chillies producing and marketing regions and localities in particular in different states.

### **Pharmacodynamics**

Rasa : Kaṭu

Virya	: Uṣṇa
Vipāka	: Kaṭu
Guṇa	: Tikṣṇa, laghu, rūksa
Doṣakarma	: Kaphavātaśāmaka, aPitta janana

**Properties and action**

Karma	: Lālāprasckajanana-vidāhī <sup>1</sup> Dīpana-pācana-anulomana Hṛdayottejaka Mūtrala Vājikaraṇa Jvaraghna Dhātunāśaka Lehana-raktotkleśaka Vātahara-nidrājanana
Roga	: Śirahśūla (Kaphaja) Āmavāta-kaṭiśūla-pārśvaśūla- gṛdhrasī Galaroinī-kanṭhaśālūka Alarkaviṣa-kukkuradamśa-vraṇa (kṣata) Carmaroga Aruci-agnimāndya-ānāha-visūcikā Hṛddourbalya-avasāda Mutrāghāta Kāmāvasāda Santatajvara-viṣamajvara- Sannipātata jvara Medoroga.

**Therapeutic uses**

The drug Kaṭuvirā (Lankā) produces salivary secretion and it is an active salivatory agent (lālāpraseka-janana). It is stomachic, digestive, carminative, diuretic, aphrodisiac, antiperiodic (febrifuge), emaciating, blood aggravating and causing burning sensation (vidāhakara) and destroying dhātus (dhātunaśana). It is contra-indicated to pitta ailments.

Dry chilli (Kaṭuvirā śuṣka) is extensively used as a spice in India. Curry powder is made by grinding roasted dry chilli with other condiments such as coriander, cumin

and turmeric. Chilli is utilised as household vegetable, spice, pickles and various dietary items.

The capsicum preparations are used as counterirritants in lumbago, neuralgia and rheumatic disorders. Internally it is effecting as tonic and carminative and is specially usefull in atonic dyspepsia. It is, however, contra-indicated in gastric catarh. In case of taking inordinately it may cause gastro-enteritis. It is sometimes added to tannin or rose gargles for pharyngitis and to relaxe sore throat.

It is administared in the form of powder, tincture, liniment, plaster, ointement, medicated wool etc. In some of these preparations, oleoresina Capsici (B.P.C.) syn. Capsicin, the alcohol soluble fraction of the ether extract of caapsicum, is the active ingredient (B.P.C.). Pharmacopoeial requirements are chiefly met by the highly pungent varieties of capsicum (*Capsicum frutescens* Linn. syn. *Capsicum minimum* Roxb.)

Indian capsicum known in trade as Bombay capsicum is used as substitute (or Bird chilly, botanically identified as *Capsicum frutescens* Linn. syn. *C. minimum* Roxb.)

**Parts used :** Fruits.

**Dose :** Powder 30-60 mg.

#### Formulations

Viśamajvaraghnī Vati, Lankāsurā (Tincture capsicum).

## KATUVIRĀ-LANKĀ ( कटुवीरा-लङ्का )

कटुवीरोज्ज्वला तीक्ष्णा तीव्रशकृत्यजडेतथा ।  
 कटुवीराग्निजननी बलासम्मी च दाहिनी ॥  
 हन्त्यजीर्ण विसूचीं च व्रणं क्लिन्र सुदारुणम् ।  
 तन्द्रां मोहं प्रलापं च स्वरभेदमरोचकम् ॥  
 नरं लुप्तधरं क्षीणं सत्रिपात निपीडितम् ।  
 नष्टेन्द्रियगणं तीक्ष्णा मृत्योराकृष्य जीवयेत् ।

Ātreyā Samhitā. (Ay. Vi.)

लङ्का तीक्ष्णा कटूष्णाऽति लालास्वावकरी मता ।

विदाहजननी पित्तकारिणी कफवातहरा।

*Dravyaguṇa Vigyān, Vol. II, p. 316.*

अरोचरेतः कफवातहारिणी विपाचिनी शोणित पित्तकारिणी।

मेदोऽक्षिनिद्रानलमान्द्याकारिणी विसूचिकां कृत्ति पित्तकारिणी॥

*Siddhabhaiṣajya Maṇimālā.*

## KEMUKA-KEB (V) UKA

**Botanical name :** *Costus speciosus* (Koen.) Sm.

**Family :** Zingiberaceae (Scitaminaceae)

**Classical name :** Kevuka-Kemuka

**Sanskrit names**

Kevuka, Kemuka, Kebuka, Kembuka, Pecula, Pelu-Peluni, Dalaśālinī.

**Regional names**

Kebu, Penu (Hindi); Chengalva-Koshtu (Tel., Kaun.); Pushkarmula (Mar.).

**Description**

A common weed in Sal forests in Siwaliks (Uttar Pradesh) characterised by large white flowers in dense terminal ovoid or oblong spikes, pink bracts and bright-red capsules.

Herbaceous plant, 4-6 ft. high. Stem somewhat woody at the base. Leaves subsessile, arranged spirally, 6-12 in. long, oblong or oblanceolate, acute or acuminate, often cuspidate, glabrous above, silky pubescent beneath base rounded; sheaths coriaceous; ligule none.

Flowers many, in dense terminal spikes 2-5 in. long; bracts bright red,  $\frac{3}{4}$  -  $1\frac{1}{4}$  in. ovate, acuminate or pungently mucronate; bracteole solitary  $\frac{5}{8}$  in. long. calyx 1-3 in. long, deltoid-ovate, cuspidate. Corolla-tube as long as calyx; lobes ovate oblong; apiculate, lateral lobes about  $1\frac{3}{8}$  in. long, dorsal one rather shorter; lip suborbicular, white with a yellow centre, 2 in. or more in diam; concave, plicate, crisped; disk pubescent and with a tuft of hairs at the base. Stamens atleast one and half in. long, with a tuft

of hairs at the base of the filament; connective petaloid, half in. long; stigma with a semilunar ciliate mouth.

Capsule 3/4 in. in diam., globosely trigonous, red. Seeds black, with a white aril.

### **Flowering and fruiting time**

Plant flowers during the rainy season and fruiting stage afterwards, autumn and onwards (or cold season).

### **Distribution**

Plant occurs in outer ranges of Himalaya, up to 4,000 ft., and more or less throughout India; also in Ceylon, Malay Peninsula and Islands and in China. It is found in siwalik range and terai area. Common in Sal forests (Uttar Pradesh), and eastwards along the Sub-Himalayan tracts of Rohilkhand and North Oudh, usually in moist shady places, and various areas in northern India. It is also cultivated as an ornamental.

### **Chemical Composition**

Rhizomes contain rich quantity of starch (1/3 of dry wt.) but compared to other tuberous foods, the fibre contents are high. Rhizome contains several alkaloids, steroids and saponins.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śita
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka, Vātavardhaka

### **Properties and action**

Karma	: Garbhāśaya sankocaka (tīvra) Dipana-pācana-grāhī-kṛmighna Hṛdaya-raktaśodhaka-śothahara Kāsahara-śvāsahare Pramehaghna Kuṣṭhaghna Jvaraghna Medohara
-------	---

<b>Roga</b>	: Kaṣṭaprasova Kṛmi Ślīpada Prameha Kāsa-śvāsa Kuṣṭha-jvara Hṛdvikāra-raktavikāra Sthoulya-santarpaṇajanya vikāra Kaphapittajanya vikāra.
-------------	---

**Therapeutic uses**

The drug Kemuka has action on uterus as garbhāśaya saṅkocaka (uterine constrictive or ecbolic activity of hastening labour by toning up uterine muscles) and it is orally given in difficult (or abnormal) labor during parturition.

The drug is stomachic, digestive, astringent, anthelmintic, cardiac, blood purifier anti-inflammatory, febrifuge and antidermatosis. The rhizomes are used in obesity, anorexia, worms, heart complaints, blood impurities, filariasis, cough, asthma, prameha, kuṣṭha and metabolic disorders. It allays ailments caused by provocation of pittakapha doṣa; it increases vāta doṣa.

It is suggested by Suśruta that the juice of Kebuka may be taken keeping on pungent diet in worms affections (Suśruta Saṁhitā, Uttara. 54-25). The juice of Kebuka rhizome mixed with biḍa salt and juice of Putranjiva is recommended in filaria or ślīpada (Ibid, cikitsā. 19-62).

The rhizome is edible and is used after cooking. It is mucilaginous, feebly astringent and has no aroma. It is cooked in syrup and made into a preserve.

A name 'costus roots' given to *Saussurea lappa* C.B. Clarke., Kuṣṭha drug of Indian medicine, is sometimes to Costus speciosus (Koenig) Sm., Kebuka drug of present context, when in fact, both plant sources as well as drugs (auṣadha) are quite distinct.

**Parts used :** Rhizome

**Dose :** Juice 10-20 ml., Powder 3-6 gms.

**KEMUKA-KEB(V)UKA**

( केमुक केबु( वु )क )

केमुकं कटुकं पाके पित्तलं ग्राहि हिमं लघु ।  
 दीपनं पाचनं हृदयं कफपित्तज्वरापहम् ।  
 कुष्ठकासप्रमेहास्त्राशनं वातलं कटु ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga, 110-111.*

- क. केमुकं पेचुला पेलुः पेलुनी दलशालिनी ।  
 ख. केमुकं कटुकं पाके तिकं हिमं लघु ।  
     दीपनं रोचनं हृदयं कफपित्तज्वरापहम् ॥  
     कुष्ठकासप्रमेहासृक् हरते कुरुतेऽनिलम् ।  
     कटु स्वादु रसं वृष्यं हितं पित्तध्रमे सदा ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1607-1609.*

**श्लीपदे**

केवुकाकन्द निर्यासं लवणं त्वथ पाकिमम् ।  
 रसं दत्त्वाथ पूर्वोक्तं पेय मेतद् भिषणितम् ॥

*Suśruta Saṃhitā, cikitsā. 19-62*

**क्रिमिरोगे**

‘केवुकस्वरसं वापि पूर्ववत्तीक्षणभोजनः ।’

*Suśruta Saṃhitā, Uttara. 54-25.*

**KETAKI****Botanical name**

Pandanus fascicularis Lamk.

Syn. Pandanus ordoratissimus Linn. f., Pandanus tectorius Soland ex Parkinson.

**Family :** Pandanaceae

**Classical name :** Katakī

**Sanskrit names**

Ketaka, Sūcīpuṣpa, Krakacchada, Tr̥ṇaśūnya,  
 Kañcukī, Halimaka, Karatṛ̥ṇa, Sugandha, Kakacatvaca,  
 Jambuka.

### **Regional names**

Kevrha, Kebarha (Hindi); Kiya (Beng.); Kevarha (Mar.); Kevarhi (Guj.), Javanah chedi (Tam.) Mogali chettu (Tel.); Kaji (Arb.); Kadi (Pers.); Screw Pine, Umbrella tree (Eng.).

### **Description**

Gregarious, much branched, stem bent, sometimes up to 25 ft. high, but more often shrubby, resting on strong aerial roots. Shrubby up to 6 meters high, rarely erect, often bushy shrub, stem supported by aerial roots.

Leaves glaucous-green, 8-6 ft. long, caudate-acuminate, usually with strong spines on edges and midrib.

Flowers spathes white, fragrant. Male flower-spadix with numerous subsessile, cylindric spikes, enclosed in long white fragrant, caudate-acuminate spathes, staminal column 6-13 mm.; anthers longer than slender filaments, cuspidate. Female flower-spadix solitary, 5 cm. diam., carpels confluent in obphyramidal groups, stigmas short, reniform, yellow. Female flowers highly fragrant. Spadix with numerous sessile cylindric spikes 2-3 in. long, enclosed by long white fragrant spathes; staminal column 1/4 - 1/2 in. long; anthers inserted along the whole length of the upper portion.

Syncarpium solitary, drooping, scarlet; drupes numerous (50-60), each consisting of 5-12 carpels, the apex of each carpel distinct more or less convex with a small variously-lobulate stigma.

### **Flowering and fruiting time**

Fruiting in autumn.

### **Distribution**

Plant is cultivated in gardens for fragrant flowers. It often runs wild in vacant and waste places; Southern India and coastal regions. Malaya Peninsula, Andmans, Seacoast of Peninsula on both sides. Burma and Sri Lanka, Sundargans in India. It is often planted in gardens almost throughout India.

### **Chemical Composition**

Flowers contain aromatic volatile oil.

**Pharmacodynamics**

Rasa	: Tikta, madhura, kaṭu
Guṇa	: Laghu, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka tridoṣahara.

**Properties and action**

<b>Karma</b>	: Varṇya Vedanāsthāpana- soumanasyajanana Ākṣepahara Dourgonadhyahara Keśya Vraṇaropāṇa Medhya-mastiṣka indriya balya Vṛṣya Raktaprasādana Mūtrasaṅgrahaṇīya Stambhana Prajāsthāpana-Vājikaraṇa Svedajanana Kuṣṭhaghna-Kaṇḍughna Kaṭupouṣṭika Dipana-Pācana-anulomana
<b>Roga</b>	: Varṇavikāra (tvacāgata) Kuṣṭha Jvara-Visphoṭayukta Jvara Masūrikā Vandhyatva-garbhasrāpata- garbhasrāva Prameha Agnimāndya-ajīrṇa-vibandha Mastiṣkādourbalya (Janita Vikāra) Raktavikāra Hṛtspandanādhikya Kaṭiśūla-āmavāta-śirahśula Apasmāra Karṇaśūla Vraṇa

Keśaroga  
Śrama-Klama  
Dourbalya.

### **Therapeutic uses**

The drug Ketakī is antiseptic, aromatic, cooling, bitter, pungent and stimulant. It is used in burning sensation, eye diseases, headache, rheumatism, small pox, eruptions, scabies and all other skin diseases, syphilis and vitiligo. The decoction of roots is given in jaundice and 'Sherbat Keorha' is taken to reduce heat in body. 'Ark Keorha' (aromatic aqua) and 'Itra Keorha' (scent) are also products of ketaki which are used in various purposes.

Drug plant is useful as diaphoretic, febrifuge, brain tonic, cardiotonic, refrigerant, anti-convulsant and aromatic agent. It is useful as herbal drug promoting to conception (foetus stabilising) or prajāsthāpana and pleasing to mind (soumanasyajanana).

**Parts used :** Flowers, roots, fruit.

### **Dose**

Aqua (Ketakārka) 40-60 ml., Syrup (Ketaka pānaka) 20-40 ml., Infusion 20-50 ml., Paste 2.5-5 gm.

## **KETAKĪ (केतकी )**

- क. केतकः सूचिकापुष्पो जम्बुकः क्रकच्छदः ।  
सुवर्णकेतकी त्वन्या लघुपुष्पा सुगन्धिनी ॥
- ख. केतकः कटुकः स्वादुर्लघुस्तिकः ।  
उष्णा तिक्तरसा ज्ञेया चक्षुष्पा हेमकेतकी ॥

*Bhāvaprakāśa Nighantu, Puṣpa Varga, 42-43.*

### **केतकी**

केतकी कंचुकी ज्ञेय सूचीपुष्पोः हलीमकः ।  
तृणशून्यं करतृणं सुगन्धः ककचत्वचः ॥

### **सुवर्णकेतकी**

‘सुवर्णकेतकी त्वन्या लघुपुष्पा सुगन्धिनी’ ।  
केतकी मधुरा तिक्ता कफन्नी कटुका लघुः ॥

## पुष्पफलञ्ज

तत्‌फलं कटुं तिक्तं लघूष्णं कफवातजित् ।  
पुष्पाणां प्रवरं हेमकेतकी पुष्पमुच्यते ॥  
ईषदुष्णं सुगन्धं च सतिक्तं दृष्टिदायकम् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1483-1485.*

## श्वेत केतकी

केतकी तीक्ष्णपुष्पा च विफला धूलिपुष्पिका ।  
मेध्या कण्टदला चैव शिवद्विष्टा नृपप्रिया ॥  
क्रकचा दीर्घपत्रा च स्थिरगन्धा तु पांशुला ।  
गन्ध पुष्पेन्दुकलिका दलपुष्पा त्रिपञ्चधा ॥

## स्वर्ण केतकी

स्वर्णादि केतकी त्वन्या ज्ञेया सा हेमकेतकी ।  
कनकप्रसवा पुष्पो है मो छिन्नरुहा तथा ।  
विष्टरुहा स्वर्णपुष्पी कामखङ्गदला, च सा ॥

*Rāja Nighantu, Karavīrādi Varga, 67-69.*

## केतकी गुणाः

केतकी कुसुमं वर्णं केशदौर्गन्धयनाशनम् ।  
हेमाभं मदनोभादं वर्द्धनं सौख्यकारि च ॥  
तस्याः स्तनोऽतिशिशिरः कटुः पित्तकफापहा ।  
रसायनकरोबल्यो देवदार्ढपकरः परः ॥

*Rāja Nighantu Karavīrādi Varga, 70-71.*

## अस्थिगत वाते केतक्याद्य तैलम्

केतकिनागबलाऽतिबलानां यद्बहुलेन रसेन विपक्षम् ।  
तैलमनल्पतुषोदक सिद्धं मारुतमस्थिगतं विनिहन्ति ॥  
अनल्पवचनात् तत्र तुल्ये क्वाथतुषोदके ।  
अकल्कोऽपि भवेत् स्नेहो यः साध्यः केवले द्रवे ॥

*Vṛndanādhava, 22-150. Cakradatta,  
Vātavyadhi Cikitsā, 22/150-151.*

## गुल्मचिकित्सायां केतकीक्षारः

सर्जिकाकुष्ठसहितः क्षारः केतकिजोऽपि वा ।  
तैलेन पीतःशमयेद् गुल्मं पवनसम्भवम् ॥

*Cakradatta, Gulma Cikitā, 30-12.*

**अपस्मारे**

केतकस्य फलार्कस्य नस्यात् कर्णप्रपूरणात् ।  
पानादञ्जनो हन्यादपस्मारं न संशयः ॥

*Arka Prakaśa, 5-71.*

**असृगदरे**

जलेन केतकीमूलं संघृष्य सितया सहा ।  
कारितं कविनां नार्याः रक्तस्त्रावं निवर्तते ॥

*Vaidya Manoramā, 2-33.*

## KHADIRA

### **Botanical name**

Acacia catechu Willd.

syn. Mimosa catechu L.f.

**Family :** Mimosideae (Leguminoseae)

**Classical name :** Khadira

### **Sanskrit names**

Khadira, Gāyatrī, Raktasāra, Kanṭakī, Bālapatra,  
Yajñiya, Dantadhāvana.

### **Regional names**

Khair (Hind. Mar.); Sondra (Tel.); Karanagalli  
(Tam.); Kaggali (Kann.); Cutch Tree (Eng.).

### **Description**

Medium-sized trees, with thorny and hairy branches; bark rough, dark brown. Stipular spines flat, hooked and pointed, less than 1 cm. long. Rachis pilose, with a large gland near base and frequently several smaller ones in between pinnae; pinnae 10-30 pairs; leaflets minute linear, oblique based and obscurely nerved, 16-50 pairs per pinna. Calyx pubescent outside, teeth deltoid. Pod strap-shaped, broken, narrowed below into a short stalk, 3-10-seeded.

### **Flowering and fruiting time**

Plant flowers in August-September and fruits in October-December.

## Distribution

Plant is common in the forests of country in plains, dry and warm regions and it occurs in the hills up to 5,000 ft. elevation.

## Catechu Catechin or Cutch

**Khadirasāra** or **Katha** : Sapwood comparatively large yellowish-white, not durable. Heartwood dark-red, very durable, seasons well and takes fine polish; weight varies between wide limits (average about 60 lbs. per c. ft.).

The pores in heartwood are distinct, being usually filled with a white substance which is in fact the katha or catechin. This substance as well as the cutch-products of great commercial value are obtained by boiling chips of heartwood (in earthen pots as well as suitable vessels e.g. copper, under traditional to developed process in from villages to factories. and finally the substance becomes solid, dry (dried extract) and brown mass (cutch blocks, cubes, and katha picces) in various marketable forms and colours, commonly known as katha or Khadirasāra, which is used in various purposes such as commercial or industrial, pointing, dyeing, medicinal and indispensable ingredient of betel-chewing (*Tāmbūla*) and other (*pān masālā*) preparations in prevalence. Katha industry is of economic importance.

## Pharmacodynamics

Rasa	: Tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittāśāmaka

## Chemical Compositions

The chief constituents of the heartwood are catechin and Catechutannic acid; and catechin content varies from 4 - 7%. The proportion of catechin may be up to 17% in cutch. Normally the kutch (Katha or khadirasāra) has the composition: moisture 12.5-12.0; tannin (high powder method) 57.3 - 59.1; catechin 14.2-17.2; extractive matter

(non-tanning) insoluble matter 3.6-4.2 and ash 1.4 - 1.6 percent.

The catechin of source plant (Acacia catechu Willd. or Khadira producing kutch or Khadirasāra) is also named acacatechin and it is colourless crystalline material insoluble in cold water, but soluble in hot water. It melts at 204-205 percent and has formula  $C_{15} H_{14} O_6$ ,  $3H_2O$ . Actually it has been observed that acacatechin is not an individual substance but a mixture of flour isomerides. However, the acacatechin is a comparatively unstable substance and is readily oxidised in solution mainly to catechutamic acid and some brown decomposition products.

Catechutannic acid is an amorphous reddish-brown material, readily soluble in water and alcohol, and is insoluble in ether. Purified Kheersal is found to melt at 225-230° and is of the isomeric catechins.

### **Properties and action**

**Karma** : Kuṣṭhaghna-kaṇḍūghna

Stambhana-raktastambhana-  
soṇitāsthāpana

Kaṇṭhya

Kāsaghna

Dantya

Vraṇaropāṇa

Raktavardhak

Śothahara

Mūtrasaṅgrahaṇīya

Sukraśodhana

Garbhāśayaśaithilyahara

Jvaraghna

Dhātuśoṣaṇa-medośoṣaṇa

Kṛmighna

Rocana

**Roga** : Kuṣṭha-śvitra

Carmavikāra-Kaṇḍu

Raktapitta

Raktasrāva

Vraṇa-kṣata

Dantaroga

Mukharoga  
 Kan̄haroga-svarabheda  
 Kāsa  
 Medoroga  
 Pradara-yoniśaithilya-kāmātiśaya  
 Plihāvṛddhi  
 Aruci-Atisāra-Kṛmi  
 Prameha.

### **Therapeutic uses**

The durg Khadira is an important medicinal item in indigenous medicine where bark and various parts of plant drug are used in various forms and mainly bark, heartwood and kutch or dried extract are used medicinally in addition to flowers, pods, leaves and gum carrying medicinal properties.

Khadirasāra or Katha (Cutch) is regarded as astringent, cooling and digestive. It is useful in relaxed condition of the throat, mouth and gums, also in cough and diarrhoea. Externally it is employed as an astringent and as a cooling application to ulcers, boils and eruptions on the skin. Katha also enters into a number of compound preparations and some prescriptions.

### **Parts used**

Bark, heart wood, flowers, Extract (Khadira-sāra)

### **Dose**

Powder 3-5 gms. / 1-3 gms., Decoction 50-100 ml., Khadira sāra 1/2-1gm.

### **Formulations**

Khadirāriṣṭa, Khadirāṣṭaka-Khadirādi vaṭī,  
 Khadirādi Kvātha.

### **Gāṇa**

Kuṣṭhaghna, Kaṣāyas skandha (Caraka Saṁhitā), Sālasārādi (Suśruta Saṁhitā).

## **KHADIRA ( खदिर )**

खदिरः शीतल स्तिक्त कषायः कफपित्तहा ॥

दन्त्यो हन्ति कृमिश्वत्रकुष्ठकण्डू ज्वरव्रणान् ।

शोषप्रमेहमेदोऽस्त्रकासारोचक पाण्डुताः ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 823-824.*

श्वेतखदिरः

खदिरः श्वेतसारोऽन्यः कदरः सोमवल्कलः ।  
कदरो विशदो वर्णयो मुखरोगकफास्त्रजित् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 825.*

खदिरः

खदिरः शीतलो दन्त्यः कण्डूकासारूचि प्रणुत् ॥  
तिक्त कषायो मेदोघः कृमिमेह ज्वर ब्रणान् ।  
शिवत्रशोथामपितास्तपाण्डुकुष्ठकफान् हरेत् ॥

*Bhāvaprakāśa Nighantu, Vaṭādi Varga, 31-32.*

श्वेतखदिरः

‘कदरो विशदो वर्णयो मुखरोगकफास्त्रजित् ।’

*Bhāvaprakāśa Nighantu, Vaṭādi Varga, 34.*

खदिरः

खदिरस्तु रसेतिक्तः शीतपित्तकफापहः ।  
पाचनः कुष्ठकासास्त्रशोषकण्डूब्रणापहः ॥

*Rāja Nighantu, Śalmalyadi Varga, 23.*

श्वेतसार (श्वेतखदिर)

श्वेतस्तु खदिरः तिक्तः कषायाः कटु विपाकः ।  
कण्डूतिभूतकुष्ठघ्रः कफवातब्रणापहा ॥

*Rāja Nighantu, Śalmalyadi Varga, 25.*

रक्तखदिरः

कटूष्णो रक्तखदिरः कषाय गुरुतिक्तकः ।  
आमवातास्त्रवातघ्नी ब्रणभूतज्वरापहः ॥

*Rāja Nighantu, Śalmalyadi Varga 27.*

विट्खदिरः

विट्खदिरः कटूष्णस्तिक्तो रक्तब्रणोत्वगदोषहरः ।  
कण्डूतिविषविसर्प ज्वर कुष्ठोन्मादभूतघ्रः ॥

*Rāja Nighantu. Śalmalyādi Varga 29.*

खदिर सारः

कटुकः खदिरः सारः तिक्तोष्णः कफवातहत् ।

ब्रणकण्ठामयघनश्च रुचिकृत् दीपनः परः ॥

*Rāja Nighaṇṭu. Śalmalyādi Varga 32.*

### कुष्ठनाशाय खदिर श्रेष्ठत्वम्

खदिरः कुष्ठाद्भानां श्रेष्ठम् ।

*Caraka Saṁhitā, Sutra.25*

### सर्वकुष्ठरोगे महाखदिरकं घृतम्

*Cakradatta, Kuṣṭha Cikitsā, 50/111-115*

### दन्तरोगे

‘खदिरस्य तथा क्वाथो..... ।’

.....दन्तरोग निवारणः ॥

*Hārīta Saṁhitā, Cikitsā.*

### स्थावर विषप्रतिषेधे

खदिरस्य च सुगन्ध तथा निम्बफलानि च ।

उष्णोदकेन पीतानि जयेशुः तत्क्षणाद् विषम् ॥

*Hārīta Saṁhitā, Cikitsā. 55.*

### मसूरिका-रोमान्तिका-विसर्प-कण्डवादयाः शमनाय खदिराष्ट्रक

### क्वाथः

*Cakradatta, 54/25-26.*

### श्लीपदे

खदिरासनशालानां सारकलंकं पिबेन्नरः ।

प्रातर्गवां हि मूत्रेण सक्षौद्रं श्लीपदं जयेत् ॥

*Sodhala, Gadanigraha, 4-2-42.*

### मसूरिका रोगे ( अरोचकाद्य प्रयोगः )

‘पिबेदम्भस्तसशीतं भावितं खदिरासनैः ।’

*Cakradatta, 54-34.*

### कुष्ठे

दिव्यक्षुरन्तं कुष्ठस्य खदिरं कुष्ठपीडितः ।

सर्वधैव प्रयुज्ञीत स्नानपानाशनादिषु ॥

यथाहन्ति प्रबृद्धत्वात् कुष्ठमातुरभोजसा ।

तथा हन्त्युपयुक्तस्तु खदिरः कुष्ठभोजसा ॥

*Suśruta Saṁhitā, Cikitsā. 9-70/71.*

**शनैर्मेहे**

‘शनैर्मेहिनं खदिर कषायम् ।’

*Suśruta Saṃhitā, Cikitsā, 11-9.*

**क्षौद्रमेहे**

‘....क्षौद्रमेहिनं खदिरक्रमुककषायम् ।’

*Suśruta Saṃhitā, Cikitsā, 11-6.*

**मुखरोगे**

‘.....तैलमिदं वारिमेदसा प्रथितम् ।  
अनुशीलयन् प्रतिदिन स्वस्थोऽपि दृढ़द्विजो भवति ॥’

*Aṣṭāṅga Hṛdaya, Uttara, 22-96.*

**कुष्ठरोगे**

‘खदिरः कृमिकुष्ठघ्नः कफरेतोविशोषणः ।’

*Dhanvantari Nighaṇṭu.*

यथा सर्वाणि कुष्ठानि हतः खदिरबीजकौ ।

तथैवार्शांसि सर्वाणि वृक्षकारुष्करौ हतः ॥

*Suśruta Saṃhitā, Cikitsā, 6.*

**खदिर सारंगात्रि प्रयोगे ( दुग्धसेवी निषेध )**

रात्रौ दुग्धप्राशकानां न हितः तद्विरोधतः ।

कषायस्तुवरश्चास्य स द्वेष्टा पायसः स्मृतः ॥

**खदिरसाराति योगम्**

‘साराधिकये खदिरे शोषदात्री ।’

*Rāja Nighaṇṭu.*

**विषे**

खदिरस्य च मूलञ्च तथा निम्बफलानि च ।

उष्णोदकेन तैलानि जयेयुस्तत्क्षणात् विषम् ॥

*Śāraṅgadhara Saṃhitā, 3-56-11.*

**कुष्ठे रसायने च**

दह्यामानाच्युते कुम्भे मूलगे खदिराद्रसः ।

साज्यधात्रीरसक्षौद्रो हन्यात्कुष्ठं रसायनम् ॥

*Vṛnda mādhava, Kuṣṭhadhikāra 51-59.*

**सर्वस्त्वगदोषे खदिर क्लाथः**

प्रलेपोद्वर्तनस्त्रानपानभोजनकर्मणा

|

शीलितं खदिरं वारि सर्वत्वगदोष नाशनम्॥

Vṛnda mādhava, Kuṣṭhādhikāre 51-74. Cakradatta, 50-93.

**स्वरभेदे**

‘तैलाक्तं स्वरभेदे वा खदिरं धारयेन्मुखे ।’

Cakradatta, Svarabheda cikitsā, 13-7.

**विस्फोटे**

‘.....खदिरेन्द्रयवाम्बु वा ।’

विस्फोटान्नाशत्याशु वायुर्जलधरानिव ॥

Cakradatta, 53-28.

‘विस्फोटान्नाशत्याशु वायुः जलधरानिवः ।’

Cakradatta, Visarpa Visphoṭa-Cikitsā.

**वातज कासे**

‘पिबेत्खदिरसारं वा मदिरादधिमस्तुभिः ।’

Caraka Saṁhitā, Cikitsā - 64.

**ब्रणशोधने**

‘त्रिफला खदिरः.....कषाया शोधना मताः ।’

Caraka Saṁhitā, Cikitsā 25-84.

**सर्वकुष्ठचिकित्सायां खदिर निर्दाहरसः:**

Cakradatta, 50-65.

**कुष्ठे**

पानाहार विधाने प्रसेचने धूपने प्रदेहे च ।

.....विशिष्यते कुष्ठहा खदिरः ॥

Caraka Saṁhitā, Cikitsā. 7-159, 97/99.

**रक्तपित्ते**

‘खदिरस्य..... ।

पुष्पचूर्णानि मधुना लिहान्ना रक्तपित्तिकः ।

Caraka Saṁhitā, Cikitsā. 4-70. Vṛndamādhava, 9-20.

**कुष्ठे रक्तपित्ते च**

खदिरं धृतं निष्प्रधृतं दार्वीधृतमुत्तमं पटोलधृतम् ।

कुष्ठेषु रक्तपित्तेषु भिषाग्जित सिद्धम् ॥

Caraka Saṁhitā, Cikitsā 7-135.

कुष्ठे

महाखदिर घृतम्

*Caraka Samhitā, Cikitsā. 7-152/156.*

खदिरकल्पः

*Bhela Samhitā, Cikitsā. 6-52/54.*

यथा सर्वाणि कुष्ठानि हतः खदिर बीजकौः ।

तथैवार्शसि सर्वाणि वृक्षकारुष्करौ हतः ॥

*Suśruta Samhitā, Cikitsā. 6-19.*

‘पानपरिषेकवगाहादिषु च खदिरकषायम् ।’

*Suśruta Samhitā, Cikitsā 9-5.*

खदिरविधानम् ॥

*Suśruta Samhitā, Cikitsā. 10-13.*

‘कुष्ठेषु सेव्यः खदिरस्य सारः ।’

*Aṣṭāṅga Hṛdaya, Uttara. 40-50.*

श्वित्रे

यच्चान्यत् कुष्ठस्त्रं शिवत्राणां सर्वमेव तच्छस्तम् ॥

खदिरोदकसंयुक्तं खदिरोदकं पानमग्रयं वा ॥

*Caraka Samhitā, Cikitsā. 7-166.*

मसूरिकायाम्

पिबेदम्भस्ताशीतं भावितं खदिरासनैः ।

शौचे वारि प्रयुज्मीत गायत्री बहुवारजम् ॥

*Vṛndamādhava, 56-30.*

भगन्दरे

खदिरस्य त्रिफलाक्षाथो महिषीघृतसंप्लुतः ।

विडङ्गचूर्णयुक्तश्च भगन्दरविनाशनः ॥

*Śāringadhara Samhitā, 2-2-133.*

रक्तपित्ते

गायत्रिजम्बर्जुन कोविदार शिरीषरोधाशनशाल्मलीनाम् ।

पुष्पाणि शिग्रोश्च विचूर्ण्य लेहो मध्वन्वितः शोणितपित्ते ॥

*Suśruta Samhitā, Uttara. 45-34.*

### मुखरोगे-दन्तरोगे

‘खदिरादि गुटिका, खदिरादि तैलञ्ज।’

*Caraka Samhitā, Cikitsā. 26-199/206.*

खदिरस्य तथा क्राथो यवानिक्राथ एव च।

क्राथश्च निष्म्बमूलस्य दन्तरोग निवारणः॥

*Sārāṅgadhara Samhitā, 3-46-14.*

### रसायने

खदिरासनयूषभावितायाः त्रिफलायाः घृतमाक्षिकालुतायाः।

नियमेन नरा निषेवितारो यदि जीवन्त्यरुजः किमत्र चित्रम्॥

*Aṣṭāṅga Hṛdaya, Uttara. 39-153.*

### छर्द्याम्

‘खर्जूरमांसामान्यश्च नारिकेल द्राक्षामधो वा बदराणि लिहच्यात्।’

*Caraka Samhitā, Cikitsā. 20-28.*

### रक्तपित्ते

‘हितञ्च खर्जूरफलं समाक्षिकम्।’

*Suśruta Samhitā, Uttara. 45-20.*

### हिक्कायाम्

खर्जूरमध्यं भागध्य.....।

### राजयक्षमणि

घृतं खर्जूरमृद्दीकाशर्कराक्षौद्रसंयुतम्।

सपिप्पलीकं वैस्वर्यं कासश्वासञ्चरापहम्॥

*Caraka Samhitā, cikitsā. 8-16.*

### मुखवैरस्ये

.....द्राक्षाखर्जूरयोस्तथा।

वैरस्यं धारयेत् कल्कं गणदूषञ्च तथा हितम्॥

*Suśruta Samhitā, Uttara. 39-185.*

### ग्रहणी

‘तद्वद् द्राक्षेक्षुखर्जूरस्वरसानासुतान् पिबेत्।’

*Caraka Samhitā, Cikitsā. 15-151.*

### पित्तजकासे

खर्जूरपिप्पली द्राक्षासितालाजाः समांशकाः।

मधुसर्पियुतं लेहः पित्तकासहरः परः ॥

*Vrndamādhava, 12-7.*

शोणितमेहे

.....सक्षौद्रं रक्तमेहजित् ।

क्वाथः खर्जूर काशमर्य तिन्दुकास्थ्यामृताकृताः ॥

*Vrndamādhava, 35-11.*

## B. KADARA

### Botanical name

Acacia suma Buch-Ham., A. suma Buchanan.

Syn. Acacia catechu Bedd., Mimosa suma Roxb.

**Family :** Mimosaceae (Leguminosae)

**Classical name :** Kadara

**Sanskrit name :** Kadara

**Regional names**

Salkanta (Common, Bengla); Daula Khejra (Rajthan)

### Description

A large or middle-sized tree. Bark white. Branches stiff, flexuous; branchlets and petioles downy, with soft grey pubescence. Prickles in pairs, infra-stipular; conical, downy white young, brown shining afterwards.

Common petiole 4 - 10 in. long, unarmed, with a large cup-shaped gland above the base. pinnae 10-20 pairs; leaflets 20-50 pair, linear, approximate, imbricate, generally ciliate.

Flowers white or pale yellow; spikes lax. Petals not much longer than calyx.

Pods 3-5 by 1/4 in., pubescent when young. Wood similar to that of *Acacia catechu* Willd. (Khadira), used as a tan and cutch.

### Flowering and fruiting time

Rains to Autumn and onwards.

### Distribution

Western peninsula, both on the West as well as on

the East side, extending north to the southern Rajasthan, lower Bengal and Sunderban.

## KADARA ( कदर )

मधुमेहे

कदरक्रमुककषायम् ।

*Suśruta Saṃhitā, Cikitsā. 11-9*

मधुमेहेकदरखदिरपुरकषायम् ।

*Aṣṭāṅga Saṅgraha, Cikitsā. 14.-8*

कदरखदिर पूगक्षाथं क्षौद्राह्वये पिबेत् ।

*Vṛndamādhava, 35-13.*

## KHARBŪJAM

### Botanical name

Cucumis melo L.

Syn. Cucumis melo var. culta Kurz.

**Family :** Cucurbitaceae

**Classical name :** Karbūjam

**Sanskrit names**

Kharbūjam, Daśāṅgula, Madhuphalā, Vṛttakarkatī, Vṛttairvāru, Śodarekhā.

**Regional names:**

Kharbuja (Hindi); Kharbuja (Punj., Guj., Mar.); Kharmuj (Beng.); Mulampaz-ham (Tam.); Kharbujadoṣa Putzakova (Tel.); Melon (Eng.) Musk Melon, Sweet Melon (Common.)

**Description**

Robust prostrate annuals. Leaves 8-15 cm. long, almost equally broad, 5-angular or moderately, 3-7-lobed; lobes obtuse, sub-orbicular; denticulate, base cordate, villose or subhirsute.

Male flowers fasciculate; peduncles slender, 5-30 cm. long; calyx-tube narrow, campanulate, villose 6-8 mm. long; lobes subulate; erect or spreading; corolla ca 2 cm.

the East side, extending north to the southern Rajasthan, lower Bengal and Sunderban.

## KADARA ( कदर )

मधुमेहे

कदरक्रमुककषायम्।

*Suśruta Saṃhitā, Cikitsā. 11-9*

मधुमेहेंकदरखदिरपुरकषायम्।

*Aṣṭāṅga Saṅgraha, Cikitsā. 14.-8*

कदरखदिर पूगक्षाथं क्षौद्राह्वये पिबेत्।

*Vṛndamādhava, 35-13.*

## KHARBŪJAM

### Botanical name

Cucumis melo L.

Syn. Cucumis melo var. culta Kurz.

**Family :** Cucurbitaceae

**Classical name :** Karbūjam

**Sanskrit names**

Kharbūjam, Daśāṅgula, Madhuphalā, Vṛttakarkatī, Vṛttairvāru, Śodarekhā.

**Regional names:**

Kharbuja (Hindi)); Kharbuja (Punj., Guj., Mar.); Kharmuj (Beng.); Mulampaz-ham (Tam.); Kharbjadoṣa Putzakova (Tel.); Melon (Eng.) Musk Melon, Sweet Melon (Common.)

**Description**

Robust prostrate annuals. Leaves 8-15 cm. long, almost equally broad, 5-angular or moderately, 3-7-lobed; lobes obtuse, sub-orbicular; denticulate, base cordate, villose or subhirsute.

Male flowers fasciculate; peduncles slender, 5-30 cm. long; calyx-tube narrow, campanulate, villose 6-8 mm. long; lobes subulate; erect or spreading; corolla ca 2 cm.

long 5 lobes ovate-oblong, acute; staminal filaments very short; anthers 3-4 mm. Female flowers peduncles 1-2 cm. long; Ovary softly hairy, style 1-2 mm. long, stigma connivent, ca 2 mm. long.

Fruits polymorphous; seeds oblong, 10-12 × 5-6 mm., white, obtuse at apex, base subacute.

### **Flowering and fruiting time**

Plant flowers in May-July and it becomes in fruiting in July-October. Seeds are sown usually from January to March and the fruits are ready for harvest within 3-4 months (July).

### **Distribution**

It is commonly cultivated for edible fruits. Plant is extensively cultivated in warmer regions for its delisicous fruits valued as dessert.

### **Kinds and varieties**

Another plant *Cucumis melo* var. *arestis* Naud. syn. *Cucumis pubescens* Willd. is a variety. Plants are slender wild annuals with smaller leaves and oblong or turbinate fruits which are much smaller as compared to var. *melo* and fruits are inedible.

Numerous varieties, and races are known differing in the size and shape of fruits, types thickness, colour, markings on the rind, taste, flavour and colour of the inner flesh and cultural behaviour.

### **Pharmacodynamics**

Rasa	: Madhura (anurasa: amla, saksāra)
Guṇa	: Snigdha, Śīta
Viryā	: Śīta
Vipāka	: Madhura
Dosakarma	: Vātapittaśāmaka

### **Chemical composition**

Analysis of the fruit gives following data: protein 0.6, carbohydrates 5.4, fat 0.2, crude fibre 0.5, ash 0.6, calcium 0.16 and phosphorous 0.015%, iron 3.9 mg per Kg.; copper 0.6 mg. per kg.; (pro) vitamin A 2400 IU, vitamin B<sub>1</sub>, 57 ug., B<sub>2</sub> 75 ug., and vitamin C 25 mg./ per 100g.

### Properties and action

<b>Karma</b>	: Vṛṣya Tarpaṇa-santarpaṇa Puṣṭidā Dāhapraśamana Śramahara Mūtrala-mūtraśuddhikara Raktapittapraśamana Balya
<b>Roga</b>	: Mutrakṛchra Unmāda Dāha Śrama Santāpa Raktapitta Śukradourbalya Klaibya Dourbalya.

### Therapeutic uses

Kharbūja is a tasty edible fruit. Fruit and seeds have medicinal properties. Seeds are effective diuretic and used in urinary troubles. Kharbūja is used to allay burning sensation, heat effects, biliary affections, debility, seminal complaints and raktapitta. It is a tonic.

The seeds are large in some varieties and seeds of sweet melon (kharbūja) contain a kernel rich in oil. Seeds are edible which are generally eaten after removing seed-coat, and they are used as a substitute of almond and pistachio.

The seeds are diuretic (mūtrala). The pulp of fruit is also diuretic and beneficial in chronic or acute eczema. Melons are eaten raw as dessert. The flesh constituting 45-80% of the fruit, is soft, often mealy in consistency, with musk-like odour and delicious taste. The fruits can be canned or made into syrup or jam.

**Parts used :** Fruit, seeds.

**Dose :** 3-6 gm. Fruit-pulp edible, 1-3 gm. Seeds-powder.

## KHARBŪJAM ( खर्बुजम् )

दशाङ्गुलं तु खर्बूजं कथ्यन्ते तदगुणा अथ ।  
 स्त्रिग्धं स्वादुतरं शीतं वृष्टं पित्तानिलापहम् ॥  
 तेषु यच्चाम्लमधुरं सक्षारञ्च रसादभवेत् ।  
 रक्तपित्तहरं ततु मूत्रकृच्छ्रहरं परम् ॥

*Bhāvaprakāśa Nighantu, Āmrādiphala Varga, 44.*

### खर्बुज ( त्रपुसविशेषः )

- क. अथ खर्बुजा मधुफला षड्गेदवा वृत्तकर्कटी तिक्ता ।  
 तिक्तफला मधुपाका वृत्तैवरिश्च षण्मुखा नवधा ॥
- ख. तिक्तं बाल्ये तदनु मधुरं किञ्चिदम्लं च पाके  
 निष्पक्तं चेत्तदमृतसमं तर्पणं पुष्टिदायि ।  
 वृष्टं दाहश्रम विशमनं मूत्रशुद्धिं विधत्ते  
 पित्तोन्मादापहरकपदं खर्बुजं वीर्यकारि ॥

*Rāja Nighantu,, Mūlakādi Varga, 200-201.*

## KHARJŪRA

### Botanical name

*Phoenix sylvestre* (L.) Roxb. (Type)

syn. *Elate sylevestris* L. *Phoenix dactylifera* Linn.

**Family :** Arecaceae (Palmae)

**Classical name :** Kharjūra

**Sanskrit names**

Kharjura, Kharjūrī, Skandaphala, Kākakarkaṭī,  
 Svādumastakā, Duraroha, Mṛducchadā.

**Regional names**

Khajura (Hindi); Khejura (Beng.); Khajura (Mar.,  
 Guj.); Rutab (Arab.); Khurma (Pers.); Date (Eng.)

**Description**

Robust trees up to 16 meters high (when not cut for tapping); trunk rough owing to persistent leaf bases of fallen leaves.

Leaves 3-5 meters long; leaflets up to  $45.0 \times 2.5$  cm., spinetipped, 7.5 cm. apart.

Male flowers white, in a compact spadix; peduncle short, flattened. Female flowers in spikes fascicled on peduncle, 60 cm. or more long. Sepals united. Petals twice as long as calyx.

Drupe orange-red, about 2.5 cm. long; stone 2 cm. long, grooved on one side.

### **Flowering and fruiting time**

January to April. Winters to summer season.

### **Distribution**

It is found throughout India. Piṇḍakharjura is native of Egypt, Syriya and Arab. It is also cultivated in Sindha and Punjab.

### **Kinds and varieties**

There are two kinds of drug viz. Kharjūra and Piṇḍakharjūra. The fruit of Piṇḍakharjūra is big and fleshy; leaves are sharply pointed. The source plant is botanically named as *Phoenix dactylifera* Linn. Dried fruit of this plant is known as Gostana Kharjūra (Chhuvara). These three kinds of kharjūra are collectively put in a group and named as 'Kharjura trikāya'. Bhāvaprakāśa Nighaṇṭu also mentions Sulemānī Kharjūra which is a variety of Piṇḍakharjūra. In Rājanighaṇṭu, the kinds of kharjūra are mentioned as follow : Kharjūra, Kharjūrī, Piṇḍakharjūrī, Rāja Kharjūrī, Madhukharjūrī and Bhūkharjūrī. Bhukharpūrī is botanically identified as *Phoenix acaulis* Roxb or *Phoenix humilis* Royle. Hintāla is botanically known as *Phoenix paludosa* Roxb.

### **Chemical composition**

Fruit contains protein 1.2%, carbohydrate 33.8%, fibres 3.7%, minerals 1.7%, calcium 0.22% and phosphorus 0.38%. Nirā contains vitamin B and C. Piṇḍakharjūra contains higher nutritive value. Ripe fruits of Piṇḍakharjūra contains sugar percentage up to 87 percent.

### **Pharmacodynamics**

Rasa : Madhura

Guṇa	: Snigdha, guru
Vīrya	: Śīta
Vipaka	: Madhura
Doṣakarma	: Vātapittaśāmaka.

**Properties and action**

Karma	: Dāhaprasādana Hṛdaya-Raktapittaśāmaka Kaphaniḥsāraka Vṛṣya Mūtrala Jvaraghna Śramahara-balya-brñhaṇa Snehana-anulomana-stambhana Viṣṭambhī <sup>1</sup> Kṛmighna Nāḍibalya-mastiṣkaśāmaka- Vātahara Vedanāsthāpana Madakārī
Roga	: Kāsa-hikkā-śvāsa Chardi Raktapitta Kṣaya-kṣata-uraḥkṣata Granthi Muskhavairasya Hṛdvikāra Balya Jvarātisāra Mada-mūrchā Śukrakṣaya Madyobhūta vikāra dantaśūla Mūtrakṛchra Jvara-dāha Koṣṭhagatavāta Kaṭiśūla-grdhṛasi-vātāvikāra

**Therapeutic uses**

The drug Kharjūra pacifies raktapitta, and it is car-

diotonic and expectorant. It is diuretic, demulcent, nervine tonic, aphrodisiac, general tonic, carminative and anthelmintic.

Fruits and some other parts are useful and there are important products of Kharjūra which have different kinds of uses in medicine as well as food or drinks carrying wide ranging utility. They have commercial value also.

Fruits and other parts or produces have medicinal properties. Fruits are used in various forms and modes in cough, hiccup, asthma, spermatorrhoea, dysuria, fever, burning sensation, thirst, faints, alcoholism, sciatica, back-ache, vomiting and diarrhoea. Root, leaves and other produces are also useful in medicine.

#### Parts used

Fruit, juice, leaves, Nira (fresh unfermented sap), Guda (palm Jaggery or gur, Vinegar (fermented sap), Toddy.

**Dose :** 10-20 gm., Depending on requirement.

## KHARJŪRA ( खर्जूर )

- क. भूमिखर्जूरीका स्याद्वी दुरारोहः मृदुच्छदा ।  
तथा स्कन्धफला काककर्कटी स्वादुमस्तकः ॥
  - ख. पिण्डखर्जूरिका त्वन्या सा देहे पश्चिमे भवेत् ।
  - ग. खर्जूरी गोस्तनाकारा परद्वीपादिहागता ॥  
जायते पश्चिमे देशे सा छोहारीति कीर्त्यते ।
- Bhāprakāśa Nighaṇṭu, Āmraphalādi Varga, 115-117*

### खर्जूरी त्रितयम्

(क्षुद्रखर्जूरी-पिण्डखर्जूरी-छोहारा च) तासां गुणांश्च-

खर्जूरी त्रितयं शीतं मधुरं रसपाकयोः ॥  
स्निग्धं रुचिकरं हृद्यं क्षतक्षयहरं गुरु ।  
तर्पणं रक्तपित्तहरं पुष्टि विष्टम्भ शुक्रदम् ॥  
कोष्ठमारुतहृद् बल्य वान्ति वातकफापहम् ।  
ज्वरातिसार क्षुतृष्णाकासश्वासनिवारकम् ॥

मदमूच्छमिरुचित्पित्तमद्योदभूतगदान्तकृत् ।

महातीभ्यां गुणैरल्पास्वल्पखर्जूरिका स्मृता ॥

*Bhāvaprakāśa Nighantu, Āmraphalādi Varga, 117-120.*

### खर्जूरीतरुतोयम्

खर्जूरीतरुतोयं तु मदपित्तकरं भवेत् ।

वातश्लेष्महरं रुच्यं दीपनं बलशुक्रकृत् ॥

*Bhāvaprakāśa Nighantu, Āmraphalādi Varga, 121.*

### पिण्डखर्जूरीभेदः (सुलेमानी खर्जूरी)

सुलेमानी तु मृदुला दलहीनफला च सा ।

सुलेमानी श्रमध्रान्ति दाहमूच्छिस्थिपित्तहत् ॥

*Bhāvaprakāśa Nighantu, Āmraphalādi Varga, 122.*

### खर्जूर

क. सिंही श्रेमी खरस्कंधा निःश्रेणी दृढ़कण्टका ।

कषाया मधुरा स्वाद्वी दुरारोहा ग्रहापरा ॥

ख. भूमिखर्जूरिका काककर्कटी काकपर्कटी ।

खर्जूरिका स्वादुफला सुफला स्वादुमस्तका ॥

### पिण्डखर्जूरिका

ग. पिण्डखर्जूरिका खर्जुःदुःप्रवर्षा सुकण्टका ।

### खर्जूर गुणाः

घ. खर्जूरं तुवरं शीतं मधुरं रसपाकयोः ॥

स्त्रिधं रुचिकरं हृद्यं क्षतक्षयहरं गुरु ।

तर्पणं रक्तपित्तन्नं तुष्टिपुष्टिद शुक्रलम् ॥

कोष्ठमारुतकृत् वन्यं दाहवातकफापहम् ।

ज्वराभिघातक्षुतृष्णा कासश्वासस्त्रियाच्छति ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 294-298.*

### खर्जूर मस्तकमज्जा

मज्जा तु मूर्धजः स्वादुर्वृष्ट्यो रक्तकफापहः ।

### खर्जूरवृक्षतोयम्

खर्जूरिकातोयं मदपित्तकरं परम् ॥

वातश्लेष्महरं रुच्यं दीपनं बलशुक्रकृत् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 297-298.*

### क. खर्जूरी

खर्जूरी तु खरस्कन्धा दुष्प्रवर्षा दुरारुहा ।  
 निःश्रेणी च कषाया च यवनेष्टा हरिप्रिया ॥  
 खर्जूरी तु कषाया च पक्वा गौल्यकषायका ।  
 पित्तघी कफदा चैव क्रिमिकृद्वयवृंहणी ॥

*Rāja Nighantu, Āmrādi Varga, 55-56.*

### ख. मधुखर्जूरी

मधुखर्जूरी त्वन्या मधुकर्कटिका च कोलकर्कटिका ।  
 कण्टकिनी मधुफलिका माध्वी मधुरा च मधूरखर्जूरी ॥  
 मधुखर्जूरी मधुरा वृष्या सन्तापपित्तशान्तिकरी ।  
 शिशिरा च जन्तुकरी बहुवीर्य विवर्द्धनं तनुते ॥

*Rāja Nighantu, Āmrādi Varga, 57-58.*

### ग. भूखर्जूरी

भूखर्जूरी भुक्ता वसुधाखर्जूरिका च भूमिखर्जूरी ।  
 भूखर्जूरी मधुरा शिशिरा च विदाह पित्तहरा ॥

*Rāja Nithantu, Āmrādi Varga, 59.*

### घ. पिण्डखर्जूरी

दीप्या च पिण्डखर्जूरी स्थलपिण्डा मधुस्रवा ।  
 फलपुष्पा स्वादुपिण्डा हयभक्ष्या स्वराभिधा ॥

*Rāja Nighantu, Āmrādi Varga, 60.*

### ङ. राजखर्जूरी

तथाऽन्या राजखर्जूरी राजपिण्डा नृपप्रिया ।  
 सुनिखर्जूरिका वन्या राजेष्टा रिपुसन्मिता ॥  
 पिण्डखर्जूरिका युग्मं गौल्यं स्वादे हिमं गुरु  
 पित्तदाहार्तिश्वासग्रं श्रम हृदीर्यवृद्धिदम् ॥

*Rāja Nighantu, Āmrādi Varga, 61-62.*

## KHATMĪ

**Botanical name :** Althaea officinalis Linn.

**Family :** Malvaceae

**Classical name :** Khatmī

**Sanskrit names**

Khatmī, Picchilamūlā, Khatmī, Supuṣpā.

**Regional names**

Khatmi Khatami (Hindi); Gulkhairu (flowers); Tukhma Khatmi (fruits), Rasha Khatmi (roots); Khatmi (Pers.); Kasirul munpheat (Arabic); Sajposh (Kash.); Marsh mallow (Eng.).

**Description**

*Althaea officinalis* Linn., belonging to a small genus of herbs (comprising about 15 species), distributed in the temperate regions, of which two are native to India.

***Althaea officinalis* Linn.**

It is a perennial herb, with ornamental flowers, occurring in Kashmir as wild plant and in Punjab; and cultivated in various parts of country. *Althaea rosea* Linn. is the common Holly-hock, often planted in Indian gardens as an ornamental plant frequently cultivated for beautiful flowers in kitchen gardens. It is often met with as an escape. Flowers are showy.

***Althaea rosea* Linn.**

Flowers solitary in the axils or upper leaves; white, red, pink, yellow or rosy, 5-12 cm. across; pedicels 0.5-1.5 cm. long; epicalyx bracteoles, 6-8; calyx stellately pubescent; corolla often double. Flowering in March-June.

**Pharmacodynamics**

Rasa	: Madhura
Guṇa	: Snigdha, picchila, guru
Virya	: Sita
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka Kaphaniḥsāraka

**Properties and action**

Karma	: Snehana-anulomana Śleṣmahara Mūtrajanana Sothahara-vedanāsthāpana
Roga	: Antraśotha-antrāvarodha

Pravāhikā  
 Pratiśyāya-Kāsa (Vātapaittika)  
 Mūtrakṛcchra-mūtradāha  
 Vraṇaśotha-stanaśotha  
 Pārśvasūla-phuphusaśotha  
 Kanṭhaśotha.

### **Chemical Compostion**

Roots of *Althaea officinalis* Linn contain mucilage 35%, and starch 37%. The seeds of *Althaea rosea* Cav. (Holly-Hock) contain 11.1% of a drying oil.

Roots (*A. officinalis*) contains mucilage, starch, pectin, sugar, fixed oil and Khatmine or Althein, a crystalline form sustance, 1%-2% which is similar to Asparagin (isolated from *Asparagus* sps.) flowers (*Althaea rosea*) yield a red dye (anthocyanins) which may be used as an indicator in acidimetry and alkalimetry.

### **Therapeutic uses**

The roots of plant drug (khatmi) are suitable for uses as medicine. Roots are quite mucilaginous and roots, need to be utilised after peeling off their outer bark (mūlatvak). Root is pleasantly odorous, light and slightly sweet or sweetish in taste. Roots give ash (4.5%) on burning.

The seeds of plant drug (Tukhme Khatmi or Habbul Khatmi), flat and black (seeds actually carpels or fruits of plant) are used medicinally. Seeds and leaves are externally applied to inflammation, localised oedema or swelling, boil, painful organs (lesions) and as emollient medicine.

Decoction or infusion of seeds and flowers is given in cough and respiratory diseases as it effects as demulcent medicine in respiratory tract. Seeds are also mucilaginous and given in diarrhoea (Pittaja atisāra), dysentery, urinary burning sensation (mūtradāha) and intestinal inflammation (āntraśotha). Roots are mainly antiphlogistic and anti-cough; and in coryza and dry cough the decoction of root,seeds and flowers is given. Topical effect is also analgesic of drug besides other medicinal properties.

It is an emollient and is used in making absorbent pills and pastilles. Leaves are useful in preparation of a soothing ointment.

The roots are available in market as 'Resha Khatmi' and used as drug in medicine, flowers as commonly known 'Gulkheru' and seeds as 'Tukhma Khatmi', besides other parts like stem, leaves, gum (Kāñda, patra, niryāsa) are used for medicinal purposes.

The flowers of *Althaea officinalis* Linn. are useful, in the form of infusion in bronchial catarrh, cough and bronchitis. Flowers are externally applied over burns. Roots, seeds, leaves, stem and gum are medicinally useful besides flowers.

The flowers of *Althaea rosea* Linn. are cooling and diuretic; they are useful in rheumatism, decoction used as demulcent in affections of respiratory organs.

**Parts used :** Flowers, seeds, roots, leaves, stem, gum.

**Dose :** 3-6 gm. or 5-7 gm.

## KHUBBĪJA - KHUBBAJI

**Botanical name :** *Malva sylvestris* Linn.

**Family :** Malvaceae

**Common name :** Khubbāji

**Sanskrit name :** Khubbīja

**Regional names**

Kunjhi, Khubaji, Kunzi (Hi.); Khabaji (Sindh), Nane kulang-Kagarotika (Pers.), Pijak (Pers.); The Common Mallow (Eng.). Papara, Papra, Changer, Changal (Hindi) plant.

### Description

An erect glabrous annual, 8-5 ft. high.

Leaves cordate, rounded, with 5-7 obtuse lobes; petioles as long as the leaves; stipules ovate oval acute. Peduncles several, axillary, much shorter than the petioles.

Flowers 1-1.5 in. diam., pale rose streaked with purple. Petals notched; claw bearded.

Carpels wrinkled on the back, glabrous.

### **Flowering and fruiting time**

Plant flowers in cold season and fruiting stage begins afterwards.

### **Distribution**

Plant occurs in Bengal and Southern India. It also occurs in Punjab and on the western Himalaya, extending westward to Europe and North Africa (also to Siberia). It is found in Uttar Pradesh. Frequently grown in the gardens and used as pot herb.

### **Chemical composition**

The analysis of the leaves gave the following values: moisture 92.0, nitrogen 0.33 and ash 1.7 percent; and calcium 221, phosphorous 36, iron 9.7, carotene 4.8, thiamine 0.10, rivoflavin 0.24 and niacin 0.44 mg / 100 g.

The plant is good source of carotene and calcium, ascorbic acid is present in appreciable amounts. Plant has rich content of mucilage. The colouring matter of the flowers is a diglucoside, malvin.

### **Pharmacodynamics**

Rasa	: Madhura, tikta
Guṇa	: Snigdha, picchila
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphahara-Tridoṣaśāmaka.

### **Properties and action**

Karma	: Chhedana-śleśmahara Kāsaghna-śvāsaḥara-Kaṇṭhya-svarya Doṣapācana-doṣavilomakara Snehana-picchila Mūtrajanana Pittapācana
Roga	: Kāsa-śvāsa-svarabhaṅga- kaṇṭhavikāra Mūtrakṛcchra-mūtraghāṭa Āntravikṛti (āntrarouksya)

### **Therapeutic uses**

The leaves are eaten as a vegetable. Young carpels

and seeds are also eaten. All parts of plant drug are richly mucilaginous.

The herb possesses demulcent, cooling, antiseptic and emollient properties. It is used in pulmonary and urinary affections and externally also on abscess and inflammations. It is given in cough.

The flowers and immature fruit, are used for whooping cough. Fruits flowers and leaves are official in some pharmacopoeias (French and Swiss). Plant has emollient properties.

An extract of the leaves stimulates the smooth muscles of isolated uterus and intestines. Active principle is present in the leaves to the extent of 0.018 percent. Flowers are used for colouring wine red.

#### **Parts used**

Fruit Khubbaji, as known (Bija) or seeds in practice).

**Dose :** 5-7 gm.

## **KIRĀTATIKTA**

#### **Botanical name**

*Swertia chirayita* (Roxb. ex Flem.) Kurst. *Swertia chirata* Buch.-Ham.

**Family :** Gentianaceae

#### **Classical name**

Kirātatikta, Anāryatikta, Bhunimba, Kirāta.

#### **Regional names**

Chirayatā, Chiraita, Chireta (Hindi); chireta (Beng.); Kirait (Mar.); Kariyatu (Guj.) Nilavembu (Guj.); Nilavebu (Kann.), Nilaveppa (Mal.); Kasabuljarira (Arab.) Nainihabandi (Pers.); Chiretta, Chirayata (Eng.).

#### **Description**

An erect herbaceous robust herb; stems 1-1.5 m. branching, terete except near the top; annual plants 60-90 cm. tall (2-3 ft.).

Leaves broadly lanceolate, 10 × 3.75 cm. acute.

Flowers in paniculate or corymbose cymes; calyx and corolla 4-lobed; corolla greenish-yellow tinged with purple, two glands on each lobe; green, fringed with long hairs; ovary 1-celled; style short; stigma 2-lobed.

Capsule sessile, oblong, 5/8 cm. diam; seeds many minute, smooth.

### **Flowering and fruiting time**

Plant is flowering and fruiting in September-November or autumn season.

### **Distribution**

Plant occurs in eastern temperate Himalayas at 1500-3000 meters altitude. It is found in Uttar Pradesh, Himachal Pradesh and Kashmir in the region above 4,000-5,000 ft. Plants grow wild in the Himalayan regions between 1208-3046 meters (4000 - 10,000 ft.) elevations from Kashmir to Bhutan and it is found in nature in Khasi hills at 1204-1525 metres (4,000-5000 ft) in north eastern Himalayan region. Some other species of Swertia are found frequently than *Swertia chirata* Buch-Ham.

### **Kind and varieties**

There are some other species of the genus *Swertia* which have occurrence in the same areas (and also in other localities even lower elevations), where *Swertia Chirata* Buch-Ham. grows in nature (only at suitable altitudinal ranges). Certain species resemble in appearance but they quite differ in taste (bitterness even few species are not bitter rather such species have no bitterness in taste). For the instance, *Swertia angustifolia* Buch Ham. is also known as Mitha Chirayata. *Swertia alata* Royle is never bitter. Such species are adulterants and substitute plants which do not, actually replace genuine and bitter *Swertia* sp. possessing actual medicinal properties of Kiratatika, though some other species are also medicinal.

### **Chemical composition**

Plant contains chiratin and ophelic acid, two bitter principles; and chiratin is chief bitter active constituent which are very bitter and amorphous glucoside. Ophelic

acid is yellowish brown (like syrup) which is soluble in water and alcohol. Another neutral principle, oleic acid, palmitic acid, stearic acid and phytosterol in more or less extents are also isolated from plant.

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Viṛya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaśāmaka Vātapittasāmaka

### **Properties and action**

Karma	: Jvaraghna Kaṭupouṣṭika Dāhapraśamana Raktaśodhana Kaṇḍūghna-Kuṣṭhaghna Svedajanana Stanyaśodhana Kaphoghna-śvāsaḥara Hṛdya Śothaha Trṣṇānigrahanā Dīpana-Pācana-āmapācana Pittasāraka Anulomana Kṛmighna Vraṇaropaṇa-śodhana
Roga	: Jvara-Jīrṇajvara-viṣamajvara Kuṣṭha-kaṇḍū-carmavikāra-raktaduṣṭi Kāmala-yakṛdvikāra-pāṇḍu Agnimāndya-ajīrṇa-vibandha Trṣṇā-dāha Kṛmi Kāsa-śvāsa Hṛddourbalya-raktavikāra Vraṇa Atisāra-grahaṇī

Upadarīśā  
Visarpa-visphoṭa  
Stanyaduṣṭi.

### **Therapeutic uses**

The drug Kirātātikta is bitter, biliary, tonic, blood purifier carminative vermifuge, stomachic, tonic, expectorant, febrifuge and laxative. It is used in anorexia, biliary disorders, cough, constipation, fevers, skin affections, wounds and worms. It is useful in periodic febrile conditions.

The whole plant (pancāṅga) of drug plant is used in the form of powder, decoction and as an ingredient of various formulation; and the drug is chiefly given as potent remedy against malarial fever, periodic fevers, blood impurities, liver and spleenic complaints. It is taken in debility after fever, burning sensation, lactation problems, oedema, heart weakness, excess thirst and skin diseases.

**Parts used :** Whole plant.

### **Dose**

Powder 1-3 gms., Decoction 25-50 ml.

### **Formulation**

Sudarśana cūrṇa, Kirātādi kvāṭha

### **Guṇa**

Tiktakandha, Stanyaśodhana, Trṣṇānigrahaṇa (Caraka Saṃhitā), Aragvadhādi (Suśruta Saṃhitā).

## **KIRĀTATIKTA ( किराततिक्त )**

भूनिष्वः शीतलो रुक्षो रसे तिक्तो लघुः सरः ॥

शीतलः कफपित्तास्त्रकुष्मेहापहो हरेत् ।

श्वासकासतृषादाहारुचिशोफ ज्वरकृमीन् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 890-891.*

किरातः सारको रुक्षः शीतलस्तिक्तको लघुः ।

सत्रिपातज्वर श्वासकफपित्तास्त्रदाहनुत् ।

कासशोथतृषाकुष्मज्वरब्रणकृमि प्रणुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Haritakyādi Varga, 155*

भूनिम्बो वातलस्तिक्तः कफ पित्तज्वरापहः ।  
ब्रणसंरोपणोः पथ्यः कुष्ठकण्डूतिशोफनुत् ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 16*

उपदंश चिकित्सायां भूनिम्बादि क्वाथः

*Bhāvaprakāśa, Madhyakhaṇḍa, 51-39.*  
*Cakradatta, 47-18.*

शोथे भूनिम्बादि क्वाथः

भूनिम्ब विश्वकल्कं जाध्वा पेयः पुनर्नवाक्वाथः ।  
अपहरति नियतमाशु शोथं सर्वाङ्गनां नृणाम् ॥

*Vṛdamādhava, 39-17. Cakradatta, Śotha Cikitsā, 39-21.*

विस्फोटके विसर्प रोगे भूनिम्बादि कषायः

*Cakradatta, Visarpa-visphota cikitsā, 53-24.*  
*Gadunigraha, 2-40-16.*

छर्द्याम्

पीतो भूनिम्बकल्कश्च शर्करासमभागतः ।  
द्विदि हरेच्च हृत्कलेशं मधुना वा समन्वितः ॥

*Hārīta Saṃhitā, 3-51-6.*

ज्वरे

ननु रामसेनफाण्टः प्रविरलधान्याकदलधान्यः ।  
किं कुरुते वैद्यपते ! ज्वरं इटिति जर्जरीकुरुते ॥

*Siddha Bhaisajya Maṇimālā, 4-32.*  
*Caraka Saṃhitā, Cikitsā, 15-132/133.*

ग्रहणी रोगे

भूनिम्बाद्यं चूर्णम्  
किराताद्य चूर्णम्

*Caraka Saṃhitā Cikitsa, 15-137/140.*

रक्तपित्ते

किराततिकं क्रमुकं समुस्तं..... ।  
पृथक् पृथक् चन्दनयोजितानि तनैव कल्पेन हितानि तत्र ॥

*Caraka Saṃhitā, Cikitsā, 4-74/76.*

स्तन्यशोधने

पाययेताथवा स्तन्यशुद्धये रोहिणी शृतम् ।

अमृतासपर्णं त्वक् क्षाथे चैव सनागरम् ॥  
 किरातिक्कक्षाथं श्लोकपादेरितान् पिबेत् ।  
 त्रीनेतान् स्तन्यशुद्ध्यर्थमिति सामान्यभेषजम् ॥

*Caraka Samhitā, Cikitsā. 30-261/262.*

### शोथे

हन्यात् त्रिदोषंचिरजञ्च शोथं कल्कश्च भूनिष्वमहौषधस्य ।

*Caraka Samhitā, Cikitsā. 12-42.*

भूनिष्वविश्वकल्कं जगध्वा पेयः पुनर्नवाक्षाथः ।

अपहरति नियतमाशु श्वयथु सर्वाङ्गं नृणाम् ॥

*Vṛndamādhara, 39-17.*

# KīTAMĀRĪ

**Botanical name :** Aristolochia bracteata Retz.

**Family :** Aristolochiaceae

**Classical name :** Kītāmārī

**Sanskrit names :** Kītāmārī, Dhūmrāpatrā

**Regional names**

Kitamar (Hindi); Patuvang (Beng.); Kidamari (Mar., Guj.); Paniri (U.); Adu-tinn palai (Tam., Mal.); Gadidagalappa (Tel.); Adumuttadgida (Kann.); Bracteated Birthwort (Eng.)

### Description

Slender perennial herb. A glabrous, prostrate herb. Leaves  $4-6 \times 3.5-4.5$  cm., glaucous, reniform or broad ovate, deep, cordate; basal lobes rounded. Flowers  $50 \times 5$  mm., dark purple, solitary, tubular, with trumpet-shaped mouth. Capsules oblong ellipsoid, ribbed, 2.5-1.5 cm.

### Flowering and fruiting

Greater part of the year.

### Kinds and varieties

Aristolochia bracteata Retz. is occurring in wild state, while Aristolochia elegans Mast is a climbing shrub. Plants are cultivated form and they are grown as an orna-

mental climber along the trellises, forming a dense screen with its foliage. Former species is wild and latter ones is planted which is climbing glabrous shrub; flowering during October December period.

### Distribution

It is found in the Upper Gangetic plain, Bengal and the western peninsula, and in the north-west up to Bundelkhand in Uttar Pradesh. Plant grows abundantly on the black and of Deccan and Gujrat. Herb is also found in Delhi but rare occurrence (wild state).

### Chemical composition

It contains a volatile oil having unpleasant odour, an alkaloid and salt specially potassium chloride and nitrate. Its bitter component is aristolochic acid.

### Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa, tīksṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka.

### Properties and action

Karma	: Kṛmighna Recana Śothahara Garbhāśayottejaka Svedajanana Viṣamajvarapratibandhaka Viṣaghna, Kaṇḍughna
Roga	: Kṛmiroga Vibandha Śotha Rajorodha-Kaṣṭārtava Tvagdoṣa-vicarcikā Viṣamajvara.

### Therapeutic uses

The leaves of plant drug are ground and their paste is applied to skin diseases particularly it is considered good

in cases of eczema. In chronic ulcers, the juice of leaves is applied.

The decoction of roots is orally given in worm affection for expelling the worms; it has purgative action also.

The plant is useful in oedema, malarial fever, skin diseases and menstrual troubles particularly dysmenorrhoea. The plant is exceedingly bitter and is reputed to possess cathartic and anthelmintic properties. Expressed juice of the leaves is said to destroy maggots when applied to foul and neglected ulcers. The bruised leaves mixed with castor oil, are applied externally in obstinate cases of eczema on children's legs, and a decoction of the roots was found to be generally efficacious in expelling round - worms.

It is extremely bitter plant and known as an anthelmintic indigenous drug (Kiramar) among rural and tribal folks.

**Parts used :** Leaves, roots.

**Dosha**

Powder 1-3 gm., Decoction 50-100 ml., Juice 5-10 ml.

## A. KITAMĀRĪ YAVĀNĪ CHUHĀRA

**Botanical name :** Artemisia maritima Linn.

**Family :** Asteraceae (Compositae)

**Classical name :** Kitamārī yavānī-Cauhāra.

**Sanskrit names:** Kītāmārī yavānī, Cauhāra.

**Regional names:**

Kiramala (Hindi), Kirmani ajwain, Kirmani ajunwua (Mar.); Tarkh (Pashtu): Chhuvaro, Kiramani ajami (Guj.); Karmarhi (ni) ajm, Chhuharo (north-western (U.P.); Dirmana (Pers.) Shih (arbik), worm-seed, Santonica (Eng.)

**Description**

A shrubby aromatic species, about 3.5 feet or up to 4 feet high (about one meter or more) with a woody root

stock, erect or ascending and much branched from the base. It is an exceedingly variable plant with erect or drooping flowers-heads and leaves are 1.25 - 5 cm. long, mostly whitish, 2-pinnatisect, on liner, branches and stem, upper leaves entire or non-lobed, liner. Flowers of herb are in small heads (1/4 cm. long) from leaves axills or axillary, ovoid and 3-4 fls. in each head.

### **Flowering and fruiting time**

Rainy season to autumn and onwards.

### **Distribution**

Plant occurs in the western Himalayas from Kashmir to Kumaon, at 7,000-9,000 ft. elevation. It is widely distributed all over the northern hemisphere of the world. Plant is commonly growing in various areas of north-western India, such as Kashmir, Kurram, Kagan, Bushaher, Waziristam and other regions. Plants are generally found in the Himilayan region up to elevation of 2,125-3,329 meters (7000-11000 ft.). *Artemisa maritima* Linn. is the only santonin-bearing species occurring in India. This species is common in several areas of north western India, such as Kashmir, Kurram, Kagan, Bushaher, Wazirstan etc., but the plants growing only in certain areas of Kashmir and Kurram have been found to contain santonin. In these areas santonin-free plants are also found alongwith santonin source plants species.

### **Chemical composition**

The plant *Artemisa maritima* Linn. is source of santonin. Normally (and for profitable utilisation) the herb should contain not less than 1.2% of santonin, but Indian artemisia is generally poorer in santonin then Russian *Artemisia sina* (from Turkistan) which is reported to contain 2.3-3.6%. The santonin content of artemisia from Kashmir has been reported to vary from 1-2 percent and that of artemisia from the Kurram valley from 1-1.6 percent.

All the varieties of *Artemisia maritima* Linn. contain essential oils which vary both in quantity (2-3%) and in composition. The commerical oil, a by-product of santonin

factories, is a thick yellow oil (sp. gr. 0.915-0.940). The essential oil from Turkestan variety has been found to contain cineole 27.8 and thujone 7-8% as per investigation reports.

### Pharmacodynamics

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

### Properties and action

Karma	: Kṛmighna Dīpana-vātānulomana-sara Yakṛaduttejaka Śvāsahara-Kaphaniḥsāraka Vedanāsthāpana-śothahara Vraṇaropāṇa-romasanjanana Mūtrala-mūtraranjana Vājikara-ārtavajananā Śītapraśamana-Jvaraghna Lekhana.
Roga	: Kṛmiroga Agnimāndya-ādhmāna Udararoga Śvāsa Mūtrakṛchra Kāmaśaitya Rajorodha Śītajvara Medoroga.

### Therapeutic uses

The whole plant specially immatured or undeveloped flower-heads (3-6 gm.) and extract known as santonin (60-100 mg.) are used for medicinal purposes in therapeusis. It is an anthelmintic drug used in worms affections specially intestinal worms (*gaṇḍūpada-kṛmi*). It is given particulary in *ascaris lumbricoides* infestation, and also in other worms (*sūtrakṛmi*).

**Parts used :** Whole plant, Extract (Santonin).

**Dose**

Powder (Whole plant) 1-3 gm., Santonin (extract) 60-100 mg., (62.5 mg.- 107.5 mg.).

## KĪTAMĀRĪ YAVĀNĪ-CAUHĀRA ( कीटमारी यवानी-चौहार )

यवानिका यवानी स्याच्छौहारो जन्तुनाशनः ।

चौहास्तदगुणः प्रोक्तो, विशेषात् कुमिनाशनः ॥

*Rāja Nighaṇṭu.*

## B. KĪTAMĀRĪ YAVĀNĪ TIKTAPATRĀ-AFASANTIN

**Botanical name :** Artemisia absinthium Linn.

**Family :** Asteraceae (Compositae)

**Classical name :** Kitmāri yavāni-Tikta patrā, Afasantin.

**Sanskrit name**

Kītamāri yavāni, Tikta patrā, Karpūṣagandhā, Kṛmikāṣṭhā.

**Regional names**

Afasantin (Hindi); Titapati (Kumaon); Titvan, Titvin (Ka.); Afasantin (Arb.); Marwa (Pers.); Worm wood (Eng.), Vilayati Afsantin (Decc. Hind.); Dioman (s.) Mastiyara, (Punj.); March, Shumbakusha (Pers.); Absinthium (Yunan); Mgu-wort, wormwood, The absintha (Eng.).

**Description**

An aromatic and bitter herb; very odorous (intense unpleasantly aromatic), whole plant very bitter, perennial herbaceous. Stem 30 cm.-90 cm. high (1-3 feet tall), angular and ribbed, much branching.

Leaves 2.5 - 5 cm. (1-2 inches) long, 2-3-pinnatifidly

cut, segments linear, spreading. Whole plant silky, white, minutely hairy.

Flowers small (minute), yellowish or pale-white, in spikes on branch ends.

Receptacles with long and straight hairs, with small fruits; seeds minute, many.

### **Flowering and fruiting time**

Rainy season to autumn season, and onwards.

### **Distribution**

Plant is found in Kashmir at 5,000-7000 ft. elevation. It is distributed over northern Asia, Afghanistan, and extends westward to the Atlantic. It is naturalised in eastern Canada and the plant is cultivated in the United States. Plant occurs in Kashmir region at 5,000-7000 ft. altitude in India in wild state.

### **Chemical composition**

The essential oil of *Artemisia absinthium* Linn. (about 0.3%) used to be a constituent of 'absinthe,' but its addition is now prohibited. The commercial oil (sp. gr./25°; 0.917-0.942) is produced in America and its chief constituents are thujone and thujyl alcohol. Plant contains a bitter glucoside, absinthin, a crystalline compound (m.p. 165°).

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka.

### **Properties and action**

Karma	: Krmighna Dīpana-yakṛaduttejaka Hṛdayottejyaka Mūtrala Ārtavajanana Jvaraghna
Roga	: Kṛmiroga-gaṇḍūpāda-tantukrimi Agnimāndya-Udararoga

Yakṛdvikāra  
 Hṛddourbalya  
 Mūtrakṛcchra  
 Kaṣṭārtava-rajoradha  
 Jīrnajvara-niyatakālīka Jvara  
 Sandhiśotha  
 Yakṛtplihaśotha  
 Karṇaśūla  
 Sothavedana Vikāra  
 Vātaroga.

### **Therapeutic uses**

The drug is bitter (in taste) and hot (in potency). It is irritant or sharp (tikṣṇa guṇa), light (laghu) and rough or dry (rūkṣa) in properties (guṇa). Drug allays kapha and vāta doṣa.

It is stomachic, febrifuge, anthelmintic, cardiac stimulant, diuretic, anti-inflammatory, analgesic, liver stimulant, emmanagogue and brain tonic. The drug is used in liver and splenic enlargement and other disorders, ascites and chronic fever. It is given to counter periodic febrile conditions. In loss of appetite (for increasing digestive fire in case of mandāgni) and infestation of round worms, the drug is orally taken. The drug is internally recommended in treatment of vātā roga, śirahśūla, epilepsy, paralytic conditions, (paralysis, periplegia, hemiplegia), brain abnormalities, nervous disorders and amenorrhoea.

The volatile oil obtained from plant drug, known as Absinthe or wormseed oil causes the sings and symptoms of a violent narcotic poison if it is orally given in excess. It is a pharmacopoeial drug (I.P.). Afsantine (mug-wort) is important drug used in Unāni medicine where some formulations are in vogue such as Ark afsantin, Sherbat afsantin, Hubb absantin etc.

The dried leaves and the flowering tops of the plant are used medicinally. The tincture (B.P.C.) is used in medicinal purposes and specifically it is given as a tonic and digestive medicine.

### **Parts used**

Leaves, flowers, whole plant, tender floral branches.

Fresh (green) and dried whole plant (esp. leaves and floral branches).

**Dose :** Powder 1-3 gm., 2-4 gm.

## KOKILĀKṢA

### Botanical name

*Hygrophila auriculata* (Schum.) Reine.

Syn. *Astercantha longifolia* Nees.,

*Hygrophila spinosa* T. Anders.

**Family :** Acanthaceae

**Classical name :** Kokilākṣa-Ikṣuraka

### Sanskrit names

Kokilākṣa, Ikṣuraka-Ikṣura, Kākekṣu, Kṣura-Kṣuraka, Bhikṣu, Kaṇḍekṣu, Ikṣugandha, Ikṣubālikā, Tilakanṭaka, Śragāli-Śringala, Vijnrakanṭaka, Śringalghanṭā.

### Regional names

Gokhula, Jal makhana, Tal makhana (Hindi); Kulimakharha, Kanṭakaliya (Beng.); Talimakhana (Mar.); Ekhro (Guj.); Nirmulli (Tam.); Nirugubbi (Tel.).

### Description

A small spiny herb, 3-4 feet high, stem simple or branched, up to 1.5 meters high, hairy on younger parts, more or less hispid with long hairs especially at each node base.

Leaves in spuriou whorls of 6 each, lanceolate, hairy, up to 15 cm. long, subessile, sparsely hispid on both sides with long white hairs, each of the six leaves with a long sharp nearly straight yellow spine in the axil.

Flowers whorls often subtended by sharp stout, yellow thorns bracts involucrate sub-2-seriate, hispidly hairy, up to 4 cm. long. Posterior calyx segment longer. Corolla up to 3 cm. long, purple-blue, widely 2-lipped, tube abruptly swoollen at the top; lower lip with 2 entire crest like longitudinal folds on the palate.

Capsule oblong, glabrous, liner-oblong, pointed. Seeds 4-8 compressed, hygroscopic hairy; seeds brownish,

somewhat to sesame seeds (but smaller) with tasteless and mucilaginous nature.

### **Flowering and fruiting time**

October to May.

### **Distribution**

Plant occurs throughout India and Ceylon. It is commonly found in marshes, moist ridges, drying ponds or ditches, paddy fields, swamps, and other similar localities. It is also found in Sri Lanka, Singapore and extending to South and tropical Africa.

### **Chemical Composition**

Seeds contain 23 percent of a yellow semidrying oil (sap. val. 196, iod. val. 126), linoleic acid 71 percent. They also contain distage, lipase and protease. Seeds develop a large amount of tenacious mucilage. The ash of the seeds is 6.4 percent.

### **Pharmacodynamics**

Rasa	:	Madhura
Guṇa	:	Guru, snigdha, picchila
Vīrya	:	Śīta
Vipāka	:	Madhura
Doṣakarma	:	Vātапittaśāmaka

### **Properties and action**

Karma	:	Śukrajanana Vṛṣya Mūtrala Balya Bṛñhaṇa Nāḍibalya Sothahara Yakṛaduttejaka Anulomana
Roga	:	Śukradourbalya Klaibya Śotha Pittāśmari Kāmala-yakṛadālyudara

Ānāha  
 Nāḍidourbalya  
 Vātarakta  
 Vātavyādhi  
 Mūtrākṛchra  
 Aśmari  
 Bastiśotha  
 Dourbalya Nidrānāśa.

### **Therapeutic uses**

The drug Kokilākṣa or Ikṣuraka is regarded as useful drug mainly a diuretic and tonic medicine. Seeds of the source plant (*Hygrophila spinosa* T. Anders) are frequently used in medicine and they are commonly known as 'Tālmakhānā' in drug market. Among other parts used in medicine, the whole plant, root and alkalies (Kṣāra) are obtained and employed in medicinal preparations prescribed in various ailments mainly urinary diseases, sexual debility, general weakness, nervine complaints (debility) and liver disorders. The drug is used in dropsy, rheumatism, anasarca and diseases of the urino-genital tract. The chemical composition of the seeds, particularly large amount of mucilage and potassium salts content in seeds, is attributed for diuretic properties. Seeds are almost tasteless or slight sweet-bitter and quite macilaginous. Whole plant (pañcāṅga) has its organic waste material maximum of 2 percent; the whole plant is burnt to ash for preparing its alkalies preparation known as Ikṣuraka Kṣāra or Kokilākṣa kṣāra ('Kokilākṣa bhasma' also mentioned in classical texts).

It is used in treatment of certain diseases. Kokilākṣa bhasma (ash) with cow-urine or water and prescribed for oral use in oedema (śotha). The ash and alkalies (bhasma and Kṣāra) of drug plant are considered useful in some other ailing conditions.

### **Parts used**

Roots, seeds, whole plant, alkali (Kṣāra).

### **Dose**

Decoction 50-100 ml., Seeds powder 3-6 gm., Alkali (Kṣāra) 1-3 gm.

**Formulation:** Pouṣṭika cūrṇa, Kokilākṣa Kṣāra.

## KOKILĀKṢA ( कोकिलाक्ष )

कोकिलाक्षस्तु काकेक्षुरिक्षुरः क्षुरकः क्षुरः ।

भिक्षु काण्डेक्षुरप्युक्त इक्षुगन्धेक्षु बालिका ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 224.*

क्षुरकः शीतलो वृष्यः स्वाद्वम्लः पिच्छिलस्तथा ।

तिको वातामशोथाशमतृष्णादृष्ट्यनिलास्त्रजित् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 225.*

### कोकिलाक्ष-इक्षुरकः

क. कोकिलाक्षो भिक्षुरिक्षुबालिका तिलकण्टकः ।

अक्षेक्षुर क्षुरो ध्वांकः क्षुरकश्चैक्षुगन्धिका ॥

### अन्य जातिः

ख. अन्यः करंबशालिः स्याद् बृहत् केशरश्च खगगलः ।

### गुणाः

ग. कोकिलाक्षो हिमस्तिकः स्वाद्वम्लः स्निग्धपिच्छिलः ॥

### कोकिलाक्षपत्रम्

बृंगो वातामवाताशमतृष्णादृष्टिखुडास्त्रजित् ।

घ. इक्षुरस्य दलं स्वादु तिक्तं शोफ विषापहम् ॥

शूल पाण्डूदरानाहवातमूत्र विबन्धनुत् ।

*Kaiyadeva Nighaṇṭu, Oṣdahi Varga, 1010-1093.*

### कोकिलाक्षः

कोकिलाक्षः शृगाली च शृङ्खला रकणस्तथा ।

शृङ्खलालघण्टौ वज्जास्थि-शृङ्खला वज्रकण्टकः ॥

इक्षुरः क्षुरको वज्जः शृङ्खलिका पिकेक्षणः ।

पिच्छिला चेक्षुगन्धा च ज्ञेया भुवन सन्मिता ॥

### कोकिलाक्षः गुणाः

कोकिलाक्षस्तु मधुरः शीतः पित्तातिसारनुत् ।

वृष्यः कफ हरी बल्यो रुच्यः सन्तर्पण परः ॥

*Rāja Nighaṇṭu, Śatāhvādi varga, 191-193.*

### वाजीकरणे

स्वयंगुमेक्षुरकयोः फलचूर्ण सशर्करम्।  
धारोष्णेन नरः पीत्वा पयसा न क्षयं व्रजेत्॥

*Suśruta Saṁhitā, Cikitsā. 26-33.*

### सुखप्रसवनार्थम्

सितया चर्वणं कृत्वा कोकिलाक्षस्य मूलकम्।  
तत्कर्णं पूरणेनाशषु सुखं नारी प्रसूयते॥

*Baṅgasena, Strīroga. 231.*

### निद्राजननार्थम्

काकजंघा त्वपामार्गः कोकिलाक्षः.....।  
क्राथो निद्राकरः शीघ्रं.....॥

*Hārīta Saṁhitā, 3-15-6*

### वातरक्ते

कोकिलाक्षमृताक्राथे पिबेत् कृष्णां यथाबलम्।  
पथ्यभोजी त्रिसप्तहान् मुच्यते वातशोणितात्॥

*Vṛndamādhava. 23-14.*

कोकिलाक्षकनिर्यूहः पीतस्तच्छाकभोजिना।  
कृपाभ्यास इव क्रोधं वातरक्तं निगच्छेति॥

*Aṣṭāṅga Hṛdaya, Cikitsā. 22-18.*

### शोथे

‘शोथनुत् कोकिलाक्षस्य भस्म मूत्रेण वाम्भसा।’

*Cakradatta, 39-23.*

## KOLAKANDA- VANAPALĀNDU

**Botanical name :** Urginea indica Kunth.

**Family :** Liliaceae

**Common name :** Kolakanda-Vanapalāndu

**Sanskrit names :** Vanapalāndu, Kolakanda

**Regional names**

Jangli pyāj, Jangli Kanda, Kanda, Uskil (Hindi);

Ram Kanda, Kolkanda (Mar.); Jungli Kando, Pankando (Guj.); Nari vangayam (Tam.); Adavitelgada (Tel.); Adadurisulli (Mal.); Unmul (Arabic); Piyaj Sahrai (Pers.), Indian Squill (Eng.).

### Description

Herb with tunicate bulbs.

Leaves appearing after the flowers, 6-18 in. long, linear, acute, nearly flat.

Scape erect, 12-18 in. long, brittle.

Flowers distant, drooping or spreading, greenish-white, or dingy-brown; bracts minute, soon falling. Perianth campanulate; segments  $\frac{3}{8}$  in. long, oblong-lanceolate, obtuse, with 2 or 3 strong approximate median nerves. stamens  $\frac{1}{4}$  in. or longer; filaments flattened. Style obconic.

Capsule ellipsoid,  $\frac{1}{2}$ - $\frac{3}{4}$  in long; cells 6-9 seeded. Seeds  $\frac{1}{4}$  in. long, flattened, elliptic, black.

Bulbs turnicated, ovoid, or pear-shaped, 5-10 cm. long.

### Flowering and fruiting time

Bulbs are gathered in early autumn after the leaves wither after flowering. Rains to Autumn.

### Distribution

It occurs in western Himalaya upto 7,000 ft., salt range of Punjab and South to Konkan; also in Burma, and Bihar, Chota Nagpur, extending to tropical Africa. It is found in Siwalik range and also plentiful eastwards in the sub-Himalayan tracts and Terai region upto North Oudh; Uttar Pradesh and northern India, Himachal Pradesh.

### Kind and varieties

*Scilla indica* Baker is resembling with Kolakanda (*Urginea indica* Kunth). Small portion of *Scilla hyacinthiana* is also sometimes admixed. Squill available in the market is generally found adulterated with bulbs of *Scilla* sps. and most probably the bulls of both plants (*Urginea* and *Scilla*) are replaced or inter mixed in market drug material.

### **Chemical composition**

Bulb contains scillaren A and scillaren B, two glycosides (0.3%). Mucilage matter 51%, sugar; and ash 5% which contain crystals of calcium oxalate and calcium citrate. Bulbs of Indian squill contain a mixture of cardiac glycosides which constitute the active principles of drug.

### **Pharmacodynamics**

Rasa	: Katu, tikta
Guṇa	: Tīkṣṇa, laghu
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphaśāmaka Pittavardhaka.

### **Properties and action**

Karma	: Hṛdaya Kṛmighna Raktotkleśaka-Vraṇakāraka Kaphaaniḥsāraka Hṛdaya-hṛdayottejaka Mūtrala Ārtavajanana Svedajanana Karkaṭārburda-pratirodhī Viṣaghna Śothahara Kṣobhaka (ābhyanṭara).
Roga	: Hṛdroga-hṛdrogajanya śotha Udararoga-Jalodara Jīrṇa pratiṣyāya-jīrṇakāsa- phuphphusavikāra Śvāsaroga Jīrṇavṛkkaroga-mūtrāghāta Rajrodha-kaṣṭārtava Cormavikāra-dravayukta śotha Kaṇḍū Viṣa.

### **Therapeutic uses**

The drug Kolakanda is powerful expectorant and

(Kaphanihsāraka) drug, and it is cardiotonic as well as cardiac stimulant (hr̥dyā) and diuretic (mūtrajanana). It is emmenagogue and diaphoretic and it has anti-cancer activity. The bulbs are used as deobstruent medicine.

Bulbs are used in cough, asthma, heart troubles, dropsy, rheumatism and skin troubles. Externally they are applied to remove warts and corns. Bulbs are heated, bruised and applied to the feet. It is useful for countering the poison.

**Parts used :** Bulb.

**Dose**

Powder 120-200 mg., Syrup 30-60 drops., Tincture 5-30 drops.

## KOŚĀMRA

**Botanical name**

Schleichera oleosa (Lour.) Oken.

Syn. Pistacia oleosa Lour., Schleichera trijuga Willd.

**Family :** Sapindaceae

**Classical name :** Kośāmra

**Sanskrit names**

Kośāmra, Kṣudrāmra, Lākṣāvṛkṣa, Ghanaskandha, Krmivṛkṣa, Sukośaka, Jantupadapa, Roktāmra, Suraktaka, Amlaskandha, Kṣudramla, Vanāmra, Kṣudramoukuli.

**Regional names**

Kusum, Gousam, Kosum, Kusum (Hindi, Bangla); Kosumb (Guj.); Kosib (Mar.) Pumarat (Tam.); Pusam (Mal.); Posuku (Tel.); Jindal, Chakot (Kann.); Kol (Burm.); Sagadi (Kan.) Ceylon oak (Eng.).

**Description**

Large shady, underageous, deciduous trees, with thick, smooth grey bark, a short fluted trunk, exfoliating in plates of irregular shape, red inside. Heartwood red or reddish-brown, very heavy, close-grained, hard, tough and strong, marked with white waxy concrete lines (wt. about 70 lbs. per c. ft.).

Leaves paripinnate up to 40 cm. long; leaflets opposite, sessile, elliptic, those of terminal pair more than twice as long as the lowest pair. Youngest shoot silky. Leaflets 2-4 pairs, pink when young.

Flowers yellowish-green, polygamo-dioecious in short racemes; latter arranged in spikes missing from the twigs among the leaves. Stamens 6 to 8. Styles 3 or 4-cleft.

Berry hard-skinned round-elongate with a point at the tip with compressed brown seed. Fruit .6 - .8 in. diam., 1-celled globose. Seeds in a pulpy aril having an acid taste. Testa brown, enclosed.

### **Flowering and fruiting time**

It flowers in February-March and fruits in July- September or October. New leaves appear alongwith flowers about colder months or spring season.

The old leaves are shed in January-February, the young leaves or foliage comes out towards the end of March or early in April, while the other trees of the dry forests are still leafless, the young shoots deep red. Flowers appear with young leaves.

### **Distribution**

It occurs in Indo-Malaysia. It is commonly planted in gardens and along avenues and sometimes in forest formation. Plant is occurring from Kashmir to West Bengal, Chota Nagpur, Central India, Southern India, Orissa, Madhya Pradesh, Mysore, Tamilnadu and other areas, up to 6,000 ft. elevation.

Trees are planted for commercial purpose.

### **Pharmacodynamics**

Rasa	: Amla (phala-fruit), kaṭu, tikta, kaṣāya (taila-oil)
Guṇa	: Guru
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

### **Chemical composition**

Seeds yield a fatty oil.

**Properties and action**

<b>Karma</b>	: Kanḍūghna Kṛmighna Kuṣṭhaghna Vraṇaśodhana Keśya Vedanāsthāpana Grāhī <sup>1</sup> Dīpana-rucivardhaka Virecana Raktaśodhaka Śothahara Raktastambhana Viṣaghna Kuṣṭhaghna Jvaraghna Stambhana
<b>Taila - oil</b>	: Kanḍūghna Kṛmighna Vraṇaśodhana Keśya Vedanāsthāpana
<b>Phala-fruit</b>	: Grāhī
<b>Pakvaphala-ripe fruit:</b>	Dīpana, Rucivardhana.
<b>Tvak-bark</b>	: Kaṣāya-raktastambhana-Jvaraghna-satambhana
<b>Bījataila-Seeds oil</b>	: Virecana, Kṛmighna
<b>Roga</b>	: Kanḍū-Kuṣṭha-Carmavikāra-Kṣudraroga-Sandhivāta-Vātavyādhi-Keśavikāra (tail-oil) Duṣṭavrāṇa-Krimivrāṇa (bijā cūrṇa- Seeds powder) Vibandha (Seeds oil-bijā taila) Pradara (Tvak-bark) Sarpaviṣa (Kṣāra-alkali) Viṣamajvara (Bark).

**Therapeutic uses**

The young fruits are pickled and the acid pulp of the ripe fruit is eaten. The seeds yield a fat oil which is used

for burning. Tree is lopped for fodder as the leaves are good cattle fodder. Fruit or berry with a succulent arillus of pleasantly acid taste and cotyledons are full of oil which is used for burning in rural areas and the oil is medicinally useful. Bark, fruit, seeds and lac (produced on source plant i.e. tree of Schleichera trijuga Willd. or Kośāmra) are medicinally useful. The succulent arillus of berries is of acid tasty edible which is of medicinal properties. These fruit are pulpy and with subacid aril; it has medicinal properties. A lack of the superior quality is yield by this trees which belongs to fine or best grade lac raw drug material or Lākṣā (Kusum lākh) produced on Kośāmra and certain other specific source or host drug-trees.

#### Parts used

Bark, seeds, oil, fruits, Lac (Kośāmra lākṣā).

**Dose :** Bark decoction 50-100 ml., Seeds oil 5-10 gm.

### KOŚĀMRA ( कोशाम्र )

- क. कोशाम्र उक्तः क्षुद्राम्रः कृमिवृक्षः सुकोशकः ।
  - ख. कोशाम्रः कुष्ठशोथास्त्र पित्तव्रणकफापहः ॥
  - ग. तत्फलं ग्राहि वातम्ब्रमस्त्वा गुरु पित्तलम् ।
  - घ. पक्वन्तु दीपनं रुच्यं लघूष्णं कफवातनुत् ॥
- Bhāvaprakāśa Nighantu, Āmrādi phala Varga, 23-24.*
- अ. कोशाम्रश्च अम्लस्कन्धो वनाम्रो जन्तुपादपः ।  
क्षुद्राम्लश्चेति रक्ताम्रो लाक्षावृक्षः सुरक्तकः ॥
  - ब. कोशाम्रमस्तमनिलापहरं कफार्ति-  
पित्तप्रदं गुरु विदाह विशोफकारि ।

#### पक्वफलम्

- स. पक्वं भवेन्मधुरमीषद् पारमम्लं  
पट्टवादियुक्तरुचिदीपनं पुष्टिबल्यम् ।

*Rāja Nighantu, Āmrādi Phala Varga, 14-15.*

#### कोशाम्रः

- अ. कोशाम्रको जन्तुवृक्षो लाक्षावृक्षः सुकोशकः ।

सरक्तको घनस्कन्धः क्षुद्राप्रः क्षुद्रमौकुलिः ॥

**कोशाप्रगुणाः**

- ब. कोशाप्रस्तुवरो हन्ति रक्तपित्तं कफव्रणान्।  
शोथकुष्ठहरं कोष्ठशोधनं तत्कलं गुरु ॥

**कोशाप्रफलम्**

अम्लोष्णं ग्राहि वातघ्नं रक्तपित्तबलासकृत्।

**पक्फलम्**

पक्फं तु दीपनं रुच्यं लघूष्णं कफवातजित्।

**कोशाप्र मज्जा**

मज्जातु केशयो वातघ्नं स्वादुः स्निधो बलासकृत्।

*Kaiyadeva Nighantu, Osadhi Varga, 383-386.*

**व्रणे**

‘कलायविदलीपत्रं कोशाप्रास्थि च पूरणात्।’

*Vrndamādhava, 44-44.*

**वातवृद्धौ**

कोशाप्र तिल्वकैरण्डफलतैलानि वा नरम्।

सक्षीरं वा पिबेन् मासं तैलमेरण्ड संभवम्॥

*Susruta Samhitā, Cikitsā. 19-5/6.*

## KOŚĀTAKĪ-DHĀMĀRGAVA

**Botanical name :** Luffa cylindrica (Linn.) M. J. Roem.

**Family :** Cucurbitaceae

**Classical name :** Kośātakī-Dhāmārgava.

**Sanskrit names**

Kośātakī, Dhamārgava, Mahākośātakī, Mahājālinī, Ghoṣaka, Hostighoṣā, Hastiparna-Hastiparṇikā, Mahāphalā.

**Regional names**

Nenua (Hindi); Ghiyatori (Punjabi); Dhundul (Bengla); Ghansale (Marathi); Galakan (Guj.); Mijuku pira Kankai (Tamil); Tuppahirekai (Kann.); Katṭupinchal (Mal.); Guttivira (Tel.); Smooth Luffa, Sponge Gourd (Eng.).

## Description

Climbers. Leaves up to 20 cm. long, almost equally broad, palmately 5-lobed, tendrils trifid, Probract 3-7 × 2-4 mm. fleshy, ovate with 3-7 glistering glands on the upper surface.

Flowers bright yellow, male and female flowers often in same axils. Male flowers peduncles up to 15 cm. long, 15-20-flowered; pedicels 1-2 cm. long; calyx-tube short, broadly campanulate, lobes oblong-runciform, ca 2 × 1 cm.; stamens 3 or 5, one unilocular, the other two 2-locular, or 5 unilocular; filaments shortly villose at base. Female flowers peduncles up to 10 cm. long; ovary cylindric, softly hairy.

Fruits fusiform, up to 50cm. long and up to 8 cm. wide, not angular, obtuse, strongly fibrous inside; seeds ovate, ca 12 × 8 mm. smooth, black.

## Flowering and fruiting time

June to December. Plant becomes in flowering stage in summers, and afterwards fruting stage continuing in colds.

## Distribution

Plant is commonly cultivated for fruit-vegetable.

## Kinds and varieties

Sweet (madhura) and bitter (tikta) which are cultivated and wild respectively. Former in useful as vegetable (Śāka) and latter is for medicine (ausodha).

## Chemical composition

Analysis of the edible part of fruit of the tender fruit gave the following values: moisture 93.19, protein 1.21, ether extr. 0.23, carbohydrates 2.93, fibre 1.95; and ash 0.49% and calcium 36 mg., phosphorous 19 mg., and iron 1.1 mg 1100g., carotene (as vitamin A) 200 I.U., thiamine 17.55 ug., reivoflavin 63.17 ug., niacin 0.37 mg. / 100g. and ascorbic acid, trace.

## Pharmacodynamics

Rasa : Tikta

Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittasamśodhana

**Properties and action**

Karma	: Ubhayatobhāgahara-vamana- bhedana-anulomana Raktaśodhaka-Śothahara Kaphanihsāraka Viṣaghna Arśoghna Kāsahara Kṛmighna Jvarahara Hṛdyā
Roga	: Vibandha Udararoga-Gulma Kāsa-śvāsa-svaravikāra Kāsa-śvāsa-svaravikāra Viṣa Kaphajavikāra-pittavikṛti Arśa Viṣa-mūṣikaviṣa Pāṇḍu-kāmalā Śotha Kuṣṭha-Kaṇḍū Plīhavikāra Prameha Jvara Yonikanda Gandamālā Upadamśa.

**Therapeutic uses**

The drug Dhāmārgava is useful as emetic and cathartic both (ubhayatobhāgahara). It is used in abdominal complaints (udararoga, gulma, vibandha), blood affections, cough, asthma, throat affections, poisons. It is useful in the diseases caused by kapha (for proper purification or

clensing by elimination of impurities on account of Kapha saṁśodhana) in particular.

The fruits, leaves and flowers are used in medicine.

Fruits (cultivated variety) are commonly eaten and used as household vegetable; it is wholesome (pathya) in various diseases.

**Parts used :** Fruit, flowers, leaves.

**Dose :** Juice 10-20 ml.

#### Formulations

Kośātaki Kalpa (Caraka Saṁhita, Kalpa.4).

#### Gana

Vamana, Phalini (Caraka Saṁhitā), Urdhvabhāgahara (Suśruta Saṁhitā).

## KOŚĀTAKI-KRTAVEDHANA

**Botanical name :** Luffa acutangula (Linn.) ThUMB.

**Family :** Cucurbitaceae

**Classical name :** Kṛtavedhana-Kośātaki

#### Sanskrit names

Kṛtavedhana-Kośātaki, Mṛdaṅgaphala-mṛdaṅga-phalini, Jālinī, Rājimatphalā, Pītāpuṣpā.

#### Regional names

Torai, Taroi (Hindi); Jhinga (Beng.); Shirola (Marathi); Pirkankai (Tamil); Birkaya (Telugu); Hirekapi (Tam.); Pichenga (Mal.); Ribbed Luffa, Ribbed Gourd (English).

#### Description

Climbers, Leaves up to 20 cm. long and almost equally broad, palmately, .5-.7 angled or sublobate tendrils often trifid.

Flowers pale yellow, male and female ones in the same axil. Male flowers peduncles 10-15 cm. long, 17-20 flowered at the apex; pedicels 1-4 cm. long; probract 3-7 × 2-4 mm., fleshy, green, Ovate with 3-10 glistening glands on upper surface; calyx-tube Campanulate, pentagynous; lobes lanceolate, carnate' petals subcordate, or 2 × 2 cm.,

stamens 5, one unicellular; two bilocular, filaments bearded at base. Female flowers peduncles up to 8 cm. long, ovary 10- angular, apex constricted. Fruits clavate-oblong, 15-25 × 6-8 cm. acutely 10-angled; apex obtuse or slightly acute; seeds ovate, ca 11 × 7 mm. compressed black.

### **Flowering and fruiting time**

Plant flowers in June-September and fruits in July-October.

### **Distribution**

Plant is commonly cultivated for fruit-vegetable throughout India (sweet variety or madhura jāti: Miṣṭa Koṣātaki). Plants of wild variety or bitter luffa : Kaṭu Koṣātaki) are found almost throughout country in wild state.

### **Kinds and Varieties**

There are two varieties of Koṣātakī viz. Vanya (wild) and Kṛṣita (cultivated) which are bitter (tikta kaṭu) and sweet (madhura-miṣṭa) considered suitable for medicinal and dietary purposes respectively.

### **Chemical composition**

The seedless dried fruit contains an active principle resembling to coloncynthin present in Indravārunī (Citrullus colocynthis Schrad) and anther constituent luffein. Seeds yield reddish brown or dark brown fixed oil.

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapitta samśodhana.

### **Properties and action**

Karma	: Ubhayatobhāgahara-vāmakā- recaka-
	Raktaśodhaka-śothahara
	Kaphaniḥsāraka
	Kuṣṭhaghna
	Kaṭupouṣṭika

	Viṣaghna
Roga	: Udararoga-gulma-Vibandha
	Raktavikāra-śotha
	Plihavṛddhi
	Kāsa-śvāsa
	Kuṣṭha
	Pāṇḍu-viṣa

**Therapeutic uses**

The drug Kṛtavedhana is recommended as emetic as well cathartic (ubhayatobhāgahara) drug possessing properties of purification or cleansing kapha and pitta doṣa (śamśodhana).

It is used in fever, abdominal diseases including gulma, spleenic enlargement, oedema, cough, asthma, dermatosis, anaemia, poisons or toxic affects, blood impurities, jaundice and piles. Fruits, leaves and roots are employed in medicine.

Fruits (cultivated variety) are cooked as household vegetable. It is a wholesome (pathya) vegetable (phalaśāka) in various diseases.

**Parts used :** Fruit, leaves, root.

**Dose :** Juice 10-20 ml.

**Formulations**

Kṛtavedhana-kośātaki Kalpa-60 (Caraka Saṁhitā, Kalpa.6).

**Gana**

Vamana, Phalini (Caraka Saṁhitā),  
Ūrdhvabhāgahara, Ubhayatobhāgahara (Suśruta Saṁhitā).

**A. KOŚĀTAKI-DHĀMĀRGAVA**

( कोशातकी-धामार्गव )

**B. KOŚĀTAKI-KRTAVEDHANA**

( कोशातकी-कृतवेधन )

**महाकोशातकी**

क. महाकोशातकी प्रोक्ता हस्तिघोषा महाफला ॥

- ख. धामार्गवो घोषकश्च हस्तिषर्णश्च स स्मृतः ।  
महाकोशातकी स्निग्धा रक्तपित्तानिलापहा ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga, 65-66.*

### राजकोशातकी

- क. धामार्गवः पीतपुष्पो जालिनी कृतवेधना ।  
राजकोशातकी चेति तथोक्ता राजिमतफला ॥
- ब. राजकोशातकी शीता मधुरा कफवातकृत् ॥  
पित्तन्नी दीपनी श्वासज्वरकासकृमिप्रणुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga, 67-68.*

### कोषातकी

- अ. कोषातकी कृतच्छिद्रा जालिनी कृतवेधना ।  
क्षेडा सुतिक्ता घण्टाली मृदङ्गफलिनी तथा ।
- ब. कोषातकी तु शिशिरा कटुकाऽल्पकषायका ।  
पित्त वात कफन्नी च मलाध्मान विशोधिनी ॥

*Rāja Nighaṇṭu, Guḍūcyādi Varga, 48-49.*

### कोशातकी

- अ. श्रेतघोषा कृमिच्छिद्रा घण्टाली कृतवेधना ।  
मृदङ्गवत्कोशवती मृदङ्गफलिनी तथा ॥
- कोशातकी तु कर्कोटी जालिनी कर्कशच्छदा ।  
क्षेलः तिक्ता सुघण्टाली ज्योत्सना जाली च घोषकः ॥

### सामान्य गुणाः

- ब. कोशातकी कटुस्तीक्ष्णा पक्षामाशय शोधनी ।  
लघ्वी रूक्षा कटुःपाके जयेत् कासगरोदरम् ॥
- पाण्डुशोफकफलीह गुल्मार्शः कुष्ठकामलाः ।

### फलम्

- स. फलमस्याः कटुस्तिर्थं तिक्तं पाके हिमं लघु ॥  
दीपन भेदनं हृदयं वातलं हन्त्यरोचकम् ।
- कासमेह ज्वर श्वासकुष्ठपित्तकफानिलान् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 568-572.*

### राजकोशातकी

- अ. राजकोशातकी हस्तिषर्णिका पीतपुष्पिका ।

धार्मार्गवः कोशफला महाजाली सपीतकः ॥  
 व् राजकोशातकी तिक्ता मधुरा कफवातला ।  
 पित्तघ्री दीपनी हन्ति श्वासकासज्वरकृमीन् ॥

*Kaiyadeva Nighanṭu, Oṣddhi Varga, 573-574.*

### महाकोशातकी

अन्या त्वैभी हस्तिघोषा महत्पुष्पा सपीतिका  
 महाकोशातकी त्वस्याः कथितं जाङ्गलं फलम् ।  
 हस्तिघोषा सरा स्निग्धा मधुरा स्लेष्मलागुरु ॥

*Kaiyadeva Nighanṭu, Oṣadhi Varga, 575-576.*

### उपदंश चिकित्सायां कोशातकी तैलम्

*Bhāvaprakāśa, Madhyakhaṇḍa, 51/47-48.*

गण्डमाला चिकित्सायां नस्यार्थं कोषातकी फल स्वरसः:  
 कोषातकीनां स्वरसेन नस्यं तुम्ब्यास्तु वा पिप्पली संयुतेन ।  
 तैलेन वाऽरिष्ट भवेन कुर्याद् वचोपकुल्ये सह माक्षिकेण ॥

*Vṛndāmādhava, 41-25. cakradatta,  
 Galagandādi Cikitsā, 41-21.*

### रोम्यामपुनर्भवाय

उत्पाट्य गुह्यप्रभवाणि रोमाण्यभ्यञ्जनं तत्र ततो विधेयम् ।  
 कोशातकीबीज समुद्भवेन तैलेन लोम्प्रापुनर्भवाय ॥

*Rāja Martanda, 31-52.*

### रेतःस्त्रवणे ( गर्भनिरोधे )

एकं माक्षिक मिश्रं लेपात् कोशातकी भवं चूर्णम् ।  
 योन्यां वराङ्गपाते कुरुते रेतः स्त्रुतिस्तस्याः ॥

*Baṅgasena, Jaladoṣādi, 11.*

### कुष्ठे

कोशातकी फले न्यस्तं जलं पर्युषितं निशि ।

कर्षमात्रं तु तत्पीतं सर्वकुष्ठहरं परम् ॥

*Gadanigraha, 2-36-49.*

### मूषिकविषे

छर्दनं जालिनी छाथैः शुकार व्याइकोट्योरपि ।

*Suśruta Saṁhitā Kalpa. 7-34.*

अखिलाखुविषं निहन्यात् ।  
कोशातकी क्रथनमापिबतोऽथवाऽपि ॥

*Gadanigraha, 7-6-5.*

कुष्ठरोगे

सर्षपकरञ्जकोशातीकानां तैलान्यथेङ्गुदीनाश्च ।  
कुष्ठेषु हितान्याहुस्तैलं चच्चापि खदिरसारस्य ॥

*Caraka Samhitā, Cikitsā. 7-119.*

योनिकन्दे

घोषकस्वरसः पीतो मस्तुना च समन्वितः ।  
योनिकन्दं निहन्त्याशु तत्रादीँ चैव धूपतः ॥

*Bangasena, Strīroga. 388.*

अर्शःसु

कोशातकी रजोधर्वात्रिपतन्ति गुदीदभवाः ।  
योज्यं रक्तार्श सैस्तद्वज्योत्सिकामूलं लेपनम् ।

*Cakradatta, 5-4-6.*

स्विनं वार्ताकुफलं घोषायाः क्षारजेन सलिलेन ।  
तदधृतभ्रष्टं युक्तंगुडेन वा तृसितो योऽत्ति ॥  
पिबति च तत्रं नूनं तस्याश्वेवातिवृद्धगुदजानि ।  
यान्ति विनाशं पुंसः सहजान्यपि सप्तरात्रेण ।

*Gadanigraha, 462-463.*

## KRSNA VETRA

**Botanical name**

*Tiliacora acuminata* (Lim.) Hook. & Thoms.

Syn. *Tiliacora racemosa* Colebr., *Menispermum acuminatum* Lam.

**Family :** Menispermaceae

**Classical name :** Kṛṣṇa Vetra

**Sanskrit name :** Kṛṣṇa Vetra.

**Regional names**

Bega, Bhaga, Mushada, Karwanth, Rangoi  
Ranisarobel (Hindi); Kappatige (Tel.) Mushadiliga  
(Telugu); Kurmunta, Runpoe (Oudh); Tilikora (Beng.);

Kadaparauruvalli (Tam.) Kurivalli (Kan.). Vallikkannizam (Mal.); Kalajatinoi (Oriya).

### Description

Large, woody lianas. Leaves subcoriaceous ovate or lanceolate, acuminate; petiole sulcate leaving discoid scars. Young shoots glabrous. Lvs. 4-5 in. ovate or ovate-cordate, acuminate, somewhat 3 veined, undulate, glabrous, dark green; petiole upto 1 in. long, slender. Panicles 6-10 in, hoary at langth glabrous. Flowers yellowish in long, axillary, tomentose racemose panicles of 1-few-flowered cymes. Male flowers inner sepals glabrous; petals shorter than sepals; stamens 6, subcylindrical. Female flowers carpels 8-12 glabrous. Occurrence of bisexual flowers in cultivated plants is frequent (in certain areas). Male branches 3-7 flowered. Femalesimple, 1-flowered. Fls. yellow. Ripe carpels 1-10, half inch, smooth red or yellow, endocarp wrinkles. Seeds bent double.

### Flowering and fruiting time

February to June, spring to summer season.

### Distribution

It occurs in India and Java. Plant is found occasionally upon shrubs or trees or scandent from rock crevices. It is occurring from Bengal to Orissa and Konkan. Plant occurs in Ceylon, Singapore and Java. It is found in Oudh forest in upper gangetic plain area. Commonly climbing on hedges and among bushes and occasionally or sometimes in forests climbing to tree tops.

### Chemical composition

Root bark has earlier been reported to contain two alkaloids: tiliacorine and tilliarine. Tiliacorine has been shown by degradative work. Besides tiliacorine, three other alkaloids viz. tiliacorinine (occurring next in abundance to tiliacorine and isomeric with it), and two isomeric N-demethyl derivatives of tiliacorinine and named nortillia corinine. Root bark (dried) also contains tilliacorine and mosine and seven water soluble bases, of which three have been isolated in crystalline form and named as tilliacine

corine and mohinine. Corine showed a curative type of activity.

The presence of d- quercitol, fumaric fatty oil, glucose and resin has been reported in the bark.

The leaves contain saponin and an alkaloid named tilliacoridine.

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūksa
Vīrya	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Kaphapittaśamaka.

### **Properties and action**

Karma	: Viṣaghna Kuṣṭhaghna Kaṇḍūghna
Roga	: Viṣa Kuṣṭha Tvagvikāra.

### **Therapeutic uses**

The drug is useful in kūṭha roga (diseases of skin in general and particularly leprosy). There are three formulations (yoga) viz. Mahasindūryādi taila, Vajraka ghṛta and Paṭolādi kvāṭha (of which are prescribed in treatment of this group of diseases : Cakradatta, 50, 61, 122 & 154).

Decoction or paste of drug mixed with ghee is used to destroy poisoning of śṛṅgi fish as incorporated in texts.

The root bark and leaves are chemically potent and medicinally useful.

Branches and stems are of economic utility. Flowers are fragrant and foliage is ornamental as plant (also cultivated in gardens) has also aesthetic value.

**Parts used :** Root-bark, leaves.

**Dose :** 1-3 gm.

### **Formulations**

Mahāsindūryādi taila (Cakradatta, 50-154), Vajraka ghṛta (Cakradatta, 50-122), Paṭolāli kvāṭha (Cakradatta. 50-60).

## KRSNA VETRA (कृष्णवेत्र )

विषे

कृष्णवेत्रस्य निःक्लाथः कल्को वा घृतमिश्रितः ।

शृङ्गीमत्स्यविषं हन्ति धूमो वा बहिपक्षजः ॥

Baṅgasena, Viṣa. 204.

कुष्ठे

पटोलादि क्लाथे ।

Cakradatta, 50-61.

वज्रकघृते ।

Cakradatta, 50-122.

महासिन्दूराद्य तैले ।

Cakradatta, 50-154.

## KRSNABIJA

**Botanical name :** Ipomoea nil (Linn.) Roth.

**Family :** Convolvulaceae

**Classical name**

Kṛṣṇabīja, Śyāmabīja, Kṛṣṇabīja-Kālāñjana,  
Romaśavalli.

**Sanskrit names**

Kṛṣṇabīja, Kālāñjana.

**Regional names**

Kaladana, Jharmarich (Hindi); Kaladana (Beng.);  
Kaladana (Mar.; Guj.) Kakkatan (Tam.); Kolli (Tel.);  
Ganeribija (Kann.); Khanikhondi (Uriya); Habbunnil  
(Arabic); Tukhme nil (Persian); Pharbitis Seeds (Eng.).

**Description**

Stem slender, twining, retrorsely greybrown hairy.  
Leaves ovate-cordate, acuminate, appressed longhairy.  
Cymes 1-5-flowered. Sepals long-lanceolate with linear-lan-  
ceolate apices, hairy on lower part. Corolla purple, 5-6 cm.  
long, glabrous. Capsule subglobose. Seeds densely pubes-  
cent with short trichomes.

**Flowering and fruiting time**

September to March.

**Distribution**

Plant grows in tropics. It occurs throughout India and it ascends in the Himalayan region up to elevation of 6,000 ft.

**Chemical Composition**

Seeds contain a resinous substance 14 - 17% which consists of two chemical components i.e. glycocyclic and aglycocyclic. Cathartic properties are attributed to aglycocyclic substance which causes purgation in dose of 250 mg. This active principle is 2% besides the resinous substance, seeds contain fixed oil 12.4% and some contents of cyanin, mucilage and tannin.

**Pharmacodynamics**

Rasa	: Kātu, madhura
Guṇa	: Laghu, rūkṣa, tīksṇa
Virya	: Uṣṇa
Vipāka	: Kātu
Doṣakarma	: Kaphapittasamśodhana

**Properties and action**

Karma	: Sukhavirecana-sāraka-bhedana Kṛmighna Raktaśodhaka Śothahara Jvaraghna Lekhana Kandūghna
Roga	: Vibandha Udararoga-Udāvarta Kṛmiroga Vātarakta-āmavāta Śotha Carmaroga Jvara Śiraḥśula.

**Therapeutic uses**

The seeds of plant drug are fried with ghee and

then powdered and mixed with sugar; it is considered a good purgative.

The seeds are used in constipation, flatulence, abdominal disorders, worms, gout, rheumatism, worms affections. In skin complaints, the drug is externally applied.

The seeds are suggested to be used after frying them hot sands (bhrṣṭikaraṇa process like gram or caṇaka etc.) and then powdered only mixed with sugar. There are other modes of using the seeds; the decoction of seeds is also prepared for use orally. Seeds are ground for making paste for external application.

**Parts used :** Seeds.

**Dose :** Powder 1-3 gm., Decoction 50-100 ml.

**Yoga :** Kṛṣṇabijādi cūrṇa.

## KRSNABĪJA ( कृष्णबीज )

‘रेचनं श्यामबीजं त्वाच्छोथोदर विनाशनम् ।

ज्वरे पुरीषसंगे च दारुणे शिरसो गदे ॥

उदावर्ते तथावाहे बुधैरेतत् प्रयुज्यते ।’

A.vi.

कालाञ्जनम् - कृष्णबीजम्

उदावर्ते

कालाञ्जनीजनूंषि भृष्टानि मनागू घृतेन बीजानि ।

पिष्ठ्वा सितया गिले रे ! सुखेन किल रेचनं भविता ॥

Siddha Bhaisajya Maṇimālā 4-581.

## KUBJAKA

**Botanical name**

Rosa moschata Mill., Syns. Rosa brumonii Lindl.

**Family :** Rosaceae

**Classical name :** Kubjaka

**Sanskrit name :** Kubjaka

**Regional names**

Kuja, Kanjei, Kui (Hindi); Phulwari (Kashmir);  
Kwia, Kwiali, Kuja (U.P. hills).

### Description

A large or tall sub-deciduous rambling climber or thorny shrubs with stems up to 5 inches diam. and 50 ft. high. Bark rough, dark reddish-brown, exfoliating in the strips. Blaze 15-20 in. pale, yellowish-brown, sometimes pink, towards the outside, very fibrous. Twigs glabrous. Prickles recurved, brown. Branches armed with a few stout recurved prickles.

Leaflets 3-8 pairs, nearly sessile, ovate-oblong, acuminate, 1-2 in. long. Petiole pubescent, usually prickly. Stipules adnate to the petiole, narrow, glandular, leaflets 5-9, 1-9 in. long, ovate to ovate-lanceolate acute or acuminate, glabrous above, puberulous beneath, serrate.

Flowers white, fragrant, 1-1.5 in. diam. in terminal compound corymbs. peduncles and pedicels grey-pubescent, not prickly or bristly. calyx-lobes lanceolate, caudate-acuminate, entire or pinnatifid, twice the length of ovary, often pinnatifide, styles united in a hairy clusters, clavated above, as long as stamens or longer.

Fruit dark brown, sub-globose or ovoid 1/4 to 1/2 in. long; fruits orange-red or dull-red in colour, globose or ovoid, 3-6 in. long.

### Flowering and fruiting time

Summer months and onwards; flowers-blooming to fruits-maturing period ends by winters or pre-spring periods.

### Distribution

Plant is distributed throughout north-west Himalayas from Afghanistan to Nepal, ascending to 11,000 ft., commencing at 2,000 ft. in the Punjab, and at 4,000 ft. elevation in western hills in northern India.

### Chemical Composition

Flowers yield an essential oil.

### Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Śīta
Virya	: Laghu

Vipāka : Kaṭu  
 Doṣakarma : Vātapittahara - Tridoṣahara.

### Properties and action

Karma	: Varnya Tvacya Dāhapraśamana Sāraka Vṛṣya-viryavardhana Hṛdyā Śothahara Kaṇṭhya Sangrāhī Roktaśodhaka-raktadoṣaghna.
Roga	: Varṇavikāra Tvagvikāra-carmoroga Raktaduṣti-raktavikāra Mukhapāka Āmāśayavikāra-dourbalya Yakṛta vikṛti-dourbalya Mukha vaivarṇya Kaṇṭhaśūla Visphoṭa-pīḍikā Vibandha-Koṣṭhabaddhatā

### Therapeutic uses

The drug Kubjaka is medicinally useful. Flowers of Kubjaka are medicinal and useful in various ailments. Kubjaka is used in bilious affections, burning of skin and eye diseases. Roots are considered useful in pains. Flowers are scented and essential oil is aromatic. Flowers are of medicinal aromatic and aesthetic values.

Flowers are employed for preparing gulkand (as gulkand prepared with Taruṇī or Gulāb flowers) and medicated syrup. Flowers are used in raktapitta, pigment abnormalities, burning sensation and wounds. Plant has rural economic utility also.

### Parts used

Flowers, fruits, young shoots, roots, twigs, stem.

Dose : 3-6 gm. (flowers).

## KUBJAKA ( कुब्जक )

कुब्जकः सुरभिः शीतो रक्तपित्तकफापहः ।  
पुष्पं तु शीतलं वर्णं दाहन्नं वातपित्तजित् ॥

*Rāja Nighaṇṭu, 10-102.*

कुब्जकः सुरभिः स्वादु कषायानुरसः सरः ।  
त्रिदोषशमनो वृष्य शीतहर्ता च स स्मृतः ॥

*Bhāvaprakāśa Nighaṇṭu, 5-38.*

## KUKUNDARA

### Botanical name

*Blumea lacera* Dc.

Syns. *Conyza lacera* Burm. f., *Blumea subcapitata* Dc.

**Family :** Asteraceae (Compositae)

**Classical name :** Kukundara

**Sanskrit names:** Kukundara, Tāmracūḍa, Mrducchada, Sūkṣmapatra.

### Regional names:

Kukrondha (Hindi); Kuksim Kukurshonga (Bengla); Kukurbanda (Marathi); Kokronda (Gujrati); Bhamavarda (Bombay); Katu Mulangi (Tam.); Adavi (Telugu).

### Description

A pubescent woolly herb measuring 1.2 m. high, with alternate, petiolate leaves in variable size at young and mature stages, oval and elliptical, woolly, pale green, wavy and serrated; mature leaves lobed, coarse, dark green, with soothings small, measuring 9-30 × 5-18 cm. Stem of herb branched differentiated into nodes and internodes, surface covered with hairs.

Annual or perennial 1.5-2 ft. high, pubescent, glandular and rarely glabrescent herb. Stem sometimes branched and always very leafy. Leaves alternate, lower leaves toothed or serrate, rarely lobulate, upper leaves

toothed. Flowers heads hetergamous, disciform, yellow, pappus numerous, white, receptacle glabrous; calyx-limb bristly; corolla of female florets 3-toothed, filiform connate and hermaphrodite florets 5-toothed connate, slender, tubular, slightly enlarged limb; stamens syngenesious, styles of hermaphrodite florets with almost filiform arms. Fruits achenes glabrate, subtetragonal, fruit one-seeded cypselae ridged and surrounded by pappus. Root hard, woody, long tap with secondary and tertiary branches.

#### **Flowers :**

Head stalked, bisexual yellow, surrounded by involucre of bracts 8-12 mm. long, bracts multiseriate, campanulate, green, pubescent, outer smaller, curved outwardly and inner straight, linear, foliaceous, outer pistillate florets sessile consisting of ovary, pappus petals connate forming a yellow corolla tube 3-toothed at the tip, style and stigma filiform, flattened and bifid.

#### **Flowering and fruiting time**

February to April; post-winter season.

#### **Distribution**

Plant occurs wild throughout India ascending to 2,000 ft. from the Himalayan region to Travancore, in its suitable habitats like wastelands and paddy fields specially in the plains.

The plant is collected from wild sources during its flowering season.

#### **Kinds and varieties**

*Blumea lacera* Dc. may distinguished by *B. lacera* var. *blumea* DC. various species of *Blumea* are found, some of them are : *Blumea laciniata* (R) DC., *B. balsamifera* DC., *B. densiflora* DC. and *B. erientha* Dc. Several *Blumea* species are also medicinally and chemically potent. Essential oils of *Blumea* species are useful. *Blumea malcolmii* (Cl.) Hook f. is also potent.

#### **Pharmacodynamics**

Rasa	: Tikta, Kaṣṭaya
Guṇa	: Laghu, rūkṣa, tiksṇa
Viryā	: Uṣṇa
Vipāka	: Kaṭu

Doṣakarma : Kaphapittaśāmaka.

### **Chemical Composition**

Blumea species contain camphor in good quantity.  
Blumea balsamifera Dc. contains a glucoside.

### **Properties and action**

<b>Karma</b>	: Raktastambhana-śoṇitasthāpana Dīpana-anulomana-yakṛduttejaka Krmighna Vāmaka (higher dose) Śothahara Kaphaghna Jvaraghna Viṣaghna Vṛanaropana
<b>Roga</b>	: Raktasrāvā-raktavikāra Śotha Udararoga Kṛmi Yakṛdvikāra Arśa Mukharoga Netrābhīṣyanda Pratiṣyāya-kāsa-śvāsa Pradara Jvara Viṣa-Kukkuraviṣa Vraṇa-Kṣata

### **Therapeutic uses**

The snuff or inhalation of leaves juice is recommended in headache and coryza. Leaves are warmed up and applied to topical inflammation. Juice of leaves is used as eye drop in conjunctivitis. Leaves juice is locally applied to counter worms as germicidal remedy. Paste of leaves is applied over haemorrhoids. For treatment of piles, leaves are ground with Marica (pepper) and orally given in the form of pills. Roots are also used in haemorrhoids. In vocal affections the root is chewed. In condition of haemorrhage the plant is given as good remedy. It is useful in oedema,

blood diseases and fever. In cases of dog-bite, the roots are ground and orally given (10 gm, dose).

The plant drug is bitter and antipyretic. The juice of fresh leaves is anthelmintic, astringent, febrifuge, stimulant and diuretic. Root is useful in cholera.

The plant drug is chemically potent and pharmacologically active. From the leaves of plant an essential oil 0.5% has been isolated by steam-distillation. It is greenish yellow oil. The oil when distilled at reduced pressure (30 mm.) yielded three fractions : (i) 78-80° c (40 c.c.), (ii) 80-120° C (10 c.c.) and (iii) 120-135°c (6 c.c.) Fraction (i) was strongly odorous identity of this fraction with cineol was finally confirmed. Fraction (ii) was redistilled at 30 mm. pressure when 6 c.c. passed at 91°c and the remaining 4c.c. of the contents distilled within with range of 92-120°c. The identity of citral in fraction (iii) was confirmed by comparing the results of these tests with genuine sample of citral obtained from lemon grass oil. Analysis of all the fractions would indicate the fact that the essential oil of *Blumea lacera* consists of 66% cineol, 10% d-fenchone and about 6% citral.

The chromatographic studies have been conducted. The whole plant (without roots ) with light petroleum was extracted and results were analysed. Phytochemical analysis of plant gave various contents including essential oil.

Plant drug contains 0.085% essential oil containing camphor Coniferyl alcohol was isolated from this plant. Carvotanacetone, a ketone, synthetically obtained from thujone is also available from natural sources like oils of *Blumea malcolmii* (Cl.) Hook. f. (about 80% d-carvotanacetone). Carvotanacetone has a spicy odour reminiscent of carvone. Essential oil obtained from the leaves of *Blumea lacera* and *B. laciniata* (Roxb.) Dc. possesses antimicrobial activity. Some plants were tested against the rice weevil (*Sitophilus oryzae* L.), *Blumea lacuera* could induce migration (43%) of weevil during the first week but it could not check the build up of population of insect. Insecticidal effect of oil fractions of two species

that *Blumea eriantha* caused mortality of *cellosbruchus chinensis* 65% at 5% Concentration and 40% mortality at 2.5% within 72 hours. Another species *Blumea balsamifera* DC. has also exhibited pronounced insecticidal activity which indicates insecticidal utility of *Blumea* species. *Blumea camphor* is obtained and produced from *Blumea* species.

Some nonprotoplasmic cell contents like alkaloid, tannin, saponin, sugar, fat and oil, protein, mucilage and cutin present in the crude drug react positively with different concentration of acids, alkalies, salts and dyes.

Various parts specially whole plant, leaves and roots are therapeutically useful and they are administered in treatment of different ailments. Leaves juice and fine powder is suggested to be used as a snuff in coryza, headache and similar other ailments of head and nose (*urdhvāṅga*). Leaves are made into paste and warmed up; it is topically applied to inflamed part. Internally the leaves juice is also given in coryza, fever, cough and asthma Plant drug is useful in leucorrhoea.

Plant drug is recommended against haemorrhoids, oedema or inflammation, coryza, fever, cough, asthma, dog-bit, wounds, ulcers, insanity, epilepsy, paralysis, rheumatoid arthritis and neuralgic or nervine disorders, constipation, dyspepsia, flatulence, colic, worms, blood disorders, gonorrhoea, goitre and seminal ailments.

Plant (containing camphoraceous aromatic oil) has aromatic and carminative properties. Volatile oil present in the plant (cell contents) produces a soothing aroma. Plant is useful in abdominal diseases (*udara vikāra*) and liver complaints (*yakṛdvikāra*).

**Parts used :** Root, leaves, whole plant.

**Dose :** Juice 10 ml., 3-6 gm.

## KUKUNDARA ( कुकुन्दर )

क. कुकुन्दरस्ताप्रचूडः सूक्षमपत्रो मुदुच्छदः ।

ख. कुकुन्दरः कटुस्तिको ज्वररक्तकफापहा ।

तन्मूलमार्द्धं निक्षिसं बदने मुखं शोषहत् ॥  
*Bhāvaprakākāśa Nighantu, Guḍūcyādi varga, 305-306.*

## KULATTHA

### **Botanical name**

*Macrotyloma uniflorum* (Lamk.) Verdc.

Syn. *Dolichos biflorus* Linn.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Kulattha

**Sanskrit names :**

(a) Kulattha, Kulālī, Dr̥kpṛasādā, Locanahitā, Cakṣuṣyā, Kumbhakārikā

(b) Kulathikā, Araṇyakulathikā, Kumbhakārī, Dhīrā, Vanakulathikā, Viṭapāpahā, Tāmrabija-Sitetara.

**Regional names :**

Kulathi, Kulthi; Kurathi (Hindi); Gahat, Ghout (U.P. hills); Kulattha (Beng.); Kulith (Mar.) Kalathi (Guj.); Horsegram (Eng.).

### **Description**

Slender climbing pubescent annual herbs. Leaves pinnately 3-foliolate; petioles 1-7 cm. long; leaflets ovate-elliptic to rhomboid, cuneate at base, acute at apex, 2.5 × 1.5-3 cm.

Flowers solitary or in fascicles of 2-3 in the axil of leaves. Corolla 8-18 mm. long, cream or greenish yellow, standard with two appendages at base.

Pods linear, compressed, 3-5 cm. long, 3-8 mm. broad; recurved or falcate, densely hairy.

### **Flowering and fruiting time**

September to November.

### **Distribution**

Plant grows on roadside shrubs. It is cultivated more or less in various regions of country. It occurs throughout India from Himalayan zone to Kanyakumari Islands as-

cending to 3,000 ft. elevation. Farming is undertaken in rural areas for seed-pulse. Cultivation as crop farming in different parts of country.

### **Chemical composition**

Seeds contain protein (22.5% alluminoides), starch 5.2%, oil 2% ash 3.2%, phosphoric acid 1%, fibrous tissue and urease in plenty.

### **Pharmacodynamics**

Rasa	: Kaṣāya madhura
Guṇa	: Laghu, tikṣṇa, Uṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphahara.

### **Properties and action**

Karma	: Mūtrala-aśmarībhedana Kāsaghna-Kaphahara Cakṣuṣya Hikkānigrahaṇa Śūlapraśamana Arśoghna Dāhapraśamana Medohara Sara-anulomana-bhedana Sangrāhi Vraṇaropanā Vidāhī <sup>1</sup> Sothahara Vātaghna Śukraghna Svedāpanayana Kṛmighna
Roga	: Mūtrakṛcchra-Aśmarī-Mūtravikāra Kāsa-śvāsa-ḥikkā-pīnasa Dāha Medoroga Jvara Krimi Śukrāśmarī

Śotha  
 Arśa-gudakīla  
 Udararoga-ādhamāna-  
 annadravaśula-gulma  
 Netra vikāra  
 Viṣa  
 Gaṇḍamāla  
 Āmavāta  
 Śūla-vātaśūla  
 Śītapitta.

### **Therapeutic uses**

The drug Kulattha is specifically esteemed for its effect in urinary disorders particularly urinary culculus (aśmari or mūtrāśmari) dysuria (mūtrakṛcchra) and allied urinary disorders (mūtrāmaya). Frequently the seeds are recommended as a medicine as well as wholesome diet (pathya) to patients of such diseases.

The drug Kulattha is of astringent and acidic or sour taste and potency is hot. Drug pacifies provoked kapha and vāta. It purifies blood and bile (rakta pitta śodhaka), Carminative, diuretic, antipyretic and anthelmintic. It is useful in emaciating (reducing fat, body weight or slimming) and in reducing the sweating (or anti-diaphoretic). It causes burning sensation (vidāhī). The drug Kulattha is useful against fever, cough, asthma, hicough, calculus (urinary stone), obesity, worms, oedema, piles, flatulence and rheumatism, colic urticaria, abdominal disorders, goitre, urinary, seminal and other ailments. The drug is also useful in constipation, eye (vision) ailments, chronic coryza and ulcer (vraṇaropanya). The seeds are used in medicine and they are consumed as pulse (dal).

The soup of horsegram (Kulattha yuṣa) is recommended wholesome (pathya or hita) in cases of āmavāta. In worms affection, the decoction of Kulattha added with milk is considered wholesome (kṣirapāka-kulattha kvātha). The non-slimy diet with soup of Kulattha is useful in gaṇḍamālā. The diet of barley (yavānna) with the soup of Kulattha and also other pungent drinks are wholesome in

heart disease (hṛdroga). The soup of horsegram (Kulattha yūsa) and other light pulses (mudgādyairlaghubhiryūṣāḥ kulathāśca jvarāpahā: Aṣṭāṅga Hṛdaya, Cikitsā, 1-74). In excessive perspiration or sweatening, the powder of parched Kulattha is rubbed on body part for checking this condition (svēdāpanoyana). The soup of Kulattha is given for alleviating asthma and cough. Kulattha and some others are considered wholesome (Suśruta Saṁhitā, sārīra, 2.21) in amenorrhoea (rajorodha). In abdominal pain, the soup of Kulattha properly soured, processed with the soup of quail and added with rock salt and black pepper is recommended to be used (vātaja śūla). The flour of parched Kulattha mixed with fateless curd in annadravaśūla. The diet of patient should contain soup of dried radish or Kulattha in urticaria (śītapitta). The ghee cooked with decoction of Kulattha and pañcakola is administered in cough caused by Kapha and also in hiccough and asthma (kāsa, śvāsa and hikkā). Kulattha is useful in piles (arśa); in condition of passing loose stools, the patient may be given soup of dried radish of Kulattha and other drugs. The soup of Kulattha is wholesome in gulma and other several diseases. Kulathādyā ghṛta and Kulattha guḍah are prescribed in calculus (aśmarī), and hiccough as well as asthma (hikkā-śvāsa).

In hilly region (Uttar Pradesh), the horsegram or Kulattha seeds is a favourite and common diet article as pulse being a food item of household importance for particularly using it during winter seson when hills inhabitants much relish Kulattha predominating among other pulses (dal) under hills tradition.

**Parts of uses :** Seeds

**Dose :** Decoction 50-100 ml.

**Formulations :** Kulathādyā ghṛtam, Kulathādi pralepa, Kulathayūṣa.

## KULATTHA ( कुलत्थ )

क. कुलत्थिका कुलत्थश्च कथ्यन्ते तद्गुणा अथ।

ख. कुलत्थः कटुकः पाके कषायः पित्तरक्तकृत्।  
 लघुविदाही वीर्योष्णः श्वासकास कफानिलान्॥  
 हन्ति हिक्काऽशमरी शुक्रदाहानाहान् सपीनसान्।  
 स्वेद संग्राहको मेदो ज्वरक्रिमिहरः सरः॥

*Bhāvaprakāśa Nighaṇṭu, Dhānya Varga, 60-62*

### कुलत्थगुणः

कुलत्था लघवस्तीक्ष्णा विपाकेऽम्ला विदाहिनः।  
 वीर्योष्णा मधुरा रूक्षा कषाया रक्तपित्तलाः॥  
 भेदना ध्वन्ति शोफार्शो हिध्मानाह कफानिलान्।  
 शुक्रशुक्राशमरीदृष्टिश्वासकासान् सपीनसान्।

*Kaiyadeva Nighaṇṭu, Dhānya Varga, 76-77.*

### अरण्य कुलत्थ कुलत्थिका

कुलत्थिका कुम्भकारी चक्षुष्या विट्पापहा।  
 कुलाली लोचनहिता धीरा वनकुलत्थिका॥  
 कुलत्थिका हिमा श्लेष्मविषनेत्रामयापहा।

### कुलत्थिका शाकम्

शाकं वन्यकुलत्थस्य हिक्काभिष्यन्दनाशनम्॥

*Kaiyadeva Nighaṇṭu, Dhānya Varga, 78-79.*

### कुलत्थि

कुलित्थस्ताप्रबीजश्च श्रेतबीजः सितेतरः।  
 कुलित्थस्तु कषायोष्णो रूक्षो वातकफापहः॥

*Rāja Nighaṇṭu, Śālyādīvarga, 103-104.*

### कुलत्था

कुलत्था दृक्प्रसादा च ज्ञेयाऽरण्य कुलत्थिका।  
 कुलाली लोचनहिता चक्षुष्या कुम्भकारिका॥  
 कुलत्थिका कटुस्तिका स्यादर्शः शूलनाशनी।  
 विबन्धाध्मान शमनी चक्षुष्या व्रणरोपणी॥

*Rāja Nighaṇṭu, Parpaṭādi Varga, 71-72.*

उष्णाः कषायाः पाकेऽम्लाः कफशुक्रानिलापहाः।

कुलत्थाः ग्राहिणः कासहिक्काश्वासार्शसां हिताः॥

*Caraka Saṃhitā.*

हिक्काश्वासे कुलत्थ गुडः

*Cakradatt, 13/31-34.*

ज्वरेकुलत्थ यूषः

मुदगाद्यैर्लघुभिर्यूषाः कुलत्थाश्च ज्वरापहाः ।

*Aṣṭāṅga Hṛdaya, cikitsā. 1-74*

ज्वरे अतिस्वेदे

‘स्वेदोदगमे मुष्टकुलत्थं चूर्णनिपातनं शस्तमिति द्रवन्ति ।’

*Vṛndamādhava, 1-186.*

उष्णः कुलत्थो रसतः कषायः कटुर्विपाके कफमारुतम्बः ।

शुक्राश्मरी गुल्मनिषूदनश्च संग्राहकः पीनसकासहारी ॥

आनाहमेदोगुदकील हिक्काश्वासापहः शोणितपित्तकृच्च ।

कफस्य हन्ता नयनामयम्बः विशेषतो वन्यकुलत्थं उक्तः ॥

*Suśruta Saṃhitā.*

कषायस्वादुरुक्षोष्णाः कुलत्थाः रक्तपित्तलाः ।

पीनस श्वासकासारो हिध्माऽनाह कफनिलान् ॥

घ्रन्ति शुक्राश्मरीं शुक्रं दृष्टिं शोफं तथोदरम् ।

ग्राहिणो लघवस्तीक्ष्णा विपाकेऽम्ला विदाहिनः ॥

*Vṛddha Vāgbhaṭa.*

अश्मरी रोगे कुलत्थाद्य घृतम्

*Cakradatta, 34/38-39. Bhāvaprakāśa, Cikitsā. 37-80/81.*

शीतपित्ते

‘कौलत्थेन रसेन वा ।

भोजनं सदा पथ्यम् ॥’

*Cakradatta, Śītāpitta Cikitsā*

स्वेदागमरोधनार्थम्

‘स्वेदोदगमे ज्वरे देयं चूर्णं भृष्टं कुलत्थजम् ।’

*Cakradatta, Jvara Cikitsā*

कफजगुल्मे

‘कुलत्थान्..... ।’

कफगुल्मे प्रयोजयेत् ॥

*Baṅgasena.*

गण्डमालायाम्

‘भोजनश्वावभिष्यन्ति यूषा कौलत्थं इप्यते ।’

Baṅgasena.

आमवाते

‘हितं च यूषं कौलत्थम् ।’

Baṅgasena, Āmevāta cikitsā.

अन्नद्रवाख्येशूलम्

‘कुलत्थशक्तूनथवा दध्नाऽद्याद्वित्तरेण तु ।’

Baṅgasena, Annadrava, 98.

अर्शःसु

‘यूषं कौलत्थमेव वा ।’

Caraka Saṁhitā, Cikitsā. 14-93/94.

कृमिषु

‘कुलत्थक्राथ संसृष्टं क्षीरपानञ्च पूजितम् ।’

वातशूले

‘कुलत्थयूषो युक्ताम्लो लावकीयूषं संस्कृतः ।

ससैन्धवः समरिचो वातशूलं विनाशनः ॥’

Suśruta Saṁhitā, Uttara. 42-93.

नेत्रकोपे

‘आरण्याश्छगणरसे पटावबद्धाः सुस्विन्ना नखवितुषीकृताः कुलत्थाः ।  
तच्चूर्णं सकृदयवचूर्णनातिशोथे नेत्राणां,  
विधमतिसद्य एव कोपम् ॥’

Aṣṭāṅga Hṛdaya, Uttara. 16.

अश्मर्यादि मूत्ररोगाणां चिकित्साऽर्थे

कुलत्थसिन्धूत्थं विडङ्गसारं सशर्करं शीतलियावशूकम् ।

बीजानि कूष्णाण्डकगोक्षुरानां घृतं पचेत्तद्रुणस्य तोये ॥

Bhāva-prakāśa, Aśmarirogadhikāra, 37-81.

दुःसाध्यसर्वाश्मरिमूत्रकृच्छ्रं मूत्राभिघातञ्च समूत्रबन्धम् ।

आमूलमेतानि निहन्ति शीत्रं प्ररूढवृक्षानिव वज्रपात ॥

## KUMĀRĪ

**Botanical name :** Aloe vera Tourn. ex Linn.

Syn. *Aloe barbadensis* Mill.

**Family :** Liliaceae

**Classical name :** Kūmārī

**Sanskrit names**

Kumari, Ghṛtakumārī-ghṛtakumārikā, Gṛhakanyā, Viśalā, Vīrāsrāva, Sahāsāra-Kumārīsambhava, Picchāsambhṛtā, Panktikandalā, Balā, Dhvajāmadhyadaṇḍā Arunārājiyutā.

**Regional names**

Ghikuwar, Ghaikuwar, Gvarapatha, Dekvara (Hindi); Patkvar (U.P. hills); Kuvargondal (Marathi); Ghritkumari (Bengla); Kourphad (Marathi); Kunwarpath (Guj); Chiruli (Tam.); Chimakat banda (Telugu), Lolistar (Kann.) Kumari (Mal.); Sabbarat (Arabic); Darakhte sibra (Persian); Indian Aloe, Curacao Aloe, Barbados Aloe, Jaffarabad Aloe (Eng.).

**Description**

A coarse-looking plant is with a short stem, 1-2 feet high. The fleshy leaves (about 15 inches long, 4 inches broad and 3/4 inch thick) are densely crowded. Large fleshy green leaves with sharp spines and white specks at the bases of the leaves.

Perennial herb of about 30 cm. to 60 cm. high. Dwarf succulent plants upto 30-60 cm. in height. Leaves thick, glaucous, aregated, ensiform,  $30-61 \times 5-10$  cm. with horny pickles perpendicular or margin; Fls. on the scape 61-91.5 cm., perianth reddish yellow and green, cylindrical, 1.9-2.5 cm. fruit a loculicidal capsule.

**Leaf drug :**

Leaf epidermis full of stomata on both the surfaces (as transverse section). Parenchyma rich in chlorophyll cells show starch and bundles of needles of calcium oxalate. Central portion consists of mucilage containing parenchyma. A double row of vascular bundles located at the junction of the two preceeding areas and with well marked pericycle and endodermis.

**Dried juice (leaves) :**

It varies in colour from yellow brown to chocolate

brown. It breaks with a waxy fracture giving a sour odour. Taste is bitter. Drug shows (examined in lactophenol microscopically) crystals of aloin embedded in masses of resin. Purity of drug is tested chemically (schontetus reaction etc. and other methods).

### **Flowering and fruiting time**

Plant in flowering stage during winter-spring seasons.

### **Distribution**

Plant grows widely throughout India ascending to 1500 meters elevation in Himalayan region. It is found in Africa, Arab, India, and China. plant occurs in a semi-wild state in all parts from the dry westward valleys of the Himalayas up to Cape Comorin. Plants are generally propagated by suckers. Many of the forms of this species are naturalised.

### **Chemical composition**

Aloes (Musabbar) contains chief active principle which is mixture of glucosides and collectively called 'aloin' regarded main active constituent of the drug Aloes. Proportion of aloin varies (in different samples of crude drug belonging to various areas from 10% to 30%. Aloin contains barbaloin, Isobarbaloin, aloe emodin etc.

### **Pharmacodynamics**

Rasa	: Kātu
Guṇa	: Guru, snigdha, picchila
Vīrya	: Śīta
Vipāka	: Tikta
Doṣakarma	: Kaphapittahara.

### **Properties and action**

Karma	: Pittavirecana Dipana-pācana-bhedan- yakṛduttejaka (lower dose) Virecana-kṛmighna (higher dose) Raktaśodhaka-śothahara Mūtrala Vṛṣya
-------	---

	Garbhāśayottejaka-Ārtavajanana- garbhāsrāvakara Tvagdoṣahara Jvaraghna Balya-bṛñhaṇa Viṣaghna Medhya Rasāyana Vraṇaropapaṇa Keṣya Kṛmighna Kaṇḍūghna-kuṣṭhaghna Cakṣuṣya Vātaghna Varnya.
<b>Roga</b>	: Yakṛtplihāvikāra-vṛddhi Pāṇḍu-kāmalā Carma-varṇavikāra Śothavedanāyukta vikāra Udararoga-gulma-agnimāndya- udarsūla-vibandha Raktavikāra-śotha Mūtrakṛchhra Śukradourbalya Rajorodha-ārtavavikāra Stanvyatha Carmaroga Jīrṇajvara Dourbalya Kṛmiroga-tantukṛmi Netraaroga-netrābhīṣyanda Śiroroga Vraṇa-visphoṭa Agnidagdha Apasmāra Liṅgārśa Śitapitta.

**Therapeutic uses**

The drug Kumāri or Ghṛtakumārī is bitter, cathar-

tic, anathelmintic, aphrodisiac, cooling, emmenagogue, hepatic stimulant, purgative and vermifuge. It is used in indigenous medicine in haemophilic, skin and uterine disorders. Locally it is applied on burns. It is also used in cosmetics for applying over face and skin. Drug is topically applied to ulcers, wounds eruptions or eruptive boils. It is used in anaemia, jaundice, liver and spleenic disorders, menstrual troubles, worms, chronic fever, dysuria, oedema, abdominal disorders, inflammatory and painful complaints (organs), colic, poisons and general debility. It is blood purifier, tonic and wholesome to eyes. Drug is restorative (*rasāyana*); and it is useful in urticaria, headache, loss of appetite, leucorrhoea, constipation and it allays *vāta* and *kapha* besides its cholagogue action. Drug is frequently recommended in gynaecological complaints. It is used as single drug, recipes and compound formulations. Besides as an ingredient of several pharmaceutical preparations (compounds), the plant drug is employed in some processes of pharmacy (*rasāśāstra* and *bhaiṣajya kalpanā*) in Indian medicine. It is utilised in *śodhana* and *māraṇa* methods (process) of certain processes and preparations. In addition to pharmaceutical formulations of classical group (*sāstriya*) as well as new herbomineral products indicated in treatment of various diseases.

The plant drug Kumārī is major ingredient of Kumaryāsava, Rajahpravartanī *vatī*, Kumārikā *vatī*, Kumārī taila, Kumāripāka etc. incorporated in Indian medicine. Some other drug preparations are made in Unāni medicine. Kanyāsāra or Aloes (extract) or Musabbar is used in medicine for treating different ailments and it is also an ingredient of medicinal preparations used in externally and internally in therapeusis.

Kumāri has been important and potent drug in ancient medicine and therapeutics finding its uses in several diseases as mentioned in different classical texts dealing with clinical management.

The juice of Kumārī leaves (pulp) is taken as snuff which is useful to relieve from jaundice or Kāmalā. Kumārī nasya is referred by Bhāvamiśra (*Bhāvaprakāśa*, cikitsā. 8-

44). Kumārī is used in jaundice and anaemia (Kāmalā and Pāṇḍu) in other forms also since its pharmacological action on liver and spleen function. Kumārī leaves are used in enlargements and other disorders of liver and spleen in body. Kumārī is potent cholagogue drug (pittanirharana-pittarechana). The juice of Kumāri mixed with Haridrā (turmeric) powder is given in spleen enlargement or plīhavṛddhi (Śāraṅgadhara Samhitā, 2-1-15).

In therapeutic management of amenorrhoea (rajobrodha), the extract of Kumāri leaves juice or Kanyāsāra (aloe) is chief ingredient of two compounds viz. Kumārikāvati and Rajahpravartanī vati which are frequently prescribed in menstrual problems as emmenagogue drugs (Bhaiṣajya Ratnāvali, p-1182-1183). Kumāryāsava is another prominent classical formulation which is generally recommended in female diseases and also other ailments.

Kumārī is mixed with tila and sour gruel or alone applied to ripens the abscess. Kumārī leaves or juice is recommended to apply over abscess and wounds in āma and pacyamāna stages for attaining pakva condition of vidradhi and vrāṇa (Vaidya Manoramā, 16-101-102). Leaves pulp of Kumāri are prescribed to externally apply over or by covering up with the steamed leaves devoid of pulp, in all stages of abscess as indicated in medical texts (Vidradhi cikitsā contexts). Kumārī is recommended in other several diseases in texts and medical practice.

**Parts used :** Leaves, root, Extract (powder) Kanyāsāraa.

**Dose :** Juice 10-20 ml., Powder (extract) 0.1-0.3 gm.

#### **Formulation**

Kumāryāsava,      Kumārikāvati,      Kumāripāka,  
Rajahpravartanivati.

## **KUMĀRĪ ( कुमारी )**

कुमारी शीतला तिक्ता मधुरा भेदनी जयेत् ।  
गुल्मप्लीह यकृदवृद्धि कफज्वरहरी हरेत् ।  
ग्रन्थ्याग्निदाध लिस्फोट पित्तरक्तत्वगामयान् ॥

चक्षुष्या विषवात्म्री बल्या वृष्या रसायनी ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1638-40.*

### कुमारी पुष्पम्

वातपित्तकृमिहरं कुमारी कुसुमं गुरु ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1640.*

कुमारी भेदिनी शीता तिक्ता मेध्या रसायनी ॥

मधुरा बृंहणीबल्या वृष्यावात् विषप्रणुत् ।

गुल्मप्लीहयकृद्वृद्धिकफञ्चरहरी हरेत् ॥

ग्रन्थ्यग्निदग्ध विस्फोट पित्तरक्तत्वगामयान् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍucyādi Varga 221-230.*

गृहकन्या हिमा तिक्ता मदगन्धिः कफापहा ।

पित्तकासविषश्वासकुष्ठघ्नी च रसायनी ॥

*Rāja Nighaṇṭu.*

वीरास्त्रावः सहासारः कुमारी सम्भवः ।

सहासारोऽग्निजननः पित्तनिर्हरणोमतः ॥

बलकृद्रेचनः पुष्पजननो गर्भपातनः ।

विट्सङ्गे कृमिरोगे च संन्यासेऽपस्मृतौ तथा ।

लुसे रजसि नारीणां शीतपित्ते शिरोरुजि ।

ज्वरे श्लेष्मोद्भवे प्लीहि मन्दऽग्नौ च प्रयुज्यते ॥

अर्शसस्तं न सेवेत नान्तर्वली न पुष्पिणी ।

न चासृदरिणी नापि यकृद्वृक्षादिरोगवान् ॥

A. Vi.

### कामलारोगे घृतकुमारी नस्यम्

‘अपहरति कामलाऽर्त्ति नस्येन कुमारिकाजलं सद्यः ।’

*Bhāvaprakāśa, Pāñḍukāmlāhaṭīmakādhikāra, 32-44.*

### गुल्मे कुमारिका मांसम् (पत्रमज्ञा)

गुल्मी कुमारिकामांसं कर्षद्वं गोघृतान्वितम् ।

गिलेद्वयोषाभवासिन्धु सूक्ष्मचूर्णवधूलितम् ॥

*Bhāvaprakāśa, Gulmādhikāra, 32-44.*

### लिङ्गार्शघृतकुमारी लेपम्

हरति घृतकुमारी पत्रमावेष्टनेन ग्रथन विधि विशेषांश्चर्मकीला स्तृतीये ।

अहनि गुरुतरानप्यद्वृथप्रतिष्ठान् विधिरिव विपरीतः पौरुषस्य प्रकारान् ॥  
*Bhāvaprakāśa, Madhyakanda, 52-5.*  
*Rājamāstaka, 24-1.*

शिरोरोगादयः चिकित्सायाम्

कुमारी तैलम्

*Bhāva Bhāvaprakāśa, Śirorogādhikāra, 62-42/48.*

रजोरोधे

कुमारिकावटी

रजःप्रवर्त्तनीवटी

*Bhāisajya Ratnāvalī, p. 1182-1183.*

मूत्रकृच्छ्रे

ज्वरेषु मूत्रकृच्छ्रं चेत् कुमारी स्वरसं पिबेत् ।

कनीयः पञ्चमूलं वा गुह्यमेतच्चिकित्सितम् ॥

*Vaidya Manoramā, 7-10.*

स्तनव्यथायाम्

अपत्यनाशप्रभवांनिहन्ति स्तनव्यथामाशुकृते प्रलेपे ।

स्त्रीणां हरिद्रासहितं कुमारीमूलं विशालाप्रभवं कदाचित् ॥

*Gadanigraha, 6-8-23.*

प्लीहवृद्धौ

‘निशाचूर्णयुतः कन्यारसः प्लीहापचीहरः ।’

*Śāraṅgadhara Samhitā,*

अपस्मारे

मधुकक्षाथसहिते कुमारी स्वरसे शृतम् ।

घृतं स्मृतमपस्मारे हृदुत्फाले सशर्करम् ॥

*Siddha Bhaisajya Maṇimāla, 4-453.*

ब्रणे

कुमारीसंपिण्ठं जीरकं लेपयेद् भिषक् ।

तेन दाहश्च पाकश्च शमामाप्नोति निश्चितम् ।

*Rasa Ratna Samuccaya, 25-18.*

तिलारनालक्ष्मितां कुमारी पाचयेद् ब्रणान् ।

केवलाऽथ कुमारी वा पक्वापक्व विशंकितान् ॥

आमे वा पच्यमाने वा पक्षे वा कन्यकां ब्रणे ।

स्विनां विनिर्गन्त्रां च निक्षिपेत् संप्रशाम्यति ।

Vaidya Manoramā, 16-101-102.

## KUMBHĪKA

**Botanical name :** Careya arborea Roxb.

**Family :** Lecythidaceae

**Classical name :** Kumbhīka

**Sanskrit name :** Kumbhīka

**Regional names**

**Description**

Deciduous trees, up to 20 m. tall. Leaves usually sessile, broadly ovate, 15-30 × 5-15 cm., tapering to base, obtuse or rounded at apex, denticulate or crenate, thick, smooth and shining on both sides, pale green.

Flowers swollen terminal spikes, each with a central oval bract and two lateral linear ones. Calyx tube about campanulate, 2-3 cm; glabrous, segments rounded, stiff, erect. Petals ovate, 5-7 cm. long, obtuse or acute, margins often revolute. Filaments about as long as petals, spreading. Fruits globular, ca 8 cm., green, crowned with persistent calyx segments and style, solid with many seeds embedded in fleshy pulp.

**Flowering and fruiting time**

March to July. Spring to rainy season.

**Distribution**

It is found growing on hill slopes and along the sides of streams. It occurs in Central India, Madhya Pradesh and other regions in country.

**Kind and varieties**

The plant drug Kumbhīka (*Suśruta Saṃhitā*, sūtra, 38-45) is also referred as Kumbhī (*Caraka Saṃhitā*, Vimāna. 8-144), Kumbhīkā (*Suśruta Saṃhitā*, Uttara. 3-10) and some other similar terms in classical texts. 'Kumbhikā-dvayam' has two kinds of different plant drugs viz. Sthalakumbhīkā (*Dalhaṇa Suśruta Saṃhitā*, Cikitsā. 17-27)

which is Kumbhīka, identified as *Careya arborea* Roxb.; and Jalakumbhī (Bhāvaprakāśa, Cikitsā, 45-35) which is identified as *Pistia stratiotes* Linn. Among these two plants, former is terrestrial tree and latter is aquatic herb from eco-taxonomical point of view.

Another kind of Kumbhī or Kumbhīka is Kumbhāṭoh (Paryāya Ratnamālā, 75-4), known as Kumbhāḍuh and also Āvaṭīlatā, is botanically identified as *Careya herbacea* Roxb. (Myrtaceae).

### ***Careya herbacea* Roxb.**

A small perennial under-shrub having woody root-stock, throwing up annullaly herbaceous leafy flowering shoots about 1 ft. high. Leaves 6-8 by 2-3 in., obovate, oblanceolate or spatulate, Cuneate-oblong or obovate, obtuse or emarginate, serrulate, glabrous or obscurely puberulous; petioles up to half inch long; tube campanulate, terete. Flowers stalked, 1-2 on each shoot, terminal, jointed within the bracts, bracts 2, linear at the base of calyx. Calyx 3/4 in. long, tube campanulate, terete; lobes ovate, obtuse. Petals about 1.5-2 in. long, greenish-purple. Fruit 1.5 in. diam., globose, crowned by the persistent calyx and style. Fls. March.

It occurs an grassy slopes of Siwaliks, U.P., Central India, Bengal and, other regions.

### **Chemical composition**

Leaves contain 10% tannin.

### **Pharmacodynamics**

Rasa	: Kaṣāya, tikta.
Guṇa	: Laghu, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātapiṭṭahara-Tridoṣāśāmaka.

### **Properties and action**

Karma	: Vraṇa ropāṇa Śothana Dipana-pācana Kāsaghna
-------	--

	Snehan
	Mardavakara
	Jvarghna
<b>Roga</b>	: Vraña
	Vidradhi
	Kasa
	Jvara
	Udararoga.

### Therapeutic uses

The oil prepared with bark of plant is useful for treating ulcer, wound and sinus. Kumbhikādi taila contains this drug as a major ingredient (Suśruta Saṁhitā, Nādīvraṇa. 18-19).

The bark is used as demulcent in coughs and colds, in the preparation of an emollient embrocation, and as antipyretic and antipruritic, in eruptive fevers, particularly smallpox.

The calyces of the flowers contain mucilage and are used as demulcent.

The fruits are edible and aromatic. They contain an astringent gum. A decoction of the fruits is given to promote digestion. Leaves are used for ulcers.

The seeds are reported to be poisonous. Plant is a fish poison (matsyaniṣūdana-matsyaviṣakāri). Its inner bark is rubbed on shoes for keeping off leeches in moist, humid and dense forests particularly where leeches (jaloukā) are often found and they need to be counter checked.

**Parts used : Bark**

**Dose :** Decoction 50-100 ml.

**Formulation**

Kumbhikādi taila (Suśruta Saṁhitā, Nādīvraṇa. 18-19).

## KUMBHĪKA ( कुम्भीक )

नाडीव्रणे

कुम्भीकादि तैलम्

Baṅgasena Nādīvraṇa. 98-99.

**कुम्भी**

*Caraka Samhita, Vimāna. 8-144.*

**कुम्भिका**

कुम्भी (अत्र) पानीय कुम्भिका (डल्हण)

*Dalhana, Suśruta Samhitā, Uttara. 40-155.*

**कुन्तिका द्वयम्**

‘स्थलकुम्भिका जलकुम्भिका च।’

**कुम्भीकः**

क. ‘श्लक्षणत्वक्त्रो रोमशः कुम्भीनामावृक्षः’ (डल्हणः)

ख. (पा.) ‘कुम्भाङ्गुलता, तद्बीजमपि दाडिमफलबीजाकारम्।’

(म० को०, 59-77)

*Suśruta Samhitā, Sūtra 38-45.*

**कुम्भीका**

(क) ‘दाडिमकारफला स्थलकुम्भी’ (डल्हणः)

(ख) कच्छदेशोद्भवा दाडिमफलाकारफलालता।

(म० को०, 59-77)

‘कुम्भाङ्गुलता दाडिमसमानफला।’ (शिवदत्त)

(ग) जंलकुम्भी। (अ० प्र०, 9-9)

*Arkaprakāśa, 9-9.*

## KUMUDA

**Botanical name**

*Nymphaea nouchali* Burm. f. (*Utpala*) *Nymphaea stellata* Willd. (*Nilotpala*)

**Family :** Nymphaeaceae

**Classical name :** Kumuda

**Sanskrit names :** Kumuda, Utpala.

**Regional names**

Kui, koi, Bhent (Hindi); Kumud (Beng.); Kamod (Marathi); Poyanu (Gujarati); Alli-tamarai (Tam.); Alli-tamar, (Telugu); Nipadale hudu (Kann.); Periyamval (Mal.); Indian-Red water Lily (Eng.).

### Description

**A. Nymphaea nouchali Burm. f.**

Syns. *Nymphaea stellata* Willd.

Perennial aquatic herbs with small corns. Leaves rotundate, ca 10 cm. across, entire or sinuate margined, glabrous beneath. Flowers ca 5 cm. across, blue, sometimes purple, stamens appendaged.

### Flowering and fruiting time

May to October (flowers) and October to November (fruits)

**B. Nymphaea pubescens Willd.**

Syns. *Nymphaea nouchali* auct pl. (non Burm.f.); *Nymphaea lotus* (auct non L.) sensu Hook f. & Thoms.

Perennial aquatic rhizomatous herbs. Leaves oblong or rotundate, hastate, entire or sinuate-margined, villous beneath; petioles and peduncles smooth, purplish. Flowers white or purple; petals ca 5 cm. long; stamens and stigmas pale yellow.

### Flowering and fruiting time

May to October (flowers) and October to December (fruits).

**C. Nymphaea rubra Roxb. ex Andrews**

Syns. *Nymphaea lotus* auct. (non L.) Hook. f. & Thoms.

Perennial aquatic rhizomatous herbs: petioles and peduncles smooth. Leaves rotundate, dentriculate, ca 20 cm. across, purplish, villous beneath. Flowers carmine red; petals linear-oblong, 5-7 cm. long; anthers purplish black.

### Flowering and fruiting time

July to October (flowers) and October to December (fruits).

### Distribution

It occurs in tanks and ponds of hotter regions of country.

### Chemical Composition

The aerial stem of plant contains moisture 53.95%,

protein 5.87%, fat 1.06%, starch 27.37%, fibrous substance 1.55%, other carbohydrates 9.07% and ash 1.13%. Seeds contain 7.05%, fat 0.94% and carbohydrate 77.86%.

### Kinds and varieties

There are several kinds of plants referred to Kumuda. *Nymphaea nouchali* Burm. f., *Nymphaea pubescens* Willd. and *Nymphaea rubra* Roxb. are commonly known as Neelkamal, Kanwal or Koka and Lal matala etc. respectively. *Nymphaea nouchali* Burm. f. syn. *N. stellata* Willd. is popularly known as Nilophar (Nilotpala) since the flowers of this kind is generally of blue colour (Sometimes white or pink also). Flowers of *Nymphaea alba* Linn. is pure white which is found in Kashmir Himalaya. Plant of *Nymphaea tetragona* Georgi is quite small herb which occurs in the Himalayan region (4,000-6,000ft altitude). Some of these kinds of plant flower during night while many of them bloom at morning. Species of *Nymphaea* occur throughout India, both in the plains as well as in hills.

### Pharmacodynamics

Rasa	: Kaṣāya, madhura, tikta
Guṇa	: Laghu, snigdha, picchila
Viryā	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittaśāmaka

### Properties and action

Karma	: Dāhapraśamana Varṇya-tvagdoṣahara Medhya-śāmaka Chardinigrahaṇa Trṣṇānigrahaṇa Stambhana Prajāsthāpana Mūtravirecanīya-mūtravirajaniya Jvaraghna Balya-viṣaghna Raktastambhana Viṣaghna Keśya
-------	---

<b>Roga</b>	: Dāha Varṇavikāra Tvagvikāra Mastiskadourbalya-mūrcchā- mānasadvega-anidrā- Vamarṣa-trṣṇā-atisāra-pravāhikā Hṛdroga Raktavikāra-visarpa Raktavikārā-raktārsa-raktapitta- raktasrāva Garbhasrāva-yonidāha-somaroga Prameha-paittika prameha- mūtrakṛcchra Tivrajvara-dāha Viṣa Dourbalya-Bālaśoṣa-kṣaya Pālitya.
-------------	--

**Therapeutic uses**

The drug Kumuda is astringent, cooling, antipoisonous, brain tonic and refrigerant. It is used in burning sensation, in the body, cardiac diseases, fever and hemophilic conditions. the drug is useful to check abortive tendency, habitual abortion and to promote intellect (to increase mental faculties).

**Parts used**

Whole plant, specially flowers, seeds and root.

**Dose**

Seeds powder 3-6 gm., Root juice 10-20 ml.

**Formulations**

Aravindāsava, Nilotpalādi hima, Sarbat Nilophar.

**Gana**

Mātravirajanīya (Caraka Saṃhita), Utpalādi (Suśruta Saṃhitā).

**KUMUDA( कुमुद )**

कुमुदं पिच्छिलं न्त्रिधं मधुरं हादि शीतलम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1453.*

### कुमुदबीजम्

कुमुदस्य च बीजं तु कुरुते मनसोमुदम्।  
वातलं रक्तपित्तग्रमतीसारं विनाशनम्॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 1454.*

### कुमुदिनी

कुमुद्वती कैरविका तथा कुमुदिनीति च।  
सा तु मूलादि सवादैरका समुदिता बुधैः।  
पद्ममिन्या ये गुणाः प्रोक्ताः कुमुदिन्याश्वते स्मृताः॥

*Bhāvaprakaśa Nighantu, Puṣpa Varga, 16-17.*

### योनिदाहे कमलिनी मूलम्

‘सूर्यकान्ता भवं मूलं पिबेद्वा तण्डुलाम्बुना।’

*Bhavaaprakaśa, Yonirogadhikara, 70-41.*

### सोमरोगे

उत्पलपत्र स्वरसः किञ्चित्तैलेन सह पीतः।  
अस्थिस्नावं ख्रीणां नाशयति नरस्यसोमरोगं च॥

*Vaidya Manoramā, 2-11.*

### पालित्ये

उत्पलं पयसा सार्धं मासं भूमौ निधापयेत्।  
केशानां कृष्णीकरणं स्नेहनञ्च विधीयते॥

*Vṛanda Mādhava, 57-90.*

### दन्तभग्ने

.....उत्पलस्य च नालेन क्षीरपानं विधीयते।’

*Suśruta Saṁhitā; Cikitsā. 3-42.*

### रक्तपित्ते

पद्मोत्पलानां किञ्चल्कः पृश्निपर्णीं प्रियङ्गुकाः।  
जले साध्या स तस्मिन् पया स्यात् रक्तपित्तिनाम्॥

*Caraka Saṁhitā, Cikitsā. 4-44, 67, 63/75,  
80, 86, 93, 99, 102.*

### मेघ्य रसायने चतुःकुवलय घृतम्

यन्नालकन्ददलकेशं रबद्विपक्कं नीलोत्पलस्य—  
तदपि प्रथितं द्वितीयम्।

संपिश्चतुः कुवलयं सहिरण्य पत्रं मेच्यं गवामपि भवेत् किमु  
मानुषाणाम् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 39-49.*

## KUṄKUMA

**Botanical name :** Crocos sativus Linn.

**Family :** Iridaceae

**Classical name :** Kuṅkumā

**Sanskrit names**

Kuṅkuma, Ghusrṇa, Rakta-Śoṇita, Kāśmīra, Bālhīka, Śatha, Piśuna, Varam, Sankoca, Angiśikha, Śaka, Pīnasa,.

**Regional names**

Kesar (Hindi); Kesar (Mar., Guj.); Jafran Kumkum (Beng.); Kunkumappu (Tam.) Kunkum-pubba (Tel.), Jaffran (Arabic); Karakimas (Persian); Saffron (Eng.)

**Description**

A herbaceous plant, perennial, with height 6" to 10".

Leaves radical, linear, tunnel shaped, margin curled, wings of flowers covered with leaves. Scape covered with spathe.

Flowers violet, autumnal appearing with the leaves. Throat of perianth, bearded. Anthers yellow, Solitary or together with 2 or 3 flowers, having fine essence and brown in colour. Perianth funnel shaped, tubelike and hairs found in throat region. Styles of stigma exerted outside, orange in colour, apex divided into many. Style 1 cm. elongated. Stigmas generally 3 in number, thread like, red in colour, stigmas are actually known as saffron (Kunkuma or Keśara) which are practically thread like (three in number) and visible in a flower.

Root corm, devoid of stem; sheaths of corm closely reticulate, basal spathe embracing the scape 2-valved.

Fruit rectangular in shape; ovary, trilocular, three

chambered in which round shape seeds found, fruit a capsule.

### **Flowering and fruiting time**

Post-rains and flowering during autumn and pre-cold season.

### **Distribution**

It is native of South Europe. It is cultivated in Iran, Spain, France, Italy, Greece, China and Turky. In India, it is mainly and largely cultivated in Kashmir (Pampore and Kishtwar) in Jammu and Kashmir state.

### **Chemical composition**

It contains a colouring glycoside crocin and another colourless picrocrocin. It yields volatile oil 1% and fixed oil 8-13%. Crocin is red coloured anorphous powder which is soluble in water and alcohol. It becomes blue when mixed in concentrated sulphuric acid, turns violet aftertime and finally it is red colour. It gives green colour in nitric acid solution.

### **Pharmacodynamics**

Rasa	: Katu, tikta
Guṇa	: Snigdha
Viryā	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Tridoṣahara

### **Properties and action**

Karma	: Vṛṇya Śothahara Jantughna Kothapraśamana Cakṣuṣya Uttejaka (nāḍīsansthāna) Mādaka (higher dose) Mastiṣka balya Vedanāsthāpana Dīpana-pācana-rocana-grāhī Yakṛduttejaka Chardinigrahaṇa
-------	---

	Hṛdy-a-raktaprasādana Vājikaraṇa-garbhāśaya saṅkocaka Mūtraprasādana Śitapraśamana Svedajanana-varṇya- dourgandhyahara Kaṭupouṣṭika Mūtrajanana Rasāyana
<b>Roga</b>	: Varṇavikṛti-kṣudravikāra-Vyaṅga- nyaccha-nīlikā-pīḍikā Sirahśūla-vraṇa Dṛṣṭidourbalya Mastiṣkadourbalya janita vikāra Sirahaśūla-asdhāvabhedaka Vātavyādhi-Āmavāta-nādīśūla Agnimāndya-Ajīrṇa-aruci-atisāra- vamana Yakṛdvikāra Hṛddourbalya-raktavikāra Mūtrakṛchra-mūtraghāta Dhavjabhaṅga-napuṇsakatā- kāmaśaitya Garbhāśayavikāra-prasavottarvikāra (Viśodhana) Rajaḥvikāra-rajorodha-kṣṭārtava Carmavikāra-varṇavikāra- masūrikā Jvara Dourbalya.

### **Therapeutic uses**

Prior to therapeutic use of drug Kuṇkuma or saffron, the crude plant drug Kuṇkuma needs to be observed for its quality, grade and genuineness before using it therapeutically and allowing the raw material for pharmaceutical process or any medicinal recipe since the costlier valubility of drug is liable for admixture as well as substandard crude drug carrying possibility of any kind of malpractice against the standard pharmacopoeial specification

which may conform to specified characteristics of purity and authenticity.

The stigmas of flower of the plant (*Crocos sativus* Linn.), dried and thread-like stigmas, form the drug Kuṇkuma or Keśara. The raw material of drug is tested for ascertaining the purity and quality. Stigmas are put into sulphuric acid and they immediately turn blue, afterward they change to purple and finally the stigmas become violet-red. The colour intensity of genuine saffron is specifically tested. Material of crude drug (saffron) 0.2 gm. (3/10 gr.) is mixed in 100 ml. (c.c.) water and its solution becomes water solution of potassium dichromate (0.1 percent) of yellow colour. Some other tests in chemical screening are also suggested to confirm salient characteristics of genuine drug material of saffron.

The colour intensity of saffron crude drug is important in test process to verify nature of colour. In case the sample of artificial (pseudo-coloured) or impure crude drug 0.1gm. is well-mixed with water and slowly shaken for about 15 minutes. Mixture (solution) is filtered and than discolouring charcol 1 gm. is added (well-mixed) and shaken. After ten minutes, it is filtered. Thus, the filtrate is found colourless substance. Anothr technique for testing unauthentic colour may be followed. Sample of saffron 10 mg. is mixed well in alcohol (95%) or methyl alcohol. This solution becomes greenish yellow in colour. Sample of genuine or pure saffron 10 mg. is mixed with ether or chloroform and the solution is observed almost colourless. Similarly the saffron crude sample becomes almost colourless when it is mixed in xylene, benzene or carbon tetrachloride solvent. Two filter paper pieces are treated (dipped in) with fixed oil and glycerine and the saffron sample is kept between filter papers (pieces) and pressed. It will give transluscent spots in case of impure saffron, and there will be no such spot if saffron is pure and genuine (not artificially coloured).

The saffron as raw drug is very prone to adulteration (admixture of substandard material, admixture of non-official parts and artificial crude material etc.) of various

kinds and nature on account of costlier drug and valuable herbal material produced in specific (restricted) zone of conventional farming for indigenous source of supply (and also from import drug resources) of this precious drug item carrying possibilities of admixture and availability of spurious quality of market drug saffron under trading of precious drugs commodities.

During collection of saffron at initial stage of procurement of its crude material, sometimes undesirable parts of the flowers such as styles, stamens, strips of corolla of the flower of source plant (*Crocos sativus Linn.*: Kuṇkuma) saffron are admixed other than official part i.e. dried stigmas in accordance to pharmacopoeial specification. The substandard material, exhausted and old part of crude drug are admixed as faulty procurement and supply of low or inferior quality of saffron which does not conform to an official drug standards. There is practice to make adulteration of certain plant material resembling to saffron. Among the plants and their particular flower or other part (s), *Kusumbha* (*Carthamus tinctorius Linn.*: Asteraceae) or *Barren, Jaregul* (*Calandula officinalis Linn.*: Asteraceae) and some other similar plants material are adulterated in natural form or artificially coloured state. Sometimes faulty attempts are made to increase the weight of crude drug by adding or treating saffron material with certain other liquids powder solids etc. For the instance, fixed oil, glycerine, sucrose, glucose and other organic matters; and potassium or ammonium nitrate and other inorganic salts solution. In addition, some other unauthentic plant material as well as faulty processes may be adopted as part of malpractices for adulteration in saffron.

The drug saffron or Kuṇkuma is highly medicinal, reputed flavouring and rich colouring agent among precious drugs, obtained from medicinal and aromatic plants of indigenous systems of medicine.

Kuṇkum or Keśara has therapeutic application in several diseases, and it enters in various medicinal recipes. It is employed as an ingredient of some formulations. Saffron is extensively used in perfumery and allied purposes

including flavouring item for dietetic preparations (dishes).

As an effective drug, it is recommended in treatment of fever, melancholia, impotency, catarrhal affections (especially children), lumbar, neuralgic and rheumatic pains, asthma, dysmenorrhoea, leucorrhoea, piles, sexual weakness, depression and other ailments. It is a good stimulant, aphrodisiac and mervine tonic. The drug has actions of aphrodisiac, diuretic, antiphlogistic, germicide, anodyne, stomachic and aromatic. It is useful to check vomiting, headache, dermatosis and other skin affections. Saffron is quite useful in diseases of skin and especially cutaneous ailments caused by abnormal pigmentation or discolouration since it is effectively promotor of lusture and complexion of body and skin. Saffron is hence, esteemed for cosmetic purposes. In larger dose, it is hot, stimulant, aphrodisiac and narcotic. Its smell is intense odorous which may affect adversely if inhaled in excess. The use of saffron within limited doses, is generally of therapeutic utility.

The addition of safron with other drugs in any formulation activates its action on heart and brain or making it more effective in regard to therapeutic potentialities including action of saffron on different systems, organs and functions of body.

**Parts used :** Stigma (flower-part): Kukṣibhāga-Keśara.

**Dosa :** 0.5-1 gm., 62.5 mg.-250 mg. (62.5 mg.-2 gm.).

#### Formulations

Kuṇkumādi ghṛta, Kunkumādyā taila, Keśarādi vaṭi

#### Gana

Sonitāsthāpana (Caraka Saṁhitā), Elādi (Suśruta Saṁhitā).

## KUṄKUMA ( कुङ्कुम )

कुङ्कुमं कटुकं स्त्रिधं शिरोरुग्व्रणजन्तुजित्।

तिक्तं वमिहरं वर्णं व्यञ्जदोषत्रयापहम्॥

*Bhāvraprakāśa Nighaṇṭu, Karpūrādi Varga 78.*

## कुङ्कुमम्

कुङ्कुमं पीनसं रक्तं काश्मीरं पिशुनं वरम् ।  
संकोचं चास बाहीकं वर्ण्यमग्निशिखं शकम् ॥

## कुङ्कुमगुणाः

कुङ्कुमं कटुकं तिकं वर्णं व्रणविशेषधनम् ।  
हन्ति दोषत्रयं हिक्काशिरोरोगविमिकृमीन् ॥

## देशभेदेन कुङ्कुमस्य लक्षणाति

- क. कौङ्कुमं पुष्पमारकं गन्धवत्सूक्ष्मकेशरम् ।  
कश्मीरेषु च सज्जातं पद्मगन्धिं तदुत्तमम् ॥
- ख. अतिस्थूलं लतारूपं मध्यमं कथयन्ति हि ।  
अपाण्डुरं खरं चैव स्थूलकेशरमेव च ॥
- ग. मधुगन्धिं च विज्ञेयं पारसीकं तु कुङ्कुमम् ।  
वाहीकं देशसंजातं कुङ्कुमं पाण्डुवर्णकम् ॥
- घ. केतकी गंधं संयुक्तं सूक्ष्मकेशरं शोभितम् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 1301-1305*

## कुङ्कुमम्

ज्ञेयं कुङ्कुमग्निशेखरमसृक्काश्मीरजं पीतकं  
काश्मीरं रुधिरं वरञ्च पिशुनं रक्तं शठं शोणितम् ।  
वाहीकं घुसृणं वरेण्यमरुणं कालेयकं जागुडं  
कान्तं वह्निशिखञ्च केसरवरं गौरं कराचीरितम् ॥

## कुङ्कुम गुणाः

कुङ्कुमं सुरभि तिक्ककटूष्णं कासवातकफकण्ठरुजाघ्रम् ।  
मूर्धेशूलविषदोषनाशवं रोचनञ्च तनुकान्ति कारकम् ॥

*Rāja Nighantu, Āmrādi Varga, 40-41.*

## तृणकुङ्कुमम्

तृणकुङ्कुमं तृणासं गन्धितृणं शोणितञ्च तृणपुष्पम् ।  
गन्धादिकं तृणोत्थं तृणगौरं लोहितं च नव संज्ञम् ॥

## गुणाः

तृणकुङ्कुमं कटूष्णं कफमारुतं शोफनुत् ।  
कण्ठूतिपामाकृष्टाम् दोषघ्नं भास्करं परम् ॥

*Rāja Nighantu, Āmrādi Varga, 42-43.*

मूत्राधाते

‘जले कुङ्गमकलंकं वा सक्षौद्रमुषितं निशि ।’

*Bhāvaprakāśa, Mūtraghātādhikāra, 36-36.*  
*Cakradatta, 33-5.*

व्यङ्गादयाः

(क्षुद्रविकारशमनाय) कुङ्गमाद्यतैलम्

*Bhāvaprakāśa, Kṣudrarogādhikāra, 61/46-51.*

नीलिकापिडिका व्यङ्गादयः चिकित्सायां (अभ्यङ्गार्थः

मुखाकन्तिदायक) कुङ्गम योगाः

प्रथम कुङ्गमाद्य तैलम्

द्वितीय कुङ्गमाद्य तैलम्

तृतीय कुङ्गमाद्य तैलम्

*Cakradatta, Kṣudraroga. Cikitsā, 55-63-76.*

शिरोरोगाणां प्रतिकारार्थं कुङ्गमलेपः

सशर्करं कुङ्गममाज्यभृष्टं नस्यं विधेयं पवनासृगुत्थे ।

भ्रूशङ्खकर्णाक्षिशिरोऽङ्गशूले दिनाभिवृद्धिप्रभवे च रोगे ॥

*Cakradatta, Śiroroga Cikitsā, 60-40.*

*Sārangadhara Samhitā 3-8-32.*

‘शर्कराकुङ्गमशृतं घृतं पित्तसुगन्धये ।’

*Aṣṭāṅga Hṛdaya, Uttara. 24-7.*

शीतप्रशमने

कुङ्गमागुरुकस्तूरीनिरवैलासुरदारुभिः ।

शैलेय चण्डात्वङ्मुस्तरास्ताकपिवचामयैः ॥

पृथक् प्रदेहाः सर्वे वां शीतग्नाः दृढ़कल्पिता ॥

*Aṣṭāṅga Saṅgraha, Cikitsā. 2-87.*

वातव्याधौ

कंकुमागुरुपत्राणि कुष्ठैला तगरापि च ।.....

समासेनैवमादीनि योज्यानिलरोगेषु ॥

*Suśruta Samhitā Cikitsā. 4-24/26.*

मूत्ररोधजेतदावर्त्ते

दुःस्पर्शस्वरसं वापि कषायं कुङ्गमस्य च ।

एर्वारुबीजं तोयेन पिबेद् वाऽलवणीकृतम् ॥

*Suśruta Samhitā, Cikitsā. 55-25*

**मूत्राधाते**

पिबेत् कुङ्गमकर्षं वा मधूदकं समायुतम्।  
रात्रिपर्युषितं प्रातस्तथा सुखमवाप्नयात्॥

*Suśruta Samhitā, Uttara. 58-31  
Vṛndamādhava, 33-4.*

## KUPILU

**Botanical name :** *Strychnos nuxvomica* Linn.

**Family :** Loganiaceae

**Classical name :** Kupilu-viṣamuṣṭi

**Sanskrit names**

Kupilu, Viṣamuṣṭi, Viṣatinduka, Kākatinduka, Kākapiluka, Kāraskara.

**Regional names**

Kuchla Kajra (Hindi); Kuchila (Bengla); Kajarakar (Mar.); Kachila (Orissa); Jherakochala (Gujarati); Nanjina, Kasa Kana (Kan.); Kaboung (Burm.); Yettikottai (Tamil); Musthtivittulu (Telugu); Kajjola (Mal.); Ajaraki, Habbul gurachu, Habbul gurav (Arbic); Kucula, Phulusemahi (Pers.); Nuxvomica (Eng.).

**Description**

Small to medium sized trees up to 18 meters high often a large tree; branches spreading, often with axillary thorns. Bark smooth, whitish.

Leaves shining, opposite, broadly ovate to elliptic, rounded or slightly cordate and 5-nerved at base, up to 15 cm. long, petiole up to 1.5 cm. long. Tree changes leaves during hot season, occasionally leafless for a short time.

Flowers greenish-white, in terminal, pedunculate, compound cymes. Calyx lobes acute, pubescent outside. Corolla hypocrateriform, lobes minutely tomentose on margins. Stamens subsessile, inserted inside the mouth of corolla tube. Style sparsely woolly-hairy.

Berry as large as an orange and of the same colour. Berry on strongly thickened branches, globular, orange-red

on age, up to 7 cm. across. Seeds 4, sariceous, many, flat, nearly circular, grey, shining, clothed on both sides with fine silky hairs radiating from the centre.

### **Flowering and fruiting time**

Plant flowers in May-July and fruits in November-January.

### **Distribution**

It occurs in India, Sri Lanka and Burm. It is found in tropical forests specially in Manbhund, Tamilnadu, Tranvancore-Cochin, Konkan-Malabar, Orissa and other regions in country. It is also occasionally planted in gardens. Plant occurs in warm regions of India upto an altitude of 1204 metros (4000 ft.) in wild state. Frequently growing in Orissa, Madras, Cochin, Bengal and Bihar.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphaśāmaka Vātaprakopaka-ākṣepajanana (Impure state and higher/over dose).

### **Chemical composition**

The pulp from matured and ripe fruit is separated for obtain seeds which are cleaned with water and dried under shade. Seeds are kept in airtight container put in non-humid, cold and dustless shelf or suitable place.

The seeds contain two important alkaloids namely strychnine and brucine. They also contain vamicine, columbine, logamine glycoside and fatty substance upto 3% alkaloids. Total content of the alkaloids ranges from 2.6% to 5.3% of which approximately half proportion is of strychnine, but bark yields only brucine.

Since the availability from wild population of trees of source plant (*Strychnos nuxvomica* Linn.) is plenty in the regions of occurrence, the need and chance are remote for adulteration and substitution. However, the seeds

of other two species of *Strychnos* are main adulterants, but they do not yield strychnine.

### Properties and action

<b>Karma</b>	: Ākṣepajanama (higher/overdose) Vātaśāmaka-vedanāsthāpana- uttejaka-nāḍibalya Dipana-Pācana-grāhī Śūlapraśamana Hṛdayottejaka-raktabhāravardhaka Śothahara Kaphaghna-Kāsahara Uttejaka-bastiśaithilya Vājikaraṇa Kaṭupouṣṭika-balya Kuṣṭhaghna-kaṇḍūghna- svedāpanayana Jvaraghna Arśoghna
<b>Roga</b>	: Vātavyādhī Angimāndya-āmāśayasotha- āmadoṣa-grahaṇī-udaraśūla Viṣūcikā Vātarakta Nādīśūla-ardita-paksāghāta-kampa -anidrā-sandhivāta-āmavāta- vātavikāra Arśa Krimiroga Dhvaja bhaṅga Dourbalya janita vikāra Vārdhakya janita vikṛti Jvara-viṣamajvara Hṛdayaśaithilya-hṛdayakapāṭavikṛti- hṛdayodāra Bāla śaiyāmūtra Sandhivāta-vraṇa-kṣata Kāsa-Phupphuśāsotha Kuṣṭha-kaṇḍū-atisveda

### **Therapeutic uses**

The seeds are extremely bitter and poisonous since they contain strychnine which is a highly bitter and most poisonous. Almost every part of this tree is more or less poisonous, but especially the seeds, which yield the alkaloid known as strychnine and brucine. The pulp of the fruit although containing strychnine, is largely eaten by certain birds as well as by monkeys and other animals. The wood is extremely bitter and is sometimes used in other purposes besides medicinal. The fruits (berry), becoming orange-red in ripen state, are non-edible by human but generally edible by other animals.

The seeds of two other species of Strychnine e.g. *Strychnos potatorum* Linn. (Nirmali or kataka) and *Strychnos blonda* Hill. are named among main adulterants and substitute plant drugs, but *Strychnos potatorum* Linn. does not contain strychnine, but it yields only brucine. The seeds of kupilu (*Strychnos nuxvomica* Linn.) is used therapeutically indigenous medicine only after proper purification (śodhana) as per method given in classical texts. The bark of the plant drug is also useful medicinally.

The drug Kupīlu or Vişamuşṭi in purified state with equal quantity of marica cūrṇa (powder of *Piper nigrum* Linn. or black papper) is rubbed with decoction of Indrayava (fruits or seeds of *Holarrhena antidysenterica* (L.) Wall.-Kuṭaja) and made into pills. It is orally given for removing constipation and fever caused by vāta (vātajvara and vibandha). Kupīlu, Hiṅgu and Navasādara (*Nuxvomica*, *asafoetida* and *Ammonium chloride*) are rubbed with sour (lemon juice) and made pills of the size of bengal gram (harimantha or cañaka). It is given internally for alleviating loss of digestive power and other disorders caused by the indigestion and low or abnormal digestive power (agnimāndya). If the condition of visūcikā, the pills of a recipe is orally given: Kupīlu, hingu and navasādara (each) are fried on fire (bharjita) and all mixed with water and made into pills.

The drug Kupīlu or Kāraskara is stomachic, digestive, nervine tonic, anti-rheumatic, aphrodisiac, analgesic,

anticolic, antipyretic, astringent, stimulant, antidermatosis and anthelmintic. It is recommended in vātavyādhi, rheumatic and mervine disorders, cough, loss of appetite or digestive power, visucikā, agnimāndya, piles or haemorrhoids, worms affection, general debility, jvara, višamajvara (fever and malarial fever), paralytic disorders, abdominal colic, gout, ulcer, insomnia, cramp, skin diseases and senile disorders. In higher or overdoses and excess or prolonged use, it is convulscent. It is useful in ailments caused by kapha and pittadoṣa.

The drug Kupīlu is employed as an important ingredient of various classical formulations viz. Agnituṇḍī vāṭī, Viśatinduka vāṭī, Viśamuṣṭī yoga, Kupīluhiṅgvādi yoga, Navajīvana rasa, Lakṣmivilāsa rasa, Krimimudgara rasa and other compounds which are clinically used in several diseases. Thus, a number of medicinal preparations containing Kupīlu (nuxvomica) are recommended in treatment of different diseases.

As a single drug medication, purified nuxvomica (śuddha Kupīlu) powder is frequently prescribed in different diseases with good results.

#### **Precaution**

Drug (seeds) is used only after purification and within limitation of doses for avoiding complications and toxic effects. Prolonged use of drug also needs due care. The proper care for using purified seeds or Kupīlu bija needs to be followed in oral uses of the drug.

**Parts used :** Seed-Kernel (purified), Bark.

**Dose :** 60-250 mg. (seed-kernel).

#### **Formulations**

Agnituṇḍī vāṭī, Viśatinduka vāṭī, Viśamuṣṭī vāṭī-yoga, Navajīvana rasa, Lakṣmivilāsa rasa, Krimudgara rasa, Kupīluhiṅgvādi.

## KUPĪLU-VIŚAMUṢṬI ( कुपीलु-विषमुष्टि )

विषमुष्टि: कटुस्तिक्तः कषाय कफपित्तजित्।

हन्ति मेदः कृमिश्वासगुल्मार्शो मूषिका विषम् ॥  
 विष्टाभ्यं रोचनं चोष्णं सुमुष्टिकफलमग्निकृत् ।  
 कफहत् पित्तकृद् ग्राहि जन्तु कुष्ठ प्रमेहजित् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 601-602.*

कुपीलुः शीतलं तिक्तं वातलं मदकुलघु ।  
 परं व्याहरं ग्राहि कफपित्तास्त्रनाशनम् ॥

*Bhavaaprakāśa Nighantu, Āmrādiphala Varga, 68.*

### विषमुष्टि:

विषमुष्टिः कटुस्तिक्तो दीपनः कफवातहत् ।  
 कण्ठामयहरो रुच्यो रक्तपित्तार्तिदाहहत् ॥

*Rāja Nighantu, Śatāhvādi varga, 183.*

### कारस्करः

कारस्करः कटूष्णश्च तिक्तः कुष्ठविनाशनः ।  
 वातामयास्त्रकण्डूति-कफामार्शोब्रणापहः ॥

*Rāja Nighantu, Prabhadrādi Varga, 143.*

### वातरक्ते

कारस्करघृतम् ।

*Vaidya Manoṣamā 12-27.*

### अग्निमांद्ये

विषमुष्टिकनवासापर बाहीकैरम्लभावितैर्बहुशः ।  
 मन्दाग्निमूलविकृतीर्हरन्तिहरिमन्थमेदुरावटिकाः ॥

*Siddha Bhaisajya Maṇimālā, 4-256.*

### ज्वरे

संशोधितानां विषमुष्टिकानां तुल्यांशमारीच जीयुतानाम् ।  
 वट्यो विशालाफल वारिबद्धा विबन्धवातज्वरमुद्धरन्ति ॥

*Siddha Bhaisajya Maṇimālā, 4-101.*

### विसूचिकायाम्

प्रत्येकं भर्जयित्वाऽप्नौ कुचेला हिंगुसादरम् ।  
 विमर्द्यादधिः कृता वट्यो विसूची विलयाः स्मृताः ॥

*Siddha Bhaisajya Maṇimālā, 4-277.*

# KUŚA

## **Botanical name**

Desmostachya bipinnata Stapf

Syn. Briza bipinnata L., Eragrostis bipinnata L.

## **Family : Poaceae (Gramineae)**

## **Classical name : Kuśa**

## **Sanskrit names**

Kuśa, Sūcyagra, Yajñabhūṣaṇa, Muniṣastra.

## **Regional names**

Kusha, Kusa (Hindi).

## **Description**

Erect, strong grass up to 90 cm. tall, with rough root-stock and thick-creeping rhizomes.

Leaves 40.0 × 0.8 cm., linear-convolute, narrowed into a filiform tip; ligule a ring of hairs; sheath glabrous but hairy on throat.

Inflorescence a cylindrical up to 45 cm. long; spikes crowded up to 2 cm. long. Spikelets purple-brown, 2-seriate, 1-nerved; upper glume 1 mm. long obtuse; lemma up to 1.7 mm. long, subacute scabrid on keel, 3-nerved palea 1.3 mm. long; grain up to 0.6 mm. long, obliquely ovoid compressed.

## **Flowering and fruiting time**

September-March.

## **Distribution**

It occurs in India, Arabia, North Africa to Tropical Africa. It is growing wild in plains land, and common on field bunds in ravines and open country, along river beds and in sandy soils throughout various regions in country.

## **Kinds and Varieties**

Kuśa and Darbha are actually two distinct plants. In classical texts, however, they are sometimes synonymous in certain contexts. Sitadarbha and Haridarbha are also mentioned in texts as specific varieties of Kuśa. Presently, the source plants of Kuśa and Darbha are botanically

indentified as *Deşmostachya bipinnata* Stapf and *Imperata cylindrica* Beauv. (both taxa belong to family Poaceae or Graminae) respectively.

The Kusa has religious significance with socio-cultural background and ceremonial utility in Indian traditions as a sacred plant.

### **Pharmacodynamics**

Rasa	: Madhura, Kaśaya
Guṇa	: Laghu, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittaśāmaka (Tridoṣaghna)

### **Properties and action**

Karma	: Mūtravirecanīya-aśmarīnāśana Stanyajanana Trṣṇānigrahanā Raktapittaśāmaka Stambhana Kuṣṭhaghna Dāhapraśamana
Roga	: Mūtrakṛchra-aśmari-bastiśūla Prameha-mūtravikāra Raktatisāra-pravāhikā-trṣṇā Rakatapitta Raktapradara-stanyakṣaya Carmaroga Dāha Vraṇā.

### **Therapeutic uses**

The drug kuśa is efficacious diuretic and potent medicine for urinary disorders such as dysuria, calculus and allied ailing conditions. As a single drug as well as an ingredient of Trṣṇapañcamūla and some other preparations, the drug Kusa is used in the diseases of urinary systems. Trṣṇapañcamūla decoction is given in dysuria caused by pitta humor (pittajanya mūtrakṛchra). In calculus (aśmarī), Kuśādyā ghṛtam and Kuśāvaleha are pre-

scribed. The roots of source plant (Desmostachya bipinnata Stapf.) are medicinally used in various diseases and employed in different pharmaceutical formulations.

In treatment of piles, Kuṣa root mixed with Balā root (Sida cordifolia Linn.) is given with rice water (taṇḍulodaka) and this recipes is considered useful to check bleeding from piles or haemorrhoids and meno-metrorrhagia etc. In pradara roga, the root of Kuṣa pounded with rice water is taken with the same for three days for checking the bleeding. The kṣirasādhita ṭṛṇapañcamūla (milk boiled with ṭṛṇapañcamūla for preparing Kṣīrapāka) is recommended in bleeding from urinary tract (mūtramārgē rakta pravṛtti). Kuṣa and some other drugs suitably selected are made a decoction which is externally applied to cleans wounds (Vraṇaśodhana yoga, Caraka Saṁhitā, Cikitsā. 25-54). For treatment of prameha, Kuṣāvaleha is prescribed.

**Parts used :** Root.

**Dose :** Decoction 50-100 ml.

**Formulation :** Ṭṛṇapañcamūla Kvātha, Kuṣādyaghṛta, Kuṣāvaleha, Kuṣādyaghṛta.

**Gaṇa**

Mūtravirecanīya, Stanyajanana, Madhuraskandha (Caraka Saṁhitā), Ṭṛṇapañcamūla (Suśruta Saṁhitā).

## KUŚA ( कुश )

क. कुशोदर्भस्तथा बर्हिः सूच्यग्रे यज्ञभूषणः ।  
ततोऽन्यो दीर्घपत्रः स्यात्क्षुरपत्रस्तथैव च ॥

ख. दर्भद्वयं त्रिदोषग्रं मधुरं तुवरं हिमम् ।  
मूत्रकृच्छ्राशमरींतृष्णा बस्तिरुक्प्रदरास्जित ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 165-166.*

**अ. दर्भः**

कुशो दर्भो हस्वदर्भो याजेयो यज्ञभूषणः ।  
श्वेतदर्भः पूतिदर्भो मृदुदर्भो लवःकुशः ॥  
बर्हिः पवित्रको यज्ञसंवत्सरः कुतषोऽपरः ।

**ब. कुशः**

सूच्यग्रः खर दर्भश्च मुनिशस्त्रं क्षुरच्छदः ॥

**गुणाः**

दर्भः स्त्रिगधो हिमः स्वादुः कपायः कफपित्तहा ।  
विसर्पदाहकृच्छाशमतृष्णावस्ति विकारनुत् ॥

*Kaiyadeva Nighanṭu, Oṣadhi Varga, 1239-1241.*

**सितदर्भ-कुशभेदः**

- अ. सितदर्भो हस्वकुम्भो पूतो यज्जियपत्रकः ।  
वज्जो ब्रह्मपवित्रश्च तीक्ष्णो यज्ञस्य भूषणः ।  
सूचीमुखः पुण्यतृणो वह्निः पूत तृणो द्विषट् ॥
- ब. दर्भमूलं हिमं रुच्यं मधुरं पित्तनाशनम् ।  
रक्तज्वरतृष्णाश्वास-कामला दोष शोषकृत् ॥

*Rāja Nighanṭu, Śalmalyādi Varga, 91-92.*

**हरिदर्भः कुशभेदः**

कुशोऽन्यः शरपत्रश्च हरिदर्भः पृथुच्छदः ।  
शारी च रुक्षदर्भश्च दीर्घपत्रः पवित्रकः ॥

**दर्भद्वय गुणाः**

दर्भो द्वौ च गुणे तुल्यौ तथाऽपि च सितोऽधिका ।  
यदि श्वेतकुशाभावस्त्वपरं योजयेत् भिषक् ॥

*Rāja Nighanṭu. Śalmalyādi Varga, 93-94.*

## A. KUŚA ( कुश )

**अश्मर्यादि मूत्ररोगे कुशाद्य तैलम्**

*Bhāvaprakāśa, Aśmarirogādhikāra, 37-59-62.*

**अश्मर्यादिरोगे तृणपञ्चमूलाद्य धृतम्**

*Bhāvaprakāśa, Aśmarirogādhikāra, 37/35-57.*

**प्रदरे कुशामूलम्**

कुशमूलं समुद्धृत्य पेषयेत्तण्डुलाम्बुना ।

एतत्पीत्वा त्र्यहं नारी प्रदरात्परिमुच्यते ॥

*Vyndamādhava, 63-8.*

*Bhāvaprakāśa, Strīrogādhikāra, 68-15.*

**पित्तजन्य मूत्रकृच्छ्रे तृणपञ्चमूलम्**

कुशः काशः शरो दर्भ इक्षुश्वेति तृणोद्भवम्।

पित्तकृच्छ्रहरं पञ्चमूलं बस्ति शोधनम्॥

*Cakradatta 32-4.*

**मूत्रमार्गेरक्तप्रवृत्तिरोधनार्थं तृणपञ्चमूल साधितं क्षीरम्**

‘एतत्सिद्धं पयः पीतं मेद्रगं हन्ति शोणितम्।’

*Cakradatta, Mutrakṛchhra Cikitsā, 32/45.*

**अश्मरी चिकित्सायां कुशाद्य घृतम्**

*Cakradatta, Aśmarī Cikitsā, 34/14-18.*

**प्रमेहचिकित्सायां कुशावलेहः**

*Cakradatta, Prameha Cikitsā, 35/1-5.*

**रक्तप्रदर प्रतिकारार्थं कुशमूल प्रयोगः**

कुशमूलं समुदधृत्य पेषयेत्पद्मुलाम्बुना।

एतत् पीत्वा त्वं हन्त्रार्णं प्रदरान् परिमुच्यते॥

*Cakradatta, Asrgdara cikitsā, 8.*

**मूत्रकृच्छ्रे**

शतावरीकुशकाश्वदंष्ट्राविदारिशालीक्षुकशेरुकाणाम् ।

क्राथं सुशीतं मधुशर्कराभ्यां युक्तं पिबेत् पैत्तिक मूत्रकृच्छ्री॥

*Caraka Samhitā, cikitsā, 26-50.*

**व्रणशोधने**

त्रिफला खदिरो दार्ढी न्युग्रोधादिर्बला कुशः।

निम्बकोलकपत्राणि कषायाः शोधना मताः॥

*Caraka Samhitā, Cikitsā, 25-84.*

**अर्शासि**

कशमूलं बलायुक्तं पानं तण्डुलधावनम्।

रुपाद्धि गुदजास्त्रावं प्रदरं वापि सर्वजम्॥

*Bangasena, Arṣa, 75.*

## B. DARBUKA ( दर्भ )

**रसायने**

**ब्राह्म रसायने**

*Caraka Samhitā, Cikitsā, 1/1441-57.*

**अश्मरी-शर्करासु**

*Caraka Samhitā, Cikitsa. 26-63.*

**पतिष्ठति गर्भे मूत्रसङ्घे**

‘मूत्रसङ्घे दर्भादिसिद्धम् ।’

*Suśruta Samhitā, Śārura. 10-57.*

**मूत्रकृच्छ्रे**

*Suśruta Samhitā, Uttara. 59-24.*

**नेत्ररोगे**

‘पित्ताभिष्यन्दहरे वर्गे ।’

*Suśruta Samhitā, Uttara. 10-4.*

**ज्वरे**

बलादर्भश्वदंष्ट्राणां कषायं पादशेषितम् ।

शर्कराधृतसंयुक्तं पिबेद् वातज्वरापहम् ॥

*Suśruta Samhitā, Uttara. 39-370.*

**स्तन्यजननार्थम्**

‘वीरणषट्कशालीक्षुबालिकादर्भकुशगुन्त्रेत्कटमूल  
कषायाणाञ्च पानमिति ॥’

*Caraka Samhitā, Śārira. 8-57.*

## KUŚTHA

### **Botanical name**

*Saussurea costus* (Fale) Lipsch.

Syn. *Saussurea lappa* C. B. Clarke.

### **Family : Asteraceae (Compositae)**

### **Classical name : Kuṣṭha**

### **Sanskrit names**

Kuṣṭha, Vāpya, Utpala, Kaśmīra.

### **Regional names**

Kuth (Hindi); Kuda (Bengla); Kudu Upaleth (Guj.); (Tam.); Kustham (Telugu); Seyuddi (Mal.); Kosht (Kann.); Kust-istrukh (Persian); Kuste Hindi (Arabic); Costus Kuth (Trade); Costus (Eng.).

### **Description**

Perennial, erect, robust herb, up to 1-2 meters or 2

meters tall. Roots stout thick tuberous with a characteristics penetrating aroma, often up to 60. cm. long and 30 cm. in thickness, greyish to dull brown in colour. Stem stout, fibrous with radical leaves with long lobately winged stalk. Leaves membranous; petiole irregularly winged. Flowers dark blue-purple in stalkless, axillary and terminal heads. Achenes compressed, curved, tip narrowed, one rib on each face, to 3 mm. long; pappus brown, feathery.

### **Flowering and fruiting time**

Normally the period from July to September in flowering and fruiting time..

### **Distribution**

Apparently plant is endemic to Kashmir valley at altitudes of 2, 500 to 3,000 meters in Jammu and Kashmir state. It is majorly cultivated in Kashmir and also in neighbouring Himalayan regions e.g. Himachal Pradesh, for its root in drug trade as kuth root. Plant is also undertaken for small scale cultivation in hilly regions of Uttar Pradesh.

Plant generally grows in open hill slopes of cool and humid climate of sub-alpine Himalayas. It is found and cultivated at altitudes of 2,500 to 3,800 meters in the Himalayan regions. It is also distributed in Pakistan (hilly regions) and China also.

### **Chemical composition**

The Kuth roots contain resinoid 6% essential oil 1.5%, alkaloids 0.05%, inulin 18%, fixed oil and minor constituents like tannins and sugars. Extraction of dried and powdered leaves leaves and stalks with hexane gave a drak green concentrate (3-4%) containing tarasysterol acetate and tarasterol.

### **Pharmacodynamics**

Rasa	: Tikta, kaṭu, madhura
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

**Properties and action**

<b>Karma</b>	: Śukraśodhana Vṛṣya-Garbhāsayottejaka- ārtavajanana Stanyajanana Durgandhanāśana-Jantughna Vedanāsthāpana Varṇya-kuṣṭhaghna-kaṇḍughna Avasādaka-ākṣepaśāmaka-Vātahara Dīpana-pācana-anulomana- śūlapraśamana Raktaśodhaka Kaphaghna-Kaphniḥsāraka- śvāsahara Mūtrala Jvaraghna Rasāyana Viṣaghna Rakṣoghna
<b>Roga</b>	: Śūkraśodhana-Klaivya Rajorodha-kaṣṭārtava-stanyāśuddhi (prasavottara) Mūtrakṛcchra Carmavikāra Jvara Dourbalya Kāsa-pārśvaśula-kukkurakāsa-hikkā śvāsa-tamakaśvāsa Vātarakta-āmavāta-raktāvikāra- urustambha Śirahśūla-jīrṇavranya-dantaśūla Sandhiśotha-āmavāta Carmaroga-arunṣikā Varṇavikāra-khālitya Vātavyādhī-apasmāra- āksepapradhana vikāra-mānasaroga Agnimāndhya-ajīrṇa-viṣṭambha- śūla-kukṣivāta Śotha

Bhagandara  
 Khallīśūla  
 Bālaroga  
 Rākṣasabhūta vādhā  
 Arśa.

### **Therapeutic uses**

In mental diseases, old ghee processed with Brahmi juice. (*Bacopa monnieri*), *Vicā* (*Acorus calmus*) *Sankhapuspī* (*Convolvulus pluricaulis*) and *Kuṣṭha* (*Saussurea lappa*) is used to alleviate insanity, in auspiciousness, epilepsy and sinful conditions. *Kuṣṭha* mixed with honey is also taken as snuff in condition of snake-poisoning. *Tagara* (*Valeriana wallichii*) and *Kuṣṭha* 80 gm. mixed with ghee and honey 160 gm. and its mixture is useful in snake poisoing.

In arunṣikā or head-boils, the roots of *Kuṣṭha* (*Costus* or *Kuth* root) are roasted on an earthen. pan, powdered and mixed with oil; and its external application is considered useful to destroy itching, discharge, burning sensation and pain.

**Parts used :** Root.

**Dose :** 1/4-1 gm.

### **Formulation**

*Kuṣṭhādi cūrṇa*, *Kuṣṭhādi kvātha*, *Kuṣṭhādi taila*, *Kuṣṭhadi pralepa*.

### **Gāṇa**

*Śukraśodhana*, *Lekhanīya*, *Āsthāpanopaga* (*Caraka Saṁhitā*), *Elādi* (*Suśruta Saṁhitā*).

## **KUṢTHA ( कुष्ठ )**

कुष्ठं तिक्तं कटु स्वादु लघूष्णं शुक्रलं जयेत् ॥

वातास्त्रं विषवीर्सर्पं कुष्ठकासकफानिलान् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1319-1320.*

कुष्ठमुष्णं कटु स्वादु शुक्रलं तिक्तकं लघु ।

हन्ति वातास्त्रवीर्सर्पं कासकुष्ठमरुत्कफान् ॥

*Bhāvaprakāśa Nighaṇṭu, Harītakyadi Varga, 103.*

‘कुष्ठं वात हरान्वङ्गोपयोगिताम्।’

*Caraka Saṁhitā, Sūtra. 25.*

‘कुष्ठं वातकफश्वासकासहिक्षा ज्वरापहम्।’

*Rājavallaabha Nighaṇṭu.*

यः कुष्ठचूर्णं रजनीविरामे मध्वाज्यसंमिश्रितानिनित्यम्।

स मत्तमातङ्गबलः सुगन्धिवंगिमी चिरायुश्वभवेन्मनुष्यः॥

*Rāja Martanda.*

कुष्ठरोगे कुष्ठाद्यमुद्वर्तनम्

*Cakradatta, Kuṣṭha Cikitsā, 50-15-16.*

रसायनार्थम्

यः कुष्ठचूर्णं रजनी विरामे मध्वाज्यसंमिश्रितमत्ति नित्यम्।

स मत्तमा तांगबलः सुगन्धि वाग्मी चिरायुश्व भवेन्मनुष्यः॥

*Rāja Mārtanda. Aṣṭāṅga Sangraha, Uttara 49-218.*

त्वच्यमुद्वर्तनम् कुष्ठ रसायनम्

जम्बूदलार्जुननतरप्रसवैः सकुष्टैः उद्वर्तनं प्रकुरुते प्रतिवासरं यः।

प्रस्वेदविन्दुकणिकानिकरानुषङ्गं दुर्गन्धतावपुषि तस्य पदं न धत्ते॥

*Rāja Martanda.*

गुल्मे

स्वर्जिकाकुष्ठसहितः क्षारः केतकीजोऽपि वा।

तैलेन शमयेद् पीतो गुल्मं पवन संभवम्॥

*Suśruta Saṁhitā Uttara. 42-45.*

‘पीतं सुखाम्बुना वापि स्वर्जिकाकुष्ठसैन्धवम्।’

*Suśruta Saṁhitā Uttara. 42-46.*

*Vṛndamādhava, 30-10.*

शिरः कण्डवादौ

तैलेन मृत्खर्परभृष्टकुष्ठं चूर्णान्वितेन प्रविलिसमर्थः।

कण्डूश्व दाहश्व विनाशनेति शिरोव्रणं शुष्यति दूषिका च॥

*Rāja Martanda.*

शोथे

स्नानं मूत्राम्भसी सिद्धे कुष्ठतकारिचित्रकैः।

कुलत्थ नागराभ्यां वा चण्डागुरु विलोपने॥

*Aṣṭāṅga Hṛdaya, Cikitsā 17-35.*

शोथे

स्नानं मूत्राभ्यसी सिद्धे कुष्ठतर्कारिचत्रकैः ।

कुलत्थ नागराभ्यां वा चण्डागुरु विलेपने ॥

*Aṣṭāṅga Hṛdaya, cikitsā 17-35.*

राक्षसादिभयनिवारणार्थम्

उत्पन्नमात्रस्य शिशो वितीर्ण गवाज्यमिश्रं सितकुष्ठचूर्णम् ।

रक्षो विषव्याधिभयापहं स्यात् तथाङ्गलावण्य विधायकं च ॥

*Rāja Mārtanda.*

रसायनार्थम्

कुष्ठचूर्णं समध्वाज्यं प्रत्यूषे प्रषिबेन्नरः ।

सुगन्धसुन्दरवधुः सः चिरं जीवेदनामयः ॥

*Vaidya Manorāmā.*

शिरःपीडायाम्

‘कुष्ठमेरण्डमूलं च लेपात् काञ्जिकपेषितम् ।

शिरोऽर्ति नाशयत्याशुः..... ॥

*Vṛndamādhaava Baṅgasena. 62-2.*

*Sāringadhara Saṁhitā, 3-11-62.*

अर्शःसु

‘अभ्यज्य कुष्ठतैलेन स्वेदयेत् ।’

*Caraka Saṁhitā, Cikitsā. 9*

कुष्ठे

‘लेपो योज्यः कुस्तुम्बुरुणि कुष्ठं च मण्डलनुत् ।’

*Caraka Saṁhitā, Cikitsā. 7.*

अपस्मारे

‘कुष्ठरसं, वचां वा मधु संयुताम् ।’

*Caraka Saṁhitā, Cikitsā, 15.*

मुखकान्तिकरत्वे

‘सप्ताहं मातुलुङ्गस्थ कुष्ठं वा मधुनान्वितम्’

*Aṣṭāṅga Hṛdaya, Uttara. 32.*

अरुणिकायाम्

‘कपाल भृष्टं कुष्ठं वा चूर्णितं तैल संयुतम् ।

रुणिकालेपनं कण्डूक्लेदवाहार्तिनाशनम् ॥’

*Aṣṭāṅga Hṛdaya, Uttara. 24-23.*

**उरुस्तम्भे कुष्ठाद्य तैलम्**

*Cakradatta, Urustambha Cikitsā, 24-14.*

**भगन्दर चिकित्सायां कुष्ठादि प्रलेपः**

*Cakradatta, Bhagandara Cikitsā, 46-7.*

**खलीशूले**

कुष्ठसैन्धवयोः कल्कं चुक्रतैलं समान्विताम् ।

विसूच्यां मर्दनं कोण्णं खलीशूलनिवारणम् ॥

*Vṛndamādhava, 6-58.*

**बालोपचरणीये**

नाभिञ्च कुष्ठतैलेन सेचयेत् स्नपयेदनु ।

क्षीरिवृक्ष कषायेण सर्वगन्धोदकेन वा ॥

*Aṣṭāṅga Hṛdaya, Uttara. 1-6.*

**कुमारहितार्थम्**

कुष्ठवचाऽभ्याब्राह्मीकनकं क्षौद्रसर्पिषा ।

वर्णायुष्यकान्तिजननं लेहं बालस्य दापयेत् ॥

*Vṛndamādhava 66-1.*

**सर्पदष्टे**

‘द्विपलं नतकुष्ठाभ्यां घृतक्षौद्र चतुष्पलम् ।

अपि तक्षकदृष्टानां पानमेतत् सुखप्रदम् ॥’

‘.....दर्वीकरैर्दष्टे नस्यं समधु पाकलम् ।’

*Caraka Samhitā, Cikitsā. 23-194/196.*

**मानसरोगे**

ब्राह्मीरसवचाकुष्ठशंखपुष्पीभिरेव च ।

पुराणं घृतमुन्मादालक्ष्यपस्मार पापनुत् ।

*Gadanigraha 10-25.*

सौवर्णं सुकृतं चूर्णं कुष्ठं मधु घृतं यथा ।

चत्वारोऽभिहिताः प्राशाः श्लोकार्धेषु चतुर्वर्षपि ।

कुमाराणां वपुर्मेधा बलबुद्धि विवर्धनाः ॥

*Suśruta Samhitā, Śāriira. 10-68/70.*

## KŪSMĀNDĀ

**Botanical name :** Benincasa hispida (Thunb.) Cogn.

**Family :** Cucurbitaceae

**Classical name :** Kūṣmāṇḍa

**Sanskrit names**

Kūṣmāṇḍa, Puṣpaphala, Br̥hatphala, Valliphala.

**Regional names**

Petha, Kumherha, Bhalua (Hindi); Petha (Punj.); Kumarha (Beng.); Kohala (Mar.); Kohala, Kola (Ma.); Bhurum Kohulu (Guj.); Gummadi (Tel.); Kumpalam (Mal.); Pethi sao (Sin.); Vaduv (Pers.); Mahadav (Arabic); White gourd melon (Eng.).

**Description**

Annual branched climbers; extensive, trailing or climbing herb. Leaves 10-25 cm. in diam., reniform to rounded, deeply cordate, 5-7-lobed, scabrous above, shortly hispid beneath, margin sinuate, dentate; petioles hirsute; 5-20 cm. long; tendrils slender. Male peduncles 5-15 cm. long; female peduncles 2-4 cm. long. Calyx-tube densely vellose, 12-15 mm. broad; lobes lanceolate, 8-12 × 3-5mm. Petals spreading obtuse, mucronate, 3-5 cm. long. Filaments hispid, 2-3 mm. long; anthers subtrifoliate. Ovary ovoid or cylindric, softly hairy, style 2-3 mm. long.

Fruits fleshy, hairy when young, waxy bloom when mature; Seeds compressed, ovoid, yellowish-white, distinctly marginate, 10-11 × 5-7 mm. Fruits broadly cylindrical or spherical gourd, 1-1.5 ft. long with white flesh, containing numerous, much compressed and marginal seeds.

**Flowering and fruiting time**

Plant flowers and fruits during June to October.

**Distribution**

It is commonly cultivated for producing fruits used as vegetable and edible fruits. Plant grows in the plains and hills upto an altitude of 1,204 meters (4,000ft.) as cultivated plant which is under farming in various regions. Occasionally it is found as an escape (wild). It is found in India, Ceylon and Burma.

In the plains the seeds are sown during the month of February-March, and in the months of March to Ma<sup>26</sup>.

the hills. The vines are trained on to the roofs of huts in villages. The fruits are ready in 3-6 months.

### Chemical composition

Fruits contain starch, protein (in little quantity), minerals, an alkaloid (Cucurbitiene), vitamin B<sub>1</sub>, sugar and other substances. Seeds yield a fixed oil which possesses anthelmintic properties (seeds anthelmintic); seed oil is pale yellow. Fruit has moisture 96, protein 0.4, fat 0.1 mineral matter 0.3 and vitamin B<sub>1</sub>, 21 I. u. 100 mg. carbohydrate 3.2.

### Pharmacodynamics

Rasa	: Madhura
Guṇa	: Laghu, snigdha
Viryā	: Śīta
Vipaka	: Madhura
Doṣakarma	: Vātapittaśāmaka Sarvadoṣahara (pakva-ripe fruit).

### Properties and action

Karma	: Medhya-mastiķaśāmaka-balya-nidrājanana Santāpahara-dāhapraśamana Anulomana-tṛṣṇāānigrahaṇa Kṛmighna-sphītakṛmi Hṛdaya-raktapittaśāmaka “Soṇitasthāpana Phupphusa balya-kṣayahara Mūtrajanana Śukravardhaka Sandhāniya Balya-bṛñhaṇa-rasāyana
Roga	: Unmāda-apasmāra mastiķadourbalya-smṛtihrāsa-mānasaroga Vibandha-udaraśūla Tṛṣṇā-dāha-jvara Dourbalya-kṛṣatā Hṛdvikāra-hṛddourbalya Kṣaya-rājayakṣmā-phuphusavikāra Kāsa-śvāsa

Raktapitta  
 Amlapitta-pariṇāmaśūla  
 Mūtrāghāta-aśmarī-prameha  
 Raktapitta-uraḥkṣata  
 Jvara-paittikajvara-jīrṇajvara  
 Agnidagha  
 Śirogoga.

### **Therapeutic uses**

The fruits of Kūṣmāṇḍa are used as a vegetable and made into curries, while the ripe fruit is cut into pieces and candied (petha) which is a popular sweet preparation in market. Seeds are fried and eaten. The pulp is fried to prepare 'Halwa' Besides traditional sweet (peṭhā-peṭhe ki miṭhāi), the ripe fruit pulp is macerated with suitable pulses (dal) and 'Barhis' are prepared as household dietc item commonly and 'Barhis' are prepared as household deatic item commonly and in addition to other recipes made with fruit pulp.

The drug Kūṣmāṇḍa is medicinally useful and the fruit (pulp), seeds and seeds oil are used in medicine. The fruit pulp (Kūṣmāṇḍa phala majjā) is employed in several medicinal formulations recommended in various ailments, and the fruit is used in various forms for the treatment of different diseases.

The juice of the fruit-pulp (ripe) is very useful in haemoptysis and other internal discharges, and beneficial in pthisis. The drug is tonic, brain tonic, carminative, diuretic, refrigerant, anthemic, haemostatic, antipyretic, intellect-promoting, satiating and vitaliser. It is pacifying thirst, burning sensation, brain and rakta-pitta. It is wholesome for heart, body and life-being rasāyana (promotive) and bṛnhāṇa promoting dhātus or beneficial for body-promoting) and balya (promoting body-strength).

The seeds, specially oil obtained from seeds of drug Kūṣmāṇḍa, are useful in abdominal worms specifically tapeworm. Seeds-kernel is used in different forms for medicinal purpose.

**Parts used :** Fruit, seeds, seeds-oil.

**Dose**

Fruit 10-20 gm., Seeds powder 3-6 gm., Seeds oil 5-10 ml.

**Formulations**

Kūṣmāṇḍakhaṇḍa, Kūṣmāṇḍaghṛta, Kūṣmāṇḍagudakalyāṇaka, Vāsākhaṇḍakūṣmāṇḍaka, Kūṣmāṇḍaka ghṛta, Vāsākhaṇḍa, Khandāmalakī, Kūṣmāṇḍa rasāyana.

## KŪṢMĀṄDA ( कूष्माण्ड )

कूष्माण्डं शीतलं वृष्यं स्वादुपाकरसं गुरु ।  
हृदं रुक्षं रसस्यन्दि श्लेष्मलं वातपित्तजित् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Garga, 527.*

### पक्षापक्ष फलम्

बालपित्तहरं शीतं मध्यमं तु कफापहम् ।  
पक्षं तु सर्वदोषग्रं दीपनं बस्तिशोधनम् ॥  
लघूष्यं स्वादु सक्षारं पथ्यं चेतोविकारिणाम् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 528-529.*

### कूष्माण्डभाण्डी

कूष्माणुभाण्डी सक्षारा मधुरा रोचनी गुरुः ।  
कफवातहरा रुक्षा शर्कराश्मरि भेदिनी ॥

### कूष्माण्डभाण्डी मज्जा

‘तन्मज्जा मधुरो वृष्यः पित्तनुत् बस्तिशोधनः ।’

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 537.*

### कूष्माण्डी

कूष्माण्डी तु भृशं लघ्वी कर्कचिरपि कीर्तिता ।  
कर्कारुग्राहिणी शीता रक्तपित्तहरा गुरुः ।  
पक्षा तिक्ताऽनिलवमी सक्षारा कफवातनुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga 56.*

मूत्राघातहरं प्रमेहशमनं कृष्णश्मरीच्छेदनं  
विष्मूत्रप्लपनं तृष्णार्त्तिशमनं जीर्णाङ्गपुष्टि प्रदम् ।  
वृष्यं स्वादुसारं त्वरोचकहरं बल्यं च पित्तापहं

कूष्माणुं प्रवरं वदन्ति भिषजो वली फलानां पुनः ॥

*Rāja Nighaṇṭu, Mūlakādi Varga, 161.*

### अपस्मारे कूष्माण्डरसम्

कूष्माण्डकफलोत्येन रसेन परिपेषितम् ।

अपस्मार विनाशाय यष्ट्याहं स पिबेत् त्रसम् ॥

*Baṅgasena, Aśasmara. 35.*

*Bhāvaprakāśa, Madhyakhaṇde, 23-17.*

### अपस्मारे कूष्माण्डक धृतम्

कूष्माण्डकरसे सर्पिराष्ट्रादश गुणे पचेत् ।

यष्ट्याहकल्कं तत्पानमपस्मार विनाशनम् ॥

*Bhāvaprakāśa, Madhya Khanḍa, 23-19.*

सक्षारं पक्वकूष्माण्डं मधुराम्लं तथा लघु ।

सृष्टमूत्रपुरीषं च सर्वदोष निर्वर्णम् ॥

*Caraka Saṁhitā, Śūtra. 27*

पित्तम्बं तेषु कूष्माण्डं बालं, मध्य कफापहम् ।

शुक्लं लघूष्मं सक्षारं दीपनं बस्तिशोधनम् ॥

सर्वदोषहरं हृदं पथ्यं चेतोविकारिणाम् ।

*Suśruta Saṁhitā.*

..... कूष्माण्डप्रभृतीनां तैलानि मधुराणि, मधुरविपाकानि,  
वातपित्तप्रशमनानि, शीतवीर्याणि, अभ्यन्दीनि,  
भृष्टमूत्राणि अग्निसादनानि ।'

*Suśruta Saṁhitā, Śūtra. 45.*

### उन्मादे

ब्राह्मीकूष्माण्डषड्ग्रन्थाशंखिनी स्वरसाः पृथक् ।

मधुकुष्टयुताः पीताः सवोन्मादापहारिणः ॥

*Śarāngadhara Saṁhitā.*

### रसायने

कूष्माण्डक रसायनम् ।

*Aṣṭāṅga Hṛdaya, Cikitsā. 113-116.*

### रक्तपित्ते

खण्डकूष्माण्डावलेह

बृहत्कूष्माण्डावलेह

खण्डकूष्माण्डकावलेह

वासाखण्ड

*Bhāvaprakāśa, Raktapittādhikāra, 9-50/74. Cakradatta, 9.*

अम्लपित्ते खण्डकूष्माण्डकावलेहम्

कूष्माणुकरसो ग्राहः पलानां शतमात्रकम्।

रसतुल्यं गवां क्षीरं धात्रीचूर्णं पलाष्टकम्॥

धात्री तुल्या सिता योज्या गव्यमाज्यं पलद्वयम्।

मन्दग्निना पचेत्सर्वं यावद्द्विति पिण्डितम्॥

पलार्द्धं पलमेकं वा प्रत्यहं भक्षयेदिदम्।

खण्ड कूष्माण्डकं ख्यात मम्ल पित्तापहं परम्॥

*Bhāvaprakāśa, Amlapittādhikāra, 10-20/22.*

रक्तपित्ते वासा वासाखण्डकूष्माण्डकः

*Cakradatta, Raktapitta Cikitsā 9/76-79.*

राजयक्षमणि

कूष्माण्डकफलोत्थेन रसेन परिपेषितम्।

लाक्षाकर्षद्वयं पीत्वा जयेद् रक्तक्षयन्नरः॥

*Baṅgasena, Rājayaksmā. 47.*

शूलरोगचिकित्सायां कूष्माण्ड क्षारम्

कूष्माण्डं तनु कृत्वा तु क्षिप्त्वा धर्मे विशोषयेत्।

स्थाल्यां निक्षिप्य तत्सर्वं विधानेन पिधाय च॥

चुल्ल्यां निवेश्य वहिञ्च ज्वालयेन्कुशलो जनः।

यथा तच्च भवेद्दस्म किन्त्वङ्गारो दृढो भवेत्॥

तदा निर्वापयेच्छीतं सर्वथा चूर्णितन्तु तत्।

माषद्वयमितं तावच्छुण्ठी चूर्णेन मिश्रितम्॥

जलेन भक्षयेन्नित्यं महाशीरकुलो नरः।

असाध्यमपि यच्छूलं तदप्येतेन शाम्यति॥

*Bhāvaprakāśa, Madhyakhaṇḍam,  
Dvitīyabhāgah, Śūlādhikāraḥ, 30/53-56.*

बस्तिशूलादि विकारे कूष्माण्ड योगम्

कूष्माण्ड करसो हिङ्गुयवक्षार समायुतः॥

बस्तौ मेद्रे सशूलन्त्रो मूत्रकृच्छ्रहरः वरम्॥

*Bhāvaprakāśa, Aśmarirogādhikāra, 37-52.*

रक्तपित्त चिकित्सायां कूष्माण्ड रसायने ( खण्डकूष्माण्डक ) द्रव मानम्

खण्डामलकमानानुसारात् कूष्माण्डकद्रवात्।  
पात्रं पाकाय दातव्यं यावान् वाऽत्र रसोभवेत्।  
अत्रापि मुद्रया पाको निस्त्वचं निष्कुलीकृतम्॥

*Cakradatta, Raktaguṇa Cikitsā, 9-74.*

अपस्मारे कूष्माण्डक घृतम्

कूष्माण्डकरसे सर्पिष्टादशगुणे पचेत्।  
यष्ट्याह्वकल्के तसानमपस्मार विनाशनम्।

*Cakradatta, Apasmāra Cikitsā, 20-29.*

रसायने

रसायनमिदं खण्डामलकसंज्ञिततम्॥

*Cakradatta, 27/72-77.*

परिणामशूले खण्डामलकी

- क. स्विन्नपीडित कूष्माण्डात् तुलाऽर्द्धं भृष्टमाज्यतः।  
प्रस्थादूर्ध्वे खण्डतुल्यस्तु पचेदामलकी रसात्॥
- ग्रस्थे सुस्विन्न कूष्माण्ड रसप्रस्थे विद्यट्टयन्।  
दव्या पाकं गते तस्मिंशूर्णीकृत्य विनिक्षिपेत्॥
- ख. प्रक्षेप द्रव्याणि (75-76)
- ग. पक्तिशूलं निहन्त्येतद दोषत्रयभवञ्च यत्॥  
दृद्यम्लं पित्तमूर्छाश्च कासश्वासा वरोचकम्।  
हच्छूलं रक्तपित्तञ्च पृष्ठशूलञ्च नाशयेत्॥

मदात्यये

पिबेद् रसं पुष्पफलोद्भवं वासितमधूक त्रिसुगन्धियुक्तम्।  
संचूर्ण्यं संयोज्य च नागपुष्पैरजाजि कुष्मामरिवैश्च तुल्यैः॥

*Suśruta Saṃhitā, Uttara. 47-45.*

अश्मर्या कूष्माण्डस्वरस प्रयोगः

यवक्षारं गुडोपेतं पिबेत् पुष्पफलोद्भवम्।  
रसं मूत्रविवन्धं शर्कराऽश्मरिनाशनम्॥

*Cakradatta, Asmarī Cikitsā, 34-26.*

अपस्मार रोगे कूष्माण्ड स्वरस प्रयोगः

कूष्माण्ड स्वरसे संपिष्टादशगुणे शृतम्।  
यष्टी कल्कमपस्मार हरं धी वाक् स्वरप्रदम्॥

*Aṣṭāṅga Hṛdaya, Uttara. 7-28.*  
*Vṛṇḍamādhava, 21-16.*

मदात्यये

कूष्माण्डस्य स्वरसे गुडेन सहयोजितः।  
दुष्टकोद्रवसञ्चात् मदं पानाद् व्यपोहति॥

*Sārīrigadhara Saṃhitā, 2-1-19.*

मूत्राघाते

पुष्पफलस्य स्वरसः सशर्करः प्रातरेव परिपीतः।  
कृच्छ्रं मूत्रस्य जयेत् स्नावणसहस्रं सहसैव॥

*Vaidya Manoramā, 7-80.*

यवक्षार गुडोन्मिश्रं पिबेत् पुष्पफलोद्भवम्।  
सा मूत्रविबन्धनं शर्कराशमरि नाशनम्॥

*Vṛṇḍamādhava, 34-22.*

कूष्माण्डस्य समादाय शर्करासहित पिबेत्।  
यो हि त्रिदोषाभिभूत मूत्रकृच्छ्र निवारणः॥

*Hārīta Saṃhitā, 3-29-5.*

मूत्राघाते कूष्माण्डयोगः

कूष्माण्डकरसो हिङ्गुयवक्षार रसमायुतः।  
बस्तौ मेद्रे सशूलग्नो मूत्रकृच्छ्रहरः परम्॥

*Bhāvaprakāśa, Cikitsā. 37-52.*

## KUSUMBHA

**Botanical name :** Carthamus tinctorius Linn.

**Family :** Asteraceae (Compositae)

**Classical name :** Kusumbha

**Sanskrit names**

Kusumbha, Vahnīśikha, Vastrarañjaka, Varatā-  
Varattikā, Pāvaka-agni, Latvā, Kilaṭā, Padmottara.

### **Regional names**

Kusum, Kusumb, Barre (Hindi); Kasum (Bengla); Kusumbo (Guj.); Kusambe (Kannada); Kusho (Konkani); Chendarkam (Mal.); Golapanachu (Manipuri); Kadaya, Kurdi (Mar.); Kar, Karar, Kasana, Kartam (Punj.); Kusumbha, Sendargam, Chendurukam (Tam.); Karha, Kusum (Urdu).; African saffron, Eng. Bastard saffron, Saf-flower.

### **Description**

An erect branching herb 0.3 to 0.6 m. high. Leaves broad lanceolate, spinosely serrate, suberect, oblong and sessile. Flower heads large terminal 2.5 to 3.3 cm. long of orange-red flowers. Outer involucral bract large foliaceous ovate-oblong 2.5 - 3.8 cm. long bracts constricted above the base, green, usually spinous, inner bracts ovate-oblong or lanceolate and acute. Fruits achenes glabrous, obovoid, 4-angled or compressed without any pappus. Root hard woody, long tap root with secondary and tertiary branches.

### **Flower characters :**

Morphological characters of the flowers, epidermal cells with characteristic stomata, covering and glandular trichomes, thin, pitted and unpitted walled specialised cells containing yellowish orange colouring matter, characteristic pollen grains, presence of starch grains and crystals.

### **Flowering and fruiting time**

Africa and Mediterranean regions.

### **Distribution**

It is widely distributed in Asia, Africa and Mediterranean regions. Plant is sometimes found in wild state in the drier parts of West Bengal and Bihar. Plant is cultivated in various drier regions in India.

### **Flowers drug :**

Flowers consist of involucral bracts and florets. Involucral bracts in whorls, green, outer bracts ovate, oblong leafy and inner bracts hard, spiny, conical measuring 12-20 × 2-4 mm. Florets bisexual stalked yellowish to orange red, delicate, small measuring 12-32 mm. in length consisting

of a long stalk; corolla androecium and gynoecium. Petals 5, linear, very thin, yellow to orange red, united at the base and free throughout the length, acute apex measuring 6-8 × 0.75-1 mm. Stamens 5 united throughout the length and free at the tip forming a staminal tube, each stamen consisting of a short slender filament and 2 anther lobes with sagitate base and acute apex, yellow, measuring 5-6 × 0.75 mm. Carpel consisting of long, slender style, broad, flattened, hairy, bifid stigma, inferior ovary, yellow, measuring 6-8 × 0.50-0.75 m.

### **Seed drug :**

Seed cypsela glabrous, obovoid, 4-5 angled with basal oblique aerola, flat at the top, without any pappus and measuring 7-9 × 4-5 mm.

### **Kinds and varieties**

Some other species of *Carthamus* viz. *Carthamus lanatus* Linn. (Saffron thistle) and *Carthamus oxyacantha* Boeb. (wild Safflower) are considered allied to *C. tinctorius* and these species are found to be used as substitutes or adulterants for Saffron (*Crocos sativus* Linn.). *Carthamus* flowers are major adulterant in the valued drug saffron (Kuṇkuma or Keśara) particularly raw drug material.

Kusumbha (*Carthamus tinctorius*) is cultivated in almost all the provinces in India and attained considerable importance as an oil seed crop in Maharashtra. Safflower plants are now grown mainly as an oil seed crop. Its importance as a dye crop having declined due to advent of synthetic dye-stuffs. It is cultivated mostly as a rain-fed crop and it is drought-constant and can grow even on poor sandy soils.

Safflower plants are raised from seeds. They are generally sown mixed with wheat, barley, gram or juar, but it is sown pure (umixed) when the crop is required for dye extraction from *Carthamus* flowers (Safflower). Two distinct cultivars are reported to occur, one with spiny leaves and the other with spineless leaves the former is known to

be excellent source of Safflower oil, while the latter is best suited for the extract dye from Sofflower.

### **Chemical composition**

Plant contains dye and oil. Dye is known as Safflower dye. Safflower florets contain principally two colouring matters. Carthamin is scarlet red and insoluble in water having acidic properties and safflower yellow is soluble in water. Another compound isocarthamin gradually reverts to carthamin on standing.

Safflower carmin of commerce is extracted from the washed material and precipitated by dilute acids. Safflower carmin is sold as a paste and used for dyeing cotton and silk.

Main component of the flower as observed in phytochemical screening, was a yellow chalkone glycoside agreeing in composition and properties with the yellow form of carthamin and its constitution was determined as 6-glycosidoxy-2:4:4:5-tetrahydroxy chalkone.

Chemical studies find that authentic ivory-white flowers of *Carthamus tinctorius* contain two Kaempferol glycosides. The major component is identified as 3-rhamnoglucoside of Kaempferol by its spectral properties and by complete methylation and hydrolysis. or Kusumbha taila.

Safflower seeds oil, an important industrial product, is extracted either by subjecting the seeds to cold dry pressure in a country oil press or by hot dry distillation. The seeds of oil (Kusumbha taila) content range from 20 to 30 percent and other chemical values are recorded : specific gravity ( $27^{\circ}$ )- 0.9242, saponification value 192.0, iodine value 136.2, acid value 6.3, acetyl value 13.2, hexabromide value 0.3 and unsaponifiable matter 1.3 percent. Fatty acids components and glycerides components of the oil are also estimated. The oils obtained from *Carthamus oxycantha* and *C. tinctorius* are more or less similar in composition except that the major liquid acid component of *C. oxycantha* is oleic acid while that in *C. tinctorius* is linoleic acid.

**Pharmacodynamics**

Rasa	: Kaṣāya, Madhura
Guṇa	: Rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Pittakaphaśāmaka vātala.

**Properties and action**

Karma	: Raktapittaśāmaka Avṛṣyā Mūtrala Aśmarīnāśana Pramehahara Cakṣuṣya
Roga	: Raktapitta Pittajavikāra Mūtrakṛcchra Prameha Aśmari Netravikāra.

**Therapeutic uses**

The flowers of Kusumbha (safflowers) are used as tonic to liver, hypnotic, diuretic and expectorant. Flowers are useful for inflammation, boils, ringworms, scabies, leucoderma, piles and bronchitis. They are used to improve complexion. Flowers possess stimulant, sedative and emmenagogue properties. Flowers are supposed to affect the heart, liver and to prevent the formation of white corpuscles in the blood.

Besides medicinal properties of the flowers are chiefly useful as a dye. They have a bitter, bad taste and bad odour. Safflowers (Kusumbha) in combination with other drugs are suggested to be useful against scorpion-sting as per classical texts of Āyurveda.

The drug is considered to be laxative and dia-phoretic in higher dose. It is used as a substitute for saffron, in measles, scarlatina and other exanthematous diseases to promote the eruptions.

The oil of seeds obtained from this plant drug is ef-

ficacious in treatment of prameha (group of anomalies in urine). It is prescribed in ancient medicine as a depilatory agent. Kusumbha taila (seeds oil) is anointed with paste for removing the hairs as the same eradicate hairs. It is typical use of seeds oil as an ancient aid to hair remover (nirlomakaraṇa-romotpāṭana). The oil from the seeds is sweet, used as tonic, strengthening purgative, carminative, aphrodisiac and the oil is also used to cure liver pain.

The seeds of Kusumbha are medicinal and used in therapeutics. Seeds are bitter, purgative, carminative and aphrodisiac; they are also considered good for old peoples. Seeds are useful in leucoderma, scabies, catarrh, pain in the chest and the throat. They are used to enrich the blood and give lustre to the eyes.

The powdered seeds are made into poultice and it is used externally to allay inflammation of the womb after child birth. The Kusumbha tail (carthamus oil) is used as a liniment in rheumatism and also it is used as a dressing for bad ulcers.

The seeds oil is also considered as a mild purgative and cooling medicine. Seeds are also considered a good remedy for itch. Young plant (in green state) is reported to be very efficacious in cold season in order to keep the system warm.

In veterinary medicine, the seeds oil is sometimes used as sore healer in cattlis.

Kusumbha seed (Safflower seed) oil has a higher linoleic acid content than other linseed or soyabean oil. It is most unsaturated of all vegetable oils. Since it has a high degree of poly-unsaturation which seems to cause less cholesterol to accumulate in blood vessels, lessening the chances of arterio-sclerosis, it is of good use.

The anticholesterol activity of Kusumbha oil was observed. Pharmacological compositions of Kusumbha plant extracts (undertaken experimental process) are found to have antiviral and antitumour activities including toxicity studies. Th biological experiments on Kusumbha plant extracts find elevation of lysosomal enzymes during endo toxæmia.

**Part used :** Seeds, oil.

**Dose :** Powder 1-3 gm., Oil 2.5-5 ml.

## KUSUMBHA कुसुम्भ

स्यात्कुसुम्भं वहिशिखं वस्त्ररञ्जकमित्यपि ।

कुसुम्भं वातलं कृच्छ्ररक्तपित्त कफापहम् ॥

*Bhāvaprakāśa Nighaṇṭu, Dhānya Varga, 92.*

### कुसुम्भबीजम्

कुसुम्भबीजं वरटा सैव प्रोक्ता वरट्टिका ॥

वरटा मधुरा स्निग्धा रक्तपित्तकफापहा ।

कषाया शीतला गुर्वी स्यादवृष्ट्याऽनिलापहा ॥

*Bhāvaprakāśa Nighaṇṭu, Dhānya Varga, 83-84.*

कुसुम्भं पावकं पित्तमकं वस्त्ररञ्जकम् ॥

पद्मोत्तरा तु किलटा लट्वा रक्तं च लोहितम् ।

तट्टुकुसुम्भः कटुको विदाही कफनाशनः ॥

शाकं गुरुष्णं स्वाद्वम्लं कफग्नं पित्तलं सरम् ॥

*Kaiyadeva Nighaṇṭu, Dhānya Varga, 86-87.*

### लट्वाकः वन्यकुसुम्भम्

लट्वाकः स्यात् गुगुलकः शाकं वन्यकुसुम्भजम् ।

कौसुम्भं पित्तलं स्वादु रुक्षोष्णं श्लेष्महल्लघु ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 639.*

### कुसुम्भतैलम्

कुसुम्भ तैलं सक्षारं कटुकं रसपाकयोः ।

तीक्ष्णं विदाहि वीर्योष्णं रक्तपित्त बलप्रदम् ॥

मुरु केवलवातघ्नमचक्षुष्यं त्रिदोषनुत् ।

*Kaiyadeva Nighantu, Taila Varga, 321-322.*

### अरण्यकुसुम्भम्

ज्ञेयोऽरण्यकुसुम्भः स्यात् कौसुम्भाश्वग्रिसम्भवः ।

कौसुम्भः कटुकः पाके श्लेष्महल्दीपनश्च सः ॥

*Rāja Nighaṇṭu, Śatāhvādi Varga, 166.*

### कुसुम्भम्

‘कुसुम्भं वातलं रूक्षं रक्तपित्तकफापहम्।’

*Dhanvantari Nighanṭu.*

### कुसुम्भतैलम्

कुसुम्भतैलं क्रिमिहरि तेजोबलावहं यक्षममलापहं च।

त्रिदोषकृत्युष्टिबलक्षयं च करोति कण्डूञ्च करोति दृष्टेः॥

*Rāja Nighanṭu, Kṣirādi Varga, 111.*

### कुसुम्भतैलं गुणः

कुसुम्भतैलमम्लं स्वादुष्णं गुरु विदाहि च।

चक्षुष्वामहितं बल्यं रक्तपित्त कफप्रदम्॥

*Bhāvaprakāśa Nighanṭu, Taila Varga, 20.*

कुसुम्भतैलमुष्णं च विपाके कटकं गुरु।

विदाहि च विशेषेण तञ्च रोग प्रकोपनम्॥

*Dhanvantari Nighanṭu.*

### कुसुम्भबीजम्

कुसुम्भबीजं मधुरं स्निधं शीतं कषायकम्।

अवृष्टं गुरु च प्रोक्तं कफवातास्तपित्तनुत्॥

*Nighanṭu Rotnākara.*

### कुसुम्भम्

स्निधोमा स्वादुतिक्तोष्णा कफपित्तकारी गुरुः।

दृक्शुक्रहत् कदुः पाके तद्वद् बीजं कुसुम्भजम्॥

*Aṣṭāṅga Hṛdaya.*

‘रूक्षोष्णमम्लं कौसुम्भं गुरु पित्तकरं सरम्।’

*Caraka Saṁhitā.*

### निर्लोमकरणार्थम्

‘कुसुम्भतैलाभ्यङ्गो वा रोमामुत्पाटितेऽन्तकृत्।’

*Cakradatta, 62-58. Yonivyapāc Cikitsā, 56.*

### अशमरी मृत्रकृच्छ्रयो

‘एवारुबीजं त्रपुषात् कुसुम्भात्.....।

द्राक्षारसेनाशमरी शर्करासु, सर्वेषु कृच्छ्रेषु प्रशस्तः एषः॥’

*Caraka Saṁhitā, Cikitsā.*

**प्रमेहे**

‘कुसुम्भसर्पपातसी....स्लेहः प्रमेहेषु ।’

*Suśruta Saṃhitā, Cikitsā. 31-5.*

**लिङ्गदृढीकरणार्थं भूमिलतापक कुसुम्भ तैलम्**

सिद्धं कुसुम्भतैलं भूमिलताचूर्ण मिश्रित कुरुते ।

चरणाम्बुज्ज्वेन रतयोजस्तस्माद् दृढं लिङ्गम् ॥

*Cakradatta, Vṛṣyādhikāra, 66-55.*

**अश्मर्या मूत्रकृच्छ्रे च**

एवारुबीजं त्रपुषात् कुसुम्भात् सकुङ्कुमः स्याद् वृषकश्चपेयः ।

द्राक्षारसेनाश्मरिशकरासु सर्वेषु कृच्छ्रेषु प्रशस्तः एषः ॥

*Caraka Saṃhitā, Cikitsā 26-52.*

## KUTAJA

**Botanical name**

*Holarrhena antidysenterica* (Linn.) Wall ex G. Don.

**Family :** Apocynaceae

**Classical name :** Kuṭaja

**Sanskrit name :**

Kuṭaja, Vatsaka, Girimallikā, Śiviphala, Śvetapuṣpa, Dirghpatraka, Indrayava (bija: seeds of Kuṭaja) Śakrayava.

**Description**

A small deciduous tree with rough brown bark, exfoliating in irregular flakes. Wood white, soft and even grained, weight about 40 lbs per c. ft.

Leaves opposite, 6-12 by 3-5 in., elliptic-oblong, acute or acuminate, sub coriaceous, glabrous or pubescent; lateral nerves in 10-14 pairs; base obtuse or cuneate; petiole 2 in. or less.

Flowers white or cream-colour, slightly scented, 1-1.5 in. across, puberulous in terminal corymbose cymes which are 3-6 in. diam. Calyx deeply 5-partite; lobes small; lanceolate, acuminate, with glands inside at their base. Corolla tube .3-.5 in. long cylindrical, swollen at the base

round the tube, oblong, spreading, overlapping to the left. Anthers sub-sessile, inserted near the base of the corolla-tube; cells rounded at the base. Carpels 2, distinct; ovules numerous; style short; filiform; stigma oblong.

Fruit of 2 distinct divaricate follicles, 8-16 by 2-4 in., spreading and incurved, smooth, usually with white specks. Seeds numerous, 0.5 in. long, linear; hairs silky, of a brownish-grey colour 1.5 to 2 in. long.

### **Flowering and fruiting time**

New foliage appears on plant in April. It bears flowers in May-June and fruiting stage continues in colder months.

### **Distribution**

It occurs almost throughout India. Plant is very common in the Terai and valleys in Uttar Pradesh hills, ascending up to 4,000 ft. elevation.

### **Kinds and varieties**

The plant source of drug Kuṭaja is commonly identified and known as *Holarrhena antidysenterica* (Linn.) Wall. ex G. Don. Further, there are two kinds of Kuṭaja viz. Sita or Tikta Kuṭaja (white or bitter) which is *Holarrhena antidysenterica* (Linn.) Wall. ex G. Don.; and Asita or Madhura Kuṭaja (black or sweat) which is identified as *Wrightia tinctoria* R.Br. and also *Wrightia tomentosa* Roem. Schult., both belonging to family Apocynaceae. Classically there are other two varieties of Kuṭaja viz. Strīkuṭaja and Pūnkutaja.

#### **A. *Wrightia tinctoria* R. Br.**

A small deciduous tree, glabrous or more or less pubescent. Wood white and even-grained.

Leaves 3-5 in. long, elliptic-ovate or lanceolate or obovate-oblong, caudate or acuminate, base rounded or acute; main lateral nerves 6-12 pairs, conspicuous in the mature leaf; petiole very short.

Flowers white, fragrant, arranged in lax terminal dichotomous cymes; branches slender, spreading; bracts minute, ovate. calyx-lobes ovate rounded, margins mem-

branous. Corolla-tube linear, oblong, obtuse; scales linear, scattered. Anthers white, exserted.

Follicles pendulous, 10-20 in. long, slender; cylindric, glabrous, cohering at their tips only. Seeds linear, glabrous except for the basal coma.

### **Flowering and fruiting time**

Plant flowers in March-May and fruiting in post-autumn or cold season.

### **Distribution**

Plant occurs in northern central, western and southern India. It is found in Uttar Pradesh (Bundelkhand), Rajasthan (Rajputana) in deciduous forest and other regions in northern India. Plant also occurs in Burma and Sri Lanka.

### **B. *Wrightia tomentosa* Roem & Sch.**

A small deciduous tree with grey corky bark; extremities tomentose. Wood yellowish-white, moderately hard, close-grained, easy to work; heartwood not distinct; weight about 40 lbs. per c. ft.

Leaves opposite, distichous, 3-6 by 1.5-3 in., elliptic, caudate-acuminate, rarely obscurely serrulate, rather membranous, velvety-tomentose often on both surfaces, always beneath, marrowed into a petiole 0.2-0.3 in. long; lateral nerves 10-16 pairs.

Flowers 1 in. across, in many-flowered corymbose terminal cymes; bracts deciduous. Calyx short, with 5-10 scales inside at the base; lobes rounded, half length of the corolla-tube. Corolla pale-yellow, with a fleshy orange-coloured corona of scales. lobes oblong, overlapping to the left. Stamens inserted at the top of the corolla-tube; filament short and broad; continued into broad tapering connective; anthers sagitate by the cells being spurred at the base, adherent to the stigma; ovary of 2-connate carpels; style filiform; stigma ovoid.

Fruit of 2 connate follicles 8-12 by 5-7 in., straight, cylindrical, laterally compressed, rough with white specks; follicles, separating before dehiscing. Seeds numerous, 5-7

in., slender, each with a tuft of pure-white silky hairs at the lower end.

### **Flowering and fruiting time**

New leaves appear on plant in April. Flowering in May-June and fruiting in December-January. Stages of flowering and fruiting in plant begins with new foliage during the period from summers to winters.

### **Distribution**

Plant occurs throughout hotter parts of India, in deciduous forests. It is fairly common in Siwaliks and lower valleys and outer Himalayan open valleys upto 4,000 ft. in hilly region of Uttar Pradesh. Plant occurs in various regions in India. and in the Himalaya ascending to 4,000 ft. altitude.

### **Wrightia species :**

Both plant species of Wrightia genus referred and named (used) as Asita or Madhura Kuṭaja (black or sweet kind of Kuṭaja) botanically differ and their differential identification is mainly based on characteristics of the leaves and follicles. Leaves are glabrous or puberulous beneath in Wrightia tinctoria R. Br. when Wrightia tomentosa R. & S. has tomentose leaves on both surfaces. Similarly the follicles are smooth and adhering at the apex only in Wrightia tinctoria R. Br. while the follicles are conate throughout rough with white tubercles in Wrightia tomentosa R. & S. both plants are locally known as Dudhi in northern India, (i.e. Bundelkhand in U.P.) and Wrightia tinctorius R. Br. is specifically also known as Khirni (in Rajasthan), Khirna (in Uttar Pradesh, Mirzapur), Dudhali (Gujarat, Khathiawar) and Pandharakurha (Maharastra) and other regional names in country.

### **Chemical composition**

The bark of Kutaja (*Holarrhena antidysenterica*) contains conessine, conessemine, iso-conessemine. Kurchine, Kurchicine and other alkaloids and active constituents.

### **Pharmacodynamics**

Rasa : Tikta, kaṣāya

Guṇa	:	Rūkṣa
Virya	:	Śīta
Vipāka	:	Kaṭu
Doṣakarma	:	Kaphapittaśāmaka Tridoṣaghna (Indrayava-seeds)

**Properties and action**

<b>Karma</b>	:	Āmahara (Upaśoṣaṇa)-Sāngrāhika Dīpana-pācana-stambhana-śūlahara Arśoghna Kṛmighna-jantughna Raktastambhana-raktaśodhaka Vraṇaropanā Jvaraghna Dhātuśoṣaṇa Śūlapraśamana Kuṣṭhaghna Chardinigrahaṇa-triṣṇānigrahaṇa Lekhana Jvaraghna
<b>Roga</b>	:	Āmadoṣa Atisāra-āmātisāra-pravāhikā- raktātisāra-pittātisāra Āsmari-śarkarā-śukrāśmarī Kuṣṭha-carmavikāra Viṣa-māṁsagataviṣa Vraṇa-visphoṭaka Arśa-raktārsa Jvara Prameha

**Therapeutic uses**

The leaves of Asita or Madhura Kuṭaja (Wrightia tinctoria R. Br.) yield an Indigo-like dye which is used by the natives of Southern India. Seeds (madhura Indrayava or meeṭhā indrajou) are eaten. The bark of the stem and roots of another species used as Asita or Madhura Kuṭaja Wrightia tomentosa Roem. & Sch., known as Dudhi and Indrajou) are regarded as an antidote to snake bite and scorpion-sting. In addition to medicinal utility, the woods of both Wrightia species mentioned are of economic use.

The drug Madhura Kuṭaja (Wrightia tinctoria R. Br.) is medicinally useful and recommended in certain ailments. It has specific utility in skin diseases. The leaves of Wrightia tinctoria R. Br; known as Vetapalai elai in Southern India and Siddha system of medicine, are employed for preparing oil with equal quantity of coconut oil (Nārikela taila). This oil is used in Siddha system of medicine as external application to psoriasis (Kalanjaga padai in siddha system) and the remedy has been proved effective in psoriasis (Kiṭibha Kuṣṭha).

**Parts of uses :** Seeds, Bark.

**Dose**

Bark 20-30 gms. (for decoction), Powder 3-6 gms.

**Formulations**

Kuṭajāriṣṭa, Kutajāvaleha, Kuṭajasurā.

**Gana**

Arśoghna, Kanḍūghna, Stanyaśodhana, Āsthāpanopaga, Vamana (Caraka Saṃhitā), Āragvadhādi, Pippalyādi, Haridrādi, Lākṣādi, Urdhvabhāgahara (Suśruta Saṃhitā).

## KUTAJA (कुटज )

कुटजः शीतलो रूक्षः कषायो दीपनः कटुः ॥

कफपित्तास्त्रवृद्धकुष्ठजन्त्वामार्शोऽतिसारहा ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 894-895.*

**कुटजपुष्पम्**

तत्पुष्पं शीतलं तिक्तं कषायं लघु दीपनम् ॥

बातलं कफपित्तास्त्रकुष्ठातीसारजन्तुजित् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 895-896.*

**कुटजफलम्**

फलं तिक्तरसं ग्राहि कट्टमुष्पं त्रिदोषनुत् ॥

दीपनं पाचनं कुष्ठज्वरं विसर्पं शूलनुत् ।

गुदकीलकवातास्त्रमलोहितं नाशनम् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 896-897.*

### कुटज गुणः

कुटजः कटुको रूक्षो दीपनस्तुवरो हिमः।

अर्शोऽतिसारपित्तास्कफतृष्णाऽमकुष्टनुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyadi Varga, 118.*

कुटजः कटुतिकोष्णः कषायश्वातिसारजित्।

तत्रास्पितोऽस्पित्तग्रस्त्वगदोषार्शो निकृन्तनः॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 54.*

### इन्द्रयव

इन्द्रयवा कटुस्तिका शीता कफवातरक्तपित्तहरा।

दाहातिसारशमनो नानाज्वरदोषशूलभूतग्री ॥

*Rāja Nighaṇṭu, Prabhadrādi Varga, 57.*

इन्द्रयवस्त्रिदोषघ्नः संग्राही शीतलः कटुः।

ज्वरातिसाररक्तार्शः कृमिवीसर्प कुष्टनुत्॥

*Madanapāla Nighaṇṭu.*

### सर्वातिसारे कुटज क्लाथः

कुटज त्वक्कृतः क्लाथो घनीभूतः सुशीतलः।

लेहितोऽतिविषायुक्तः सर्वातीसारनुद्धवेत्॥

वदन्त्यत्राष्मांशेन क्लाथादति विषारजः।

प्रक्षेप्यत्वात् पादिकन्द लेहादिति च नो मतिः॥

*Cakradatt, 3/54/55.*

शक्राह्वाः कटुतिकोष्णात्तिदोषघ्नाश्वदीपनाः।

रक्तार्शस्यतिसारं च घ्ननि शूलवमी तथा॥

*Dhamvantari Nighaṇṭu.*

### स्त्रीपुंकुटजञ्ज

बृहत्फलः स्वेतपुष्यः स्त्रिगधपत्रः पुमान् भवेत्।

श्यामा चुरुण पुष्पी स्त्री फल युग्मतैस्तथाणुभिः॥

*Caraka Saṁhitā, Kalpa, 5.*

### कुटज त्वग्गुणाः

‘कुटजत्वक् श्लेष्मपित्तरक्तसंग्राहिको पशोषणानाम्’

*Caraka Saṁhitā, Sūtra, 25-63.*

### कुटजपुष्य गुणाः

‘कफपित्तहरं पुष्यं कुष्टग्नं कुटजस्य च।’

*Suśruta Saṁhitā, Sūtra, 46-284.*

तत्पुष्पं शीतलं तिक्तं कषायं लघु दीपनम्।  
वातलं कफपित्तास्त्रकुष्टातीसार जन्तुजित्।

*Madanapāla Nighantu.*

### कुटजः

कुटजः कटुकः तिक्तः कषायोरूक्षशीतलः।  
कुष्टातीसार पित्तास्त्रगुदजानि विनाशयेत्॥

*Dhanvantari Nighantu.*

कुटजः कटुको रूक्षो दोषनस्तुवरो लघुः।  
अशोऽतिसारपित्तास्त्रकफतृष्णामपित्तनुत् ॥

*Madanapāla Nighantu.*

### कुटज शिष्म्बीशाकम्

तस्य शिष्म्बीभवं शाकं व्यञ्जनं चामवातजित्।  
रुच्यं कफग्रं रक्तातीसार कुष्टकृमीन् जयेत्॥

*Madanapāla Nighantu.*

### ज्वरे

क्वथितं तण्डुलपयसा शक्राहं कटुकरोहिणीस हितम्।  
क्राथं यष्टीमधुनां विनाशनं पित्तज्वराणानु ॥

*Sārangadhara Saṁhitā, 3-2-66.*

### विस्फोटके

विस्फोट व्याधिनाशाय तण्डुलाम्बुप्रपेषितैः।  
बीजैः कुटजवृक्षस्य लेपः कार्यो विजानता ॥

*Gada Nigraha.*

### शुक्राशमर्यादम्

पिबतः कुटजं दध्ना पथ्यमन्नं च खादतः।  
निपतन्त्यचिरात्स्य नियतं मेद्रशर्करा ॥

*Bhāvaprakāśa.*

### सर्वच्छर्शःसु

‘कुटजवन्दाकीमूलंकल्कं वा तक्रेण भक्षयेत्।’

*Suśruta Saṁhitā, Cikitsā 6-13.*

### अम्लपित्तानुबन्धारक्तजेषु अर्शःसु

‘कुटज मूलत्वक् फाणितं वा..... भक्षयेत्।’

*Suśruta Saṁhitā, Cikitsā, 6-13.*

प्रमेहे

‘कुटजः………पृष्ठकल्कं वा ।’

*Suśruta Saṃhitā, Cikitsā, 11-8.*

बहुश्लेष्मणि सरक्तेऽतिसारे

बहुश्लेष्मसरक्तञ्च मंदवातं चिरोत्थितम् ।

कौटजं फाणितं वापि हन्त्यतीसार मोजसा ॥

*Suśruta Saṃhitā, Cikitsā, 40-90*

आद्रषु अर्शःशु

‘भैषज्यमाद्रेषु तु वत्सक त्वक् ।’

*Aṣṭāṅga Hṛdaya, Cikitsā., 8-162.*

अतिसारे कुटज क्षीरम्

निक्राथ्य मूलकमलं गिरिमलिकायाः सम्यक् पलद्वितयमम्बुचतुः शरावे ।

तत्पदशेषसलिलं खलु शोषणीयं क्षीरे पलद्वयमिते कुशलैर जायाः ॥

प्रक्षिप्य माषकानष्टौ मधुनस्तत्र शीतले रक्तातीसारीतत्पीत्वा नेरुज्यं क्षिप्रमाप्नुयात् ॥

*Bhāvaprakāśa, Atisārādhikāra, 2-59/60.*

रक्तातिसारे कुटजदाडिमकाथम्

वत्सत्वदाडिमतरु-शलादुफलसम्भवा त्वक् च ।

त्वग्युगलं पलमानं विपचेदष्टांशसंमिते तोये ॥

अष्टमभागं शेषं क्वाथं मधुना पिबेत्पुरुषः ।

रक्तातिसारमुल्वण-मतिशयितं नाशयेन्नियतम् ॥

*Bhāvaprakāśa, Atisārādhikāra, 2-50-51.*

सन्त्रिपातातिसारे कुटजावलेहम्

कुटजत्वकृतः क्वाथो वस्त्रपूतो हिमीकृतः ।

स लीढोऽतिविषायुक्तः स्यात् त्रिदोषातिसारनुत् ॥

इच्छन्त्यत्राष्ट मांशेन क्वाथादतिविषारजः ।

प्रक्षेपच्चतुर्थोशमिति के चिद्वदन्ति हि ॥

*Bhāvaprakāśa, Atisārādhikāra, 2-94/95.*

अतिसारे वत्सकादिक्वाथम्

सवत्सकः सातिविषः सबिल्बः सोदीच्यमुस्तश्च कृतः कषायः ।

साम सशूले सहशोणिते च चिरप्रवृत्तेऽपि हितोऽतिसारे ॥

*Bhāvaprakāśa, Atisārādhikāra, 2-55.*

### विस्फोटके इन्द्रयवः:

विस्फोट व्याधिनाशाय तण्डुलाम्बुप्रपेषितैः ।

बीजैः कुटजवृक्षस्य लेपः कार्यो विजानतः ॥

*Bhāvapratikāśa, Viśphoṭādhikāra, 58-23.*

### अतिसारे कुटजपुटपाकम्

तत्कालाकृष्टकुटज त्वचं तण्डुलवारिणा ।

पिष्ठवा चतुष्पलमितां जम्बूपल्लव वेष्टिताम् ॥

सूत्रेण बद्धवा गोधूमपिष्ठेन परिवेष्टिताम् ।

लिसां च धनपङ्केन गोमयैः वह्निना दहेत् ।

अङ्गार वर्णं च मृदं दृष्टवा वह्ने समुद्धरेत् ।

ततोरसं गृहीत्वा च शीतं क्षौद्रयुतं पिबेत् ॥

जयेत्सर्वान्तीसारान् दुस्तरान् सुचिरोत्थितान् ।

*Śāraṅgadhara Samhitā, Khaṇḍa 2, 24-28.*

### रक्तातिसारे

‘कुटजस्य फलानि च ।’

एतैः घृतं सिद्धं जयेच्छीघ्रमतिसारम् ।’

*Caraka Samhitā, Cikitsā, 10-86.*

### कुष्ठे

‘वत्सकबीजस्य.....कल्कं....कुष्ठेषूद्धर्तनालेपः ।’

*Caraka Samhitā, Cikitsā, 7.*

### रक्तस्तुतो अर्णःसि

‘कुटजत्वङ्निर्यूदहः सनागरः स्तिंधरक्तसंग्रहणः ।’

*Caraka Samhitā, Cikitsā, 14-185.*

### पित्तातिसरि

पलं वत्सकबीजस्य श्रपयित्वा रसं पिबेत् ।

यो रसाशी जयेच्छीघ्रं स पीतं जाठरामयम् ॥

*Caraka Samhitā, Cikitsā 10-91 Cakradatta, 3-39.*

### यक्षिमणः अतिसारे

‘सनागर निन्द्रयवान् पिबेद्वा तण्डुलाम्बुना ।’

*Caraka Samhitā, Cikitsā, 8-122.*

### ब्रणरोपणे

‘करवीराक्तकुटजाः कषायाः रोपणाः मता ।’

*Caraka Samhitā, Cikitsā, 13-85/88.*

### रक्तातिसारे कुटजफलपेया

घृतं यवागूमण्डेन कुटजस्य फलैः शृतम्।

पेयं तस्याम्बु पातव्या पेया रक्तोपशान्तये॥

*Caraka Samhitā, Cikitsā. 19-79.*

### अर्शःसुशूले कुटजाफलादिघृतम्

कुटजफलवल्ककेशरनीलोत्पल लोब्रधातकी कलकैः।

सिद्धं घृतं विधेयं शूले रक्तार्शसां भिषज॥

*Caraka Samhitā Cikitsā. 14-197.*

### मांसगतविषे

..... मांसगते पिबेत्।

सक्षोद्रं खदिरारिष्टं कौटजं मूलभसा।

*Caraka Samhitā, Cikitsā. 23-187/188.*

### शर्करा ( अश्मरी ) विकारे

पिबतः कुटजं दध्ना पथ्यमन्तर्ज्ञ खादतः।

निपतन्यचिरातस्य नियतं मेद्रशर्करा॥

*Bhāvaprakāśa, 37-49.*

### कुष्ठे त्वग्विकारे

लोभस्य धातकीनां वत्सकबीजस्य नक्तमालस्य।

कल्कश्च मालतीनां कुष्ठेषून्मदनालेपौ।

*Caraka Samhitā, Cikitsā. 7-95, 97/99.*

‘हन्ति वृक्षकनिर्मूहः पानात् सर्वास्त्वगामयान्।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 19-36.*

### कासे

इन्द्र्यवपल्लवयुतं मरिचं खादेद्दिनत्रयम्।

कासान् जयति समूलान् नाकुल्याः पादवल्लमिताः॥

*Vaidya Manoramā, 3-1.*

### कुक्षिवाते

पिबेत् कुष्ठबीजानां चूर्णं प्रातः सुखाम्बुना।

शुण्ठीचित्रकयुक्तानां कुक्षिवात निवारणम्॥

*Baingasena, Vātvyādhi. 55.*

### रक्तार्शसि

कुटजादि रस क्रिया।

*Caraka Samhitā, Cikitsā. 14-188/192.*

### शुष्कार्णेषु-शुष्काद्र्वशर्णसि

‘शुष्केषु भल्लातक मग्रयमुक्तं भैषज्यमाप्रेषु तु वत्सकत्वक् ।’

*Aṣṭāṅga Hṛdaya, Cikitsā. 8-162.*  
*Vṛndamādhava, 5-99.*

### रक्तार्णसि

कुटजत्वकृपलं तार्क्ष्य माक्षिकं घुणवल्लभाम्।

पिबेत्तण्डुलतोयेन कल्कितं वा मयूरकम्॥

*Aṣṭāṅga Hṛdaya, Cikitsā. 8-103.*

‘कुटजोऽतिसारे ।’

*Aṣṭāṅga Hṛdaya, Uttara. 40-49.*

### अतिसारे

सक्षौद्रातिविषं षिष्ठवा वत्सकस्य फल त्वचम्।

पिबेत् पित्तातिसारन्नं तण्डुलोदकं संयुतम्॥

*Caraka Saṃhitā, Cikitsā. 19-51.*

## KUTIKTĀ-KUNAYANA

**Botanical name :** *Cinchona officinalis* Linn.

**Family :** Rubiaceae

**Classical name :** Kutiktā, Kunayana.

**Common Name :** Kunain-quinine.

**Sanskrit names**

Kunayana, Kutiktā, Jvarahantri,

**Regional names**

Kunain, Cinchona, (Hindi); Cinchona (Eng.);  
Tree. Quinine (Eng.) Drug (constituent).

**Description**

It is a slender tree, 20-30 ft. high, with small, smooth, ovate-lanceolate shining leaves and reddish paticles. Flowers rosy. Capsules ovoid-oblong, 17-20 mm. long.

Bark is rough, brown, yellow within, with black and whitish markings.

**Distribution**

Plant flourishes at an elevation on 6,000-8,000 ft. It

is found growing in Ootacamund in Southern India and West Bengal (Darjeeling), Sikkim (Mungpoo) in eastern Himalaya and other areas. Cinchona trees plantations in India and also in Sri Lanka, Burma, Java and other countries. Native of 'South America.' It is also cultivated in Nilgiris in India.

### **Chemical composition**

Bark contains chiefly an alkaloid widely known as quinine. Besides quinine, 20 others or more alkaloids are isolated which mainly include quinidine, cinchonidine and cinchonine.

Quinic acid, cinchofulvic acid and cinchotannic acid, a glucoside a-quinovin, red colouring matter and volatile oil (in minor quantity). Seeds yield fixed oil (13.3%). Activity of bark depends on presence of alkaloids. Red cinchona is potent.

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

### **Properties and action**

Karma	: Jvaraghna-viṣamajvaraghna Śitāpraśamana Viṣamajvaraprativandhaka (jīvāṇuniṣūdana) Plihasaṅkocaka Jantughna-vedanāsthāpana Dīpana-āmapācana Stambhana Kṛmighna-jantughna Hṛdayottejaka-Raktaśodhaka Plihasaṅkocaka Kaṭupouṣṭika Kaphaghna Garbhāśayottejaka
Roga	: Viṣamajvara

Yakṛtplihavṛddhi  
 Agnimāndya-āmadoṣa  
 Yakṛdvikāra  
 Pravāhikā  
 Hṛddourbalya-raktavikāra  
 Pratisyāya-kāsa  
 Rajorodha-garbhāśayaśodhana  
 Dourbalya  
 Karṇasrāva  
 Mukhapāka-galaśotha  
 Kṛmi-bāhya kṛmi

### **Therapeutic uses**

The drug Kutiktā or Kunayana is a specific, prominent and potent anti-malarial drug. Excess and constant use of drug causes side effect and complication. Quinine is extract form. Decoction of bark (Cinchona) is also febrifuge.

The drug is extremely bitter in taste. Quinine and other derivatives are used in medicine.

It is useful in some other ailments also. Bark is externally applied to germs and painful organs and also in otorrhoea. In stomatitis and throat swelling it is used for gargle.

**Parts used :** Bark, Extract (quinine).

**Dose :** Bark powder 1-2 gm.

## **KUTIKTĀ-KUNAYANA ( कुतिक्ता-कुनयन )**

लघुरुक्षोष्णः सपादि कफपित्प्रशमनः,  
 ज्वरोच्छाय तिक्तो हरित विषमाख्यं कुनयनः ।  
 परं मात्राधिक्याज्जनयति बहुपद्रवभरम्,  
 भ्रमं मूर्च्छामान्ध्यं श्रुतिवधिरतांकर्णविरुतम् ॥

*Dravyaguna Vigyan, Part II, p. 713.*

## **LAJJĀLU**

**Botanical name :** Mimosa pudica Linn.

**Family :** Mimosac

**Classical name :** Lajjālu

**Sanskrit names**

Lajjālu, Samaṅga, Lajjālu (Samaṅgā), Śamīpatrā, Namaskārī, Khadirakā-Khadirī, Raktapādī, Añjalikārikā, Gañdamālikā, Lajja-Lajjikā, Sporśalajjā, Asrarodhīnī, Raktamūlā-Tāmramūlā.

**Regional names**

Lajjalu, lajalu, lajkan, Chuimui, Lajvanti (Hindi); Lajaka, Lajjavati (Bengla); Lajalu, Lajari (Marathi); Risamani (Gujarati); Tottalvadi (Tam.), Attapatti (Telugu); Lajja (Kann.); Tintarmani (Mal.); Sensitiva Plant (Eng.).

**Description**

Stems prickly, glandular, hairy, a widely spreading diffuse under shrub. Pinnae 1.5-2 in long. Leaves seismocnastic. Rachis 1-1.5 in. long, beset with ascending bristles; leaflets .2-.3 in long., 12-20 pairs, linear-oblong, acute, oblique-based, appressed hairy beneath. Heads long peduncled usually paired. Stamens 4. Pod flat, membranous, 3-5-jointed, margins distinctly bristly; 5-8 in. long with densely prickly sutures.

**Flowering and fruiting time**

Plant flowers in February-July or rainy season, and fruits in September or December or Winters.

**Distribution**

It occurs throughout neotropical regions. It is found in warm regions in India. It is also occasionally planted in pots, flower beds and found self-grown or in wild state. Throughout the hotter parts of India, and cosmopolitan in the tropics; sub-Himalayan tracts eastwards, naturalised as a weed in waste lands.

**Kinds and varieties**

Another plant *Biophytum sensitivum* De., belonging to family Geraniaceae, is also referred as substitute **Biophytum sensitivum Dc. or adulterant of Lajjālu or (Lājvanti) and as Samangā :**

Stems hispidly pubescent. Leaves 1.5-.5 in.; leaflets

6-15 pairs, variable in size. Peduncles very variable, 1/2-5 in., hispid, sometimes, swollen at the tip; bracts rigid, setaceous. Flowers shortly pedicelled, yellow. Sepals subulate, rigid, glandular and hispid, usually much exceeding the capsule. Petals about twice as long as the sepals. Capsule elliptic, shining. Seeds minute, with obliquely transverse tubercled ridges.

Plant occurs throughout the hotter parts of India and Sri Lanka ascending to 6,000 ft. on the Himalayas.

### Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu, rūkṣa
Viryā	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittasāmaka

### Properties and action

Karma	: Sandhāniya Raktastambhana (raktarodhaka) Vraṇaropāṇa-kṣataropāṇa Stambhana Viṣya-śukrajanana Pramehaghna Viṣaghna Śramaghna Dāhapraśamana Kṛmighna Kuṣṭhaghna Arśoghna
Roga	: Bhagna Kṣata-śastraja kṣata Vraṇa Dhātukṣaya Bhagandara Pradara Sukra kṣaya-vikāra-klaivya Prameha-siktāmeha Uraḥkṣata-raktapitta Atisāra-raktātisāra-pravāhikā

Raktārśa  
 Viṣa-sarpaviṣa-maṇḍalasarpa viṣa  
 Raktasrāva  
 Āntravṛddhi  
 Urustambha.

### **Therapeutic uses**

As an antidote of snake-poison, the drug Lajjālu is indicated to be given orally to victim person specially in case of bite and poison of maṇḍalīsarpa (viṣa) which is mentioned in Rājamārtanda.

Lajjālu (samaṅgā) is mixed with flowers of Madhuka and externally applied on haemorrhoids for treatment of piles and specially checking burning sensation, moistening, rectal prolapse and other symptoms as prescribed in Caraka. Saṁhitā. The drug Lajjālu (samaṅgā) has good haemostatic and blood coagulant properties (raktastambhana-raktarodhana) which are useful in cases of haemorrhage (raktasrāva). For the instance, the root of Lajjālu mixed with honey is recommended to be orally taken in raktasrāva or haemorrhage (Suśruta Saṁhitā, Śārīra, 10-57) which is part of other drugs (Dhātakī flowers, navamālikā, red ocher, sarjarasa, rasāñjana) incorporated for checking haemorrhage).

The drug Lajjālu (samaṅgā) is a wound-healing (vraṇaropana) agent as it belongs to wound-healing group (Suśruta Saṁhitā, Sūtra, 37-24) possessing effecient healing activity in wounds. In accidental wounds (śastrakṣata), the oil cooked with fresh root of Lajjālu plant is applied hot on wound which is fastly healed up after pasting of the drug. Similarly the paste of Lajjālu root pounded with water is applied over accidental wound (Rajmārtanda, 25-4, 26-4).

In scrotal enlargement (āntravṛddhi), the paste of Lajjālu (*Mimosa pudica* Linn.) mixed with excrete of vulture (gr̥dhra viṭ) is prascribed to be applied externally. It is also used as an external application to disorders of female genital tract (Baṅgasen, āntravṛddhi, 46). Similarly another recipe of Lajjālu for external application (lajjālu lepam) is suggested (Cakradatta, 40-21) in treatment of

vṛddhi roga. In urustambha, samaṅgā, śālmalī and bilva are mixed with honey and taken internally (Caraka Saṁhitā, cikitsā. 27-29) for alleviating the ailment.

**Parts used :** Root, whole plant, seeds.

**Dose :** Juice 10-20 ml., Decoction 50-100 ml.

**Gaṇa**

Sandhāniya, Purīṣasangrahaṇiya (Caraka Saṁhitā), Ambaṣṭhādi (Suśruta Saṁhitā).

## LAJJĀLU ( लज्जालु )

क. लज्जालुः स्याच्छमपित्रा समझा जलकारिका ।

रक्तपादी नमस्करी नाम्रा खदिरकेत्यपि ॥

ख. लज्जालुः शीतला तिक्ता कषाया कफपित्तजित् ।

रक्तपित्तमतीसारं योनिरोगान् विनाशयेत् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 272-273.*

**अलम्बुषा-लज्जालु भेदः:**

अलम्बुषा खरस्त्वक् च तथा मेदोगला स्मृता ।

अलम्बुषा लघुः स्वादुः क्रिमिपित्तकफापहा ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 274.*

**लज्जालुः:**

नमस्करी रक्तपादां समझाऽञ्जलिकारिका ।

शमीपत्रा रक्तमूला रुहा खदिर कारुणा ॥

लज्जालुः स्यात् स्पृहा स्पृक्षा गन्धकारी प्ररोचनी ।

**लज्जालु गुणाः:**

नमस्करी हिमा तिक्ता कषाया कफपित्तहा ।

योनिरोगमतीसारं रक्तपित्तं च नाशयेद् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1081-1083.*

**लज्जा ह्वी-लज्जालुः:**

रक्तपादी शमीपत्रा स्पृक्षाखदिरपत्रिका ।

सङ्घोचनी समझा च नमस्कारी प्रसारिणी ॥

लज्जालुः सप्तपर्णी स्यात् खदिरी गण्डमालिका ।

लज्जा च लज्जिका चैव स्पर्श लज्जाऽस्त्रोधनी ।  
 रक्तमूला ताम्रमूला स्वगुसाऽश्चलिकारिका ।  
 नाम्रां विंशतिरित्युक्ता लज्जायास्तु भिषग्वरैः ॥

### लज्जालुगुणाः

- क. रक्तपादी कटुः शीता पित्तातीसार नाशनी ।  
 शोफ दाहश्रमश्वास ब्रणकुष्ठक फास्तनुत् ॥
- ख. लज्जालुवैंपरीत्यान्या अल्पक्षुपवृहद्दला ।  
 वैपरीत्या तु लज्जालुहर्यमिधाने प्रयोजयेत् ॥
- ग. लज्जालुवैंपरीत्याह्वा कटुरुष्णा कफामनुत् ।  
 रसो नियामकोऽत्यम्ल नानाविज्ञानकारकः ॥

*Rāja Nighantu, Parpaṭādi Varga, 103–108.*

रक्तपादी शमीपत्रा स्पृक्ता खदिरपत्रिका ।  
 स्पर्शात्संकोचतां याति पुनश्च प्रसृता भवेत् ॥

*Sivadatta, Kaiyadeva.*

### मण्डलसर्पविषे

‘तण्डुलजलेन पिष्टं.....नाशयन्ति ।  
 पानेन मण्डलिविषं यदि वा लज्जावतीमूलम् ॥’

*Śodhala.*

### शस्त्रक्षते

आद्रेण लज्जालुकिनीभवेन मूलेन तैलं पारिपाचितं यत् ।  
 तत्स्वेदितं पाकविवर्जितो द्राक् संरोहमागच्छति शस्त्रघातः ॥

*Rāja Mārtanda, 25-4.*

### विषोपशमनार्थम्

लज्जावतीमूल विलिसपाणिः बद्ध्वाऽथवा तत्रतदीयमूलम् ।  
 गृह्णाति सर्पन् भ्रमतोऽतिघोरान् पुमान् सुपर्णप्रतिमप्रभावः ॥

*Rāja Martanda.*

### वृद्धिहरं लज्जालुलेपम्

‘लज्जामृद्भ्रमलाभ्याच्च लेपो वृद्धिहरः परः ।’

*Cakradatta, Vṛddhibraghma Cikitsā, 40-21.*

### उरुस्तम्भे

‘समझा शाल्मली बिल्वं मधुना सह ना पिबेत् ।’

*Caraka Samhitā, Cikitsā, 27-29.*

**अशार्सि**

‘समझामधुकाभ्यां.....वा।’

*Caraka Saṁhitā, Cikitsā. 24-220.*

**ब्रणरोपणे**

समझा सोमसरला सोमवल्कः सचन्दनः।

काकोल्यादिश्वकल्कः स्यात् प्रशस्तं ब्रणरोपणे॥

*Suśruta Saṁhitā, Sūtra. 37-24.*

**शस्त्रक्षतोपचारार्थम्**

लज्जालुकेषु पुंखाभाङ्गीणां मध्यतः प्रलेपेन्।

एकस्या जलपिण्ठं मूलं शस्त्रक्षतेषु हितम्॥

*Rāja Mārtanda, 26-4.*

**सर्पविषे**

‘पानेन मण्डलिविषं यदि वा लज्जावतीमूलम्।’

*Rāja Mārtanda, 29-8.*

**आन्त्रवृद्धौ**

लज्जालुमूलं गृध्रस्य विट् प्रलेपः प्रयोजितः।

कुरण्डं योनिरोगञ्च नाशयेद् विकल्पतः॥

*Baṅgasena, Āntravṛddhi. 46.*

**रक्तस्त्रावे**

‘अत्यर्थ स्वतिरक्ते.....समझा.....

मधुनाऽवलिह्यात्।’

*Suśruta Saṁhitā Śārira. 10-57.*

## LĀKṢĀ

**Botanical name/Zoological name**

Laccifer (tuchardia) lacca Kerr. (Lac producing insect).

**Chief source (host) plants**

Schleichera oleosa (Lour.) Okera.

Butea monosperma (Linn.) Kuntze.

Zizyphus jujuba Lam.,

Ficus religiosa Linn.,

Ficus bengalensis Linn.

**Family : Coccideae**

**Classical name : Lākṣā**

**Sanskrit names**

Lākṣā, Jantukṣatahari, Gavayikā, Palankaṣā, Drumavyādhi, Kārpaṭa, Jantumātā, Jatū, Raktā, Raksā, Kṛmijā, Aloktaka, Kṛmidravya, Jatuka, Lohitā, Vṛkṣāmaya

**Regional names : Lākh (Hindi).**

**Discription**

Lac is the resinous protective secretion of the tiny lac insect (*Laccifer* spp. belonging to family Lacciferidae in order Hemiptera) which is a pest on a number of plants, both wild and cultivated. The minute red coloured larvae of the insect settle on young succulent shoots of the host plants in myriads, drive their long proboscis into the bark and draw their nutriment from the sap. They secrete a thick resinous fluid which envelopes their bodies; and the secretions from individual insects coalesce and form a hard continuous encrustation over the twigs. After completion of the life cycle, and just about the time of larvae of next generation begin to emerge, the twigs are harvested and the encrustations scrapped off, dried and processed to yield the lac of commerce for utility in various purposes including medicine and cosmetics.

Among some source plants of hosts species out of a number of such plants producing lac, there is an important Lākṣā vṛkṣa, which is botanical known as *Schleichera oleosa* (Lour) Oken, is incorporated and used as Kośāmra in Indian medicine.

**Kinds and Varieties**

Though there are various species of insects and many host plants, but from point of view of large scale production, quality and procurement source of lac raw material, the several kinds of lac may be grouped in two major categories viz. Rangeeni strain and Kusum strain.

Firstly the crude material of lac is collected from twigs or stick lac and out of which seed lac is separated. This material is coloured for preparing commercially useful shellac (also for sealing wax). In pharmaceutical process, it

is used for enteric costing for pills and tablets. For medicinal use in indigenous medicine, the seed lac is used for preparing recipes and as an ingredient in formulations. The crude material of lac or Lāksā is purified as per process of purification (śodhana) for eliminating undesirable portion or substances and finally purified lac or śuddha (śodhita) lāksā is recommended for medicinal uses particularly for internal purposes in medicine.

### **Chemical Composition**

Lac chiefly consists of resin or resinous matter; and it also contains wax and colouring matter pigmentlaccin and other substances.

Lac resin is composed of intersters of hydroxy fatty acid derivatives. Aleuritic acid is the major constituent.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu, snigdha
Virya	: Uṣṇa-anuṣṇa
Vipaka	: Kaṭu
Doṣakarma	: Śleṣmapittanāśaka.

### **Properties and action**

Karma	: Sandhāniya Stambhana Varnya Balya Kuṣṭhaghna Raktadoṣahara Pittapraśamana Viṣamajvaraghna-jvaraghna Vraṇaropana Kāsaghna Rucya kaṇṭhya
Roga	: Asthibhagna Varṇavikāra-vyaṅga Carmaroga-visarpa Kuṣṭha Kāsa-śvāsa-hikkā-uraḥkṣata Raktatisāra Raktasrāva

Pradara  
Bhagna  
Kanṭharoga  
Kṛmīroga  
Viṣa.

### **Therapeutic uses**

The drug Lākṣā is powdered and mixed with honey alongwith milk. It is given orally to patients of chest-woulnd (urahkṣata) and diet with milk and sugar is allowed after medicine is digested (Caraka Saṁhitā, Cikitsā. 8-15). In case of fracture (bhagna), the cow's milk cooked with sweet drugs and added with ghee and lāksā (lac) is given in the morning (Suśruta Saṁhitā, cikitsā. 3-11). Lāksā (lac) and rasāñjana (semi-solid extract of Dāruharidrā) are mixed and given to woman with goats milk (Caraka Saṁhitā, Cikitsā. 30-97) in pradara (leucorrhoea) or asṛgdara (raktapradara)

In paediatrics (bāla roga) management, Lakṣādi tailam is used for external application (massage or abhyāṅga) in specific disorders of children like bālaśoṣa (marasmus), phakka roga (rickets) and other similar ailments.

In condition of dantaśarkarā (during śastra cikitsā), the powder of lac (lāksā) mixed with honey is suggested to be applied externally (pratisāraṇa) on tartar affected teeth parts (Bhāvaprakāśa; Cakradatta 56-260). Another prominent formulation Lākṣāguggulu is prescribed. In management of bhagna (fracture) for oral use.

The drug Lākṣā is an important lusture or complexion promoting agent (Varṇya) and it is applied on skin (desired part of body); in suitable form used in health and disease and hence it is of cosmetic use. Alaktaka is traditional colouring item of women and it is varṇya and also medicinally useful.

**Part used :** Lac (Lac resin) : Lākṣā.

**Dose :** 2.5-5 gm., 0.5 gm.-1.5 gm.

**Formulations :** Lākṣāditaila, Lākṣāguggulu

## LĀKSĀ ( लाक्षा )

लाक्षा खदिरका रक्तां रङ्गमाता पलङ्गषा ।  
जंतु च क्रिमिजा चैव द्रुमव्याधिरलक्तकः ॥  
पलाशी मुद्रणी दीसर्जन्तुजा गधमादनी ।  
नीला द्रवरसा चैव पित्तारिमुनिमूह्यया ॥

लाक्षागुणाः

लाक्षा तिक्ककषाया स्यात् श्लेष्मपित्तार्ति दोषनुत् ।  
विषरक्त प्रशमनी विषमज्वर नाशनी ॥

*Rāja Nighaṇṭu, Pippalyādi Varga, 203-205.*

अलक्तकः

अलक्तको जन्तुरसो रागो निर्भव्सनस्तथा ।  
जननीं जन्तुकारी च सन्धर्षा चक्रमर्दिनी ॥

अलक्तकगुणाः

अलक्तकः सुतिक्तोष्णः कफवातामयापहः ।  
कण्ठरुक्षमनोरुच्यो ब्रणदोषार्ति नाशनः ॥

*Rāja Nighaṇṭu, Pippalyādi varga, 206-207.*

( लोधस्य नामः ) लाक्षा प्रसादनः

‘लाक्षां प्रसादयति इति लाक्षा प्रसादनः ।’

*Bhāva-prakāśa Nighaṇṭu, 1-215 (Lodhra)*

‘अस्मिन् प्रक्षिसे लाक्षा प्रसन्ना भवति इति लाक्षा प्रसादनः ।’

*Bhānuji Dikṣhit.*

लाक्षा

लाक्षापलङ्गषालक्तो यावो वृक्षामयो जतुः ।  
( ब्राह्मण्यङ्गारवल्ली च खरशाखा च हञ्जिका )

लाक्षा गुणाः

लाक्षा वण्या हिमा बल्या स्त्रिग्धा च तुवरा लघुः ।  
अनुष्णा कफपित्तास्त्र हिक्काकास ज्वर प्रणुत् ।  
ब्रणोडरः क्षतकसर्पकृमिकुष्टगदापहा ।  
अलक्तको गुणैस्तद्विशेषाद्वधङ्गनाशनः ॥

*Bhāva-prakāśa Nighaṇṭu, Harītakyādi varga, 193-195.*

## लाक्षा

- क. लाक्षा जंतु क्षतहरी द्रुमव्याधिश्च कार्पटः ।  
निर्मत्सरा रङ्गमाता जन्तुमाता गवायिका ॥  
रक्ता तु रक्षः कृमिजा कृमिद्रव्यं पलङ्ग्णषा ।  
जतुका लोहिता दीसिर्याविकोऽलक्तको मतः ॥

## लाक्षागुणाः

- ख. लाक्षा स्त्रिग्धा लघुस्तिका कषाया बलवर्णदा ।  
अनुष्णा हन्ति पित्तास्त्रकफकुष्ठ ज्वर व्रणान् ॥  
उरःक्षतपरीसर्पभग्रकास विषकृमीन् ।  
ग. अलक्तको गुणैस्तद्वाद्विशेषाद् व्यङ्ग्नाशनः ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1432-1435.*

## प्रदर रोगे

- ग. 'रसाञ्जनं च लाक्षां च छागेन पयसा पिबेत् ।'

*Caraka Saṃhitā, Cikitsā. 30-97.*

*Suśruta Saṃhitā, Cikitsā. 3-11.*

## बालरोगे लाक्षाऽऽदितैलम्

*Bhāvaprakāśa, Bālarogādhikāra, 71/88-189.*

## अस्थिभग्र चिकित्सायां लाक्षा गुग्गुलुः

लाक्षाऽस्थिसंहत्कुभाश्वगन्धाश्वूर्णीकृता नागबला पुरश्च ।  
समभग्र युक्तास्थिरुजे निहन्यादङ्गानि कुर्यात् कुलिशोपमानि ॥  
तत्रान्यतोऽपि दृष्टत्वात् तुल्यश्वूर्णन गुग्गुलुः ॥

*Cakradatta, Bhagna Cikitsā, 49-14.*

## दन्तशर्करा ( शस्त्र ) चिकित्सायां लाक्षा प्रयोगः

'लाक्षाचूर्णैर्मधुयुतैस्ततस्तां प्रतिसारयेत् ।'

*Cakradatta, Mukharoga Cikitsā (Dantaroga), 56-26.*

## उरःक्षते

उरोगत्वा क्षतं लाक्षां पयसा मधुसंयुताम् ।  
सद्य एव पिबेज्जीर्ण पयसाऽद्यात् सशर्करम् ॥

*Caraka Saṃhitā, Cikitsā. 8-15.*

## भग्रे

गृष्णिक्षीरं ससर्पिष्कं मधुरौषधसाधितम् ।

शीतलं लाक्ष्या युक्तं प्रातर्भग्नः पिबेन्नरः ॥

*Suśruta Saṃhitā, Cikitsā, 3-11.*

## LAKUCA

**Botanical name :** Artocarpus lakoocha Roxb.

**Family :** Moraceae

**Classical name :** Lakuca

**Sanskrit names**

Lakuca, Likuca, Kṣudra panasa, Duḍura-ḍahu-duhu, Granthimatphala, Sthūlaskandha, Drḍhavalkala, Śūra, Pittanāśa.

**Regional names**

Barhahar (Hindi); Dephal madar (Ben.); Botombar (Mar.); Kammarugu (Tel.) Vethuli (Kann.); Monkey Jacq. (Eng.)

**Description**

Large, erect or bent trees, up to 20 meters high; crown spreading bark fissured, dull black. Leaves large subcoriaceous, elliptic, obvate or oblong, entire, grey-pubescent beneath; stipule lanceolate, caducous, Male receptacle orange yellow, ovoid, spongy, rugose, up to 2.5 cm. long; flowers monandrous, tepals 2-3. Female receptacle lobulate, irregularly subglobose in outline, up to 12 cm. across, yellow when ripe. Achenes embedded in fleshy; edible receptacle.

**Flowering and fruiting time**

March to May.

**Distribution**

It occurs in India and Ceylon. Plant is occasionally planted in gardens and house premises. It is found in the lower Himalayan region or Terai up to 4,000 ft., from Kumaon to Assam, Bihar, Orissa, Madhya Pradesh, Central and southern India.

**Pharmacodynamics**

Rasa	: Madhura, amla, Kaṣāya
Guṇa	: Guru, rūkṣa

Vīrya : Uṣṇa  
 Vipāka : Amla  
 Doṣakarma : Tridoṣakopana-vātakaphahara.

### **Properties and action**

Karma	: Viṣṭambī <sup>1</sup> Agnināśana (adīpana) Ācakṣuṣya Raktadūṣaka Raktapittakāraka Āvr̥ṣya Šotha praśamana Kuṣṭhaghna Vraṇaropana Mālasangrāhī
Roga	: Pravāhikā Kuṣṭha Netraroga-pilla Karṇaroga Vraṇa-duṣṭavraṇa Avabāhuka.

### **Therapeutic uses**

Difference of properties in āma (raw or unripe) and pakva (ripe) fruits (phala) of Lakuca has been observed.

There is difference in medicinal properties of Lakuca fruit in regard to its stages viz. āma (unripe) and pakva (ripe) phala (fruits) which have been considered and indicated in texts of materia medica (nighaṇṭu) and the fruits are used therapeutics. Accordingly, for the instance, unripe fruit is hot, heavy and flatulent. Sweet and acidic and it allays tridoṣa, and it is unwholesome for digestive fire, semen and eyes. Ripe fruits are sweet, sour, aphrodisiac, stomachic and flatulent; and they allay pitta and vāta, and increase kapha.

The juice of Lakuca fruit is mixed with goat-milk in equal quantity which is taken by patient suffering from dysentery (pravāhikā) with blood, mucous and tenesmus (śaraktaśleṣmam pravāhaṇam gudeṣu jātam : Vaidya Monoramā, 6-11). Juice of Bāṇa (leaves) and Lakuca

(fruits) are mixed together with oil. This paste is indicated as an external application for alleviating Kuṣṭha (also in duṣṭa Kuṣṭha or complicated stage) as prescribed in therapeutic texts. Further, for vṛañāśodhana and vranaropanā in treating wounds (Vṛañā), the oil cooked with Lakuca fruit juice, Haridrā (turmeric), sulphur (gandhaka) and Punnāga in urine, added with little lavaṇa (salt) has been suggested as external application on vṛañā or ulcer in order to cleanse and heal the wound.

The drug Lakuca is useful in some urdhvajtrugata rogas. The Juice of Lakuca mixed with pure salt honey and in a bronze vessel and it is applied as collyrium specially in pilla roga under eye diseases. A little salt is kept within the fruit of Lakuca which is then rubbed and the juice extracted. This juice is put in the year for three days which removes pus and alleviates pus in Karṇaroga. For treatment of ear diseases, the recipe is mentioned in Vaidya Manoramā (16-64) and also other therapeutic uses of Lakuca.

The oil cooked with Lakuca juice, snuhī latex (snuhī kṣira) and earth worm (bhūnāga) in milk which is externally applied in condition of avabāhuka (characterized by pain in arms by aggravation of vāta in shoulder joint) belonging to Vātāvyādhi group of diseases. Lakuca is, further, indicated for treating arthritic swelling in knee joint (Janupradeśegata śophādi). The oil is cooked with Haridrā, Devadāru, Sarja-rasa in juice of Lakuca fruit. It is applied externally on affected body part with arthritic disorder (with inflammation severe pain, and others signs) caused by provocation of vāta doṣa.

Lakuca, in general, is astringent, sweet and sour. It is hot, heavy, rough (in properties) and it is wind-forming or flatulent (viṣṭambhi).

**Parts used :** Fruit.

**Dose :** 5-10 ml.

### LAKUCA ( लकुच )

क. लकुचः क्षुद्रपनसो लिकुचो डुरित्यपि।

### आमफलम्

ख. आम्रं लकुचमुष्णाञ्च गुरु विषम्भकृत्तथा ।  
मधुरञ्च तथाऽम्लञ्च दोषत्रितयरक्तकृत् ॥  
शुक्राग्निनाशनं वाऽपि नेत्रयोरहितं स्मृतम् ।

### पक्षफलम्

ग. सुपक्षं ततु मधुरमम्लं चानिलपित्तहृत् ।  
कफवह्निकरं रुच्यं वृष्यं विषम्भकञ्च तत् ॥  
*Bhāvaprakāśa Nighaṇṭu, Āmrādiphala Varga, 30-32.*

### लकुचः

लकुचः क्षुद्रपनसो विज्ञेयो ग्रन्थिमत्फलः ॥  
पित्तनाशो ग्रन्थिफलो लकुचो लिकुचो डहुः ।  
पनीसः शक्ली साक्षः पनसः क्षुद्रसारितः ॥

### लकुचगुणाः (आमफलम्)

लकुचं तुवरं चोष्णं पलेष्वप्यवरं गुरु ।  
रक्तपित्तं बव्यसं च कुरुते हरतेऽनिलम् ॥

### लकुच पक्षफलम्

पक्षं तु स्वादु विषम्भ वृष्यं दोषाग्निवर्धनम्

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 468-471.*

### लकुचः

लकुचो लिकुचः शालः कषायी दृढ़वल्कलः ।  
डहुः काश्यर्यश्च शूरश्च स्थूलस्कन्धो नवाह्नयः ॥

### लकुचगुणाः

लकुचः स्वरसे तिक्तः कषायोष्णो लघुस्तथा ।  
कफदोषहरो दाहो मलसंग्रहदायकः ॥

*Rāja Nighaṇṭu, Prabhadradi Varga, 151-152.*

### प्रवाहिकायाम्

लकुचफलस्वरसपाकं छागं पयः पलमपि प्रगे पीत्वा ।  
जयति सरक्तश्लेष्मं प्रवाहणं गुदेषु जातं च ॥

*Vaidya Manoramā, 6-11.*

### दुष्ट-कुष्टरोगे

बाणदलस्य स्वरसं लिकुचस्वरसं च तैलं च ।

संमिश्रितं प्रलेपादधन्यात् कुष्ठानि दुष्टानि ।

*Vaidya Manoramā, 11-38.*

### कर्णरोगे

लिकुच फलेऽल्पं लवणं निक्षिप्य विधृष्य तत्स्वरसम् ।

त्रिदिनं श्रवसि विदध्याच्छूलं पूयं च नाशयति ॥

*Vaidya Manoramā, 16-64.*

### ब्रणे

स्वरसे मूत्रे च शृतं लिकुचनिशाभ्यां च सुरभिपुरुषाभ्याम् ।

तैलं लवणांशयुत् ब्रणशुद्धिं रोपणं च तत्कुरुते ॥

*Vaidya Manoramā, 16-106*

### अवबाहुके वातजशोथे च

‘लिकुचरसस्तुक्षीरे तैलं समेतभूनागम् ।’

सिद्धं हिनस्ति लेपाद् दुस्तरमवबाहुकं क्षणतः ॥

*Vaidya Mārtanda, 12-16.*

जानुंप्रदेशजनितानिलनाशनाय तैलं निशामिशिसुरद्रुमदेवधूपैः ।

सिद्धं जले लिकुचजन्मनि शस्तमेच्छोफोग्रतोदसहिते रुधिरस्तौ च ॥

*Vaidya Martanda, 12-25.*

### नेत्ररोगे

धर्माध्वगतसुजातं लवणं संगृह्य पाणिनाकेन ।

लिकुच रसक्षौद्राभ्यां कंसे संघृष्य योजयेत् पिलै ॥

*Vaidya Manoramā, 16-41.*

## LĀNGALĪ

**Botanical name :** Gloriosa superba Linn.

**Family :** Liliaceae

**Classical name :** Lāngalī

**Sanskrit names**

Laṅgalī, Kalihārī, Agniśikhā, Garbhanut, Śakrapuṣpa, Viśalyā, V(B)ahnivaktrā, Halinī, Sirī, Pradiptāgnī, Śikhā, Prabhāta, Puṣpasikarā, Indrapuṣpī.

**Regional names**

Kalihāri, Kaliyārī (Hindi); Ullatakhandal, Vilanguli

(Beng.); Kalalavi, Khaḍyānāg (Mar.); Dudhiyā vacchanāga (Guj.); Vlai-paiki-Jangu (Tam.); Aḍavinābhi (Tel.); Agniśikhā (Kann.) Medoni (Mal.); Malabar Glory Lily (Eng.)

### Description

Stem glabrous, sub succulent. Leaves sessile, alternate, opposite or verticillate, ovate-lanceolate, cordate at base up to 15 cm. long pedicel 10-15 cm. long deflexed at trip. Tepals 10-15 cm. long lanceolate, acuminate; crispy-undulate on margin. Filaments golden-yellow, up to 4.5 cm. long, spreadings anthers 10-1.5 cm. long. style 3 fid, 4 cm. long. capsule linear oblong up to 4.5 cm. long, locculicidal. Seeds few, subglobose testa spongy, wing like.

### Flowering and fruiting time

July to Ocotber. Plant flowers and fruits during rainy season and afterwards in colder months, herb dries up.

### Distribution

Plant occurs in paleotropics. It is found almost throughout India up to 6,000 ft.

### Chemical Composition

Aerial stem contains colchicine alkaloid 0.2-0.3 percent which causes toxic activity. Another identical alkaloid gloriosine is found in plant. Besides these active principles an aromatic oil, benzoic acid, salicylic acid, colin, sugar, fatty acid and some resinous substances.

The tuber of *Gloriosa superba* Linn. (Lāṅgalī) contains two resins, a tannin and bitter principle known as superbine. Superbine is highly toxic substance. Kaliharene or Gloriorina, an alkaloid and starch.

### Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Kaṭu, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphvātaśāmaka

### Properties and action

<b>Karma</b>	: Garbhapātana- garbhāśayasankocaka- sukhaprasavakārī Roktotkleśaka-kṣobhaka- krimighna-(Jantughna) Dipana-pittasāraka(lowerdose) Vāmaka-recaka (higher dose) Āmaśayagata tivra dāha-kṣobha kara (higher dose) Viṣākta-upaviṣa Raktaśodhaka Viṣamajvaraghna Balya-rasāyana Śalyāpakarṣaṇa (śalyāpanayanam) Arśoghna
<b>Roga</b>	: Śotha-vraṇa-gaṇḍamālā- carmaroga-jaṅgamviṣa (daṁśa) Dehāṅgagataśalya Mūḍhagarbha-kaṣṭaprasava Yükā-likṣā-krimi-jantu Agnimādya-pittavikāra-kṛmiroga Kuṣṭha roga Viṣamajvara Dourbalya Arśa Vātarakta Kṛmikarṇa Indralupta Vraṇa-apaci-pitikā.

### Therapeutic uses

The drug Lāṅgali or Kalihārī (*Gloriosa superba* Linn.) is pungent and bitter (in taste) and hot (in potency); it allays provoked vātakapha doṣa. The drug is ecbolic or abortifacient and it induces parturition (prasavakāri). It helps extraction of foreign body (śalyā pakarṣaṇa or śalyāpanayana). Drug is blood irritant, germicide, stomachic, cholagogue, blood purifier, anti-malarial,

tonic, restorative, emetic, purgative and anti-inflammatory and anti-colic.

Langalī belongs to group of upaviṣa (subsidiary poisons) of audbhida mūla (vegetable origin); it is included in both such groups i.e. upaviṣa gaṇa (Dhanvantari nighaṇṭu, 7/113-114) and upaviṣa varga (Rasendra cūṇamaṇi, 9-13). Lāṅgali is advised for oral use after proper purification (śodhana) as well as within posological limit. Its use in pregnant female patients are normally to be avoided.

The tubers or tuberous roots of source plant (*Gloriosa superba* Linn.) are medicinally useful part which is collected when the climbing plant dries up in winter season. Tubers in well-matured and well-developed stage are obtained from 2-3 years old plant. Tuber of Lāṅgali is cylindrical flattened and long upto 7-8 in. and 1/2 in. diam thick. Two portion of tuber joint like plough ( hala) with circular scar on upper surface of joint where stem remains intact and fibrous roots arise for scar on lower surface of the joint. Both ends of ash-white colour and remaining part light reddish shade brown colour and inner matter white and juicy.

The drug Laṅgali is useful in loss of appetite, biliary affections, worms, malarial fever, debility, haemorrhoids-piles, gout, ear diseases, hair ailments, skin affections, inflammation, ulcer, wound, poisonus bite-sting, cutaneous affections, difficult labour or abnormal delivery, germs affections and some other ailing conditions including insertion of foreign body (śalya-kaṇṭaka etc.). Tubers are used both internally and externally.

The drug Lāṅgali is used in treatment of various diseases and ailing conditions. Some contexts of clinical management of different ailments as incorporated in medical texts find application of tubers of this plant-drug in various modes and it is used as single drug as well as compound formulation or recipes. For the instance, Kāsīsādi taila Lāṅgalyādi vaṭikā and Lāṅgali rasāyana are three classical formulations which employ Lāṅgali as a major ingredient. Lāṅgali is recommended in various diseases mentioned in textual sources.

The root or seeds of Lāṅgalī are pounded with sour gruel and the paste is applied locally for treating the boils (piṭakā) caused by poisonous or harmful insects ('duṣṭakiṭasamparkajātāḥ piṭakāḥ': Gadanigraha, 2-1-121). The oil cooked with one-fourth paste of Lāṅgalī tuber and four times juice of Nirguṇḍī (Vitex negundo Linn.) is used as snuff (nasya) and other purposes (including external application) in treating scrofula (apacī) which is referred by Vāgbhata (Aṣṭāṅga Hṛdaya, Uttara. 30-21). The paste of lāṅgalī is mixed with seeds of Śiriṣa (Albizia lebbeck Benth) and the same is applied on haemorrhoids properly for eradicating piles (Gadanigraha, 2-4-119). The oil is cooked with Tulasī (Ocimum sanctum Linn.) and Lāṅgali (Gloriosa superba Linn.) and it is suggested to be used as snuff (tīkṣṇa nāvana) in unmantha, an ear ailment or Karṇaroga (Aṣṭāṅga Hṛdaya, Uttara. 18-46). Another recipe of Lāṅgalī prescribed in ear diseases employs the juice of Lāṅgalī root which is mixed with fine powder of trikaṭu (group of three drugs: Zingiber officinale Rosc., Piper longum Linn. and Piper nigrum Linn. plant sources of Śunṭhi, Pippalī and Marica respectivaly. This recipe is applied for filling in the ear (Karṇapūraṇa), particularly in Krimikarna, or organism in cavity (Gadaniagraha, 3-2-64).

In Vātarakta, Lāṅgalī is main drug-ingredient in a classical formulatin known as Lāṅgalyādi vatīkā (Gadanigraha, 2-20 / 26-38; Vṛndamādhava, 23/20-22 and Bhāvaprakāśa, madhya. 83-85). This compound formulation consists of Lāṅgali, Amṛtā (*Tinospora cordifolia* Miers), Triphalā (Haritaki, Āmalaki and Bibhītaka) fruits obtained from *Terminalia chebula* Retz., *Emblica officinalis* Gaertn. and *Terminalia bellirica* Roxb. respec-tively) and Drākṣā (*Vitis vinifera* Linn.) which are pro-cessed (as per method given in texts) for preparing pills. It is recommended in management of vātarakta with honey in specific severe condition of disease.

Lāṅgalī has specific role as abortifacient drug which is also esteemed and recommend in medical texts for its applications in difficult labour, abnormal posture of foetus, placental expulsion and some other problematic

conditions of obstetric emergencies relating delivery of child during ante-natal stage. The application of the roots of Laṅgali, Pāṭhā (*Cissampelos pareira* Linn.) etc. is prescribed to be made on navel, pelvis and vulva, in order to deliver easily (*sukhaprasūti*) as incorporated by Cakrapāṇī and others (Cakradatta, striroga. 63-2; Gadanigraha, 6-4-23; Baṅgasena, striroga 230). Another reference (Cakradatta, striroga. 63-15) suggests to prepare paste of Lāṅgalī root pounded with tuṣāmbu on sole (feet) of women for enabling prompt delivery. Similarly, Lāṅgalī has classically been recommended for its effective use for helping expelling placenta (*aparāpātana*) in case of delivery (*prasava*). The paste of roots of Lāṅgalī is suggested to be applied on palm and sole ('pāṇipade ca') of woman in puerperal stage (Suśruta. sā.10; cakradatta, stri. 63-28).

The drug Lāṅgalī is classically named as 'Viśalyā' and its medicinal effect in extracting foreign body (śalyāpanyan or śalyāpakarṣana) is an important utility since Lāṅgalī is known for extracting out śalya (viśalyā) e.g. thorn, nail or any other similar harmful foreign body penetrated in body part. The paste of Lāṅgalī root is applied for extracting out foreign body (Rāja Mārtanda, 26-11) Root is pasted on wounds opening and it is mentioned in texts referred that the foreign body in question comes out immediately even if the same is hidden since long (Ibid, 26-11). In traditional practice of medicinal uses in tribal and rural regions in country, the roots of Lāṅgalī are used as medicine and other peculiar purposes. Root paste is applied frequently for extracting out foreign body. Root is used for helping easy delivery and placental expulsion. There are some other medicinal uses made in different regions. An extra-ordinary belief (supersition or tantric prabhāva) is prevalent among rural folks in certain areas of country (especially tribal belts). Root of Lāṅgalī if kept in house of someone house may cause dispute and (or) disturbance of relations between two neighbours; it can create difference or cause psychological bad affects. Kalihāri is popular name of plant drug also indicates that plant is

cause of quarrel or contention (Kalah-Kalaha Kāriṇī) as per nomenclature itself.

The plant also carries ornamental value for its showy and beautiful flowers which resemble with flame (Agniśikhā, a Sanskrit name of Lāngali). Plant has also been mentioned in various contexts of Sanskrit literature.

**Parts used :** Tuberous root.

**Dose**

Bitter tonic 250-500 mg., Abortifacient dose, 375-750 mg.

**Gana :** Upaviṣṭa.

**Formulations :** Kāsīsādītīla, Lāngalī rasāyana.

## LĀNGALĪ लाङ्गली

- क. कलिहारी तु हलिनी लाङ्गली शक्रपुष्यपि ।  
विशल्याऽग्निशिखाऽनन्ता बहिवक्त्रा च गर्भनुत् ॥
  - ख. कलिहारी सरा कुष्ठ शोफार्शोव्रणशूलजित् ॥  
सक्षारा श्लेष्मजित्तिका कटुका तुवराऽपि च ।  
तीक्ष्णोष्णा कृमिहलध्वीं पित्तला गर्भपातिनी ॥
- Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 80-81.*

### लाङ्गली

लाङ्गली हलिनी सीरी विशल्या गर्भपातनी ।  
इन्द्रपुष्पी बहिजिह्वा प्रदीपाग्नि शिखा शिखा ।  
कलिहारी बहिमुखी प्रभाता पुष्पसीकरा ।

### लाङ्गली गुणः

लाङ्गली कटुका तिक्ता सक्षारा पित्तला सरा ॥  
तीक्ष्णोष्णा गर्भहा लध्वी बस्तिशूल निर्बहणी ।  
बलासकुष्ठशोफार्शोव्रणजन्तु विनाशिनी ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1075-1077.*

### लाङ्गली

लांगली कटुरुष्णा च कफवात विनाशिनी ।  
तिक्तासरा च श्वयथुगर्भशल्यव्रणापहा ॥

*Dhanvantari Nighaṇṭu.*

## वातरक्ते लाङ्गली गुटिका

- क. लाङ्गल्यास्वमृतातुल्यं कन्दमुदधृत्य यत्रतः ।  
योजयेत्रिफला लौहरजस्त्रिकटुकैः समैः ॥
- ख. गुगुल्वमृत बलीभिर्दक्षालुङ्गरसेन वा ।  
त्रिफलाया रसैर्युक्ता गुटिकाः कोलसम्मिताः ॥  
भक्षयेत्मधुनाऽलोद्य शृणु कुर्वन्ति यत्कलम् ।  
पादस्फुटिं दुर्भग्रं जानुप्राप्तं च यद्भवेत् ॥

*Bhāvaprakāśa, Madhyakhandē, 83-85*

## मूढगर्भेशीघप्रसवार्थम्

‘तनुना लाङ्गलीमूलं बधीयाद्वस्त पादयोः ।’

*Bhāvaprakāśa, Yonirogādhikāram 70-106.*  
‘लाङ्गलीमूलकल्केन पाणिपादतलानि हि ।’

*Bhāvaprakāśa, Yonirogādhikāra, 70-133.*

## क्रमिकर्णे हलिमूलादि स्वरस पूरणम्

हलिसूर्यावर्त्तव्योष स्वरसेनातिपूरिते ।  
कर्ण पतन्ति सहसा सर्वास्तु क्रिमिजातयः ॥

*Cakradatta, Karṇaroga cikitsā, 57-48.*

## क्रिमिकर्णोपचारार्थं लाङ्गलीमूलस्वरसं पूरणम्

लाङ्गली मूलजरसं त्रूषणेनावचूर्णितम् ।  
पूरयेत् क्रिमिकर्णन्तु जन्तुनानाशनं परम् ॥

*Cakradatta, Karṇaroga Cikitsā 57-46,  
Gadanigraha 3-2-64.*

## सुखप्रसूत्यर्थं लांगली मूल लेपः ( नाभि-बस्ति-भग )

.....लाङ्गली.....पृथक् ।  
नाभिबस्तिभगालेपात् सुखं नारी प्रसूयते ।’

*Cakradatta, Strīroga Cikitsā, 63-12.*

## शीघ्रप्रसवार्थं लाङ्गली मूल प्रलेपः ( पादतल )

तुषाम्बु परिपिष्टेन मूलेन परिलेपयेत् ।  
लाङ्गल्याश्वरणौ सूते क्षिप्रमेतेन गर्भणी ॥

*Cakradatta, Strīroga Cikitsā, 63-15.*

## अपरापातन प्रयोगः

मूलेन लाङ्गलिक्याः संलिसे पाणिपादे च ।

अपरापातनं मद्यैः पिप्पल्यादिरजः पिबेत् ॥

*Cakradatta, Strīroga Cikitsā 63-28.*

### अपरापातने

‘लाङ्गली मूल कल्केन वाऽस्याः पाणिपादतलमालिम्पेत् ।’

*Suśruta Saṃhitā Śārira. 10-21.*

### वातरक्ते लाङ्गली योगः

लाङ्गल्यादि वटिका

*Gadanigraha, 2-20-36/38.*

### शत्यापनयने

पिष्टेन लाङ्गलक्याः कन्देन विलेपिते व्रणस्य मुखे ।

सद्यो निर्यति क्षताच्छल्यं चिरकालनष्टमपि ॥

*Rāja Mārtāṅda, 26-11.*

### पिटकायाम्

मूलानि बीजान्यथवा प्रपिष्टान्यथारनालेन समंहलिन्याः ।

हरन्ति लेपेन तु दुष्टकीटसंपर्कजाताः पिटकाः क्षणेन ॥

*Gadanigraha, 2-1-121.*

### इन्द्रलुसे

इन्द्रलुसे यथासन्नं सिरां विद्ध्वा प्रलेपयेत् ।

प्रच्छाय गाढं..... ।

तथा लाङ्गलिकामूलैः करवीर रसेन वा ॥

*Aṣṭāṅga Hṛdaya, Uttara. 24-28/29.*

### अशांसि

शिरीष बीजसम्मिश्रं लाङ्गली परिपेषिताम् ।

सम्यागालेपने दद्यादर्श सामुपधातिनीम् ॥

*Gadanigraha, 2-4-119.*

### कर्णरोगे

‘(उन्मन्थे) सुरसालाङ्गलीभ्याञ्च सिद्धं तीक्ष्णाञ्च नावनम् ।’

*Aṣṭāṅga Hṛdaya, Uttara. 18-46.*

### अपच्चायाम्

तैलं लाङ्गलिकाकन्दकल्कपादे चतुर्गुणे ।

निर्गुण्डी स्वरसे पक्षं नस्यादैरपचीप्रणुत् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 30-21.*

**सुखप्रसवे**

पाठालाङ्गलिसिंहास्यमयूरक जटा: पृथक् ।

नाभिबस्तिभगालपात् सुखंनारी प्रसूयते ॥

*Gadahigraha, 6-4-23.*

तुषाम्बु परिपिष्टेन कन्देन परिलेपयेत् ।

लांगल्याश्वरणौ सूते क्षिप्रमापन्न गर्भिणी ॥

*Bhangasena, Strīroga. 230.*

## LATĀKASTŪRIKĀ

### Botanical name

*Ablemoschus moschatus* Medic.,

Syn. *Hibiscus ablemoschus*, Linn.

### Family : Malvaceae

### Classical name : Latākastūrikā

### Sanskrit names : Latākastūrī, Latākastūrikā

### Regional names

Latākasturi (Hindi) Kasturi Bhiṇḍi, Mushk dana; Kalkasturi (Bengla); Kasturbhed (Marathi); Vettilai-kkasturi (Tam.); Kasturi-vendavittulu (Tel.); Habbul-mushk (Arabic); Mushkdana (Pers.); Musk mallow (Arabic); Musk seeds or Ambrette (Eng.).

### Description

Erect hispid herbs or undershrubs, 0.5-2.5 meters high, with a long slender tap root.

Leaves extremely variable, lower-suborbicular in outline, cordate, angular or palmately 3-7 lobed, upper narrower, hastate or sagitate at the base with linear-oblong or triangular lobes.

Flowers solitary, axillary. Epicalyx lobes 6-10, linear-lanceolate, usually appressed to the capsule, 10-15 mm. long. calyx 2-3 cm. long, tomentose. Corolla yellow with a dark purple centre; petals obovate, 4-7 cm. long. Staminal column ca 2 cm. long. Capsules narrowly oblong, beaked, 5-8 cm. long, deciduously hairy, on thickened pedicels; seeds subglobose-reniform, ca 3 mm. long, mostly glabrous.

### **Flowering and fruting time**

August to November. Rainy season to autumn and onwards.

### **Distribution**

Plant occurs in warmer regions of India specially in West Bengal and Tamilnadu. It is also found in northern Nepal. Plant is also cultivated.

### **Chemical composition**

Seeds contain moisture 11.4, protein 2.3, starch 13.35, fibres 31.46, fixed oil 14.5, volatile oil 0.2-0.6, a resin and a bitter substance. A ketone Ambrettolide is considered responsible for musklike odour. Its fixed oil is greenish yellow in colour and it coagulates in open air.

### **Pharmacodynamics**

Rasa	: Tikta, madhura, kaṭu
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

### **Properties and action**

Karma	: Mukhvaiśadyakara-mukhdourgandhyonāśana Rocana-dīpana-grāhī
	Hṛdayottejaka
	Kaphaghna
	Vṛṣya
	Mūtrala
	Cakṣuṣya
	Bastiviśodhanī.

Roga	: Mukhadourgandhya-āsyavikāra Aruci-agnimāndya-atisāra Hṛddourbalya Kāsa-śvāsa Mūtrakṛcchra-puyameha Śukradourbalya-dhvajabhaṅga Netraroga.
------	---

### **Therapeutic uses**

The drug Latākastūrikā or Latākastūri is mukhvaiśadyakara agent causing non-sliminess in mouth

and removing foul smell of vocal cavity or mouth (mukhadourgandhyahara).

The seeds (smelling like musk) are chiefly used in medicine. Drug is useful in loss of appetite, heart weakness, dysuria, gonorrhoea, cough, asthma, impotency and diarrhoea.

The seeds powder is externally applied in eye diseases. The juice of roots and leaves is also used in urinary complaints. Fruits are consumed after cooking as vegetable (śāka).

The drug allays ailments caused by provocation of kapha and pitta dosa. Fruits are useful as bastiśodhana dravya. It is stimulant to heart and genital organ (male). The drug is also anti-convulsant. In general, it belongs to group of odorous drugs possessing non-volatile odorous matter.

**Parts used :** Seeds, Roots, fruits and leaves.

**Dose :** Powder 1-3 gm.

## LATAKASTŪRIKĀ ( लताकस्तूरिका )

लताकस्तूरिका तिक्ता स्वाद्वी वृष्या हिमा लघुः ।

चक्षुष्या छेदिनी श्लेष्मतृष्णावस्त्यास्य रोगहत् ।

*Bhāvaprakāśa Nighaṇṭu, Karpūrādi Varga, 9.*

‘जातीकटुकयोः फलम् ।.....तिक्तं कटु कफापहम् ।

लघु तृष्णापहं वक्र व्लेद दौर्गन्ध्य नाशनम् ।

लताकस्तूरिका तद्वच्छीता वस्ति विशोधिनी ॥’

*Suśruta Saṃhitā, Sūtra. 46.*

## LAVĀNGA

### Botanical name

*Syzygium aromaticum* (Linn.) Merrill & Perry

Syns. *Eugenia caryophyllus* (Spr.) Bull & Harr.,  
*E. aromaticus* (L.) Baile.

**Family :** Myrtaceae

**Classical name :** Lavaṅga

**Sanskrit names**

Lavaṅga, Devakusuma-devapuṣpa, Śriprasūna,  
Candanapuṣpaka, Vārija.

**Regional names**

Lavaṅg, lauṅg (Hindi); Lavaṅg (Mar., Guj.); Lavaṅg  
(Beng.), Kirambu (Tam.); Karavallu (Tal.); Clove (Eng.),  
Clove tree (Eng.), Caryophyllus (Latin).

**Description**

Pyramidal or conical evergreen tree a large shrub or small tree, beautiful, 9-12 meters high or taller, with smooth grey bark and gland-dotted.

Fragrant and lanceolate leaves in pairs. Leaves obovate or elliptic, 2-4 in narrowed into a short petiole, secondary nerves numerous, joined reticulate veins.

Flower-buds borne in small clusters at the ends of branches, greenish, turning pink at the time of maturity, aromatic, buds lastly crimson.

Flowers sessile, in terminal compound, trichotomous cymes, calyx-tube broadly turbinate 1/8 in. long, limb nearly truncate; petals calyptrate, Fls. in corymbose panicles.

Drupe (mother-of-clove) fleshy, dark, pink, 2.5 cm. long and 1.5 cm thick. Fruits depressed, globose, black, shining.

**Flowering and fruiting time**

Plant flowers and fruits during January-February or different months in the year (depending upon the cropping, harvesting and picking seasons).

**Drug Clove :**

Dried floral buds constitute a major spice of commerce, highly potent drug and strong aromatic herbal item making clove a highly valuable drug as well as spice. Floral buds in dried state or clove in nail-like spice, reddish brown in colour, 12-19 mm. long, somewhat rough to touch but not wrinkled or shrivelled, with cylindrical base

crowned with plum, ball-like and unopened corolla, surmounted by the four-toothed calyx; aromatic odour, a hot and purgent and aromatic taste. yields, quality and grades depend on the various factors relating plant propagation, harvest, picking, drying, storage and other conditions from cropping to marketing. Clove-stalks are also collected separately and traded.

### Distribution

Plant is cultivated in southern India, Zangibar and Peruba (Pemba) and Kerala, Tamilnadu, Sri Lanka, Mauritius, South-east Asian countries (particularly Java, Sumatra, Borneo, Indonesia). Native of Malay Archipelago (Moluccas) as spice-crop. growing Molucca group of Islands. Plants are cultivated in India as a valuable aromatic spice on large scale.

### Chemical composition

The cloves yield a volatile oil from 15% to 20% which is known as clove oil (loung kā tel or Lavaṅga taila). Clove oil contains eugenol 85-92%. Cloves also contain tannic 13%, some quanatity of fixed oil and resin. Cloves contain caryophyllin, a phytosterol, and they also consist crude fibre 10 percent.

### Pharmacodynamics

Rasa	: Tikta, kaṭu
Guṇa	: Laghu, tīkṣṇa, snigdha
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittāśāmaka

### Properties and action

Karma	: Chedana (śleśmahara) Śleśmapūtihara-śvāsasahara- kṣayahara Kāsaghna-hikkānigrahaṇa Trṣṇāpraśamana- Dīpana-pācana-rucivardhana- vātānulomana-sūlapraśamana Vājikaraṇa Stanyaśodhaka-stanyajanana
-------	---

	Mūtrajanana-vṛkkottejaka Tvacya Āmapācana-Jvaraghna Kaṭupouṣṭika Hṛdayottejaka-raktabhāravardhoka Lālāsrāvajanana-āsyavairasya durgandha nāśana (mukhavaīśadhyakara) Viṣaghna Uttejaka-raktotkleśaka-kṛmihara Chadinigrahaṇa Maṅgalya Cakṣuṣya
<b>Roga</b>	: Kāsa-śvāsa-hikkā Kṣaya-urahvikāra Hṛddourbalya-raktavikāra Phiraṅga-upadamīśa Mūtrakṛcchra Carmavikāra Jvara Āmadōṣa-trṣṇā-chardi Dourbalya-kṣaya Aruci-agnimāndya-arocaka ajīrṇa- ādhmāna-udaraśula udarvikāra Grahaṇī Amlapitta Dontaśūla-dantakṛmi-dontavesta Mukharoga-kaṇṭharoga- mukhavaisasya-dourgandhya Āmaवāta-katiśūla-gṛdhrasī Dhvajabhaṅga-klaivya Śirahśūla-pratiśyāya-pīnasa Garbhīṇi vamana Viṣa.

**Therapeutic uses**

The plant drug Lavaṅga (cloves) is highly potent and reputed drug which is widely used as medicine, and also it is well known aromatic herbal material and common spice.

It is aromatic, stimulant, carminative, stomachic, aromatic, expectorant, aphrodisiac, cardiotonic, antispasmodic and antipyretic properties. Drug is externally and internally administered in different forms of powder, infusion, oil and others. It is widely employed as an ingredient of a large number of medicinal preparations — single and compound formulations — classically prescribed in indigenous systems of medicine as official drugs and the drug is similarly used in several other drug recipes and patent formulations prevalent in medicine and allied areas.

**Parts used :** Flowering bud.

**Dose**

Powder 1-3 gm., Oil 1-3 minim (drops).

**Formulations**

Lavaṅgādi            cūrṇa,            Lavaṅgacatuḥsama,  
Devekuṣumādi tailam, Lavaṅgādi vaṭi, Avipattikara cūrṇa,  
Devakuṣumārka, Lavaṅgodaka.

## LAVAṄGA ( लवङ्ग )

लवङ्गं कुसुमं हृदयं शीतलं पित्तनाशनम्।  
चक्षुष्यं विषहृद् वृष्यं माङ्गल्यं मूर्द्धरोगहत्॥

*Dhanvantari Nighaṇṭu.*

‘आध्मानानाहशूलग्रं लवंगं पाचनं लघु।’

*Rājavallabha Nighaṇṭu.*

देवेकुसुमोद्भवं तैलमग्निकृद्वातनाशनम्।  
दन्तवेष्टकफार्तिघं गर्भिण्याः वमनापहम्॥

*Ātreyā Saṃhitā.*

लवङ्गं शीतलं तिक्तं चक्षुष्यं भक्त रोचनम्।  
वातपित्तकफग्रं तीक्ष्णं मूर्द्धरुजापहम्॥

*Rāja Nighaṇṭu, Candanādi Varga, 83.*

लवङ्गं सोष्णकं तीक्ष्णं विपाके मधुरं हिमम्।  
वातपित्तकफामग्रं            क्षयकासास्त्रदोषनुत्॥

*Rāja Nighaṇṭu, Candanādi Varga, 84.*

लवङ्गं कटुकं तिकं रुक्षं हृदयं हिमं लघु ।  
चक्षुच्यं पाचनं हन्ति शूलानाह क्षतक्षयाम् ॥  
कफपित्तास्त्रृट्कासश्वासाध्मानविषपीनसान् ।

*Kaiyadeva Nighantu, Oṣadhi Varga, 1334-1335.*

लवङ्गं कटुकं तिकं लघु नेत्रहितं हिमम् ।  
दीपनं पाचनं रुच्यं कफपित्तास्त्रनाशकृत् ॥  
तृष्णा द्वर्दि तथाऽध्मानं शूलमाशु विनाशयेत् ।  
कासं श्वासञ्च हिक्काञ्च क्षयं क्षपयाति ध्रुवम् ॥

*Bhāvaprakāśa Nighantu, Karpurādi Varga, 59.*

### मुखरोगे

खदिरादि गुटिकायाम्

*Caraka Samhitā, cikitsā. 26-210.*

### मुखवैशद्याय

कक्कोल फलं पत्रं ताम्बूलस्य शुभं तथा ।  
तथा कपूर निर्यासः सूक्ष्ममैलायाः फलानि च ॥

*Caraka Samhitā, Sūtra. 5-77.*

### वातार्तिशमनाय

‘लेपः कोष्णजले पिष्टवा स्यालवंग त्वचा तथा ।’

*Vaidya Manoramā, 12-6.*

### विसूच्यां पिपासाप्रतिकारार्थम्

‘पिपासायामनुत्क्लेशे लवङ्गस्याम्बु शस्यते ।’

*Śodhala.*

### लवङ्गतैलम्

देवपुष्पोदभवं तैलमग्नि कृद्वातनाशनम् ।  
दन्तवेष्टकफार्तिश्च गर्भिण्या वमनापहम् ॥

*Aa. Sa.*

‘.....लवङ्गं च तिकं कटु कफापहम् ।  
लघु तृष्णापहं वक्त्र क्लेददौर्गन्ध्यनाशनम् ॥’

*Suśruta Samhitā, Sūtra. 46.*

### मुखवैशद्यार्थम्

‘धार्याण्यास्थेन वैशद्यरुचिसौगन्ध्यमिच्छुता ।

.....लवङ्गस्यं फलानि च ॥'

*Caraka Saṁhitā, Sūtra. 5-76.*

अरोचके लवङ्गादिचूर्णम्

*Bhāvaprakāśa, Madhyakhaṇde, 16-18/20.*

पिपासायां लवङ्गः प्रयोगः

पिपासायामनूतूत्क्लेशो लवङ्गस्यान्तु शस्यते ।

जातीफलस्य वा शीतं शृते भद्रघन स्य वा ॥

*Cakradatta, Agnimāndya cikitsā, 6-12.*

अजीर्णेशूले च देवकुसुमार्कः

छिकिकका रसमग्नानां च्युतं पातालयन्त्रतः ।

सत्त्वं हन्ति लवङ्गानामजीर्ण सशिवायुधम् ॥

*Siddha Bhaiṣajya Maṇimāla 4-266.*

कासे कंण्ठरोगे च

लवङ्गादि वटी

## LODHRA

**Botanical name :** *Symplocos racemosa* Roxb.

**Family :** Symplocaceae

**Classical name :** Lodhra

**Sanskrit names :** Lodhra, Sthūlavalkala

**Regional names**

Lodha, bodhra (Hindi); Lodhra (Beng.) Lodhra (Mar.); Lodhar (Guj.); Vellilethi (Tam.); Lodhug (Tel.); Pachetadu (Kann.); Pachouti (Mal.)

**Description**

***Symplocos racemosa* Roxb.**

A small evergreen tree; bark thick, spongy. Leaves glabrous, coriaceous, elliptic-lanceolate, obscurely crenate, blade 4-6; petiole 1/2-2/3 in. Flowers yellow, fragrant in simple hairy axillary more or less lax racemes, pedicels as long as calyx tube, stamens about 100. Fruits cylindric, nearly 1/2 in. long.

### **Flowering an fruiting time**

Plant flowers in November-February.

### **Distribution**

Plant occurs in sub-Himalayan tract, outer valleys and in Himalayan regions ascending 3,000 ft. and higher elevation.

### **Symplocos crataegoides Ham.**

A large shrub or small tree; bark light-grey, corky, with long vertical furrows. Wood white, hard and close-grained, but warps and splits in seasoning; weight 45-54 lbs. per c. ft.

Leaves 2-4 by 1-1.5 in., broad-elliptic or ovate, acuminate, sharply glandular-serrulate towards the apex, membranous, pilose beneath or glabrescent.

Flower white; 25 in. diam., fragrant in cymose corymbs, forming dense terminal or axillary panicles; bracts caducous. Calyx turbinate, lobes, ciliate. Corolla 5-cleft nearly to the base. Stamens indefinite, connate in 5 bundles. Ovary inferior 2-celled.

Fruit .12-3 in. long, obliquely ovoid or obovoid, crowned with the remains of the calyx-limb, usually 1-seeded. Embryo curved, axile.

### **Flowering and fruiting time**

Plant bears new leaves and flowers in May-June and fruiting in July-october. Fls. appear like hawthorn.

### **Distribution**

Plant occurs in the Himalaya at 3,000 to 9,000 ft. altitude; Outer Himalayn region and Uttar Pradesh hilly region (Kumaon and Garhwal zones). It is abundant on the Himalaya up to 9,000 ft. elevation, from the Indus to Assam and on the Khasia hills, and also Upper and Lower Burma.

### **Kinds and varieties**

There are mainly two plant sources growing in the Himalayan regions which are referred as substitutes or adulterants of the drug Lodhra e.g. *Symplocos crataegoides* Ham. and *S spicata* Roxb. which is also known as Lodha (Hindi) and Dhaka (Marathi).

*Symplocos spicata* Roxb. A middle-sized tree. Leaves coriaceous glabrous, acuminate, serrulate, blade 1-7; petiole 1/3-1/2 in. Flowers cream-coloured, sessile in paniculate axillary pubescent or glabrous spikes, each fl. supported by 3 ovate bracts, ovary 3-celled, glabrous, as well as calyx-segments. Drupes sessile, nearly globose ribbed, 1/3 in. diam.

Flowering and fruiting in September-December.

### ***Symplocos racemosa* Roxb.**

A small tree or often only a shrub. Branchlets glabrous or sparingly pilose. Bark and leaves of dyeing utility.

Leaves 3-7 in. long, elliptic-oblong or oblong-lanceolate, rounded or obtuse by acuminate at the apex, rounded or cuneate at the base, serrulate or obscurely crenate, coriaceous, glabrous above, sparsely pilose on the midrib beneath, nerves indistinct, petiole 1/4-1/3 in. long.

Flowers sessile or nearly so, yellow, fragrant, on short axillary compound spikes; bracts unequal ovate, hairy, deciduous. calyx-tube glabrous; lobes rounded, equalling the tube slightly pubescent and with ciliate edges. Corolla 3 times longer than calyx. Stamens often exceeding one hundred. Ovary 3-celled, hairy.

Fruit oblong or cylindric, 1-3-celled.

### **Flowering and fruiting time**

Summers to autumn season.

### **Distribution**

It occurs in the Himalayan regions. In north-east India, Kumaon region eastwards to Assam and Chota Nagpur; also in Upper Burma, the Andaman Islands and in China. It is found in southern India (Malabar forests); plant grows wild upto 761.5 meters or 2, 500 ft. generally plant is found in the Himalayan region ascending to about 9,000 ft. altitude.

*Symplocos racemosa* Roxb. is chief source plant for Lodhra and other two plants namely *Symplocos crataegoides* Ham. and *Symplocos spicata* Roxb. are considered substitutes or adulterants in market drug material.

Besides *Symplocos crataegoides* Buch-Ham. Syn.

Symplocos paniculata known as Ludh, lodha, Lojh (in Hindi) commonly Marang Ludma (Kola) and also Daukyat and lojh (Upper Burma and Bushahar in Himachal Pradesh respectively), the bark of Symplocos spicata Roxb. which is a medium-sized or large shrub. It occurs generally in the Himalayan regions (from Kumaon to Bhutan and upto Assam, East Bengal and other regions and Khasi hills, Cachar Chitagong hill tracts, Tenasserim, western ghats, Nilgiris, Shevarey hills. China, Japan and Malay Peninsula. Travancore Cochin (plains), Simhabhumi.

In some regions, trees of Symplocos spicata Roxb. may sometimes attain (abnormal) height upto 18.6 meters or 60 ft. particularly where they get favourable ecological conditions (for thriving and developing well) resulting into trunk of 1.8 meters or 6 ft. diam. Such trees provide good thick bark and normally thin branches give bark 2.5 mm. or 1/10 in in thickness as well as trunk bark (and also of thick branches) 1.25 cm. or 1/2 in. in thickness, and of ash or brownish colour. Trees of Symplocos spicata Roxb. flower during the period from December to May and fruiting stage is between April to June. Sometimes trees flower twice in a year rarely.

### **Chemical composition**

Bark contains alkaloids up to 0.32 percent which mainly consist of three alkaloids namely loturine 0.24%, loturidine 0.06% and collutrine 0.02% Among them, first and third constituents are of crystalline form, and remaining second principle is non-crystalline form or amorphous. Dilute acid solution of these alkaloids are with dark violet-blue colour florescence. In addition, the bark contains ample quantity colouring matter and tannin.

### **Pharmacodynamics**

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Viryā	: Katu
Vipāka	: Śīta
Dosakarma	: Kaphapittasāmaka.

### **Properties and action**

Karma	: Ārtavasaṅgrahaṇīya-
-------	-----------------------

	garbhāśayaśotha srāvahara Stambhana-saṅgrāhi Raktastambhana-raktaśodhaka- śothahara Kuṣṭhaghna-vraṇaropanā- saṅkocaka Kaphaghna Cakṣuṣya Viṣaghna Kaṇḍūghna
<b>Roga</b>	: Garbhāśayaśotha-garbhāśayasrāva- pradara Yoniroga-yonikṣata-prasūtikavikāra Raktavikāra-raktapitta-śotha Kāsa Atisāra-raktatisāra-pravāhikā Kuṣṭha-kaṇḍū-carmavikāra Vraṇa-kṣata Netrābhisyanda-netravikāra Karnasrāva Dantavikāra Garbhasrāva-pāta-calitagarbha

### Therapeutic uses

The drug Lodhra is astringent, carminative and uterine tonic. Bark is used in dysentery, haemorrhage and uterine disorders. It is reputed medicine for almost all diseases wherein uterus is affected or involved. Mouth-wash is recommended for strengthening the gum and to check bleeding from gum. Plaster of bark is used for softening the boils and abscesses. Medicinal properties of flowers (Lodhra puṣpa) are also specified in texts of *materia medica* (*nighaṇṭu*), though the bark is mostly used in medicine and pharmaceutics as potent part (*tvak*) as drug which is administered both externally as well as internally in ancient medicine.

In leucorrhoea (*śveta pradara*), the paste of Lodhra with decoction of Nyagrodh bark (*vaṭa*) is recommended (*Caraka Saṃhita*, cikitsā. 25/67-68). Lodhra is also advised

to be taken in various recipes and forms in treatment of leucorrhoea. Lodhrāsava is a popular formulation prescribed in women's diseases (Aṣṭāṅga Hṛdaya, cikitsā, 12/24-28), and other recipes containing Lodhra are also recommended for this group of female ailments. Lodhra is given for checking intrinsic haemorrhage as an efficacious drug.

Lodhra is incorporated in various recipes and indications for eye diseases (netraroga). It is used in treatment of Kuṣṭha, dysentery, wound and skin diseases.

Flowers and leaves of Lodhra (*Symplocos crataegoides* Ham.) are much used in native dyeing. Leaves afford fodder for sheep and goats.

**Parts used :** Bark.

**Dose :** Powder 1-3 gm., 3-5 gms., Decoction 50-100 ml.

**Formulations :** Lodhrāsava, Lodhrādi Kvātha.

**Guṇa**

Puriṣasaṅgrahaṇīya, Śoṇitāsthāpana Kaṣāya-skandha, Sandhāniya (Caraka Samhitā), Lodhrādi Nyagrodhādi ( Suśruta Samhitā).

## LODHRA ( लोध्र )

लो(रो)ध्रः

रोधः कषायश्वक्षुष्यः कफपित्तहरः सरः ॥

हिमः शोषातिसारासृगगुदरास्त्रारुचितुङ् विषम् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1126-1127.*

लोधपुष्पम्

निहन्त्यात्तस्य कुसुमं तुवरं मधुरं हिमम् ॥

सतिकं कटुकं पाके संग्राहि कफपित्तनुत् ।

*Kaiyadeva Nighaṇṭu, Varga, 1127-1128.*

लोधद्वयगुणः ( लोध पट्टिकालोधञ्ज )

लोधो ग्राही लघुः शीतश्वक्षुष्यः कफपित्तनुत् ।

कषायो रक्तपित्तासृगज्वरातीसार शोथहत् ॥

*Bhāvaprakāsa Nighaṇṭu, Harītakyadi varga, 216.*

**लोधद्वय गुणः ( लोधकमुकञ्च )**

लोधद्वयं कषायं स्यात् शीतं वातकफास्तनुत् ।  
चक्षुष्यं विषहत्तत्र विशिष्टो बल्करोधकः ॥

*Rāja Nighaṇṭu, Pippalyādi Varga, 212.*

**प्रसूतायाः योनि क्षते**

तुम्बीपत्र तथा लोधं समभागं सुपेषयेत् ।  
तेन लेपो भगे कार्यः शीघ्रं स्याद् योनिरक्षता ॥

*Bhāvaprakāśa, Cikitsā, 70-12.*

**प्रवाहिकायाम्**

‘सेलोध्रमे एकतो दध्रां पिबेत्प्रवाहिकार्दितः ।’

*Bhāvaprakāśa, Cikitsā, 2-120.*

**अक्षिरोगे**

‘तथा शाबरकं लोधं घृतभृष्टं विडालकः ।’

*Cakradatta, Netraroga Cikitsā, 59-10.*

**चलितगर्भे**

अष्टमे मासि लोधं प्रधुभागधिकाक्ष सहदुरधेन ।  
पीतवतीनां चलिते गर्भे स्त्रीणां सुखं संपदाते ॥

*Hārīta Samhitā, 3-50-5.*

**ब्रणे**

‘.....लोधजाम्बकट्टफलैः ।  
त्वच माश्वेव गृहणन्ति त्वक्चूर्णश्खूर्णिताः ब्रणाः ।’

*Caraka Samhitā, Cikitsā, 13-111.*

**नेत्र विकारे लोध रसयोगः**

ससैन्धवं लोधमथाज्यभृष्टं सौवीरपिण्ठं सितवस्तबद्धम् ।  
आशच्योतनं तत्रयनस्य कुर्यात् कण्डूञ्च दाहञ्च रुजञ्च हन्यात् ॥

*Cakradatta, Netraroga Cikitsā,, 59-27.*

**कुष्टे**

‘लोधस्य च कल्कः.....कुष्टेषूदृत्तनालेपः ।’

*Caraka Samhitā, cikitsā, 7-128.*

**रक्तपित्ते**

उशीरकालीयकरोधपद्मक....

|

पृथक् पृथक् चन्दनतुल्याभागिकाः ॥

*Caraka Saṁhitā, Cikitsā., 4.*

श्वेतप्रदरे

‘न्यग्रोधात्त्वक्षक्षायेण लोध्रकलं तथा पिबेत् ।’

*Caraka Saṁhitā, Cikitsā., 30-115.*

कासामातिसारयोः

पत्रकलं घृतैर्भृष्टः तिल्वकस्य सर्शकरम् ।

पेया चोत्कारिकाच्छर्दि तृट्कासामातिसारनुत् ॥

*Caraka Saṁhitā, Cikitsā., 22-180.*

अनागतबाधाप्रतिषेधनीये

भिलयुदक्कक्षायेण तथैवामलकस्य वा ।

प्रक्षालयेन्मुखं नेत्रे स्वस्थः शीतोदकेन वा ॥

नीलिकां मुखशोषं च पिडकां व्यञ्जमेव च ।

रक्तपित्त कृतान् रोगान् सद्य एवं विनाशयेत् ॥

*Suśruta Saṁhitā.*

शुद्धशुक्ररोगे

‘सेचनं रोध्र पोट्टल्यां कोष्णाम्योमग्रऽथवा ।’

*Aṣṭāṅga Hṛdaya, cikitsā. 16-66.*

लोध्रद्वयम्

लोध्रयुग्मं कषायं तु शीतं वातकफास्तजित् ।

चक्षुष्यं विषहत् तत्र विशिष्टो वल्करोध्रकः ॥

*Dhanvantari Nighaṇṭu,*

लोध्रोऽसृक्कक्फपित्तप्रः चक्षुष्यः शोथजित् सरः

तद्वच्छावरकलोध्रोऽपि चक्षुष्यो मृदुरेचनः ।

*Rājavallabha Nighaṇṭu.*

तारुण्यपिडकाहरो लोधादि लेपः

*Cakradatta, Kṣudraroga cikitsā, 55-42.*

दन्तनाडी रोगे जात्यादि तैलम्

*Cakradatta, Mukharoga cikitsā, 56-23.*

नेत्रामये लोध ( सनिम्बं ) प्रयोगः

निम्बस्यपत्रैः परिलिप्य लोधं स्वेद्याग्निना चूर्णमथापि-कल्कम् ।

आश्वयोतनं मानुषदुर्धमिश्रं पित्तास्त्र वातापहमग्रथयुक्तम् ॥

*Cakradatta, Nāsāroga Cikitsā, 59-22.*

स्त्रीरोगे

लोधासवः

*Aṣṭāṅga Hṛdaya, Cikitsā. 12-24/28.*

रक्तस्त्रावे

‘अथातिप्रवृत्ते रोधमधुक्.....अवपीडयेत्।’

*Suśruta Saṃhitā, Sūtra. 14-36.*

मूखदूषिकायाम् ( तारुण्यपिटकायाम् )

‘मूखदूषिकां तु लोध्रतुवरिकास्यां वा प्रदिह्यात्।’

*Aṣṭāṅga Sangraha, Uttara. 37-5.*

लोध्रधान्य वचालेपस्तारुण्य पिटकापहः ।

तद्वद् गोरोचनायुक्तं मरिचं मुखलेपनात् ॥

*Vṛndamādhava, 57-34.*

नेत्ररोगे वर्त्मरोगे

अभ्यज्य नवनीतेन श्वेतरोधं प्रलेपयेत् ।

एरण्डमूलकल्केन पुटपाके पचेत्ततः ॥

*Aṣṭāṅga Hṛdaya, Uttara. 9-11.*

शुद्धशुक्रे

‘रोचनं रोध्रपोट्टल्या कोष्णाम्बोग्रयाऽथवा ।’

*Aṣṭāṅga Hṛdaya, Uttara. 11-39.*

पित्तरक्ताभिष्यन्दे

श्वेतरोधं समधुकं घृतभ्रष्टं सुचूर्णितम् ।

वस्त्रस्थं स्तन्यमुदितं पित्तरक्ताभिघातजित् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 16-16.*

शुष्काक्षिपाके

श्वेतरोधं घृतभ्रष्टं चूर्णितं तान्तवस्थितम् ।

उष्णाम्बुना विमृदितं सेकः शूलहरः परम् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 16-62.*

सर्वाक्षिरोगे

‘तद्वद् शावरकं लोधं घृतभ्रष्टं बिडालकः ।’

*Caraka Saṃhitā, Cikitsā. 26-233.*

दाहकण्डूशूलेषु

ससैन्ध्वं लोध्रमथाज्यभृष्टं सौवीर पिण्ठं सितवस्त्रबद्धम् ।

अश्च्योतनं तत्रयनस्य कुर्याद् दाहं च कण्डूं च रुजं च हन्यात् ॥

*Vṛndamādhava, 61-26.*

### पितास्त्रवाते

निष्वस्थपत्रै परिलिप्य लोध्रं स्वेदाग्निना चूर्णमथापि कल्कम् ।

आश्व्योतनं मनुषदुग्धयुक्तं पितास्त्रं वातापहमग्रयमुक्तम् ॥

*Vṛndamādhava, 61-29.*

### ब्रणे

‘धातकी लोध्रचूर्णेवा तथा रोहन्ति ते ब्रणाः ।’

*Caraka Saṁhitā, cikitsā. 25-67/68.*

# LOṄIKĀ

### Botanical name

*Portulaca oleracea* Linn.

*Portulaca quadrifida* Linn.

Family : Portulacaceae

Classical name : Loṇikā

Sanskrit names

Loṇikā, Loṇī, Bṛhalloṇikā, Ghoṭikā.

Regional names

Loṇi, Loṇiya, Kulfa Chounlai, Baraloṇiya (Hindi);  
Bara Ioniya (Beng.); Bhugholi, Kurfa (Mar.); Moti Ioni,  
Goli (Guj.); Peddapayylikuru (Tal.); Karikeerai (Tam.);  
Purumsug (Oriya); Common Purslane (Eng.)

Description

***Portulaca quadrifida* Linn.**

Prostrate-creeping herbs up to 15 cm. long, rooting sub-succulent herbs with numerous ascending branches, internodes short terete, glabrous, mostly tinged with red.

Leaves under 1 cm. long, stipular hairs white up to 3.5 mm. long, opposite, narrowly elliptic or ovate or ovate-lanceolate; petioles very short, stipules bristly.

Flowers solitary, terminal, yellow. Sepals hyaline, united at base. Petals 4, oblong, united below. Stamens 8-12, filaments hairy at base style long, 3-4 cleft.

Capsules ovoid or conical; seeds blackish-brown, minutely tubercled, concentrically and horizontally ribbed.

### **Flowering and fruiting time**

July to October.

### **Distribution**

It is tropical herb. Plant is found commonly in garden, near walls, on ridges and in waste places. It is also a pot herb (kitchen Garden Purslane). which is a cultivated variety.

### ***Portulaca oleracea* Linn.**

Polymorphic herbs, erect or prostrate, subsucculent annual herbs, up to 20 cm. long variable in colour.

Leaves cuneate-oblong or cuneate-ovoblate; usually truncate, whorled above; stipular hairs, scarious, minute, or absent. Capituli 2-3-flowered, subtended by 2-8 wide spreading involucral bracts.

Flowers yellow, sessile, solitary or in clusters or cymes, supported by a whorl of leaves. Petals oblong-ovoblate, notched. Sepals prominently carinate. Stamens 7-10 (sometimes upto 15), involucral bracts. Style 5-6 fid or with 4-5 arms operculum shining as high as fruit. Seeds dark brown. Capsules dehiscing, above the base; seeds reniform, black, granulate, seeds colour dark brown or black, beaked at hilum.

### **Flowering and fruiting time**

Greater part of the year.

### **Distribution**

It is cosmopolitan herb. Plant is common in gardens near walls, on ridges (preferring moist-wet places).

### **Kinds and Varieties**

There are two kinds of Loṇi viz. Kṣudra loṇi and Br̥hat loṇi which are botanically identified as *Portulaca oleracea* Linn. and *P. quadrifida* Linn. respectively.

### **Pharmacodynamics**

Rasa : Kaṣāya, kaṭu, amla

Guṇa : Guru, rūkṣa

Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vāta kapha śāmaka

### Properties and action

Karma	: Dīpana Rocana Sāraka Viṣaghna Dāhapraśamana Viṣṭambhi
Roga	: Agnimāndya Arṣa vibandha Sotha pravāhikā Raktapitta Dāha Mūtrakṛchra Drṣṭivikāra Śiraḥśūla

### Therapeutic uses

The drug Loṇikā is useful in piles, diarrhoea, dysentery, loss of appetite, oedema, raktapitta, poisons (viṣa), constipation, dysuria, burning sensation, cough, asthma and eye affections. Seeds are useful in dysentery and diarrhoea. In general the whole plant, specially leaves are used in medicine and seeds are medicinally potent.

Loṇikā is household leafy (with tender stems) vegetable (patraśaka) with slightly acidic taste, which is commonly used among other household vegetables. Loṇikā sāka is wholesome (pathya) in various ailing conditions, and also unwholesome (apathyā) in certain diseases particularly only use in excess (pittajanana in case of sour leaves and herb of Loṇika). Loṇikā is very wholesome to patients of piles (arṣa) or haemorrhoids and some other ailments.

In indigenous medicine, Caraka mentions that Lonikā is one of wholesome vegetables in piles. They should be fried in ghee and oil mixed cooked with curd and pomegranate and added with spicy drugs dhānyaka and śunṭhi, and thus Loṇikā sāka is to be consumed

(Caraka saṁhitā, cikitsā, 14/123-125) Further Vāgbhaṭa follows Caraka advising Loṇikā in diarrhoea-dysentery (Caraka Saṁhitā, cikitsā, 19-33 and Aṣṭāṅga Hṛdaya, cikitsā, 9-22). Accordingly Loṇika should be cooked with curd and pomegranate and added with profuse ghee and it may be taken as vegetable (śāka) by patients.

Loṇikā is common purslane which has an acid taste and it is also consumed as salād, vegetable and employed in soups. Fleshy stems are pickled. They are also dried and preserved for use. Herb is toxic fodder to cattles in case of heavy ingestion.

**Parts used :** Whole plant, seeds, leaves.

**Dose :** Paste 10-20 gm.

## LOṄIKĀ ( लोणिका )

### लोणीबृहलोणी च

- क. लोणालोणी च कथिता बृहलोणी तु घोटिका ।
- ख. लोणी रूक्षा स्मृता गुर्वा वातश्लेष्महरी पदुः ।  
अर्शोन्नी दीपनीचाम्ला मन्दाग्नि विषनाशिनी ॥
- ग. घोटिकाऽम्ला सराचोष्णा वातकृत्कफपित्तहृत् ॥  
वाग्दोषव्रण गुल्मग्नी स्वासकास प्रमेहनुत् ॥  
शोथे लोचन रोगे च हिता तज्जैरुदाहता ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga, 21-22.*

### लोणी

लोणिका कटुका रूक्षा वातश्लेष्महरा गुरुः ।  
अर्शोन्नी दीपनी चुक्रा मन्दाग्नि विषनाशिनी ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 649.*

### बृहलोणिका

अम्ला सरोष्णा विनिहन्ति वातं पित्तं बलासं च करोति घोली ।  
त्वग्दोषगुल्मव्रण शोफकासस्वासप्रमेहाक्षिगदेषु पथ्या ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 648.*

### अतिसारे सप्रवाहिके

लोणिकायाः सपाठायाः सुष्कशार्करः वा पुनः ।

दधिदाडिम सिद्धेन बहुस्त्रेहेन भोजयेत् ॥

*Caraka Saṁhitā, Cikitsā. 19-33.*

*Aṣṭāṅga Hṛdaya, Cikitsā. 9-22.*

### अशार्णि

उपोदिका तण्डुलीयं वीरां वास्तुक पल्लवान् ।

सुवर्चलां सलोणीकां यवशाकमवल्युजम् ॥.....

दधिदाडिम सिद्धानियमके भर्जितानि च ।

धान्यनागरयुक्तानि शाकान्येतानि दापयेत् ॥

*Caraka Saṁhitā, Cikitsā. 14-133/135.*

## LOHAVĀNA (LOBAN)

**Botanical name :** *Styrax benzoin* Dryand.

**Family :** *Styraceae*

**Classical name :** *Lohabāṇa-Lohavāṇa*

**Sanskrit names**

Loban (Hindi); Uda (Ma.) Luban, Loban (Hindi, Beng., Mar., Guj.); Shambirani (Tam.); Javi (Arab.); Hasnlud (Pers.); Benzoin (Eng.). Benzoin tree (Eng.).

**Description**

A shrub or small tree, upto 12 meters in height, Leaves ovate-oblong to ovate lanceolate, back hairy. Flowers axillary hairy, in racemes or solitary, peduncle dense whitish hairy Fruits 1/3 inch in diam., 2-seeded; capsule ovoid or roundish, covered with dense whitish hairy.

The benzoin is resin which possesses a pleasant balsamic colour. It is obtained by making incision in the stems of 6-7-year old wild or cultivated trees. A single tree yields c. 10 kg. of resin per year and completely exhausted by ninth year of its life. The resin is a pathological product which develops after incising the bark. Tree contains no secretory cells nor does it contain the constituents of the resin until it is incised. The bark of a tree is rich in tannin, and resinotannols in benzoin are probably produced from the tannin.

## Distribution

It is native of South-east Asia and East India. It is found in Thailand, Sumatra and Java.

## Kinds and Varieties

There two main kinds of Benzoin resin known in commerce as Sumatra Benzoin and Siam Benzoin which are obtained from the trees of *Styrax benzoin* Dryand or *Styrax paralleloneurum* Perk and *Styrax tonkinensis* Craib ex Hartwich. respectively.

## Chemical composition

It contains three resins (benzoic acid 10-20%, cinamic acid and vanillin) and a volatile oil.

## Pharmacodynamics

Rasa	: Madhura, tikta
Guṇa	: Rūkṣa, laghu, tīkṣṇa
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Kaphavātāśāmaka Pittavardhaka.

## Properties and action

Karma	: Chhedana (śleṣmahara)- kaphaniḥsāraka- kaphadurgandhanasaka Mūtrajanana-mūtrāmlatva janaka Pūtihara-jantughna- dourgandhyohara Vedanāhara-vātāśāmaka Vraṇa śodhana-ropaṇa Vājikaraṇa- Garbhāśayaśothahara Svedajanana Jvaraghna Kāsa-hikkā.
Roga	: Jīrṇa kāsa-śvāsa-kṣaya-pratiṣyāya Mūtrakṛcchra-pūyameha-bastiśotha Kāmaśaitya Pakṣāghāta-ardita-vātavikāra Vraṇa

Tvagdoṣa  
Karnaśūla  
Jvara  
Śiraḥśūla.

### **Therapeutic uses**

The resin of benzoin is the drug Lohavāṇa. The extract of bark and root of source tree of Lohavāṇa (Loban) are said to possess insecticidal properties. Siam benzoin is the finest quality of resin benzoin, having an agreeable balsamic, vanilla-like colour.

The drug Lohavāṇa or benzoin is irritating expectorant, carminative and diuretics, and it forms an ingredient of inhalations in the treatment of catarrh of upper respiratory tract.

It is used in paralysis, vātavikara, neuralgic and nervine disorders, respiratory diseases, urinary disorders, sexual frigidity, skin diseases, fever and painful conditions.

The Indian pharmacopoeia prescribes the standards for quality benzoin and uses.

It is usually employed in the form of compound Benzoin Tincture. Benzoin is used as an external anti-septic and protective, and is one of the main ingredients of friars Balsam.

Lohavāṇa (benzoin or Loban) is also used to fix the odour of incenses, skin soaps, perfumes and other cosmetics and for fixing the certain pharmaceutical preparations.

In veterinary medicine, it is applied to indolent sores and foul ulcer.

Benzoin has some other kinds of economic utility and commercial importance other than medicine cosmetics and perfumery.

**Parts used :** Exudate (Resin).

**Dose :** Resin 500 mg.- 1 gm., Extract 120 mg.

## **LOHABĀÑA-LOHAVĀÑA-LOBĀN** **लोहबाण-लोहवाण ( लोबान )**

बलास वातग्रवान्तिहिका शिरोऽर्ति शैथिल्यमयं निमित्तम्।

भेतुं क्षमः स्निग्धवलक्ष्टीक्ष्णो मया प्रयुक्तः खतुं लोहबाण ॥  
*Siddha Bhaisajya Mānimālā.*

## MADANAPHALA

### **Botanical name**

Catunaregan spinosa (Thunb) Trivengadum  
*Xeromphis spinosa* (Thunb.) Kesv  
 syn. *Randia dumetorum* (Retz.) Poir, *Randia spinosa* Poir.

**Family :** Rubiaceae

**Classical name :** Madana-Madanaphala

**Sanskrit names**

Madana-Madanaphala, Kanṭakī, Chardana,  
 Rāṭhaka, Piṇḍī, Viṣapuṣpaka.

### **Regional names**

Mainphal (Hindi); Mindhal (Guj.); Marubakalam (Tam.), Madakrui (Kann.); Maianphal (Beng.); Ganga, Mayari (Tel.); Kar (Mal.); Loto (Santhal); Mohan, Ghotvaphala (Utt.); Jijul Kai (Arabic); Emetic Nut (Eng.)

### **Description**

Armed shrub for small trees, large deciduous shrub or small tree with grey bark; spines axillary, often long and stout. Leaves mostly fascicled on branchlets, obovate or oblanceolate, subcoriaceous, glabrescent or pubescent, stipules ovate; lvs. 1-2 in. long.

Flowers solitary or 2-3 fascicled creamy white fragrant. Calyx campanulate. Corolla covered with adpressed silky hairs. Fls. at the ends of short lateral branchlets, shortly pedunculate.

Calyx strigose; tube 0.2-0.3 in. long; lobes ovate, foliaceous, as long as the tube. Corolla-lobes spreading, oval or oblong, .5-.75 in; covered with adpressed white hairs, tube upto the tips of the calyx-lobes.

Fruit a soft fleshy berry, 1-1.5 in. long, globose or ovoid, yellow, glabrous or pubescent; pericarp thick, leathery; seeds compressed, imbedded in a gelatinous pulp.

Wood light brown or white, compact, hard; weight 55-60 lbs. per c. ft.

### **Flowering and fruiting time**

Plant flowers during summers or May-June and it bears fruiting during the period of autumn to winters or October to January.

### **Distribution**

It occurs almost throughout India up to 4,000 ft. altitude. Extremely common in valleys and lower areas in Uttar Pradesh hilly region, terai. It is found in warm regions in country, Central India, Madhya Pradesh and other provinces.

### **Chemical Composition**

It contains saponin, valeric acid, resin, wax and some colouring matters. Besides saponin the fruit contains a new triterpene and acid resin. and trace of pale essential oil.

The presence of pectin, mucilage and tartaric acid is reported.

### **Pharmacodynamics**

Rasa	: Kaṣāya, madhura, tikta, kaṭu
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphvātahara Kaphapittahara (saṁśodhaka)

### **Properties and action**

Karma	: Vāmaka (śreṣṭha vamankārī) Vātānulomana-kṛmighna-grāhī
	Raktaśodhaka-śothahara
	Kaphaniḥsāraka
	Lekhana-medohara
	Vraṇaropana (śodhaka)
	Ārtavajanana
	Svedajanana-kuṣṭhaghna
	Viṣaghna
	Nādīśāmaka

	Vedanāsthāpana.
Raga	: Kaphapradhāna vikāra (vamanārtha)-jvara
	Gulma
	Pratiśyāya
	Vibandha-kṛmi
	Raktavikāra-śotha
	Kaṣṭārtava-kaṣṭaprasava
	Kuṣṭha
	Jvara
	Medoroga
	Viṣa
	Vātavyādhi
	Pravāhikā
	Āmavāta-śodhavedanāyukta vikāra
	Vidradhi-vraṇa
	Udararoga-anāha-gulma-sūla- udāvartta
	Garbhasaṅga
	Apasmāra
	Pratiśyāya-kāsa-śvāsa-pārśvaśūla
	Pariṇāmaśūla.

### **Therapeutic uses**

The extracts exhibit insecticidal and insect repellent properties. They could possibly be used as synergists in insecticidal preparations. The fruit are used as colour intensifier (in calicoprinting) and they are said to produce a yellow pulp. The ethanolic extract of the pulp showed a stimulant activity on isolated guinea-pig uterus. The fruits are eaten after roasting or cooking.

The fruits are reported to be mixed with stored grain to preserve it from attack of insects and in this way, its insecticidal effect is also utilised. The unripe fruits are also used as soap in various areas.

The activity of the drug is attributed to the presence of saponins, which occur to the extent of 2-3 percent in fresh fruits (C. 10% in dried whole fruit). The saponins are concentrated mostly in the pulp. A mixture of two saponins viz. randia or neutral saponin and randia acid or

acid saponin has been isolated from the pulp; the two saponins occur in the fruits at all stages of ripening.

The drug Madanaphala is chiefly an emetic agent. The fruit (madanaphala) is credited with a number of medicinal properties. The pulp of the fruit and dried powdered pulp are valuable emetic and also used as substitute for the ipecacuanha. In smaller dose, it is nauseant, expectorant and diaphoretic. It is considered to have anthelmintic and abortifacient properties. Fruit are useful as nervine calmative and antispasmodic. The drug (madanaphala) is useful in various diseases.

It is esteemed as a domestic remedy for ailments to which children are subject at teething. The unripe pounded fruit as well as the root are used as a fish-poison. The poisonous properties are said to decrease or disappear as the fruits ripen.

**Parts used :** Fruit.

**Dose**

Powder 3-6 gm. (emesis), Powder 1-2 gm. (therapeusis).

**Formulations**

Madana Kälpa - 133 (Caraka Samhitā, Kalpa, 1).

**Gana**

Vamana, Phalini (Caraka Samhitā), Urdhvabhāgahara, Āragvadhādi, Muṣkakādi (Suśruta Samhitā). -

## MADANAPHALA ( मदनफल )

मदनो मधुरस्तिक्तो वीर्योष्णो लेखनो लघुः ॥

रूक्षो लघुः प्रतिश्याय ज्वरविद्रधिकुष्ठहा ।

गुल्मशोषकफानाहव्रणहृ वमनाग्रणी ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 601-602.*

मदनं मधुरस्तिक्तो वीर्योष्णो लेखनो लघुः ।

वान्तिकृद्विद्रधिहरः प्रतिश्यायव्रणान्तकः ॥

रूक्षः कुष्ठकफानाह शोथगुल्मव्रणापहः ॥

*Bhāvaprakāśa Nighantu, Harītakyadi Varga, 161.*

मदनः कटुतिक्षेपः कफवात्व्रणापहः  
शोफदोषापहश्चैव वमने च प्रशस्यते ॥

*Rāja Nighaṇṭu, Śālmalyādi Varga, 68.*

मदनप्रशंसा

‘मदनसर्वगदाविरोधितु ।’

‘कफपित्तहदाशुकारि चाप्यनपायं पवनानुलोभि च ।

फलनामविशेषतस्त्वातो लभते ऽन्येषु फलेषु सत्स्वपि ॥’

*Caraka Saṃhitā, Siddhi, 11.*

वमने

‘मदनफलं वमनास्थापनानुवासनोपयोगिनाम् ।’

*Caraka Saṃhitā, Sutra, 25.*

अधोभागे रक्तपित्ते

‘फलपिप्पलीक्षीरं तेन वा क्षीरयवागूमधोभागे रक्तपित्ते ।’

*Caraka Saṃhitā, Kalpa, 1.*

वमनेप्रयोगविधि

‘वमनद्रव्याणां मदनफलानि श्रेष्ठानि आचक्षते ऽनपायित्वात् ।  
तानि वसन्तग्रीष्मयोः अन्तरे पुष्टाश्वयुग्म्यां मृगशिरसा  
वागृहीयात् यत्रे मुहूर्ते ।’

‘यानिपक्वानि प्रहरितानि पाण्डूनि अकृमीनि अकृशानि अहस्वानि  
अजग्धानि तानि प्रगृह्य कुशपुटे बद्धागोमयेनालिप्य  
यवतुषमाषशालिकुलतथमुद्दपर्णीनामन्यतमे निदध्यात् अष्टरात्रम् ।’

‘अतः उर्ध्वं मृदुभूतानि तानि मध्विष्टगन्धानि उद्धृत्यशोषयेत् ।  
सुशुष्कानां फलानां पिप्पलीरुद्धरेत् ।’

‘तासां घृतदधिमधुपललविमृदितानां पुनः शुक्राणां तासां नवकलशं  
सुप्रभृष्ट वालुकम् वचस्कम् आकण्ठं पूरयित्वा स्वेवच्छन्नं  
स्वनुगुस्तं शिक्येऽवसज्य स्थापयेत् ॥’

*Caraka Saṃhitā, Kalpa, 1-1, 14.*

शूले नाभौ मदन लेपः

‘नाभौलेपाज्येच्छूलं मदनः काञ्जिकान्वितः ।’

*Cakradatta, 26-22.*

‘नाभिलेपाज्येच्छूलं मदनं काञ्जिकान्वितम् ।’

*Bhāvaprakāśa, Śūlādhikāra, 30-35.*

**परिणामशूले चिकित्सा सूत्रान्तर्गत वमन विधिः**

पीत्वा तु क्षीरमाकणं मदन क्वाथसंयुतम्।

कान्तारकस्य पौण्ड्रस्य कोशकारस्य वा रसम्॥

*Bhāvaprakāśa, Śūlādhikāra, 30-58.*

**उदावर्त्ते फलवर्ति ( गुदगतप्रयोगार्थम् )**

*Cakradatta, Udāvarta Cikitsā, 28-13.*

**निरुहे मदन योगः**

लवणं कार्षिकं दद्यात् फलमेकन्तु मादनम्।

वाते गुडः सिता पित्ते कफे सिद्धार्थं कादयः॥

*Cakradatta, Nirūhādhikāra, 72-28.*

**पार्श्वशूले**

‘नाभिलेपाजयेच्छूलं मदनः काञ्चिकान्वितः।’

*Baṅgasena Śūla, 11.*

**गर्भसङ्के**

‘गर्भसङ्के तु योनि धूपयेत् कृष्णसर्पनिर्मोकेण पिण्डीतकेन वा।’

*Suśruta Saṃhitā, Śārira, 10-11.*

**ज्वरे**

मदनं पिप्पलीभिर्वा कलिङ्गेर्मधुकेन वा।

युक्तमुष्णाम्बुना पेयं वमनं ज्वरशान्तये॥

*Caraka Saṃhitā, Cikitsā, 3-228.*

**अपस्मारे**

मदनस्य च बीजानि चूर्णयित्वा तथैव च।

पिण्डीतकस्य चाल्पस्य कर्षिकं पेषयेज्जले॥

ततोऽस्य पानमात्रेण नश्यतेऽपस्मृतिर्गदः॥

*Baṅgasena, Apasmāra, 39.*

## MADAYANTIKĀ

**Botanical name :** Lawsonia inermis Linn.

**Family :** Lythraceae

**Classical name :** Madayantikā

**Sanskrit names**

Madayantikā, Raktaraṅgā, Dāhahantri.

### **Regional names**

Mehandi (Hindi); Mendi (Mar., Guj.); Mehndi (Mal.); Manj, Monja (Kann.); Mehandi (Beng.); Evanam (Tam.); Krommi (Tel.); Mailanchi (Mal.); Hirena (Arab.); Hina (Pers.); Henna (Eng.).

### **Description**

Shrubs, up to Ca 3 meters tall, with some branchlets spinous at tip. Leaves opposite, lanceolate or oblanceolate, 2-3 cm. long, apex, acute, subsessile; petioles short. Bark greyish-brown colour.

Flowers Ca 5 mm. across, cream-coloured, fragrant, in terminal panicled cymes. Sepals persistent. Petals 4, yellowish, orbicular or obovate, Ca 4 mm., crumpled. Stamens 8, inserted in pairs on the rim of calyx tube; anthers oblong Ca 1 mm. long. Ovary 4-celled. Style Ca 5 mm. long erect. Fls. numerous, white or rose-coloured.

Fruits depressed globose, Ca 5 mm. across, red, tipped with persistent style. Fruits capsule, about a size of a pea with pyramidal smooth seeds.

### **Flowering and fruiting time**

Plant in flowering and fruiting stages during April to August.

### **Distribution**

It is found almost throughout India and usually planted as hedge plant. In various regions e.g. Punjab, Gujarat, some parts of Madhya Pradesh and Rajasthan, plant is under commercial forming. Madayantika is Henna plant which is cultivated in many tropical and warm temperate regions as a hedge plant. It is under agro-practice of dye crop, for meeting the henna leaves requirement.

### **Chemical Composition**

Leaves contain a colouring matter 12%-15%, tannic acid viz. Hennotannic acid, and other of olive green colour and resin soluble in resin.

Flowers yield an aromatic oil known as scent Henna (rogam or iitra). Seeds also yield a kind of oil.

**Pharmacodynamics**

Rasa	: Tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Virya	: Śīta
Vipaka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

**Properties and action**

Karma	: Kuṣṭhaghna Varṇya-varṇasañjanana Saundaryī karaṇa-angarāga Kāṇḍūghna Dāhapraśamana Stambhana Pittprāśamana Jvaraghna Mūtrala Vraṇaropana-vraṇaśodhana Bhūtaghna-bhūtagrahavādhāhara Keśya-keśarañjana Śothahara-vedanāsthāpana Yakṛduttejaka Medhyā-nidrājanana Raktaprasādana-raktastambhana.
-------	---

Roga	: Kuṣṭha-kaṇḍu-tvagvikāra Mukha-kaṇṭha roga Keśaroga-pālitya Vraṇa-kṣata-vaivarṇya Śotha-raktasrāva Śirahśūla Sandhiśotha Dāha-hastapādataala dāha Mastiṣka dourbalya-anidrā Pravāhikā-raktatāsāra Hṛdroga Raktavikāra Raktapitta Mūtrakṛcchra-pūyameha-mūtradāha
------	--

Prameha  
Upadamśa  
Jvara  
Śoṣa.

### **Therapeutic uses**

The henna or madayantikā has long been used in India, since ancient times, for colouring palms of hands, soles of feet and finger nails, being a potential and popular rāñjana dravya or dyeing plant source. It is also used for dyeing hair, beard and eye brows, for personal adornment. Tails, manes and hairs of horses and some other animals are sometimes dyed with henna (besides colouring leathers and skins). The colouring properties of plant Madayantikā are further useful in medicine and cosmetic including hair and skin health care, alongwith medicinal potentiality of plant drug and its external and internal application in various diseases in view of chemical constituents in different parts other than leaves (which are chiefly used as henna), and their medicinal efficacy which is therapeutically applied in as drug in specialised area of herbal medicine.

The leaves of henna plant (Madayantikā patra) are used as a prophylactic against skin diseases. They have astringent properties. They are used externally in the form of a paste or decoction against boils, burn bruises and skin inflammation. A decoction is used as gargle for relaxed sore throats. Paste is often applied on sole and palms alongwith fingers for preventing and eradicating itching, discolouring and other skin affections. Alcoholic extracts of henna leaves show mild antibacterial activity against *Micrococcus pyogenes* var. *aureus* and *Escherichia coli*.

The air-dried leaves powder contains normally moisture 8.97 ash 14.85 and tannin 10.21 percent. The tannin content is variable.

**Part used :** Leaves, flowers, seeds.

**Dose :** Juice 5-10 ml., Seeds powder 1-3 gm.

**Formulation :** Madayantyādi cūrṇa.

## MADAYANTIKĀ ( मदयन्तिका )

मदयन्ती लघू रक्षा कषाया तिक्तशीतला ।  
 कफपित्तप्रशमनी कुष्ठघ्नी सा प्रकीर्तिता ॥  
 निहन्ति ज्वरकण्डूतिदाहासृक्पित्तकामला ।  
 रक्तातीसारहृद्रोगमूत्रकुच्छ्रभ्रम ब्रणान् ॥

*Dravyaguṇa Vijñāna, 149.*

हरीतकी चूर्णमरिष्टपत्रं चूतत्वचं दाढिम् पुष्पवृत्तम् ।  
 पत्रं च द्यान्मदयन्तिकाया लेपोऽङ्गरागोनरदेवयोग्यः ॥

*Suśruta Saṃhitā, Cikitsā, 25.*

### मदयन्तिका

रक्तरंगा दाहहन्त्री वान्तिकृत् शैष्मकुष्ठहा ।  
 बीजमस्याः ग्राहकन्तु शोषकं च प्रकीर्तितम् ॥  
 भूतग्रहाणां दोषं तु ज्वरं चैव विनाशयेत् ॥

*Nighaṇṭu Ratnākara.*

‘नखादि रागजननी ‘महेन्दी’ इति प्रसिद्धाः’

*Suśruta Saṃhitā, Cikitsā, 9.*

### प्रमेहे

‘शोणितमेहे मदयन्ती पत्रकल्कञ्च सक्षौद्र शीताम्बुना ।’

*Aṣṭāṅga Saṅgraha, Cikitsā, 14-7.*

### रक्तपित्ते

मदयन्तिकमूलस्य कषायः पूतशीतलः ।  
 शर्करामधुसंयुक्तो रक्तपित्तप्रणाशनः ॥

*Gadanigraha, 2-8-64.*

### शोषे

समूलपुष्पच्छदपल्लवायाः साः प्रयोज्यो मदयन्तिकाया ।  
 मासो प्रयोगेन समस्तलिङ्गं यक्षमाणुग्रं हरति प्रसह्या ॥

*Bangasena, Rājayakṣmā, 45.*

## MADHŪKA

### Botanical name

Madhuka longifolia ssp. latifolia (Roxb.) chev.

syn. *Madhuka indika* J.F. Gmelin., *Bassia latifolia* Roxb.

**Family :** Sapotaceae

**Classical name :** Madhuka

**Sanskrit Names**

Madhūka, Guḍapuṣpa, Madhukapuṣpa,  
Madhusrava, Vānaprastha, Maḍuṣṭhila, Jalaja, Madhūlaka,  
Dolaphala, Tīkṣṇasāra, Madhura, Madhukoṣṭha,  
Rodhravṛkṣa, Vanavāsi, Mahādruma.

**Regional names**

Mahua (Hindi); Mahua, Maul (Beng.); Moharha (Mar.); Mahudo (Guj.); Illuppi (Tam.); Ippachittu (Tel.); Hippe (Kann.); Iluda (Mal.); Mahua (Santh.); Butter tree (Eng.).

**Description**

Large deciduous trees up to 20 meters high, young parts pubescent, with short, stout, trunk and dense spreading crown. Bark grey or blackish, with shallow wrinkles and vertical cracks.

Leaves clustered near branch ends, up to 22 x 11 cm., short petioled stipulate; Lvs. elliptic or oblong elliptic, short acuminate or obtuse; coriaceous, densely woolly beneath when young, glabrescent afterwards; main lateral nerves 10-12 pairs; base cuneate; petiole 1-1.5 in., stipules drooping.

Flowers in dense fascicles near the ends of branches; pedicels slender drooping and pubescent. Calyx rusty-tomentose divided nearly to the base segments ovate; subacute; outer 2 enclosing the inner 2, corolla cream-coloured campanulate, with broad tube; lobes mostly 8-9 (or 7-14), erect; stamens generally 24-26; anthers hairy at the back, sub-sessile inserted in 3 series inside the corolla tube.

Berry up to the 5 cm. long, ovoid, fleshy. Seeds 1-4, crustaceous, shining. Berry fleshy-green.

**Flowering and fruiting time**

Plant flower in March-April and fruits in May-August. Plant leafless in February-April. Generally flowering and fruting period March to November.

### Distribution

It occurs throughout India up to 4000 feet altitude.

### Kinds and varieties

Another variety of drug Jalāmadhūka which is found in southern India.

*Madhuka longifolia* ssp. *longifolia* van Royen Biume. Syn. *Madhuka longifolia* (Koenig) Macbride, *Bassia latifolia* Koenig. Leaves up to 10 x 4 cm. calyx segments ovate-oblong, acuminate Berry oblong, 1-2 seeded.

### **Madhuca longifolia (Koenig) Macbride**

A large tree, young shoots silky elliptic-lanceolate, glabrous when full grown, blade 4-0, petiole slender, 1-1.5 in. long. Bark yellowish-grey. Flowers pale-yellow and fleshy, almost similar to *M. latifolia*, pedicels slender 2-2.5 in., outer calyx-segments nearly glabrous, inner finely tomentose, adhers apiculate, 3-toothed at apex. Fruits velvety when young obliquely ovoid 2, seed 1.5 in. long.

It is indigenous to South India. Commonly cultivated in the Peninsula, an excellent avenue tree. Indigenous chiefly in the moist forests on the West side from the Konkan Southwards; also in Ceylon and Upper Burma.

### Chemical Composition

Seeds contain semisolid fixed oil 50-55 percent which yield Oleic acid 40%, palmitic acid 26.5%, linoleic acid 13.5% and myristic acid 16%. Cake contains mourin which is glycocidal saponin and with toxic effects.

Air dried flowers contain invert sugar 52.6%, can sugar 2.2%, albuminoids 2.2%, cellulose 2.4%, ash 4.8% and aqueous content 15%.

Ash contains salicylic acid, phosphoric acid, calcium, iron, potash and soda (in traces) and other substances.

In addition, the flowers contain enzymes and yeast with high quantity. Fruits contain saccharose 4.6-16.2% maltose 2.4% tannin; enzymes and other substances.

### Pharmacodynamics

Rasa : Madhura, kaśaya

Guṇa	:	Guru, snigdha
Virya	:	Śīta
Vipaka	:	Madhura
Doṣakarma	:	Vātapittaśāmaka

**Properties and action**

Karma	:	Dāhapraśamana Santarpaṇa Vṛṣya Balya-Bṛīhāṇa Snehana Mūtrala Kaphaniḥsāraka Stanyajanana Ārtavajanana Nāḍibalya Vātaśāmaka Vedanāsthāpana Kuṣṭhaghna Raktapittaśāmaka Ahṛdyā (phala-fruit) Trṣṇānigrahaṇa Anulomana Stambhana
Roga	:	Raktapitta Trṣṇā-dāha-bhrama Vātavyādhi Śiroroga (paitika) Nāḍidourbalya Carmavikāra Atisāra-grahaṇī-koṣṭhagata vāta Kāsa-śvāsa-hikkā śukradourbalya Stanyakṣaya Rajorodha Mūtrakṛcchra Jvara-dāha Dourbalya-kṣaya-śoṣa.

**Therapeutic uses**

The leaves of Madhūka are astringent and they are

used in embrocations. Leaves are cattle fodder and green manure. Fruit's yellow volatile oil (0.03% yield) with a spicy odour is also useful. A milky latex exudes from bark (from incision and cracks there) and later it becomes coagulum is useful. Bark (containing tannin 17% and employed in dyeing and tanning) is used for rheumatism, ulcers and diabetes mellitus. In veterinary medicine, it is given to horses for stomach-ache. The roots are applied to ulcers. Flowers are employed for fermentation.

The fruits (madhūka phala) and seeds are medicinally useful alongwith seeds oil. Flowers (madhūka puṣpa) are largely used in preparation of distilled liquors. They are regarded as cooling, tonic and demulcent. Flowers are used in cough, cold and bronchitis. They are anti-bacterial.

The drug Madhuka is astringent, laxative, tonic, aphrodisiac and stimulant. It is useful in burning sensation in the body, debility, emaciation; respiratory diseases, rheumatism and thirst. It is also useful considered useful in snake-bite and fish poison. Liquor brued from the flowers which is extensively used in rural and tribal areas. Madhuka phala (mahua berries) are eaten raw or cooked. They are of medicinal utility. Berries are eaten by cattles, animals and birds-(leaves also eaten by animals esp. cattles). Fruits are collected near the ripening stage.

**Part used :** Flowers, seeds, oil.

#### Dose

Flowers juice 10-20 ml., Bark decoction 50-100 ml.

**Formulation :** Madhūkasava.

## MADHUKA ( मधूक )

- क. मधूको गुडपुष्पः स्यान्मधुकपुष्पो मधुस्रवः ।  
वानप्रस्थो मधुष्टीलो जलजेऽत्र मधूलकः ॥
- ख. मधूकपुष्पं मधुरं शीतलं गुरु बृहणम् ।  
बलशुक्रकरं प्रोक्तं वातपित्तादिनाशनम् ॥
- ग. फलं शीतं गुरु स्वादु वातपित्तनुत् ।

अहद्यं हन्ति तृष्णाऽस्त्रदाहश्चासक्षतक्षयान् ॥

*Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi Varga, 95-97.*

**मधूकः**

डोलाफलस्तीक्ष्णसारो मधुको गुडपुष्पकः ।

एलाफलो मधुष्टीलो मधुको मधुरो मतः ॥

मधुकोष्ठो रोध्रवृक्षो वनवासो महाद्रुमः ।

मधूकोऽन्यो मधूलः स्याज्जलजो दीर्घपत्रकः ॥

गौरशाखी नीरवृक्षो मधुवृक्षो मधुस्रवः ।

वानप्रस्थो मधुष्टीलो हस्वपुष्पफलः स्मृतः ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 455-457.*

**मधूकः गुणः**

मधूकस्तुवरस्तिक्तो ब्रणानिलकफापहा ।

**मधूक पुष्पम्**

तत्पुष्पं मधुरं शीतमहद्यं बृहणं गुरु ॥

(बलशुक्रकरं प्रोक्तं वातपित्तविनाशनम् ।)

**मधूकफलम्**

स्त्रिग्धं विकासि तीक्ष्णोष्णं तत्फलं गुरु शीतलम् ।

अहद्यं शुक्रलं स्त्रिग्धं मधुरं रसपाकयोः ।

विष्टम्भि बृहणं बल्यं कफाकृन् मारुतापहम् ।

हन्ति पित्तासृतदाहश्चासक्षतक्षयान् ॥

**पक्षफलम्**

पक्षं तु तत्फलं बल्यं पित्तमारुत् नाशनम् ।

**मधूक तैलम्**

कषायं स्वादु माधूकं तैलं पित्तकफप्रणुत् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 458-461.*

‘कषायं स्वादु माधूकं तैलं पित्तकफापहम् ।’

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 332.*

**मधूकः**

मधूको मधुवृक्षः स्यात् मधुष्टीलो मधुष्टीलो मधुस्रवः ।

गुडपुष्पो लोध्रपुष्पो वानप्रस्थश्च माधवः ॥

**मधूकगुणः**

मधुकं मधुरं शीतं पित्तदाह श्रमापहम् ।

वातलं जन्तुदोषघं वीर्यपुष्टिविवर्द्धनम् ॥

*Rāja Nighaṇṭu, Āmrādi Varga, 91-92.*

### मधूकपुष्पफल गुणः:

मधूक पुष्पं मधुरञ्ज वृष्यं हृदयं हिमं पित्तविदाहादि ।

फलञ्ज वातामयपित्तनाशि ज्ञेयं मधूकद्वयमेवमेतत् ॥

*Rāja Nighaṇṭu, Āmrādi Varga, 95.*

### जलमधूकः:

अन्यो जलमधूको मङ्गल्यो दीर्घपत्रको मधुपुष्पः ।

क्षौद्रप्रियः पतङ्गः कीरेष्टे गैरिकाक्षश्चः ॥

### जलमधूक गुणः:

ज्ञेयो जलमधूकस्तु मधुरो ब्रणनाशनः ।

वृष्यो वान्तिहरः शीतो बलकारी रसायनः ॥

*Rāja Nighaṇṭu, Āmrādi Varga, 93-94.*

ज्ञेयो जलमधूकस्तु मधुरो ब्रणनाशनः ।

वृष्यो वान्तिहरः शीतो बलकारी रसायनः ॥

*Dhanvantari Nighaṇṭu.*

‘गौरशाको मधूकोऽन्यो गिरिजः सोऽल्पपत्रकः ।’

*Mādhava.*

‘मधूकोऽन्यो मधूलस्तु जलजो दीर्घपत्रकः ।’

*Kṣīrasvāmī.*

### विषे

सम्यग् मधूकसारेण गोमूत्र भावितेन्तु ।

दद्याद् विषापहं नस्यं सिद्धं चापि प्रलेपनम् ॥

*Gadanigraha, 7-3-8.*

### आयुष्यप्रदे

सद्यवच्युतं स्थूल मधूकपुष्पं संशोधितं केशरधूलिवर्जितम् ।

संवाचितं शुभ्रासिताघृताभ्यां सजीरकं जीवनदं हिजीविनाम् ॥

*Kṣemakutūhalam, 8-176.*

### रक्तपित्ते

‘तथा मधूकस्य तथाऽसनस्य क्षाराः प्रयोज्या विधिनैव तेन ।’

*Caraka Samhitā, Cikitsā. 4-94.*

## हिंकासु

‘मधूकं मधुसंयुक्तं.....हिंकाघ्नं वावनम्।’

*Bhāvaprakāśa.*

## ग्रहण्याम्

‘मधूकपुष्पस्वरसं                   शृतमर्धक्षयीकृतम्।  
क्षौद्रपादयुतं शीतं पूर्ववत् सन्निधापयेत्॥  
तं पिबन् ग्रहणीदोषान् जयेत्सर्वान् हिताशनः॥’

*Caraka Saṁhitā, Cikitsā. 19-148.*

## पित्तज शिरोरोगे

‘नावनं शर्कराद्राक्षामधूकैर्वापि पित्तजे।’

*Caraka Saṁhitā, Cikitsā. 26-162.*

## शिरोरोगे-पित्तजे

‘नावनं शर्करा द्राक्षामधूकैर्वापिपित्तजे।’

*Caraka Saṁhitā, Cikitsā. 26-179.*

## कर्णपूरणे

रसमाभ्रकपित्थानां                   मधूकधवशालजम्।  
पूरणार्थं प्रशसन्ति तैलं वा तै विपाचितम्॥

*Suśruta Saṁhitā, Uttara. 21-47.*

## शुक्रवैवर्ण्यनाशने

‘मधूकसारं मधुना योजयेच्चाङ्गने सदा।’

*Suśruta Saṁhitā, Uttara. 12-33.*

## भग्रास्थिबन्धनार्थम्

‘मधुकस्य त्वचं....वा कुशार्थमुपसंहरेत्।’

*Suśruta Saṁhitā, Cikitsā. 3-6.*

## हिंकायाम्

क्षौद्रं सितां वारणकेशारं च पिबेदसेनेक्षुमधूकजेन।

*Suśruta Saṁhitā, Uttara. 50-24.*

## वामिजयनार्थम्

‘मधूकमय हीवेर मुत्पलानि मधूलिकाम्।  
लीद्वा चूर्णानि मधुना सर्पिषा च वर्मि जयेत्॥’

*Suśruta Saṁhitā, Uttara. 39-204.*

### अपच्याम्

‘मधूकसारश्च हितोऽवपीडे ।’

*Suśruta Saṃhitā, Cikitsā. 18-23.*

### कफज शिरोरोगे शिरोविरेचनार्थं मधूकं चूर्णनस्यः

‘मधूकसारेण शिरः स्वत्राक्तान्ध्य विरेचयेत् ।’

*Cakradatta, Śiroroga Cikitsā. 60-17.*

### ग्रहणीरोगे

‘मधूकासवः ।’

*Caraka Saṃhitā, Cikitsā. 15-146/150.*

### तृष्णायाम्

.....मधूकपुष्पादिषु चापरेषु ।

राजादन क्षीरिकपीतनेषु षट् पानकान्यत्र हितानी च स्युः ॥

*Suśruta Saṃhitā, Uttara. 48-26.*

### नेत्ररोगे-अभिष्यन्दे

‘मधूकसारं मधुना तुल्यांशं गैरिकेण च ।’

*Suśruta Saṃhitā, Uttara. 12-41.*

### नेत्रगतशुक्ररोगे

मधूकसारं मधुना योजयेचाङ्गने सदा ।

विभीतकास्थिमज्जा वा सक्षौद्रः शुक्रनाशनः ॥

*Suśruta Saṃhitā, Uttara. 12-33.*

### पामानि

मधूकपुष्पाणि पयःप्लुतानि बद्धानि पामोपरि कर्पटन ।

तत्तावृगुद्रिक्तातदीपदाह पीडाभृत्यापदमक्षिपन्ति ॥

*Siddha Bhaiśajya Maṇimālā, 8-849.*

### रक्तपित्ते

मधूक.....चूर्णितैः ।

भिषग् विधभ्याच्चतुरः समाक्षिकान् हिताय लेहानसृजः प्रशान्तये ॥

*Suśruta Saṃhitā, Uttara. 45-19.*

## B. MADHŪKAPUŚPI

### Botanical name

Diploknema butyracea (Roxb.) H. J. Lamb.

Syns. *Madhuca butyracea* (Roxb.) Macbride. *Bassia butyracea* Roxb.

**Family :** Sapotaceae

**Classical name :** *Madhūkapuṣṭī*

**Sanskrit names**

*Madhūkapuṣṭī*, *Madhūkaparṇī*, *Gucchapatrā*,  
*Tailabījā*, *Himamadhūka*, *Śailamadhūka*, *Jyotibījī*,  
*Guḍapuṣṭī*, *Guḍapuṣṭā*, *Madhurasā*, *Madhurapuṣṭā*.

**Regional names**

Chyura, Chura (U.P. Hills); Phalwara, Phulei,  
 Phuleca, Chiura (Hindi).

**Description**

A large deciduous tree with dark-grey bark.  
 Branchlets, petioles, underside of leaves, and pedicels with  
 fine silky hairs.

Leaves 6-12 by 4-7 in., obovate or obovate-oblong,  
 coriaceous, soft-tomentose beneath, crowded near the end  
 of the branches; blade 6-12, petiole 1-1.5 in. long; lvs. coria-  
 ceous; lateral nerves 15-20 pairs (sec. nerves 15-20 pair),  
 prominent, base rhomboid, stipules minute, caducous.

Flowers on drooping tomentose pedicels 1-1.3 in.  
 long, crowded below the terminal leaves in the axils of the  
 lower ones. Calyx coriaceous, rusty-tomentose, deeply 5-  
 cleft; lobes 0.3-0.5 in. long. Corolla pale-yellow; tube 0.7 in.  
 long, cylindrical, not fleshy; lobes 8-10, spreading. Stamens  
 30-40; anthers exserted, not hairy; filaments glabrous as  
 long as anthers.

Fruits berry, fleshy, ovoid, smooth, 1 in. long, 1-3-  
 seeded, seed 3/4 in. long.

**Flowering and fruiting time**

Plant is flowering during the period from autumn  
 to winter or October - November to December - January.  
 Fruiting stage during the period summers to rains or be-  
 ginning of the rainy months.

**Distribution**

Plant occurs in the Subhimalayan tract from the

Eastern Dun eastwards ascending to 5,000 ft. Inner hills of Kumaon and Garhwal sectors, Uttarakhand Himalayan region in Uttar Pradesh. Kumon hills, from lower areas and valleys upto areas of 1200 meters, Uttar Pradesh. The cultivation or plantation is gaining suitability in the hill region with a good scope of utility.

### Kinds and varieties

There are mainly three plants under the name(s) of Madhūka are mentioned in classical texts as well as prevalent in Indian medicine including ethnomedicine or traditional practices of medicine (medicinal plants utility in rural regions), they may be indicated alongwith their botanical sources :

Madhūka : *Mandhuca indica* J.F. Gmel.

Jalamadhuka : *Madhuca longifolia* (Koenig.) Macbride.

Madhūkapuṣṭī : *Madhuca butyracea* (Roxb.) Macbride.

### Chemical composition

The seeds Kernel forms about 70% of the weight of the seed (weight 100 seeds 78 g.). The composition of the seed kernel follows : moisture 5.0, ether extract 55.9, crude fibre and N-free extract 30.0, protein 5.2, and ash 3.82% Kernels contain saponin.

The yield of oil is 42-47% of the weight of the seeds or 60-67% of the weight of the Kernels. The characteristics of oil are recorded. The component fatty acids of the oil are : palmitic 56.6, stearic 3.6, oleic 36.0 and linoleic acid 3.8% Various component glycerides are present alongwith small quantities of stear odileins and triolein.

By crystallisation from acetone, 72% of the fat is obtained as a crystalline solid containing 58% of oleodipalmitin mixed with 8% tripalmitin and 6% palmitodioleins. It is thus a convinient source of natural oleodipalmitin.

### Therapeutic uses

The plant is valued for its fruit, from the seeds of fruit which a vegetable butter is extracted. It makes good soap, and it is made into candles which burn without

smoke or unpleasant smell as per appreciation made by rural hill users. It is used as an external application for headache and for rheumatism. The oil-cake, as also the pulp of the fruit, is eaten. The sweet juice of fresh corolla is expressed and boiled into gur (Guda) which is much prized in hill region (i.e. Kumaon area) in Uttar Pradesh where multipurpose utility of chyura or chura (Madhūkapuṣṭī) is traditionally known and particularly the white vegetable butter of the consistence of the lard.

The fruit (berry) is blackish in colour, with a thick, soft, sugary pericarp and characteristic sweet colour. Pericarp, forming nearly 70% of the weight of berry which is edible and medicinal.

The seeds are rich source of fat which is known (in trade) as Phulwara Butter which has been classed alongwith commercial Mowra or Bassia fats. It is, however, distinct from the fats of both *Madhuca latifolia* Roxb. and *Madhura longifolia* Macb. (*Madhūka dvaya*) and is commercially more valuable than the Mowra fat. It is in fact an exception to Sapotaceae (*madhūka kula* or *varga*) fats as a whole. Phulwara butter is used mostly as a substitute or as an adulterant of ghee. Besides its commercial and other utility, it is medicinally useful.

The flowers form a rich source of sugars and are utilised for the preparation of a gur-like product and spirituous liquors which have also medicinal properties.

## MADHŪKAPUṢṬĪ ( मधूकपुष्टी )

‘मधूकपुष्टी’—मधूक विशेषः ।

*Caraka Saṁhitā, Vimāna, 8-139.*

## MADHŪLIKĀ

**Botanical name :** Eleusine carocana Gaertn.  
**Family :** Poaceae (Graminae)

**Classical name :** Madhūlikā, Rāgī

**Sanskrit name :** Madhūlikā

### Regional names

Mandua, Mandal (Hindi); Marua (Beng.); Nagli (Mar.); Nachoni (Mar.); Banlo, Nagli (Guj.); Rangalu (Tel.); Ragi, Kalvarega (Tam.); Ragi (Kan.); Muttari (Mal.); Ragi, Finger Millet, African Millet (Eng.).

### Description

An erect annual grass, 2-4 ft. high, with tillering tufted stems. Stems somewhat laterally flattened bearing when mature, a whorl of 2-7 but normally 4-6, digitate, straight or slightly incurved spikes. Spikes about 1/2 in. broad and 5-6 in. long. Spikelets numerous, about 70, arranged alternately on rachis; each spikelet contains 4-7 seeds, varying in diam. from 1 to 2 mm. Seeds nearly globose or somewhat flattened smooth or rugose, varying in colour from dark reddish brown to nearly white.

### Flowering and fruiting time

Farming seasons (crop).

### Distribution

It is typically a tropical crop. It is cultivated in India (data and informations on acreage, production of grains, races, agro-practices, farming, pests etc. on record) as a food grain throughout India specially in warmer regions, and also in the hilly regions of country.

### Chemical composition

The growing plant is considered to be as nutritious as growing oats, but once the grains ripen, the nutritive value of the straw suffers. Green fodder contains : moisture 20.83, fat 0.48, protein 1.94, soluble carbohydrates 7.85, fibre 5.38, total ash 3.52 and ash soluble in HCL 2.28 per cent.

The average composition of the straw (on dry matter basis) follows : crude protein 3.67, fibre 35.93, N-free. extr. 51.38, ether extr. 0.92, total ash soluble in HCL 5.35, CaO 1.11, P.O. 0.16, MgO 0.45, Na<sub>2</sub>O 0.26 and K<sub>2</sub>O 1.50%. Digestive nutrients per 100 lb. of straw are : crude protein

0.21, starch equivalent 31.2 and total 50.1 lb. Nutritive value is enhanced as a result of stacking. Silage is also analysed.

### **Pharmacodynamics**

Rasa	: Madhura, kaśāya
Guṇa	: Guru
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittasāmaka

### **Properties and action**

Karma	: Vāmaka Kāsaghna
Roga	: Kāsa-śvāsa Jvaropadrava Balaroga-bālaśoṣa-mukhamanḍikā

### **Therapeutic uses**

The drug Madhūlikā is prescribed in therapeusis of various diseases and also incorporated as an ingredient of some formulations recommended in treatment of different diseases.

In consumption of children (bālaśoṣa), the drug Madhūlikā is employed in preparation of Śṛṅgyādi ghr̄ta. Among pediatric disorders, it is also used against Bālagraha. Ghee or ghr̄ta cooked with milk, tugakṣīrī, Kākolyādi and laghu pañcamūla gaṇa is given in treating mukhamanḍikā, one of the bālagraha in children.

As the drugs prescribed for enemas (basti), Madhūlikā is also useful in enemas such as aphrodisiac unctuous enema and non-unctuous enemas (vṛṣyatam niruha basti).

Madhūlikā is prescribed alongwith other certain drugs for treatment of coryza (pratiṣyāya caused by pitta and rakta), cough (kāsa) bronchial asthma (śvāsa) and some other ailments. Gaṇdhataila used in fracture (bhagna) contains Madhūlikā as an ingredient. Śṛṅgyādi ghr̄ta prescribed in bronchial asthma (śvāsa).

The complications of fever (jvaropadrava) are also treated with a recipe : Powder of Madhūlikā, hr̄ivera and

utpala are given with honey (madhu) and ghee (ghṛta) in complications of fever like vomiting, excess mucus secretion, intrinsic haemorrhage, hiccough and dysmenorrhoea.

*Madhūlikā* (*Rāgī*) is the principal food grains of the agricultural classes, tribals and rural folks, particularly in southern and hill tracts of northern India. The ragi is usually converted into flour and a variety of preparations such as cakes, puddings, porridge etc. are made. A fermented drink or beer is prepared from the grains in some parts of the grains are also malted and the flour of the malted grain used as a nourishing food for infants and invalids. *Madhūlikā* grains is specially recommended as a wholesome food for diabetics. The nutritive value of the grains is higher then that of rice and equal to that of wheat. The husk forms only 5-6% of the weight of the grains and is the lowest among food grains.

The composition of the grain varies according to type. The average composition follows : moisture 13.1, protein 7.1, fat 1.3, mineral matter 2.2, carbohydrates 76.3, calcium 0.33, and phosphorous 0.27%, iron 5.4 mg.; carotene (I.U. vitamin A) 70, Vitamin B<sub>1</sub> 420 Y and nicotinic acid, 1.1 mg./100g. *Madhūlikā* is poor in vitamin B<sub>2</sub> and rich in calcium, phosphorous and iron; and it is rich in calcium, phosphorous and iron; the calcium content is higher than in the common cereals and millets. The iodine content 101.4/100g.) is reported to be the highest among food grains. It also contains sulphur (0.19%) and zinc (1.48 mg./100 g.). Ragi enjoys a traditional reputation as a nutritious and sustaining food.

Malt extracts with the colour and consistency of honey have been produced on a commercial scale and those prepared from white ragi conform to the specifications of the British pharmacopoeia for barley malt.

The grains of *Madhūlikā* are a staple food having good maintenance value and its growth promoting value can be greatly improved by supplementing it with pulses and milk.

**Part used :** Seeds (grains).

**Dose :** Powder 3-5 gm.

**Formulation :** Gandhataila, Śringyādi ghṛta.

## MADHŪLIKĀ ( मधूलिका )

बस्तौ

वृष्टमें स्लेहबस्तौ ।

*Caraka Saṃhitā, Siddhi, 12-18 (1-3).*  
निरुह बस्तौ ।

*Suśruta Saṃhitā, Cikitsā, 38-28.*

बालरोगे

मुखमण्डका प्रतिषेधे

मधूलिकायां पयसि तुगाक्षीर्या गणे तथा ।  
मधुरे पञ्चमूलं च कनीयसि घृतं पचेत् ॥

*Suśruta Saṃhitā, Uttara, 35-5.*

बालशोषे

शृङ्गादि घृते ।

*Aṣṭāṅga Hṛdaya, Uttara, 251/52.*

श्वासे

शृङ्गादि घृते ।

*Suśruta Saṃhitā, Uttara, 51-21/22.*

ज्वरोपद्रवे

मधूकामथ हीवेरमुत्पलानि मधूलिकाम् ।  
लीढवा चूर्णानि मधुना सर्पिषां च जयेद् वमिम् ॥  
कफ प्रसेकासृक्पित्तहिकाशासांश्च दारुणान् ।

*Suśruta Saṃhitā, Uttara, 39-300/301.*

वमनार्थम्

जीवक त्रैषभकौ.....मधूलिका ॥  
तद्रजोभिः पृथग् लेहाः धामार्गवरजोऽन्विताः ।  
कासे हृदयदाहे च शस्ताः मधुसितादुताः ॥

*Aṣṭāṅga Hṛdaya, Kalpa, 1-37/38.*

कासे

खर्जूर.....मधूलिकैलामलकैः समांशैः ।

उत्कारिका घृते सिद्धा श्वासे पित्तानुबन्धजे ॥

*Caraka Saṁhitā, Cikitsā, 17-111.*

## MADHUYASTĪ

**Botanical name :** Glycyrrhiza glabra Linn.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Madhuyaṣṭī

**Sanskrit names :**

Madhuyaṣṭī, Yaṣṭimadhu-Yaṣṭimadhuka, Madhuka,  
Klitaka-klitanaka.

### Regional names

Muleṭhi, Jethimadhu (Hindi); Yastimadhu (Beng.);  
Jeṣṭimadh (Mar.); Jathimadh (Guj.); Atimadhuoram  
(Tam.); Yaṣṭimadhukam (Tel.), Asluspus (Arab.);  
Bekhanarak (Pers.); Liquorice (Eng.).

### Description

Herbaceous perennials, 45 cm. to 1.5-1.8 meters (1.5-6 feet) high, tender stem, hardly perennial herb or under shrub attaining a height upto 100 cm.

Leaves multifoliate, imparipinnate, pinnae in 4-7 pairs, ovoid and lanceolate in shape (outline).

Flowers in axillary spikes, papilionaceous; colour lavender to white, or light pink to violet, purple; 1.25 cm. or more long.

Pods compressed, about (upto) 2.5 cm. or 1 inch. long, flat; seeds kidney-shaped, 2-3 or more.

Rootstock with roots and stolons. Dried pieces of small and big sizes, peeled and unpeeled liquorice root form (market) drug Madhuyaṣṭī or Yaṣṭimadhu.

**Root drug :** Root consists of stolons and pieces of roots. Outer surface is dark reddish brown, longitudinally wrinkled. Stolons bear small bunds, scale leaves or scars of slender side roots. Smooth transverse surface of the stolons show a thin brown cork externally, a well marked cambium line and a central whitish pith. Beneath the cork is a

very narrow band of phellogen. Stale shows a radiate structure with pale medullary rays. Pith is absent in the root and well-marked medullary rays are visible.

### **Distribution**

Plant occurs in Southern Europe, Spain, Syria, Russia, Egypt, Arab, Iran (Persia), Turkistan, Central Asia, Afghanistan, Peshawar and from Chenab to East in the Himalayas, Burma and Andaman Islands. Cultivation is being undertaken in various regions of India on trial basis.

### **Chemical composition**

Roots chiefly contain an active principle glycyrrhizin; it is present in the form of glycyrrhizic acid which is sweet anrethan 50% in compare to sugar and its sweetness is observed even in 1 : 2000 solution. This prepared in hot water can be frozen. The content of glycyrrhizin is isolated from different species of *Glycyrrhiza* within the range of 2-10 per cent which is found and detected in only underground parts of the source plant and not in its urial part.

The yellow colour in roots of liquorice is due to presence of a glycoside isoliquiritin (2.2%) which is partially converted into liquiritin. These both active principles are bitter in taste with slightly sweetness and propelling salivary secretion. Extract is prepared of the roots.

A steroid estrogen is also present in the roots. They contain glucose 3.8, sucrose 2.4-6.5, menite, starch 30%, asparagine, bitter substance, resinous matter 2.4 and a volatile oil 0.03-0.35 per cent and a colouring matter. Ash (water soluble) is less than 20 per cent in root and 10% in root with bark, but less than 6% in barkless root.

### **Pharmacodynamics**

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipaka	: Madhura
Doṣakarma	: Vātапittaśāmaka

### **Properties and action**

Karma	: Chedana (śleśmahara)-kāsa-hara-
-------	-----------------------------------

	kaṇṭhya Śoṇitasthāpana Chardinigrahaṇa-trṣṇānigrahaṇa- vātanulomana-mṛdurecana Āmāśayasthāmlatva nāśaka-kṣata sandhāniya Medhya-nādībalya Dāhaśāmaka Keśya Vedanāsthāpana Śothahara Mūtrala-mūtravirajanīya-snēhana Vṛṣya-śukrajanaṇa Varṇya-tvacya-kandūghna Jvaraghna Jīvanīya-sandhānīya-rasāyana Cakṣuṣya Vraṇaropana Stanyajanana Hikkānigrahaṇa Balya-bṛñhaṇa Viṣaghna.
Roga	: Kāsa-śvāsa-hikkā-svarabheda-kaṇṭhā (gala)-vikāra Adhoga-urdhvag raktapitta Raktapitta Kṣaya-yakṣmā Vāta vikāra-āmavāta Maṣṭiṣka-nādīdourbalya- buḍḍhimāndya Śiroroga Chardi-trṣṇā-vibandha-udaraśūla Amlapitta-āmāśayika vraṇa- parināmaśūla Raktavikāra-raktalptā Pāṇḍu Prameha-pūyameha-paittikameha- mūtrakṛcchra Śukrameha-śukrakṣaya

Varṇavikāra-kaṇḍū-carmavikāra  
 Uraḥkṣata-pārśvaśūla-kṣataksīṇa  
 Vraṇa-sadyovraṇa-kṣata  
 Apasmāra  
 Stanyakṣaya.

### **Therapeutic uses**

The drug Madhuyaṣṭi or yaṣṭimadhu (Ka) is a potent expectorant herbal agent possessing chedana (śleṣmahara) properties acting on respiratory system. It is a prominent plant drug recommended in cough, asthma, bronchitis and throat affections e.g. hoarseness of throat and voice abnormalities (including laryngitis and pharyngitis). The root-pieces are common remedy for chewing in throat disorders, cough and allied ailments. As per popular practice, the pieces of root (obtained from Madhuyaṣṭi plant identified as *Glycyrrhiza glabra* Linn.) are also component of betel in tradition (betel chewing - tambūla carvaṇa or bhakṣaṇa). Thus, yaṣṭimadhu has utility of a drug as well as condiment having oral use in health and morbidity particularly in vocal cavity and respiratory tract.

As an effective medicine, it is prescribed in pulmonary diseases including tuberculosis (yakṣmā); the drug acts as a good expectorant and also antipyretic and promotes functions of lungs and other respiratory organs. In cases of hiccough, cough, chest pain, coryza, catarrhal affections, influenza, cold and fever, the roots are used as single drug and combined in group of ingredients (of infusion, decoction, syrup, powder etc.) of any suitable recipe or formulation.

Madhuyaṣṭi is one of the rasāyana drugs (promotive and restorative) belonging to alterative group of medicinal plants, specially it has been recommended an intellect-promoting (medhya rasāyana) in ancient tradition of medicine among some specific drugs carrying rasāyana potentials under promotive therapy to human body (physically and mentally) as a whole with physchosomatic effects) in general and being intellect-promoting (or memory-improving) drug in particular. The textual references in classical compendia (Caraka Saṃhitā, Cikitsā, 1-3/30-31 etc.)

of Indian medicine are providing support of its medicinal efficacy as a major rasāyana (health promotive) drug.

For management of epilepsy (apasmāra), the paste (roots) of yaṣṭimadhu (80 gm.) is cooked in ghee (640 gm.) with fruit-juice dhātrī (*Embllica officinalis Gaertn.*) 10.24 litres. Thus, madhuyaṣṭi ghṛta is prepared which is orally given to epileptic patient suffering from epilepsy (specifically caused by pitta doṣa). Similarly, the paste of yaṣṭimadhu roots prepared by pounding in juice of Kūṣmāṇḍa (*Benincasa hispida*) has been suggested to be internally administered (*Bhāvaprakāśa, Cikitsā, 23-17*) in disease of epilepsy.

The drug is used in vātavikāra, vātarakta, nervous disorders, headache, śiroroga, hemicrania, rheumatic disorders and as a nervine tonic in addition to its intellect promoting (medhya) potentiality described in early texts of medicine. Madhuyaṣṭi is analgesic (vedanāsthāpana) and anti-inflammatory (śothahara). Externally the roots paste is applied to counter inflammation (vraṇaśotha) and poisonous affect (viṣa). In head and hair ailments (siroroga and keśaroga), the decoction of drug-root is used as liquid wash (keśa-prakṣālana). The drug is useful in greying of hairs (pālitya) and baldness (Khālitya-īndralupta). Yaṣṭimadhuka taila is prescribed in Indian medicine (*Sāringadhara Saṃhitā, 2-9-153*) for treatment of pālitya (greying of hairs etc.).

Apart from rasāyana (health promotive), jivaniya (life-promotive and (rajuvenative), balya (body strengthening) and sandhaniya (union-promoting), the drug yaṣṭimadhu is varṇya (complexion and lustre promoting) that improves and protects skin health (including maintenance of pigmentation); it eradicates skin affections (tvagvikāra-varṇavikāra). In skin burn cases, the ghee mixed liquorice (madhuyaṣṭi) roots powder is suggested for local application especially burn caused by alkali (samyagdagdha : Suśruta Saṃhitā, Sūtra, 11-19).

In the management of wounds and ulcers, yaṣṭimadhu has been recommended in indigenous system of medicine. The drug is good wound healer and also use-

ful in post-operative surgery. It has been prescribed in Indian medicine by Suśruta, fathur of surgery in ancient India, that the pain is removed by applying locally warm ghee mixed with root-powder of drug yaṣṭimadhu (Suśruta Saṃhitā, Sūtra. 5-42) which is later followed in tradition of medical system (Vṛndamādhava, 45-1). Similarly, the paste of madhuyaṣṭi mixed with nimba leaves is applying over wounds (vṛṇaśodhana) cleaning (Caraka Saṃhitā, Cikitsā. 25-85). The paste of madhuyaṣṭi root mixed with tīla seeds (*Sesamum indicum*) is applied on wound as healing medicine.

Madhuyaṣṭi has classically been recommended in the ophthalmic therapeutics. In the disorders of eye-lid after scarification of lid (vartma lekhana), the liquorice root (madhuyaṣṭi mūla) powder or decoction of drug root is sprinkled on spot. Similarly in upapakṣma, the sprinkling of drug-root cooked with ghee has been prescribed in order to relieve pain immediately (Baṅgasena, netraroga, 288). In addition to eye-lid treatment with madhuyaṣṭi (Aṣṭāṅga Hṛdaya, uttara, 9-18), a collyrium has been suggested to prepare with madhuyaṣṭi (extract), out of the four drugs incorporated in texts (Vṛndamādhava, 61-96) and this collyrium (añjana) is applied in case of corneal opacity (śukra). In stage of timira roga (defects of vision or eye sight), the bath with madhuyaṣṭi and āmalaka (aiwlā) has been suggested (Baṅgasena, netraroga, 288) for alleviating pitta and removing the visionary anomalies (dṛṣṭidoṣa). In general, the powder of liquorice root (yaṣṭimadhu) is advised for oral use with milk or with any other suitable vehicle (anupāna) for promoting eye vision (dṛṣṭi vardhāna) and as a cakṣuṣya medicine (beneficial for eye or protection opthaolmic function).

The roots of drug madhuyaṣṭi are used as laxative, carminative, diuretic, anti-colic and herbal antacid being effective in hyper acidity peptic ulcer and dueodenal ulcer. It is useful in vomiting, over thirst; rakta pitta (intrinsic haemorrhage), blood diseases, anaemia, prameha, gonorrhoea, dysuria, spermatorrhoea, chronic fever, gen-

eral debility, pradara and other diseases. It is an aphrodisiac (vr̥ṣya) drug providing sexual potency.

**Parts used :** Roots.

**Dose :** 3.5 gms.

### Formulations

Yaṣṭyādi cūrṇa, Yaṣṭyādi kvātha, Yaṣṭimadhvādyataila

### Gana

Kaṇṭhya, Jīvaniya, Varnya, Kaṇḍūghna, Mūtravirajaniya, Śoṇitāsthāpana (**Caraka Saṃhitā**), Kākolyādi, Sārivādi, Anjanādi (**Suśruta Saṃhitā**), Chardinigrahaṇa, Snchopaga, Vamanopaga Āsthāpanopaga.

## MADHUYASTĪ ( मधुयष्टी )

यष्टी हिमा गुरुः स्वाद्वी चक्षुण्या बलवर्णकृत्।  
सुस्निग्धा शुक्रला केश्या स्वर्या पित्तानिलास्त्रजित्॥  
त्रणशोथविषच्छर्दित्प्यागलानि क्षयापहा।

*Bhāvaprakāśa Nighantu, Harītakyādi Varga, 146.*  
मधुकं मधुरं वृष्यं वर्ण्यं स्वर्यं हिमं गुरुं।  
सुस्निग्धं बृंहणं केश्यं वातपित्तकफापहम्॥  
सद्यः क्षतास्तृट्ठर्दिक्षयशोकब्रणान् हरेत्।

*Kaiyadeva Nighantu, Oṣadhi Varga, 1180-1181.*

मधुरं यष्टिमधुकं किञ्चितिकं च शीतलम्।  
चक्षुष्यं पित्तहनुच्च शोषतृष्णाव्रणापहम्॥

*Rāja Nighantu, Pippalyādi Varga, 145.*

### क्लीतनकम्

क्लीतनं मधुरं रुच्यं बल्यं वृष्यं ब्रणापहम्।  
शीतलं गुरु चक्षुष्यमस्त्र पित्तापहं परम्॥

*Rāja Nighantu, Pipalyādi Varga, 148.*

मधुयष्टिः स्वादुरसा शीतपित्तविनाशिनो।  
वृष्णाशोषक्षयहरा विषच्छर्दि विनाशिनी॥  
यष्टिकायुगलं स्वादु तृष्णापित्तास्त्रजित् समम्।

*Dhanvantari Nighantu.*

**धथाया: स्तन्यवृद्धयर्थम्**

यष्टीमधुकं संयुक्तं गव्यं क्षीरं सशर्करम् ।

पीत्वा धात्रौ भवेद् भूरिस्तन्यपूर्णं पयोधरा ॥

*Vaidya Manoramā.*

**अर्णसि**

‘ततो यष्टीमधुकमिश्रेण सर्पिषा निर्वाच्य ।’

*Suśruta Saṃhitā, Cikitsā. 6-4.*

**पित्तजविद्रधिद्घो यष्ट्याद्य लेपः**

*Cakradatta, 43-7.*

**रक्तप्रदरे**

मधुकं कर्षमेकं तु कर्षकाञ्च सितां तथा ।

तण्डुलोदकसम्पिष्टां लोहितेप्रदरे पिबेत् ॥

*Bhāvaprakāśa Strīrogādhikāra, 68-12.*

**केशकुञ्जनीकरण मधुकादि लेपः**

*Cakradatta, Kṣudraroga Cikitsā, 55-103.*

**हिक्कायाम्**

‘मधुकं मधुसंयुक्तं.....हिक्काद्यं नावनत्रयम् ।’

*Śodhala, Vṛndamādhava, 12-3.*

**शोषे**

‘पयसा सेकः शस्तश्च मधुकाम्बुना ।’

*Caraka Saṃhitā, Cikitsā, 8-85.*

**बाजीकरणे**

कर्षं मधुकचूर्णस्य घृतक्षौद्रसमन्वितम् ।

पयोऽनुपानं यो लिह्यान्तित्यवेगः सा ना भवेत् ॥

*Śodhala.*

**केशश्वमश्रुजननार्थं यष्टीमधुकाद्यं तैलनस्यम्**

*Kṣudraroga cikitsā, Cakradatta, 55-111.*

**पैत्तिक स्वरभंगे**

‘अशनीयाश्च ससर्पिष्कं यष्टीमधुकं पायसम् ।’

*Suśruta Saṃhitā, Uttara 53-13.*

*Śodhala, Gadaṇigraha.*

**भल्लातकोत्थश्वयथुप्रतिकारे**

‘यष्टि दुग्धतिलैर्लेपो नवनीतेन संयुतः ।

शोथमारुष्करं

हन्ति..... ॥'

Vṛndamādhava, 39-98.

Sodhala.

### हिक्कायाम्

‘यष्ट्याहं वा माक्षिकेणावपीडे पिप्पल्यो वा शर्कराचूर्ण संयुक्ताः ।’

Śuśruta Samhitā, Uttara, 50-16.

### तिमिररोग

‘मधुकामलक स्नानं पित्तब्धं तिमिरापहम् ।’

Baṅgasena.

### पित्तजे कर्णरोगे

‘द्राक्षायष्टिशृतं क्षीरं शास्यते कर्णपूरणे ।’

Baṅgasena, Kārṇaroga. 52.

### तृष्णायाम्

क्षयोत्थितां क्षीरघृतं निहन्यान् मांसोदकं वा मधुकोदकं वा ।

Suśruta Samhitā, Uttara. 48-28.

### अपस्मारे

कूष्माडकफलोत्थेन रसेन परिपेषितम् ।

अपस्मार विनाशाय यष्ट्याह्वासं पिबेत् त्र्यहम् ॥

Bangasena, Bhāvaprakāśa, 23-17.

### उपपक्षमनाग्नि नेत्ररोगे

‘यष्टि सिद्धं घृतं सेकात् सद्यो हरति वेदनाम् ।’

Bangasena.

### मूत्ररोधज उदावर्त्ते

‘.....क्षीरं द्राक्षायष्टीमथापि वा ।’

Bhāvaprakāśa, Cikitsā, 11-25.

### मूत्रावरोधजन्योदावर्त्ते मधुयष्टी स्वरसम्

‘सितामिक्षु रसं क्षीरं द्राक्षा यष्टीमथापि वा ।’

Bhāvaprakāśa, Śūladhikāra, 31-25.

### सर्वेषु शिरोरोगेषु

यष्टीमधुककषायः स्यात् तुर्याशं तु विषं भवेत् ।

तयोश्चूर्णं सुसूक्ष्मं स्यात् तच्चूर्णं सर्षपाचितम् ॥

नासिकाभ्यन्तरे न्यस्तं सर्वा शीर्षव्यथां हरेत् ।

दृष्टप्रयोगो योगोऽयमनुभाविभिराद्यतः ॥

Bhāvaprakāśa, Cikitsā, 62-59/60.

**नेत्रगते मसूरिका ( पीडिका ) शमनार्थं मधुकादि लेपः**

*Cakradatta, 54-38.*

**सद्योव्रणे**

सद्यः क्षतव्रणं वैद्यः सशूलं परिषेचयेत् ।

यष्टीमधुककल्केन किञ्चिदुष्मौन सर्पिषा ॥

*Cakradatta, Vraṇāśothacikitsā, 50-49.*

**रुधिरवमने**

‘यष्टमयाह्वचन्दनोपेतं सम्यक् क्षीरप्रपेषितम् ।

तैनेवालोड्य पातव्यं रुधिरच्छर्दिनाशनम् ॥’

*Cakradatta, Chardi Cikitsā, 15-25.*

**उदर्दे**

‘भिषगत्रापि योजयेत् ।

सितां मधुकसंयुक्ताम्.... ॥’

*Cakradatta, 51-3.*

**सम्यग्दग्धे**

‘तत्राम्लवर्गः शमनः सर्पिमधुकसंयुक्तः ।’

*Suśruta Samhitā Sūtra, 11-19.*

**हृद्रोगे**

‘यष्टयाह्विकातिक्करोहिणीभ्याम् ।

कल्कं पिबेच्चापि सिताजलेन् ॥’

*Caraka Samhitā, Cikitsā, 26-21.*

**वातरक्ते**

‘सिद्धं (तैलं) मधुककाश्य रसैर्वा वातरक्तनुत् ।’

*Caraka Samhitā, Cikitsā, 29.*

**रसायनार्थम्**

‘क्षीरेण यष्टीमधुकस्य चूर्णम् ।’

*Caraka Samhitā, Cikitsā, 1-3/30-31.*

**क्षतक्षीणे**

‘कल्पोऽथ शुण्ठीमधुकयोस्तथा ।’

*Caraka Samhitā, Cikitsā, 16.*

**मुखरोगे**

यष्टीमधु पलमेकं त्रिंशत्रीलोत्पलस्य तैलस्य ।

प्रस्थं तद् द्विगुणपयोविधिनापकं तु नस्येन् ॥

निशि वदनस्य स्नावं क्षपयति गात्रस्य दोषसंघातम् ।  
 कच्चर्घर्षणत्वमवश्यं क्रमतोऽभ्यङ्केन जन्तुनाम् ॥  
*Bhāvaprakāśa, Mukharogādhikāra, 66/166-167.*

### वातरक्ते

मधुकाद्दिगुणं तैलं तैलादाजं पयो भवेत् ।  
 तद्यथाऽग्निबलं पेयं वातरक्तरुजाऽपहम् ॥

*Bhāvaprakāśa, Vātaraktadhikāra, 29-56.*

### गर्भे शुष्के शुष्प्यति च बाले

‘सिताकाशमर्यमधुकैः हितमुत्थापने पयः ।’

*Caraka Saṁhitā, Cikitsā, 28-96.*

### पित्तजापस्मारे

मधुकट्टिपले कल्के द्रोणो चामलकी रसात् ।  
 तद्वत् सिद्धौ घृतप्रस्थः पित्तापस्मारभेषजम् ॥

*Caraka Saṁhitā, Cikitsā, 10-31.*

### पाण्डुरोगे

पाण्डुरोगहरं लिह्याच्यूर्णं क्षौद्रविमिश्रतम् ।  
 यष्ट्याहस्य प्रयत्नेन तत्कार्थं वा पिबेन्नरः ॥

*Gadanigraha, 2-7-43.*

‘हितश्च यष्टीमधुकं कषायां,  
 चूर्णसमं वा मधुनावलिह्यात् ।’

*Suśruta Saṁhitā, Uttara, 44-20.*

### अधोग रक्तपित्ते

‘यष्टिमधुकयुक्तं च सक्षोद्रं वमनं हितम् ।’

*Suśruta Saṁhitā, Uttara, 44.*

‘पिबेदक्षसमं कल्कं यष्टीमधुकमेव वा ।’

*Suśruta Saṁhitā, Uttara, 45.*

### अर्धाविभेदके

‘मधुकेनावपीडो वा मधुना सह संयुतः ।’

*Suśruta Saṁhitā, Uttara, 46.*

### मेध्य रसायने

‘मण्डूकपण्याः स्वरसः प्रयोज्यः क्षीरेण यष्टीमधुकस्य चूर्णम् ।’

*Caraka Saṁhitā, Cikitsā, 1:3-30/31.*

## वृष्टमधुक योग

कर्ष मधुकचूर्णस्य घृतक्षौद्रसमन्वितम् ।  
पयोऽनुपानं यो लिह्यान्तित्यवेगः स ना भवेत् ॥

*Aṣṭāṅga Sangraha, Uttara, 50-43.*  
*Caraka Saṃhitā, Cikitsā, 2:3-19.*  
*Cakradatta, Viṣyādhikāra, 66-8.*

## वमनकर्म परिकर्त्तिका ( अतियोगात् )

‘यष्टीमधुकसिद्धं वा स्नेहबस्ति प्रदापयेत् ।’

*Caraka Saṃhitā, Siddhi, 6-67.*

## बली-पलित निरोधार्थ देहकान्तिदायकवर्णकघृतम्

*Cakradatta, 55/77-80.*

## स्तन्य रोगे

द्राक्षामधुककल्केन स्तनौः चास्या प्रलेपयेत् ।  
प्रक्षाल्य वारिणा चैव निदुह्यात्तौ पुनः पुनः ॥

*Caraka Saṃhitā, Cikitsā, 30-272.*

## मुखकान्तिदायक कनक तैलम्

*Cakradatta, Kṣudraroga Cikitsā, 55/58-59.*

## विसर्पे

घृतमण्डेन शीतेन पयसा मधुकाम्बुना ।  
पञ्चवल्कलकषायेण सेचयेच्छीतलेन वा ॥

*Caraka Saṃhitā, Cikitsā, 21-94.*

शतधौतघृतेनाग्रिं प्रदिद्व्यात् केवलेन वा ।  
सेचयेद् घृतमण्डेन शीतेन मधुकाम्बुना ॥  
शीताम्भसाऽम्भोजजलैः क्षीरेणेक्षुरसेन वा ॥

*Aṣṭāṅga Hṛdaya, Cikitsā, 18-21.*

## वातरक्ते

### शतपाकं मधुक तैलम्

*Caraka Saṃhitā, Cikitsā, 19-117/118.*

‘अजाक्षीरं वाऽधतैलं मधुकाक्षयुक्तम् ।’

*Suśruta Saṃhitā, Cikitsā, 5-7.*

## ब्रणे

मधुकं निम्बपत्राणि प्रलेपे ब्रणशोधनः ।  
यष्टी तिलाः सुपिष्ठा या स्मृता ब्रणरोपणाः ॥

*Vṛndamādhava, 44-73.*

## सद्यःक्षते

या वेदना शस्त्रविधात जाता तीव्रा शरीरं प्रदुनोति जन्तोः ।

घृतेन वा शान्तिमुपैति सिक्ता कोष्णेन यष्टीमधुकान्वितेन ॥

*Suśruta Saṃhitā, Sūtra, 5-42,  
Vṛndamādhava, 45-1.*

## वृद्धौ

‘यष्टीमधुकसिद्धेन ततस्तैलेन योजयेत् ।’

*Suśruta Saṃhitā, Cikitsā, 19-7.*

## भगन्दरे

ततो मधुकतैलेन तस्य सिङ्गेत भिषग् ब्रणाम् ।

*Suśruta Saṃhitā, Cikitsā, 8-18.*

## मूत्राधाते

मधुककुङ्कुमकल्कमिदाम्बुना गुडयुतेन विलोङ्घनिशाम्बितम् ।

शिशिरमाशु पिबेन् जयतीद्धमप्याखिलमूत्रविकारभरं नरः ॥

*Kalyāṇakāraka, 17-64.*

## रक्तप्रदरे

मधुकं कर्षमेकं तु कर्षकाञ्च सितां तथा ।

तण्डुलोदक सर्पिष्ठां लोहितप्रदरे पिबेत् ॥

*Bhāvaprakāśa, Cikitsā, 68-13.*

## रक्तपित्ते

‘पिबेदक्षसमं कल्कं यष्टीमधुकेव वा ।’

*Suśruta Saṃhitā, Uttara, 45-24.*

यष्ट्याह्व चन्दनोपेतं सम्यक् क्षीरप्रपेषितम् ।

तैनेवालोङ्घ पातव्यं रुधिरच्छर्दिनाशनम् ॥

*Cakradatta, 15-25.*

# MAHĀBALĀ

## Botanical name

Sida rhombifolia (Linn.) Mast.

syns. Sida rhomboidea Roxb. ex. Fleming., Sida rhombifolia var. rhomboidea (Roxb. ex Fleming) Mast.

Family : Malvaceae

Classical name : Mahābalā

**Sanskrit names**

Mahābalā, Švetapuṣpā, Sahadevā, Kṣetrabalā.

**Regional names**

Pila Bariyara (Hindi); Pita badela, Halde Badela (Beng.); Khetrau bala (Guj.).

**Description**

Erect herbs or undershrubs, upto 1.5 m. high usually covered with shining stellate hairs; branches often reddinged.

Leaves usually ovate-oblong or rhomboid, sometimes lanceolate, 1-10 cm. long, usually serrate-crenate in the upper part.

Flowers axillary, solitary or 2-5 together; pedicels upto 4 cm. long, jointed below apex, Calyx campanulate Ca 1 cm. across, with 5 prominent nerves above. Corolla Ca 15 mm. across, yellow or orange; petals obliquely obovate. Mericarps 9-10, flattened, trigonous, 2.5-3.5 mm. long, mostly muticous, sometimes with two small mucros or awns.

**Flowering and fruiting time**

Plant flowers in September-October and fruits in October-April.

**Distribution**

Plant occurs throughout India. It is generally found in wastelands, rock-cervices, forests and along streams and other places in various regions in country.

**Chemical Composition**

Roots contain mucilaginous matter, fatty acid, resin, potassium nitrate and other substances. Alkaline substance is found to be 0.085 per cent while seeds yield its higher content.

**Pharmacodynamics**

Rasa : Madhura

Guṇa : Laghu, snigdha, picchila

Virya : Śīta

Vipāka : Madhura  
 Doṣakarma : Vātapittanāśaka

### **Properties and action**

<b>Karma</b>	: Balya-bṛīhaṇa-ojovardhana Vātaghna-nādībalya Vedanāsthāpana-śothahara Grāhī Hṛdaya-raktapittaśāmaka Śukrala-prajāsthāpana Jvaraghna Mūtrala.
<b>Roga</b>	: Vātavikāra-nādīdourbalya Grahanī Hṛddourbalya-raktapitta-urahkṣata Śukrameha-pradara-gorbhāśaya dourbalya Mūtrakṛcchra Jvara-viṣamajvara Dourbalya-kṣayaroga-kṛṣata Vranaśotha Netraroga.

### **Therapeutic uses**

The drug Mahābala belongs to the group of four kinds of Balā which is known as 'Balācatuṣṭaya', and the medicinal properties and uses in therapeusis are almost similar to that of Balā drug or other components comprising Balā group.

Mahābalā is specially indicated (Baṅgasena and Bhāvaprakāśa) in filariasis (ślipada) and malarial fever (viṣamjvara) besides various other diseases where Balā and Balācatuṣṭaya are recommended for therapeutic uses in different forms and formulations, in addition to single drug use of Mahābalā.

**Parts used :** Roots, seeds.

**Dose :** Juice 10-20 ml., Powder 3-6 gm.

**Formulation :** Balācatuṣṭaya (c.f.).

**Gaṇa :** Balācatuṣṭaya (c.f.).

## MAHĀBALĀ ( महाबला )

महाबला तु हद्रोग वार्तार्शः शोफनशिनी ।

शुक्रवृद्धिकरी हन्यात् विषमद्यं ज्वरं नृणाम् ॥

*Dhanvantari Nighantu.*

### विषमज्वरे महाबला

‘महाबलामूलमहौषधाम्यां क्वाथो निहन्याद्विषमज्वरं हि ।

शीतं सकम्पं परिदाहयुक्तं विनाशयेद्द्वित्रिदिनं प्रयोगात् ।’

*Bhāvaprakāśa.*

### श्लीपदेमहाबलामूलम्

‘असाध्यमपि यात्यस्तं श्लीपदं चिरकालजम् ।

मूलेन सहदेवायास्तालमिश्रेण लेपितम् ॥’

*Baṅgasena.*

## MAKHĀNNA

### **Botanical name**

*Euryale ferox* Salisb.,

Syn. *Anneslia spinosa* Roxb.

### **Family :** Nymphaceae

### **Classical name :** Makhānna

### **Sanskrit names**

Makhānna, Padmabījābha, Añkalodya, Pāniyaphala.

### **Regional names**

Makhanna (Hindi); Makhana (Beng.); Jaibar (Punj.); Makane (Mar.); Makhana (Guj.); Kautapadma (U.); Fox nut, Gorgon Fruit (Eng.).

### **Description**

***Euryale Salisb*** : A monotypic genus *Euryale* Salisb. represented by species *E. ferox* Salisb. A dense prickly aquatic herb; root stock thick. Leaves orbicular, corrugate. Flowers violet-coloured, partially submerged. Sepals 4, erect inserted on the edge of the torus above the carpels. Petals numerous, 3-5-seriate, shorter than the sepals. Stamens many, many-seriate, in bundles of eight; filaments

linear. Ovary 8-celled, sunk in the dilated top of the torus; stigma discoid, depressed concave; ovules few, parietal. Berry spongy, crowned with the persistent sepals. Seed 8-20; aril pulpy; testa thick, black.

**Euryale ferox Salisb.** : A densely prickly, stemless aquatic herb. Rootstock thick, short. Leaves 1-4 ft. in diam., oval or orbicular, green above, downy red or purple beneath, with strong spiny ribs. Lvs. floating.

Flowers 1-2 in. long, violet-coloured inside green and shining outside. Sepals with recurved spines on their backs. Petals about 20, narrowly ovate-oblong, inner smaller. fls. violet, blue or red in colour.

Berry 2-4 in. diam., nearly sound. Seeds about 20, from the size of a pea to that of a cherry. Fruit a berry, round and prickly, almost in size of orange.

### Flowering and Fruiting time

Plant flowers during the rains and fruiting stage begins afterwards. In some areas, plant commences to January-February and bears fruit in May-June.

### Distribution

Plant occurs eastwards to East Bengal and China; it is also in Kashmir and Oudh, Utter Pradesh in tanks and Jhils. It is found (in aquatic habitat and as an aquatic plant like lotus) in northern, central and western India and also in north Bihar in abundance in tanks and ponds; fresh water tank and Jhils in northern, central and western India.

### Chemical composition

Analysis of edible part of the seeds gave the following values : moisture 12.8, protein 9.7%, fat 0.1%, mineral matter 0.5, carbohydrates 76.9, calcium 0.02 and phosphorous 0.09%; iron 1.4 mg./100g.; carotene trace.

Seeds majorly contains carbosé (carbohydrate), protein, mineral substance, calcium, iron, phosphorus, carotene and other substances.

### Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha/rūkṣa

Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

**Properties and Action**

Karma	: Śukrajanana-sūkrastambhana-vājikaraṇa Prajāsthāpana Hṛdaya-Śoṇitasthāpana Balya-bṛīhaṇa Dāhapraśamana Grāhī Vistambhi
Roga	: Śukrameha-śukrakṣaya-napuṇsakatva Garbhāśaya dourbalya Pradara-prasavottara dourbalya Dourbalya Dāha Hṛdroga-raktapitta.

**Therapeutic uses**

The fruits are tonic, cardiac tonic, haemostatic and useful to check burning sensation, debility, weakness in females after delivery leucorrhoea and spermatorrhoea.

The farinaceous seeds are eaten after being roasted in hot sand. Seeds which may be of size of a pea or of a cherry, are black in colour and eaten raw or roasted. On roasting in hot sand the seed coat swells and bursts and can be easily peeled off. The seeds are available in market in the state of seeds attained after frying or roasting in hot sand (bhṛṣṭa bija or roasted seeds) and used as edible item with utility of farinaceous food. The seed flour is also used as a substitute for arrowroot. It is nutritious and is easily digested, it is also recommended as food for certain ailing conditions and also in health as light and easy digestible food item, particularly it is also acceptable during fasts (vrata and upavāsa) of cultural (for specific fasting), traditions supported with its sanctity in some religious ceremonies. Seeds are wholesome (pathya) in certain diseases.

The seeds are used in medicine owing to their medicinal efficacy, and potentiality of nutrient values in health as well as in diseases. The seeds are tonic, astringent and deobstruent.

It is useful as an aphrodisiac (vṛṣya) and conception-promoting-preserving or foetus stabilising (garbha sansthāpaka-prajā sthāpana); it allays burning sensation in body, pitta and blood provocation (pitta rakta prakopaṇa). It is strengthening body and tonning up body tissues (balya-brīhaṇa) and haemostatic (śoṇitasthāpana), semen promoting-propelling and checking the semen-discharge or delaying ejaculation (śukrajanana-śukra stambhana), cardiotonic and allaying provocation of vāta and pitta doṣa. Seeds are given in different forms in hṛidrogas, raktapitta, pradara, śukrameha and napuñśakatā.

**Part used :** Fruit.

**Dose :** 5-10 gm.

**Formulation :** Pouṣṭika cūrṇa.

## MAKHANNA ( मखान्न )

मखान्नं पद्मबीजाभं पानीयफलमित्यपि ।

मखान्नं पद्मबीजस्य गुणैस्तुल्यं विनिर्दिशेत् ॥

विषम्ब वृष्ट्यं रुक्षं च गर्भसंस्थापकं परम् ।

कफवातहरं बल्यं ग्राहि पित्तास्तदाहनुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Āmrāphaladi Varga, 91.*

## MĀLAṄGA (TUTAMALṄGA)

**Botanical name :** Lallemantia royleana Benth.

**Family :** Lamiaceae (Labiateace)

**Common name :** Tutamalanga-Tukhmalanga.

**Classical name :** Mālaṅga, Mālaṅgā, Bālaṅga

**Regional names**

Balanga, Balangu, Tutamalanga, Lokamalanga (Hindi); Balangu (Bomb.); Balanka (South.); Ghareika-

shmah, Tukhm malanga (Punj.); Tukmevalung (Tredy); Balangu, Tukhme Balangu (Pers).

### Description

Herbaceous erect, annual small herbs with angled stems, hoary-pubescent or glabrate herb; 15-45 cm. high. Leaves 1.25-2.5 cm. long (upto half to one inch long), opposite, ovate or oblong, 2.5 cm. long, coarsely crenate.

Flowers 5/3 cm. long (2/3 inch. long), pinkish shade, small, pale lilac, in numerous whorls in long interrupted spikes. Nutlets 2.5 mm. long narrowly oblong, black and smooth.

### Flowering and fruiting time

Farming season

### Distribution

Plant is cultivated in India for its mucilaginous seeds. It responds well to cultivation and it is grown to a small extents in Punjab. It ascends to 3,000 ft. elevation.

Plant requires rich, loamy, well-drained soil and frequently irrigation. Seeds are sown in September-October at the rate of 3-4 lb. per acre and the crop is harvested in April. An yield of 4-5 md. of seeds per acre is estimated.

### Kinds and varieties

The seeds of another plant *Salvia santolifolia* Boiss. (*Salvia aegyptiaca* L. var. *pumila* Hook. J.) are used as Tukhma Balanga particularly in northern India. Sometimes seeds of *Dracocephalum royleanum* Benth., belong to same family (Lamiaceae) are also considered substitutes/adulterants to the drug Tukhm-malanga. The seeds of Tukhmalanga are said to be imported from Persia or Indian market of drugs.

Seeds form raw materiel of drug Mālangā or Tūtamalaṅga-Tukhmalanga and the market crude drug consists of black seeds 5/16 cm. (1/8 inch long), triangular seeds when put into water (soaked) become mucilaginous, sticky, transparent, tasteless and fully brownish mucilage.

### Chemical composition

Seeds yield 0.8% of a light, green, semi-drying oil with the characteristics recorded (with sp. gr., sap. val., iod.

val., acid val. and unsapon matter (sitosterol) 0.28%. The mixed fatty acids contain stearic 3.2, palmitic 10.1, oleic 59.4 and linolenic 26.1 percent.

### Pharmacodynamics

Rasa	: Tikta, kaṣṭāya
Guṇa	: Picchila
Vīrya	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Vātапittahara

### Properties and action

Karma	: Soumanasyajanana-hṛdaya Śītasangrāhī <sup>1</sup> Sangrāhi-picchila Puṣṭikara Mūtrajanan-mūtradahaśāmaka Vraṇasothahara-vraṇavidāraṇa- vimlāpana
Roga	: Atisāra-raktatisāra-pravāhikā Vraṇasotha-vidradhi Hṛdroga-hṛddourbalya

### Therapeutic uses

The drug Mālanga is medicinally active as cooling sedative and diuretic properties for which the seed are valued and used in medicine.

Seeds are also employed in preparation of beverages. They are given internally as soothing drink in urinary troubles and other similar problems or also normally using a drink with soothing effect.

The seeds are also recommended for checking cough. A poultice of seeds is applied to abscesses, boils and inflammations.

The seeds of drug when moistened become coated with a translucent, tasteless and sticky type of mucilaginous substance. The seeds are, however, considered dangerous for oral uses, as when the seeds are internally taken and they are ingested in alimentary canal, the mucilage forms rigid peltate masses which interlocking with intestinal contents tend to occlude the lumen of the bowel.

The seeds are used in diarrhoea, dysentery and diarrhoeal complaint with gripping and blood. Seeds are frequently pasted over boil and abscesses for (vidāraṇa) coming out pus and purification or cleansing (śodhana).

**Part used :** Seeds.

**Dose :** 5-7 gm.

## MALAYAVACĀ

**Botanical name :** *Alpinia galanga* willd.

**Family :** Zingiberaceae

**Classical name :** Malayavacā

**Sanskrit names**

Malayavacā, Sugandhā, Sthūlagranthi, Kulañja, Kulañjana, Gandhamūla, Tīkṣṇamūla, Sthūlagranthi, Uragandha, Mahābharivacā.

**Regional names**

Kulanjan, Kulinjan (Hindi); Kulirldan (Mar., Guj.); Gerarattai (Tam.); Pencudarump (Tel.); Eestrakam (Andhra.); Khulanjan (Arab.); Khuskhidaru (Pers.); Greater galangal, Java galangal (Eng.); Galanga Cardamon (fruits-English).

**Description**

Plant is 6-7 feet high, and bears perennial rhizomes which are deep orange-brown in colour, aromatic, pungent and bitter. The fruits are about 1/2 inch long, constricted in the middle, and they contain 3-6 seeds. The latter are slightly pungent, with an aroma similar to that of the rhizome. Rootstock perennial and rhizome aromatic (but less odorous than chinese source plant *Alpinia officinarum* Hance rhizome). Herb 90 cm. - 180 cm. high (or up to 6-12 feet high) depending upon ecological conditions and stem leafy similar to plant of *Acorus calamus* or *Vaca*. Leaves 20-50 cm. (8-20 inches) x 3.75-12.5 cm. (1.5-5 inches), acuminate, pointed, smooth uppersurface green and lower surface (back) fadé colour. Flowers greenish white in colour. Fruits red when ripen, ovoid, 1.25-2.5 cm.

(1/2-1 inch.) long and attractive in matured state. Fruits are known as Galanga Cardamon.

### **Flowering and fruiting time**

Plant flowers during summers and fruiting afterwards.

### **Distribution**

It is native of Sumatra and Java and grows in South east Asian region. Plant is found in the Himalayas and southern-western India.

### **Kinds and varieties**

Rootstock is perennial, potato-like tuberous and odorous. Pieces of about 1-2 inches long, finger like size (C.) of rootstock, known as lesser Galangal, are available in market. *Alpinia officinarum* Hance. is another kind of source plant (native of China) drug. Its rootstock is smaller, reddish-white, intense odorous and pungent taste.

The source plant (native of China) of the lesser Galangal or Kulanjan is *Alpinia officinarum* Hence. Deshi Kulanjan or the greater Galangal is *Alpinia galanga* willd.

Former plant is mainly distributed mainly in the eastern Himalayas and south west India, Bengal, Malabar and other regions in country. It is found wild and the plants are also cultivated. Plant is native of Java and Sumatra.

### **Chemical composition**

The green rhizomes contain 0.04% essential oil. It consists of methyl-cinnamate (48%), cineol 20-30%, some comphor and probably d-pinene. Leaves also yield a volatile oil. Rhizome yield volatile oil 3/4-1%, and Kaempferine, a neutral, inodorous, tasteless crystalline principle, and galangin, alpinin and galangol (*A. officinarum*).

### **Pharmacodynamics**

Rasa	: Katu
Guṇa	: Tīkṣṇa, laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Katu

Doṣakarma	: Kaphavātaśāmaka	
<b>Properties and action</b>		
<b>Karma</b>	: Kanṭhya-svarya Kaphaghna Nādyottejaka-nāḍibalya Sītapaṛśamana-lekhana-uttejaka Mukhaśodhana-dīpana-pācana lālāsrāvajanana Anulomana Hṛdayāvasādaka Svāsahara Vājikaraṇa Sītapaṛśamana	
<b>Roga</b>	: Svarabhaṅga-svarabheda-gala (kanṭha)-svara (minmina-gadgada) vikāra Kāsa-śvāsa Prameha-bahumūtra Dhvajabhaṅga Śitādhikya (tvaggata) Mukhāśuddhi Agnimāndya-udarśula Vātika hṛdroga Nāḍidourbalya-vātavyādhi.	

### Therapeutic uses

The rhizomes are used in rheumatism and catarrhal affections, specially in bronchial catarrh. The drug is a depressant of the cardio-vascular system. Respiration in experimental animals is stimulated by small doses but depressed by larger ones. It has important action on the bronchioles. It is useful in respiratory troubles, especially of children. The rhizomes are also carminative and stomachic. They (fruits) are also used (in Malaya) as substitutes for cardamon.

The drug Malayavacā or Kulinjana is rhizome of 'greater galangol' (obtained from the plant *Alpinia galanga* Willd.) of commerce, and in drug trade as well as pharmaceuticals in India. The imported raw drug is (obtained from the plant *Alpinia officinarum* Hance of

China) rhizomes of 'lesser galangal'. Cut pieces of the dried rhizomes form the drug material practically. The rhizomes of 'lesser galangal' is smaller and reddish brown in colour and with stronger odour and pungent taste.

The drug Malayavacā is effective in hoarseness (svarabhanga) and sore throat. Pieces of rhizome are given for chewing in throat affections as specific remedy. Powder of rhizome is orally recommended in cough, throat affections, asthma coryza, catarrhal affections, impotency, nervine disorders, abdominal colic, anorexia, vāta vyādhi, urinary ailments (prameha) mouth foul, excess cold (cutaneous), indigestion and the ailments caused by provoked vāta and kapha humors.

**Part use :** Rhizome

**Dose :** Powder 1-3 gm. or 1-2 gm.

**Formulation :** Kulinjanādyavaleha.

## MALAYAVACĀ ( मलयवचा )

**महाभरी वचा** (यस्या लोकेकुलिङ्गन इतिनामान्तरं तस्यागुणानाहः)

सुगन्धाऽप्युग्रगन्धा च विशेषात्कफकासनुत्।

सुस्वरत्वकरी रुच्या हृत्कण्ठ मुखशोधिनी ॥

*Bhāvaprakāśa Nighantu, Harītakyādi Varga, 105.*

**अपरा सुगन्धा स्थूल ग्रथि** (यस्या लोके महाभरी वचा

इति नाम तस्या गुणानाह)

‘स्थूलग्रन्थिः सुगन्धा स्यात्तो हीनगुणा स्मृता।’

*Bhāvaprakāśa Nighantu, Harītakyādi Varga, 106.*

**कुलञ्जः-कुलिङ्गन**

कुलञ्जो गन्धमूलश्च तीक्ष्णमूलः कुलञ्गनः।

कुलञ्जः कटुतिक्तोष्णो दीपनो मुखदोषनुत्॥

*Rāja Nighantu, Pippalyādi Varga, 55.*

## MALLIKĀ

**Botanical name :** Jasminum sambac (Linn.) Ait.

**Family :** Oleaceae

**Classical name :** Mallikā

**Sanskrit names**

Mallikā, Śītabhīru, Mālatī, Sumanā, Hṛdyagandhā, Priyamvadā, Rājaputrī, Rātripuṣpi, Bhadravallī, Gourī.

**Regional name**

Motiyā, Mogrā, Belā (Hindi); Mogra (Mar.); Mogro (Guj.); Gundumalli (Tam.); Gundumalle (Tel.); Kolummige (Kann.); Nallamulla (Mal.); Arabian Jasmine Tuskan Jasmine (Eng.).

**Description**

A straggling, erect or sub-scendent shrub with broadly ovate or elliptic leaves 1.5-3 in. long and white fragrant flowers, corolla usually doubles.

Shrub, often more or less climbing, branchlets and petioles pubescent. Leaves ovate, nearly glabrous.

Flowers white, fragrant, in terminal cymes, sometimes solitary calyx-teeth hairy, 1/4 in. long; corolla-lobes as long as tube. Fls. colour white, pinkish-violet in bud, usually double, in few or many. Ripe carpels 1 or 2 nearly globose flowered clustered.

**Flowering and fruiting time**

Plant flowers in summer season, and also in hot and rainy season.

**Distribution**

Plant is cultivated throughout India and in most tropical countries on account of its delightfully fragrant flowers in a number of varieties.

**Kinds and varieties**

Different varieties and types are planted in gardens. Flowers are in numerous varieties, erect and climbing with large and small, double and single flowers.

**Distribution**

It is very much cultivated in gardens for its odorous flowers which are largely used in worship, making garlands and also for perfumery purpose.

### **Chemical composition**

Flowers contain a yellow pigment, used as a substitute of saffron.

### **Pharmacodynamics**

Rasa	: Tikta, kaṭu
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipaka	: Kaṭu
Doṣakarma	: Tridoṣaśāmaka.

### **Properties and action**

<b>Karma</b>	: Stanyasaṅgrahaṇīya Sothahara Vraṇaropanā Kuṣṭhaghna Varṇya Grāhī <sup>1</sup> Roktaprasādana (raktaśodhaka) Garbhāśayottejaka Ārtavajanana Vṛṣya-kāmottejaka Pittapraśamana Cakṣuṣya Viṣaghna Tvacya Sugandha-souanasayajanana
<b>Roga</b>	: Stanaśotha Kuṣṭharoga Carmavikāra-kaṇḍū Netravikāra Mukharoga-mukhapāka-dantaroga Vraṇa Raktaja pravāhikā-Atisāra Raktavikāra-raktasrāva-raktapitta Rajorodha-kaṣṭārtava Kāmaśaitya Śiroroga Viṣa Aruci

Dāha  
Pālitya  
Yoniśūla  
Apasmāra.

### **Therapeutic uses**

The drug mallikā is medicinally potent. The flowers and other part of plant drug are used in medicine. A lotion made of the flowers is used for washing the face and eyes. Crushed flowers are used as a lactifuge. A decoction of the leaves is used for fevers. Leaves are applied as a poultice for skin complaints and ulcers. Roots are used with leaves in eye lotions.

Being an aromatic as well as medicinal plant, the flowers give perfume as perfume oil is extracted which is used an aromatic item, and also of cosmetic and perfumery value.

The plant is much valued for its exquisitely fragrant flowers which are widely used as common, favourite and pleasant flowers which have also religious importance.

**Parts used :** Roots, leaves, flowers.

**Dose :** Decoction 50-100 ml.

## **MALLIKĀ ( मल्लिका )**

‘मालती मल्लिके तिक्के सौभ्यायात् पित्तनाशने ।’

*Suśruta Saṃhitā, Sūtra, 46.*

मल्लिकोष्णा लघुर्वृष्णा तिक्का च कटुका भवेत् ।

वातपित्तास्तदृग्व्याधिकुष्ठारुचि विषब्रणान् ॥

*Bhāvaprakāśa Nighaṇṭu.*

**मालती**

**क.** मालती सुमना जाती हृद्यगन्धा प्रियम्बदा ।  
राजपुत्री रात्रिपुष्पी चेतिका तैलभाविनी ॥

**ख.** मालती तुवरा तिक्का कटूष्णा दोषनाशिनी ।  
शिरोऽक्षिमुखदत्तार्ति विषकुष्ठाब्रणास्त्रजित् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1473-1474.*

### मल्लिकाऽस्फोता वन्यजातिश्च

- क. भूमण्डली भूमिमण्डो भूमिदण्डो प्रबोधनी ॥  
 प्रमोदनी विजयनी भूपदी मुक्तबन्धना ।  
 मल्लिका मदनीया स्याद् त्रिपुटा शीतभीरुका ॥  
 अष्टापदी सुरुपा च तृणशून्यं गवाक्षिका ।  
 मदयन्ती सुवर्षा स्यान्याऽस्फोता वनोद्भवा ॥
- ख. मल्लिका कटुका तिक्ता लघूष्णा शुक्रला हरेत् ।  
 वातपित्तास्त्रहद्रोगकुष्ठारुचिविषप्रणुत् ॥

*Kaiyadeva Nighantu, Oṣadhi varga, 1469-1472.*

### मल्लिका

मल्लिका भद्रवल्ली तु गौरी च वनचन्द्रिका ।  
 शीतभीरुः प्रिया सौम्या नारीष्ठा गिरिजा सिता ।  
 मल्ली च दमयन्ती च चन्द्रिका मोदिनीमनुः ॥

### मल्लिका गुणः

मल्लिका कटुतिक्ता स्याच्चक्षुष्या मुखपाकनुत् ।  
 कुष्ठविस्फोट कण्डूति विष व्रणहरा परा ॥

*Rāja Nighantu, Karavīradi varga, 81-82.*

‘मालती मल्लिके तिक्ते सौरभ्यात् पित्तनाशने ।’

*Suśruta Saṁhitā.*

‘मल्लिका सम्भव पुष्पं तिक्तं जयति मारुतम् ।’

*Śodhala.*

### वार्षिकी-मल्लिका

वार्षिकी शीतला लघ्वी तिक्ता दोषत्रयापहा ।  
 कर्णाक्षिमुखरोगद्वी तत्तैलं तद्दुणं स्मृतम् ॥

*Bhāvaprakāśa.*

वार्षिका शिशिराहद्या सुगन्धिः पित्तनाशिनी ।

कफवात विषविस्फोट क्रिमिदोषामनाशिनी ॥

*Rāja Nighantu.*

मुद्ररो मधुरः शीतः सुरभिः सौख्यदायकः ।

मनोज मधुपानन्दकारी पित्तप्रकोपहत् ॥

*Rāja Nighantu.*

**पालित्ये**

महानील तैले

*Caraka Samhitā, Cikitsā, 26-171.*

**योनिशूले**

‘पृथकं मातुलुंगस्य मूलानि मदयन्तिकाम्।  
पिबेत् सलवणौर्मद्ये:।’

*Caraka Samhitā, Cikitsā, 30-56.*

**अपस्मारे**

महापञ्चगव्यघृते।

*Caraka Samhitā, Cikitsā, 10-21.*

**दाहप्रशमनार्थम्**

‘कर्पूरमल्लिकामालाः हाराः सहरिचन्दनः।’

*Aṣṭāṅga Hṛdaya, Sūtra, 3-40.*

**अतिसारे**

श्रीपण्ड्या मदयन्त्याश्च यूथिकायाश्चपल्लवम्।  
.....कारयेत्॥

स्नेहाम्ल सलवणोपेतान् खण्डान् संग्राहिकान् परम्॥

*Caraka Samhitā, Cikitsā, 8-129/130.*

**नेत्ररक्षार्थम्**

‘मालतीमल्लिकापुष्पैर्वद्वाक्षी निवसेन्निशाम्।’

*Aṣṭāṅga Hṛdaya, Sūtra, 24-22.*

**नस्यधूमगते विषे**

तत्र दुधैर्गवादीनां सर्पिः सातिविषैः शृतम्।

पानै नस्यै च सश्वेतं हितं समदयन्तिकाम्॥

*Suśruta Samhitā, Kalpa, 1-65.*

**अङ्गरागे**

हरीतकी चूर्णमरिष्टपत्रं चूतत्वचं दाढिमपुष्पवृन्तम्।

पत्रञ्जदद्यान् मदयन्तिकायाः लेपोऽङ्गरागे नरदेव योग्यः॥

*Suśruta Samhitā, Cikitsā, 25-43.*

**रक्तपित्ते**

रोधो वृषस्तण्डुलीयः कृष्णमृन् मदयन्तिका।

रक्तपित्तहराः क्वाथास्त्रयः समधुशकरा॥

*Aṣṭāṅga Hṛdaya, Cikitsā, 2-26-27.*

# MĀMSAROHINĪ

## Botanical name

Soymida febrifuga (Roxb.) A. Juss.

Syn. Swietenia febrifuga Roxb.

**Family :** Meliaceae

**Classical name :** Māṁsarohinī

**Sanskrit names**

Māṁsarohinī, Rohinī, Atiruhā, Vṛttā, Carmakaśā, Prahārvallī, Vikaśā, Vīravatī, Vasā, Māṁsarohinī, Sulumā-sulomakaraṇī.

## Regional names

Rohana (Hindi); Rohan (Beng.); Rona; Rohini (Guj.), Kaim (Tam.); Sonida manu (Tel.); Sukhani bhanu (Kann.); Indian Red wood (Eng.).

## Description

Trees, leaves clustered at the tips of branches; parapinnate up to 40 cm. long; rachis and midrib red; leaflets 3-6 pairs; obliquely elliptic, 5-10 cm. long. Bark exudes blood-red after incision.

Flowers in large terminal panicles, ca 8 mm. across, white. Fruits pendulous, 5-6 cm. long, 5-valved.

## Flowering and fruiting time

Plant flowers and fruits in March-May.

## Distribution

It occurs in hilly and drier forests and it is found in north-western, central and southern India.

## Chemical composition

Bark contains a bitter resinous substance and tannin (17-41%).

## Pharmacodynamics

Rasa : Kaṣāya, kaṭu

Guṇa : Laghu, rūkṣa

Vīrya : Śīta

Vipāka : Katu

Doṣakarma : Kaphpittasāmaka

**Properties and action**

<b>Karma</b>	: Vrañarohaṇa-vrañaropana-savarṇikaraṇa Stambhana Raktastambhana Jvaraghna-viṣamajvara pratibandhana Sandhāniya Rasāyana Kaṇṭhaśuddhikara Viṣya-pouṣṭika Kṛmighna Vātāghna Rucya Varṇya Balya
<b>Roga</b>	: Vraṇa-kṣata Śotha Mukha-danta roga Atisāra-pravāhikā Raktapitta Jvara-viṣamajvara-jīrṇajvara Raktasrāva Asthibhagna-māṁsakṣata Uraḥkṣata Kṛmi Sangrahaṇī Vaivarṇya Dourbalya.

**Therapeutic uses**

The drug Māṁsarohinī is chiefly a vrañarohaṇa and vrañaropana (wound healer) herbal agent which is stambhana, haemostatic (raktastambhana), febrifuge, savarṇikaraṇa (for skin colouring or pigmentation normalcy), sandhāniya (union promotor) and rasāyana.

The bark is used both externally and internally in various diseases. Local application of bark paste, decoction lotion wash and for dressing in ulcers, fracture, mouth and dental diseases, inflammation, trauma, bruises and other

similar conditions. Fruits are applied for making skin colour normal (savarnīkaraṇa). It is applied in māmsa kṣata and similar conditions.

Internally it is administered in diarrhoea, dysentery, raktapitta, chronic fever, malarial fever and general and sexual debility. Māmsarohinī is also a rasāyana drug.

**Parts used :** Bark

**Dose :** Powder 3-6 gm., Decoction 25-50 ml.

## MĀMSAROHINĪ ( मांसरोहिणी )

मांसरोहिण्यतिरुहा वृत्ता चर्मकषा वसा ।

प्रहारवल्ली विकशा वीरबल्यपि कथ्यते ॥

स्यान्मांसरोहिणी वृच्छा सरा दोषत्रयापहा ।

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 132.*

### मांसरोहिणी

प्रहारवल्ली विकसाऽतिरुहा वीरबल्यपि ।

मांसरोहा चर्मकषा वृन्ता पिशितरोहिणी ॥

मांसरोहा रसे पाके मधुरातुवरा हिमा ।

सर्वा संग्रहणी हन्ति नात्र कार्या विचारणा ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1600-1601.*

### रोहिणी-मांसरोहिणी

क. मांसरोहिण्यतिरुहा वृत्ता चर्मकषा च सा ।

विकसा मांसरोही च ज्ञेया मांसरुहा मुनिः ॥

ख. अन्या मांसी सदामांसी मांसरोहा रसायनी ।

सुलोमा लोमकरणी रोहिणी मांसरोहिका ॥

*Rāja Nighaṇṭu, Candanādi varga, 145-146.*

### मांसरोहिणी गुणः

विकसा कटुका तिक्ता तथोष्णा स्वरसादनुत् ।

रसायनप्रयोगाच्च सर्वरोगहरा मता ।

कषाया ग्राहिणी वर्ण्या रक्तपित्तप्रसादनी ॥

### रोहिणीद्वय गुणः

रोहिणी युगलं शीतं कषायं क्रिमिनाशनम् ।

कण्ठशुद्धिकरं रुच्यं वातदोष निसूदनम्॥

*Rāja Nighaṇṭu, Candānadi varga, 147-148.*

रोहिणीवातहृत् कासश्वासशोणितनाशनी ।

रोहिणी द्वितीयं बल्यं रक्तपित्तनिषूदनम्॥

पौष्टिकं शीतलं कण्ठशुद्धिकारि कषायकम् ।

रुच्यं सरं च मधुरं वृष्यं च कृमिवातहन्॥

*Nighaṇṭu Ratnākara.*

## MĀNAKANDA

**Botanical name :** Alocacia indica (Roxb.) Schott.

**Family :** Araceae

**Classical name :** Mānakanda

**Sanskrit names :** Mānaka, Mahāpatra, Mānakanda.

**Regional names**

Mankand (Hindi); Mankachchu (Beng.); Mansachchu (Mar.); Giant Taro (Eng.).

**Description**

A tall aroid with an underground rhizome, bearing a succulent stem, 4-8 inches in diameter.

Plant 7.5 cm. - 15 cm. high (3-6 feet tall). It somewhat resembles with other Alocacia species (Arabi or Bunda). Stem comparatively more thick 10 cm. - 20 cm. in diam. Leaves thick green colour, 60 cm. - 90 cm. (2-3 feet) long, triangular sagitate. Flowers on many peduncles, often 10-20 cm. long, (4-8 ft.), male and female flowers separately, covered with greenish yellow spathe. Male fl. white and female pale-yellow often. Fruit berry, round, 0.625-1 cm. in diam; red when ripens. Rootstock tuberous, roots from stem.

**Distribution**

It is cultivated in Assam and Bengal as a food crop. It is also an ornamental plant.

**Chemical composition**

Rhizome of Mānaka contains potassium oxalate, calcium and starch.

### Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

### Properties and action

Karma	: Śothahara Vedanāsthāpana Vātaśāmaka Śūlapraśamana Anulomana-vibandhahara Raktarodhaka-raktapittahara Mūtrala Balavardhaka Arśoghna.
Roga	: Śotha-sarvāṅga śotha Arśa Pāṇḍu Udararoga-udaraśūla-vibandha Yakṛtpliha vikāra Mūtrakṛcchra Dourbalya Sandhivāta-āmavāta Jihvāroga-jihvājāḍya (jihvāstambha) Karṇaroga-karṇaśūla-karṇasrāva.

### Therapeutic uses

The stems and root-stocks are edible, if boiled and washed thoroughly. It yields a pure white starch when the root is pulped and washed. The flour obtained is a light nutritous food, suitable for invalids. It is somewhat mucilaginous and is considered to be more easily digestible than rice.

The leaf juice is astringent. The rhizome is stated to act as a mild laxative and diuretic, and is considered useful in ansarca.

The drug Mānaka or Mānakanda has been prescribed in various diseases in Indian medicine. The ash of

mānaka mixed with salt and oil should be rubbed on the tongue for removing palsy (stiffness) of tongue (jihvājādya) as incorporated by Cakrapāṇi (Cakradatta, 56-53). Further, Mānaka stands as main component drug, in two classical formulations namely Mānaka pāyasa (Cakradatta, 37/57-98) and Mānaka-ghṛta (Vaidya manoramā, 19-25) which have been indicated in management of udararoga (abdominal diseases) and oedema (śotha) respectively. In addition, Mānakādya guṭikā has been recommended in treatment of liver and splenic disorders (Cakradatta, 38/15-18).

**Parts used :** Tuber, stem, leaves.

**Dose :** Leaves powder 5-10 gms., Juice 10-20 ml.

#### **Formulations**

Mānaka ghṛta, Mānakādi guṭikā, Mānamanḍa.

## **MĀNAKANDA ( मानकन्द )**

मानकः स्यान्महापत्रः कथ्यन्ते तदुणा अथ ।

मानकः शोथहच्छीतो रक्तपित्तहरो लघुः ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka Varga, 71.*

#### **स्थूलकन्दः माणकश्च**

अ. स्थूलकन्दो ग्रामकन्दो महाकन्दस्तु माणकः ।

स्थूलकन्दः कटुः स्वादुः नात्युष्णास्तुवरो गुरुः ॥

ब. रुक्षो विष्टम्भकी वातकफकृत् पित्तशोफजित् ।

माणको मधुरः शीतो रक्तपित्तहरो गुरुः ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1615-1616.*

## **प्लीहा-यकृच्चिकित्सायाम् माणाद्य गुटिका**

*Cakradatta, 38/15-18.*

#### **शोथेमाणक घृतम्**

मानकक्षाथकल्काभ्यां घृतप्रस्थं विपाचयेत् ।

एकजं द्वन्दजं शोथ त्रिदोषश्च व्यपोहति ॥

*Vṛndamādhava, 39-25.*

*Bhāvaprakāśa, Śothādhikāra, 42-36.*

*Cakradatta, 39-36.*

### उदररोग चिकित्सायां माणकप्रयोगः

पुराणंमाणकं पिष्ठा द्विगुणीकृततण्डलम्।  
 साधितं क्षीरं तोयाम्यामध्यसेत् पायसन्तु तत्॥  
 हन्ति वातोदरं शीघ्रं ग्रहणीं पाण्डुतामपि।  
 सिद्धो भिषग्भिराख्यातः प्रयोगोऽयं निरत्ययः॥

*Cakradatta, Udara Cikitsā, 37/57-58.*

### जिह्वाजाड्ये (जिह्वरोग चिकित्सायां) माणक भस्म प्रयोगः

‘जिह्वाजाड्यं चिरजं माणकभस्म लवणतैलधर्षणं हन्ति।’

*Cakradatta, Mukharoga Cikitsā, 56-5.*

## MANDAPĪ

**Botanical name :** Arachis hypogaea Linn.

**Family :** Fabaceae

**Classical name :** Maṇḍapi

**Sanskrit names :** Maṇḍapī, Snehabija, Bhuśimbi.

#### Regional names

Mooṅgphali (Hindi); Ciniābadām, Moongphali (M.P.); Cini Badam (Beng.); Bhui Mug (Mar.); Verusangulu (Tel.); Verkalai (Tam.); Nela gadale (Kann.); Nelakadala (Mal.); Groundnut, Peanut, Monkey Nut (Eng.).

#### Description

Semi-erect, much branched, slightly hairy annual herbs. Leaves stipulate, even-pinnate; stipules 2-4 cm. long, adnate to the petiole; leaflets 2 pairs, ovate or obovate or elliptic; obtuse or mucronate, 2 - 6.5 x 0.7 - 3.2 cm., glabrous or faintly pilose beneath.

Flowers solitary, axillary, or few in axils, pedicellate, primary bracts ovate-lanceolate, 10-14 x 4-5 mm., secondary bracts bifid, hypanthium pubescent. Corolla yellow, streaked with red, 0.5 - 1.5 cm. long; standard rounded narrowed towards base; wing free; keel beaked, incurved. Stamens 9. Pedicel elongates soon and enter the ground where ovary develops into 1-4-seeded jointed turgid pods.

A small branched herb which grows erect (1-2 feet high), or trails on the ground and bears small yellow flowers. After fertilisation the base of the every develops a long stalk (gynophore) which pushes the ovary into the soil where it begins to develop into a pod maturing in about 2 months. Cylindrical reticulated pods or nuts (1-2") usually contain 2 seeds within outer shell. Each seed is covered by a coloured seed-coat.

### **Flowering and fruiting time**

Plant flowers in August-Setember and fruits in October-November.

### **Distribution**

Plant is cultivated commercially under crop farming for edible seeds as well as seed-oil in different regions of country. *Arachis hypogaea* Linn. is one of the most important oil-seed crops (for groundnut oil production on large scale) of the warmer region of the world on commercial scale.

Brazil is regarded as the home of the groundnut but it is now cultivated in tropical and sub-tropical countries. The major groundnut producing countries are India, China, the U.S.A. and West Africa. Groundnut is also cultivated in Burma, the East Indias, Nigeria and in Southern Europe.

### **Chemical composition**

The chemical composition of groundnuts (Indian) in general follows (per 100 g.) : moisture 7.9, protein 26.7, fat 40.1, carbohydrates 20.3, fibre 3.1, ash 1.9, Cal. val. 549, calcium 0.05, phosphorous 0.39, Iron (mg./100g.) 1.6; Vitamins (100 g.) A (AU) 63, B<sub>1</sub> 300 (AV); and nicotinic acid (mg.) 14.1%. Chemical profile of roasted nuts (Indian) varies (per 100 g.) : moisture 4.0, protein 31.5, fat 39.8, carbohydrate 19.3, fibre 3.1, ash 2.3, Cal. val. 561, Calcium 0.65, Phosphorus 0.44 and Iron mg. (100 g.) 0.3.

### **Pharmacodynamics**

Rasa	: Madhura, kaṣāya
Guṇa	: Snigdha

Vīrya : Uṣṇa  
 Vipāka : Madhura  
 Doṣakarma : Vātakaphakāraka

### Properties and action

Karma	: Balya
	Mṛdusāraka
Roga	: Dourbalya.

### Therapeutic uses

The groundnut is most common and favourite edible article which may be eaten either raw or after roasting but in general, roasted one are preferred. They are used in numerous ways, salted, sugared, or mixed with sweetmeats and other edible preparations. Groundnuts prove rather indigestible owing to their high oil content, and also because in chewing, the kernels are not broken into sufficiently small particles. Groundnuts are popular since they are within reach from common man to elite society in several forms and various modes and purposes of household utility and dietary requirements.

Groundnuts are useful for their high nutritive values. Maṇḍapi (groundnut) is medicinally potent. Oleum Arachis or Maṇḍapi taila is useful which is sometimes used in place of olive oil. Kernels (seeds) are tonic and nutritive and uṣṇa (heating), madhura and snigdha in properties. The oil is mṛdusāraka to some extent. It increases vāta and kapha. Excess use of groundnut may cause disfavour (ahita) in body particular mouth orifice abdomen and other parts concerned, and for the instance, it can cause vertigo sometimes and heaviness of stomach when groundnuts are consumed in excess.

**Parts used :** Seed, oil.

**Dose :** Seeds, Seed oil, Edible seeds.

## MANDAPĪ ( मण्डपी )

मण्डपी मधुरा स्निग्धा वातला कफकारका ।

ग्राहका बद्धवचञ्चि ततैलं तदुणं स्मृतम् ॥

*Nighaṇṭu Ādarśa, Pūrvārdha, 396.*

# MANDŪKAPARNĪ

**Botanical name**

Centella asiatica (Linn.) Urban.,

Syn. *Hydrocotyle asiatica* Linn.

**Family :** Apiaceae (Umbelliferae)

**Classical name :** Maṇḍūkaparnī

**Sanskrit names**

Maṇḍūkaparnī, Māṇḍūki, Brāhmī, Sarasvatī.

**Retional names**

Bengsag, Brahmi (Hindi); Thulkumi, Dhulkudi (Beng.); Karivana (Mar.); Khandbrahmi (Guj.); Vallarikiri (Tam.); Mandukabrahmi (Tel.); Indian Pennywort (Eng.).

**Description**

Trailing herbs; faintly aromatic; rooting at the nodes, young parts finely pubescent. Leaves long-petiolate reniform, crenate or dentate, deeply cordate, stipulate. Lvs. 0.5-2.5 in., orbicular, often lobid, glabrous or nearly so and shining. Stipules adnate to petioles.

Umbels several at a node with 2 involucral bracts, each 3-5 flowered. Flowers pink or deep red; sessile. Petals ovate, acute, pink. Fruits ovate to orbicular, primary ridges prominent; vittae absent. Carpels carpels ablong, subcylindric, curved, much longer than broad, slightly compressed. Fruits 1/8-1/6 in., carpels reticulate-rugose, each with 9 curvilinear subsimilar ridges and 2 within the commissure; pericarp thickened, woody, white.

**Flowering and fruiting time**

Plant flowers and fruits during summer. or May-June.

**Distribution**

Plant occurs almost throughout India from the base of Himalaya to Ceylon (up to 2,000 ft. altitude). It is found along streams, river-beds, tanks or ponds and moist places. Sri Lanka, Malaysia, and in all tropical and subtropical regions of the world.

### Chemical composition

Plant contains alkaloid hydrocotylin ( $C_{22} H_{33} NO_8$ ), glycoside asiaticoside (0.07-0.12%) vellerine, a white crystalline, bitter, medicinally potent principle, volatile oil in little quantity, fixed oil, resinous substance, pectic acid, ascorbic acid and other substances. Glycosides and volatile oil are generally found in green leaves of the plant drug. Dried herb contains centoic acid. ( $C_{20} H_{48} O_6$ ) and centellic acid ( $C_{30} H_4 O_6$ ). *Centella asiatica* (Linn.) Urban plant contains various active principles and other constituents which are under detailed phytochemical screening and allied studies.

### Kinds and varieties

Presently the source plants of Brāhmī and Māndūkaparṇī are botanically identified and determined as *Bacopa monnieri* (Linn.) Pennel. and *Centella asiatica* (Linn.) Urban. respectively. Brāhmī is also classically named and considered as Aindri.

### Pharmacodynamics

Rasa	: Tikta-Anurasa : Kaṣāya
Guṇa	: Laghu
Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittasāmaka

### Properties and action

<b>Karma</b>	: Medhya-medhya rasāyana-mastiṣkabalya-sāmaka Rasāyana-vayaḥsthāpana-balya Hṛdaya Sothahara Agnidīpana Kaphaniḥsāraka Pramehaghna Stanyajanana-stanyaśodhaka Āmapācana-jvarahara.
<b>Roga</b>	: Buddhimandatva-smṛtihrāsa-mastiṣkadourbalya

Unmāda-apasmāra  
 Agnimāndya-grahani  
 Hṛdvikāra-hṛddourbalya-hrcchotha  
 Kāsa-śvasa-svarabheda  
 Prasavottara vyāpat-stanyakṣaya  
 Kuṣṭha-granthika kuṣṭha-jīrṇa  
 vrana-kṣayaja  
 Phiraṅga-upadamśa  
 Gaṇḍamāla-ślipada  
 Āmadoṣa-āmajanita vikāra  
 Pisasa-śoṣa  
 Vāyuvikāra  
 Kamalā-pāṇḍu  
 Piṭika.

### **Therapeutic uses**

Asiaticoside has been shown to be active in the treatment of leprosy. It probably acts by dissolving the waxy covering of *Bacillus leprae*, the bacillus thus becomes fragile and may easily be destroyed by the tissues or by some other drug. The results of injections of the solution prepared by Boiteau are reported as being remarkable. Leprosy nodules are broken down, diffuse infiltrations disappear, perforating ulcers and lesions on the fingers heal and most remarkable of all, eye lesions rapidly cured if treatment is given before the posterior chamber of the eyes is involved. Asiaticoside and oxy-asiaticoside which is prepared by permanganate oxidation of asiaticoside, have been employed in the treatment of certain types of tuberculosis.

The plant drug Maṇḍūkaparṇī enjoys a good reputation in Indian systems of medicine where it is credited for its effective medicinal potentiality. The drug is an alternative, diuretic, tonic and antidermatosis. An infusion of the plant is used in the treatment of leprosy and is known to ameliorate the symptoms of disease and to improve the general health of the patient. The leaves are commonly employed but the use of whole plant is suggested. An usual dose for oral administration is 5-10 grains of the plant powder thrice daily. In larger doses, the drug is a stupefying narcotic, producing giddiness and sometimes coma.

The drug Maṇḍūkaparṇī or Māṇḍūkī is chiefly medhya (intellect-promoting) and kuṣṭhaghna (anti-leprotic) herbal agent; which is cordiotonic (hṛdya), stomachic (dīpana), tonic (balya), restorative (rasāyana), jvaraghna (febrifuge), stanyajanana (galactogogue) etc. in general.

**Parts used :** Whole plant.

**Dose**

Whole plant powder 3-5 gm., Juice 10-20 ml., Root powder 0.5-1.5 gm.

**Formulations**

Brāhmī pānaka, Brāhmī taila, Sārasvatāriṣṭa, Sārasvata ghṛta, Brāhma ghṛta.

**Gaṇa**

Tiktakandha, Prajāsthāpana, Vayahsthāpana (Caraka Saṃhitā), Tikta varga (Suśruta Saṃhitā).

## MANDŪKAPARNĪ ( मण्डूकपर्णी )

रसायनार्थम्

‘मण्डूकपर्ण्या: स्वरसः प्रयोज्या: क्षीरैण.....।’

*Caraka Saṃhitā, Cikitsā, 18-176.*

पुष्ट्यायुर्बलारोगकरत्वे

‘मण्डूकपर्ण्या: कल्पोऽथ शुण्ठीमधूकयोस्तथा ।’

*Caraka Saṃhitā, Cikitsā, 16.*

पिटिकायाम्

‘रसौ मण्डूकपर्ण्या तु प्रलेपान् पिटिकायाम् ।  
.....संप्रणाशयेत् ।’

*Śodhala, Granthyādhikāra.*

मेध्य रसायनम्

मण्डूकपर्ण्या: स्वरसः प्रयोज्यः क्षीरैण यष्टीमधुकस्य चूर्णम् ।

आयुप्रदान्यामयनाशनानि बलाग्निवर्ण स्वरवर्धनानि ।

मेध्यानि चेतानि रसायनानि..... ।

*Caraka Saṃhitā, Cikitsā, 1/3-30*

## मेधायुष्यकामीये मण्डूकपर्णी

हृतदोष एवं प्रतिसंसुष्ट भक्तः यथाक्रमम् आगारं प्रविष्य  
मण्डूकपर्णी स्वरसमादाय सहस्र संघाता भिहूतं कृत्वा यथाबलं पयसा  
आलोड्य पिबेत् ।

पयोऽनुपानं वा तस्यां जीर्णायां यवान्नं पयसोपयुज्ञीत् ।

तिलैर्वा सह भक्षयित्वात्रीन् मासान् पयोऽनुपानं जीर्णेपयः  
सर्पिरोदनइत्याहारः एवमुपयुज्ञन् ब्रह्मवर्चसौ श्रुति निगादौ भवति,  
शतवर्षामायुरवाप्नोति ।

त्रिरात्रोद्योषितश्च त्रिरात्रमेतां मक्षयेत् त्रिशत्रादुर्धर्वं पानः सर्पिरित  
चोपयुज्ञीत् ।

बिल्वमात्रं पिण्डं वा पयसाऽलोड्य पिबेत् । एवं दशरात्रमुपयुज्य  
मेधावी शतवर्षायु भवति ।

*Suśruta Samhitā, Cikitsā, 28-4.*

## वायुविकारे

शालूरपर्णी मालूरमूलामयमधुप्लुता ।

शंखपुष्पीसहिता सेव्या वाचां विशुद्धये ॥

*Bhāvaprakāśa, Cikitsā, 1-659.*

## कासे शोषे च

मण्डूकपर्ण्याः कल्पोऽयं यष्टयाः विश्वौधस्य च ।

*Aṣṭāṅga Hṛdaya, Cikitsā, 3-119.*

मण्डूकपर्ण्याः शुण्ठ्याश्च ब्राह्म्याश्च मधुकस्य च ।

तद्वुणः सर्वरोगघ्ने विधिर्नार्गबलाः समः ॥

*Kāśyapa Samhitā, Page 109.*

## रसायने

मण्डूकपर्णी रसायनम् ।

*Suśruta Samhitā, Cikitsā, 28-4.*

मण्डूकपर्णीमपि भक्षयन्ते भृष्टां धृते मासमन्नभक्ष्याः ।

जीवन्ति कालं विपुलं प्रगल्भ स्तारुण्यलावण्यगुणोदयस्तथा ।

*Aṣṭāṅga Hṛdaya, Uttara, 39-165.*

## पीनसे

मण्डूकपर्णी मरिचकुलत्थैः साधु साधितः ।

कषायः पीनसार्तिंष्ट्रः कोष्णाम्बु पिबतोनृणाम् ॥

*Vaidya Manoramā, 16-69.*

## कामलायाम्

मधुनानिशया धात्रा क्षीरेण वा मिश्रितः प्रगोपीतः ।

स्यान् मण्डूकीस्वरसः कामलिनां हितकरो नृणाम् ॥

*Vaidya Manoramā, 10-2.*

# MAÑJIṢṬHĀ

**Botanical name :** *Rubia cordifolia* Linn.

**Family :** Rubiaceae

**Classical name :** Mañjiṣṭhā

**Sanskrit names**

Manjiṣṭhā, Vikasā, Yojanavallī, Rataṅgī, Bhaṇḍīrī-  
Bhaṇḍī, Aruṇā, Kālā Vastrarañjinī, Mañjūṣā, Samaṅgā,  
Vikasā, Kālameśikā.

**Regional names**

Majith (Hindi); Manjistha (Beng.); Majith (Guj.);  
Manjitti (Tam.); Tamravalli (Tel.); Manjustha (Kann.);  
Manjetti (Mal.); Fubb (Ara.); Runas, Rodak (Pers.); Indian  
Madder (Eng.).

**Description**

A deciduous climber with weak flexible stems upto  
40 feet high and 0.25 in. diam. Basal portions of stems usu-  
ally persistent and often softly woody. Branches quadran-  
gular, remorsely scabrid or glabrous.

Leaves 4 in. whorl, two often larger and with longer  
petioles, 1.5-4 in. long, ovate, acute, base cordate, scabrid  
or smooth with 5-7 strong basal nerves, prominent and usu-  
ally remorsely scabrid beneath. Petiole 2-4 in. long. Upper  
leaves often acute at base and with shorter petioles.

Flowers less than 1 in. diam. dark red or pinkish  
brown, in terminal cymose, leafy panicles, the branches tri-  
chotomous, spreading, upto 8 in. long, with foliaceous  
bracts.

Fruits 0.2 in diam., globose, dark purple or black  
fleshy, succulent, with red juice. Seeds small 2.

### **Flowering and fruiting time**

Plant flowers during rains or July-September, and its fruiting stage begins onwards i.e. September-November.

### **Distribution**

It is commonly occurring throughout the hilly regions in India, ascending to 8,000 ft. eltitude. Frequently in the Himalayan region of country from the North-west Frontier eastwards on the Himalaya (upto approx. 2,500 m.) and south to Ceylon and the Malay Peninsula; also in China, Japan, Java and Tropical Africa. Plant is generally found in Uttar Pradesh, the Sub-Himalayan tracts of Rohilkhand and north Oudh and other similar areas.

### **Chemical constituents**

The plant *Rubia cordifolia* Linn. (*Manjiṣṭhā*) contains various chemical components which belong to the anthraquinone group. Saponins and some napthlene derivatives are also isolated. It contains Alizarin, pseudoparpurins, Rubiadin alongwith its glucoside, lucidin, Asperuloside, purpurin and Manjisthin.

### **Pharmacodynamics**

Rasa	: Tikta, Kasīya, Madhura
Guṇa	: Guru, rūkṣa
Virya	: Usṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittasāmaka

### **Properties and action**

Karma	: Raktaśrādhanā-raktaśodhana Varṇya-tvacya Mastiṣka-nādiśāmaka Dipāna-pācana-āmapācana Stambhana Kṛmighna Kaphaghna Garbhāśayottejaka-ārtavajjanana Stanyaśodhana Pramehaghna Kuṣṭhaghna
-------	--

	Jvaraghna
	Balaya-Rasāyana
	Viṣaghna
	Śothahara
	Vraṇaropāṇa
	Arśoghna
	Sandhānīya
	Svarya
<b>Roga</b>	<b>: Kuṣṭha</b>
	Carmavikāra-Raktavikāra
	Vraṇa-visphoṭa-visarpa-pīḍikā
	Kṣudraroga-nīlikā-vyaṅga
	Arśa
	Viṣa-sarpaviṣa
	Prameha-mañjiṣṭhāmeha
	Agnidagdha
	Bhagna
	Ślīpada
	Śotha
	Mūtrakṛcchra
	Agnimāndya-āmadoṣa-atisāra
	Kṛmiroga
	Raktasrāva-raktavikāra
	Kāsa-svarabheda
	Kaṣṭārtava-rajorodha
	Prasavottara vyāpat-stanyaśuddhi-prasūti jvara
	Jvara-jīrṇajvara
	Dourbalya
	Akṣi-karṇaruk.

### Therapeutic uses

The drug Mañjiṣṭhā is blood purifying agent and pigment stimulant; it is artringent, antiseptic bitter pungent, tonic and haemostatic. It is useful in diseases of blood, skin and urinary system, it is externally used for leucoderma. It is used in blood dysentery, ear and eye diseases, inflammation and urino-genital disorders.

The roots of Mañjisthā are administered in the forms of powder, decoction and in other modes in skin af-

fections, leucorrhoea, haemorrhage, pigmentation anomalies, amenorrhoea, prameha, kuṣṭha, jīrṇajvara, visarpa and several other diseases.

Maṇjiṣṭhā is an important varṇya (promoting lustre-complexion) herbal agent and applied in different forms and employed in various formulations which are frequently prescribed in several diseases coming under this group. Roots are esteemed as herbal cosmetic. Roots yield dye also.

**Parts used :** Roots.

**Dose :** Power 1-3 gm., Decoction 50-100 ml.

**Formulation**

Maṇjiṣṭhādi kvātha, Maṇjiṣṭhādyārka, Maṇjiṣṭhāsava, Maṇjiṣṭhādyā ghṛtam, Maṇjiṣṭhādyā tailam, Maṇjiṣṭhādi lepam.

**Gana**

Varnya, Viṣaghna, Jvarahara (Caraka Saṃhitā), Priyangvādi, Pittasamśodhana (Suśruta Saṃhitā).

## MAÑJIṢṬHĀ ( मञ्जिष्ठा )

मञ्जिष्ठा तुवरा तिक्ता स्वर्योष्णा मधुरा गुरुः ।

कर्णाक्षियोनिरोगघ्रो कफशोफविषापहा ॥

विसर्पमेहकुष्टाशीब्रणरक्तातिसारजित् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1426-1427.*

**मञ्जिष्ठा शाकम्**

‘शाकं स्वादु लघु स्त्रिधं दीपनं वातपित्तजित् ।’

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1427.*

**मञ्जिष्ठा गुणः:**

मञ्जिष्ठा मधुरा तिक्ता कषाया स्वरवर्णकृत् ॥

गुरुरुष्णा विषश्लेष्मघ्री शोथयोन्यक्षिकर्णरुक् ।

रक्तातीसारकुष्टास्त्वीसर्पब्रणमेहनुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Harītakyādi Varga, 188-189.*

*Cakradatta, 42-8.*

**श्लीपदे मञ्जिष्ठादि लेपः:**

मञ्जिष्ठा मधुरा स्वादे कषायोष्णा गुरुस्तथा ।

व्रणमेहज्वरश्लेष्म-विषनेत्रामयापहा ॥

*Rāja Nighantu, Pippalyādi Varga, 194.*

चोलश्च योजनी कौञ्जी सिंहिली च चतुर्विधा ।

मञ्जिष्ठा चैव सा प्रोक्ता विलोमे चोत्तमोत्तमा ॥

*Rāja Nighantu, Pippalyādi Varga, 195.*

मञ्जिष्ठा मधुरा स्वादे कषायोष्णा गुरुस्तथा ।

कफोषब्रणमेहास्वविष नेत्रामयान् जयेत् ॥

*Dhanvantari Nighantu.*

‘मञ्जिष्ठा कुष्ठवीसर्प शोथघ्नी मूत्रकृच्छ्रजित् ।’

*Rāja Vallabha Nighantu.*

### मंजिष्ठामेहे

‘मञ्जिष्ठा चन्दनकषायै मंजिष्ठामेहिनं पाययेत् ।’

*Suśruta Saṃhitā, Cikitsā.*

### व्यङ्गेषु

‘.....मञ्जिष्ठा वा समाक्षिका ।’

*Cakradatta.*

### कुष्टरोगे

लघुमञ्जिष्ठाऽऽदि क्राथ

मध्यमञ्जिष्ठाऽऽदि क्राथ

बृहन्मञ्जिष्ठाऽऽदि क्राथ

*Bhāvaprakāśa, Kuṣṭharogādhikāra, 99-106.*

### अग्निदग्ध व्रण चिकित्सायां मञ्जिष्ठाद्य घृतम्

*Cakradatta, Vranaśotha Cikitsā, 44-93*

### नीलिकाव्यङ्गं पीडिकाऽदयाः रोगाणां शमनार्थम्

मुञ्जिष्ठाद्य तैलम्

*Cakradatta, Kṣudraroga Cikitsā, 55/61-62.*

### मुखकान्तिकर लेपः

( समञ्जिष्ठाऽन्य घटक द्रव्याः )

*Cakradatta, 55-45.*

### अशार्सि

‘शोणितार्शः सु मंजिष्ठागुरुङ्गयादीनां कषाये ( सर्पिः ) पाचयेत् ।’

*Suśruta Saṃhitā, Cikitsā, 6-9.*

**व्यङ्गे**

‘क्षौद्रेण वा पिष्टा मञ्जिष्ठा ।’

*Aṣṭāṅga Saṅgraha, Uttara, 37-24.*

**सर्पविषे**

‘पानश्च क्षौद्रमञ्जिष्ठगृहधूमयुतं घृतम् ।’

*Aṣṭāṅga Hṛdaya, Uttara, 36-59.*

**प्रमेहे**

‘मञ्जिष्ठमेहिनं मञ्जिष्ठाचन्दन कषायम् ।’

*Suśruta Saṃhitā, Cikitsā, 11-9.*

**भग्ने**

‘आलेपनार्थं मञ्जिष्ठा मधुकञ्चाम्लपेषितम् ।’

*Vṛndamādhava, 46-3.*

## MARICA

**Botanical name :** *Piper nigrum* Linn.

**Family :** Piperaceae

**Classical name :** Marica

**Sanskrit names**

Marica, Dharmapattana, Kṛṣṇa, Uṣaṇa, Vellaja, Suvṛttā.

**Regional names**

Kāli mirca, gol mirca, mirica (Hindi); Golmarica (Beng.); Kare manesu (Kann.); Nallamuluku (Mal.); Philphil asvad (Arab.); Philphil Syah (Pers.); Black Pepper (Eng.).

**Description**

A stout climber vines perfectly glabrous more or less coriaceous, base cuneate or rounded, woody; stem thickened at the nodes, blade 4-6; petiole 1/2-in. long, basal nerve 3 or 5. Fruiting spike slightly interrupted, drooping 4-8 in. long; red when ripe.

Plant is branching, climbing, perennial shrub, mostly found in cultivated state. Branches stout, trailing and rooting at the nodes. Leaves entire, 12.5-17.5 by 5.0-

12.5 cm., very variable in breadth, sometimes glaucous beneath; base acute, rounded or cordate, equal or unequal; nerves about 5-7 pairs, basal; petiole stout.

Flowers minute in spikes, usually dioecious, but often the female bears 2 anthers and the male a pistillode. Anthers 2-celled, fl. spike very variable in length and robustness; rachis glabrous.

Fruiting spike very variable in length and pubescences, rachis glabrous. Fruits ovoid or globose, bright red when ripe. Seeds usually globose, testa thin, albumin hard. Fruit glabose, berry sessile, red, pulp thin; 3-6 mm. in diam., surface (outer coat) dark brown or grey black strongly reticulated; apex shows remains of sessile stigmas. Plants continue to bear fruits (produce) for about 25-30 years in full swing normally and afterwards fruiting yield of plants tend to reduce gradually (sometimes and rarely it may go upto 100 years). Two crops of black pepper fruits are in practice during August-September and March-April.

### **Flowering and fruiting time**

Plants flower in June-July and fruit in December-March. Farming seasons.

### **Distribution**

Plant is cultivated in hot and moist parts of India Malaysia, Indonesia, Ceylon and other tripical countries. It cultivated particularly in Konkan, Malabar, Travancore and other parts of Southern India especially in hot and damp parts of the region, also found in Karnataka and Tamilnadu. There are several types of pepper (including hybrids and crosses) grown in India.

It is probably originated in the hills of south-western India and also Assam where it is met with in a wild state in the rain forests from North Kanara to Kanyakumari (Southern India, Kerala). It is most ancient crop of India.

### **Chemical composition**

Analysis of green pepper (after discarding the stalks) gave following values : moisture 70.6, protein 4.8, fat

2.7, carbohydrates 13.7, fibre 6.4 and mineral matter 1.8%; calcium 170, phosphorous 70, iron 2.4, thiamine 0.05, riboflavin 0.04, necotinic acid 0.2 and ascorbic acid, 1 mg./100g., Carotene (as vit. A) 900 I.U./100g.

Analysis of black pepper (dried) gave following ranges of values : moisture 8.7-14.1, total nitrogen 1.55-2.60, nitrogen in non-volatile ether extract 0.70-4.22, volatile ether extract 0.3-4.2; non-volatile ether extract 3.9-11.5; alcohol extract 4.4-12.0; starch (by acid hydrolysis) 28.0-49.0; crude fibre 8.7-18.0; crude piperine 2.8-9.0, piperine (spectrometrically) 1.7-7.4; total ash 3.6-5.7 and acid insol. ash (sand) 0.03-0.55%. Fruits mainly contain piperine 5-10%, piperidine 5%, pipertine and chavicine. Fruits also yield oil of pepper.

### Pharmacodynamics

Rasa	: Kaṭu
Guṇa	: Laghu, tīkṣṇa
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphaśāmaka
Ārdra phala	: Guru, madhura vipākī, nātyuṣṇa (fresh or green)

### Properties and action

Karma	: Dīpana-pācana-āmapācana-vātānulomana Yakṛduttejaka Kṛmighna Uttejaka (hṛadayottejaka) Kaphaghna-kaphaniḥṣāraka Mūtrendriyottejaka (mūtrajanana) Svedajanana-kuṣṭhaghna Jvaraghna-viṣamajvara pratibandhaka Raktotkleśaka-lekhana Nādyottejaka-nāḍibalya Śūlapraśamana Dantya Cakṣuṣya
-------	--

	Śothasāmaka
	Srotorodhahara
Roga	: Agnimāndya-ajirṇa-ādhmāna-
	udaraśūla
	Yakṛdvikāra
	Kāsa-śvāsa-hikkā-pratiṣyāya
	Mūtrakṛcchra
	Dhvajabhaṅga-rajorodha
	Kuṣṭha-carmavikāra
	Vātavikāra-nāḍīdourbalya
	Carmavikāra-śvitra-kilāsa-pāmā
	Śotha-vedanā yuktavikāra
	Pīḍikā-śotha
	Netravikāra-naktāndhya-arma-śukla
	Dantavikāra-dantaśūla-dentakṛmi
	Jvara-śītajvara-viṣamajvara
	Srotorōdhajanya vikāra.

### Therapeutic uses

The drug Marica is a dīpana drug (auṣadhi) since it stimulates digestive fire or increase (promote) appetite (stomachic or appetizer) and promote digestive function, and it occupies a prominent place as dīpana-pācana herbal drug possessing various medicinal potentialities which make Marica one of the reputed drugs in Indian medicine. in addition to its very common utility as spice characteristic of pungency having various kinds and many fold utility.

In general, the drug is alterative, anthelmintic, appetizer, carminative, febrifuge, stimulant, tonic and urinary antiseptic. It is intense pungent (kaṭu) in taste (rasa) and hot (uṣṇa) in potency (vīrya); it allays provoked state of vāta and kapha doṣa. But the medicinal properties of green or fresh (ārdra) Marica differs. Normally the dried fruits of plant are used as drug Marica.

The drug is used in cough, bronchitis, cold, asthma, coryza, eczema, cataract, headache, influenza, intermittent fever, neuritis, night blindness, respiratory diseases, syphilis and worms. It is useful as nervine stimulant, expectorant, diuretic, diaphoretic, anti-dermatosis, emmenagogue, emaciating and blood provoking (raktotkleśaka)

and also cleansing the channels (sroto-śodhana) in human body.

The powder of Marica is externally applied in different and suitable forms in various ailments. In skin affections, it is applied locally (cūrṇa or taila) in powder form and mixed with oil, especially in śvitra, kilāsa and pāmā. Ailing conditions of organ with swelling and pain. It is applied. The fruit rubbed in honey and applied to eye diseases e.g. naktāndhya, arma, śukla and others. In dental complaints, it is used as tooth powder as well as gargle; and fruits also chewed in dental problems.

Marica is internally administered in a number of diseases as single drug, ingredient of several formulations (yoga) and also as component of trikaṭu (comprising three major pungent drugs viz. śunṭhi, marica and pippali) widely used in Indian medicine. The drug Marica is generally recommended in treatment of agni-vikāra (diseases caused by loss or reduction of normal digestive power or fire, digestive enzymatic abnormality) ajirṇa (dyspepsia), śūla (abdominal colic), ādhmāna (flatulence), yakṛdvikāra (liver disorders) and kṛmi (worms affections). It is used in hṛddourbalya (heart weakness), mūtrakṛchra (dysuria), dhvajabhaṅga (impotency), dysmenorrhoea and vātavikāra. The drug Marica is frequently given in kāsa, śvāsa, svara-kaṇṭha vikāra, pratiṣyāya, nāsāroga, śiroroga and other similar diseases (related to respiratory system, nose and throat etc.).

In addition, the marica powder is useful in obesity (medoroga); the ten marica grains with betel leaf (tāmbūla) are prescribed for intake of cold water for two months (Vaidya manoramā, 12-11). For digestion of ghee, the powder of marica is given or ghee mixed with marica is advisable (Bhāvaprakāśa, cikitsā. 6-44). Powder of marica mixed with butter is suggested in oedema of children (bālaśotha).

The decorticated fruits of marica (black pepper) are known as Śveta Marica which is also used in eye diseases, snake bite etc.

**Parts used :** Fruits

**Dose :** Powder 500 mg.-1 gm.

### Formulation

Maricādi guṭikā, Maricādi taila, Bṛhanmaricādya taila, Maricādi cūrṇa, Maricādya cūrṇa, Apratisārāñjana Sañmākṣika yoga.

### Guna

Dīpanīya, Śūlapraśamana, Kṛmighna, Śirovirecana (Caraka Saṁhitā), Trikaṭu (tryuṣaṇa), Pippalyādi (Suśruta Saṁhitā).

## MARICA ( मरिच )

नात्युष्णं मरिचं चार्द्धं स्वादुपाकमपित्तलम् ॥  
 कफप्रसेकि कटुकं किञ्चित् तीक्ष्णकरं गुरु ।  
 शुष्कं सोष्णं रसे पाके कटुकं लघु दीपनम् ॥  
 अवृष्टं रोचनं तीक्ष्णं रुक्षं वातकफापहम् ।  
 कृमिजित् श्वासशूलग्रन्थं छेदि शोषनुत् पित्तलम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1164.*

### मरिचं गुणाः

मरिचं कटुकं तीक्ष्णं दीपनं कफवातजित् ।  
 उष्णं पित्तकरं रुक्षं श्वासशूलकृमीन्हरेत् ॥

*Bhāvaaprakāśa Nighaṇṭu, Haritakyādi Varga, 60.*

मरिचं कटु तिकोष्णं लघु श्लेष्मविनाशनम् ।  
 समीरकृमिहद्रोगहरञ्च                           रुचिकारकम् ॥

*Rāja Nighaṇṭu, Pippalyādi Varga, 32.*

### आर्द्रपक्वमरिच गुणाः

तदार्द्धं मधुरं पाके नात्युष्णं कटुकं गुरु ।  
 किञ्चित्तीक्ष्णगुणं श्लेष्मप्रसेकि स्यादपित्तलम् ॥

*Bhāvaaprakāśa Nighaṇṭu, Haritakyādi Varga, 61.*

### श्वेतमरिच

कटूष्णं श्वेतमरिचं विषग्रन्थं भूतनाशनम् ।  
 अवृष्टं दृष्टिरोगग्रन्थं युक्त्या चैव रसायनम् ॥

*Rāja Nighaṇṭu, Pippalyādi Varga, 34.*

‘मनःशिलाले मरिचानि तैलमार्कं पयः कुष्ठहरः प्रदेहः ।’

*Caraka Samhitā, Sūtra, 3.*

स्वादुपाक्यार्द्धमरिचं गुरु श्लेष्मप्रसेकि च ।  
कटूष्णं लघु तच्छुष्कमवृष्ट्यं कफवातजित् ॥  
नात्युष्णं नातिशीतं च वीर्यतो मरिचं सितम् ।  
गुणवन्मरिचेभ्यञ्च चक्षुष्यं च विशेषतः ॥

*Suśruta Samhitā, Sūtra, 46.*

नात्यर्थमुष्णं मरिचमवृष्ट्यं लघु रोचनम् ।  
छेदित्वाच्छोषणत्वाच्च दीपनं कफवातजित् ॥

*Caraka Samhitā, Sūtra, 27.*

### सर्वकासहरणार्थम्

लिह्यान्मरिच चूर्णं वा सद्यृत क्षौद्रशर्करम् ।  
सर्वकासहरं श्रेष्ठं लेहं कासार्दितो नरः ॥

*Caraka Samhitā, Cikitsā, 22.*

### कासचिकित्सायाम्

मरिचाद्य चूर्णम्

मरिचादि गुटिका

*Bhāvaprakāśa, Kāsarogādhikāra, 12-39/42.*

### अपतानके मरिच चूर्ण प्रयोग

हन्त्यभुक्तवता पतिमस्लं दध्यपतानकम् ।  
मरिचेन समायुक्तं स्नेह बस्तिरथापि च ॥

*Bhāvaprakāśa, Madhyakhaṇda, 24-203.*

### ग्रहणीरोगे

मरिचाद्य चूर्णम्

*Caraka Samhitā Cikitsā, 15-108.*

### नक्तांध्ये

‘अचिराद्धन्ति नक्तांध्यं तद्वत्सक्षौद्रमूषणम् ।’

*Bhāvaprakāśa, Netrarogādhikāra, 63-231.*

### अतिसारे मरिच कल्कः

पयसा पिप्पलीकल्कः पीतो वा मरिचोद्धवः ।

ऋहात् प्रवाहिकां हन्ति चिरकालानुबन्धनीम् ॥

*Cakradatta, Atisāra Cikitsā, 3-97.*

### ग्रहणीरोगे मरिचादि चूर्णम्

चूर्णं मरिचमहौषधं कुटजात्वज्जं क्रमाद् द्विगुणम् ।

गुडमिश्रमथितं पीतं ग्रहणी दोषापहं ख्यातम् ॥

*Cakradatta, Grahaṇī Cikitsā, 4-28.*

### प्रतिश्याम प्रतिकारार्थं गुडमरिचयोगः

शोषणं गुडसंयुक्तं स्निग्धदध्यम्लं भोजनम् ।

नवप्रतिश्यायहरं विशेषात् कफपाचनम् ॥

*Cakradatta, Māsāroga Cikitsā, 58-19.*

### अग्रिमांद्ये

अविरुद्धोपदंशेन पक्षमन्त्रेन मात्रया ।

भक्षितं मरिचं पूर्वं भृष्टं दुर्जरतां जयेत् ॥

*Vaidya Manoramā, 6-23.*

### उम्मादे मरिचाञ्जनम्

मरिचं वाऽऽतपे मासं सपितं हितमञ्जनम् ।

वैकृतं पश्यतः कार्यं दोषभूतहतस्मृते ॥

*Cakradatta, Unmāda Cikitsā, 20-47.*

### कुष्ठचिकित्सायां मरिचाद्यं बृहन्मरिचाद्यञ्च तैलं योगाः

*Cakradatta Kuṣṭha Cikitsā, 50/35-36, 137-145.*

### पामा विकारे सिन्दूरादि लेपः

सिन्दूरं मरिचं चूर्णं महिषीनवनीतं संयुक्तं बहुशः ।

लेपाद्विनिहन्ति पामां तैलं..... ॥

*Cakradatta, Kuṣṭha Cikitsā, 50-48.*

### इन्द्रलुमे मरिच चूर्णं प्रयोगः

वृष्टस्य कर्कशैः पत्रैरिन्द्रं लुमस्य गुण्डनम् ।

चूर्णितैभीश्वैः कार्यं मिन्दलुमं विनाशनम् ॥

*Cakradatta, Kṣudra roga Cikitsā, 55-101.*

### बालशोषे

‘मरिच नवनीताढ्यं शोषग्रं भक्षयेत् शिशुः ।’

*Bangasena, Bālaroga, 123.*

### शूले

शूलं तदांशु शमयेद् विणमूत्रे च्यावयेन्नियतम् ।

स्तन्यं निधृष्टं मरिचं नसि निहितं नाशयेच्छूलम् ॥

*Vaidya Manoramā, 8-23.*

## अतिनिद्रायाम्

क्षौद्राश्वबलालासंपृष्ठैः मरिचैः नेत्रमञ्जनात् ।

अतिनिद्रा शमयाति तमः सूर्योदयादिव ॥

*Bangasena, Netraroga, 575.*

## पामानि

अभिनवगोघृतेन मरिचस्य पिबतां

हुतवहदेशकालबलदोषसात्प्यवताम् ।

जघनकराङ्गुलिविष कूर्परजानुभवाः करुहवान्धवाः

सपदि यान्ति रुजः शमनम् ॥

*Vaidya Manoramā, 11-49.*

## भुक्तसर्पिषः पाचनार्थम्

....सर्पिः ।

मरिचाटपि तच्छींग्रं पाकं यान्त्येव..... ॥

*Bhāvaprakāśa, Cikitsā, 6-144.*

## नेत्र विकाराणां मरिचं प्रयोगाः

## क. नेत्रस्नावे

मरिचांशः शिलार्धेन योजितः सुप्रचूर्णितः ।

नेत्रस्नावं हरत्याशु नराणामयमञ्जनात् ॥

*Gadanigraha, 3-3-446.*

## ख. नक्तान्ध्ये (रात्र्यांध्यत्वम्)

‘दध्ना विद्युष्टं मरिचं रात्र्यान्ध्याञ्जनमुत्तमम् ।’

*Aṣṭāṅga Hṛdaya, Uttara, 13-84.*

## ग. तिमिरे

षण्माक्षिक योगः

*Aṣṭāṅga Hṛdaya, Uttara, 13-44.*

अप्रतिसाराञ्जनम् ।

चिञ्चास्वरसनिधृष्टं मरिचं सायन्तने तथासाज्यम् ।

अक्षिनिषिकं शमयति कण्डूं तिमिरञ्ज वातोत्थम् ॥

*Vaidya Manoramā, 16-34.*

## रसवृद्धर्थम्

‘मरिचैः क्वथितं दुग्धं पानै रात्रौ प्रशस्यते ।

रसानां तेन वृद्धिः स्यात्- ॥’

*Hārīta Saṃhitā, 3-9-28.*

## ग्रहणी रोगे

पिप्पल्याः पिबतः सूक्ष्मं रजो मरिचजन्म वा ।

चिरकालानुवक्ताऽपि नश्यत्याशु प्रवाहिका ॥

*Aṣṭāṅga Hṛdaya, Cikitsā, 9-40.*

## उदरविकाराणां मरिच प्रयोगः

तक्रेण या पिबेत्रित्यं चूर्णं मरिचसंभवम् ।

चित्रसौवर्चलोपेत ग्रहणी तस्य नश्यति ॥

उदरप्लीहमन्दाग्निगुल्मार्शानाशनं भवेत् ।

*Sārīngadhara Saṁhitā, 2-6-53.*

## कासे

लिह्नान् मरिचचूर्णं वा मधु सघृतक्षौद्रशर्करम् ।

बदरीपत्रकल्कं वा घृतभ्रष्टं ससैन्धवम् ॥

स्वरभेद च कासे च लेहभेतं प्रयोजयेत् ।

*Caraka Saṁhitā, Cikitsā, 18-180.*

*Aṣṭāṅga Hṛdaya, Cikitsā, 3-172.*

‘लिह्नाद् घृतक्षौद्रयुतां समांशां सितोपलां वा मरिचांशयुक्ताम् ।’

*Suśruta Saṁhitā, Uttara, 52-18.*

‘क्षौद्रेण लिह्नात् मरिचानि चापि ।’

*Suśruta Saṁhitā, Uttara, 52-21.*

मधुनामरिच लिह्नात् मधुनैव च जोंगकम् ।

पृथग्र रसांश्च मधुना व्याघ्रीवार्ताकभृंगजात् ॥

कासघ्रस्याश्वशकृतः सुरसम्यासितस्य च ॥

*Aṣṭāṅga Saṅgraha, Cikitsā, 4-57-58.*

*Aṣṭāṅga Hṛdaya, Cikitsā, 3-70.*

‘गुडोदकं वा क्वथितं सक्षौद्रमरिच हितम् ।’

*Aṣṭāṅga Hṛdaya, Cikitsā, 3-70.*

## हिक्काश्वासयोः

.....जलेन वा ।

कोष्णेन भार्ङ्गी शुण्ठीं च, क्षारं वा मरिचान्वितम् ॥

*Aṣṭāṅga Sangraha, Cikitsā, 6-34.*

## प्रतिश्याये पीनसे च

ऊषणं गुडसंयुक्तं स्निग्धदध्यम्लभोजनम् ।

नवप्रतिश्यामहरं विशेषात् कफपाचनम् ॥

*Vṛndamādhava, 60-21.*

## तारुण्यपिङ्कायाम्

‘तद्वद् गोरोचनामुकं मरिचं मुखलेपनम्।’

*Śarangadhara Samhitā, 3-11-11.*

### स्थौल्ये

मासद्वयं प्रकुर्याद्वशमरिचोपेतमेकताम्बूलम्।

खात्वा सुशीतमम्भः पिबेत् कुशः स्यादतिस्थूलः ॥

*Vaidya Manoramā, 12-31.*

# MĀRĪṢA

**Botanical name :** Amaranthus blitum var. oleracea Duthie.

**Family :** Amaranthaceae

**Classical name :** Mārīṣa

**Sanskrit names :** Mārīṣa, Vāśpaka, Marṣa.

**Regional names :** Marsa, Marasa, Chaulai (Hindi).

### Description

A tall erect glabrous succulent herb. Stem stout, grooved, striate.

Leaves 1.5-2.5 in. long, ovate-oblong or rounded, usually notched at the apex; base cuneate; nerves prominent beneath; petioles 1-2.5 in. long.

Flowers in axillary clusters and in terminal simple or branched spikes; bracteoles shorter than sepals. Sepals 3, linear-oblong, obtuse or acute. Stamens 3, utricle 1/10 in. long, broadly ovate and with a blunt apex; styles 3, very short.

Seeds lenticular, dark-brown and shining.

### Flowering and fruiting time

### Distribution

Plant is cultivated throughout India and in Ceylon.

### Kinds and varieties

Rakamārṣa, Śvetamārīṣa, Amla mārīṣa, Jalamārīṣa and Sarandhra vaṣpa are some varieties (*bhedah*) mentioned in texts of *materia medica* (*nighanṭu*).

### Pharmacodynamics

Rasa	:	Madhura
Guṇa	:	Guru
Viryā	:	Sīta
Vipāka	:	Kaṭu
Doṣakarma	:	Pittaśāmaka, Vātakaphakara (Variation in the kinds of Māriṣa).

### Therapeutic uses

The drug Māriṣa is sweet (madhura), cold (sīta), and heavy (guru) in properties. It allays pitta doṣa and increases vāta and śleṣma doṣa. As a drug it pacifies raktapitta and controls viṣṭambhi (uneasily digestible and causing flatulence).

The leaves are extensively used as a potherb; and in the submontane tracts of Uttar Pradesh hills (Garhwal and Kumaon regions). This plant is also grown also for its grain; and the parched seeds are either eaten with milk or mixed with sugar and made up into sweatmeat balls.

Medicinal properties are indicated in regard to different kinds of Māriṣa (vāṣpa) having variation accordingly.

## MĀRISA ( मारिषः )

मारिषः

*Caraka Samhitā, Sutra, 27-98.*

## MĀRISA ( मारिष )

मारिषः

क. मारिषो वाष्पको मार्ष श्वेतो रक्तश्च सस्मृतः ।

मारिष गुणाः

ख. मारिषो मधुरः शीतो विष्टम्भी पित्तनुद् गुरुः ॥  
वातश्लेष्मकरो रक्तपित्तनुत् विषमाग्निजित् ।

मारिष भेदाः

ग. रक्तमार्षो गुरुमर्ति सक्षारो मधुरः सरः ।

श्लेष्मलः कटुकः पाके स्वल्पदोषः उदीरितः ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka varga, 10-11*

### श्वेतरक्तमरिषौ

- अ. मारिषो मधुरो रुक्षः कटुः शीतो गुरुः सरः ।  
वातश्लेष्मकरो हन्ति मदपित्तास्त्रवृत्तविषम् ॥
- ब. रक्तवाष्पो गुरुर्नाति सक्षागे मधुरो रसे ।  
श्लेष्मलः कटुकः पाके स्वल्पदोषं वदेदमुम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 634-635.*

### विचित्र मारिषः

हरितो रक्तवर्णश्च सक्षारः स्वादु पित्तलः ।

### अम्ल मारिषः

अम्लवाष्पोऽम्ललवणो मधुरो दोषकोपनः ॥

### जल मारिषः

जलवाष्पो विशेषेण रक्ताशो विनिवारणः ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 634-637.*

### सरन्ध्रवाष्प

सरन्ध्रवाष्पं रुक्षं च हृदयं कफकृमिप्रणुत् ॥

दीपनं तूष्णीवीर्यश्च रक्तपित्तं प्रकोपणम् ।

### कन्दगुणा:

वाष्पस्य कन्दः कफवातकोपी,

जन्त्वाकारः पित्तकरः सुरुच्यः ।

विषभूती त्वतिसारकारी

विपाककाले कटुको गुरुश्च ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 637-638.*

## MĀRKANDIKA- SVARNAPATRĪ

### Botanical name

Cassia senna L. var. senna Brenan.,

Syn. Cassia angustifolia Vahl., Senna officinalis  
Roxb.

**Family :** Caesalpiniaceae

**Classical name :** Markaṇḍikā-Svarṇapatrī

**Sanskrit names**

Markaṇḍikā, Svarṇapatrī-patrikā, Bhumivallī, Markaṇḍī, Mṛḍurecanī, Bhūpaitharikā, Pītāpuṣpī, Svarṇamukhī, Hemapatrī, Malaśodhī, Kalyāṇī.

**Regional name**

Saray (Hindi); Sannamakki (Beng.); Sanpat, Sonamakhi (Mar.); Nat ki sona (Guj.), Nilabirai (Tam.); Telatpendu (Tel.); TelvariKE (Kann.); Tilvak (Mal.); Sanay makki (Arab.); Indian Senna (Eng.).

**Description**

Shrub 0.60-0.75 meter high. Leaves paripinnate usually 5-8 jugate, the leaflets forming the drug senna, 2-4.5 cm. long 0.5-1.5 cm. wide, yellowish green in colour and glabrous. Flowers axillary racemes, erect, laxly many-flowered, usually exceeding the subtending leaf bracts membranous. Fruits legume flat, 1.5-1.7 mm. in breadth; seeds obovate, cuneate and compressed.

**Leaf-drug character :** Leaves pinnate compound with 10-16 leaflets, yellowish green in colour, isobilateral with somewhat prominent midrib and viens on the under surface, lanceolate measuring 1.7 - 5.5 x 0.4 - 1.2 cm. with a very small petiole of about 1 mm. in length, with more or less asymmetrical leaf base and an acute spiny apex, entire, reticulate, glabrous and transparent hairs on both the surface.

**Flowering and fruiting season**

Farming season. Plant of 3-5 months gives flowers and subsequent fruiting. Sown after rice crop.

**Distribution**

Plant is indigenous or native to Somaliland and Arabia. It is cultivated in South India (Tinnevelly); Madurai and Trichinopoly. Further it has been introduced in Karnataka (Mysore) and others regions of India including Gujarat where it also grows. Plant belongs to cultivated group of plant drugs.

### Kinds and varieties

Alexandrian Senna is obtained from the wild plants of *Cassia acutifolia* Delb. occurring in Africa and Sudan. The leaflets of this variety, also known as Sikandari Sanay (in Indian market), are shorter and narrower than those of *Cassia angustifolia* Vahl. Alexandrian Senna (*Cassia acutifolia* Delb.) is reported to be cultivated in India which is stated to be finer than either Tinnevelly Senna or Alexandrian Senna. As regards other characters for difference, the pods of Indian Senna are larger and narrower than those of the Alexandrian variety and brown area of pericarp surrounding the seeds is larger and the remains of the style are also not distinct.

Arabi Sanay or Makka (i) Sanay coming from Arabian countries to India (Bombay etc.) have larger and narrower leaves comparatively and whitish green in colour (Arabian, Mecca or Bombay senna), and the crude drug forms leaves obtained from wild source, which is almost considered similar to Indian (or Tinnevelly) Senna as well as Alexandrian Senna in regard to marketability and utility (medicinal value).

The chief adulterants of senna are the leaf-stalks and stems of the plant leaflets and fruits of other species of *Cassia* viz. *C. obovata* (L.) Collad. The seeds of *Cassia obovata* are reported to be mixed with those of *Cassia angustifolia* Vahl. (Tinnevelly Senna). Both kinds of Senna drug differ on the basis of structure and other characters of seeds and leaves.

The leaves of true senna are often mixed with those of *Tephrosia purpurea* (Linn.) Pers. (Śarapunkhā). Senna can be differentiated from Tephrosia by distinguishing architectural features of leaf (and also arrow or 'Sara' like structure of leaf) when it is broken as a common way (state) of fracture.

Sometimes the crude drug material of Indian Senna leaves is found to be unadulterated and in case of adulterated raw material the pharmacognostic and diagnostic key makes the difference and detection alongwith other

chemical methods as well as purity and drug standardisation tests.

### **Chemical composition**

Some nonprotoplasmic cell contents like alkaloid, tannin, sugar, starch, fat, protein, mucilage, lignin, cutin, suberin and calcium oxalate present in the leaf drug react positively with different concentrations of acids, alkalies, salts and dyes. Senna leaves contain aloe emodin, a purgative constituent, which is found independently as well as in the form of glycoside. Broadly, the leaves contain flavenone and Anthraquinone groups compounds. First group includes isorhamnetin and Kaempferol, and in second group rhein and some emodin are included. It also contains two glycosides, sennoside (A & B) which are with chiefly cathartic effect. Besides these components, some other chemical constituents include manitol, sodium and potassium tartarate, salicylic acid, chrysophanic acid, volatile oil, resin, calcium oxalate and other contents in the plant.

The chromatographic studies isolated and fractioned the water-soluble polysaccharides from the leaves of plant *Cassia angustifolia* Vahl. Fractional precipitation and chromatographic study finds that the pods of *Cassia angustifolia* Vahl. contain besides sennosides A and B, glycosides of rhein and chrysophanic acid. Chrysophanic acid was best isolated by acidification of the aqueous extract of pH<sub>3</sub>. Biological studies indicated that a mixture of these anthraquinone glycosides and the bianthranol glycosides was more active than either individually. The possibility of the presence of traces of aloe emodin or emodin glucoside was also indicated. The development of free and combined anthraquinones in plant *Cassia angustifolia* Vahl, the source of drug.

The chemical studies have found that the cathartic principles of drug Senna are soluble in water and dilute alcohol but insoluble in absolute alcohol. The odorous and colouring principles are soluble both in alcohol and water. Petroleum ether extract of the Senna leave, a colourless

crystalline wax (m.p. 80-83°C) and myricyl alcohol (m.p. 87-88°C). The leaf powder left after extraction with petroleum ether gave flavonol and anthraquinone groups of compounds separately. The flavonol portion consists of isorhamnetin and Kaemferol in more or less equal quantities, while anthraquinone portion contains mostly rhein alongwith small quantities of emodin.

The presence of two glycosides, one easily hydrolysable yielding emodin and the other hydrolysable with difficulty and slow in laxative effect, has been reported. Two glycosides, Sennoside A and Sennoside B which are believed to be the laxative principles of senna, both have the same formula, but differ principally in the manner of linkage of glucose to the aglycone fraction. Among other substances detected generally in senna; mannitol, sodium, potassium tartarate, myricalcohol, salicylic acid, chrysophanic acid, an ethereal oil and a resin.

The flowers of the plant drug Senna have been found to contain chrysophanic acid. Fruits of this plant are reported to occur exymethyl anthraquinone to the extent of 1.33 percent. The presence of rosette aggregate crystals of calcium oxalate throughout the parenchyma is also revealed (through microscopic examination). Most of the inorganic matter from the leaves seems to be extractable with water. Calcium, potassium and magnesium salts of organic acids are also present in plant drug *C. angustifolia* Vahl.

### **Drug Production**

The source plants of the drug Mārakaṇḍikā or Svarṇapatrikā are of cultivated group in India for procurement of raw drug. The crop of *Cassia angustifolia* Vahl. can thrive on a variety of soils, but is largely grown on red loams including even coarse gravelly soils, on alluvial loams and on the rich clayey rich fields. The plant also has great tolerance for salinity or saline soils. The tolerance is lower at seedling stage and progressively increases further with growth of plant of Senna which have been found to accumulate salts at terminal regions particularly in the condition of cultivation (planting) in the saline soils.

The cultivation technique of Senna is followed for producing crop. It is necessary to give inter-culturing once or twice after which the rows close up in growing plants beds. Plants do not grow tall but when the flower-stalks begin to grow in plots, they elongate and become almost equal in height to the lower portion of the plants. At this stage, the flower stalks are cut which induces further branching and perhaps increasing potency or biological activity of the leaves. Application of the fertilizers including nitrogenous is considered to be beneficial especially under irrigated conditions. The cultivation practices usually maintain that the crops leguminous group do not generally require use of nitrogenous fertilizers since roots of plant are not forming nodules and not fixing atmospheric nitrogen. In Senna plants, the nitrogenous fertilizers are recommended in view of these conditions.

The harvesting of crop is done after two months of time, but usually first plucking of leafless is done after three months of sowing and growth. The most suitable stage for collection or plucking of leaves from plants is actually related with maturity of bulk of leaves it can be judged by the leaves becoming full grown, thick and bluish in colour, losing the tender green of the young leaf stages. It is observed that first 6-7 leaves bear elliptical broad leaflets which are deep green and valued more for collection. The second picking is done after a month of first picking and third one after 4-6 weeks of second picking. Last picking of leaves from senn plants also includes the picking the pods of plants.

Under common practice of collection and preservation of raw drug Senna, the leaves are plucked by hand in the way of tea leaves plucking. Leaves are picked after 3-4 months growth of plants when the leaves are fully matured and become bluish. Lot of plucked leaves is dried under shade for 7-8 days. Raw material of leaves and pods is kept properly in storage.

### **Pharmacodynamics**

Rasa : Kaṭu, tikta, madhura, kaśaya.

Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Pittaśodhaka Vātahara (anulomaka).

**Properties and action**

Karma	: Sransana-vātānulomana-mṛḍurecana (sukhavirecana) Kāyaśodhana (ūrdhvādhaḥ) Dīpana Yakṛduttejaka Kṛmighna Kuṣṭhaghna Plihahara Raktaśodhaka Lekhana-tvagdoṣahara
Roga	: Vibandha-jīrṇakoṣṭhabaddhatā Ānāha-adhmāna Gulma-udararoga Kṛmi Āmavāta-vātarakta Paittika vikāra Raktavikāra Kapha-pittajanya roga (śodhanārtha) Vāyū vikāra (anulomanārtha).

**Therapeutic uses**

The pharmacological studies find the antitumour activity of the poly saccharide fractions obtained from the leaves of *Cassia angustifolia* Vahl. tested against the solid sarcoma—180 in CDI mice various investigations on the plant drug record some important observations.

Anthraquinone glycoside tend to accumulate mostly during the period September-October. The sennosides of leaves are at maximum after 49 days seeds germination and then its yield progressively decrease with the maturation of pods. The extent of sennoside in pods are at maximum when total seeds weight per pod is 23-30 per cent. The leaves of drug contain maximum sennosides

at the time of flowering in source plant. Main pharmacologically active substances of plant drug Mārkaṇḍikā (Svarṇapatrikā) are found in favourable season, stage and condition of source plant alongwith its proper collection ad storage, in accordance to the standards of pure and quality drug which is considered therapeutically potent and clinically useful in treatment of diseases.

The drug Mārkaṇḍikā or Svarṇapatrī is one of the important laxative drugs (anulomana-sransana or sukhavire-cana) or mild purgative which is esteemed as an ideal laxative medicine. Hence it is valued in medicine for its cathartic properties.

This drug is useful in constipation, loss of appetite, liver complaints, abdominal troubles, splenic enlargements, dyspepsia, typhoid, jaundice, anaemia, leprosy, poisoning symptoms, foul breath, bronchitis and tumours. It is useful specially in habitual and chronic constipation. It decreases the peristaltic movements of the colon. The tendency to gripe caused by Senna drug may be obviated by combining it with aromatics or with a saline laxative.

The pods have the same therapeutic effect as the leaves but they cause less griping. Cassia acuminatea and Cassia angustifolia are recognised by British Pharmacopoeia and United States Pharmacopoeia.

**Parts used :** Leaves, pods, roots.

**Dose :** 500 mg.-1gm.

**Formulation :** Saṭsakāra cūrṇa, Pañcasakāra cūrṇa.

## MĀRKĀNDIKĀ-SVARṄAPATRĪ ( मार्कण्डिका-स्वर्णपत्री )

क. मार्कण्डिका भूमिवली मार्कण्डी मृदुरेचनी।

ख. मार्कण्डिका कुष्ठहरी उर्ध्वाधःकायशोधिनी।

विषदुर्गन्ध कासघी गुल्मोदर विनाशिनी॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 289-290.*

**मार्कण्डिका**

अपरा भूपैठारिका मार्कण्डी मृदुरेचनी ।  
 मार्कण्डिका जयेत् कुष्मूर्ध्वाधः कायशोधनी ॥  
 विषदुर्गन्ध कासघ्री गुल्मोदर विनाशनी ।

**मार्कण्डिका मूलम्**

तन्मूलं तु सरं रक्षिततृष्णोहनाशनम् ।  
 स्वादुपाकेऽनिलहरं गुरु शुक्रक्षयापहम् ।  
 कृमिकुष्ठप्लीहहरं दीपनं वर्णकृत् परम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1003-1005.*

**सनामकी**

‘रुक्षोष्णं शोधिनी बाढं वातश्लेशमविरोधिनी ।  
 शान्ता सनामकी नाम मनाकृपीत तनुच्छदा ॥’

*Siddha Bhaisajya Maṇimālā.*

**मार्कण्डिका**

मार्कण्डिका कुष्ठहरी उर्ध्वाधःकायशोधिनी ।  
 वातरुक् कृमिकासघ्री गुल्मोदर विनाशनी ॥

*Nighaṇṭu Saṅgraha.*

# MARUBAKA

**Botanical name**

Majorana hortensis Moench.,  
 Syn. Origanum majorana Linn.

**Family :** Lamiaceae (Labiateae)

**Classical name :** Marubaka-Maruvaka

**Sanskrit names**

Marubaka, Maruva-maruvaka, Kharapatra, Prastha-puṣpa.

**Regional names**

Marua (Hindi); Bantulsi (Kumaon); Murwa (Deccan); Murru (Beng.); Mameva (Mar.); Murru (Tam.); Maruvamu (Tel.); Marum (Kann.); Maruvamu (Mal.); Sweet marjoram (Eng.).

**Description**

An aromatic, branched perennial, 30-60 cm. high

(plant, though perennial, treated as an annual under cultivation).

Leaves oblong-ovate.

Flowers small, whitish or purplish, in terminal clusters.

Seeds minute, oval, dark brown.

### **Flowering and fruiting time**

Farming seasons. Autumn or colder months generally (fls. & fts.).

### **Distribution**

Plant is commonly grown in Indian gardens; it is particularly suited for hill stations. Its native of southern Europe, North America and Asia Minor. It is cultivated in India.

Plants of Sweet Majorana or Majorana hortensis Moench grow in any well-drained fertile garden loam. It is propagated by seed and cuttings. Seeds are sown in the plains in October and in the hills from March to the middle of June. Seeds are sown in pots and seedlings when large enough to handle, are transplanted in the field 8-10 in. apart in rows which are spaced 12 in. apart. Propagation by cuttings sometimes done at higher elevations. The crop is readily available for harvesting in c. 5-6 months. Tops are cut when plants begin to flower in beds.

### **Kinds and varieties**

Another plant species occurs in India and named as *Origanum vulgare* Linn. which is a source for Maruvaka grows in Himalayas from Kashmir to Sikkim at 7,000-12,000 ft. altitude.

***Origanum vulgare* Linn.** is known as common or wild. Morjoram and also Sathra (Hindi), Mridu-maruvamu (Tel.), Maruga (Kann.) and Mirzanjosh (Punjabi).

It is an aromatic, branched perennial herb, 30-90 cm. high, Leaves broadly ovate, entire or rarely toothed. Flowers purple or pink, in corymbose, cymes. Nutlets smooth, brown.

Plants occurs wild in the temperate Himalayas from Kashmir to Sikkim, at altitude of 1,500-3,600 meters. It is very common in Shimla region of Himachal Pradesh and Kashmir region (valley) of Jammu and Kashmir state.

It is hardy and can be grown in all warm garden soils. Plant is propogated by seeds, cuttings, layers and root-division. It can be sown during October in the plains during March and April in the hilly regions.

### **Chemical composition**

The analysis of dry herb gave the following values : water 7.61, protein 14.31, fixed oil 5.60, volatile oil 1.72, pentosants 7.68, fibre 22.06 and ash 9.69 per cent. Tannin, a bitter substance and ursolic acid (0.21% in tops and 0.05% in stem). Leaves and flowering heads of Majorana hortensis yields sweet Majorana oil.

Another plant (source of Maruvaka) *Origanum vulgare* Linn. contains a volatile oil (0.15-0.40%), tannin (C. 80%) and a bitter principle. Steam distillation of the whole plant gave a pale yellow oil (yield 0.2%) with a pleasant smell which has been analysed. It contained dl-pinene, dipentene, linalool bi-and tri-cyclic sesquiterpenes etc.

### **Pharmacodynamics**

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavāṭa śāmaka Pittavardhaka

### **Properties and Action**

Karma	: Vāṭānulomana
	Rocana-dīpana
	Kṛmighna
	Kaphaghna-śvāsahara
	Hṛdayottejaka
	Ārtavajanana
	Svedajanana-Kuṣṭhaghāna
	Jvaraghna

	Kaṭupouṣṭika
	Viṣaghna
	Sothahara
	Vedanāsthāpana
	Vraṇaropāṇa
	Durgandhanāśana.
Roga	Ādhmāna-udaraśūla-viḍbandha
	Aruci-agnimāndya-udararoga
	Kṛmi
	Kāsa-śvāsa-hikkā
	Hṛddourbalya
	Kaṣṭārtava-rajorodha
	Carmaroga-kuṣṭha
	Jvara
	Dourbalya.

### Therapeutic Uses

The plant drug Maruvaka (*Origanum vulgare* Linn.) possesses an aromatic, thyme-like flavour. The leaves and tops cut prior to blooming are used to flavour food in the same way as sweet Majorana (*Majorana hortensis* Moench). The plant, a pot herb, is also eaten as vegetable in some remote hilly region. It was formerly employed to flavour ole and beer before hops were introduced in the brewing industry.

Maruvaka taila (oil of origanum) possesses carminative, stomachic, diuretic, diaphoretic and emmenagogue properties. It is given a stimulant and tonic in colic and diarrhoea; it is also applied in chronic rheumatism, toothache and earache. On account of sapsmolytic action of the oil, it is used in whooping cough and bronchitis. It is useful in hysterical condition.

Sweet majorana (*Majorana hortensis* Moench) is characterised by a strong, spicy and pleasant colour and flavour. The volatile oil content of leaves is maximum when the plant is under harvesting before seeds formation.

The oil obtained from herb *Origanum vulgare* Linn., called oil of origanum in trade, is really Thyme oil (oil obtained from *Thymus vulgare* Linn.); oil of origanum *vulgare* Linn. herb is often confused with Sweet Majorana

oil (*Majorana hortensis Moench.*) which is, however, dextrorotatory (upto 40°). The oil of *origanum* possesses an aromatic, spicy, somewhat basal like odour and it has thymol (upto 7%). The *origanum* oil is medicinally and chemically potent.

The *origanum* oil (Maruvaka oil) is used externally; it is applied in healing lotions for wounds, usually in conjunction with other herbs. The oil has been employed in veterinary medicine for preparing liniments applied to cattles. The oil is used in gargle and baths. It is stimulating agent to growth of hairs. The oil is employed in cosmetic and soap preparations as health protectives for skin care. The *origanum* oil is considered helpful, in view of medicinal activity of herb. for ulcers and skin affections in general in different modes of administration.

The drug Maruvaka (*Majorana hortensis Moench.*) is useful as medicine as well as condiment and also an aromatic herbal. The leaves of the plant are used fresh or dried and highly esteemed as a condiment for seasoning food. They are used also as a poultry-scasoner. Fresh leaves are employed as garnish and incorporated in salads. They are used also for flavouring vinegar. Dried flowering tops are used for sachets and potpourri. The aromatic seeds are used in confectionary and French confitures.

The oil of Sweet Majorana or Majororam oil (contained in the leaves and flowering heads as a volatile oil, obtained by steam distillation from flowering herb : yield 0.3-0.4% and 0.7-3.5% of frash and dry herbal material respectively) is employed to a small extent in high grade flavour preparations and perfumes and in soap and liquor (liqueur) industries being an aromatic herbal source of utility.

The sweet majoram (Maruvaka) is considered carminative, expectorant and tonic. Leaves and seeds are astringent. An infusion of the plant is used as stimulant, sudorific, emmenagogue and galactagogue. It is reported to be useful in asthma, hysteria and paralysis.

The maruvaka taila (sweet majoram oil) is

employed to a small extent in high grade flavour preparations and perfumes. Extremely it is used as local application for sprains, bruises, stiff and paralytic limbs and toothache. It is also used for hot fomentation in acute diarrhoea. Herb is applied is scorpion sting.

Marubaka or Maruvaka is indicated in aruci, agnimāndya, ādhmāna, udaraśūla, kṛmi, hṛddourbalya, kāsa, śvāsa, hikkā, kaṣṭārtava, rajorodha, tvagvikāra, jvara, dourbalya and kuṣṭha roga. The herbal drug is topically applied to rheumatism, headache, toothache, ulcer and scorpion sting. It is employed in the modes of svedana, lepa, upanāha and fumigation.

**Parts used :** Whole plant.

**Dose**

Juice 5-10 ml., Oil 2-5 minims (drops), Infusion 10-20 ml.

## MARUBAKA ( मरुबक )

मरुदग्निप्रदो हृदस्तीक्षणोष्णः पित्तलो लघुः ।

वृश्चिकादि विषश्लेष्मवात् कुष्टकृमि प्रणुत् ॥

कटुपाकरसो रुच्यास्तिक्तो रुक्षः सुगन्धिकः ।

*Bhāvaprakāśa Nighaṇṭu.*

मरुवः कटुतिक्तोष्णाः कृमिकुष्टविनाशनः ।

विडबन्धाध्मानशूलघ्नो मांद्यत्वगदोष नाशनः ॥

*Rāja Nighaṇṭu.*

‘मरुबकः कफहरो रुच्यो मुखसुगन्धकृत् ।’

*Dhanvantari Nighaṇṭu.*

**मरुबकः:**

क. मरुबकः खरबुसः खरपत्रः सुखात्मकः ॥

सूक्ष्महीनः सुगन्धीऽन्यः प्रस्थपुष्पो मरुत्तकः ।

ख. सुखात्मकः कटुस्तिक्तो ग्रहजित् पाचनो हिमः ॥

निहन्ति कफपित्तात्मा कुष्टकण्ठौ विषज्वरान् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 1571-1573.*

# MĀṢA

**Botanical name**

Vigna mungo (L.) Hepper.,  
Syn. Phaseolus mungo Linn.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Māṣa

**Sanskrit names**

Haribīja, Bijavara, Saṭī, Vṛṣya, Vṛṣākari-vṛṣākara.

**Regional names**

Urhad, masa, mah, urada (Hindi); Mah (Punj.); Mashakalai (Bang.); Urhid (Mar.); Arhad (Guj.); Ulundu (Tam.); Bhinumu (Tel.); Mashe syah, Mashe Hindi (Arab., Pers.); Black gram, Kidney-bean (Eng.).

**Description**

Much branched climbing or erect annual herbs, with 30-60 cm. long straggling branches densely clothed with greyish to grey brown reflexed hairs.

Leaves 3-foliate; petioles 5-20 cm. long; stipules peltate, 7-10x4-5 mm.; leaflets ovate, rhomboid to ovate-deltoid or elliptic-ovate, acuminate, entire or slightly lobed, 5-8x4-6 cm.

Racemes capitate. 4-8 flowers; peduncles 1.5-4 cm. long. calyx 2-3 mm. long; teeth lanceolate. Corolla yellow, 9-13 mm. long.

Pods 3.5-6.5 cm. long, covered with long spreading hairs, 6-12-seeded, the rim-aril distinctly raised around the hilum of the seeds which are dirty green in colour.

**Flowering and fruiting time**

Plant flowers in August-September and fruits in October-November. Forming season. Flowering and fruiting during cold season.

**Distribution**

It is comonly cultivated in India as Kharif crop for agro produce of pulse. Forming in northern India specially in western Uttar Pradesh, Punjab and Harayana and different regions in country.

### Kinds and varieties

These are mainly two varieties of Māṣa in texts of indigenous materia medica and medicine (nighanṭu and samhitā) viz. Māṣa and Rājamāṣa (alasāndra), classified in Śimbīdhānya varga (leguminous seeds) which are botanically known as Vigna mungo (L.) Hepper syn. Phaseolus mungo Linn. and Vigna unguiculata (Linn.) Walp. respectively.

### Chemical composition

Seeds contain albuminoid 22.7%, starch 55.8%, oil 2.2%, fibre 4.8% and alkalies (including phosphoric acid) 4.4 per cent.

### Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Vātaśāmaka Pittakaphakara

### Properties and action

Karma	: Vātaghna Vedanāsthāpana Nādibalya Mādaka Rocana-puriṣajanana-sransana- śūlapraśamana Yakṛduttejaka Mūtrala Vṛṣya-stanyajanana-ārtavajanana Balya-bṛṅghaṇa-jīvaniya- medovardhaṇa Santarpaṇa
Roga	: Vātavyādhī-ardita-pakṣāghāta- sandhivāta Nādīdourbalya Aruci-vibandha-udaraśūla Yakṛdvikāra Arśa-gudakīla

Bastiśotha-mūtrakṛcchra  
 Klaibya-śukrakṣaya  
 Rajorodha  
 Stanyalpatā  
 Dourbalya-medakṣaya-māṁsakṣaya-  
 kṛṣatā.

### **Therapeutic uses**

The drug Māṣa is aphrodisiac, carminative, diuretic, laxative, galactogogue, emmenagogue and nervine tonic. It is useful in anorexia, gastrointestinal diseases, impotency, liver disorders, nervine and neurological diseases and urinary tract ailments. It is used frequently in all types of nervine and neurological disorders and also used in impotency. Māṣa is very commonly consumed as a household food article belonging to pulse (dāli or dal) group.

Māṣa has been employed as a drug in a number of classical recipes and formulations which are prescribed mainly for vājikaraṇa and vātanāśaka medicine. The compounds of māṣa (employed as major component and subsidiary drug also with different parts of māṣa) are recommended mainly in various ailments of related with nervine, neuralgic and sexual disorder.

Māṣa is specifically incorporated as effective drug in treatment of vātavyādhi such as ardita, pakṣāghāta, manyāstambha, viśācī, avabāhuka, sandhivāta and other vāta roga. The oil prepared with māṣa is frequently recommended and the poultice is also suggested in case of vātavyādhi. Among important formulations Māhāmāṣa taila and Māṣa taila are prominent oil formulations which are generally prescribed in clinical management of the diseases under vātavyādhi group.

Large number of classical recipes and formulations have classically been incorporated in context of vājikaraṇa compounds by Caraka and Suśruta followed by other therapeutic texts. They appreciate and recommend use of Māṣa as an effective aphrodisiac drug in various forms and modes of administration including unique type of aphrodisiac therapy (e.g. māṣaparṇabhṛtiya vājikaraṇa-aphrodisiacs on cow-fed on black gram leaves etc. Caraka, Cikitsā -3).

Māṣa is indicated as wholesome (pathya) and unwholesome (apathyā) diet in various diseases.

**Parts used :** Fruit-seeds, root.

**Dose :** Powder 5-10 gm.

#### Formulations

Māṣabalādi pācana, Mahāmāṣa taila, Māṣa taila, Bṛhanmāṣa taila, Vṛṣyamāṣa yogah (Caraka Saṃhitā, cikitsā. 2/1-4 : Vājīkaraṇa).

## MĀṢA-RĀJAMĀṢA ( माष-राजमाष )

क. माषो गुरुः स्वादुपाकः स्निग्धो रुच्योऽनिलापहः ।  
संसनस्तर्पणो बल्यः शुक्रलो बृहणः परः ॥  
भिन्नमूत्रमलः स्तन्यो मेदः पित्तकफप्रदः ।  
गुदकीलार्दितश्वासपक्षिशूलानि नाशयेत् ॥

*Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 41-42.*

#### कफपित्तकरा माषादयः

ख. कफपित्तकरा माषः कफ पित्तकरं दधि ।  
कफपित्तकरा मत्स्या वृत्ताकं कफपित्तकृत् ॥

*Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 43.*

#### राजमाषः

क. राजमाषो महामाषश्वपलश्च बलः स्मृतः ।  
राजमाषो गुरुः स्वादुस्तुवर स्तर्पणः सरः ॥  
रूक्षो वातकरो रुच्यः स्तन्यो भूरिबलप्रदम् ।

#### राजमाषभेदाः

श्वेतो रक्तस्तथा कृष्णास्त्रिविधः स प्रकीर्तिः ।  
यो महास्तेषु भवति स एवोक्तो गुणाधिकः ॥

*Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 44-45.*

#### माषः

माषो हरिर्बीजवरः सटी वृष्ट्यो वृषाकरिः ॥

#### माष गुणाः

माषः स्निग्धो गुरु स्वादुः पाकेऽम्लो बृहणः सरः ।  
वीर्योष्णस्तर्पणः स्तन्दी शुक्रवृद्धि विरेककृत् ॥

कफपित्तबलस्तन्य मेदो मासबलप्रदः ।  
पक्षिशूलार्दितश्वासदुर्नामानिलनाशनः ॥

*Kaiyadeva Nighanṭu, Oṣadhi varga, 56-58.*

### राजमाषः

अलसान्द्रो राजमाषश्वपलश्वबलस्तथा ।  
राजमाषः स्वादुपाको रुक्षो बहुशकृद् गुरुः ॥  
कषायस्तर्पणो वातकरः स्तन्यरुचिप्रदः ।

*Kaiyadeva Nighanṭu, Oṣadhi varga, 59-60.*

कषायमाषान्नं पुरीषभेदो,  
न मूत्रलो नैव कफस्य कर्ता ।  
स्वादुर्विषपाके गृहजोऽलसान्द्र,  
संतपर्णः स्वादुरुचि प्रदश ॥

*Kaiyadeva Nighanṭu, Oṣadhi varga, 60.*

### धान्यमाष-माषः

माषस्तु कुरुविन्दः स्याद्वान्धवीरो वृषाकरः ।  
मांसलश्च बलाद्यश्च पित्राश्च पितृजोत्तमः  
माषः स्निग्धो बहुमलकरः शोषणः श्लेष्मकारी  
वीर्येष्णोष्णो इटिति करुते रक्तपित्तप्रकोपम् ।

### माष गुणः

हन्याद्वातं गुरुबलकरो रोचनो भक्ष्यमाणः ।  
स्वादुर्नित्यं श्रमसुखवतां भेदनीयो नराणाम् ॥

*Rāja Nighanṭu, Śālyādi varga, 80-81.*

### राजमाषः

राजमाषो नीलमाषो तृणमाषो नृपोचितः ।  
कफपित्तकरो रुच्यो वातकृद्वलदायकः ॥

*Rāja Nighanṭu, Śālyādi varga, 82-83.*

### वृद्ध्यमाष योगः

माषयूषेण यो भुक्त्वा घृताद्यं षष्ठिकौदनम् ।  
पयः पिबति रात्रिं स कृत्त्वां जागर्ति वेगवान् ॥

*Caraka Saṁhitā, Cikitsā. 2-1/47.*

वाजीकरणार्थं योगाः (माष घटकद्रव्य)

वाजीकरण घृतम्

वाजीकरण पिण्ड रस

वृष्टमाहिष रस

*Caraka Samhitā, Cikitsā, 2-1/33.*

अपत्यकर स्वरस योग —

वृष्टक्षीर योग —

*Caraka Samhitā, Cikitsā, 2-2/14-20.*

अपत्यकरी षष्ठिकादि गुटिका —

*Caraka Samhitā, Cikitsā, 2-2/3-9.*

त्रय वृष्ट गोदध योगाः ( माषपर्णभृतीय वाजीकरणं पादम् )

माषपर्णभृतां धेनुं गृष्टं पुष्टां चतुःस्तनीम् ।

समानवणवत्सां च जीवद्वृत्सां च बुद्धिमान् ॥

रोहिणीमथवा कृष्णपूर्वशृङ्गामदारुणाम् ।

इक्षवादामर्जुनादां वा सान्द्रक्षीरां च धारयेत् ॥

केवलं तु पयस्तस्याः शृतं वाऽशृतमेव वा ।

शर्कराक्षोद्रसर्पिर्मियुक्तं तद्वृष्टमुत्तमम् ॥

*Caraka Samhitā, Cikitsā, 2-2/3-5.*

अपत्यजननं क्षीरयोगः:

मण्डलैर्जातरुपस्य तस्या एव पयः शृतम् ।

अपत्यजननं सिद्धं सघृतक्षौद्र शर्करम् ॥

*Caraka Samhitā, Cikitsā, 2-3/11.*

वृष्टपञ्चदशयोगः:

प्रहर्षयोनयो योगा व्याख्याता दशपञ्च च ।

माषपर्णभृतीयेऽस्मिन् पादे शुक्रबलप्रदाः ॥

*Caraka Samhitā, Cikitsā, 2-3/31.*

वृष्टपूपलिका योग

वृष्टपायस योग—

*Caraka Samhitā, Cikitsā, 2-3/14-17.*

वाजीकरणार्थ माषपायसयोगः घृतभृष्टो

दुग्धमाषपायसोवृष्ट उत्तमः ।

*Cakradatta, Vṛṣyadhikāra, 66-10.*

‘माषाः श्लेष्म पित्तजननानाम् ( श्रेष्ठम् ) ।’

*Caraka Samhitā, Sūtra, 25.*

**माषः-राजमाषः:**

*Caraka Samhitā, Sūtra, 4-2.*

वृष्यः परं वातहरः स्निग्धोष्णमधुरो गुरुः ।

बल्यो बहुमलः पुंस्त्वं माषः शीघ्रं ददाति च ॥

*Caraka Samhitā, Sūtra, 27-24.*

माषो गुरुर्भिन्नं पुरीषमूत्रः स्निग्धोष्णवीर्यो मधुरोऽनिलग्नः ।

सन्तर्पणः स्तन्यकरो विशेषाद् बलप्रदः पित्तकफावहश्च ॥

कषायभावान्नं पुरीषभेदी न मूत्रलो नैवः बलासकर्ता ।

स्वादुर्विषपाके मधुरोऽलसान्द्रः सन्तर्पणश्चैव रुचिप्रदश्च ॥

माषैः समानं फलयात्मगुक्षमुक्तं च काकाण्डं फलं तथैव ।

*Suśruta Samhitā, Sūtra, 46-34/35.*

माषः स्निग्धो मारुतग्नो गुरुष्णो वर्चः पित्तश्लेष्मकृत्तेजहेतुः ।

शुक्राधिक्याद्द्रावकर्ता सरः स्यात् काकाण्डोलान्यात्मगुसापितद्वत् ॥

स्निग्धोऽथ वृष्योमधुरश्च बल्यः स्तन्यः कफानां परिबृंहणश्च ।

पाकेऽस्त्विकोऽयं कथितो हि शुक्रभेदप्रदोऽनल्पबलो हि माषः ॥

माषः स्निग्धो बलश्लेष्ममलपित्तकरः सरः ।

गुरुष्णोऽनिलहा स्वादुः शुक्रवृद्धिं विरेककृत् ॥

*Aṣṭāṅga Hṛdaya.*

**वृष्य योगः:**

माषाणां पलमेकं तु संयुक्तं क्षौद्रसर्पिषा ।

अवलिह्य पयः पीत्वा तेन वाजी भवेत्रः ॥

*Suśruta Samhitā, Cikitsā, 26-211.*

**वाजीकरणे**

माषयूषेण यो भुक्त्वा घृताढ्यं षष्ठिकौदनम् ।

पयः पिबति रात्रिं स कृत्स्नां जागर्ति वेगवान् ॥

*Caraka Samhitā, Cikitsā, 2-45.*

**विश्वाच्याम्**

‘मूलं बलायाः…… ।

नस्यं तु यो माषरसेन कुर्यान्मासदसौ वज्रसमानबाहुः ।’

*Vṛndamādhava, Vātādhikāre.*

**वाजीकरणे प्रयोगः:**

माषयूषेण यो भुक्त्वा घृताढ्यं षष्ठिकौदनम् ।

पयः पिबति रात्रि स कृत्स्नां जागर्ति वेगवान् ॥

*‘समाष विदला वृष्णा घृतक्षीरोपसाधिता ।’*

*Caraka Saṁhitā, Cikitsā, 21-45.*

*‘शुक्रसुतिकरं किञ्चित् किञ्चिच्छुक्रविवर्धनम् ।  
सुतिवृद्धिकरं किञ्चित् त्रिविधं वृष्यमुच्यते ॥’*

*‘पुंस्त्वं शीघ्रं ददाति च ।’*

### शोषे

*‘घृतेन चाजेन समाक्षिकेण तुरङ्गं गन्धा तिल माष चूर्णम् ।’*

*Saśruta Saṁhitā, Soṣapratīṣedhaka.*

### स्वप्रदर्शनान्तरम्

*‘दद्यान्माषांस्तिलांलोहं.....विप्रेभ्यः काञ्चनं तथा ।’*

*Suśruta Saṁhitā, Sūtra, 29-72.*

### प्रदेहार्थम्

*‘वातामयितां प्रदेहः ।’ स्वेदोपग दशेमानि ।*

*Caraka Saṁhitā, Sūtra, 3.*

### अन्नद्रवशूले ससैन्ध्व प्रयोगः ( सिद्धाहारकल्पना )

*माषेण्डरीं सलवणां सुस्विनां तेलपाचिताम् ।  
तादृशीं सर्पिषा खादेदन्नद्रवनिपीडितः ॥*

*Bhāvaprakāśa, Sūlādhikāra, 30-72.*

### सोमरोगे

*माषचूर्णं समधुकं विदारीं मधुशर्कराम् ।*

*पयसा पाययेष्वातः सोमधारणमुत्तमम् ॥*

*Bhāvaprakāśa, Somorogādhikāra, 69-8.*

### अन्नद्रवशूले माषेण्डरी पथ्यम्

*‘माषेण्डरी सतुषिका स्विना सर्पियुता हिता ।’*

*Cakradatta, Parināmaśūla Cikitsā, 27-85.*

### वातव्याधि चिकित्सायां तैल योगः

*स्वल्पमाष तैलम्*

*माष तैलम्*

*द्वितीय माषतैलम्*

*तृतीय माषतैलम्*

*सप्तप्रस्थबृहन्माषतैलम्*

### महामाषतैलम्

*Cakradatta, Vātavyādhi Cikitsā, 22/154-172.*

*Cakradatta, 22/187-200.*

### दारुणक रोगे माष लेपः ( शिरगत )

‘काञ्जिकायाः त्रिसप्ताहं माषा दारुणकापहाः ।’

*Cakradatta, Kṣudraroga Cikitsā, 55-86.*

### चिरकालीन प्रतिश्यायहरो माष ( बीज ) योगः

भक्षयति भुक्तमात्रे सलवणमुत्स्वस्त्रमाषमत्युष्णन् ।

स जयति सर्वसमुत्थं चिरजातञ्च प्रतिश्याययम् ॥

*Cakradatta, Nāsāroga Cikitsā, 58-22.*

### शिरोरोगे वातिके

माषान् मुद्दान् कुलत्थान् वा तद्वत् खादेदघृतान्वितान् ।

तैलं तिलानां कल्कं वा क्षीरेण सह पाययेत् ॥

*Aṣṭāṅga Hṛdaya, Uttara. 24-2.*

### वाजीकर प्रयोगः

प्रसृतं माषचूर्णस्य धात्रीस्वरसभावितम् ।

विदारीरजसो वापि लिहन् मधुघृतद्रुतम् ॥

क्षीरानुपश्टकवत् दारकृत्वो ब्रजेत् स्त्रियः ।

*Aṣṭāṅga Sangraha, Uttara, 50-40.*

### वातव्याधौ विश्वाची-अवबाहुके

दशमूली बलामाषकाथं तैलाज्यमित्रितम् ।

सायं भुक्त्वा पिबेन्नस्यं विश्वाच्यामवबाहुके ॥

मूलं बलायास्त्वथः पारिभद्रात्थात्मगुसा स्वरसः पिबेद् वा ।

नस्यं तु यो माषरसेन कुर्यादमासादयोन्रजसमबाहुः ॥

*Vṛndamādhava, 22-31-62.*

तैल संकुचितैऽध्यंगो माषसैन्धवसाधितम् ।

बाहुशीर्षगते जलं पानं चोत्तरभक्तिकम् ॥

*Vṛndamādhava, 22-219.*

### पक्षाघात मन्यास्तम्भे

माष बलाशूकशिम्बीकतृणरासनाश्वगन्धोरुबूकाणम् ।

क्षाथो तस्यनिपीतो रामठलवणान्वितः कोष्णः ॥

अपहरति पक्षाघातं मन्यास्तम्भं सकर्णनादरुजम् ।

दुर्जयमर्दितवातं      ससाहाज्ययति      चावश्यम् ॥  
*Vṛndamādhava, 22-21.*

## MĀṢAPARNĪ

**Botanical name :** *Teramnus labialis* Spreng

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Māṣaparnī

**Sanskrit names**

Māṣaparnī, Mahāsahā, Sūrpaparnī, Pāṇḍurā, Hayapucchikā, Haṁsamāśā, Svādumāśā, Māṁsamāśā, Kambojikā, Kṛṣṇavṛntā, Simhavinnā, Māṣapatrikā.

**Regional names**

Masavan, Ban Urhad (Hindi); Masani, Vankalai (Beng.); Ran urhad (Mar.); Jangli Arhad (Guj.).

**Description**

A wide-spreading slender, climber, with a few appressed hairs on the stems.

Leaves long 1.5-3.3 cm. or 3/5 - 10 1/3 in. (sometimes upto 2.5-7.5 cm. or 1-3 in. long) or length of leaves exceeds upto about 4 in., with minute lanceolate deciduous; stipules minute, subulate; petiole 1 in. or more, leaflets 3, membranous or subcoriaceous, one inch to two and half inches long, ovate-oblong with a rounded base, subacute or obtuse, glabrescent above, sparsely appressed-hairy beneath; lateral slightly than the terminal.

Racemes axillary, elongated lax; pedicels solitary below, fascicled upwards; bracts narrowly lanceolate, caducous; bracteoles minute, subulate. Calyx-teeth subequal, about as long as the tube. Corolla reddish. Fls. pink-purple or sometimes white in colour.

Pods upto 2 in. long, linear, globrous, recurved, 8-12-seeded. flat, erect or curved. Seeds red in colour in fresh or green state but turned black when dried.

**Flowering and fruiting time**

Plant flowers during winter season and fruiting begins afterwards.

**Distribution**

Plant is cosmopolitan in the tropics. It occurs in Punjab plains, Bengal and Southern India to Sri Lanka. It is found in U.P. and central India.

**Chemical composition**

Seeds contain albuminoids 22.7%, starch 55.8%, oil 2.2%, fibres 4.8%, and alkalies 4.4%.

**Pharmacodynamics**

Rasa	: Madhura, tikta
Guṇa	: Laghu, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātāpittaśāmaka Kaphavardhaka

**Properties and action**

Karma	: Jīvanīya Rasāyana Śukrajanana-vājīkaraṇa Dīpana-snehana-anulomana-grāhī Vātaghna Raktaśodhaka-raktapittaśāmaka- śothahara Dāhapraśamana Jvaraghna Prajāsthāpana.
Roga	: Raktapitta-raktasrāva Vātavyādhī-ardita-pakṣāghāta- sandhivāta-vātarakta Udarśūla-viṣṭambhī-grahanī Raktavikāra Śotha Śukrameha-śukrakṣaya Jvara Dāha Kṣayaroga Kāsa Dourbalya-śoṣa.

### **Therapeutic uses**

The drug is used as an aphrodisiac and employed in Śaṣṭikādi guḍikā. It is an ingredient in Balāghṛta as well as Balā taila which are recommended for holding conception. In treatment of vātarakta, the formulations (yoga) Dvipañcamūlyādi (jīvanīya) ghṛta and Jivakādya ghṛta-taila containing the drug Māṣaparṇī are recommended. It is one of the Rasāyana drugs and it is an ingredient of important formulations viz. Brāhmaṛasāyana and Cyavanaprāśa. As an aphrodisiac, it enters into formulation known as Śaṣṭikādi guḍikā incorporated in texts (Caraka Saṁhitā, cikitsā. 2-2-5), and some other recipes (Yoga).

For treatment of cough (Kāsa), ghṛta (ghee) is cooked with paste of śarkarā, jīvaka, mudgaparṇī, māṣaparṇī and durālabhā alongwith eight times milk ('kṣireṇāṣṭaguṇen'). This preparation is recommended to be given as linctus (leha), drink (pāna) and food (bhojana), in order to alleviate cough (pittaja kāsa) caused by pitta provocation (Aṣṭāṅga Hṛdaya, cikitsā. 3/38-39.

In rat poisoning (mūṣika viṣa), Māṣaparṇī, mixed with sindhuvāra and mākṣika, is suggested to be taken as linctus (Suśruta Saṁhitā, kalpa. 6). The drug Māṣaparṇī is used in some other ailments. The māṣaparṇī plant (pancāṅga) is cooked in oil and it is applied in vagina (picudhāraṇā) in ailment of leucorrhoea and pradara (vātasṛgdara) with menorrhagia and metrorrhagial condition.

**Parts used :** Whole plant, root.

**Dose :** Decoction 50-100 ml., Powder 3-6 gm.

**Gāṇa**

Jīvanīya, Śukrajanana, Madhuraskandha (Caraka Saṁhitā), Kākolyādi, Vidārigandhādi (Suśruta Saṁhitā).

## **MĀṢAPARΝĪ ( माषपर्णी )**

माषपर्णी हिमा तिक्ता रुक्षा॑ शुक्रबलासकृत्।

मधुराग्राहिणी शोथवातपित्तज्वरास्त्रजित्॥

*Bhāvaprakāśa Nighaṇṭu, Guḍucyādi Varga, 56.*

- अ. माषपर्णी सूर्यपर्णी पाण्डुरा हयपुच्छिका ।  
हंसमाषा स्वादुमाषा मांसमाषा महासहा ॥  
काम्बोजिका कृष्णवृन्ता सिंहविना विशाचिका ।  
ब. माषपर्णी हिमा रुक्षा मधुरा कफशुक्रला ।  
तिक्ता संग्रहिणी वातपित्तदाहज्वरास्त्रजित् ॥

*Kaiyadeva Nighantu, Oṣadhi Varga, 104-106.*

### माषपर्णी

माषपर्णी तु काम्बोजी कृष्णवृन्ता महासहा ।  
आर्द्रमाषा मांसमाषा मङ्गला हयपुच्छिका ॥  
हंसमाषाश्वपुच्छा च पाण्डुरा माषपत्रिका ।  
कल्याणी वज्रमूली च शालिपर्णी विसारिणी ॥  
आत्मोद्धवा बहुफला स्वयम्भूः सुलभा घना ।  
इत्येषा माषपर्णी स्यदिक विंशति नामका ॥

*Rāja Nighantu, Guḍūcyādi Varga, 30-32.*

### माषपर्णी गुणः

माषपर्णी रसे तिक्ता वृष्ट्या दाहज्वरापहा ।  
शुक्रवृद्धिकरी बल्या शीतला पुष्टिवर्धनी ॥

*Rāja Nighantu, Guḍūcyādi Varga, 33.*  
'माषपर्णी महावृष्ट्या चक्षुव्या मुद्रपर्णिका ।'

*Raja Ballabha Nighantu.*

### वातासृगदरे

माषपर्णी विपक्षेन तैलेन पिचुधारणम् ।  
कर्तव्यं रक्तनाशाय मार्दवाय सुखाय च ॥

*Baṅgasena, Asrgdara Cikitsā.*

### मूषकविषे

'सहे ससिन्धुवारे च लिह्यात् तत्र समाक्षिके ।'

*Suśruta Saṁhitā, Kalpa, 6.*

### बाजीकरणे

षष्ठिकादि गुडिकायाम्

*Caraka Saṁhitā, Cikitsā, 2-5.*

### गर्भधारणार्थम्

बलाघृततैले

*Caraka Saṁhitā, Cikitsā, 30-50.*

**वातरक्ते**

द्विपञ्चमूलाग्र घृते ।

*Caraka Saṁhitā, Cikitsā, 29-61.*

**रसायने**

ब्राह्मरसायने ।

*Caraka Saṁhitā, Cikitsā, 2-1-43.*  
च्यवनप्राशे ।

*Caraka Saṁhitā, Cikitsā, 1-1-62.*

**कासे**

शर्करा जीवकं मुद्दाषपण्यो दुरालभाम् ।

कल्कीकृत्य पचेत् सर्पि: क्षीरणाष्ट गुणेन तत् ॥

पानभोजनलेहेषु प्रयुक्तं पित्तकासजित् ।

*Aṣṭāṅga Hṛdaya, Cikitsā, 3-38/39.*

## MASTAKĪ-(RUMIMASTAGI)

**Botanical name :** Pistacia lentiscus Linn.

**Family :** Anacardiaceae

**Classical name :** Mastakī

**Common name :** Rumi Mastagi

**Sanskrit names**

Carvaṇikā, Mukhaśodhikā, Sthiradantā, Mastakī, Rūmajā, Gundrā.

**Regional names**

Rumi Mastagi, Mastagi (Hi.); Ruma mastaki (Mar.); Mastaki, Alakarumi (Arabic); Kundar rumi (Pers.); Mastic tree (Eng.).

**Description**

A variable evergreen shrub or a small tree, up to 4 meters in height with pinnate leaves and small (4-5 mm. in diam.), globose black drupes, found chiefly in the Mediterranean region. Plant (mastic tree) yields resin mastic forming drug Mastakī or Rumimastagi which is imported to India.

Evergreen small tree or shrub upto 15 feet tall. Leaves pinnotifid. Fruits 4-5 mm. in diam., drupes, globose, black.

**Drug Mastakī :** The resin Mastic forms drug. Mastakī or Rumi mastagi. Resin exudes naturally from the bark, but for commercial purposes, it is obtained by making small vertical incisions in it and picking off the hardened product about three weeks later. Mastic varies in colour and apperance according to the commercial grade, but generally it occurs in globular, pyriform or elongated tears, 4-8 mm. in diam., pale yellow, clear and glassy when fresh, becoming dull and brittle on keeping; it has an aromatic odour and agreeable taste.

The powdering of drugs raw material is required care and promptness while put in Kharala (for mardana) to avoid its sticky nature. Material is put into a cloth (poṭtali) and soaked in water and then quickly it is put for powdering after cleaning with cloth.

### Distribution

The mastic trees occur in Mediterranean region and the main source of supply of mastic is the island of chios in the Aegean Sea where the plants grow mainly is the south-east corner of island upto an altitude of 500 meters (average rainfall 73 cm.).

Propogation is done by cuttings, only male trees are cultivated as the female ones yield an inferior resin. A tree gives 4-5 kg. resin in a year.

### Chemical composition

It contains a volatile oil, mastiscine 10%, resin soluble in 30% alcohol, masticonic and masticolic (soluble in alcohol). Essential oil occurs both in fruit and leaves.

The seeds yield over 30 per cent of a fatty oil. Leaves contain tannin 9-10% and they also contain myrecetin probably as a glucoside, and quinic and shikimic acid.

### Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Laghu, rūkṣa

Virya : Uṣṇa  
 Vipāka : Madhura  
 Doṣakarma : Vātapittasāmaka  
               Kaphaniḥsāraka.

### Properties and action

<b>Karma</b>	: Chedana-śleśmahara Dourgandhyahara- mukhadurgandhahara- sugandhihara Daśanasthiratākara Varṇya Śothahara Raktarodhaka Dipana-vātānulomana Yakṛduttejaka Grāhī Mūtrajanana Vājikaraṇa Ārttavajanana
<b>Roga</b>	: Mukhadourgandhya-caladante Kāsa-śvāsa Mūtrakṛcchra Kaṣṭārtava Klaivya Agnimāndya-ādhmāna Sangrahaṇī Yakṛdvikāra.

### Therapeutic uses

The drug Mastaki or Rumimastagi (Mastic) is considered carminative, stimulant and diuretic. Mastic has been used specially (in the Mediterranean countries) as a masticatory to sweeten the breadth and to preserve teeth and gums. It is used in the preparation of chewing gum. It has also been used to flavour alcoholic bewerages and cordials. Besides its more or less use as medicine it still enters into the preparation of various pharmaceutical products, perfumes and incenses. It is also used for filling of carious teeth and in paints used as protective covering for wounds.

Mastic has also other utility besides medicine, aromatic and masticatory item.

The gum resin of Mastakī (Rumimastagi) is useful in cough, asthma, dysuria, loss of appetite, flatulence, sangrahaṇī, liver disorders, painful menses, impotency and dysuria. It is useful in the diseases caused by provoked vāta and pitta doṣa and also in kaphaja vikāra for saṁśodhana.

It is used externally on inflammation and pigmentation abnormalities including skin discolouration (varṇa vikāra). The chewing of drug is useful to check foul smell. It is chewed for stabilising teeth and good for gums.

**Parts used :** Exudate (gum-resin).

**Dose :** 1-3 gms.

## MASTAKĪ (RUMI MASTAGI)

मस्तकी ( रूमी मस्तगी )

‘रुमजो मस्तकीगुन्द्रो दशनस्थिरताकरः ।’

*Siddha Bhaiṣajya Maṇimālā.*

मधुरो मस्तकी गुन्द्रो लघुरुष्णः सुगंधयुत् ।

कफग्नो मूत्रलो हृद्यः संग्राही दीपनो मतः ॥

*Dravyaguṇa Vijñana, Part II, P. 260.*

## MASŪRA

### Botanical name

*Lens culinaria Medic.*

Syns. *Ervum lens L.*, *Lens esculenta Moench.*

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Masūra

**Sanskrit names**

Masūra, Maṅgalya, Masūrikā, Rāgadāli, Pṛthubījaka, Pāṇḍurā, Śūra, Kalyāṇabīja, Gurubīja, Masūraka.

**Regional names**

Masura, malka (Hindi); Masur, Masser, Masuri

(Hindi, Bengla, Marathi, Gujarati); Misurpappu, Chirisangalu (Telugu); Massur, Chanangi (Kan.); Masur, Malka, Massur, Musri (Punjab); Masurmoha (Assam); Lentil (Eng.).

### **Description**

Erect much branched hairy herb, 30-60 cm. tall, with angular branches; softly pubescent herb.

Leaves paripinnately compound, ending in a short bristle, sometimes in a tendril, leaflets 4-7 pairs, subopposite, pilose on both sides, entire, up truncate to retuse, apiculate.

Inflorescence peduncled, 1-4-flowered, ending in a bristle. Calyx pilose, teeth subequal acute. Corolla pale purple, wings adnate to the keel and to the staminal tube. Style bearded longitudinally on the inner face. Flowers white, rose, red violet.

Pods rhomboid, glabrous, 8-14 x 5.8 mm. Seeds 2, compressed, grey; pods smooth with lenticular seeds, varying in colour from pale pinkish buff to prussian red.

### **Flowering and fruiting time**

Plant flowers and fruits during the period from November to April. Farming seasons as pulse crops (rabi crop and depending upon various agro-practice factors).

### **Distributions**

It is commonly cultivated in India as a cold weather crop for seed-pulse. Large scale crop farming for commercial purpose (trade) of lentils (masūra) specially northern, western and eastern regions to varying extents (mainly in U.P., M.P., Bihar and West Bengal etc.) other than Southern India (excluding Mysore).

### **Chemical Composition**

Analytical data on values of pulse (lentil) follow : moisture 12.4, protein 25.1, fat (etherextr.) 0.7, Carbohydrates 39.7 and mineral matter 2.1% the carbohydrates present are : hemicellulose, starch, paragalactoaraban stachyose and reducing sugars. Lentils contain high protein value, similar to those of peas and beans. In common

with other pulses, lentil is good source of vitamins of the B group. Mineral various contents are reported in lentil. Lentil contains amylase, proteolytic enzymes, phosphates and phytase.

The germinating plant shows high dipeptidase activity. A saponin name esculenin has been isolated in appreciable amounts. Asparagin is present in the embryo.

### **Pharmacodynamics**

Rasa	: Madhura, Kaśaya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kabhapittanāśaka Vātala

### **Properties and action**

Karma	: Grāhī
	Jvaraghna
	Raktapittaśāmaka
	Mūtrala
	Varṇya
	Adhmānakara vātala
	Tvacya
	Viṣaghna
	Chardinigrahaṇa
Roga	: Atisāra
	Raktapitta
	Mūtrakṛcchra
	Varṇavikāra
	Kṣudraroga-vyaṅga-nīlikā
	Sarpadamśa
	Chardi.

### **Therapeutic uses**

Masūra is useful as medicine. Its grains and pulse are used in various ailments. In diarrhoea (atisāra), masūra ghṛta is prescribed and similarly another formulation masūra ghṛta has been indicated in sangrahaṇī (śāraṅgadhara saṃhitā, 2-9/25-26, Vṛndamādhava, 4-21/22). For checking the vomiting (chardi nigrahaṇa), the

parched flour of masūra mixed with honey and churned with the juice of pomegranate (dāḍima) is given in condition of vomiting caused by tridoṣa provocation (Śāraṅgadhara Saṁhitā, 2-3-11) which incorporated as Masūramantha yoga.

The drug Masūra is valued as varṇya (lustre pigmentation, or complexion promoting) and sundarikarāṇa (beautifying) herbal agent. Besides its use as paste over face and other parts of body, the same is applied in freckles (vyāṅga). Various recipes have been mentioned in Indian medicine (viz. Aṣṭāṅga Hṛdaya, Uttara. 32-19; Bhāvaprakāśa, 61-43; Vaidyamanoramā, 52-39); Cakradatta, Vṛṇḍamādhava, 57-39) recommending external application of Masūra in health and disease for skin complaints as herbal cosmetics in traditions.

The lentil (masūra) is commonly valued as an article of food and is mostly used as pulse (dāli) or dhal (dehusked grain). For removing the husk, the seed is moistened with oil and water, dried in shade and passed through a mill (2-3 times). Everytime the dhal, chooni (broken bits) husk are separated. To give an attractive apperance, the husked pulse is polished with magnesite powder and gritty powder.

Masūra (lentil) is used mainly in soups flavoured with spices and condiments and also component of khichri (kr̥śarā) and similar other dietary preparations (regimens). Young pods are eaten as vegetable. Lentil meal mixed with barley or other cereal flour and common salt, is maraked as invalid food in some countries. In northern India, for the instance, Uttar Pradesh, fairly large quantity of whole seed is used in preparing dal-mot, a salted fried preparation popularly marketed and consumed. Masūra is recommended as wholesome food (pathya) in various diseases.

**Parts used :** Seeds.

**Dose :** Decoction, 50-100 ml.

**Formulation :** Masūrikā lepa, Masura ghṛta.

## MASURA ( मसूर )

- क. मङ्गल्यको मसूरः स्यान्मङ्गल्या च मसूरिका ।  
 ख. मसूरो मधुरः पाके संग्राही शीतलो लघुः ।  
 कफपित्तास्त्रद्रूषो वातलो ज्वरनाशनः ॥
- Bhāvaprakāśa Nighantu, Dhānya Varga, 50.*

- अ. मसूरो रागदालिस्तु मङ्गल्यः पृथुबीजकः ।  
 शूदः कल्याणबीजश्च गुरुबीजो मसूरकः ॥  
 ब. मसूरो मधुरः शीतः संग्राही कफपित्तजित् ।  
 वातामयकरश्चैव मूत्रकृच्छ्रहरी लघुः ॥
- Rāja Nighantu, Śālyādi Varga, 94-95.*

- क. मसूरिका मसूराख्या मङ्गल्या पाण्डुरा तथा ।  
 ख. मसूरा मधुराः पाके कषाया मधुरा मधुरा हिमाः ॥  
 लघवो ग्राहिणो रुक्षा रक्तपित्तकफापहाः ।

### मसूरशाकम्

- ग. वर्ण्या वातोल्वाणा बल्यास्तेषा शाकं सतिक्तकम् ।  
 ऋते मुद्रमसूराभ्यामन्ये त्वाध्मानकारकाः ॥
- Kaiyadeva Nighantu, Dhānya Varga, 71-73.*

### मसूरः

- मसूरो रागदालिन्तु मङ्गल्यः पृथुबीजकः ।  
 शूरः कल्याणबीजश्च गुरुबीजो मसूरकः ॥

### मसूरगुणः

- मसूरो मधुरः शीतः संग्राही कफपित्तजित् ।  
 वातामयकरश्चैव मूत्रकृच्छ्रहरो लघुः ॥
- Rāja Nighantu, Śālyādi Varga, 94-95.*

### विसर्पे मसूर घृत योगः

- पटोलादिकषायं वा पिबे त्रिफल्यासहा ।  
 मसूरविदलैर्युक्तं घृतमित्रं प्रदापयेत् ॥
- Caraka Samhitā, Cikitsā, 21-60.*

### विसर्पे मसूर प्रदेहः ( अन्य योग सहित )

- ‘हरेणवो मसूराश्च समुद्धाः श्वेतशालयः ॥

पृथक् पृथक् प्रदेहाः स्युः सर्वे वा सर्पिषा सह ।'

*Caraka Saṁhitā, Cikitsā, 21/80-81.*

मसूरः

‘मस्यति परिणमति पाके मधुरो लघुश्च इति मसूरः ।’

मसूर गुणाः

विपाके मधुराः प्रोक्ता मसुराः बद्धवर्धनः ।

ऋते मुद्रमसूराभ्याम् अन्ये त्वाध्मानकारकाः ॥

*Suśruta Saṁhitā, Sūtra, 46.*

मधुरस्यापि मसूरस्य बद्धवर्चस्त्वं प्रभावात् ।

*Cakrapāni.*

‘चणकाश्च मसूराश्च..... ।’

लघवस्ते मधुराः शीताः सकषाया विरुक्षणाः ।

पित्तश्लेष्मणि शस्यन्ते सूपेष्वालेपनेषु च ॥

तेषां मसूरः संग्राही..... ।

*Caraka Saṁhitā, Sūtra, 27.*

द्व्याम्

मसूरमन्थः ।

*Śāringadhara Saṁhitā, 2-3-71.*

क्षौद्रयुक्ता मसूराराणां सक्तवो दाढिमामम्भसा ।

मथिता वारन्त्याशु छर्दि दोषत्रयोद्भवाम् ॥

*Śāringadhara Saṁhitā.*

मसूरघृतम् ।

*Śāringadhara Saṁhitā, 2-9-25/26.*

अतीसारे

मसूराणां पलशतं नीरद्रोणे विपाचयेत् ।

पादशेषं शृतं नीत्वा दत्त्वा बिल्वपलाष्टकम् ॥

घृतत्रस्थं पचेत्तेन सर्वातीसारनाशनम् ।

ग्रहणीं भिन्नविट्कं च नाशयेच्च प्रवाहिकाम् ॥

*Śāringadhara Saṁhitā.*

मसूरघृतम्

*Vṛndamādhava, 4-21/22.*

संग्रहव्याम्

पीतो मसूरयूषेण कल्कः शुण्ठीशलादुजः ।

जयेत्संग्रहणी तदुत्क्रेण बृहतीभवः ॥  
 Šārṅgadhara Saṁhitā.  
 'मसूर्यूषः संग्राही बृंही स्वादुः प्रमेहनुत्।'  
*Bhāvaprakāśa, Jvarādhikāra - 1/239.*

व्यङ्गे

मसूरैः क्षीरसम्पिष्टै लिंसमास्यं घृतान्वितैः ।  
 सप्तरात्रात्मवेत्सत्यं पुण्डरीकदलोपमम् ॥  
*Bhāvaprakāśa, Kṣudrarogādhikāra, 61-43.*

मुखसौन्दर्ययुक्त मसूरिका लेपः

मसूरैः सर्पिषा पिष्टैलिंसमास्यं पयोऽन्वितैः ।  
 सप्तरात्राद्ववेदुक्रपुण्डरीकदलोपमम् ॥  
*Cakradatta, Kṣudraroga Cikitsā, 55-47.*

सर्पदंश सावधिभयमुक्तिदायकं मसूर गुड योगः

मसूरं निष्पत्राभ्यां खादेन्नेषगते रथौ ।  
 अब्दमेकं न भीतिः स्याद्विघात् तस्य न संशयः ॥  
*Cakradatta, Viṣa Cikitsā, 3.*

मुख सुन्दरीकरणे

क्षीरपिष्टाः घृतक्षौद्रयुक्ता वा भृष्टनिस्तुषाः ।  
 मसूराः क्षीरपिष्टा वा तीक्ष्णाः शाल्मलिकण्टकाः ॥  
*Aṣṭāṅga Hṛdaya Uttara, 23-19.*  
 मसूरै सर्पिषा पिष्टैलिंसमास्यं पयोन्वितैः ।  
 सप्तरात्रेण भवति पुण्डरीकदलप्रभम् ॥  
*Vṛndamādhava, 57-39.*

## MATSYĀKṢAKA

**Botanical name :** Alternanthera sessilis (Linn.) R. Br.

**Family :** Amaranthaceae

**Classical name :** Matsyākṣaka

**Sanskrit names**

Matsyākṣaka, Matsyākṣī, Gart Kalāyaka, Matsyāksikā, Nāḍīkalāyaka, Matsyādani, Gaṇḍālī.

**Regional name**

Machechi (Hindi); Ponnaganta kura (Tel.);

Ponnanganni-keeray (Tam. & Mal.); Honagyone soppu (Kan.).

### Description

Polymorphic herbs, highly variable in size, habit and colour. Stem upto 40 cm. long, hairy on nodes, with 2 lines of hairs, lengthwise on internodes.

Leaves variable in shape, acute or cuneate at base; dark-green above, pale beneath, or suffused with red on both sides.

Spikes globose-cylindric, 1-3 in the axils of leaves. Tepals nearly equal, ovate, finely acuminate. Pseudostamnodes entire or 2-3-dentate. Utricle obcordate-obreniform, deeply notched at apex.

### Flowering and fruiting time

It bears flowers and fruits in August-April.

### Distribution

Plant occurs in paleotropic regions. It is common in moist or waterlogged places in gardens, near ponds or rivers, in low lands, along roads or railway tracks. It is often cultivated as a pot herb. Plant is common weed occurring throughout India and Sri Lanka.

### Chemical Composition

The young-shoots are nutritious and they contain protein 5% and iron 16.7 mg./100 mg.

### Pharmacodynamics

Rasa	: Tikta, Kaṣṭaya, Madhura
Guṇa	: Laghu
Virya	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Pittakaphahara Vātala.

### Properties and action

Karma	: Grāhī
	Kuṣṭhaghna
	Medhya
	Rasāyana

	Raktaprasādana Vraṇalekhana
Roga	: Kuṣṭha Kaṇḍu Raktavikāra.

**Therapeutic uses**

The drug Matsyākṣaka or Matsyākṣī is mainly blood purifier (raktaśodhana), vraṇalekhana, saangrāhi, cakṣuṣya and śukramehahara in pharmacological action. It is bitter, astringent and sweet (tikta-kaṣāya-madhura) in taste (rasa) and usṇa (hot) in potency or power (vīrya). It allays pitta and kapha doṣa and may increase vāta doṣa.

The herb is given in diseases caused by blood impurities (rakta-suddhi janya vikāra). It is mixed in the ointments (malahara) for applying on ulcers and wounds which forms the yellow pus (piṭapūyasaṛāvi vraṇa), such ulcerations become dry after application for a few days. For such purpose of external application of drug, the herb's paste is boiled (cooked) with sesame oil (tila taila) and after preparing oil (under procedure of oil pharmaceutics); the matsyākṣaka taila is locally applied on ulcers and other similar conditions including kaṇḍu and skin affections.

Whole plant is useful in dysentery, diarrhoea, spermatorrhoea, śukrasaṛāva and bloody diarrhoea (raktatisāra). A varti prepared with matsyākṣī, bhṛṅgaraja and punarnavā which is used as añjana (by rubbing or as collyrium) in some eye diseases i.e. conjunctivitis (netrabhiṣyanda), glaucoma (raktadhimantha), eye itching (netrakaṇḍū), trachoma (pothakī) and weak eyesight (dṛṣṭimāndya).

**Parts used :** Whole plant (pancāṅga), stem, leaves.

**Dose :** Juice 10-20 ml., Herb 3-6 and 5-7 gm.

## MATSYĀKṢĪ-MATSYĀKṢAKA ( मत्स्याक्षी-मत्स्याक्षक )

मत्स्याक्षी ग्राहणी शीतकुण्ठपित्तकफास्तजित्।

लघुस्तिका कषाया च स्वाद्वी कटुविपाकिनी ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍucyādi Varga, 266.*

क. मत्स्याक्षिका मत्स्यगन्धा बाढ़ी नाड़ीकलायकः ।

मत्स्यादनी तु गण्डाली तथा गर्तकलम्बुकः ॥

ख. बाढ़ी तिक्का स्वादुशीता कषाया ग्राहिणी लघुः ।

वातला कटुका पाके कफपित्तास्तकुष्टजित् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 728-729.*

मेधयलेहे

मत्स्याक्षकः शंखपुष्पी मधुसर्पिः सकाञ्चनम् ।

कमाराणां वपुर्मेधाबलबुद्धिविवर्धनाः ॥

*Suśruta Saṃhitā, Śārira, 10-68.*

रसायने

ऐन्द्ररसायने

*Caraka Saṃhitā, Cikitsā, 1-3-24.*

## MĀYĀPHALA

**Botanical name :** *Quercus infectoria* Oliv.

**Family :** Fagaceae

**Classical name :** Māyāphala

**Sanskrit names**

Māyāphala, Māyuka, Majjaphala, Māyiphala,  
Māyikā, Chidraphala, Kīṭavāsa.

**Regional names**

Majuphal (Hindi); Majuphala (Guj.); Machkai (Tam.); Machikay (Tel.); Machikai (Kann.); Majkani (Mal.); Afs (Arab.); Maju (Pers.); Galloak, Dyers oak, (Eng.).

**Description**

A small tree or shrub, c. 2-5 meters high, Leaves 4-6 cm. long, very rigid, often glabrescent with spinous teeth; acorns cylindrical. Tree yields the oak galls which arise as excrescences on the young twigs are caused by the deposition of egg by a small hymenopterous insect, Adheria

gallae tinctorius Oliver. The female fly lays the egg, on or in the cambium of a young shoot. Egg develops into a larva and gets surrounded by the tissues of the developing gall. The galls are collected before the escape of the insect and are well dried.

These galls are spherical or pear-shaped and measure 6-50 mm. in diam. The surface of the mature dry gall may be smooth and shining as though varnished, and chestnut brown colour, when the galls are gathered at the correct stage i.e. before the insect emerges, the inner tissue is soft, of a deep greenish yellow colour, with a very astringent taste and slightly sweet after taste. The galls vary generally in size, colour and general appearance depending upon the producing region or country etc.

**Drug :** Galls (not fruit), produced by specific insects cynips gallas infectoriae. Olivier (family cynipidae), formed on branches of *Quercus infectoria* olivier form drug Māyāphala. Galls are galla and they are also known as Aleppo Gall or Blue Galls. Gall are studded with numerous tuberortities on outer surface and insects inside, bluish-dark outside in colour and inside yellow or whitish and middle light yellowish, odourless and very astringent in taste; cavity inside with insect, insectless light.

### Distribution

Turkey, Persia, Yunan and other regions. Exported to India. The galls of *Quercus infectoria* Oliver, as well as of some allied species are imported into India and other countries.

### Chemical composition

The galls of oak contain tannic acid (gallotannic acid) as the principal constituent (50-70%). They also contain gallic acid, ellagic acid, gum, starch, sugar and essential oil.

The chemical constituents and other characteristics may differ in some of the galls nuts employed in India, other than imported galls of various types in trade e.g. Alappo Gall, Mecca Gall, Turkey Gall, Levant Gall, Smyrna

Gall, Syrian Gall, Acorn or Knoppers Galls, Bassorah Galls etc. which are also obtained from indigenous species of oaks found in U.P. hilly region.

### **Pharmacodynamics**

Rasa	:	Kaṣāya
Guṇa	:	Laghu, rūkṣa
Vīrya	:	Śīta
Vipāka	:	Kaṭu
Doṣakarma	:	Kaphapittaśāmaka.

### **Properties and action**

<b>Karma</b>	:	Stambhana Vāmaka (higher or excess dose) Raktastambhana Kaphaghna Mūtrasaṅgrahaṇīya Lekhana Svedāpanyana Viṣaghna Keśarañjana Dantya Vraṇaropāṇa
<b>Roga</b>	:	Raktasrāva Yonisrāva-yonimargasrāva-pradara yonisaṅkocaka Mūtrasaṅgrahaṇīya- mūtramārgasrāva hrāsaka Atisāra-grahaṇī-raktārśa Raktapitta Kāsa Prameha-pūyameha Aṣṭgdara Mukharoga-dantaroga Kanthavikāra Gudabhrāṁśa Arśa Vraṇa.

### **Kinds and varieties**

Another plant Rhus semi-alata Mill. belonging to

family is also referred in context of Mayāphala particularly its market adulterant, or substitutes.

Likewise to Karkaṭaśringī or kakrhasingi (*Pistacia integerrima* Stewart), the galls Chinese or Japanese galls produced by hemipterous insect *Melophis Chinensis* Bell. (belonging to family Aphididae) on this plant are admixed with galls of Māyāphala (*Quercus infectoria* Oliver) which form genuine drug material in drug trade.

**Rhus semialata Merr. Syn. Rhus chinensis Mill.**

A small deciduous tree or middle-sized tree. Resin-canals in the bark filled with white milk which is sticky, but does not turn black. Young parts covered with dark-grey pubescence. Branchlets, petioles, underside of leaves and inflorescence clothed with short, soft, brownish-grey pubescence. Leaves 4-6 pairs, opposite, sessile, 2-4 by 1-2 m., elliptic, acuminate, deeply crenate or dentate, glabrous above, soft-tomentose beneath; lateral nerves, 10-15 pairs, parallel; base rounded, somewhat oblique. Lvs. not aromatic, dentate, teeth large, triangular often sharp; lateral leaflets sessile, the terminal on a marginate petiolule; upper part of common petiole generally marginate or winged or winged. Pedicels terminal 0.6-0.3 long, conical, dense-flowered. Flowers 0.1 in. diam., white or pale-green. Sepals ovate. Petals oblong, ciliate much exceeding the tepals. Drupe 0.2 in. diam., subglobose, compressed, tomentose, edible.

The plant known as Tibri, Arkhoi, Tekri, Titri, Avkhoi and also by other names in the Himalayan regions where it grows wild; Uttar Pradesh hills, outer Himalayas, North-West Himalaya, areas between 3,000-6,000 ft. altitude; Assam; Khasi and Naga hills, Siam hills, Upper Burma, Martalan. China and Japan.

The plants of *Rhus semi-alata* Murray. begin flowering during April to September; and fruiting in September-October. Leaves twin red before they fall. Galls are produced by insect and they form frequently on the branches and galls are of various shapes. Besides galls, the fruits are often eaten and used medicinally in hill regions.

As the substitutes and adulterants and besides the plant *Rhus chinensis* Mill. syn. *Rhus semialata* Murr., the galls formed and produced on some species of oak occurring in Uttarakhand Himalaya (Uttar Pradesh) and other regions in the Himalayas in India are also obtained and employed as other kind of raw drug material; and as subsidiary plant sources certain plants e.g. *Quercus ilex* Linn., *Q. incana* Roxb., *Quercus dilatata* Lindl. ex Royle., known as Holly or Holm oak, Ban oak or Grey oak and Green oak respectively. and also some other species (as Indian gall nuts are also exported).

Gall nuts, also known as Magic nut; are Māyāphala are of different kinds in view of their colour, size and other features in generally apperance.

### **Therapeutic uses**

The drug Māyāphala is chiefly stambhama medicine (auśadha showing stiffening action, also haemostatic) with grāhī (astringent) activity (owing to kaṣāya rasa or taste : Grāhī and Kaṣāya both indicate to kaṣāyatva in general).

Māyāphala is stambhana and also emetic (if used in excess or overdose), raktastambhana (haemostatic), lekhana (emaciating), viṣaghna (antipoison), mūtra-sangrahanīya (anti-diuretic), yonisrāvahara (checking vaginal discharge), keśarañjana (hair colouring or dyeing), vraṇaropana (wound healer-antiseptic) and other pharmacological activities as considered in Indian medicine.

The drug in the form of galls in generally used in medicine after making powder as a single drug as well as an ingredient entering in some preparations and recipes. Some other forms and modes of drug usage are also prevalent in medical practice.

Māyāphala is chiefly used internally in atisara (diarrhoea), grahaṇī, arṣa (piles)especially raktārṣa (bleeding piles); rakta pitta (intrinsic haemorrhage), kāsa (cough), prameha, pūyameha (gonorrhoea), pradara and yonisrāvakaḷeda (leucorrhoea-vaginal discharge), garbhāśayāśuddhi (impurity of uterus needing cleansing or checking-uterine

and vaginal) and yonikanda (a kind vaginal diseases). In these diseases, the powder of galls is recommended to be administered as useful remedy and for application in vaginal and ulerine disorders, the basti prayoga, vartidhāraṇa and cūrṇa uddhūlana (powder dusting) are specifically advised. It also checks slackness of vulva or vaginal organ (orifice) in female (yoniśaithilyahara).

The powder of drug (galls) of Māyāphala is esteemed for applying as tooth powder (danta mañjana) having frequent and potent utility. The gargle (gaṇḍūṣa and kavala) of galls is useful in dental, throat and mouth (vocal) ailments. The dusting of powdered galls is prescribed in prolapse of anus (gudabhrāṁśa) and bleeding haemorrhoids (raktarśa). In excess sweating (svedādhikya), the fine powder is dusted (avacūrṇana-uddhūlana). The galls are suggested to be useful for applying as hair dyeing herbal agent (keśakṛṣṇikaraṇa).

**Parts used :** Gall (Kiṭagṛha).

**Dose :** 1-3 gm.

**Formulation**

Vajradanta mañjana, Māyāphalādi malahara.

## MĀYĀPHALA ( मायाफल )

मायाफलं मायिफलञ्च मायिका  
छिद्राफलं मायि च पञ्चनामकम् ।  
मायाफलं वातहरं कटूष्णकम्  
शैथिल्यसङ्घोचकेशकार्ष्यं प्रदम् ॥

*Rāja Nighaṇṭu, Pippalyādi Varga, 25-9.*

मायाफलं हिमं रूक्षं कषायं कफपित्तनुत् ।  
संग्राहि परमं रक्तस्थापनं मुखरोगहत् ॥

*Dravyaguṇa Vijñāna.*

मायुकं शीतलंरूक्षं कषायं मायाफलादि मलहर ।  
विपाके कटुकं ग्राहि कफपित्तहरं परम् ॥

*Śodhala Nidhaṇṭu.*

कीटावासो मज्जफलं ग्राहि बल्यं ज्वरापहम्।  
 शोणितास्तुतिहृद् हन्ति मुखदन्तगदान् गदान्॥  
 श्वेतपद्मशार्सि योनिकन्दं सुदारुणम्।  
 अतीसारं महावीरं ग्रहणीं सप्रवाहिकाम्॥

*Ayurveda Vijñāna.*

## MAYŪRAŚIKHĀ

**Botanical name :** Adiantum caudatum Linn.

**Family :** Polypodiaceae

**Classical name :** Mayūraśikhā

**Sanskrit names**

Mayūraśikhā, Madhucchada, Nīlakanṭhaśikhā.

**Regional names**

Mayurshikha (Hindi).

**Description**

It is a fern with sharply pinnate-pinnae fronds and sporagia.

**Distribution**

Plant occurs mostly in moist hills along river and rivulets. Plant dries up in January and fruiting begins in July-December.

**Kinds and varieties**

Various plants resembling to appearance of Mayūraśikhā are claimed as source for Mayūraśikhā such as Actinopteris dichotoma Bedd., Elephantopus scaber Linn. and Celosia argentea Linn.

**Pharmacodynamics**

Rasa	: Tikta, Kaṣāya, Madhura
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

**Properties and action**

**Karma** : Stambhana

	Kṛmighna
	Raktapittahara
	Pramehaghna
	Kuṣṭhaghna
	Jvaraghna
	Viṣaghna
	Prajāsthāpana
<b>Roga</b>	: Atisāra-pravāhika
	Kṛmiroga
	Raktapitta
	Prameha
	Carmaroga
	Jvara.

**Therapeutic uses**

The drug Mayūraśikhā is mainly stambhana and Kṛmighna; it is given in diarrhoea, dysentery, worms, raktapitta, prameha, skin diseases and fever.

Mayūraśikhā is suggested in medical texts for promoting conception (garbhadhāraṇa), snake bite (sarpaviṣa) and specific child disease (ahitunḍikā). Whole plant is administered in medicine.

**Parts used :** Whole plant.

**Dose :** Juice 10-20 ml.

## MAYŪRAŚIKHĀ ( मयूरशिखा )

मयूराद्विशिखा प्रोक्ता सहस्राहिमधुच्छदा ।

नीलकण्ठशिखा लघ्वी पित्तश्लेष्मातिसारजित् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 309.*

मयूराद्वा शिखा शीता कषाया कटुपाकिनी ।

लघ्वी पित्तकफौ रक्तमतीसारं विनाशयेत् ॥

*Kaiyadeva Nighaṇṭu.*

शिशूनां अहितुण्डकाप्रतिकारार्थं मयूरशिखा मूल प्रयोगः

सोमग्रहणे विधिवत् केकिशिखामूलमुद्भृतंबद्धम् ।

जघ्नेऽथ कन्धरायां क्षपयत्यहितुण्डकां निपतम् ॥

*Cakradatta, Bālaroga Cikitsā, 63-6.*

## सर्पविषे

साज्या मयूरचूडा तु पीता तण्डुलवारिणा ।

सर्वसर्पविषं हन्यात् काकजंघाऽथवा ध्रुवम् ॥

*Gadanigraha, 7-3-6.*

## गर्भधारणार्थम्

शिफां बर्हिशिखायास्तु क्षीरेण परिपेषिताम् ।

पिबेद् ऋतुमतीनारी गर्भधारण हेतवे ॥

*Gadanigraha, 6-5-10.*

# MEDĀSAKA

**Botanical name**

*Litsaea chinensis* Lamk.,

Syn. *Litsea glutinosa* (Lour.) C.B. Robins., *L. sebifera* Pors., *Tetranthera longifolia* Jacq.

**Family :** Lauraceae.

**Classical name :** Medāsaka

**Sanskrit names**

Medāsaka, Sadāruṇa, Gandhaparna, Sadāparṇa.

**Regional names**

Medalakarhi (Hindi); Karkmeda, Medalakarhi (Ma.); Meda lakarhi (Mar., Guj.); Kukurchite (Beng.); Medalakavi (Tam.); Meda (Tel.); Magase Hindi (Arab.); Kilz (Pers.).

**Description**

A moderate-sized evergreen tree with dark-green soft-corky bark; young parts grey-tomentose. Wood greyish-brown, close and even-grained, durable (not attacked by insects); heartwood not distinct; weight 46 lbs. per C.ft.; inner bark granular and viscid. Bark forms the drug Medāsaka or maidalakrhi sold in raw drug market in the form of broken quills or pieces (a few inches in length).

Leaves 4-10 in. long, elliptic-ovate, oblong or lanceolate, acute or acuminate; pubescent or glabrescent above; grey-tomentose beneath, soft-coriaceous; lateral nerves 8-12 pairs; petiole 0.5-1.5 in.

Umbels 0.3-0.6 in. diam.; pedicels clustered on a common peduncle 0.2-0.3 in. long; bracts 4, rounded, tomentose. Stamens 9-20 or more; filaments hairy.

Fruit about 0.3 in. diam., globose, supported by the club-shaped pedicel. Ft. like a pea (rounded), black or violet in colour.

### **Flowering and fruiting time**

Flowering stage begins during rainy season and fruiting from autumn to winters. Flowers in July and fruits in September-October.

### **Distribution**

It occurs upto 4,500 ft. elevation and almost throughout tropical forests in India specially in Uttar Pradesh, West Bengal, Bihar, Madhya Pradesh, and provinces. Plant generally grows in shady places, valleys and along Nallas. It is commonly found in forests U.P. hills in low valleys terai. Siwaliks and specially in shady revines. Plants may be propogated by seeds or by coppice shoots.

### **Kinds and varieties**

Another kind of Medāsaka (medalakarhi) is *Litsaea polyantha* Juss. and the bark of this tree is used as substitute or adulterant of the drug material.

***Litsaea polyantha* Juss.** Syn. *Tetranthera monopetala* Roxb. Karka, Karkaua (Dehradun, U. P.); Medalakari (Hindi); Porajo, Pojo (Santhal); Kukurchita (Beng.); Beghlal (Mal., Panj.), Motwa (Tha.).

A moderate-sized evergreen tree with dark grey, smooth-bark Leaves 4-8 in. long, oblong ovate or ovate or obovate, tip acute or rounded, glabrous above, rusty tomentose and strongly reticulate beneath; lateral nerves 5-10 pairs; petiole 5-1 in. Umbels stoutly pedicelled, 5-6-flowered; bracts 5, membranous. Stamens 9-13, filaments hairy. Fruit ovoid, 2-3 in. long; on a small perianth-base. Wood of a dark grey colour and durable (weight 38 lbs. per c.ft.).

Flowering during the period from March to April and also irregularly throughout the year. Fruiting after months of flowering.

Plant occurs in Himalayan terai region upto Assam ascending to 3,000 ft. altitude, and in Bihar, Satpura hills and coromendel. It is found in Himalayan terai, foothills and Siwalik regions in Uttar Pradesh.

The leaves of the tree as well dark smell like odour of cinnamon bark and leaves. Bark particularly inner bark of obtained from tree is admixed and supplied with bark of Medāsaka (Medalakarhi).

### Chemical composition

Bark contains tannin and an alkaloid namely Laurotetanine. Seeds yield 35% of a fat with strong aromatic odour and disagreeable taste. The component fatty acids are : lauric 96.3 and oleic 2.3%. A reddish colouring matter is present in the bark.

### Pharmacodynamics

Rasa	: Kāṭu, tikta, kaṣāya
Guṇa	: Laghu, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kāṭu
Doṣakarma	: Kaphavātaśāmaka

### Properties and action

Karma	: Vedanāsthāpana Śothahara Ākṣepahara-nāḍibalya Dīpana-grāhī Raktastambhana (kiñcit) Kaphaniḥsāraka Kamottejaka Mārdavakara Vātaśāmaka.
Roga	: Sandhiśotha-abhighāta- asthibhagna-sandhijāḍya Vātavyādhi-gradhṛṣī-vātarakta- kaṭiṣūla-ākṣepaka-āmavāta Agnimandya-atisāra-udararoga Śotharoga-raktasrāva Jīrṇakāṣa Klaibyaroga

Carmavikāra (rūkṣa-sūṣka).

### Therapeutic uses

The drug Medasaka is vātaśāmaka, vedanāsthāpana (analgesic or anodyne) and śothahara (anti-inflammatory) in particular. The bark constitutes the drug Medāsaka which is mucilaginous, feebly balsamic and mildly astringent. It is used in diarrhoea and dysentery. Ground and pasted material is used as an emollient application for sprains, bruises and rheumatic and gouty joints. It is also applied as a styptic dressing for wounds. Paste is applied externally to joints swelling, fracture, trauma and joints painful and inflammatory ailing conditions. The drug is useful in sciatica, nervine and neuralgic disorders, gout, backache, rheumatic disorders, convulsions and other similar complaints caused by provoked vāta doṣa (humor). It is also used in cough (chronic), oedema, haemorrhage, impotency, skin affections loss of appetite, diarrhoea and other ailments caused by vātakapha provocation.

The fruits (medāsaka phala) are edible. They are good source of fat and also rich in lauric acid and may be utilised for the preparation of lauryl compounds used as detergent. Roots are sweetish bitter, astringent and tonic. Root decoction is considered emmenagogue in menstrual troubles. Leaves are mucilaginous and considered emollient and antispasmodic. Their infusion or poultice is applied to bruises and wounds.

**Parts used :** Bark (inner bark).

**Dose :** Powder 1-3 gm.

## MEDĀSAKA ( मेदासक )

- क. मेदासकः सदारुणैः गन्धपर्णश्च स स्मृतः ।  
मध्यमाकृति वृक्षश्च वन्यदेशोद्भवोऽपि च ॥
- ख. मेदासको लघुः स्निग्धः कटुस्तिकः कषायकः ।  
उष्णो वातकफौ हन्ति शोथशूलविनाशनः ॥
- दीपनः स्तम्भनश्चैव सर्ववातविकारनुत् ।

आग्निमांद्येऽतिसारे च रक्तस्रावे च युज्यते ॥

*Dravyaguṇa Vijñāna, 71.*

## MESAŚR̥NGĪ

**Botanical name :** *Gymnema sylvestre* R. Br.

**Family :** Asclepiadaceae

**Classical name :** Meṣaśr̥ngī

**Sanskrit names**

Meṣaśr̥ngī, Madhunāśinī, Viṣāṇī-viṣāṇikā, Meṣavallī, Ajaśr̥ngikā, Putraśreṇī, Varttikā, Putraśreṇī, Sarpaḍa-nṣṭrikā, Cakṣuṣyā, Tiktadugdhā.

**Regional names**

Medhasingi, Gurhmar (Hindi); Medhasingi (Bang.); Kabali (Mar., Guj.); Shirukuriy (Tam.); Vodapatte (Tel.).

**Description**

Diffuse, twining shrubs with pubescent young parts. Leaves short-petioled, ovate, elliptic or oblong, acute or acuminate, rounded below, densely pubescent beneath.

Flowers greenish-yellow, spirally arranged in lateral corymbose cymes, calyx pubescent, divided to the base, segments obtuse, ciliolate. Corolla campanulate. Corona projections with a decumbent base, flanked by 2 rows of short, stiff hairs, ciliate. Cymose cynostegium without corona.

Follicles terete, lanceolate, acuminate, up to 7.5 x 0.8 cm. Seeds flat, with marginal wing.

**Flowering and fruiting time**

Plant flowers and fruits in March-June. Flowering in autumn and fruiting colder season end.

**Distribution**

Plant occurs in tropical Africa, Asia and Malesia. It is occasionally found upon bushes or trees in various regions of India; central, northern and western India and from Konkan to Travancore.

### Kinds and Varieties

The kinds and plant sources for drugs in the context conclusively follow :

Meṣāśṛṅgī : *Gymnema sylvestre* R. br. : Climber (latā)

Meṣāśṛṅga : *Dolichandrone falcata* Seem : Tree (vṛkṣa)

Uttamāraṇī : *Pergularia daemia* (Forsk.) Chow. : Climber (latā).

Presently the source plant for drug Meṣāśṛṅgī is considered as *Gymnema sylvestre* R. Br. (gurhmar-madhunaśinī).

### Chemical Composition

The leaves of source plant (*Gymnema sylvestre* Br.) contain two resins - one soluble and another insoluble in alcohol. A bitter neutral principle in lower dose (little quantity), albuminous substance, colouring matter, calcium oxalate, gymnemic acid 6%, quercitol and sugar yeast. Ash contains ferric oxide, manganese and other matters.

### Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu, rūkṣa
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka.

### Properties and action

Karma	: Rasagrahaṇa nirodhaka (madh) Dīpana-yakṛduttejaka Mūtrala-vāmaka Mūtra-raktagataśarkarā hrāsaka Madhumehaghna Hṛdayottejaka Kaphaghna Mūtrala Garbhāśayottejaka Viṣamajvaraghna Kaṭu pouṣṭika Viṣaghna.
-------	--

<b>Roga</b>	Madhumeha-prameha-ikṣumeha Aśmarī-mūtrakṛcchra Agnimāndya-vibhandha Kāmalā Arśa Hṛddourbalya Kāsa-śvāsa-pratiṣyāya-śiraḥsūla Rajorodha Viṣamajvara Sarpa viṣa Dourbalya Śotha Granthiśotha-yakṛcchotha-plihavṛddhi.
-------------	---

### Therapeutic uses

The plant drug is stomachic, stimulant, laxative and diuretic. It is useful in cough, biliousness and sore eyes. The drug is initially action on rasanā or jihva (tongue). It is used in diabetes insipidus and diabetes mellitus in particular for which leaves powder is prescribed as a single drug or as an ingredient of a recipe. Roots decoction is orally given in case of snake-bite. The drug is bitter tonic. Seeds are useful in coryza, cold, cough and asthma; the root-bark is employed in dhūmapāna (smoking) in respiratory ailments. The drug is useful in calculus, dysuria, dysmenorrhoea, malarial fever, heart trouble, constipation, loss of appetite, jaundice and piles. Leaves paste mixed with castor oil is applied to joints inflammation, liver complaints (e.g. yakṛcchotha), spleen enlargement and other problems. Root paste is also suggested in snake-bite. Roots are countering poison, anti-inflammatory and analgesic medicine.

The leaves of the plant (meṣaśṛṅgi patra) when chewed, possess the remarkable property of paralysing for a few hours, the sense of taste for sweet and bitter substances; acid taste is not affected while salt taste is very slightly, if at all influenced. The plant is so named Gurhmar with sense of killing the gur or anti-sweetening effect of peculiarity. The leaf powder is tasteless with a faint pleasant aromatic odour. Leaves powder is traditionally

given in glycosuria and diabetes (ikṣumehaa madhumeha) as a valued herbal remedy in folk medical practices in different regions of country showing frequent uses of this drug among anti-diabetic herbs of tribal medicine.

The plant leaves cause hypoglycaemia in experimental animal when administered orally or by injection. Leaves are considered effective medicine in diabetes sometimes it has gained importance, despite the experimental claim, however, the effect is not due to any direct influence on the carbohydrate metabolism, but to indirect stimulation of insulin secretion by pancreas (and also stimulation of thyroid and adrenal glands secretion alongwith liver function) and hence the hypoglycaemia is induced in experimental animals during biological trials, and further experimental screenings support the hypoglycaemic activity of leaves of plants, which has been mentioned and recommended in Indian medicine as anti-diabetic agent. Leaves powder, thus, stands as hypoglycaemic herbal drug of clinical significance in Āyurveda.

**Parts used :** Leaves, roots, Seeds.

**Dose**

Leaves powder 3-6 gm., Root decoction 50-100 mg., Seeds powder 1-3 gm.

**Formulation**

Madhumehāntaka cūrṇa (powder of plant drug leaves).

## MESAŚRĀNGI ( मेषशृङ्गी )

- क. मेषशृङ्गी विषाणी स्वान्मेषवल्ल्यजशृङ्गिका।
- ख. मेषशृङ्गी रसे तिका वांतला श्वासकासहत्।  
रुक्षा पाके कटुः पित्तब्रण श्लेष्माक्षिशूलनुत्॥
- ग. मेषशृङ्गी फलं तिकं कुष्ठमेहकफप्रणुत्।  
दीपनं संसनं कासक्रिमिब्रण विषापहम्॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi Varga, 254-255.*

मेषशृङ्गी दलं तिकं कुष्ठमेहकफप्रणुत्।  
दीपनं स्नासनं कासक्रिमि व्रणविषापहम्॥

*Bhāvaprakāśa op. Cit.  
(with alteration 'dalam' instead of 'Phalam').*

## A. MEṢAŚR̄NGĪ ( मेषशृङ्गी )

### प्रथमा-मेषशृङ्गी

अ. श्रीवृक्षको मेषशृङ्गी बस्तशृङ्गी च शृङ्गिका॥  
पादवृक्षो घनशृङ्गश्कुष्यो बहुलाङ्गकः।  
अवलक्लोऽबलाङ्गः स्यात् नदी बहुल चक्षुषी।  
(वृश्चिकाली मेषशृङ्गी कूर्चपर्णी विषाणिका॥)  
महाफला तिक्तदुग्धा स्वजशृङ्गयक्षविषजम्।

### द्वितीया-मेषशृङ्गी

ब. दक्षिणावर्ती वृश्चिकाली सपुच्छिका॥

### मेषशृङ्गी गुणाः

स. निहन्ति तिमिरश्वासकासव्रण विषकृमीन्।

### मेषशृङ्गीफलम्

द. मेषशृङ्गी फलं तिकंकुष्ठमेहकफप्रणुत्।  
दीपनं पाचनं चैव कृमिदोषनिबर्हणम्॥

*Kaiyadeva Nighaṇṭu, Oṣadhi Varga, 735-739.*

### मेषशृङ्गी अजशृङ्गी

अजशृङ्गी मेषशृङ्गी वर्त्तिका सर्पदंष्ट्रिका।  
चक्षुष्या-तिक्तदुग्धा च पुत्रश्रेणी विषाणिका॥  
अजशृङ्गी कटुस्तिका कफार्शःशूल शोफजित्।  
चक्षुष्या श्वासहद्रोग विषकासातिकुष्ठजित्॥

### अजशृङ्गीफलम्

अजशृङ्गी फलं तिकं कटूष्णं कफवातजित्।

जठरानलकृत् हृद्यं रुचिरं लवणाम्लकम्॥

*Rāja Nighaṇṭu, Prabhadrādi varga, 32-34.*

## B. MESĀSR̄NGA ( मेषशृङ्ग )

शिरोरोगे

शिरो मधूकसारेण स्निधं चापि विरेचयेत् ।

इङ्गुदस्य त्वचा वापि मेषशृङ्गस्य वा भिषक् ॥

*Suśruta Saṃhitā, Uttara, 26-20.*

नेत्ररोगे दृष्टिप्रसादनार्थम्

दृष्टेरतः प्रसादार्थमञ्जने शृणु मे शुभे ।

मेषशृङ्गस्य पुष्पाणि शिरीषधवयोरपि ॥

सुमनायाश्च पुष्पाणि मुक्ता वैदूर्यमेव च ।

अजाक्षीरेण संपिण्ड ताम्रे सप्ताहभावयेत् ॥

प्रविधाय च तद्वर्तीयोजयेच्चाञ्जने भिषक् ॥

*Suśruta Saṃhitā, Uttara, 17-16/18.*

काचप्रतीकारार्थम्

‘समेषशृङ्गाञ्जनभागसंमितं जलोद्धवंकाचमलं व्यपोहति ॥’

*Suśruta Saṃhitā, Uttara, 17-40.*

ब्रणरोपणे

त्वचोऽश्वकर्णधवयोर्मौचकीमेषशृङ्गयोः ।

शल्कव्यर्जुनयोश्चापि विदार्याः क्षीरिणां तथा ॥

बलामूलानि चाहत्य तैलमेतैर्विपाचयेत् ।

ब्रणं संरोपयेत्तेन ।

*Suśruta Saṃhitā, Cikitsā, 2-64/65.*

## C. UTTAMĀRANI ( उत्तमारणी )

अर्शःसु

कासीसाद्यतैलम्

*Suśruta Saṃhitā, Cikitsā, 6-12.*

महाकुष्ठे

शिंशपादि सुराकल्पः

*Suśruta Saṃhitā, Cikitsā, 10-8.*

# METHIKĀ

**Botanical name :** Trigonella foenum-graceum Linn.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Methikā

**Sanskrit names**

Methikā, Methī, Pītabījā, Methini, Dīpanī, Bahupatrikā, Bodhinī, Bahubījā, Jyoti, Gandhaphalā, Kairavī, Kumbhikā.

**Regional names**

Methi (Hindi); Mettikura (plant), Mettulu (seeds); Vendayam (Tam.); Mentiya (Kann.); Fenugreek (Eng.).

**Description**

Erect, glabrous or hispid, annual herbs, 30-60 cm. high. Leaves 3-foliolate; petioles 1-2 cm. long; leaflets obovate, oblanceolate or oblong; cuneate, toothed, 1.5-3 x 0.5-1.5 cm., stipes 6-8 mm. long, lanceolate, acuminate, entire.

Flowers 1-2, sessile, axillary. Calyx 4-8 mm. long; teeth linear. Corolla yellow, sometimes tinged with lilac, 8-18 mm. long.

Pods linear, falcate, 5-15 cm. long, hispid, with a long persistent beak, 10-20-seeded.

**Flowering and fruiting time**

January to February-March winters. Forming season.

**Distribution**

Plant commonly cultivated as a cold weather leafy vegetable and for seeds-spice. It is grown almost throughout India; and it is also wild in Punjab and Kashmir.

**Kinds and varieties**

There are two varieties viz. small and big (laghu and brhat methikā) which are used for vegetable (patra śāka) and cattle fodder (paśu khādyā) respectively.

Grāmya (cultivated) and vanya (wild) are two kinds mentioned in texts of materia medica (nighaṇṭu). Culti-

vated variety is grāmya methikā and its leaves are commonly used for vegetable and food item for humans while Vanya methikā or variety found in nature (wild) is considered suitable for horse fodder. It is named as Ahitya in Dhanvantari Nighaṇṭu and 'Hispittha' appears to be more relevant in this context with 'Aśvabalā'. Another plant *Medicago sativa* Linn. is suggested to be botanical source of Aśvabalā.

### **Chemical Composition**

Seeds contain moisture 13.7, protein 26.2%, fat 5.8%, fibres 7.2%, carbohydrate 44.1% and ash 3.0 per cent. They contain minerals, which include calcium, phosphorous, iron, sodium and potassium. Seeds contain various vitamins. Seeds yield a better fixed oil 6-8% with unpleasant odour and white intense odorous oil in little quantity. Leaves contain various nutrients.

### **Pharmacodynamics**

Rasa	: Kaṭu
Guṇa	: Laghu, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātaśāmaka Vātakaphanāśaka.

### **Properties and action**

Karma	: Vātaghma Vedanāhara Śothanāśana Nāḍibalya Raktapittakopaka Angamardapraśamana Dīpana-pācana-anulomana- śūlapraśamana Stanyajanana-garbhāśayaviśodhana
Roga	: Vātajanita vikāra-vātavyādhī Śūla Śotha Angamarda Agnimāndya-udarśūla-koṣṭhagata

vāta-ādhmāna  
 Stanyakṣaya-garbhāśayāśuddhi-  
 prasavottara vyāpat (sūtikā roga)  
 Dourbalya.

### Therapeutic uses

The seeds are used as medicine and spice while leaves or tender vegetative part (whole plant rootless) are utilised as leafy vegetable eaten after cooking which belongs to common household vegetable group. Leafy vegetable (methikā śāka) is available in vegetable market in season. Matured seeds are sold in market.

The drug Methikā is antiphlogistic, stomachic, appetiser, tonic, demulcent, nervine tonic, antipyretic, cardiac and anthelmintic. It checks vomiting and nausea. Seeds allay cough, vata, kapha, vomiting and worms. It helps to regulate menstruation, scanty and painful periods. Seeds are of hot properties and potency. The drug specifically seeds is esteemed for using in puerperal disorders (sūtikā roga) of female (mothers), after child delivery as a traditional as well as classical medicine. Medicated sweet preparations are made as household dietetic item (e.g. laddū or modaka) consisting of various other aromatic, spicy and tonic medicinal items. Such preparations are conventionally used during puerperal stage (sūtikākāla) and also other conditions. In general medicated preparations of Methikā (sweet and salty etc.) are of specific properties i.e. tonic, strengthening body, appetising, increasing desire to relish, digestive, and other similar effects and usefulness.

Methikā kṛśarā (methi ki khicari) is prepared by adding rice and pulse (or rice and fenugreek combination only). It is a good medicated food item (kṛtānna khādya) which is more suitable in colder season (relished in hilly regions) and in conditions of body when hot, energetic, digestive and nutritious diet is required.

Generally the seeds of Methikā or Fenugreek are pungent and bitter with spicy taste. Seeds become tasty, and spicy when fried. Seeds become more bitter when they are soaked in water. Seeds give a pleasant odour in general.

The seeds are quite useful in vātavyādhi; they are used in nervine complaints including neuralgic pain since the drug Methikā has properties of pacifying provoked vāta doṣa in general (vāta kapha śāmaka). As a single drug, the fenugreek seeds are given in form of powder or any other suitable mode for treatment of vātaroga. It enters in compound formulations. Caturbija consisting Methika seeds (composed of four kinds of seeds : Methikā, candrasūra, kālājājī and yavānī) is made powder which is taken for alleviating vātavyādhi, indigestion, colic, flatulence, pain in sides and lumbago. Among other formulations of classical importance, Pañcajiraka pāka and Methi modakārāre compound preparations which are specially recommended in puerperal diseases (sūtikā roga) and also other ailments.

The vegetable of leaves (methikā śāka) is useful to remove constipation (vibandha) and it is specially suitable to persons of paittika constitution (pitta prakṛti). Methika patra (fenugreek leaves) are pounded and applied to inflammation (śvayathu vilayana) and the seeds are also suggested for same purpose (vraṇaśothahara śāmaka). Methika is vitiating or aggravating raktapitta (raktapitta prakopana) in general, particularly by excess use.

Recently the fenugreek seeds (methikā bija) have become prominent as an anti-diabetic drug possessing hypoglycaemic activity. The powder of seeds and any other suitable form (e.g. seeds soaked in water or infusion - śṛtaśīta) are recommended for oral use in diabetic cases. Beside the curative drug, the use of seeds regularly is suggested to be a good preventive measure against diabetic condition and it is considered a wholesome dietary item (pathya) for such group of persons. Thus, the seeds of fenugreek (methikā bija) are esteemed presently both as diet and as medicine. For treatment of diabetes or madhumeha, there are several new formulations of herbo-mineral drugs that contain fenugreen in suitable forms. The pharmaco-clinical and allied studies on hypoglycaemic effects of the drug Methikā (fenugreek seeds) have been conducted in view of anti-diabetic potentials of Methika attracting scientific studies.

There is peculiar effect of drug Methikā on sexual activity of human body. It has been marked that the regular use of fenugreek seeds in good quantity or even in normal dose (as medicine) in any form and mode of administration helps to control and pacify intensity of sexual desire and undesirable sexual instincts (anechika kāmottejanā or lingothāna - atisaya kāma sampraharṣa) and simultaneously the drug Methika is found to be tonic strengthening body as a whole and it ultimately promotes virility or sexual capability in human. It appears that the drug is somewhat sedative to fragmentary or untimely sexual desire or stimulation and on the other hand, the same is promotive and tonic to sexual act (male organ and coitus—organic and functional) in proper at actual occasion of sexual need. This pharmacological aspect of drug Methikā is of scientific interest. In Āyurveda, the drug Methikā is indicated as 'śukranut' (harmful or causing loss to semen : śukranāsana) to strengthen body as a whole. It may be mentioned that Vanya-methikā is wholesome diet for horses (aśva) in order to increase body strength.

**Parts used :** Seeds, leaves, whole plant.

**Dose :** 1-3 gm.

**Formulation :** Methi(Kā)modaka, Pañcajīraka pāka.

## METHIKĀ ( मेथिका )

### मेथिका-वनमेथिका

- क. मेथिकामेथिनी मेथो दीपनी बहुपत्रिका ।  
बोधिनी बहुबीजा च ज्योतिर्गन्धफला तथा ॥
  - ख. वलरी चन्द्रिका मन्था मिश्रपुष्पा च कैरबी ।  
कुञ्जिका बहुपर्णी च पीतबीजा मुनिच्छदा ॥  
मेथिका वातशमनी श्लेष्मग्नीज्वर नाशनी ।  
ततः स्वल्पगुणावन्या वाजिनां सा तु पूजिता ॥
- Bhāvaprakāśa Nighaṇṭu, Harītakyādi Varga, 93-95.*

### मेथिका

- अ. मेथिका मेथिनी मेथो दीपनी बहुपत्रि ।

- वेधनी गन्धबीजा च ज्योतिगन्धफला तथा ॥  
 वल्लरी चन्द्रिका मेथी मिश्रपुष्पा च कैरवी ।  
 कुम्भिका बहुपर्णी च पीतबीजा मुनीन्दुधा ॥
- ब. मेथिका कटुरुष्णा च रक्तपित्तप्रकोपणी ।  
 अरोचकहरा दीसिकरा वातग्नदीपनी ॥
- Kaiyadeva Nighaṇṭu, Oṣadhi varga, 67-69.*
- क. मेथिका मेथिनी मेथी दीपनी लघुपत्रिका ।  
 वेधनी गन्धबीजा च ज्योतिर्गन्धफला तथा ॥  
 वल्लरी चन्द्रिका मेधा मिश्रपुष्पा च कैरवी ।  
 कुञ्चिका बहुपर्णी च पीतबीजा सुनीन्दुधा ॥
- ख. मेथिका कटुरुष्णा च रक्तपित्तप्रकोपणी ।  
 अरोचकहरा दीसिकरा वातप्रदीपनी ॥

*Rāja Nighaṇṭu, Pippalyādi varga, 67-69.*

### मेथिकाशाकम्

मेथीशाकं पयसि विधृतं स्वेदितं पीडितं हि  
 प्राज्ये स्वाज्ये जरणसहिते मेलितं भर्जितं हि ।  
 कासोच्छ्वासं प्रसृतमधिकं कर्षितो जाठराग्नि-  
 र्येनप्राणं सुबहुगुणितं भक्ष भूयोऽपि भूयः ॥  
 मेथिका दीपनी हृद्या बद्धविद्वृक्मिशुक्रनुत् ।  
 रुक्षोष्णं तत्फलं कासानिलश्लेष्मवमीञ्जयेत् ॥

*Kṣemakutūhalam.*

### सूतिकारोगे

पञ्चजीरकपाके

*Bhāvaprakāśa, Cikitsā, 70-158/162.*

### मेथीमोदकः

*Bhaiṣajya Ratnāvalī, P. 223.*

### वातव्याधौ

मेथिका चन्दशूरश्च कालाजाजी यवानिका ।  
 एतच्चतुष्टयं युक्तं चतुर्बीजमिति स्मृतम् ॥  
 तच्चूर्णं भक्षितं नित्यं निहन्ति पवनामयम् ।  
 अजीर्ण शूलमाध्मानं पार्श्वशूलं कटिव्यथाम् ॥

*Bhāvaprakāśa Nighaṇṭu, 1-98-99.*

# MIŚREYA

**Botanical name :** *Foeniculum vulgare* Mill.

**Family :** Apiaceae (Umbelliferae)

**Classical name :** Miśreya

**Sanskrit names :** Miśreya, Miśi, Madhurikā, Madhurā.

**Regional names**

Sounf (Hindi); Mouri (Beng.); Sounf (Punj.); Barhi shep (Mar.); Bariyali (Guj.); Shoumbu (Tam.); Soupu (Tel.); Barhi sounpu (Kann.); Rajiyanaj (Arab.); Rajiyan; Fennel (Eng.).

### **Description**

Perennial glaucous herbs; with aromatic smell, upto 5-6 ft. tall; stems striate. Leaves 3-4-pinnate; segments filiform; leaf bases sheathing. Umbels compound, terminal; involucres and involures absent, rays 5-30. Calyx absent. Petals yellow. Fruits oblong to ovoid 3-5 m. (6-7 mm.) long, glabrous, not winged, ft. cylindrical, straight or slightly curved, greenish or yellowish brown, pericarp 5-ridged with prominent vittae.

### **Flowering and fruiting time**

Plant bears flowers and fruits during cold to spring seasons; December-March.

### **Distribution**

It is commonly cultivated for leaf-vegetable and seedspice. Fennel cultivated mostly as a garden or homeyard crop throughout India at all altitudes upto 6,000 ft.

### **Chemical composition**

Fennel fruits contain a volatile oil. The percentage of oil varies considerably, being lowest in fruits of Indian origin (0.7-1.2) and highest in fruits from eastern Europe (4-6). They also contain a fixed oil (9-13%), pentosan and pectin. Starch is present in small concentrations, if at all Trigonelline and choline are present. The percentage of ash dose not exceed 12 per cent.

Fruits also contain iodine C. 20.8 y/100 g., vitamin A 139 I.V./100 mg., thiamine 36y/100 g. Traces of albumin, barium, lithium, copper, manganese, silicon and titanium have been reported.

The oil of Fennel is obtained by the steam distillation of crushed fruits. It is a colourless or pale-yellow liquid with a characteristic taste and odour. Main constituent of the oil from the fruits (obtained from cultivated source plant) is anethole which should be present 50-60 per cent in good quality oil.

### **Pharmacodynamics**

Rasa	: Madhura, kaṭu, tikta
Guṇa	: Snigdha, laghu, tīkṣṇa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātапittaśāmaka.

### **Properties and action**

Karma	: Vātānulomana Trṣṇānigrahaṇa-chardinigrahaṇa- dīpana-pācana Anulopana (fruits)-recana (root) Śūlaprasanana Hṛdaya-raktaprasādana Kaphaniḥsāraka Mūtrala Yoniśūlahara Stanyajanana Vṛṣya Svedajanana Jvaraghna Dāhapraśamana Balavardhana Medhya Dr̥ṣṭisaktivardhana Āmapācana Jantughna Plīhāhara Mukhaśodhana.
-------	--

<b>Roga</b>	: Āmadoṣajanya vikāra Pravāhikā-atisāra-grahaṇī Vamana-tṛṣṇā-agnimāndya-ajīrṇā- ādhmāna-udaraśūla Arśa Amlapitta Kāsa-śvāsa Hṛdroga-raktavikāra Mūtrakṛcchra-mūtrāghāta Stanyālpatā-śukrakṣaya Carmaroga Jvara-dāha Dourbalya-kṣaya Kṛmi vikāra Plihāvikṛti Mukhadourgandhya.
-------------	--

### Therapeutic uses

The fruits of fennel (*miśreyā*) are aromatic, stimulant and carminative. They are official in the pharmacopocias of all countries and are considered useful in diseases of the chest, spleen and kidney. They are employed as corrective for less pleasant drugs, particularly senna and rhubarb. Fennel is component of liquorice. An infusion prepared with 8-12 fruits in 500 cc. of boiling water is employed as an enema for infants for the expulsion of flatus. A hot infusion of the fruits is used in indigenous medicine to increase lacteal secretion and to stimulate sweating.

The dried fruits of *miśreyā* (fennel) have a fragrant odour and a pleasant aromatic taste. They are used for flavouring soups, meat dishes and sauces, breadrolls, pastries and confectionery. They are also used for flavouring liqueurs and in the manufacture of pickles.

The drug *Miśreyā* or *Miśi* is possesses action as carminative (*vātānulomana*), stomachic (*dīpana*), digestive (*pācana*), vermifuge (*kṛmighna*), emmenagogue (*ārtava-janana*), galactogogue (*stanyajanana*), diaphoretic (*svedajanana*) and *hṛdayottejaka* (cardiostimulant). It is śothahara and kaphaghna (allaying oedema and kapha),

also analgesic (vedanāsthāpana). This drug is useful in cough, hiccough and asthma. Fruits are given frequently in dyspepsia, abdominal colic, flatulence and other similar ailments. It is āmadoṣa pācana and, given effectively in udaravikāra.

The oil of fennel or miśreya taila is largely used as a flavouring agent in culinary preparations, confectionery, cordials and liquours. Earlier it was utilised as a in place of anise oil as a source of anethole. It is a grateful aromatic and is mildly carminative. It is useful in infantile colic and flatulance. It checks griping in purgation (purgatives) and is considered a vermicide against hookworm (in dose of 60 minims). It is employed as a corrective for medicinal preparations with less pleasant flavour and colour and enters into the composition fennel water used medicinally as a vehicle for drugs. Not much is used in perfumery but for scenting soap of cosmetic use.

The feed is utility of residue left after the distillation of essential oil from the fruits, for cattles; it contains protein 14-22% and fat 13-13.5%.

**Parts used :** Fruits, root, oil.

**Dose**

Fruit powder 3-6 gm., Root powder 3-6 gm., Oil 5-10 minims (drops),, Aqua (arka) 20-40 ml.

**Formulation :** Śatapuṣpādi cūrṇa, Śatapuṣpā Arka.

## MIŚREYĀ ( मिश्रेया )

माधुरी कटुका पाके रुग्णां गर्भप्रदा सरा ।

तिक्ता कट्टवी च मधुरा वृष्या चाग्निप्रदीपनी ॥

वातं ज्वरं च शूलं च दाहं नेत्ररुजं तृष्णाम् ।

व्रणवान्तिमतिसारमामं चैवं विनाशयेत् ॥

*Gada Nigraha.*

माधुरी मधुरो स्निग्धा कटुः कफहरा परा ।

वातपित्तोत्थादोषन्नी प्लीहजन्तुविनाशिनी ॥

मिश्रेया कटुका पाके रसे तीक्ष्णाग्रिकृलघुः ।

रूक्षोष्णा बद्धविट् हृद्या कृमिशुक्रनिलापहा ॥

*Kaiyadeva Nighantu, Oṣadhi varga, 1199.*

### मिश्रेयाफलम्

‘फलं दाहारुचिच्छर्दिकासश्वेष्मानिलप्रणुत्।’

*Kaiyadeva Nighantu, Oṣadhi Varga, 1200.*

### मिश्रेयागुणः

मिश्रेया तदगुणा प्रोक्ता विशेषाद्योनिशूलनुत् ॥

आग्निमान्द्यहरी हृद्या बद्धविट् कृमिशुक्रहत् ।

रूक्षोष्णा पाचनी कासवमिश्रेष्मानिलान् हरेत् ॥

*Bhāvaprakāśa Nighantu, Haritakyādi varga, 91-92.*

मिश्रेया मधुरा स्निग्धा कटुः कफहरा परा ।

वातपित्तोत्थदोषघ्नी प्लीहजन्तुविनाशिनी ॥

*Rāja Nighantu, Śatāhvādi varga, 16.*

## MOKṢAKA

**Botanical name :** Schrebera swietenioides Roxb.

**Family :** Oleaceae

**Classical name :** Mokṣaka

**Sanskrit names**

Mokṣaka, Muṣkaka, Kṣārī-kṣārapādapa-kṣāraśreṣṭha, Śikharī, Muṣaka, Muncaka, Golīḍha.

**Regional names**

Mokha (Hindi); Moka, Ghanta (U.P., Bundel khand).

**Description**

A moderate-sized tree, 40-50 ft. high, with grey scabrous bark; young parts pubescent. Wood grey close-grained.

Leaves deciduous, common petiole 2-3 in. long; leaflets 7-9 opposite, glabrous when mature, the lowest pair smaller; blade 2-4 in. long, ovate or ovate-lanceolate, bluntly acuminate base often oblique; main lateral nerves 6-8 pairs.

Cymes 5-6 in. long and almost as wide, many flowered; bracts small, linear, pubescent. Flowers shortly pedicelled, fragrant. Calyx 1.6 in. long, pubescent; limb irregularly 4-6-toothed or sub-truncate. Corolla 1.3 in. long, white with elevated brown glandular dots on the inner surface of the elliptic-oblong, ciliate lobes.

Capsule pendulous 2 in. long, pearshaped, hard and woody surface rough, with white raised specks. Seeds 3-4 in. each cell.

### **Flowering and fruiting time**

Plant flowers in February-April and fruiting stage onwards. Flowers fragrant at night.

### **Distribution**

Plant occurs subtropical Kumaon upto 1,500 feet, North Bengal, Chota Nagpur and from the Central Province to the drier parts of Southern India, and also in Upper Burma. It is found in Central India and hotter regions and terai of lower hills in Uttar Pradesh and other regions of country.

### **Kinds and Varieties**

There are two kinds of Mokṣaka (Muṣkaka dvaya) i.e. śveta (white) and kṛṣṇa (black) which are claimed to be botanically known as *Schrebera swietenoides* Roxb. and *Elaeodendron glaucum* (Rottl.) Pers. respectively.

### **Cassine glauca (Rottl.) Pers.**

**Family : Celastraceae.**

Syn. *Elaodendron glaucum* (Rotte.) Pers.

A moderate sized tree usually, with numerous, often reddish branches, forming a close oval crown; sometimes large tree. Reddish branchlets, bark dark-grey, smooth, blood-red inside, exuding when cut a profuse watery sap from the cambium-layer.

Leaves opposite or sub-opposite, less frequently alternate, 2-6 by 1-3 in., elliptic ovate-oblong or obovate, acuminate, crenate, sub-coriaceous, glabrous, dark-green and shining above, glaucous beneath (when the specific

name); stipules small, deciduous, main lateral nerves about 10 pairs, slender; petiole 0.4-1 in. long, channeled.

Cymes axillary, dichotomous, 3-5 in. long; peduncle 1.2.5 in. long, often red, longer than the petiole, branches divaricate; bracts small, caducous. Calyx-lobes broad, obtuse. Petals 4-5 about 0.1 in. long, oblong, yellowish-brown edged with white often red. Stamens shorter than the petals; filaments recurved; anthers roundish. Flowers 0.2 in. diam., whitish. Calyx 4-5-cleft, segments obtuse. Disk fleshy. Segments obtuse. Ovary adnate to the disk; style very short.

Fruits a dry ovoid drupe, .4-.6 in. long, 1-celled, 1-seeded, tipped with the persistent style, mostly sterile (re-production chiefly by root-suckers), ovoid or obovoid; yellowish-green when ripe, tipped with the persistent style.

Wood moderately hard, even-and close-grained, deep-red when fresh-cut, turning light-brown in seasoning; weight 40-50 lbs, per c. ft.

### **Flowering and fruiting time**

Plant becomes leafless in April. It flowers in April-June and fruiting during the period of January to June of the next year.

### **Distribution**

Plant occurs in outer Himalayas upto 6,000 ft, Chota Nagpur, Central Province to Southern India and Ceylon; also in the Malay Archipelago, Siwaliks, Oudh, Bundelkhand, lower valleys in U.P. hills, also in Sal forests.

Plant is commonly known as Dhebri, Jangela, Jangel, Paniala, Jamrasi, Kala-muka, Mainiri (U.P. hills and plains) and other names in different regions.

### **Pharmacodynamics**

Rasa	: Katu, tikta
Guṇa	: Tiksṇa
Viryā	: Uṣṇa
Vipāka	: Katu
Doṣakarma	: Kaphapittaghna Tridoṣaghna (puspa-flowers).

**Properties and action**

<b>Karma</b>	: Rocana-pācana-bhedana Kaṇḍūghna-kuṣṭhaghna Viṣaghna Kṛmighna Arśoghna Kṣāraśreṣṭha Śothahara
<b>Roga</b>	: Kuṣṭha-kaṇḍū Grahaṇī-udararoga Prameha Vātavyādhi Mukharoga Viṣa-dūṣīviṣa Śukradoṣa Pāṇḍu Bastiruk-bastivikāra Plīharoga Śotha.

**Parts used**

Bark, Alkalī (Kṣāra), Flowers, Flowers, Exudation, (Niryāsa).

**Dose :** Powder 3.5 gm., Alkali 1-3 gm.

**Formulation :** Muṣkaka (mokṣaka) kṣāra.

**MOKṢAKA ( मोक्षक )**

क. मोक्षकः कफवातग्ने ग्राही गुल्मविषक्रिमीन्।

हन्त्युष्णो बस्तिरुक्कण्डूस्तपुष्णं कफपित्तजित्।

ख. निर्यासोऽस्य परं वृष्णः शोथपित्तानिलापहः।

*Madanapāla Nighaṇṭu.*

**मोक्षकपुष्णम्**

पुष्णं कुष्ठहरं ज्ञेयं वातपित्तकफप्रणुत्।

*Rāja Nighaṇṭu.*

‘तस्यपुष्णं कफं पित्तं कुष्ठं चार्ति नियच्छति।’

*Kaiyadeva Nighaṇṭu.*

### मोक्षकफलम्

फलमग्रे: दीसिकरं भेदकं रोचकं मतम् ।  
गुल्ममेहार्शपाण्डुभ्रं शुक्रदोषोहरं जयेत् ॥

*Rāja Nighaṇṭu.*

मोक्षकं फलमतीव दीपनं  
गुल्ममेहकफपाण्डुशुक्रजित् ।  
भेद्यरोचकगुदाङ्गुशन् जये-  
दश्मरीजठररोगनाशनम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 977.*

### मुष्ककः

मुष्ककः कटुकः तिक्तो ग्राह्योष्णः कफवातहृत् ।  
विषमेदोगुल्मकण्डूबस्तिरुक्कूमिशुक्रनुत् ॥

*Bhāvaprakāśa Nighaṇṭu.*

### मोक्षकः

- अ. मुष्कको मोक्षको क्षारी शिखरी क्षारपादपाः ॥  
मूषकः मुञ्चको घण्टापाटलिः क्षुद्रपाटलिः ।  
गोलीढो मुञ्चको मुष्टिः क्षारश्रेष्ठो विषापहः ।
- ब. मोक्षस्तीक्ष्णः कटुस्तिक्तो ग्राह्योष्णः कफपित्तहा ।  
विषमेदोगुल्मकण्डूबस्तिरुक्कूमिशुक्रजित् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 873-875.*

### मुष्ककद्वयम्

‘श्रेतः कृष्णश्च स द्वेधा स्यात् त्रयोदश संज्ञकः ।’

*Rāja Nighaṇṭu, Āmrādi phala varga, 205.*

### मुष्कक( द्वय )गुणाः

मुष्ककः कटुकोऽम्लञ्च रोचनः पाचनः परः ।  
प्लीहगुल्मोदरार्त्तिघो द्विधा तुल्यगुणान्वितः ॥

*Rāja Nighaṇṭu, Āmrādi phala varga, 206.*

मोक्षकः कफवातघो ग्राही गुल्मविषक्रिमीन् ।  
हन्त्युष्णो बस्तिरुक्कूमिशुक्रनुत् ॥  
निर्यासोऽस्य परं वृष्यः शोषपित्तानिलापहः ॥

*Madanapāla Nighaṇṭu.*

कुष्ठे

‘हन्यात् कुष्ठं मुष्कके चापि सर्पिः ।’

*Suśruta Saṃhitā, Cikitsā, 9-49.*

विषसंसृष्टेऽञ्जने

मुष्ककस्याजकर्णस्य (पुष्पस्य) फेनो गोपित्तसंयुतः ।

*Suśruta Saṃhitā, Kalpa, 1-71.*

मुखरोगे कण्ठरोगेषु

पलाशमुष्ककक्षारयवक्षारश्च चूर्णिताः ।

गुडे पुराणे द्विगुणे क्रथिते गुडिकाः कृताः ॥

कर्कन्धुमात्राः सप्ताहं स्थिता मुष्ककभस्मानि ।

*Caraka Saṃhitā, Cikitsā, 26-192/193.*

ग्रहणीरोगे मुष्ककप्रयोगः

*Caraka Saṃhitā, Cikitsā, 19-181.*

कफपित्तहरणाय

मुष्ककपुष्पम्

*Suśruta Saṃhitā, Sūtra, 46-284.*

क्षारनिर्माणे

मुष्ककं क्षारश्रेष्ठत्वम्

*Suśruta Saṃhitā, Sūtra, 11-11.*

क्षारश्रेष्ठः

*Dhanvantari Nighaṇṭu, 5-132.*

‘मोक्षको द्विविधो ज्ञेयः श्वेतः कृष्णो विभेदतः ।’

‘शिखरी वनवासी च द्विविधः श्वेतकृष्णकः ।’

*Śodhala.*

दूषीविषे

अथवा मुष्ककश्वेतासोमत्वकृताप्रवलितः ।

शिरीषाद् गृध्रनख्याश्च क्षारेण प्रतिसारयेत् ॥

*Aṣṭāṅga Hṛdaya, Uttara, 35-46.*

प्रमेहे

‘शालकम्पिलकमुष्ककल्कभक्षमात्रं वा

मधुमधुरमामलकरसेन हरिद्रायुतम् ।’

*Suśruta Saṃhitā, Cikitsā, 11-8.*

# MUCAKUNDA

## **Botanical name**

Pterospermum acerifolium willd.,  
Syn. Pentapetes acerifolia L.

**Family :** Sterculiaceae

**Classical name :** Mucakunda

## **Sanskrit names**

Mucakunda, Kṣatravṛkṣa, Prativiṣṇuka, Cibuka,  
Bahupatra, Sudala, Harivallabha, Supuṣpa, Ardhyārh,  
Lakṣmaṇaka, Raktaprasava, Vasunāmā.

## **Regional names**

Muchakund (Hindi, Mar., Guj.); Gule Muchkun  
(Pers.); Muchkund Chonpa (Beng.).

## **Description**

Lofty large trees upto 20 meters tall. Leaves crowded at the top of branchlets, digitate, long petioled; leaves oblong, obovate, ovate, orbicular, or rectangular, 10-40x8-35 cm., cordate, often peltate, margin wavy to distantly coarse toothed or irregularly lobed, silvery to rusty pubescent beneath, glabrescent and dark green above, petiole 5-15 cm. long, tomentose; stipules pinnatifid, caducous.

Flowers mostly solitary, 10-15 cm. long and across large, flashy, white, fragrant; pedicels Ca 2 cm. long; bracts laciniate. Sepals linear-lanceolate; united at base into a short tube, 8-12 cm. long, about 1 cm. broad, obtuse, rusty pubescent outside, thick, reflexed, deciduous. Petals linear-oblong or obovate; 6-12 cm. long, reflexed. Fertile stamens 5-9 cm. long, staminodes equalling the petals; anthers 1-15 cm. long. Carpels 5; ovary pentagonal, rusty tomentose, capsule 5-10 cm. long, glabrescent, rusty-brown, 5-valved. Seeds compressed.

## **Flowering and fruiting time**

Plant flowers in February to April, and fruits in June to July. Springs to rainy season.

## Distribution

Plant occurs in Indo-Malaysia. It is occasionally planted in gardens. Plant is found in eastern and south-western regions specially West Bengal, Orissa, Assam, Konkan and north Canara, upto 5,000 ft. altitudy in India.

## Chemical composition

Flowers contain volatile oil (responsible for aroma in flowers); and the seeds yield an yellowish oil 22.6 per cent.

## Pharmacodynamics

Rasa	: Kaṣāya, Kaṭu, tikta
Guṇa	: Picchila
Virya	: Kiñcit uṣṇa (Kiñciduṣṇa)
Vipāka	:
Doṣakarma	: Tridoṣaghna

## Properties and action

Karma	: Vedanāsthāpana Raktastambhana Śirorujāhara Kaphaghna-kaṇṭhya Viṣaghna Kuṣṭhaghna-tvacya-kaṇḍūghna Vraṇaropana-śodhana Dāhapraśamana
Roga	: Śirahṣūla Raktārsa Raktapitta Mosūrikā-dāha Vedanāpradhāna vātavikāra Raktasrāva Kāsa-śvāsa-svarabheda Viṣa Tvagvikāra-kuṣṭha-kaṇḍū.

## Therapeutic uses

The drug Mucakunda is astringent and slightly pungent-bitter. It pacifies tri-humors (tridoṣa) and raktapitta. The drug is blood purifier, haemostatic, analgesic and anti-pruritic. It is beneficial for throat. Externally the flowers of drug Mucakunda are pounded with water and applied over

head (front head or lesion of pain-śirah or śirahśūla) as the flowers of Mucakunda relieves headache immediately which is an important medicinal utility in classical uses of Mucakunda. Mucakunda is recommended for external application as a paste over abscess (vidradhi). The drug in general is considered useful in cough (kāṣṭa), tvagdoṣa (cutaneous affections), poison (viṣa), pruritis (kaṇḍu), or eczeema (pāmā), throat affections (kaṇṭha vikāra), inflammatory conditions (śotha-śopha), blood diseases (raktadoṣa-rakta vikāra), and painful conditions (vedanā vikāra). The oil is prepared with the flowers of Mucakunda (flowers cooked in tila taila or sesame oil according tailapāka vidhi) and the oil is applied to head (śiroabhuṅga.). The drug flowers are also employed in some medicated oils as an ingredient. The flowers of plant drug (mucakundapuspa) are pounded and fried in ghṛta or ghee by adding sugar (for preparing Halvā) and it is taken in cases of haemorrhage (raktasrāva) specially in diseases of raktapitta, raktārsa and other similar ailments.

**Parts used :** Flowers.

**Dose :** 3-6 gm.

**Formulation :** Himānsu taila.

## MUCAKUNDA ( मुचकुन्द )

क. मुचकुन्दः क्षत्रवृक्षश्वित्रकः प्रतिविष्णुकः ।

ख. मुचकुन्दः शिरःपीडापित्तास्वविषनाशनः ॥

*Bhāvaprakāśa Nighantu, Puṣpa varga, 55.*

मुचकुन्दः क्षत्रवृक्षश्वित्रुकः प्रतिविष्णुकः ॥

मुचकुन्दोऽस्पित्तघः शिरोऽर्तिविषनाशनः ।

*Kaiyadeva Nighantu, Oṣadhi varga, 1520-1521.*

**मुचकुन्दः:**

मुचकुन्दो बहुपत्रः सुदलो हरिवलभः सुपुष्पश्च ।

अर्धाहीं लक्ष्मणको रक्तप्रसवश्च वसुनामा ॥

**मुचकुन्दगुणाः:**

मुचकुन्दः कटुतिकः कफकास विनाशनश्वित्रकण्ठदोषहरः ।

त्वगदोषशोफशमनी

व्रणपामाविनाशनश्वैवः ॥

*Rāja Nighaṇṭu, Karavīrādi varga, 103-104.*

मुचकुन्दः शिरः पीडापित्तास्थविषनाशनः ।

मुचकुन्दः कटुश्वोष्णः तिक्तः स्वर्यः कफापहः ।

कासत्वगदोषशोफग्नः वीर्यपीडानिवारकः ॥

त्रिदोषरक्तपित्तघ्नः पित्तरक्तविकारनुत् ।

*Nighaṇṭu Ratnākara.*

शिरःपीडायाम्

‘शिरोऽर्ति नाशयत्याशु पुष्टं वा मुचकुन्दजम् ।’

*Cakradatta, Vṛndamādhava, 62-2.*

विद्धौ

‘मुचकुन्दः कण्टकायबदरः अन्ये मुचकुन्दमाहुः ।’

*Dalhana, Suśruta Saṃhitā Cikitsā, 18-10.*

‘मुचकुन्दः कुन्दभेदः प्रसिद्धः ।

तौ तु शुक्लरक्तभेदेन ज्ञातव्यौ ॥’

*Ādhyamalla, Śāringadharā Saṃhitā.*

शिरःशूले

कुष्ठमरेण्डतैलेन लेपात् काञ्जिकपेषितम् ।

शिरोऽर्तिं वातजां हन्यात् पुष्टं वा मुचकुन्दजम् ॥

*Śāringadharā Saṃhitā, 3-11-62.*

## MUDGA

**Botanical name**

Vigna radiata (Linn.) wilezek.,

Syn. Phaseolus radiatus Linn., P. aureus Roxb., P. mungo Linn.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Mudga

**Sanskrit names**

Mudga, Sūpaśreṣṭha, Vājibhojana, Rasottama, Bhuktiprada, Varṇārha, Hayānanda, Bhubala.

**Regional names**

Moong, Mung, Pessara (Hindi); Uthulu,

Patchapessalu (Tel.); Mug (Mar.); Mung (Beng.); Hesaru (Kan.); Cherupayaru (Mal.); Green Gram, Golden Gram (Eng.).

### **Description**

Climbing or erect herbs, 30-45 cm. long; stem and branches covered with brown or greyish-brown spreading hairs.

Leaves 3-foliolate; petioles 5-21 cm. long, stipules peltate, ovate, hairy, 5-7 x 3-5 mm.; leaflets elliptic-ovate, glabrous or pilose, acute or acuminate at apex, cuneate or truncate at base, 5-15 x 3-10 cm., entire or faintly lobed; laterals oblique.

Racemes capitate peduncles 1.5-8 cm. long, 4-8-flowered; flowers 1-1.5 cm. long, bracteolate. Calyx 3-4 mm. long, glabrous, teeth ciliate corolla yellow; keel curled upwards.

Pods linear, cylindrical, bristly hairy, 4-10 cm. long, 8-15-seeded of plant.

### **Flowering and fruiting time**

Flowers and fruits appear during the period from September to December. Farming seasons. Kharif crop (also cold season crop).

### **Distribution**

Plant is commonly cultivated as a Kharif crop for seeds-pulse. Area, production, types (strains etc.), yield and all details relating to commercial scale farming of Mung or Green gram are available in relevant sources.

### **Kinds and varieties**

There are some classical varieties of Mudga viz. Kṛṣṇa mudga, Śārada mudga and Dhūsara mudga. Vanamudga or Makuṣṭha is also another kind mentioned in texts (Nighaṇṭu etc.).

A number of types, varieties and kinds (strains etc.) are under forming of crop.

### **Chemical composition**

The seed-coat or husk forms 10-12 per cent of the

weight of the seed (dry basis) : the cotyledons and the rest of the embryo (cotyledons as a part of the embryo) form 85-86 and 2.0-2.5 per cent, respectively.

Analysis of the whole seed and of pulse (dal) without husk gave, respectively, the following values : moisture 10.4, 10.1; protein 24.0, 24.5; fat 1.3, 1.2; fibre 4.1, 0.8; other carbohydrates 56.7, 59.9; minerals 3.5, 3.5 g.; Ca 24, 75; P. 326, 405 (Phytin P. 148, 209); Fe 7.3, 1.13; S 188, 214; and Cl 12, 25 mg./100 g.; calorific value 334, 348 K cals./100 g.

The iodine content of the seeds has been reported to be 0.034 Kg./g. (fresh basis). Sprouted beans (also used as found) contain water 88.8, protein 3.8, fat 0.2, crude fibre 0.7, total carbohydrates 6.6 and ash 0.6 g./100 g., mineral constituents : Ca 19, P 64, Fe 1.3, Na 5 and K 223 mg./100 g.

### **Pharmacodynamics**

Rasa	: Kaṣāya, madhura
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Pittakaphanāśana

### **Properties and action**

Karma	: Balya Jvaraghna Dāha-santāpahara Rocana-dīpana-pācana Grāhī Cakṣuṣya Trṣṇāpraśamana Chardinigrahaṇa Kāsaghna Raktasrāvahara Raktaprasādana Pathya
Roga	: Jvara Dourbalya Aruci-agnimāndya

Netravikāra-dṛṣṭimāndya  
 Kāsa  
 Rakta-pitta-raktasrāva  
 Śiroroga  
 Madātyaya-śukra  
 Visarpa.

### **Therapeutic uses**

The drug Mudga is tonic (balya), febrifuge (jvaraghna), stomachic (dipana), digestive (pācana), haemostatic (raktasrāvahara), blood purifier (rakta-prasādana) and expectorant (kāsaghna). It allays burning sensation (dāhapraśamana), excessive thirst (trṣṇāprashaṇa), vomiting (chardinigrahaṇa) and excessive fat (medohara). It has properties of grahi, laghu (light), supācyā (easily digestible), pathya (wholesome) and cakṣusya (good for eyes and vision). It is cordiotonic (hr̥daya) and indicated in fever, diarrhoea, abdominal disorders and ailments caused by loss of digestive power (pācakāgni). The mudga yūṣa (soup) has been given due importance in Indian medicine, in various forms or mixed and flavoured with spices and suitable drugs, for making its use as medicated article. Such preparations are generally suggested and consumed in ailing conditions and convulsing stages.

The pulse is also useful in vertigo (bhrama) and given in some areas. Decoction of the seeds is used as an effective diuretic in beri-beri. The mungo extract is reported to have protective and curative in polyneuritis gallinarum.

Green gram or Mudga, commonly known as Mung, ranks high among the pulse crops of India. Mature of seeds are rich in protein and cooked seeds and dal from a valuable constituent of the daily diet and component of several dishes, regimen and food articles consumed by a considerable number of people in the country. Mudga belong to Śimbīdhānya varga (legume seeds). Being a potent dietary item with medicinal properties, the preparations and use of Mudga as wholesome (pathya khādyā) diet is indicated

in several diseases, in addition to its common utility as an ideal, light and healthy ingredient of dietetics.

**Part used :** Seeds.

**Dose :** Decoction 50-100 ml., Edible (pulse).

## MUDGA ( मुद्ग )

- क. मुद्ग रूक्षो लघुर्गाही कफपित्तहरो हिमः ।  
स्वादुरल्पानिलो नेत्र्यो ज्वरघ्नो वनजस्तथा ॥
- ख. मुद्गो बहुविधः श्यामो हरितः पीतकस्तथा ।  
श्वेतो रक्तश्च तेषान्तु पूर्वः पूर्वो लघुः स्मृतः ॥
- ग. सुश्रुतेन पुनः प्रोक्तो हरितः प्रवरो गुणैः ।  
चरकादिभिरप्युक्त एष एव गुणाधिकः ॥

*Bhāvaprakāśa Nighantu, Dhānya varga, 38-40.*

### शिष्म्बीधान्यम्

- क. शमीजाः शिष्म्बजाः शिष्म्बीभवाः सूप्याश्च वैदलाः ।
- ख. वैदलः मधुरा रूक्षाः कषायाः कटुपाकिनः ।  
वातलाः कफपित्तघ्ना बद्धमूत्रमला हिमाः ।
- ग. ऋते मुद्गभसूरभ्यामन्येत्वाध्मानकारिणः ॥

*Bhāvaprakāśa Nighantu, Dhānya varga, 36-37.*

### वनमुद्ग-मकुष्ठः ( वनमुद्गः )

- क. मकुष्ठो वनमुद्गः स्यान्मकुष्ठकमुकुष्ठकौ ।
- ख. मकुष्ठो वातलो ग्राही कफपित्तहरो लघुः ।  
वह्निजन्मधुरः पाके कृमिज्वरविनाशनः ॥

*Bhāvaprakāśa Nighantu, Dhānya varga, 48-49.*

### शिष्म्बीधान्यभेदाः

- मुद्गो माषो राजमाषो मकुष्ठो वल्कस्तथा ॥
- सतीनको हरेणुश्च कलायस्त्रिपुटश्चणः ।
- मसूरिकाख्या मङ्गल्या तुवरी चक्रकादयः ॥

*Kaiyadeva Nighantu, Dhānya varga, 44-45.*

### शिष्म्बीधान्यगुणकर्माणि

#### क. सामान्यगुणाः

शिष्म्बीधान्यं हिमं रूक्षं कषायं मधुरं लघु ।

कटुपाकं बद्धमूत्रं विबन्धाध्मानवातनुत् ॥  
कफपित्तास्तमेदांसि हन्ति लेपादियोजनात् ।

#### ख. धान्यशिर्षी:

तेषां शिर्षिः कटुः स्वादुपाका समधुरोषणा ॥  
हृद्या रुच्या सरानुष्णशीता विष्ट्रिभ्नी गुरुः ।  
कषाया विशदा रुक्षा वातपित्तविदाहकृत् ॥  
कफाग्निविषदृक्शोफबलशुक्रप्रमेहजित् ।

#### ग. शिर्षीशाकम्

शाकं सलवणं स्वादु कषायं तिक्तकोपणम् ।  
विष्ट्रिभ्नी सृष्टविष्मूत्रं कफमारुतवर्द्धनम् ॥

*Kaiyadeva Nighanṭu, Dhānya varga, 46-50.*

#### मुद्रः:

मुद्रस्तु सूपत्रेष्ठः स्याद्वर्णार्हश्च रसोत्तमः ।  
भुक्तिप्रदो हयानन्दो भूबलो वाजिभोजनः ॥

*Rāja Nighanṭu, Śālyādi varga, 73.*

#### मुद्रजातयः:

##### क. कृष्णमुद्रः:

कृष्णमुद्रस्तु वासन्तो माधवश्च सुराष्ट्रकः ।  
कृष्णमुद्रलिंगदोषघो मधुरो वातनाशनः ॥  
लघुश्च दीपनः पथ्यो बलवीर्याङ्गपुष्टिदः ।

##### ख. शारदमुद्रः:

शारदस्तु हरिन्मुद्रो धूसरोऽन्यश्च शारदः ॥  
हरिन्मुद्रः कषायश्च मधुरः कफपित्तहत् ।  
रक्तमूत्रामयध्रश्च शीतलो लघुदीपनः ॥

##### ग. धूसरमुद्रः:

तद्वच्च धूसरो मुद्रो रसवीर्यादिषु स्मृतः ।  
कषायो मधुरो रुच्यः पित्तवातविबन्धकृत् ॥

*Rāja Nighanṭu, Śālyādi varga, 74-78.*

#### मुद्रयूषगुणाः

पित्तज्वरार्तिशमनं लघु मुद्रयूषं  
सन्तापहारि तदरोचकनाशनञ्च ।

रक्तप्रसादनमिदं यदि सैन्धवेन  
युक्तं तदा भवति सर्वरुजापहारि ॥

*Rāja Nighaṇṭu, Śālyādi varga, 79.*

ज्वरे यूषयोग्यद्रव्यं मुद्रादयः

मुद्रान्मसूरांश्चणकान् कुलत्थान् समकुष्टान् ॥  
यूषार्थे यूषसात्म्यानां ज्वरितानां प्रदापयेत् ।

*Caraka Samhitā, Cikitsā, 3-188/189.*

वमने भृष्टमुद्रकषायः

कषायो भृष्टमुद्रस्य सलाजमधुशर्करः ।  
छर्द्यतीसारतुडदाह-ज्वरघ्नः सम्प्रकाशितः ॥

*Cakradatta, Chardi cikitsā, 15-8.*

*Vrndamādhava, 15-7.*

जिह्वारोगे पथ्यानि

‘क्षारसिद्धेषु मुद्रेषु यूषाश्वाप्यशने हिताः ।’

*Cakradatta, Mukharoga cikitsā, 56-12.*

## MUDGAPARNI

### Botanical name

Vigna trilobata (L.) Verdicourt., Phaseolus trilobus Ait; Dolichos trilobata L.; Phaseolus trilobatus auct. non (L.) Ait.; P. trilobatus (L.) Schreb.; P. trilobus sensu Baker.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Mudgaparnī

### Sanskrit names

Mudgaparnī, Sūrpaparnī, Śimbī, Kākamudgā, Hansī, Kuraṅgikā, Mṛgagandhā, Vanajā, Kṣudrasahā, Śimbiringiṇī, Mahāmārjāra gandhikā, Vanamudgā.

### Regional names

Mungvan (Hindi); Mugam, Mungam (Central India); Mugani (Beng.); Ranmug (Mar.); Udvaisan, Janglisan; Pillipesara (Tel.); Panipayer, Naripayer (Tam.), Ceruvidukol (Mal.).

### Description

Trailing, twining, straggling or suberect annual or

perennial herbs; variable habit (slender, prostrate or trailing) herbs.

Leaves long-petioled, 3-foliolate; stipule oval; leaflets deeply 3-lobed or entire, petiolate of terminal leaflet much longer than 2 lateral ones.

Racemes capitate, long-peduncled. Bracts deciduous, bracteolas below calyx. Calyx glabrous, teeth minute.

Pod linear upto 5.0 x 0.3 cm., turgid, 6-12-seeded.

### **Flowering and fruiting time**

Plant flowers and fruits in September-December or autumn to winters.

### **Distribution**

It is paleotropical plant. Plant occurs throughout India and it is occasionally found along railway tracks on ridges, in cultivated fields and roadsides. Plant is found in the plains of India (old gardens, broken or waste buildings and other similar places) and shady places in forests. It occurs in Himalayan region ascending to 7,000 ft. altitude. Another wild variety grows wild in forests.

### **Chemical composition**

An analysis of the fodder gave (on air-dry basis) following values : moisture 10.7, protein 11.4, fat 1.3, N-free extract 41.4, fibre 22.1, ash 13.4, calcium (as CaO) 2.69, and phosphorous 0.40 per cent. The plant can also be made into hay and the animals are fed alongwith rice-straw; it is much relished by the cattles being succulent and also with nutritive values of the green and tender herbage when the flowers have first appared (best time for cuttings as fodder), having veterinary utility.

### **Pharmacodynamics**

Rasa	: Madhura, tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Tridoṣaśāmaka Vātapittaśāmaka

**Properties and action**

<b>Karma</b>	: Jīvanīya Vṛṣya-śukrala Rasāyana Kṛmighna Dāhapraśamana Jvaraghna Cakṣuṣya Śothahara Kṣayahara Arśoghna Prajāsthāpana Viṣaghna Kuṣṭhaghna Kāsaghna Chardinigrahaṇa Mūtrala Raktaśodhaka-raktastambhana
<b>Roga</b>	: Śukrameha Jvara Dāha Raktapitta Śotha Kṣayaroga Atisāra-grahaṇī Arśa Vātarakta-raktavikāra Raktapitta Netraroga Viṣa-mūṣikaviṣa Raktapradara Trṣṇā Madātyaya Kuṣṭha.

**Therapeutic uses**

During cold season, whole plant of the drug *Mudgaparṇī* is collected after maturity or in flowering and fruiting stage, and the crude material is dried under shade.

Raw drug is ready for use in medicine. Crude drug material is stored/packed in airtight container kept in non-humid cold place. The dried whole plant forms the crude market drug.

Besides the importance of Mudgaparṇī as a medicine, its seeds or pulse is eatable as food item and the plant are valued as green fodder being succulent and nutritious to cattles.

The drug Mudgaparṇī pacifies provocation of all the three body-humors (tridoṣa) specifically vāta and pitta doṣa. It is stomachic, vitaliser carminative, haemostatic, antipyretic, aphrodisiac and antiphlogistic. The drug purifies blood, allays or pacifies burning sensation and counters intoxication or poisonous affect. It is beneficial for eyes and pacifying rakta pitta. The pulses (seeds) are highly nutritive.

**Parts used :** Whole plant, roots, seeds.

**Dose :** Decoction 50-100 ml.

**Groups (gaṇa)**

Jivanīya, Śukrājanana, Madhuraskandha (Caraka Saṁhitā), Kākolyādi, Vidarigandhādi (Suśruta Saṁhitā).

## MUDGAPARNĪ ( मुद्रपर्णी )

मुद्रपर्णी हिमा रूक्षा तिक्ता स्वादुश्च शुक्रता ।

चक्षुष्या क्षतशोथघ्नी ग्राहिणी ज्वरदाहनुत् ।

दोषत्रयहरी लघ्वी ग्रहण्यशर्ततिसारजित् ॥

*Bhāvaprakāśa Nighantu, Guḍucyādi varga, 53-54.*

**मुद्रपर्णी**

अ. मुद्रपर्णी सूर्यपर्णी शिम्बी हंसी कुरञ्जिका ।

मृगगन्धा शिम्बिपर्णी वनजा शिम्बिरिंगिणी ॥

काकमुद्रा क्षुद्रसहा महामार्जारंधिका ।

ब. चक्षुष्या क्षतशोथघ्नी मुद्रपर्णी तु तद्विधा ॥

दोषत्रयहरा लघ्वी ग्रहण्यशर्ततिसारजित् ।

*Kaiyadeva Nighantu, Oṣadhi varga, 107-109.*

### मुद्रपर्णी

मुद्रपर्णी क्षुद्रसहा शिश्म्बी मार्जारगन्धिका ।  
वनजा रिङ्ग्नी हस्वा सूर्यपर्णी कुरङ्गिका ।  
कांसिका काकमुद्रा च वनमुद्रावनोद्भवा ।

### मुद्रपर्णीगुणाः

अरण्यमुद्रा वन्धेति ज्ञेया पञ्चदशाह्वया ।

*Rāja Nighaṇṭu, Guḍūcyādi varga, 34-35.*

### मुद्रपर्णी

अरण्यमुद्रावली सशिश्म्बा पीतपुष्पका ।  
मुद्रवल्ल्यामपर्णा या मुद्रपर्णीति सा स्मृता ॥  
माषपर्णसदृक्षपर्णा रोमालुः वनसम्भवा ।  
मार्जारमोदिनी माषपिण्डी च वक्रनालका ।  
हयपुच्छसमाकारा मधुरा पर्वतोद्भवा ॥

*Śivadatta.*

मुद्रपर्णी हिमा स्वादुः वातरक्तविनाशिनी ।  
पित्तदाहज्वरान् हन्ति कूमिग्नी कफशुक्रनुत् ॥  
माषपर्णी रसे तिक्ता शीतला रक्तपित्तजित् ।  
कफपित्तशुक्रकरी हन्ति दाहज्वरानिलान् ॥

*Dhanvantari Nighaṇṭu.*

मुद्रपर्णी हिमा कासवातरक्तक्षयापहा ।  
पित्तदाहज्वरान् हन्ति चक्षुष्या शुक्रवृद्धिकृत् ॥

*Rāja Nighaṇṭu.*

### वातासृगदरे

मुद्रपर्णी विपक्वेन तैलेन पिचुधारणम् ।  
कर्तव्यं रक्तनाशाय मार्दवाय सुखाय च ॥

*Baṅgasena, Strīroga, 18.*

### वाजीकरणे

षष्ठिकादिगुडिकायाम् ।

*Caraka Saṁhitā, Cikitsā, 3-2-5.*

### मद्यजतृष्णायाम्

पाटलोत्पलकन्देषु मुद्रपर्ण्याश्च साधितम् ।  
पिबेत् मागधिका तत्राम्भो हिमशीतलम् ॥

*Suśruta Saṁhitā, Uttara, 40-51.*

## गर्भधारणार्थम्

बला-घृततैले ।

*Caraka Saṁhitā, Cikitsā, 38-50.*

रसायने

ब्राह्मरसायने

*Caraka Saṁhitā, Cikitsā, 1-1-43.*

च्यवनप्राशे

*Caraka Saṁhitā, Cikitsā, 1-1-62.*

विषे

मृतसङ्खीवन अगदे

*Caraka Saṁhitā, Cikitsā, 23-56.*

कुषे

पूतीकदारु जटिलाः शक्रसुरा क्षौद्रमुद्रपर्णी च ।

लेपः सकाकनासे मण्डलकुष्ठापहः सिद्धः ॥

*Caraka Saṁhitā, Cikitsā, 7-123.*

वातरक्ते

द्विपञ्चमूलाद्यघृते ।

*Caraka Saṁhitā, Cikitsā, 29-61.*

जीवकाद्यस्नेहम्

*Caraka Saṁhitā, Cikitsā, 19-73.*

कासे

शर्करा जीवकं मुद्रमाषपण्यो दुरालभाम् ।

कल्कीकृत्य पचेत् सर्पिः क्षीरेणाष गुणेन तत् ॥

पानभोजनलेहेषु प्रयुक्तं पित्तकाससजित् ।

*Aṣṭāṅga Hṛdaya, Cikitsā, 3-38/39.*

## छद्याम्

निशि स्थितं वारि समुद्रकृष्णं सोशीरधान्यं चणकोदकं वा ।

गवेधुकामूलजलं गुडूच्या जलं पिबेदिक्षुरसं पयो वा ॥

*Caraka Saṁhitā, Cikitsā, 20-61.*

मुद्रविदलैर्विपक्वे केरीक्षीरेण भक्षितैर्बुहुशः ।

छर्दिनर्शयति सहसा तयोस्तुल्याम्बुधिः पीतैः ॥

*Vaidya Manorama, 4-9.*

मुद्रामलकयूषो वा ससर्पिष्कः ससैन्धवः ।

यवागूं मधुमिश्रो वा पञ्चमूलीकृतां पिबेत् ॥

*Suśruta, Saṃhitā, Uttara, 49-19.*

*Vṛndamādhava, 15-3.*

रक्तपित्ते

शालिपण्या युता मुद्दाः पृश्निपण्या मसूरकाः ।

तुवर्यो वातिवलया वलया वा हरेणवः ॥

तत् कषाये हिताः पेया मांसपेयास्तथा रसाः ।

*Aṣṭāṅga Saṅgraha, Cikitsā, 3-20/21.*

तृष्णायाम्

‘मुद्रमसूरचणकजः रसास्तु भृष्टाः धृते देवाः ।’

*Caraka Saṃhitā, Cikitsā, 22-31.*

विसर्पे

मुद्दान् मसूरांश्वणकान् युषार्थमुपकल्पयेत् ।

अनम्लान् दाडिमाम्लान् वा पटोलामलकैः सह ॥

*Caraka Saṃhitā, Cikitsā, 21-111.*

मदात्यये

मुद्रयूषः सितायुक्तः स्वादुर्वा पेशितो रसः ।

पित्तपानात्यये योज्याः सर्वतश्च क्रियाः हिमाः ॥

*Vṛndamādhava, 18-7.*

कासे

कण्टकारिरसे सिद्धो मुद्रयूषः सुसंस्कृतः ।

सगौरामलकः साम्लः सर्वकासभिषग्रजितम् ॥

*Caraka Saṃhitā, Cikitsā, 18-184.*

नेत्ररोगेशुक्रे

मुद्दान् वा निस्तुषान् भृष्टान् शङ्खौद्रसितायुतान् ।

मधूकसारं मधुना योजयेच्चाञ्जने सदा ॥

*Suśruta Saṃhitā, Uttara, 12-32.*

*Aṣṭāṅga Hydaya, Uttara, 11-46.*

शिरोरोगे

मुद्दान् कुलत्थान् माषांश्च खादेच्च निशिकेवलान् ।

कटूष्णांश्च ससर्पिष्कानुष्णं चानु पयः पिबेत् ॥

*Suśruta Saṃhitā, Uttara, 26-4.*

## शोथे

मूलकानि च शुष्काणि भद्रमुस्तं समास्थिम्।  
गोमूत्रपिष्टो लेपोऽयं श्वयथोर्विनिवारणः॥

*Kāśyapa Saṁhitā, p. 243.*

मूलकानि च सिद्धानि सानिले भक्ष्येन्नरः।  
रसेन मूलकानां तु कुर्यात् परिषेचनम्॥

*Bhela Saṁhitā, Cikitsā, 17-26.*

## मूत्रकृच्छ्रे

उत्पाठ्यं मूलकं भक्तमुदजीपरि विन्यसेत्।  
प्रातः पिबेद् रसं कृच्छ्री सयवक्षारसोरकम्॥

*Siddha Bhaiṣajya Maṇimālā, 4-531.*

## विसर्पे

शुष्कमूलककल्केन नक्तमालत्वचापि वा।  
विभीतकत्वचा वापि कल्केनोष्णेन लेपयेत्॥

*Caraka Saṁhitā, Cikitsā, 21-124.*

## अशार्द्धसि

अग्रिमन्थस्य शिग्रोश्च पत्राण्यशमन्तकस्य च।  
जलेनोत्क्राथ्य शूलार्ते स्वभ्यक्तमवगाहयेत्॥

*Caraka Saṁhitā, Cikitsā, 14-45/46.*

## पाण्डुरोगे कामलायाञ्च

पलं बालकमूलाम्बु शर्करामधुरीकृतम्।  
अप्युच्चैर्दुर्जयं हन्ति पाण्डुं कतिपयैर्दिनैः॥

*Siddha Bhaiṣajya Maṇimālā, 4-287.*

## कासे

वास्तुको वायसी शाकं मूलकं सुनिषण्णकम्।  
शस्यते वातकासे तु स्वाद्वाललवणानि च॥

*Caraka Saṁhitā, Cikitsā, 18-81/82.*

## अर्बुद-ग्रन्थ्यादौ

लेपनं शङ्खचूर्णेन सह मूलकभस्मना।  
कफार्बुदापहं कुर्याद् ग्रन्थ्यादिषु विशेषतः॥

*Vṛndamādhava, 41-37.*

## आमवाते

शुष्कमूलकयूषे वा यूषं वा पाञ्चमौलिकम्।

काञ्जिकं वापि शुष्कीचूर्णाविचूर्णिताम् ॥

*Bhāvaprakāśa, Cikitsā, 26-17.*

वातव्याधौ

मूलकाद्यतैलम् ।

*Caraka Samhitā, Cikitsā, 28-167/169.*

शोथे पीनसादौ

मूलकानां कुलत्थानां यूषैर्वा सुपक्षस्थितैः ।

यवगोधूमशाल्यनैर्यथासात्म्यमुपाचयेत् ॥

*Caraka Samhitā, Cikitsā, 8-68.*

अतिसारे

‘यूषेण मूलकानां तु बदराणामथापि वा ।

दधिदाडिमसिद्धेन बहुस्नेहेन भोजयेत् ॥’

*Caraka Samhitā, Cikitsā, 19-31/33.*

## MŪLAKA

**Botanical name :** Raphanus sativus Linn.

**Family :** Cruciferae

**Classical name :** Mūlaka

**Sanskrit name :** Mūlaka

**Regional names**

Muli, Mura, Murai (Hindi); Mura (Beng.); Mula (Mar.); Mulo (Guj.); Muri (Punj.); Turb (Pers.); Phujl, Fujal (Ar.); Radish (Eng.).

**Description**

Erect herbs with fusiform tap root. Stem corymbosely branched, 20-90 cm. tall. Lower leaves lyrate-pinnate-partite, with sinuate-dentate segments, very variable, 3-5 jugate; upper ones entire or dentate, subsessile or sessile. Lvs. pinnate or pinnatifid, terminal leaflet or lobe very broad.

Racemes 10-30-flowered. Flowers 15-20 mm. across, usually lilac, white or violet; pedicels 5-10 mm. long increasing to 20 mm. in fruit. Sepals 6-8 x 1.5 x 2 cm., oblong,

subequal. Petals 15-20 x 5-7 mm. long, clewed. Stamens 7-9 and 10-20 mm. long; anthers 2-3 mm. long. Fls. with purple veins.

Pods 20-60 x 4-5 mm., beak 9-20 mm., long; seeds 6-12 subglobose uniserial, brown, reticulated. Pods indhiscent, terete, thick, 2.5 cm., more or less constricted between the seeds, prolonged beyond the valves in a pointed beak about half the length of pod; seeds separated by pith. Roots long, fleshy, white, thick.

### **Flowering and fruiting time**

It is flowering and fruiting during December to April. Farming season.

### **Distribution**

Plant is commonly cultivated as popular vegetable throughout India.

### **Chemical composition**

Seeds and root contain non-volatile oil and a volatile oil which resembles oil of Inidan mustard seeds (Rājikā or rai). It is colourless and in taste like radish (Mūlaka or muli). Mūlaka (radish) is a good source of ascorbic acid (15-40 mg./100 g.) and supplies a variety of mineral salts.

Trace elements in radish include aluminium, barium, lithium manganese, silicon, titanium, flourine and iodine (up to 18 mg./100 g.).

Pink-skinned radish is generally richer in ascorbic acid than the white-skinned one. In the former the vitamin is more concentrated in the skin in association with the pigment than in the flesh.

### **Kinds and varieties**

Mūlaka is chiefly of two kinds on the basis of classical consideration viz. Mūlaka, and cāṇakyamūlaka, other than Bālamūlaka or Laghumūlaka and Piṇḍamūlaka, as mentioned in texts (Nighaṇṭus).

There are large number of types of radish (indigenous as well as introduced) with wide range of forms, cultivars (and races etc.) are under cultivation under horticultural practices for large scale almost round the year.

### **Pharmacodynamics**

Rasa	: Kaṭu
Guṇa	: Laghu (laghu mūlaka); Guru (bṛhat mūlaka)
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara (laghu mūlaka)- Tridoṣakara (bṛhat mūlaka)

### **Properties and action**

Karma	: Rocana-dīpana-pācana Vātānulomana-bhedana Yakṛduttejaka Kaphaniḥsāraka-kaṇṭhya-svarya Mūtrala-aśmarībhedana Ārtavajanana
Roga	: Agnimāndya-ādhmāna Atiśāra Arśa Kāmalā Tvagvikāra Kāsa-śvāsa-kṣaya Svara-kaṇṭha vikāra Yakṛdvikāra Udāvarta-śūla-gulma Jvara Kuṣṭha Nāsāroga Netrāmaya Karṇaroga Śotha.

### **Therapeutic uses**

The drug Mūlaka is the tuberous tap root of the plant (*Raphanus sativus Linn.*) which is commonly known as rādīsh (and several other regional names) and used throughout country. Radish is highly medicinal and similarly its other parts such as leaves (patra), pods (śimbi), seeds (bīja) and flowers (puṣpa) have medicinal properties and utility.

Mūlaka (radish) root (tap and tuberous-mulaka kanda) is credited with refreshing and depurative properties. Radish preparations are useful in liver, spleen and gall bladder troubles. They are used for neuralgic headaches, sleeplessness and chronic diarrhoea. Roots, leaves, flowers and pods are reported to be active against Gram-positive bacteria. The roots are considered useful in urinary complaints, piles and in gastrodynia. A salt extracted from the (roots dried) and burnt to white ash is suggested to be useful in stomach troubles. The juice of fresh leaves is used as diuretic and laxative. The seeds are considered to be peptic, expectorant, diuretic and carminative. In general, Mūlaka, as a whole, is much valued for nutritive and medicinal values and it has utility as drug in therapeusis.

The radish is extensively used as Mūlaka śāka (vegetable) all over country as a most popular root-vegetable (mūla or kanda śāka including patra and phalaśāka). Mūlaka (radish) is eaten raw as salad as well as cooked as vegetable (mūlaka kanda śāka). It is much relished for its pungent flavour and is considered an appetizer. the leaves are also boiled or cooked for using as eatable; the raw leaves (lender) are eaten. Pods (commonly known as Mugra) are eaten after cooking as vegetable or raw.

The salad made from coloured upper skin together with young radish leaves could serve as an excellent source of ascorbic acid. There is appreciable loss of ascorbic acid during storage, cooking or drying of radish. Pink-skinned radish, in comparison to white-skinned radish, is quite useful as it is generally rich source of ascorbic acid, since the vitamin has been reported to be more concentrated in the skin of radish (especially pink-skinned type) with the pigment in comparison to flesh within radish, the tuberous tap roots, of mūlaka.

**Parts used :** Roots, leaves, seeds.

**Dose :** Juice 10-20 ml., Decoction 50-100 ml.

**Formulations (yoga)**

Śuṣkamūlakādya tailam, Śuṣkamūlakādya ghṛtam, Mūlakādya tailam, Mūlaka kṣāra, Mūlaka bijādi lepa, Kṣāra tailam.

## MŪLAKA ( मूलक )

### बालमूलकम्

बालमूलकमत्यल्पक्षारं तिक्तोष्णं लघु ।  
 मूलकं बालकं रुच्यं स्वर्योष्णं पाचनं लघु ॥  
 दोषत्रयज्वरं श्वासनासाकण्ठाक्षिरोगनुत् ।  
 रोचनं दीपनं स्वर्यमुष्णं हृदयं त्रिदोषजित् ॥  
 निहन्त्याददुदुः शूलामकोठोदावर्तपीनसान् ।  
 गुल्मकासक्षयश्वासव्रणनेत्रजलामयान् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 699-671.*

### महामूलकम्

महदामं कटु स्वादु रसे पाके त्रिदोषकृत् ।  
 रुक्षं विदाहि तीक्ष्णोष्णमुत्क्लेशि स्तम्भि गुर्वपि ॥

### स्वेहसिद्धमूलकम्

तदेव स्त्रिधसिद्धं तु दोषत्रयनिबर्हणम् ।

### शुष्कमूलकम्

शुष्कं लघु हरेच्छोफं विषं दोषत्रयं तथा ॥

### मूलकस्य पुष्टं फलञ्ज

तत्पुष्टं कफपित्तग्नं फलं तु कफवातजित् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 672-673.*

### मूलकपत्रम्

पाचनं लघु रुक्षोष्णं पत्रं मूलकणं नवम् ।

स्वेहसिद्धं त्रिदोषघ्नमसिद्धं कफपित्तकृत् ॥

*Bhāvaprakāśa Nighaṇṭu, Śāka varga, 33.*

### मूलकद्वयम्

- क. मूलकं द्विविधं प्रोक्तं तत्रैकं लघुमूलकम् ।  
 शालामर्कटकं विस्तं शालेयं मरुसम्भवम् ॥
- ख. चाणक्यमूलकं तीक्ष्णं तथा मूलकपोतिका ।  
 नेपालमूलकं चान्यतद्वेदजदन्तवत् ॥
- ग. लघुमूलं कटूष्णं स्यादुच्यं लघु च पाचनम् ।  
 दोषत्रयहरं स्वर्यं ज्वरश्वासविनाशनम् ॥  
 नासिकाकण्ठरोगग्नं नयनामयनाशनम् ।

घ. महत्तदेव रूक्षोष्णं गुरु दोषत्रयप्रदम्।  
स्नेहसिद्धं तदेव स्याद् दोषत्रयविनाशनम्॥

*Bhāvaprakāśa Nighaṇṭu, Śāka varga, 99-103.*

### कफजार्बुदे मूलकलेपः

लेपनं शङ्खचूर्णेन सह मूलकभस्मना।  
कफार्बुदापहं कुर्याद् ग्रन्थ्यादिषु विशेषतः॥

*Cakradatta, 41-52.*

### शोथचिकित्सायां शुष्कमूलकाद्यतैलम्

शुष्कमूलकवर्षाभूदासुरास्तामहौषधैः।

पक्वमध्यञ्जनात् तैलं सशूलं श्वयथुं जयेत्॥

*Cakradatta, Śōtha cikitsā, 39-40.*

### मूलकगुणाः

मूलकं तीक्ष्णमुष्णश्च कटूष्णं ग्राहि दीपनम्।

दुर्नामगुल्महृदोगवातप्रं रुचिदं गुरु॥

*Rāja Nighaṇṭu, Mūlakādi varga, 16.*

### चाणाख्यमूलकम्

चाणाख्यमूलकं सोष्णं कटुकं रुच्यदीपनम्।

कफवातक्रिमीन् गुल्मं नाशयेदग्राहकं गुरु॥

*Rāja Nighaṇṭu, Mūlakādi varga, 18.*

### पिण्डमूलकम्

‘पिण्डमूलं कटूष्णं च गुल्मवातादिदोषनुत्।’

*Rāja Nighaṇṭu, Mūlakādi varga, 21.*

### बालमूलकम्

सोष्णं तीक्ष्णं च तिक्तं मधुरकटुरसं मूत्रदोषापहारि

श्वासार्शःकासगुल्मक्षयनयनजा नाभिशूलामयघ्रम्।

कण्ठयं बल्य च रुजं मलविकृतिहरं मूलकं बालकं स्यात्-

दुष्णं जीर्णं च शोथप्रदमुदितमिदं दाहपित्तास्तदायि॥

*Rāja Nighaṇṭu, Mūlakādi varga, 22.*

अपि च

आमं सङ्घग्राहि रुच्यं कफवनहरं पक्वमेतत्कटूष्णं

भुक्तेः प्राभक्षितं चेत्सपदि वितनुते पित्तदाहास्तकोपान्।

भुक्त्या सार्धन्तु जाधं हितकरजलकृदेशवारेण तच्चेत्

पक्कं हद्रोगशूलप्रशमनमुदितं शूलरुग्वारि मूलम्॥

*Rāja Nighantu, Mūlakādi varga, 23.*

कर्णरोगे क्षारतैलम्

निर्माणविधिः क.

शुष्कमूलकशुष्टानां क्षारो हिङ्गं महोषधम्।

....सवैरतैयथोद्दृष्टैः क्षारतैलं विपाचयेत्॥

प्रयोगः ख.

वाधिर्य कर्णनादश्च षूयस्नावश्च दारुणाः।

क्रिमयः कर्णशूलं च पूरणादस्य नशयति॥

*Caraka Saṁhitā, Cikitsā, 26-226/227.*

अतिसारे मूलकयूषम्

(अन्यद्रव्याणां सह प्रयोगः)

‘यूषेण मूलकानां तं बदराणामथापि वा।’

*Caraka Saṁhitā, Cikitsā, 19-31.*

कुष्ठरोगे

‘लिम्पेन्मूलकबीजैः पिष्टैस्तक्रेण सिध्मनाशाय।’

*Cakradatta, 50-31.*

अम्लमूलकम्

‘काञ्जिके व्युषितं पक्कं मूलकं त्वम्लमूलकम्।’

*Cakradatta, Prathamam Parisistam.*

शुष्कमूलकाद्यघृतम्

मूलकं शुष्कमार्दं च वर्षाभूः पञ्चमूलकम्।

कृतमालफलं चाप्सु पक्त्वा तेन घृतं पचेत्॥

तत्पीतं शमयेत् क्षिप्रमुदावर्त्तमशेषतः॥

*Bhāvaprakāśa, Udāvariādhikāra, 31/43-44.*

अर्णःसु

‘शुष्कमूलकयूषं वा.....छागलं वा रसं

दद्याद् यूषैरतैर्विमिश्रितम्।’

*Caraka Saṁhitā, Cikitsā, 9.*

प्रवाहिकायाम्

‘तं मूलकानां यूषेण.....भोजयेत्।’

*Caraka Saṁhitā, Cikitsā, 10.*

### ग्रन्थविसर्पे

‘सुखोष्णया प्रदिद्याद्वा....शुष्कमूलककल्केन।’

*Caraka Saṁhitā, Cikitsā, 11.*

### कफजशोथे

‘शस्तस्तथा मूलकतोयसेकः।’

*Caraka Saṁhitā, Cikitsā, 17.*

### वातव्याधिचिकित्सार्थं मूलकाद्यतैलम्

‘मूलकस्वरसं क्षीरं तैलं दध्याम्लकाञ्जिकम्।

तुल्यं विपाचयेत् कल्कैर्बलाचित्रकसैन्धवैः॥

.....पुष्कराह्वशटीबिल्वचशताह्वानतदारुभिः ।

तत्सिद्धं पीतमत्युग्रान् हन्ति वातात्मकान् गदान्॥’

*Caraka Saṁhitā, Cikitsā, 28-167-169.*

### मूलकतैलम्

‘रास्ना शिरीषयष्ट्याह्वशुण्ठी सह्यरामृताः॥

....दध्यारनालमार्षाम्बुमूलकेक्षुरसैः शुभैः॥

पृथक् प्रस्थोन्मितैः सार्थं तैलप्रस्थं विपाचयेत्।

प्लीहमूत्रग्रहश्वासकासमारुतरोगनुत् ॥

एतन्मूलकतैलाख्यं वर्णायुर्बलवर्धनम्।’

*Caraka Saṁhitā, Cikitsā, 28-172/176.*

### वातरोगे मूलकतैलम्

मूलकस्वरसे क्षीरसमे स्थाप्यं त्र्यहं दधि॥

तस्याम्लस्य त्रिभिः प्रस्थैस्तैलप्रस्थं विपाचयेत्।

यष्ट्याह्वशर्करारास्नालवणार्द्रकनागरैः ॥

सुपिष्टैः पलिकैः पानात्तदध्यङ्गाच्च वातनुत्।

*Caraka Saṁhitā, Cikitsā, 28-136/137.*

### वातोदरे मूलकबीजतैलम्

सरलामधुशिग्रुणां बीजेभ्यो मूलकस्य च॥

तैलाभ्यङ्गपानार्थं शूलघ्नान्यनिलोदरे।

*Caraka Saṁhitā, Cikitsā, 13-155/156.*

### मूलकम्

शुष्कं त्रिदोषशमनं शोथघ्नं गरजिलघु।

तत्पुष्टं कफपित्तब्रं तत्फलं कफवातजित् ॥

*Rāja Ballabha Nighaṇṭu.*

बालं दोषहरं वृद्धं त्रिदोषमारुतापहम् ।

स्नेहसिद्धं विशुष्कं तु मूलकं कफवातजित् ॥

*Caraka Saṁhitā, Sūtra, 27.*

हिक्काश्वासयोः

‘शुष्कमूलकयूषश्च हिक्काश्वासनिवारणः ।’

*Caraka Saṁhitā, Cikitsā, 17-99.*

कफशोथे

‘शस्तस्तथा मूलकतोयसेकः ।’

*Caraka Saṁhitā, Cikitsā, 12-73.*

वातकासिणः पथ्यार्थम्

‘....मूलकं सुनिषण्णकं....शस्यते वातकासे तु.... ।’

*Caraka Saṁhitā, Cikitsā, 22.*

विसूच्याम्

‘बालमूलस्य तु छाथः पिप्पलीचूर्णसंयुतः ।

विसूचीनाशनः श्रेष्ठः जठराग्निविवर्द्धनः ॥’

*Bhāvaprakāśa, Cikitsā, 6-111.*

शोफे

‘मूलकं च तिलेनाशु सर्वशोफहरं परम् ।’

*Sodhala, Gadanigraha, 2-33-76.*

कर्णशूले

‘मूलकस्य च स्वरसः श्रेष्ठः कटूष्णः कर्णपूरणे ।’

*Suśruta Saṁhitā, Cikitsā, 3-21.*

कुष्ठचिकित्सायां मूलकबीजादिलेपः

*Cakradatta, Kuṣṭha Cikitsā, 50-34.*

शीतपित्ते

‘शुष्कमूलकयूषेण....भोजनम् सर्वदा कार्यम् ॥’

*Cakradatta, 51-14.*

सिध्मे

‘शिखरिरसेन सुषिद्धं मूलकबीजं प्रलेपतः

सिध्मं....नाशयति ।’

*Baṅgasena, Kuṣṭha. 71, Cakradatta, 50-26.*

**कफवातात्मके ज्वरे**

‘हस्वमूलकयूषस्तु कफवातात्मके हितः ।’

*Cakradatta.*

**शुष्कार्शःसु**

‘शुष्कमूलकपिण्डैर्वा.....स्वेदयेत् पोट्टलीकृतैः ।’

*Caraka Saṁhitā, Cikitsā, 9-42/43.*

**श्वित्रे मूलकबीजलेपम्**

‘मूलकबीजावल्युजलेपः पिष्टो गवां मूत्रे ।’

*Caraka Saṁhitā, Cikitsā, 7-169.*

**सशूलशोथे शुष्कमूलकतैलम्**

शुष्कमूलकवर्षाभूदारुरास्नामहौषधैः ।

पक्वमध्यञ्जनं तैलं सशूलं श्वयथुं हरेत् ॥

*Bhāvaprakāśa, Śothādhikāra, 42-37.*

## MUNDI

### **Botanical name**

Sphaeranthus Senegalensis Dc.,

syns. Sphaeranthus indicus Linn.; S. indicus auct. non L.

**Family :** Asteraceae (compositac)

**Classical name :** Muṇḍī

**Sanskrit names**

Muṇḍī, Śravaṇī, Tapodhanā, Śravaṇasīrṣaka, Muṇḍatikā, Bhikṣu, Śravaṇā, Paribrājī, Prannajitā.

**Regional names**

Mundi, Gorakhmundi (Hindi); Murhmurhiya (Beng.); Gorakhmundi (Mar.); Kottakaranthai (Tel.); Bhirangni (Mal.); Buikadam (U.).

**Description**

Annual, prostrate-decumbent, procumbent-ascending, glandular, villous, tomentose aromatic herbs, 30-60 cm. high; stems narrowly winged, wing toothed.

Leaves sessile, 2.5-5 x 1.5 - 2 cm., obovate-oblong,

acute to rounded at tip, mucronate, margins dentate, glandular-villous on both surfaces.

Leaves lanceolate, oblong or oblong-spathulate, obtuse-mucronate; base semi-amplexicaul, margins acutely serrate (rarely double dentate at some places, both sides villous, glands sessile. Peduncles 2-6 cm. long, glandular-pubescent, with a compound purple head. Involucral bracts membranous, toothed along margins and shorter than heads.

Heads Ca 13 mm. in diam, globose or ellipsoid, purplish, involucral bracts 2-seriate; outer bracts Ca 3 mm. long, linear, apiculate, ciliate and glandular; inner bracts Ca 3 mm. long, linear-ob lanceolate, acuminate. Ray florets Ca 1.5 mm. long, 2-toothed, disc florets 2-2.5 mm. long, 5-lobed. Infloroscence capitula.

Achenes Ca 1 mm. long, glandular hairy; pappus absent; achenes tipped with persistent corolla.

### **Flowering and fruiting time**

Plant flowers and fruits from winters to summers. January-June.

### **Distribution**

Plant occurs almost throughout India ascending to 5,000 feet elevation. It is commonly found in gardens, fallow fields, waste places, along the roadsides, railway tracks, ponds or ditches, dried ponds and dry open forests.

### **Kinds and varieties**

There two kinds of Munḍī viz. Munḍī (*śrāvanī*) and Mahamunḍī (*mahāśrāvanī*). Botanical source of the both *sphaeranthus indicus* Linn. and *Sphaeranthus africana* Linn. respectively.

### ***Sphaeranthus africanus* Linn.**

A slender, glabrous or pubescent, fragrant herb, commonly occurring in marshy situations all along the coast from West Bengal to Kerala and Maharashtra. Branches winged, wings entire; leaves obovate, finely toothed; flowers in heads, white or purple.

This plant is suggested to be plant species for Mahāmuṇḍī (and known in southern region with different names e.g. Velutha adakkamantiyan in Malayalam) and used medicinally specially substitute for sphaeranthus indicus Linn. or Muṇḍī (for the instance; in Kerala).

Plant is reported to be useful as cattle fodder. An aqueous extract of the stems and leaves is found to be toxic to American cockroaches. The aerial parts of the plants are reported to contain an unidentified alkaloid.

### **Chemical composition**

The flowering herb contains a volatile oil which yields sphaeranthine alkaloid and a glucoside. A reddish aromatic oil 0.01-0.02% from the herb is reported to contain ugenol, ocimin and other constituents. An yellowish fixed oil (3%) is also found.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, rūkṣa
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaśāmaka

### **Properties and action**

Karma	: Raktaprasādana-raktaśodhaka Śothahara Hṛdayottejaka Dīpana-pācana-anulomona Yakṛduttejaka Kṛmighna Kaphaghna Vṛṣya Mūtrala Svedajanana Kuṣṭhaghna-kaṇḍūghna Jvaraghna Rasāyana Medhya-nādībalya Vedanāsthāpana
-------	--

	Chardinigrahaṇa Medohara.
Roga	: Raktadoṣa-raktavikāra Vātarakta-visphoṭa Śothavedanayukta vikāra Apasmāra Mastiska-nāḍīdourbalya Śiroroga-śirahśūla-ardhāvabhedaka- sūryāvarta Agnimāndya-śūla-udaravikāra Yakṛḍplihavṛddhi Kāmalā Arṣa Kṛmi Jīrṇakāsa-śvāsa Napumṣakatva Mūtrakṛcchra-pūyameha-prameha Kuṣṭha-visarpa-tvagvikāra Jvara Dourbalya.

### Therapeutic uses

The drug Muṇḍī is a raktaprasādana or raktasodhana (blood purifying) herbal agent which possesses various other medicinal properties. It is mainly used in blood anomalies and ailments caused by blood impurities, gout, eruptive conditions, skin diseases, erysepalas, gonorrhoea, filaria, goitre, gaṇḍamālā, obesity (esp. foul smell of body) and rheumatism. It is used in inflammatory and painful ailments. The drug is useful in headaches, epilepsy, vātavyādhi, agnimāndya, colic, jaundice, chronic cough, asthmā and liver-splenic enlargement. It is also used as nervine and brain tonic including memory promoter (medhya). Being a vṛṣya medicine, the oil of root is given for aphrodisiac action. Drug is also used in dysuria; prameha, fever and general debility.

All parts of the plant drug find uses medicinally and whole plant and inflorescence (capitula) generally form the raw drug as Muṇḍī for therapeutic use.

**Parts used :** Whole plant.

**Dose :** Juice 10-20 ml., Decoction 50-100 ml.

**Formulation (yoga) :** Muṇḍī arka

**Group (gana) :** Rasāyana (Caraka Saṁhitā).

## MUNDĪ-MUNDITIKĀ ( मुण्डी-मुण्डितिका )

### मुण्डी महामुण्डी च

क. मुण्डी भिक्षुरपि प्रोक्ता श्रावणी च तपोधना ।

श्रवणाह्वा मुण्डितिका तथा श्रवणशीर्षिका ॥

ख. महाश्रावणिकाऽन्या तु सा स्मृता भूकदम्बिका ।

कदम्बपुष्पिका च स्यादव्यथाऽतितपस्विनी ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 215-216.*

मुण्डितिका कटुः पाके वीर्योष्णा मधुरा लघुः ।

मेध्या गण्डापचीकृच्छ्रकृमियोन्यर्तिपाण्डुनुत् ॥

श्लीपदारुच्यपस्मारप्लीहमेदोगुदर्तिहृत् ।

महामुण्डी च ततुल्या गुणैरुक्ता महर्षिभिः ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 217-218.*

### श्रावणी

श्रावणी स्यान्मुण्डितिका भिक्षुः श्रवणशीर्षिका ।

श्रवणा च प्रन्नजिता परित्राजी तपोधना ॥

### श्रावणीगुणाः

श्रावणी तु कषाया स्यात् कटूष्णा कफपित्तनुत् ।

आमातीसारकासन्नी विषच्छर्दिविनाशनी ॥

*Rāja Nighaṇṭu, Parpaṭādi varga, 17-18.*

मुण्डिका कटुतिका स्याद् अनिलास्त्रविनाशिनी ।

आमारुचिघ्न्यपस्मारगण्डश्रीपदनाशिनी ॥

*Dhanvantari Nighaṇṭu.*

### महाश्रावणी

महाश्रावणिकाऽन्या सा महामुण्डी च लोचनी ।

कदम्बपुष्पी विकचा क्रोडचूडा पलङ्घणा ॥

नदीकदम्बो मुण्डाख्या महामुण्डितिका च सा ।

छिन्ना ग्रन्थनिका माता स्थविरा लोभनी तथा ।  
भूकदम्बोऽलम्बुषा स्यादिति सप्तदशाह्वया ॥

### महाश्रावणीगुणः

महामुण्डघुष्णितिका च ईषद्‌गौल्या मरुच्छदा ।  
स्वरकृद्रोचनी चैव मेहहच्च रसायनी ॥

*Rāja Nighaṇṭu, Parpaṭādi varga, 19-21.*

मुण्डतिका कटुः पाके वीर्योष्णा मधुरा लघुः ।

मेध्या गण्डापचीकृच्छ्रकृमिपित्तार्तिपाण्डुनुत् ॥

*Madanapāla Nighaṇṭu.*

### रक्तगुल्मे (रुग्णा)

गुण्डारोचनिकाचूर्णं शर्करामाक्षिकान्वितम् ।

विदधीताशु गुल्मन्या मलसञ्चइक्रमाय च ॥

*Bhāvaprakāśa, Gulmādhikāra, 32-42.*

### सूर्यावर्त्तावभेदयोः

पीत्वा मुण्डतिकोत्थं स्वरसं मरीचावचूर्णितं चोष्णम् ।

भक्तादौ खलु सप्तहात् सूर्यावर्त्तावभेदकौ हन्यात् ॥

*Śāringadhara Saṃhitā, 2-1-17.*

*Śoḍhala, Gadanigraha, 3-1-66.*

### योनिशूले

एरण्डतैलेन परिप्लुता स्यात् कार्पासपिण्डौ यदि योनिमध्ये ।

शूलं तदानीं शमयेत्तदीयं संयावको मुण्डकया कृतो वा ॥

*Rāja Mārtavida, 31-36.*

### आमवाते

‘विश्वालम्बुषयोः कल्कमद्यात् ।’

*Bhāvaprakāśa, Cikitsā, 26-29.*

### सूर्यावर्त्तादौ

‘रसो मुण्ड्याः सकोष्णो वा मरिचैरेव धूलितः ।

जयेत्सप्तदिनाभ्यासात् सूर्यावर्त्तावभेदकौ ॥’

*Śāringadhara Saṃhitā.*

### अपच्यादौ

अलम्बुषायाः स्वरसः पीतो द्विपलमात्रया ।

अपचीगण्डमालानां कामलायाश्च नाशनः ॥

*Śāringadhara Saṃhitā.*

छिन्ना ग्रन्थिनिका माता स्थविरा लोभनी तथा ।

भूकदम्बोऽलम्बुषा स्यादिति सप्तदशाह्वया ॥

### महाश्रावणीगुणाः

महामुण्डघुण्णतिका च ईषद्गौल्या मरुच्छिदा ।

स्वरकृद्रोचनी चैव मेहहच्च रसायनी ॥

*Rāja Nighaṇṭu, Parpaṭādi varga, 19-21.*

मुण्डतिका कदुः पाके वीर्योष्णा मधुरा लघुः ।

मेध्या गण्डापचीकृच्छ्रकृमिपित्तार्तिपाण्डुनुत् ॥

*Madanapāla Nighaṇṭu.*

### रक्तगुल्मे (रुग्णा)

गुण्डारोचनिकाचूर्णं शर्करामाक्षिकान्वितम् ।

विदधीताशु गुल्मिन्या मलसञ्चाइक्रमाय च ॥

*Bhāvaprakāśa, Gulmādhikāra, 32-42.*

### सूर्यावर्त्तावभेदयोः

पीत्वा मुण्डतिकोत्थं स्वरसं मरीचावचूर्णितं चोष्णम् ।

भक्तादौ खलु सप्ताहात् सूर्यावर्त्तावभेदकौ हन्यात् ॥

*Śāringadhara Saṃhitā, 2-1-17.*

*Śoḍhala, Gadanigraha, 3-1-66.*

### योनिशूले

एरण्डतैलेन परिप्लुता स्यात् कार्पासपिण्डौ यदि योनिमध्ये ।

शूलं तदानीं शमयेत्तदीयं संयावको मुण्डकया कृतो वा ॥

*Rāja Mārtanūda, 31-36.*

### आमवाते

‘विश्वालम्बुषयोः कल्कमद्यात् ।’

*Bhāvaprakāśa, Cikitsā, 26-29.*

### सूर्यावर्त्तादौ

‘रसो मुण्डयाः सकोष्णो वा मरिचैरेव धूलितः ।

जयेत्सप्तदिनाभ्यासात् सूर्यावर्त्तावभेदकौ ॥’

*Śāringadhara Saṃhitā.*

### अपच्यादौ

अलम्बुषायाः स्वरसः पीतो द्विपलमात्रया ।

अपचीगण्डमालानां कामलायाश्च नाशनः ॥

*Śāringadhara Saṃhitā.*

आमवाते

‘विश्वालम्बुषयोः कल्कमद्यात्।’

*Bhāvaprakāśa, Cikitsā, 26-29.*

अलम्बुषादिचूर्णम्।

*Bhāvaprakāśa, Cikitsā, 26-63/70.*

गात्रदौर्गन्ध्ये

‘विमलारणालसहितं पीतमिवालम्बुषाचूर्णम्।’

*Cakradatta, 36-38.*

अपचीगण्डमालासु

अलम्बुषादलोद्धूतात् स्वरसात् द्वे पले पिबेत्।

अपच्या: गण्डमालायाः कामलायाश्च नाशनः॥

*Cakradatta.*

वातरक्ते

लीद्वा मुण्डितिकाचूर्णं मधुसर्पिः समायतम्।

छिन्ता क्वाथं पिबन् हन्ति वातरक्तं सुदुस्तरम्॥

*Cakradatta, 23-7.*

शिशोः विच्छिन्नामचर्मरोगे

अलम्बुषाकाजटाकलं सर्जचूर्णसमन्वितम्।

बहुधा कटुतैलेन मिश्रयित्वा च पाचितम्॥

सन्दद्यात्तन्तुलीमात्रं गते विच्छत्राः प्रलेपनम्॥

*Baṅgasena, Bālāroga, 128.*

पतितयोः ( वनितायाः ) स्तनयोः:

अलम्बुषाकणाकल्कैः सिद्धं तैलं करोति वनितायाः।

पिचुधारणनस्यदानात् कुचद्वयं श्रीफलाकारम्॥

*Baṅgasena, Stroroga, 367.*

आमवाते

अलम्बुषादिचूर्णम्

द्वितीयालम्बुषादिचूर्णम्

तृतीयालम्बुषादिचूर्णम्

*Bhāvaprakāśa, Āmaवाताधिकारा, 26-63/70.*

आमवाते अलम्बुषाऽद्यचूर्णम्

*Cakradatta, Āmaवाता cikitsā, 25/19-22.*

मेदोजन्यतीव्रदेहदौर्गन्ध्ये

अलम्बुषाभवं चूर्णं पीतं काञ्जिकसंयुतम्।

दौर्गन्ध्यं नाशयत्याशु दुष्टं मेदोभवं नृणाम्॥

*Bhāvaprakāśa, Sthoulyādhikāra, 49-70.*

गण्डमालाऽपचीकामलाचिकित्सायां मुण्डीप्रयोगः:

अलम्बुषादलोद्भूतात् स्वरसाद् द्वे पले पिबेत्।

अपच्या गण्डमालायाः कामलायाश्च नाशनः॥

*Cakradatta, Galagandādi cikitsā, 41-23.*

स्थौल्ये गात्रदौर्गन्ध्ये

‘अपगच्छति दौर्गन्ध्यं मुण्डीचूर्णस्य पानाद् वा।’

*Rāja Mārtāṇḍa, 8-20.*

## MUÑJĀTAKA

**Botanical name :** *Orchis latifolia* Linn.

**Family :** Orchidaceae

**Classical name :** Munjātaka

**Sanskrit name :** Muñjātaka

**Regional names**

Salam, Salampanja' (Hindi); Goru chettu (tel.); Salab (Arabic); Salep (Eng.).

**Description**

A herb with purple flowers; herb 1-3 high, stem hollow. Leaves 2-6 in. long, many, on top of herb (stem). Flowers peduncled, peduncle 1-6 in. long, fls. 2/3 in. long, violet or purple in colour. Roots tuberous.

**Tuber drug :** Tubers of *orchis latifolia* Linn. are known as Salep. The tuberous roots of the main source plant (though the tuberous roots of some species of orchid genus including *Orchis* yield the salep).

Salep consists of washed, scalded and dried tubers which are yellowish white or greyish in colour and rounded, ovate or digitate in form (0.5-2 cm. x 0.4 cm.) having somewhat wrinkled appearance and hard corny con-

sistency. They are to some extent translucent, odourless and nearly tasteless.

### Distribution

Plant occurs in Western Himalaya and Tibet at altitude of 8-12,000 feet. It is imported from Iran and Afghanistan, some of which is probably of European region. Orchis genus is chiefly distributed chiefly in Europe, temperate Asia and North Africa with a species occurring in North America and Canary Islands.

The observations on drug market are usually suggest finding to suggest two kinds of raw drug under the name of 'Salam-miśhri' viz. Panjasalam and Lahasuni salam. Mostly the tuberous raw drug is imported from Persia also. Persian panja and Lahasuni salam mainly are obtained from *Orchis latifolia* Linn. and *orchis laxiflora* Linn. (both belonging to family orchidaceae). Salam obtained from Indian plant sources and is collected from various parts of country where these plant occur (Himalays and Southern India, Nilgiris and Khasi hills and other areas). The characteristics of raw material of tuber-drug available under the name of Salampanja and Lahsuni salam are helpful to differentiate those two types and also detect the adulterated material for which microscopic investigation is also made for comparison with genuine drug features.

### Kinds and varieties

Tubers of *Eulophia campestris* Wall. are also used as Salam or Salampanja. Another plant *Eulophia herbacea* Linn. is a substitute or adulterant of raw drug material of Muñjātaka. Sometimes the tubers or roots of Muśalī, Satāvarī, Tālamūlī and other similar plant drugs are also found admixed with raw drug material.

**Eulophia campestris** wall. is known as Salibmisri (Hindi, Bengla and Marathi), Salum (Gujarati), Salibmisri (Punjabi), Hattipaila (Nepalese). It is another plant source of Salep or Salamishri. It is a slender herb found throughout the greater part of India, mostly in the plains. It bears two linear leaves, 25-40 cm. long and a raceme of yellow or

green flowers with pink stripes. The rhizome consists of ovoid, often lobed tubers which are esteemed as tonic and aphrodisiac. They are reported to be used in stomatitis, purulent cough and heart troubles.

**Eulophia nuda Lindl.** is known as Goruma, Amarkand (Hindi), Budbar (Bangla), Amvarkand (Marathi) and Mankand (Bombay). It is herb found in tropical Himalayas from Nepal eastwards to Assam and in Deccan from Konkan southwards. It bears rather large, green or purple flowers and bulbous tubers (5-7 cm. in diam). The tubers are reported to be used for tumours, scrofulous glands of the neck, bronchitis and diseases of the blood. They are also used as vermifuge.

**Eulophia spp.** The tubers of *Eulophia epidendraea* Fischer syn. *Eulophia virans* R. Br. inhabiting dry areas in Bengal, Madhya Pradesh and Deccan are used as vermifuge. The tubers of *Eulophia pratensis* Lindl. (known as satawar in Marathi) found in pasture lands of Deccan from Konkan southwards are used in applications for scrofulous glands.

The tuberous roots of *Eulophia herbacea* Lindl. are also esteemed as Salep. This herb is distributed in western Himalayas, Bangal and western parts of the Deccan Peninsula.

*Eulophia*, a genus of perennial terrestrial orchids with fleshy tubers, rarely pseudobulbs is distributed in warm parts of Asia and Africa including India where several species are growing in Himalayas and other parts of country. Some of other species are ornamental and some yield salap. Thus, the tubers of certain *Eulophia* species are collected from their areas of occurrence and are adulterated or substituted with/for Salep tuberous raw material of drug Muñjātaka.

### Chemical composition

Leaves contain a glucoside and loroglossin. Tuberous roots contain mucilage, a bitter substance and volatile oil. It should not contain more than moisture 14% and ash 6% (vide specifications in Russian pharmacopoeia). The

powder when macerated or soaked in water gives much mucilage due to high mucilage content in the tubers.

### **Pharmacodynamics**

Rasa	: Madhura
Guṇa	: Guru, Snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka.

### **Properties and action**

Karma	: Bṛmhāṇa Sukrala-vṛṣya (param) Balya Koṣṭha snehana-anulomana Mastiṣka nāḍibalya Tarpaṇa Trṣṇānigrahaṇa Samśodhana.
Roga	: Kṛśatā-dourbalya Śukrakṣaya-klaibya Prasavottara dourbalya Pravāhikā Vātapaittajanita vikāra Kaphaja visarpa Śiroroga Vātarakta Trṣṇā.

### **Therapeutic uses**

The drug is an esteemed aphrodisiac and prescribed generally in seminal disorders, spermatorrhoea and sexual weakness; it is also a popular sexual tonic.

It is useful in general debility and debility particularly after delivery. It is used brain and nervine tonic. It dysentery the tubers are given (after little maceration in water) in mucilaginous form.

The tubers are used as farinaceous food, nervine tonic and aphrodisiac. They yield as lot of mucilage with water and form a jally supposed to be nutritious and useful in diarrhoea, dysentery and chronic fevers. A decoction of

salep containing some sugar and flavoured with spices makes and agreeable drink for the sick. Salep is also used as a sizing material in silk industry. An infusion of the tubers is used to relieve hoarseness.

The drug Muñjātaka is chiefly an aphrodisiac and semen promoting-propelling herbal agent enjoying a place of precious tuberous which is known as sexual tonic, general tonic or strengthening body and nervine tonic.

Muñjātaka is used in impotency, consumption, debility, dysentery, loss of semen, brain and nervine debility, post-natal or puerperal debility and also in headache and diseases of head (śiroroga), gout (vātarakta), crysepalas (visarpa) and overthirst (trṣṇā).

The drug is useful for allaying the diseases caused by the provocation of vāta and pitta doṣa.

**Parts used :** Tubers.

**Dose :** Powder 3-5 gm.

**Formulations**

Mahāmayūra ghṛta, Dvipañcamūlādya ghṛta, Sukumāraka taila, Godhumādya ghṛta.

## MUÑJĀTAKA ( मुञ्जातक )

बल्यः शीतो गुरुः स्निधस्तर्पणो बृहणात्मकः ।

वातपित्तहरः स्वादुर्वृष्यो मुञ्जातकः परम् ॥

*Caraka Saṁhitā, Sūtra, 25.*

वाजीकरणे

गोधूमाद्यघृते ।

*Cakradatta, 67-27.*

संशोधने

पित्तहरबस्तौ ।

*Caraka Saṁhitā, Siddhi, 3-50.*

तृष्णायाम्

तृष्णपञ्चमूलमुञ्जातकैः प्रियालैश्च जाङ्गलासु कृताः ।

शस्ताः रसाः पयो वा तैः सिद्धं शर्करामधुमत् ॥

*Caraka Saṁhitā, Cikitsā, 22-30.*

शिरोरोगे

महामायूरघृते ।

*Caraka Saṁhitā, Cikitsā, 26-171.*

वातरक्ते

द्विपञ्चमूलाद्यघृते । सुकुमारकैल ।

*Caraka Saṁhitā, Cikitsā, 29-66-96.*

कफजविसर्पे

कालानुसर्यागुरुचोचगुञ्जारास्तावचाशीतशिवेन्द्रपण्यैः ।

पालिन्दिमुञ्जातमहीकदम्बा हिता विसर्पेषु कफात्मकेषु ॥

*Suśruta Saṁhitā, Cikitsā, 17-15.*

## MŪRVĀ

**Botanical name :** *Marsdenia tenacissima* W. & A.

**Family :** Asclepiadaceae

**Classical name :** Mūrvā

**Sanskrit names**

Mūrvā, Mourvī, Tiktavallī, Mūrvavallī, Corasnāyu, Moraṭa, Murvā (feminine-strīliṅga) and Moraṭa (masculine-pullinga).

**Regional names**

Maruva bel, Jartor, Chinharu (Hindi); Bahuni lahaba, Sunamarai (Nepal); Banal jak (M.P.); Kamtionsongrik (Lepcha); Babaljak (Central India); Chiti, Jiti (Beng.); Karudushtupatige (Telugu).

**Description**

**A. Mūrvā : Marsdenia tenacissima W. & A.**

A large twining shrub; extremities soft-tomentose; bark grey, corky and deeply furrowed on old stems. Bark of young shoots yields a silky-white fibre of great strength (used for fishing-lines and bow-strings).

Leaves 4-6 by 3-4 in., broad-ovate, cordately 2-lobed, acuminate, pubescent or tomentose when young; petiole 3-4 in. long.

Flowers in corymbosely branched cymes. Corolla .2 in. diam; lobes, oblong ciliate.

Follicles 4-6 by 1.2 in., lanceolate, finely pubescent, longitudinally wrinkled; pericarp very thick. Seeds ovate-oblong, 0.5 in. long.

### **Flowering and fruiting time**

Plant flowers in April-May and fruiting in cold season.

### **Distribution**

It occurs in Khair forests of valleys in Siwalik Terai, and along the foot of the Himalaya. Plant is found in the plains and warm regions in country.

**B. Morata : *Maerua arenaria* (Dc.) Hook. f. & Thoms. syn. *Niebuhria arenaria* Dc.**

Unarmed, large, glabrous, climbing shrubs. Leaves entire, glabrous, leathery petiolate. Flowers 1.5-2.5 cm. across, in axillary and terminal corymbs; calyx tube half as long as the limbs, dilated upwards. Fruits 4-5 cm. long, glabrous, pendulous; deeply constricted between the seeds; seeds brown, glabrous, chinate.

### **Flowering and fruiting time**

Plant bears flowers and fruits in February-June; springs to summers.

### **Distribution**

Plant occurs on lower hill slopes in dry deciduous forests in Madhya Pradesh; It is found in different parts of India.

### **Kind and varieties**

As regards Mūrva, the root without its bark (peeled off roots) of *Marsdenia tenacissima* W. & A. is so market raw drug under the name Safed Nishat<sup>1</sup>.

### **Chemical composition**

The analysis of latex coagulum gave the following values : caoutchonic 13.3, resins 81.8, and insolubles 4.9%. The fresh latex contains caoutchonic 2.4; and water solubles 82.1 per cent.

**Pharmacodynamics**

Rasa	: Tikta, Kaṣāya
Guṇa	: Guru, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Uṣṇa
Doṣakarma	: Tridoṣahara

**Properties and action**

Karma	: Jvaraghna Svedajanana Tvagdoṣahara Raktaśodhaka Hṛdaya Kuṣṭhaghna-Kaṇḍūghna Stanyaśodhaka Dīpana-āmapācana-pittasāraka Anulomana Śūlapraśamana Krmighna Rasāyana
Roga	: Jvara-viṣamajvara Carma vikāra Amlapitta-āmadoṣa Vibandha Grahaṇī Kāmalā Śūla Kṛmi Chardi Hṛdroga Raktavikāra Prameha Stanya vikāra Kuṣṭha Kaphavātaja-paittika vikāra Netraroga.

**Description**

The drug Mūrvā is bitter (tikta), astringent (kaṣāya), and hot (uṣṇa) in potency; it is antipyretic

(Jvaraghna), blood purifier (raktaśodhana), galactogogue (stanyajanaṇa), diaphoretic (svedajanana), cardiatonic (hṛdaya), cholagogue (pittasāraka), carminative (anulomana), āmapācana, anti-colic (śūlapraśāmana), stomachic (dīpana) and anti-emetic (chardinigrahaṇa). Mūrvā is rasāyana and it allays prameha, tvagdosa, kuṣṭha and provocation of tridoṣa (tri-humors) and allied ailments.

Mūrvā has been therapeutically used in various diseases in medical texts. It is employed in some compound formulations, and as an ingradient of few recipes and also as a single drug for treatment of different ailments particularly chardi, grahaṇī, jvara, kuṣṭha, netra roga and some other ailing conditions. Mūrvā enters into certain preparations (yoga) such as kanakakṣīri taila, Mahātiktaka ghṛta, Tiktekṣvākādi taila, Gahaṇī bala-vardhana kṣāra, jvarahara kaṣāya and other recipes incorporated in medical texts.

**Parts used :** Roots.

**Dose :** Decoction 50-100 ml., Powder 3-5 gm.

**Groups (gāṇa)**

Trptighna, Stanyaśodhana, Tiktakandha (Caraka Saṁhitā), Paṭolādi, Pittasamīśanā (Suśruta Saṁhitā).

## A. MŪRVĀ ( क. मूर्वा )

कुष्ठे

प्रायोगिकाभक्ष्ये ।

*Caraka Saṁhitā, Cikitsā, 7-65/68.*

रसायने

मूर्वावृहती..... ।

.....वदन्ति पौनर्नवमेव कल्पम् ॥

*Aṣṭāṅga Hṛdaya, Uttara, 39-156.*

छद्याम्

समाक्षिका मधुरसा पीता वा तण्डुलाम्बुना ।

तर्पणं वा मधुयुतं तिसृणामपि भेषजम् ॥

*Suśruta Saṁhitā, Uttara, 49-28.*

नेत्ररोगे

सौबीरं सैन्धवं तैलं मूर्वामूलं तथैव च।  
कांस्यपात्रे विघृष्टं स्यादक्षणोः शूलनिवारणम्॥

*Baṅgasena, Netraroga, 125.*

ज्वरे

जलवेतसयोर्मूले मूर्वायां देवदारुणि।  
कषायं विधिवत् कृत्वा पेयमेतज्ज्वरापहम्॥

*Suśruta Samhitā, Uttara, 39-204.*

ज्वरहरे कषाये।

*Caraka Samhitā, Cikitsā, 3-204.*

ग्रहणीरोगे

ग्रहणीबलवर्धनक्षारे।

*Caraka Samhitā, Cikitsā, 15-179.*

कुषे

महातिक्ककघृते

*Caraka Samhitā, Cikitsā, 7-146.*

प्रायोगिकभक्ष्ये।

*Caraka Samhitā, Cikitsā, 7-65/68.*

तिकेक्ष्वाकुवादि तैले।

*Caraka Samhitā, Cikitsā, 7-108.*

कनकक्षीरीतैले।

*Caraka Samhitā, Cikitsā, 7-113.*

छद्याम्

‘मूर्वा तथा तण्डुलधावनेन।’

*Caraka Samhitā, Cikitsā, 20-33.*

## B. MORATA ( ख. मोरट )

पित्तजाश्मर्याम्

कुशः काशः शरो गुन्द्रा इत्कटो मोरटोऽश्मभित्।  
.....क्रथितास्तेषु साधितम्॥  
घृतम्।

*Suśruta Samhitā, Cikitsā, 7-9/11.*

# MUŚALĪ

**Botanical name :** Asparagus adscendens Roxb.

**Family :** Liliaceae

**Classical name :** Muśalī

**Sanskrit name :** Muśali

### Regional names

Safed musali, musali, Hazarmuli (Hindi); Jhirna (Garhwal, U.P. hills), Safed musali (Marathi); Dholi musali, Ujali musali (Guj.); Tannir vittang (Mal.); Salligadda (Tel.); Shakakule hindi (Arab., Pers.).

### Description

A suberect excessively branching and tall with densely crowded whitish cladophylls shrub with stout, terete stem and grooved ascending branchlets; spines .5-.7 in., stout, straight. Cladodes 6-20 together, terete and very slender.

Racemes 1-2 in. long, many-flowered; pedicels .1-.2 in., jointed. Flowers white, .1-.15 in. diam.

Berries .2-.3 in. diam., 1-seeded.

### Flowering and fruiting time

Plant flowers in autumn and fruits in cold season.

### Distribution

Plant occurs in western Himalaya, Punjab, Gujarat, Madhya Pradesh and provinces of India. Common in Dun valley, Siwaliks and Sal forests in Uttar Pradesh foot-hills. It is distributed in Afghanistan, the Punjab and in the Himalayas up to an altitude of 6,300 feet.

### Kinds and varieties

There are two kinds of Muśali viz. Muśalī (*Śveta muśali*) and Tāla mūlī (*Kṛṣṇa muśali*) which are botanically known as *Asparagus adscendens* Roxb. and *Curculigo orichoides* Gaertn. respectively. They are also popularly named safed musali and kali musali respectively. Tālmūlī or *kṛṣṇa mūśali* is dealt separately.

Another plant *Chlorophytum tuberosum* Baker. (Liliaceae family) is used as Safed musali (śveta muśalī).

### Pharmacodynamics

Rasa	:	Madhura
Gुṇा	:	Guru, snigdha
Viryā	:	Śīta
Vipāka	:	Madhura
Doṣakarma	:	Vātapittasāmaka Kaphavardhaka

### Properties and action

Karma	:	Śukrājanana Vṛṣya Bṛmhāṇa Balya Rasāyana
Roga	:	Śukrakṣaya-dhātukṣaya Klaibya Dourbalya Śukrameha Ikṣumeha Kṣaya Karṇaroga-Bādhiryā Vyaṅga.

### Therapeutic uses

The drug Muśali is an aphrodisiac (vṛṣya or vājikaraṇa) drug of repute. As a single drug the roots are used in powder or anyother suitable form, with proper vehicle (anupāna) or adjutant (sahāyaka) dravya; and the drug becomes a major ingredient of various compound formulations, prescribed as aphrodisiac medicine.

The drug Muśali is an esteemed drug properties and action as tonic, strengthening body tissues, promoting body-weight, promoting as well as propelling semen and restorative as well as promotive of human body as a whole since it has efficacy as vājikaraṇa and rasāyana both kinds of medicinal activities on systems of body, being vṛṣya, śukrājanana, bṛmhāṇa, balya and rasāyana in action, the drug Muśali is effectively used in impotency, sexual,

seminal and urinary disorders, general debility, consumption, skin affections (also discolouration or pigmentation deficiency), prameha and ear diseases (deafness). The drug is sweet (in taste), heavy (in property) and cold (in potency); it allays vāta and pitta doṣa, and it increases kapha doṣa in human body.

In classical texts of indigenous medicine, several recipes are incorporated. The powder of muśalī root is combined with guḍūci-satva, kapikacchu, gokṣura, sālmalī, āmalakī and śarkarā; and these ingredients are suspended in milk and added with ghee (ghṛta). This recipe (Bhāvaprakāśa, Cikitsā. 72/25-28) is given in order to stimulate sex urge and manhood.

It is sometimes used as a vegetable. The white tubers are hairy on and mucilaginous and swell up with water. They are reported to possess cooling and demulcent properties. Their uses are similar to those of Salep misri (*Orchis mascula Linn.*).

The powder of muśalī and bākucī are useful for alleviating deafness of ear (Baṅgasena, Karṇaroga, 35). The root of muśalī pounded with goat's milk and mixed with honey is applied on face for eradicating freckles (vyaṅga) as prescribed in textual sources (Aṣṭāṅga Hṛdaya, Uttara. 32-21) which also incorporate Muśalyādi cūrṇa (Yogaratnākara, p. 446) as an effective aphrodisiac (vājikaraṇa) and similar other formulations based on the drug of good therapeutic utility.

**Parts used :** Tubers.

**Dose :** Powder 3-6 gm.

**Formulations (yoga)**

Muśalī pāka, Muśalyādi yoga, Muśalyādi cūrṇam.

## MUŚALĪ ( मुशली )

मुशली मधुरा वृद्धा वीर्योष्णा बृंहणी गुरुः ।

तिक्ता रसायनी हन्ति गुदजान्यनिलं तथा ॥

*Bhāvaprakāśa Nighaṇṭu.*

गोधापद्या मूलं क्रथितं घृततैलगोरसोन्मिश्रम् ।  
पीतं निरुद्धमचिराद्विनत्ति मूत्रस्य सञ्ज्ञातम् ॥

*Bhāvaprakāśa, Mūtraghātādhikāra, 36-29.*

### कर्णपालीवृद्धयर्थं मुशलीकन्दप्रयोगः

माहिषनवनीतयुतं सप्ताहं धान्यराशिपरिनिहितम् ।  
नवमुशलीकन्दचूर्णमृद्धिकरं कर्णपालीनाम् ॥

*Cakradatta, Karmaroga Cikitsā, 57-58.*

### कर्णरोगेवाधिर्थे

‘मुशलीबाकुचीचूर्णं खादेद् बाधिर्यशान्तये ।’

*Baṅgasena, Karmaroga, 85.*

### वाजीकरणे

मुसल्यादि चूर्णम्

*Yogaratnākara, p. 446.*

मुशलीकन्दचूर्णं तु गुड्चीसत्वसंयुतम् ।  
वानरीगोक्षुराभ्याङ्गं शाल्मलीशर्करामलैः ।  
आलोड्य घृतदुग्धेन पाययेत् कामवर्धनम् ॥

*Śāringadhara Saṁhitā, 26-58.  
Bhāvaprakāśa, Cikitsā, 3-25/28.*

### व्यङ्गे

‘पिष्टवा वा छागलाद्या सक्षौद्रा मौशली जटा ।’

*Aṣṭāṅga Hṛdaya, Uttara. 32-21.*

## MUSTAKA

### Botanical name

Cyperus rotundus Linn.,

syns. Cyperus L. ssp. retzil kuk., Cyperus retzil kuk.,  
C. tuberosus sensu Cl., C. scariosus R. Br.

### Family : Cyperaceae

### Classical name : Mustaka

### Sanskrit names : Mustaka, Vārida.

### Regional names

Motha, Nagarmotha (Hindi); Mutha (Beng.);  
Moth. Nagarmoth (Mar., Guj.); Muthakach, Korai (Tam.);

Tungmuste (Tel.); Tungegadde (Kann.); Soyad-kuphi (Arab.); Mushke jami (Pers.); Nut grass (Eng.).

### Description

(*Cyperus rotundus ssp. rotundus Kern.*)

Syn. *Cyperus rotundus L.*

Polymorphic sedge up to 60 cm. tall. Rhizome emitting long, slender, wiry stolons ending in a fleshy, blackish tuber.

Leaves shorter than stems. Inflorescence simple or compound, upto 12 cm. across. Involucral bracts 2-4, variable in size, the largest often overlapping the inflorescence. Spikelets linear, acute, 30x2 mm.; rachilla broadly winged.

Glumes 3.5 x 1.4 mm.; ovate, keeled, 5-7-nerved over 1/3 to 1/2 on either side, rest portion hyaline. Stamens 3. Nut 1.5 x 0.7 mm., narrowed at apex.

### Flowering and fruiting time

Plant flowers and fruits during rainy to spring season. July to March.

### Distribution

It is cosmopolitan plant. Herb (sedge) is very common in almost every sort of terrestrial habitats. Plant occurs throughout India in aquatic wet and moist places upto 6,000 ft. altitude.

***Cyperus rotundus ssp. tuberosus (Rottb.) Kuk.* syn.  
*Cyperus tuberosus Rottb.***

Stouter than preceding plant species (ssp.) *cyperus rotundus ssp. rotundus Kern.*, reaching upto 1.25 m. high. Rays more slender, pendent - spikelets 40.0 x 2.2 mm. Glumes 3.8 x 1.5 mm. Nut 1.5 x 1.25 mm. fusiform, brown, paler ends.

### Flowering and fruiting time

Plant flowers and fruits in September-December.

### Distribution

It is occasionally found in wet places in gardens. Plant occurs in tropical Africa and Indo-malasia.

**Tuber-Drug morphology :** The drug comprises of dried tubers in varying sizes. The tubers are oval to spindle shaped, somewhat compressed and tapered at both the ends, spreading the root system. The tubers generally range from 1.5-3.5 cm. in length 0.5-2.5 cm. in diam. The tubers are unbranched and sometimes flattened or uniformly cylindrical with comparatively longer central portion. There are slightly semisucculent when fresh, but turn hard in nature after drying. These are dark brown to black in colour and are covered with numerous rootlets. Some of the tubers have tears or remains of rootlets. Tubers are not easily breakable due to smaller size and hardened nature. The fracture is short exposing white interior with light brown dots. The tubers have an aromatic fragrance and a slightly agreeable taste.

### **Flowering and fruiting time**

Rainy season and onwards.

### **Distribution**

The plant grows abundantly as weed after rainy season and commercial supplies are based on collection from natural habitats. It is not cultivated commercially on large scale. Plant can be cultivated and raised through tubers, and the plant is undertaken for experimental cultivation as it is considered a suitable cultivation species in marshy open and fields, alongwith other medicinal plants undertaken for cultivation in herbal garden or farming plots. By nature the plants thrive best in slightly marshy areas. the drug is collected from most of the parts of country after rainy season when it flourishes well as a common weed in the areas of occurrence.

The source plant *Cyperus rotundus* Linn. of drug Mustaka occurs throughout India particularly in marshy and moist areas ascending to 6,000 ft. elevation in different regions where the localities with water courses or any other similar watery or aquatic situations alongwhich the plants find their suitable habitat. It is a common annual weed of the pasture lands, road sides and other moist places in the plains and also in the hilly region.

The plant is commonly growing along water course or near ponds and tanks or similar habitats in eastern and southern India and Bengal, Uttar Pradesh, Rajasthan and other states in India.

### Kinds and varieties

Generally, the three kinds of Mustaka are prevalent in Ayurveda on the basis of texts (*Nighaṇṭu*) viz. Mustaka (*bhadra-mustaka*), *Nāgaramustaka* and *Jalamustaka* (*Kaivartamustaka*). In comparison to other major classical works on *materia medica* (e.g. *Dhanvantari Nighaṇṭu* and *Rāja Nighaṇṭu*) incorporating the foregoing three kinds of Mustaka, *Bhāvamiśra* (*Bhāvaprakāśa Nighaṇṭu*) also similarly mentions three kinds of Mustaka, but *Bhadramusta* and *Nāgaramusta* are termed synonymous in this particular *Nighaṇṭu* work.

Various species of *Cyperus* genus are referred in context of Mustaka specially *Cyperus rotundus* Linn., *Cyperus scariosus* R. Br. *Cyperus esculentus* Linn., *Cyperus platy stilos* Br. and *Cyperus amabilis* Vahl. Some of these species are almost morphologically similar or their morphological differences are minute, and result they are difficult to be distinguished during collection in field and use as the raw drug material.

Most commonly the drug Mustaka is identified and recognised as *Cyperus rotundus* Linn. which is generally used in current medical practice. As regards the classical varieties and botanical species, the correlation and probable identity are made. For instance, Mustaka and Bhadra mustaka are synonymous and so they indicate to single drug which is botanically identified as *Cyperus rotundus* Linn., a commonly and abundantly found weed in the field. *Nāgarmustaka* can be considered as *ciccoḍa* which may be botanically known as *Cyperus esculentus* Linn. instead of *Cyperus scariosus* R. Br. which is almost similar to *C. rotundus* Linn. *Kaivarttamustaka* or *Jalamustaka* may be known as *Cyperus platystilos* Br. or *Cyperus amabilis* R. Br. which is generally found in paddy fields. In *materia medica* texts (*Nighaṇṭu*), *Nāgarmustaka* is also

given synonymous names like Uccaṭā, Cūḍāla etc. Uccaṭā is indicated as Mustā viṣeṣa (Amarakoṣa) and interestingly. Nāgaramustaka is one of the Nāgaraka given in Kāmaśāstra (classical sexology) where Nāgaramustaka is also named as Uccaṭā. Another variety of Mustaka is kṣudramustaka, classically termed as Paripelam or Paripelavam (in Kaiyadeva Nighaṇṭu) and Kaivarti (a) mustaka is termed as vitunnakam (Bhāvaprakāśa Nighaṇṭu). Classical description of Mustaka regarding its habit and habitat alongwith characteristics of ideal or quality drug Mustaka (praśasta mustaka) is given in Ayurveda.

### **Chemical composition**

The tuber of the plant drug *Cyperus rotundus* Linn. contains an aromatic oil 0.5-0.9 per cent and remaining quantity is of fixed oil. Another plant species *Cyperus esculentus* Linn., a tonic and aphrodisiac drug, tubers yield chupa oil and they also contain protein 5.21%, starch 22.72% and other carbohydrate 24.79%.

Mainly two species of *Cyperus* (out of a number of *Cyperus* species growing in India) are source of an aromatic oil, known as *Cyperus* oil which is obtained by distillation. *Cyperus rotundus* Linn. (Motha) yield an essential oil which obtained by distillation. The chemical values of oil are on record. The Sudanese oil has lower refractive index, specific gravity and negative optical rotation. The oil is not of much commercial production owing to the difficulty in collection of commercial quantities of the raw material. Similarly *Cyperus scariosus* R. Br. (Nagar motha) rhizomes are used for commercial distillation of oil. Chemical characteristics and saponification values are on record. *Cyperus* oil is useful as flavouring agent.

### **Pharmacodynamics**

Rasa	: Tikta, kaṭu, kaṣāya
Guṇa	: Laghu, rūkṣa
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittasāmaka

**Properties and action**

<b>Karma</b>	: Pācana-āmapācana Grāhī-sangrāhaka Dīpana-pācana Trṣṇānigrahaṇa Kṛmighna Raktaprasādana Mūtrala Garbhāśayasaṅkocaka Balya Medhya-nāḍībalya Sothahara Tvagdoṣahara-kaṇḍūghna Lekhana Stanyajanana-stanyaśodhana Kuṣṭhaghna Ārtavajanana
<b>Roga</b>	: Aruci-vamana Atisāra-saṅgrahaṇī Agnimāndya Trṣṇā-dāha-śrama Raktavikāra Kāsa-śvāsa Mūtrakṛcchra Rajorodha-sūtikāroga Stanyavikāra Carmavikāra-kaṇḍū-pāmā-visarpa-kaṇḍū-visphoṭa Kuṣṭha Jvara Dourbalya Viṣa Mastiṣkadourbalya-apasmāra Mūtrakṛcchra Vātarakta Madātyaya Vraṇa-granthi Kāmalā-halīmaka.

### **Therapeutic uses**

The drug Mustaka is tubers obtained from *Cyperus rotundus* Linn. It is used as anthelmintic, antipoisonous, astringent, attenuent, carminative, demulcent, dia-phoretic, diuretic, emmenagogue, expectorant, febrifuge, galactagogue, lithontriptic, nervine tonic, sedative (intestinal), stomachic and tonic. It is medicinally utilised in appeasing of thirst, disorders of stomach, irritation of bowels, febrile and dyspeptic ulcerations. It heals wounds and ulcers and cures abdominal pain. It is also used in scorpion stings.

It is an important drug of Ayurveda and the drug is used in the classical formulations and some of the reputed classical formulations viz. Karpūrādyarka, Kanṭakāryā-valeha, Cyavanaprāśa, Cāturbhadra kvātha-cūrṇa, Punarnavādi kvātha-cūrṇa, Kunkunādi taila, Kacchurādi cūrṇa-lepa, Kāyasthadi vaṭī, Punarnavādi maṇḍūra, Karpūra rasa and Candanādi louha. Besides classical formulations, the drug Mustaka is commercially exploited for using in various medicinal products in pharmaceutical field.

The therapeutic utility of Mustak is wide-ranging and is mainly based on its chief action as Saṅgrāhaka, dīpana, pācana (and āmapācana) according to pharmacoclinical consideration in Indian medicine. The drug Mustaka is prescribed in vomiting, dyspepsia, anorexia, flatulence, diarrhoea, chronic dysentry, colitis, excess thirst, worms and allied ailments of digestive system. Decoction of drug rhizome mixed with honey is prescribed in diarrhoea. Rhizomes of drug Mustaka are boiled in milk and the liquid (water) reduced, and this preparation is given for treating diarrhoea. A decoction of rhizome of this plant drug is prepared (by crushing the rhizomes and boiling in water or milk and reducing it one fourth), after mixing honey or other suitable adjuvants, in diarrhoea with mucous and blood. The water processed with drug Mustaka and Parpaṭa (*Fumaria indica*) is given as drink to diarrhoeal patients. Rhizomes of drug Mustaka (2 Kg.) are crushed and cooked in milk (640 ml.) adding sufficient wa-

ter till only milk portion remains in boiling vessel, then remaining quantity of medicated and cooked milk (*kṣirapāka*), after removing crushed (*Mustaka*) rhizomes, is curdled. This medicated curd (*mustaka dadhi*) prepared with drug *Mustaka* is recommended for using in diarrhoea and other abdominal disorders.

The drug *Mustaka* is effectively prescribed in fever due to its certain medicinal properties resulting to check temperature, overthirst, burning sensation, weakness and other symptoms and complications. *Mustaka* boiled in water is prescribed in fever and addition of *Parpaṭa* (and also other drugs needed in different conditions and stages) make decoction or cold infusion more efficacious in cases of fever. It is useful to alleviate pitta and kapha *jvāra* and other diseases in particular.

In condition of alcoholism due to overdrink (or excess inlake of alcohols), the drug *Mustaka* is prescribed. Water is boiled with rhizome of *Mustaka* and same is given orally all types of alcoholism (*madātyaya*). *Mustaka* rhizomes are ground to prepare powder and *Lauha bhasma* is properly mixed; this preparation is given with decoction of *Khadira* (*Acacia catechu*) in *Halimaka* (an advanced stage of *Kāmalā* or jaundice). In glandular erysipelas (*granthivisarpa*), the use of parched grain flour prepared with *Mustaka* and other drugs is classically prescribed.

The powder of rhizome of drug *Mustaka* mixed with *Karkaṭaśṛṅgī* (*Pistacia integerrima* Stew ex Brandis) or *Durābhā* (*Fagonia cretica* Linn.) added with honey is taken to check vomiting caused by kapha (*kaphacchardi*). The decoction of rhizomes of *Mustaka* with *Drāksā* (*Vitis vinifera*) and *Haridrā* (*Curcuma domestica*), mixed with honey, is taken orally in *vātarakta*-predominant in kapha. Similary this preparation further added with *Amalaka* (*Emblica officinalis* (Gaertn.). In treatment of gout and rheumatic complaints, the rhizome of *Mustaka* are considered efficacious by using in various forms and as ingridient of medicinal preparations.

In the disease of epilepsy (*apasmāra*), the drug is recommended. Roots (rhizome) of *Mustaka* are suggested

to be taken out (collected or uprooted) from the northern direction (*uttara diggatamūlam*) and pounded which is taken with cow's milk (*milching cow mother having calf of similar colour : 'goḥ savarṇavatsāyah'*).

Root of Bhadramustaka rubbed with goat's urine is applied as *netrāñjana* (collyrium) and it cures chronic corneal opacity and redness of eye. In Nagarjuna *guṭikā* prescribed in ophthalmic diseases, Bhadramusta is an ingredient which helps in alleviation of blindness and defects of vision.

The root of Mustaka is pounded with cow ghee and this paste is applied on the wound, specially accidental wound (*āgantuka* or *sadyojāta vrāṇa*). Drug is externally applied to skin affections as it is good for skin and drug is blood purifier (*raktaśodhaka*). It is useful in various skin ailments (*pāmā*, *kacchū* and *carmavikāra*).

The drug Mustaka is employed in major component of *Mustādi vaṭī* which is prescribed in condition of loose teeth (*cala danta*) and teeth ailments. *Mustādi taila* is prescribed in dental carries (*danta krimi*). *Śarkarādi* formulation mixed with Mustā and Marica in cough caused by pitta associated with kapha.

The rhizomes of drug are ground and paste is applied over mammal or breast of females (*stana vrddhikara* and *stanyajanana*) in order to develop the organ and to promote secretion of latex or lactation (*galactogogue*).

In treatment of abdominal colic (*śula* and *āmadōṣajanya vikāra*), *Mustādiyoga* is prescribed against *āmadōṣa*. *Mustākṣira* is given in stage of *Āmātisāra*. Drug rhizome is useful in general debility and poison or toxic conditions (*viṣa*).

In general, the drug Mustaka possesses various medicinal properties and recommended to be useful as anthelmintic, aromatic, astringent, demulcent, dia-phoretic, diuretic, emmenagogue, stimulant and galactogogue medicine. It is given in anorexia, cough diarrhoea, fever and haemophilic conditions. An infusion or water of drug (processed with roots of Mustaka) is prescribed for

frequent oral use in fever, diarrhoea and some other ailments.

**Parts used :** Rhizomes.

**Dose :** Powder 3-5 gm., Decoction 50-100 ml.

**Formulations (yoga)**

Mustakādi kvātha, Mustakāriṣṭa, Mustādi cūrṇa,  
Mustādileha, Śaḍāṅgapāṇīya.

**Group (gana)**

Trptighna, Trṣṇānigrahaṇa, Lekhaniya, Kaṇḍū-  
ghna, Satnyaśodhana (Caraka Saṁhitā), Mustādi, Vacādi  
(Suśruta Saṁhitā).

## MUSTAKA ( मुस्तक )

**मुस्तकम्**

मुस्तं तिक्तं हिमं ग्राहि दीपनं पाचनं कटु ॥

कषायं कफपित्तास्त्रतृद्वरारुचिजन्तुजित् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1358-1359.*

**क्षुद्रमुस्तकम् ( परिपेलवम् )**

परिपेलं हिमं तिक्तं कषायं कटु कान्तिदम् ।

कफपित्तास्त्रविसर्पकुष्ठकण्डूविषप्रणुत् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1361.*

**मुस्तकं नागरमुस्तकञ्च**

मुस्तं कटु हिमं ग्राहि तिक्तं दीपनपाचनम् ।

कफपित्तास्त्रतृद्वरारुचिजन्तुहत् ।

**प्रशस्तमुस्तकविशेषम्**

अनूपदेशे सङ्ग्रातं मुस्तकं तत्प्रशस्यते ।

तत्रापि मुनिभिः प्रोक्तं वरं नागरमुस्तकम् ॥

*Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 93-94.*

**कैवर्तीमुस्तकम्**

वितुत्रकं हिमं तिक्तं कषायं कटु कान्तिदम् ।

कफपित्तास्त्रविसर्पकुष्ठकण्डूविषप्रणुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 124.*

**भद्रमुस्तकम्**

भद्रमुस्ता कषाया च तिक्ता शीता च पाचनी ।

पित्तज्वरकफघ्नी च ज्ञेया सङ्ग्रहणी च सा ॥

*Rāja Nighaṇṭu, Pippalyādi varga, 140.*

**नागरमुस्तकम्**

तिक्ता नागरमुस्ता कटुः कषाया च शीतला कफनुत् ।

पित्तज्वरातिसारारुच्चितृष्णादाहनाशनी श्रमहत् ॥

*Rāja Nighaṇṭu, Pippalyādi varga, 143.*

‘मुस्ता सङ्ग्राहकदीपनीयपाचनीयानाम् ।’

*Caraka Saṃhitā, Sūtra, 25.*

‘क्राथश्च मुस्तककृतः समधुः सुशीतः

पीतः प्रवृद्धमतिसारगदं निहन्ति ।’

*Bangasena.*

मुस्ता तिक्तकषायातिशिशिरः श्रेष्ठरक्तजित् ।

पित्तज्वरातिसारघ्नी तृष्णाकृमिविनाशनी ॥

*Dhanvantari Nighaṇṭu.*

**आमातिसारे मुस्ताक्षीरम्**

पयस्युत्क्राथ्य मुस्ता वा विंशतिं भद्रकाह्वयाः ।

क्षीरावशिष्टं तत् पीतं हन्यादामं सवेदनम् ॥

*Cakradatta, Atisāra cikitsā, 3-32.*

**मुस्तकशुद्धिः ( तैलकल्पना )**

मुस्तकन्तु मनाकृ क्षुण्णं काञ्जिके त्रिदिनोषितम् ।

पञ्चपलवपानीयस्विन्नमातपशोषितम् ॥

गुडाम्बुना सिच्यमानं भर्येच्छूर्णयेत् ततः ।

आजशोभाङ्गनजलैर्भावयेच्चेति शुध्यति ॥

*Cakradatta, Vātavyādhi cikitsā, 22/289-290.*

**शूलचिकित्सायाम् - आमदोषपाचनार्थं मुस्तादियोगः**

*Cakradatta, Śūla cikitsā, 26-45.*

**सर्वविसर्पे ( त्रिदोषजविसर्पातिरिक्तं ) मुस्तकादिक्राथः**

‘मुस्तारिष्टपटोलानां क्राथः सर्वविसर्पनुत् ।’

*Cakradatta, Visarpa-visphoṭa cikitsā, 53-18.*

**क्रिमिदन्तरोगे मुस्तादितैलम्**

*Cakradatta, Mukharoga cikitsā, 56-39.*

ज्वरे

मुस्तापर्षटकः ज्वरे

*Aṣṭāṅga Hṛdaya, Uttara, 40-48.*

मुस्तापर्षटकोशीरचन्दनोदीच्यनागरैः ।

शृतशीतं जलं दद्यात् पिपासाज्वरशान्तये ॥

*Caraka Saṃhitā, Cikitsā, 3.*

मुस्तया पर्षटं युक्तं शुण्ठया दुःस्पर्शयापि वा ।

पाक्यं शीतकषायं वा— ॥

*Aṣṭāṅga Hṛdaya, Cikitsā, 1-75.*

चलदन्ते

मुस्तादिवटी ।

*Bhāvaprakāśa, Cikitsā, 36-44/45.*

कासे

‘पित्ते समुस्तमरिचः सकफे— ।’

*Caraka Saṃhitā, Cikitsā, 18-90.*

नेत्ररोगे

छागमूत्रेण सङ्ख्यृष्टभद्रमुस्ताञ्जनेन हि ।

चिरकालोद्भवं पुष्टं रक्तत्वञ्चापि नश्यति ॥

*Gadanigraha, 3-3-200.*

‘.....निर्घृष्टं वा वारिणा भद्रमुस्ता ।

आन्ध्यं सद्यस्तैमिरं हन्ति पुंसामत्युद्गाढनेत्रयोरञ्जनेन ॥’

*Gadanigraha, 3-3-299/302.*

अपस्मारे

उत्तरदिग्गतमुस्तकमूलं बुद्ध्या समुदृतं पेयम् ।

पीतं पयसा हन्यादपस्मृतिं गोः सवर्णवत्सायाः ॥

*Baṅgasena, Apasmāra, 34.*

मदात्यये

जलं मुस्तैः शृतं वापि दद्याद् दोषविपाचनम् ।

एतदेव च पानीयं सर्वत्रापि मदात्यये ॥

*Caraka Saṃhitā, Cikitsā, 24-167.*

बातरक्ते

मुस्तद्राक्षाहरिद्राणां पिबेत् क्राथं कफोल्चणे ।

सक्षौद्रं त्रिफलाया वा गुडूची वा यथा तथा ॥

*Aṣṭāṅga Hṛdaya, Cikitsā, 22-14.*

मुस्तामलकनिशाभिः क्वथितं तोयं समाक्षिकं पेयम् ।

जयति मदागतिरक्तं सकफं वा सततयोगेन ॥

*Bhāvaprakāśa, Cikitsā, 29-78.*

### ग्रन्थविसर्पे

मुस्तभलातसक्तूना प्रयोगैर्माक्षिकस्य च ।

देवदारुगुडूच्याश्च प्रयोगैर्गिरिजस्य च ॥

*Caraka Saṃhitā, Cikitsā, 21-130.*

### अतिसारे

पयस्युक्त्राथ्य मुस्तानां विंशतिं त्रिगुणाभ्यसि ।

क्षीरावशिष्टं तत्पीतं हन्त्यामं शूलमेव च ॥

*Suśruta Saṃhitā, Uttara, 40-47.*

*Aṣṭāṅga Hṛdaya, Cikitsā, 9-39-60.*

‘मौस्तं कषायमेकं वा पेयं मधुसमायुक्तम् ।’

*Suśruta Saṃhitā, Uttara, 40-72.*

### मुस्तकक्षीरम्

मुस्तां सङ्क्षुद्य शुद्धां समपयसि दृढं मर्दयित्वा सपूतं

पक्त्वा पादावशिष्टो मृदुतरिशिखिना शीतली कृत्य पश्चात् ।

लीद्वा क्षौद्रान्वितां तां जयति सहकफं रक्तयुक्तातिसारं

विष्णोः पूजेव सद्यः शमयति दुरितं पूर्वजन्मार्जितं तु ॥

*Vaidya Manoramā, 6-19.*

### मुस्तकदधि

पयःप्रस्थे सम्यङ् नवमुदकमासिच्य जलदान् ।

शतद्वन्द्वान् क्षुण्णानपि सपदि निक्षिप्य विपचेत् ॥

पयः शिष्टे त्यक्त्वा जलदशकलानि प्रतिवपे-

दुदक्षितज्जातं दधि जठररोगानपनयेत् ॥

*Vaidya Manoramā, 6-19.*

### आगन्तुब्रणे

कान्तक्रामकमेकं सुशूक्ष्यं गव्यपयसा पिष्टम् ।

शमयति लेपान्त्रियतं व्रणमागन्तुजं न सन्देहः ॥

*Cakradatta, 44-53.*

विसूच्यातृष्णायाम्

‘.....शृतं भद्रघनस्य वा।’

*Cakradatta, 6-91.*

हलीमके

मारितं चायसं चूर्णं मुस्ताचूर्णेन संयुतम्।

खदिरस्य कषायेण पिबेदधन्तुं हलीमकम्॥

*Bhāvaprakāśa, Cikitsā, 8-45.*

छद्याम्

सजाम्बवं वा बदराम्लचूर्णं मुस्तायुतं कर्कटकस्य शृङ्गीम्।

दुरालभा वा मधुसम्प्रयुक्ता लिह्यात् कफच्छर्दिविनिप्रहार्यम्॥

*Caraka Samhitā, Cikitsā, 20-38.*

## NĀDĪHINŪGU

**Botanical name :** Gardenia gummifera Linn. f.

**Family :** Rubiaceae

**Classical name :** Nādīhingu

**Sanskrit name :** Nādīhingu

**Regional names**

Dikamali (Hindi); Telbhanga (Tel.); Kikamalapi (Tam.); Dikkaimalli (Kann.).

**Description**

Small trees, shrub-like or bushy, up to 3 meters high or generally 5-6 feet high. Leaves obovate-oblong or elliptic-oblong, sessile, glabrous acute at base, 4-10 x 2-6 cm., main nerves 15-18 pairs; stipules ochrea like wood white somewhat lustrous, smooth in feel.

Flowers white scented yellowish, on short peduncle or sessile. Calyx-teeth triangular, pubescent. Corolla-tube upto 6 cm. long, pubescent outside. Stamens clavate.

Fruit oblong, 2 x 3 cm. with numerous ribs, fleshy.

Gum yellowish in colour by found incisions on branches and breaking points of leaves (on back side of branches), drying in air and smell like asafoetida or Hingu

(Hing). Gum in pieces and yellowish black in colour marketed in the name of Dikamali or Cumbi gum.

Wood (specific gravity C. O. 74, wt. 48 lb./cu. ft.), and branches exuding gum with the characteristics as that of other species of *Gardenia geneus*.

### **Flowering and fruiting time**

Plant flowers and fruits during the period from March to August. Flowers appear in April when plant becomes leafless, and fruiting begins in June-August.

### **Distribution**

It occurs in hilly regions, Maharastra, central India (Madhya Pradesh), southern India, Bihar and Bangladesh (Chittagong).

### **Kinds and varieties**

*Gordenia lucida Roxb.* syn. *Gardenia resinifera* Roth. is named as Dikamali. The gum known as Dikamali gound or cumbi collected from this species is identical with that from *Gardenia gummifera Linn. f.*

### **Chemical composition**

It contains resin 89.9%, volatile oil 0.1% and colouring matter gardenin alongwith plant impurities 10.0%.

Destructive distillation of wood yields (on dry basis) charcol 30.1%, pyroligneous acid (dry) 39.5, tar 10.8, pitch and losses 1.3, acid 5.47, ester 1.67, acetone 3.80 and methanol 1.19%, gas (at N.T.P.) 1.35 cu. ft./lb. (*Gardenia lucida Roxb.*).

The resin (*Gardenia gummifera Linn. f.*) has the following characteristics : m.p. 40-50°, acid val. 17.1, iodine val. 80.8 and saponin val. 172.3. It also yields a colouring matter gardenin which can be obtained (yield upto 1.4%) by digesting the resin with hot alcohol.

Samples of gum *Nādīhīṅgu* or dikamali which are deep yellow in colour give higher yields of gardenin.

### **Pharmacodynamics**

Rasa : Kaṭu, tikta

Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

**Properties and action**

Karma	: Vātānulomana Rocana-dīpana-pācana Kṛmighna Kaphaniḥsāraka-śvāsahara- śleṣmapūtihara Kuṣṭhaghna-svedajananā Jvaraghna-viṣamajvaraghna Lekhana Hṛdayottejaka-plihavṛddhihara Vedanāsthāpana-Vraṇaropanā.
Roga	: Aruci-agnimāndya-ajīrṇa-ādhmāna Gulma-udarasūla Arṣa Kṛmiroga-gaṇḍupadakrimi Hṛddourbalya Jvara-viṣamajvara Plihavṛddhi Jīrṇakāṣa-śvāsa-hikkā Carmaroga Medoroga Vraṇa Dantaśūla Vedanāyukta Vikāra.

**Therapeutic uses**

The drug Nādīhiṅgu (resinous substance of plant *Gardenia gummosa* Linn. f.) is chiefly carminative (vātānulomana), stomachic (dīpana), digestive (pācana), appetiser and vermifuge (kṛmighna). It is useful in various ailments related with these pharmacological actions, and in case of worms, it is especially given in round worms.

The drug is suggested to be useful in chronic cough, hiccup, asthma, skin diseases, splenic enlargement, malarial fever, obesity and heart weakness. Externally the

resin is recommended for ulcers, piles, toothache and joints. A decoction or infusion of resin (*nāḍīhiṅgu kvātha*) is suggested to be used in fevers. In dyspepsia attended with flatulence, the resin has been frequently used with advantage.

Externally it acts as an antiseptic and stimulant. The resin is extensively employed in veterinary medicine to keep away fleas from sores, for destroying maggots in wound and sheep waste. *Nāḍīhiṅgu* resin (*niryāsa*) is also applied to cleanse foul ulcers on account of its action as *vraṇaviśodhana* (cleansing ulcers).

The resin forms the drug *Nāḍīhiṅgu* is antispasmodic, expectorant, carminative, diaphoratic and anthelmintic. It is given to children in nervous disorders and diarrhoea due to dentition and rubbed on gums to allay irritation.

An ether extract of the leaves of *Gardenia lucida* Roxb. show antibiotic activity against *Staphylococcus aureus* and *Escherichia coli*.

The uses of the gum obtained from *Gardenia lucid* Roxb., also known as Dikamali, are similar to that of *Gardenia gummifera* Linn. f.

The leaf buds and the young shoots of *Nāḍīhiṅgu vrkṣa* (*Gardenia gummifera* Linn. f. as also of *G. lucida* Roxb.) yield a resinous exudation, known in commerce as Dikamali or cumbi Gum. The resin is secreted freely in the form of tears or resin attached and marketed either in this form or after agglutination into cakes or irregular masses. The resin is transparent, greenish yellow, with a sharp pungent taste and a peculiar offensive odour. Resin mainly exudes from branches (lesion of incision) and broken points of leaves.

**Parts used : Resin**

**Dose :** 1/4 - 1/2 gm.

## NĀḌĪHIṄGU ( नाडीहिङ्गु )

क. नाडीहिङ्गु पलाशाख्या जन्तुका रामठी च सा ।

वंशपत्री च पिण्डाह्वा सुयोज्या हिङ्गुनाडिका ॥

*Rāja Nighaṇṭu.*

ख. नाडीहिङ्गु कटूष्णं च कफवातार्तिशान्तिकृत्।  
विष्टाविबन्धदोषप्रमानाहामयहारि च ॥

*Rāja Nighaṇṭu.*

नाडीहिङ्गुस्तु कटुकस्तीक्ष्णश्वेष्णश्व दीपकः ।

कफवातमलस्तम्भमनोमोहामनाशनः ॥

*Nighaṇṭu Ratnākara.*

## NĀGABALĀ

**Botanical name :** Grewia hirsuta vahl.

**Family :** Tiliaceac

**Classical name :** Nāgabalā

**Sanskrit names :** Nagabala, Gudaśarkarā.

### Regional names

Gulshakri, Gurkhandi, Gur-sukri (Hindi); Govali (Mar.); Jibilike (Tel.); Tabidru (Tam.); Kuli (Ur.).

### Description

Shrubs, about 1 meter tall; younger branches brown pubescent, older glabrous, evenly fissured.

Leaves elliptic-acuminate, 9 x 3.5 cm., rounded at base nerves and nervules impressed above; petiole Ca 5 mm. long; stipules Ca 5 mm. long, linear, falcate.

Flowers white, Ca 8 mm. across, in about 4 cm. long, axillary 3-flowered umbellate cymes. Sepals 6 mm. long, elliptic, pubescent. Petals Ca 8 mm. long, ovate-oblong, villous outside, glandular within. Ovary villous, styles glabrous; stigmas slightly lobed lacerate.

Drupes Ca 1 cm. across, lobed, sparsely hairy, 4-stoned, small, yellow, ripe fruits tasty, sweet, edible (also called 'Shikari meva').

### Flowering and fruiting time

Plant flowers in September and fruits in December-June. Flowering begins in rainy season and fruits appear by cold season.

### Distribution

Plant occurs in warm, stony and hilly regions upto 4,500 feet elevation. It is generally found in Bihar, Vindhya Pradesh, Mādhyā Pradesh, Rājasthān, Uttar Pradesh, Konkan and other parts of country.

### Pharmacodynamics

Rasa	: Madhura, Kaśāya
Guṇa	: Snigdha, picchila, guru
Vīrya	: Śitā
Vipāka_	: Madhura
Doṣakarma	: Vātāpittaśāmaka

### Properties and action

Karma	: Rasāyana Nādibalya-medhya Snehana-amlatānāśaka-anulomana Hṛdaya-raktapittaśāmaka Kaphaniḥsāraka Vṛṣya-garbhasthāpana Mūtrala Dāhapraśamana Jvaraghna Raktastambhana Vedanāsthāpana Vraṇaropanā
Roga	: Amlapitta Koṣṭhagatavāta-vibandha Kāsa-śvāsa-svarabheda Urahkṣata-rājayakṣmā- śoṣa-kṣatakṣīṇa Śukradourbalya Raktapradara-garbhapāta Mūtrakṛcchra-pūyameha Jvara-viṣamajvara Hṛdroga-raktapitta Raktapitta Raktasrāva-vraṇa-kṣata Nādīdourbalya-smṛtidourbalya Vātavyādhī.

### **Therapeutic uses**

The plant drug Nāgabalā has properties to pacify provocation of vāta and pitta humor (vātапittaśāmaka). Drug is useful as nervine tonic, brain tonic, demulcent, anti-acidic, expectorant, antipyretic, diuretic, aphrodisiac, carminative and cardiac tonic. It is alterative or restorative (promotive) and analgesic. It pacifies burning sensation (dāhaśāmaka) and raktapitta. It has foetus stabilising (garbhasthāpana) properties. It has wound-healing, styptic or blood-coagulant and analgesic action.

The drupes (Nāgabalā phala) are given in diarrhoea and dysentery. A paste of the root in water is applied to wounds to hasten suppuration and as a dressing of wounds (vraṇaropanā); it is an external use of drug.

The management of heart disease (hṛdroga) has use of drug Nāgābala. The powder of Nāgabalā root and Arjuna tvak (bark of tree Terminalia arjuna W. & A.) are mixed and used with milk. This recipe is given to patient of a month. It eradicates heart disease, cough and dyspnoea. It is also useful as excellent rasāyana and if taken for a year the man lives full life of hundred years as mentioned in medical text.

The powder of Nāgabalā mixed with ghṛta (ghee) and madhu chest-wound and (honey) is recommended for use in morning for treatment of consumption (kṣaya-śoṣa and kṣatakṣīṇa). The powder of root of the drug plant (Nāgabalā mūla) is prescribed as rasāyana and balya medicine for promoting strength, life-span, body tissue and preserving disease-free health in general (puṣṭyāyurbalārogya-kara) Nāgabalā cūrṇa (root powder) is given in the dose of 5 gms. to begin with increasing gradually upto 40 gms. with milk for a month keeping on milk-diet without cereals. For the purpose of Rasāyana, Nāgabalā rasāyana is recommended in classical texts of medicine (Caraka Saṁhitā, Cikitsā, 12-11 and Aṣṭāṅga Hṛdaya, Uttara, 39/54-55).

The drug Nāgabalā is used in treatment of kṣaya, raktapitta, hṛdroga, kṣata kṣīṇa and klaivya.

**Parts used :** Root, root-bark.

**Dose :** Decoction 50-100 ml., Root bark powder 3-6 gm.

## NĀGABALĀ ( नागबला )

बल्या नागबला गुर्वी रक्तपित्तक्षयापहा ।

वृष्णा रसायनी तस्याशमन्तकफलवत् फलम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1057-1058.*

बला चतुष्टयं शीत मधुरं फलकान्तिकृत् ।

स्निधं ग्राहि समीरास्पित्तास्पक्षतनाशनम् ॥

*Bhāvaprakāśa Nighaṇṭu, Guducyādi varga, 144.*

### नागबलारसायनम्

#### क. नागबलासङ्घरुणविधानम्

‘धन्वनि कुशास्तीर्णे स्निधकृष्णमधुरमृत्तिके सुवर्ण-  
मृत्तिके वा व्यपगतविषश्वापदपवनसलिलाग्रिदोषे  
कर्षणवल्मीकश्मशानचैत्योषरावस्थवर्जिते देशे  
यथर्तुसुखपवनसलिलादित्यसेविते जातान्यनुपहता-  
न्यनध्यारुढान्यबालान्यजीर्णन्यभिगवीर्याणि  
शीर्णपुराणपर्णान्यसञ्चातान्यपर्णानि तपसि तपस्ये वा  
मासे शुचिः प्रयतः कृतदेवार्चनः स्वस्तिवाचयित्वा  
द्विजातीन् चले सुमुहूर्ते नागबलामूलान्युद्धरेत् ।’

*Caraka Saṁhitā, Cikitsā, Rasāyanapāda, 1-11.*

‘तेषां सुप्रक्षालितानां त्वक्षिण्डमात्रमात्रक्षमात्रं  
वा शूक्ष्मपिष्ठमालोड्य पयसा प्रातः प्रयोजयेत् ।’

#### ख. नागबलाप्रयोगविधानम्

‘चूर्णीकृतानि वा पिबेत् पयसा, मधुसर्पिभ्यां वा  
संयोज्य भक्षयेत् जीर्ण वा क्षीरसर्पिभ्यां शालि-  
षष्ठिकमक्षीयात् । संवत्सरप्रयोगादस्य वर्षशतमजरं  
वयस्तिष्ठतीति समानं पूर्वेण ।’

*Caraka Saṁhitā, Cikitsā, Rasāyanapāda, 1-11.*

### रसायने

#### नागबला-रसायनम् ।

*Caraka Saṁhitā, Cikitsā, 1-2-11.  
Aṣṭāṅga Hṛdaya, Uttara, 39-54/55.*

### शोषे क्षतक्षीणे च

चूर्णं नागबलायास्तु घृतमाक्षिकमित्रितम्।

प्रलिह्यात् प्रातरुत्थाय क्षयव्याधिनिवारणम्॥

*Gadanigraha, 2-9-65.*

घृतकुसुमसारलीढं क्षय नयति गजबलामूलम्।

दुग्धेन केवलेन तु वायसजङ्घा निपीतैव॥

*Cakradatta, 10-13.*

पिबेन्नागबलामूलमर्थकर्षविवर्धितम् ।

पलं क्षीरयुतं मासं क्षीरवृत्तिरनन्त्रभुक्॥

एष प्रयोगः पुष्ट्यार्युबलारोग्यकरः परः।

मण्डूकपण्याः कल्पोऽयं शुण्ठीमधुक्योस्तथा॥

*Caraka Saṁhitā, Cikitsā, 11-91/92.*

### हृद्रोगे

मूलं नागबलायास्तु चूर्णं दुग्धेन पाययेत्।

हृद्रोगकासश्वासन्नं ककुभस्य च वल्कलम्॥

रसायनं परं बल्यं वातजित् मासयोजितम्।

संवत्सरप्रयोगेण जीवेद् वर्षशतं ध्रुवम्॥

*Vṛndamādhava, 31-15-16.*

## NĀGADAMANA

**Botanical name :** Sansevieria roxburghiana Schult. f.

**Family :** Liliaceae

**Classical name :** Nāgadamana

**Sanskrit name :** Nāgadamana

**Regional names**

Nagdoun, Murva (Hi.); Murga (U.); Indian Bow-string Hemp (Eng.).

**Description**

Herb 1-2 feet. high rootstock prostrati. Leaves 6-25 in number like garland, linear, 3/4-2 ft. long and 1/2-1 inch broad, blackish-green, with strips dark coloured.

Spadix 1-2.5 ft. long. Flowers white or light green in colour.

Leaves with stout fibres suitable for ropes.

### **Flowering and fruiting time**

Plant flowers in June-July and fruiting in December.

### **Distribution**

Plant occurs in eastern sea coastal region, from west Bengal to Tamilnadu.

### **Kinds and varieties**

Another species *Sansevieria hyacinthoides* (Linn.) Druce is also prevalent and used. It occurs in Sri Lanka and Southern India. Leaves are broader and inflorescence longer comparatively to *Sansevieria roxburghiana* Schult. f.

### **Pharmacodynamics**

Rasa	: Madhura
Guṇa	: Snigdha, picchila
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka Kaphasamśodhana.

### **Properties and action**

Karma	: Balya Mūtrala Jvaraghna Kaphaniḥsāraka Anulomana
Roga	: Dourbalya Vibandha-arśa Kāsa-śvāsa-Rājayakṣmā Mūtrakṛcchra Vātapittajavikāra Ślaiśmikara vikāra.

### **Therapeutic uses**

The drug Nāgādamana is tonic (balya), diuretic (mūtrala), carminative (anulomana), expectorant (kaphaniḥsāraka), antipyretic (jvarghna) and kaphaśodhana.

Roots are used in medicine. The drug is useful in debility, cough, asthma, dysuria, fever and ailments caused by provoked vātapitta humors (doṣa).

**Parts used :** Root.

**Dose :** Juice 10-20 ml.

## NĀGADAMANA ( नागदमन )

विज्ञेयो नागदमनो मधुरः शीतपिच्छिलः ।  
वातपित्तापहो बल्यः ज्वरघ्नः कफशोधनः ॥  
कासे श्वासे मूत्रकृच्छ्रे दौर्बल्ये च प्रशस्यते ।

*Dravyaguṇa Vijñana, part II, p. 770.*

## NĀGAKEŚARA

### Botanical name

Mesua ferrea Linn.,

Syn. Mesua coromandeliana wight., M. pedunculata wight, M. speciosa chois.

### Family : Guttiferae

**Classical name :** Nāgakeśara

**Sanskrit names :** Nāgakeśara, Nāgapuṣpa, Cāmpeya.

### Regional names

Nagkeshar, Nagkesara, Pilanagkeshar (Hindi), Nageshwar (Beng.); Nagachampa (tree-Mar.); Nagkeshar (Mar.); Pilu nagkesara (Guj.); Nangu (Tam.); Nagkeshar (Kann.); Nanga (Mal.); Nagchampkamu (Tel.); Miskurumman (Arabic); Naremushk (Persian); Mesua (English).

### Description

A large or medium-sized, beautiful evergreen tree. Branches straight, round, tender and bark whitish. Heartwood dark red, extremely hard, madullary rays extremely fine. Young shoots at first brilliant red, then pink, gradually passing into dark green.

Leaves 5 cm.-15 cm. (2-6 inches) long and 2.5-3.75 cm. (1-1.5 inches) broad, coriaceous, lanceolate, upper side shinning, underside covered with a white waxlike powder; secondary nerves very close but indistinct.

Flowers 3-4 in. diam., solitary, white, fragrant, nearly sessile, bisexual. Sepals 4 in 2 rows; petals 4, imbricate; stamens 00, anthers linear, basifixed. Ovary 2-celled, 2 ovules in each cell, style filiform, stigma peltate. Stamens are drug Nāgakeśara and flower is Nāgapuṣpa.

Fruits pointed, 2.5-3.125 cm. long, 2-valved, valves rough, supported by the enlarged sepals; seeds 1-4, testa hard, shining, embryo a fleshy homogeneous mass.

### **Flowering and fruiting time**

Plant flowers in spring season and fruiting afterwards during autumn. Flowering and fruiting in February-April.

### **Distribution**

Plant occurs in western Ghats and Assam, Khasi hills, Chittagong, Upper Burma, Tenassarim, Andaman Islands, western coast form North Kanara southward. It is generally found in evergreen forests, commonly cultivatid. Ceylon and the Malay Peninsula. Eastern Himalaya in India and eastern Bengal, south Konkan and western ghats forests ascending to 1,523 meters (5,000 ft.). Plants are wild in Andaman Islands. It is planted in the gardens.

### **Chemical composition**

The seeds kernels forming 53-73% of the weight of seeds (150-200 seeds weigh 1 lb.) yield 60-77% of a viscous, reddish or dark brown oil with a disagreeable odour and bitter taste.

The raw (unripe) fruit contains a resinous oil. Pericarp of fruit contains tannin.

Flower-stamens (kesara) contain two bitter substances and an yellow colouring matter. Seeds contain mesuol and mesuone.

### **Kinds and varieties**

There are two drugs allied to Nāgakeśara i.e. Punnāga and Surapunnāga which are botanically identified as *Calophyllum inophyllum* Buch & Hook. f. and *Orchocarpus longifolius* Buch-Ham. respectively. Another plant drug is substitute or adulterant to Nāgakeśara as 'Lal

Nagkesar' which is botanically known as *Ochrocarpus longifolius* Benth. particularly in Southern India as a market drug.

### **Pharmacodynamics**

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu, rūkṣa
Viṛya	: Uṣṇa (iṣat)
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittāśāmaka

### **Properties and action**

Karma	: Raktastambhana (śoṇitasthāpana) Svedāpananya-durgandhanāśana Vedanāsthāpana Uttejaka Dīpana-pācana Grāhī
	Trṣṇānigrahaṇa Chardinigrahaṇa Arśoghna Krimighna Hṛdyā Vājikaraṇa Mūtrājanana Kuṣṭhaghna Jvaraghna Balya Viṣaghna Kaphaghna Mastiṣkabalya.

Roga	: Rakta-pitta Raktasrāva Raktarśa Raktatisāra Raktapradara (asṛgdara) Agnimāndya-ajirṇa Trṣṇā-chardi Pravāhikā Kṛmi
------	---

Hṛddourbalya  
 Kāsa-hikkā-śvāsa  
 Klaibya  
 Mūtrāghāta  
 Kuṣṭha-visarpa  
 Jvara  
 Dourbalya  
 Viṣa.

### **Therapeutic uses**

The drug Nāgakeśara is useful in several diseases and it is specifically valued as stambhana, pācana and raktastambhana; it is viṣaghna, sveda dourgandhyahara, kuṣṭhaghna, kaṇḍughna, chardinigrahaṇa, trṣṇaprasamana, āmapācana and arśoghna. The drug is used in raktapradara, raktatisāra, raktārsa, somaroga, hikkā, kuṣṭha, trṣā, chardi, hṛllāsa, bastiroga, Kanṭhaśīrṣarujā, viṣa, visarpa, kaṇḍū, svedadourgandhya, śvetapradara and calita garbha-garbha srāva. This drug is an ingredient of Kanakāriṣṭa and some other formulations prescribed in management of various diseases.

Drug is chemically potent. Raw or unripe fruits contain an oleo-resin which yields a volatile oil. Seeds contain a fixed oil and fruit covering contains tannin. Flowers particularly stamens contain two bitter principles.

The powder of Nāgakeśara is taken with butter milk (takra) for three days keeping on diet of butter milk (takra) for checking leucorrhoea (pradara). Nāgakeśara powder is given and found useful in both kinds of pradara (rakta and śveta pradara).

The powder of drug is mixed with sugar (śarkarā) and honey (madhu), alongwith juice of sugarcane (īkṣurasa) and madhūka, in order to check hiccough (hikkā).

For treatment of diarrhoea with blood (raktatisāra), the powder of drug Nāgakeśara is an effectively excellent drug for checking blood in diarrhoea or hemorrhage.

The drug Nāgakeśara is recommended for protecting and stabilising conception (garbhasthāpana). The fine

powder of Nāgakeśara with cow's ghee (goghṛta) is given during the period or season by keeping on milk diet, for conception. Similarly the powder of Nāgakeśara with pūga powder (areca nut cūrṇa) is esteemed formulation for conception.

Powder of Nāgakeśara (stamens of flowers of Mesua farrea Linn.), butter (navanīta) and sugar (śarkarā) are mixed and orally given to patients of bleeding piles or haemorrhoids (raktārṣa).

Nāgakeśara is astringent, bitter, aromatic, cooling, expectorant and sodorofic; it is indicated in blood dysentery, fevers, piles and leucorrhoea. Phenolic constituents of seeds oil show bronchodilator effects.

**Parts used :** Stamens, flowers.

**Formulations :** Kanakāriṣṭa, Halawa supari pāk.

**Dose :** Powder 0.5-1 gm.; 1-3 gm.

**Group (gaṇa)**

Elādi, Priyaṅgvādi, Añjanādi (Suśruta Saṁhitā), Caturjāta (Bhāvaprakāśa).

## NĀGAKEŚARA ( नागकेसर )

नागपुष्पं कषायोष्णं तीक्ष्णं लघ्वामपाचनम् ॥

रूक्षं पित्तकफच्छर्दिरुडकण्डूविसर्पजित् ।

हलासस्वेददौर्गन्ध्यकुष्टतृष्णाविषापहम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1346-47.*

नागपुष्पं कषायोष्णं सूक्ष्मं लघ्वामपाचनम् ॥

ज्वरकण्डूतृष्णास्वेदच्छर्दिहलासनाशनम् ।

दौर्गन्ध्यकुष्टवीसर्पकफित्तविषापहम् ॥

*Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 70-71.*

नागकेशरमस्योष्णं केशरं तिक्तं कफापहम् ।

बस्तिवातामयग्रं च कण्ठशीर्षरुजापहम् ॥

*Rāja Nighaṇṭu, Pippalyādi varga, 178.*

केसरं विषवीसर्पपरकार्शोबमिकुष्टहृत् ।

हलासवमिदौर्गन्ध्यतृष्णापित्तवलासजित् ॥  
*Gadanigraha.*

‘उष्णरुक्षं नागपुष्टं कषायं तृष्णाच्छर्दिश्वेष्मवातप्रमाथि ।’  
*Siddha bhaiṣajyamaṇimālā.*

### असूगदरे

‘तक्राशनरता सम्यक् सम्पिबेन्नागकेसरम् ।’  
 त्र्यहं तक्रेण सम्पीडय श्वेतप्रदरशान्तये ॥

*Sodhala, Gadanigraha, Strīroga, 34.*  
*Baṅgasena, Strīroga, 145.*

### रक्तातिसारे

.....सितया सह ।  
 नागकेसरचूर्णं वा रक्तसङ्घ्रहणं परम् ।’

*Baṅgasena, Atisāra, 119.*  
 ‘श्वेष्मपित्तविषम्ब्रं तु नागम् ।’  
*Suśruta Saṃhitā, Sūtra, 46-187.*

### गर्भस्थापने

‘नागकेशरपूगास्थिचूर्णं वा गर्भदं परम् ।’  
*Baṅgasena, Strīroga, 145.*

### पुत्रप्रसवार्थम्

गोधृतेन सह नागकेसरं शूक्ष्मचूर्णितमृतौ नितम्बिनी ।  
 गव्यदुग्धनिरता पिबेद्यदि स्यात्तदा नियतमेव वीरसूः ॥  
*Rājamārtanda, Gadanigraha, 6-5-21.*

### रक्ताशे

केसरनवनीतशर्कराभ्यासात्..... ।  
 अर्शासि अपयान्ति रक्तानि ॥  
*Caraka Saṃhitā, Cikitsā, 4.*

### हिक्कायाम्

क्षौद्रं सिता वारणकेसरं च ।  
 पिबेद्रसेनेक्षुमधूकेन ॥  
*Suśruta Saṃhitā, Uttara, 50-23.*

### सोमरोगे

तक्रौदनाहारस्य सम्पिबेन्नागकेशरम् ।  
 त्र्यहं तक्रेण सम्पीडय श्वेतप्रदरशान्तये ॥  
*Bhāvapratkāśa, Somarogādhikāra, 69-11.*

पाददाहहर्षे नागकेशरलेपः ।  
 नागकेशरचूर्णं वा शतधौतेन सर्पिषा ।  
 पिष्टा लेपो विधातव्यो दाहे हर्षेऽथ पादयोः ॥

*Cakradatta, Kṣudraroga cikitsā, 5-140.*

### रक्ताशीसि

नवनीततिलाभ्यासात् केशरनवनीतशर्कराभ्यासात् ।  
 दधिसरमधिताभ्यासादर्शस्यपयान्ति रक्तानि ॥

*Caraka Saṁhitā, Cikitsā, 14-240.*

### कनकारिष्टः

*Caraka Saṁhitā, Cikitsā, 14-158/168.*

## NALA

**Botanical name :** Arundo donax Linn.

**Family :** Poaceae (Gramineae)

**Classical name :** Nala

**Sanskrit names :** Nala, Poṭagala, Śunyamadhyā, Dhamana.

**Regional names**

Narkat, Narakul, Bara nal (Hindi); Nala (Beng.); Nali (Guj.); Bansi (Punj.); Gaha nal (Bengla), Alo-kya (Burm.); Great Reed Spanish cane (Eng.).

### Description

#### A. Nala : Arundo donax Linn.

A tall reed with hollow stems; perennial reed grass, usually 6-12 feet high. Leaves tapering from an amplexicaul base. Axis of spikelets (rachillium) elongate, glabrous; flowering glume silky-hairy. Panicle thyrsiform.

#### B. Mahānala : Phragmites Karka Trin. syn. Phragmites roxburghii (Kunth.) Steud. and P. maxima Blatter & Mecann.

A tall reed, with thick creeping rhizome, found in marshy places and along banks of lakes and streams throughout India, ascending upto 1,300 meters in the Himalayas. Stems erect, upto 6 meters high, stout, hollow, close-grained; leaves linear-lanceolate, upto 62 cm. long

and 4 cm. broad, panicles upto 60 cm. long, brownish; grains oblong. The reeds are common in many parts of India from the plains to Himalayan region (restricted to lower heights or sub tropical areas).

### Distribution

It occurs in throughout India in lower areas in Himalayas from Kashmir to Assam and Nepal, ascending to 8,000 ft. elevation, and also in Nilgiris in southern India.

### Chemical composition

Plant contains total cellulose 42.8 and lignin 9.4 per cent and it yields 37% of unbleached pulp, and 34% bleached pulp. Chinese Reed has been found to contain total cellulose 50.3 (α-cellulose 36.2) and lignin 15.7 and to yield 44% to bleached pulp.

Two alkaloids gramine (donaxine)  $C_{11} H_{14} N_2$ , mp. 138-139°, donaxarine  $C_{15} H_{16} O_2 N_2$ , mp. 127° have been isolated from the plant. The former in small doses raises blood pressure in dogs, but in larger doses it causes a fall in blood pressure. Its action is similar to that of d-pseudo ephedrine.

### Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tiksna
Viryā	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

### Properties and action

Karma	: Stanyajanana Rocana-dīpana-pācana-anulomana Kṛmighna Hṛdayottejaka Raktaśodhaka Mūtrājanana Svedajanana Jvaraghna Vraṇaropaya.
Roga	: Stanyakṣaya

Mūtrāghāta  
 Kāsa-śvāsa-pratiṣyāya  
 Aruci-agnimāndya-ajirṇa  
 Viṣucikā  
 Śūla-udaraśūla  
 Kṛmīroga  
 Hṛddourbalya  
 Vātarakta  
 Raktavikāra  
 Tvagdoṣa  
 Jvara  
 Vraṇa.

### **Therapeutic uses**

The drug Nala is chiefly galactagogue (stanya-janana) and diuretic (mūtrājanana) herbal agent and it is used widely as diuretic (mūtrala); It is styptic or haemostatic (raktarodhaka), blood-purifier (raktaśodhana) and antipyretic (jvaraghna). It allays and pacifies raktapitta, provocation of blood (rakta prakopa), eruptive condition (visphoṭa) and burning sensation (dāha).

The roots of plant forms the drug which is used in both modes externally as well as internally in various diseases. Root drug is also an important component of valuable group of medicinal utility which is frequently prescribed in the name of Pañcatrṇamūla entering into different forms of pharmaceutics (kalpa).

Nala is internally administered in bastiśotha, mūtrakṛcchra, mūtrāghāta and other similar mutra vikāra (ailments of urinary system). It is also used as cardiac stimulant (hṛdayottejaka) and semen propelling (śukrājanana).

Externally it is applied to erysepalas (visarpa), skin diseases (tvagvikāra), ulcerative (vraṇa) and burning sensation (dāha) conditions.

The reed is of economic utility since it is suitable for manufacturing various articles and for making musical pipes (seed being hollow); it is most suitable raw material of for manufacture of high grade writing paper (reed being cellulose rich).

**Parts used :** Stem, leaves, flowers, oil.

**Dose :** Decoction 50-100., Oil 1.3 drops (minims).

**Group (gana) :** Trīṇapañcamūla.

## NALA ( नल )

क. नलः पोटगलः शून्यमध्यश्च धमनस्तथा ।

ख. नलस्तु मधुरस्तिक्तः कषायः कफरक्तजित् ।

उष्णो हृदस्तियोन्यर्तिदाहपित्तविसर्पहृत् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍuci-yādi varga, 156-157.*

नलः

पोटा पिटो नटो रन्धो मृत्युपुष्पो विभीषणः ।

शून्यमध्यः पोटगलो धमनो नर्तको नखः ॥

नलगुणा:

नलस्तु मधुरस्तिक्तः कषायोष्णः कफास्त्रजित् ।

हृदस्तियोनिमूत्रार्तिपित्तदाहविसर्पनुत् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 131-132.*

नलः

नाली नडी नलशैव कुक्षिरन्धोऽथ कीचकः ।

वंशान्तरश्च धमनः शून्यमध्यो विभीषणः ॥

छिद्रान्तो मृदुपत्रश्च रन्धपत्रो मृदुच्छदः ।

मालवंशः पोटगल इत्यस्याह्नास्त्रिपञ्चधा ॥

*Rāja Nighaṇṭu, Śālmalyādi varga, 101-102.*

नलगुणा:

नलः शीतकषायश्च मधुरो रुचिकारकः ।

रक्तपित्तप्रशमनो दीपनो वीर्यवृद्धिदः ॥

*Rāja Nighaṇṭu, Śālmalyādi varga, 103.*

महानल-नलभेदः

अन्यो महानलो वन्यो देवनलो नलोत्तमः ।

स्थूलनालः स्थूलदण्डः सुरवालः सुरद्रुमः ॥

महानलगुणा:

देवनालोऽतिमधुरा वृष्य ईषत्कषायकः ।

नलः स्यादधिको वीर्ये शस्यते रसकर्मणि ॥

*Rāja Nighantu, Śālmalyādi varga, 103.*

श्वविषे

‘नलमूलं जले पिष्टे पानलेपनयोर्हितम् ।’

*Aṣṭāṅga Saṅgraha, Uttara, 46-54.*

विसर्पे

‘शैवालं नलमूलानि..... ।’

पृथगालेपनं कुर्याद् द्रुद्धशः सर्वशोऽपि वा ।

प्रदेहाः सर्व एवैते देवाः स्वल्पघृतप्लुताः ॥

*Caraka Saṃhitā, Cikitsā, 21-90/92.*

मूत्राधाते नलादिशिफाप्रयोगः

नलकुशकाशेभुशिफां क्रथितां प्रातः सुशीतलां ससिताम् ।

पिबतः प्रयाति नियतं मूत्रग्रह इत्युवाच कचः ॥

*Cakradatta, Mūtrāghāta cikitsā, 33-10.*

*Bhāvaprakāśa, Cikitsā, 36-27.*

ज्वरे

नलवेतसयोर्मूले मूर्वायां देवदारुणि ।

कषायं विधिवत् कृत्वा पेयमेतज्ज्वरापहम् ॥

*Suśruta Saṃhitā, Uttara, 39-204.*

## NĀRAṄGA

**Botanical name**

Citrus aurantium Linn., Citrus reticulate Blance.

**Family :** Rutaceae

**Classical name :** Nāraṅga

**Sanskrit names**

Nāraṅga, Nāgaraṅga, Vaktrasugandha, Mukhapriya, Yogasāra, Yogika, Sugandha, Madhurāmla, Yogaraṅga, Gandhāḍhya, Gandhapatra, Suraṅga.

**Regional names**

Narangi (Hindi); Santre, Naring (Mar.); Narangi (Guj.); Naranj (Arabic); Narang (Pers.); Orange (Eng.); Sour, Bettar, Seville, Bigarade Orange (Eng.).

## Description

**Nāranga :** *Citrus aurantium* L. Small trees rarely shrubs young shoots glabrous, greenish-white. Leaves 1-foliolate; leaflets 8-15 cm., elliptic or ovate, acute, obtuse or acuminate, petiole naked or winged, wings often obovate and nearly as large leaf-blade. Flowers bisexual pure white. Stamens 20-30.

Fruit globose, oblate, not mamillate; orange in colour rind loose or adherent; pulp sweet; yellow, rarely red.

## Flowering and fruiting time

It is in flowering and fruiting stages in July-March.

## Distribution

It is cultivated in India for popular edible-fruits (high content of vitamin C). Plant is grown in various regions of India; Planted in Maharashtra, Madhya Pradesh, Tamilnadu; Andhra Pradesh, Bihar, Orissa, Punjab and other regions, as fruit-gardens.

## Kinds and varieties

There are two kinds of fruits commonly known as bitter orange (Karhavi narangi) and sweet orange (mithi narangi) which are botanically named as *Citrus aurantium* Linn. and *Citrus sinensis* Linn. respectively. *Citrus aurantium* Linn. is popularly known as Santara.

The source plant for Nāraṅga is *Citrus aurantium* Linn. syn. *Citrus reticulata* Balanco (including *Citrus aurantium* var. *bigarandia* of Watt.). Which is named with speciality of fruits sucas Sour, Bitter, Seville, Bigarede orange. This plant species has several varieties, forms and hybrids related with different factors including area of cultivation and characteristics of fruits etc.

Another medicinal fruit Moṣāmbī is allied which is botanically named as *Citrus sinensis* (Linn.) Osbeck, the Sweet orange commonly known as Mousammi or Mosami. It is a popular fruit of this group. Fruits are named as sweet orange, Tight skinned orange, Batavian and Mozambique orange.

### Chemical composition

The flowers, leaves and fruits, all yield volatile oil, much valued in the perfumery trade. The fresh flowers yield two valuable products viz. Oil of Neroli Bigarade and Orange Flower water. The oil of Pentigrain obtained from leaves and young shoots (through distillation) of the plant resembles nardi oil to some extent.

### Pharmacodynamics

Rasa	: Amla, madhura
Guṇa	: Guru
Vīrya	: Śita/Uṣṇa
Vipāka	: Amla/Madhura
Doṣakarma	: Vātaśāmaka

### Properties and action

Karma	: Rocana-dīpana Hṛdaya Sāraka Mukhadourgandhyahara- vaktrasugandhakara Vātaghnā Durjara Krmighna Śūlaghnā Bhramahara
Roga	: Aruci-agnimāndya Vātajanya vikāra Hṛdroga Vibandha Mukhadurgandhi Vibandha Kṛmiroga Śūla Bhrama.

### Therapeutic uses

The fruit and flowers of Nāraṅga are chiefly used in medicine. Fruit is one of the common edible fruits which are esteemed for their tasty and juicy quality. Fruit juice is highly medicinal. Leaves are odorous as they have oil

glands on back surface. Rind of fruit is useful to promote lustre or complexion of skin (varṇya) and it is externally used in different forms; it is also utilised for cosmetic purpose.

The drug Nāraṅga allays or pacifies provoked vāta and pitta humor (vātapiṭṭha doṣe śāmaka); it is Cardiac, haemostatic, stomachic, pleasing to mind (soumanasyajanana) and promoting desire for food and relish (rocana rucikara), anti-emetic (chardinigrahana), tonic or strength-promoting (balya) and anthelmintic (krimighna).

**Part used :** Fruit, flowers and rind.

**Dose :** Juice 25-50 ml.

**Formulation :** Sharbat Narang (syrup orange).

## NĀRĀNGA ( नारङ्ग )

- क. नारङ्गो नागरङ्गः स्यात्कसुगन्धो मुखप्रियः ॥
  - ख. नारङ्गो मधुराम्लः स्याद्रोचनो वातनाशनः ।  
अपरं त्वम्लयत्युष्णं दुर्जरं वातहत् सरम् ॥
- Bhāvaprakāśa Nighaṇṭu, Āmrādiphala varga, 63-64.*

- अ. नारङ्गको योगसारो नारङ्गो यौगिको मतः ।  
गोक्षुरस्त्वक् सुगन्धः स्यात् मधुराम्लो मुखप्रियः ॥  
ऐरावतो रुचिकरः सुधा तक्राधिवासनः ।
- ब. नारङ्गमुष्णमस्त्वञ्च गुरु वातहरं सरम् ॥  
कफपित्तास्त्वकृद्यतु स्वाद्वम्लं विशदं गुरु ।  
सुगन्धि दुर्जरं रच्यं हृदयं मारुतनाशनम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 313-314.*

### नारङ्गः

- नारङ्गः स्यात्नारङ्गः सुरङ्गस्वगन्धश्चैरावतो वक्तवासः ।  
योगीरङ्गो नागरो योगरङ्गः गन्धाद्योऽयं गन्धपत्रो खीष्टः ॥

### नारङ्गगुणाः

- नारङ्गं मधुरं चाम्लं गुरुष्णश्चैव रोचनम् ।

वातामक्रिमिशूलग्रं श्रमहद्बलरुच्यदम् ॥

*Rāja Nighaṇṭu, Āmrādi varga, 171-172.*

अम्लं समधुरं हृद्यं विशदं भक्तरोचनम् ।

वातग्रं दुर्जरं प्रोक्तं नागरङ्गफलं गुरु ॥

*Dhanvantari Nighaṇṭu.*

अम्लं समधुरं हृद्यं विशदं भक्तरोचनम् ।

वातग्रं दुर्जरं प्रोक्तं नारङ्गस्य फलं गुरु ॥

*Suśruta Saṃhitā, Sūtra, 46-161.*

‘दुर्जरं वातशमनं नागरङ्गफलं गुरु ।’

*Caraka Saṃhitā, Sūtra, 47-150.*

## NĀRIKELA

**Botanical name :** Cocos nucifera Linn.

**Family :** Palmae

**Classical name :** Narikela

**Sanskrit names**

Nārikela, Nālikera, Dṛḍhaphala, Lāṅgalī, Kūrca-sīrṣaka, Tuṅga, Skandhaphala, Tṛṇarāja, Sadāphala, Dakṣinātyaka.

**Regional names**

Nariyal, Gari, Khopra, Gola (Hindi); Narikel (Beng.); Narel (Punj.); Khopa, Mada (tree), Naral (fruit); Nariyal (Guj.); Tennamaram (Tam.); Narikelamu (Tel.); Tengu (Kann.); Tenga (Mal.); Narjil (Arab.); Nargil (Pers.); Coconut palm (Eng.).

**Description**

Tall trees (almost looking like palm tree), about 24.36 meters (80 ft.). Trunk high, annulate, often curved, trunk 30 cm. - 45 cm. (1-1.5 ft.) in diam., rarely branching, base thickened with a mass of rootlets. Ringlike leaf scars on trunk.

Leaves 6-13 ft. long; leaflets equidistant, pinnatisect linear lanceolate, 2-3 ft. long, petiole stout.

Spadix stout, androgynous, divided into numerous

drooping spikes bearing at their base. Male flowers with a few female flowers, the upper portion being densely covered with female flowers. Male flowers sepals small, valvate, petals 1/4 in. long, stamens 6. Female flowers ovoid, supported by several broad bracteoles, perianth accrescent, sepals 1 in. diam., round, concave, petals similar to sepals, but smaller. Cut flowers stalks yield toddy.

Fruit 3-cornered, 10-15 in. long, pericarp thick, fibrous, endocarp bony with 3 basal pores, indicating the 3 cells of the ovary. Cavity of endosperm before maturity large, filled with the cocoa-nut mulk. Nut requires 9-10 months to ripen.

### **Flowering and fruiting time**

Plant flowers in dry season; generally flowering and fruiting cycle continues round the year.

### **Distribution**

It is cultivated throughout the tropics, chiefly in the vicinity of the sea, but also inland. Plant is abundant in southern India, Malabar coast, Coromandel coast, eastern Bengal, islands and coast of Bay of Bengal, Sri Lanka, Burma and eastern group of Islands. Commercial produce of fruits for kernel and oil, also fruits and different parts.

### **Chemical composition**

The kernel of fruit contains nitrogenous substances, fat, glucose, sucrose and other similar substances. Kernel yields oil 60-70 per cent which contains lauric acid (44-51.3%), myristic acid (13-18%), Caprilic acid, palmitic acid, stearic acid glycyrides. Coconut milk contains protein, sucrose, chlorides and vitamin A and B. Alkalies contain potash in good quantity.

### **Pharmacodynamics**

Rasa	: Madhura
Guṇa	: Guru, snigdha
Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittasāmaka

**Properties and action**

<b>Karma</b>	: Keśya (watery fluid-jala, oil-taila) Varṇya Pittaśāmaka Dāhapraśamana (watery fluid-jala) Kuṣṭhaghna-kandūghna Vraṇaropāṇa Stambhana (puṣpa-flowers) Amlapittahara (kṣāra-alkali, phala navīna-raw fruit) Bhedana (kṣāra-alkali) Raktapittaśāmaka (watery fluid, flowers, green or raw fruit) Hikkānigrahaṇa (watery fluid) Bṛīṁhaṇa-balya (fresh fruit-apakva phala) Karśana (oil-taila) Jvaraghna Vraṇaropāṇa (oil-taila).
<b>Roga</b>	: Keśavikāra-khālitya-pālitya Masūrikā Carmaroga-vraṇa Kuṣṭha Vraṇa Trṣṇā-dāha-paittikavikāra Amlapitta-āmāśayakṣobha Pariṇāmaśūla-annadravaśūla- paittikaśūla Gulma-ślaiṣmika śūla Atisāra-raktātisāra Raktapitta Hikkā Mūtrāghāta-mūtrakṛcchra- mutravikāra (mūtravaivaran्यa) Kaṣṭārtava Vājikaraṇa Jvara-viṣamajvara Adhmāna-udara vikāra

Dourbalya-kṛśatā<sup>1</sup>  
Kṣayaroga.

### Therapeutic uses

The drug Nārikela or Nālikera is aphrodisiac, carminative, cooling, diuretic, refrigerant and tonic. It is used in burning sensation in humen body, consumption, diarrhoea, emaciation, heart diseases, spermatorrhea and urinogenital diseases. The water produced by tender coconut provides source of glucose supply in acute dehydration.

Nārikela is a reputed Keśya (hair promoting or hair beneficiary) herbal agent as the oil of coconut (nārikela taila), obtained from endosperm of cocoanut (fruit), applied as single drug as well as an ingredient or oil-base of several oily formulations and hair oils largely used in medicine, cosmetic and traditions including household hair care of daily routine. The oil is wound healer and antileprotic besides other uses.

The oil is edible and also employed as a cooking media and for culinary and also other simialr domestic dietary needs. The oil is ued in pharmaceutical processes as an ointment base. Copra, flowers, water, root and keśara are useful besides fruits and the exocarp's fibres also used. Nārikela is useful in a number of diseases and several recipes and formulations used in medicine.

Nārikela or coconut and its various parts and several products are of commercially important in industry.

**Parts used :** Fruit, flowers, oil, water, root, kṣāra.

**Dose :** Fruit 10-20 gm., Oil 10-20 drops., Alkali 1-2 gm.

### Formulation (yoga)

Nārikela Khaṇḍa, Nārikela lavaṇa, Nārikelāmṛta.

## NĀRIKELA ( नारिकेल )

नारिकेलस्य तालस्य खर्जूरस्य शिरांसि तु ।  
कषायस्त्रिग्धमधुरबृंहणानि गुरुणि च ॥

### नारिकेल:

क. नारिकेलो दृढफलो लाङ्गली कूर्चशीर्षकः ।

तुङ्गः स्कन्धफलश्वैव तृणराजः सदाफलः ॥

### नारिकेलगुणा:

ख. नारिकेलफलं शीतं दुर्जरं बस्तिशोधनम्।  
विष्टम्भि बृहणं बल्यं वातपित्तास्त्राहनुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Āmraphalādi varga, 38-39.*

### कोमलजीर्णतत्फलयोर्गुणा:

विशेषतः कोमलनारिकेलं निहन्ति पित्तज्वरपित्तदोषान्।  
तदेव जीर्णं गुरुं पित्तकारि विदाहि विष्टम्भि मतैर्भिषग्निभः ॥

*Bhāvaprakāśa Nighaṇṭu, Āmraphalādi varga, 40.*

### नारिकेलादीनां शिरोगुणा:

नारिकेलस्य तालस्य खंजूरस्य शिरांसि तु।  
कषायस्त्रिग्राधमधुरं बृहणानि गुरुणि च ॥

*Bhāvaprakāśa Nighaṇṭu, Āmraphalādi varga, 42.*

### नारिकेलजलगुणा:

तस्याम्भः शीतलं हृदयं दीपनं शुक्रलं लघु।  
पिपासापित्तजित्स्वादु बस्तिशुद्धिकरं परम् ॥

*Bhāvaprakāśa Nighaṇṭu, Āmraphalādi varga, 41.*

### नारिकेल-नालिकेरः

नालिकेरो लतावृक्षो दृढबीजो महाफलः।  
तुङ्गस्कन्धफलाश्वोचः तृणराजः सुतुङ्गकः ॥  
दृढवृक्षो दृढफला लाङ्गली कूर्चकेशरः।  
दृढबीरस्त्र्यक्षफलो दाक्षिणात्यः सदाफलः ॥

### नारिकेलफलम्

चोचमस्य फलं त्र्यक्षं तोयगर्भं पुटोदकम्।  
जलं केरजलं कोष्मकरं केरफलस्थिति ॥  
नालिकेरं हिमं स्त्रिग्राधं स्वादुपाकरसं गुरु।  
तर्पणं पाचनं वृष्णं बृहणं बलमांसकृत् ॥  
विष्टम्भि दुर्जरं हृदयं श्लेष्मलं बस्तिशोधनम्।  
दाहक्षतक्षयहरं वातपित्तास्त्राशनम् ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 26-7-269.*

### शूलचिकित्सायाम् अपरो नारिकेलखण्डः

*Cakradatta, Śūla cikitsā, 26/35-40.*

### नारिकेलोदकम्

तस्योदकं हिमं स्निग्धं मधुरं बस्तिशोधनम्।

दीपनं शुक्रलं हृद्यं लघु तृट्टदाहपित्तनुत्॥

*Kaiyadeva Nighantu, Oṣadhi varga, 270.*

### नारिकेलक्षीरम्

वृच्छं स्निग्धं नारिकेलस्य दुग्धमीषत् कुर्यात् पित्तदाहो गुरु स्यात्।

उष्णं हन्याद् वातगुल्मं बलासं बल्यं रुच्यं कासहत् स्वादुपाके॥

*Kaiyadeva Nighantu, Oṣadhi varga, 271.*

### नारिकेलघृतम्

नालिकेरोद्धवं सर्पिर्बृहणं बलवर्धनम्।

केशं पित्तानिलहरं मधुरं रसपाकयोः॥

हृद्यं रुच्यं नवं प्रोक्तं पुराणं गुरुवातनुत्।

तिक्तमहृद्यं मधुरं कण्डूकोठहरं परम्॥

*Kaiyadeva Nighantu, Oṣadhi varga, 272-273.*

### नारिकेलतैलम्

नालिकेरोद्धवं तैलं वृहणं बलवर्धनम्।

केशं पित्तानिलहरं दन्त्यं मधुरमेव च॥

स्वादुपाकरसो रक्तपित्तघ्नः कफनाशनः।

ग्रहणीदीपनानाहहितस्तद्वल्कजो रसः॥

*Kaiyadeva Nighantu, Oṣadhi varga, 274-275.*

### नारिकेलशर्करा

शर्करा नालिकेरस्य मधुरा वातपित्तजित्।

### नारिकेलपुष्पम्

नालिकेरप्रसूनं तु रक्तपित्तप्रमेहनुत्॥

रक्तातिसारं हरति महालोहितनाशनम्।

शीतलं सोमरोगग्नं विबन्धं कुरुते भृशम्॥

*Kaiyadeva Nighantu, Oṣadhi varga, 276-277.*

### नारिकेलशिरोमज्जा

तद्दुमस्य शिरोमज्जा मधुरो रसपाकयोः।

वातपित्तास्वशमकः शुक्रशूष्मविवर्धनः॥

*Kaiyadeva Nighantu, Oṣadhi varga, 278.*

### नारिकेलतरुतोयम् (मदम्)

नालिकेरतरुतोयमतीव स्निग्धमाशु मदकृद् गुरु वृष्ट्यम्।

साम्लभावमुपयात्यपराह्नश्रैष्मपित्तकरवातकृमिद्धम् ॥

*Kaiyadeva Nighantu, Osadhi varga, 279.*

ज्वरे

तुङ्गद्वमस्य तरुणानि फलानि चर्म चत्वारि किञ्चिदपनीय जलस्य कुम्भे ।

पक्खा गते तदुदके पीतमेकं संसाधयेज्ज्वरमतीव चिरन्तनं द्राक् ॥

*Vaidya Manoramā, 1-17.*

### अम्लपित्ते नारिकेलखण्डम्

अ. कुडवं नारिकेलस्य जले मृद्गिनां पचेत् ।

नारिकेलजलाला गव्ये पयसि तत्पचेत् ॥

धान्यकं पिष्पली मुस्तं चातुर्जातं विचूर्णितम् ।

प्रत्येकं टङ्गणमात्रं तु शीते तस्मिन्विनिक्षिपेत् ॥

पलमात्रस्तद्वोऽपि भक्षितः प्रत्यहं नरैः ।

ब. नारिकेलस्य खण्डोऽयं पुस्त्वनिद्राबलप्रदः ॥

अम्लपित्तं रक्तपितं शूलञ्च परिणामजम् ।

क्षयं क्षपयति क्षिप्रं शुष्कं दार्वनलो यथा ॥

स. पलमात्रगव्यघृतेन नारिकेलस्य भर्जनं कर्तव्यमिति सम्प्रदायः ।

*Bhāvaprakāśa, Amlapittādhikāra, 10-23/28.*

### अम्लपित्ते बृहन्नारिकेलखण्डः:

*Bhāvaprakāśa, Amlapittādhikāra, 10-27/32.*

*Cakradatta, 16-13/16.*

### परिणामशूले नारिकेलक्षारम्

नारिकेलं सतोयञ्च लवणेन सुपूरितम् ।

मृदाऽववेष्टितं शुष्कं पक्कं गोमयवह्निः ॥

पिष्पल्या भक्षितं हन्ति शूलं हि परिणामजम् ।

वातिकं पैत्तिकञ्चापि श्रैष्मिकं सात्रिपातिकम् ॥

*Bhāvaprakāśa, Madhyakhande, Cikitsā*

*Prakaraṇa Śūlādhikarāḥ, 30/66-67.*

### परिणामशूलचिकित्सायां नारिकेललवणम्

नारिकेलं सतोयञ्च लवणेन प्रपूरितम् ।

विपक्कमग्निः सम्यक् परिणामशूलनुत् ॥

वातिकं पैत्तिकञ्चैव श्लैष्मिकं सान्त्रिपातिकम् ।

*Cakradatta, Parinamaśula cikitsā, 27/21-22.*

### परिणामशूलचिकित्सायां नारिकेलखण्डः

क. कुडवमितमिह स्यान्नारिकेलं सुपिष्टम्  
पलपरिमितसर्पिः पाचितं खण्डतुल्यम् ।  
विजपयसि तदेस्त् प्रस्थमात्रे विपक्नं-  
गुडवदथ सुशीते शाणभागान् क्षिपेच्च ॥

ख. धन्याकपिष्पलिपयोदतुगाद्विजीरान्छाणं  
त्रिजातीमकेशरवद्विचूर्ण्य  
हन्त्यम्लपित्तमस्त्रचिं क्षयमस्त्रपित्तं शूलं  
वमि सकलपौरुषकारि हारि ॥

*Cakradatta, 27/77-79.*

### नेत्ररोगे अनन्तवातेषु नारिकेलजलपानम्

‘पिबेत् सशर्करं क्षीरं नीरं वा नारिकेलजम् ।’

*Cakradatta, Široroga cikitsā, 60-46.*

### अम्लपित्ते

पित्तहत्कम्पतुण्मूर्छाभ्रमादीन् घन्ति दारुणाम् ।  
नालिकेराम्बुना पीताः सक्तवः समशर्करा ॥

*Vaidya Manoramā, 4-17.*

### परिणामशूले

नारिकेललवणम् ।

*Cakradatta, 27-21/22.*

### छद्याम्

‘खर्जूरमांसान्यथ नारिकेलं द्राक्षामथो वा बदराणि लिह्यात् ।’

*Caraka Saṁhitā, Cikitsā, 20-28.*

### विपादिकायाम्

नालिकेरोदरे न्यस्तस्तण्डुलः पूतितां मतः ।  
लेपाद् विपादिकां हन्ति चिरकालुबन्धनीम् ॥

*Vrndamadhava, 51-37.*

### ब्रणे

‘जीर्णञ्च नालिकेरस्य तैलं हन्याद् ब्रणं द्रुतम् ।’

*Vaidya Manorama, 16-109.*

**क्रिमिरोगे**

‘नालिकेरस्य निर्यूहः क्रिमिहास्यात् सरामठः ।’

*Vaidya Manorama, 11-65.*

**शर्करायाम्**

‘.....दधा पीतं वा नारिकेलजं कुसुमम् ।

विष्मूत्र शर्करायाः भवति सुखी कतिपयैः दिवसैः ॥’

*Bhavaaprakasa, Cikitsa, 37-50.*

**सूर्यावर्त्ताधिविभेदकयोः:**

पिबेत् सशर्करं क्षीरं नीरं वा नालिकेररजम् ।

सुशीतं चापि पानीयं सर्पिर्वा नस्ततस्तयोः ॥

*Vrndamadhava, 62-43.*

## NATAPUŚPIKĀ- ADHAHPUŚPI

**Botanical name :** Trichodesma indicum R. Br.

**Family :** Boraginaceae

**Classical name :** Adhaḥpuśpi, Natapuśpikā

**Sanskrit names :** Adhopuśpi, Adhaḥpuśpi, Natapuśpikā.

**Regional names**

Andhahuli (Hindi); Jindhi, Gaboja (Mar.); Undhahuli (Guj.); Chetarahuli (Bengla).

**Description**

An annual herb, rough with appressed hairs, bulbous-based stiff hairs. Stem erect, or diffuse, upto 18 in. long.

Leaves mostly sessile, 3-4 in. long, ovate-oblong or lanceolate, obtuse or subacute; base narrowed, cordate; upper surface clothed with stiff hairs, seated on flattened circular tubercles; lower surface less harshly hispid; more or less villous or quite glabrous except on the nerves and veins.

Flowers pale blue, changing to pink or white. Calyx about 1/2 in. long, clothed with long rather stiff hairs; seg-

ments lanceolate, acute, cordate or hastate at the base. Corolla 3/4-1/3 in. long; limb oblique, funnel-shaped; lobes ovate, abruptly acuminate.

Nutlets 1/3 in. long, smooth and polished on the back, regose, on inner face, sparsely margined, white or bluish when ripe.

### **Flowering and fruiting time**

Plant flowers during cold season and fruiting stage begins afterward.

### **Distribution**

Plant occurs throughout India and in Sri Lanka, ascending to 5,000 ft. on the Himalaya; extending to Afghanistan; Baluchistan, Persia and the Mauritius. It is commonly grows along road-sides and in waste places in various regions in country.

### **Pharmacodynamics**

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

### **Properties and action**

Karma	: Śothahara Vedanāsthāpana Raktaśodhaka-śothahara Viṣaghna-jaṅgamaviṣahara Mūtrala Garbhāśayasaṅkocaka Tvacya Jvaraghna Cakṣuṣya Dīpana-grāhī
Roga	: Śotharoga-raktavikāra Sandhivāta-āmavāta Vraṇaśotha Viṣa-sarpaviṣa Carmavikāra

Jvara  
 Agnimāndya-pravāhikā-grahaṇī  
 Mūtrakṛcchra  
 Rajaḥkṛcchṛtā-ārtavavikāra  
 Mūḍhagarbha  
 Neträbhiṣyanda.

### **Therapeutic uses**

The leaves and flowers of Adhaḥpuṣpī are eaten. The herb is credited with emollient and diuretic properties and is used for making emollient poultices. It is prescribed for the expulsion of dead foetus and abnormal posture of foetus (in uterus) during delivery. An infusion is considered depurative.

The root (adhaḥpuṣpī mūla) is pounded and made into a paste for application on the swellings, particularly of the joints. The root is also for the treatment of dysentery and fever.

The flowers (adhapuspi puṣpa) are considered to be employed as a sudorific and pectoral medicine.

In general, the drug Adhopuspi is anti-inflammatory (śothahara) medicine which is also analgesic (vedanāsthāpana). Whole plant is pouinded and paste is applied externally on swollen joints, boil and other condition of pain and inflammation; it is also pasted in conjunctivitis.

The herb is used in loss of appetite, dysentery, blood impurity, rheumatism, arthritis, dysuria, dysmenorrhoea, skin affections, snake bite (root's external application) oedema, fever and other ailments.

**Parts used :** Root, whole plant.

**Dose**

Root (paste) 5-10 gm., Juice (whole plant) 10-20 ml.

## **ADHAHPUSPI ( अधःपुष्पी )**

अधःपुष्पी रसे तिक्ता कट्टवी लघ्वी प्रशस्यते ।

वीर्योष्णा कफवातम्री ब्रणशोथहरा परम् ॥

*Dravyaguṇa Vigyana, part II, p. 233.*

# NĪLĪ

**Botanical name :** Indigofera tinctoria Linn.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Nīlī

**Sanskrit names**

Nīlī, Nīlinī, Rañjanī, Grāmīnā, Nilapuṣpa, Śāradī.

**Regional names**

Nila (Hindi); Nila (Beng.); Nili (Mar.); Gali (Guj.);  
Lila (Mal.); Nilam, Avari (Tam.); Aviri, Nilachettu (Tel.),  
Nilaj (Arabic); Darakhte nil (Pers.); Indigo (Eng.).

**Description**

Much branched, appressed-hairy profuse shrubs 0.3-2.0 m. (2-3 ft. high) or 60-120 cm. high shrubs, with slightly angular-silvery pubescent branches.

Leaves imparipinnate 5-10 cm. long; petiole short; leaflets elliptic or oblong; appressed pubescent beneath; stipule minute setaceous. Petiole 12-15 mm. long; leaflets 7-13 obtuse or retuse; 10-25 x 5-12 mm., pubescent, beneath.

Racemes axillary, subsessile, 4-12 cm. long, many-flowered. Calyx 1-2 mm. long; pubescent. Corolla lilac red, 3-5 mm. long.

Pods 2-4 cm. long, turgid, straight or slightly curved 8-10 seeded, apiculate, glabrous.

**Flowering and fruiting time**

Generally herb begins blooming in rains and fruits in autumn.

Plant bears flowers and fruits in July-May. Greater part of the year. It flowers in September and fruits in December.

**Distribution**

Plant occurs in tropics. Plant occasionally grows on ridges, near ponds and ditches, along the roads or railway tracks and other places.

Agro-techniques for cultivation of drug plant Indigofera tinctoria Linn. (Nīlī) find that the seedlings are

raised from seed and transplanted in well prepared flat beds in February giving a spacing of 45 x 45 cm. The plot can be made, for the example, with an area of 400 cm. or more (for trial as well as general cultivation). Watering is given to the plants once in two days in the beginning, followed once a week from March onwards. As regards manuring, the cow dung application is made in the form of slurry with urea for inducing quick growth. Leaves of the plant become matured for harvest in two months period. First harvest of leaves is done after two months of planting and at two months intervals subsequently. Application of cow slurry is repeated. Finally the harvesting give produce of leaves of drug.

### **Chemical composition**

Phytochemical studies find the presence of alkaloids in the alcoholic extract of leaves. It also showed steroids in chloroform, alcohol and water extractions. Presence of protein, carbohydrate and steroids were also noted in alcohol and water extractions. Tests for saponins were positive only in water extract. Analysis of the root powder shows the presence of protein in alcoholic extract. Carbohydrates are present in chloroform, alcohol and water extracts. Carbohydrate in chloroform may be an indication of the glycoside. Plant contains a glucoside Indican. Herb gives ash 4.5 per cent.

### **Pharmacodynamics**

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

### **Properties and action**

Karma	: Keśya-keśarañjana-keśavardhana Kuṣṭhaghna Vrañcaropana Viṣaghna Kṛmighna Lekhana
-------	---

	Vedanāsthāpana Uttejaka Yakṛduttejaka Śūlapraśamana Hṛdyā Raktaprasādana Śothahara Mūtrājanana Kaphaghna Viṣamajvara pratibandhaka Moha bhramahara Vātaghna Recana.
<b>Roga</b>	: Keśavikāra-pālitya-khālitya Tvagvikāra-kuṣṭha-dadru-kilāsa Viṣa-kukkuradāmṣṭra-maṇḍalīviṣa sarpaviṣa Vraṇa Visarpa Āmavāta-sandhivāta Netraroga Aśmarī-mutrakṛcchra Kāsa-śvāsa-phupphusaśotha Viṣamajvara Raktavikāra Vātarakta-āmavāta Udāvarta-jalodara-vibandha-gulma Kṛmiroga Yakṛtplihodara Mastiķadourbalya-mada-mūrcchā- bhrma Dantakrimi Pakvāśayagataviṣa.

### **Therapeutic uses**

The drug Nīlī or Nīlinī is purgative in action, bitter and hot. It improves hair and cures prameha and giddiness and useful against abdominal enlargement of spleen, vātarakta, kapha, vāta, āmavāta, udāvarta, alcoholic intoxication and severe poison. The plant drug has bitter bad

taste and it lessens inflammation. The drug cures chronic bronchitis and asthma (especially of children), piles, leucoderma, bites of insects and reptiles, burns, scalds, ulcers and skin diseases.

The juice of the leaves has great repute as a cure for hydrophobia, being administered both internally and externally.

The seeds (tukhme nil), leaves (vasma, varkunnil) and whole plant are used in medicine and other similar purposes. Plant has historical and traditional importance as Indigo plant which is source of well known Indigo dye. It was under commercial cultivation and production at large scale for procurement of Indigo dye (blue colour substance) which has been later replaced by synthetic blue dye. The value of herb as source of colouring matter (Indigo dye) has been given applied importance in medicine as well as cosmetics with special reference to Āyurveda and other indigenous systems of medicine.

**Parts used :** Whole plant, Seeds, leaves, roots.

**Dose :** Decoction 50-100 ml., Root extract 125-250 mg.

**Group (gāṇa)**

Virecana (Caraka Saṁhitā), Adhobhāgahara (Suśruta Saṁhitā).

## NĪLĪ ( नीली )

- क. नीली तु नीलिनी तृणी काला दोला च नीलिका ।  
रञ्जनी श्रीफली तुच्छा ग्रामीणा मधुपर्णिका ॥
- ख. कर्लीतका कालकेशी नीलपुष्पा च सा स्मृता ।  
नीलिनी रेचनी तिक्ता केश्या मोहभ्रमापहा ॥  
उष्णा हन्त्युदरप्लीहवातरक्तकफानिलान् ।  
आमवातमुदावर्त्त मदं च विषमुद्धतम् ॥
- Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 207-209.*

**नीली**

नीली तु कटुतिक्तोष्णा केश्या कासकफामनुत् ।  
मरुद्विषोदरव्याधिगुल्मजन्तुज्वरापहा

॥

## महानीली

अन्या चैव महानीली अमला राजनीलिका ।  
 तुथा श्रीफलिका मेला केशार्हा भृशपत्रिका ॥  
 महानीली गुणाद्या स्याद्रङ्गश्रेष्ठा सुवीर्यदा ।  
 पूर्वोक्तनीलिकादेश्या सगुणा सर्वकर्यसु ॥

*Rāja Nighaṇṭu, Śatāhvādi varga, 84-85.*

## नीलिनी

नीलिनी नीलिका नीली काली दोला विशोधनी ।  
 ग्राम्या तुच्छा नीलपुष्पी सारटी भारवाहिनी ॥

## नीलीगुणा:

नीली तिक्ता रसे पाके सरोष्णा भ्रममोहकृत् ।  
 कफानिलहरा केश्या प्लीहोदरविषापहा ॥  
 वातरक्तमुदावर्त्तमामवातगदं हरेत् ।

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 791-793.*

नीलिका नीलपत्रा स्याच्छरपुङ्गुदला च सा ।  
 बहुशिम्बा कालिका च रङ्गपत्री च रञ्जनी ॥

*Śivadatta.*

नीली तिक्ता रसे चोष्णा कटिवातकफापहा ।  
 केश्या विषोदरं हन्ति वातासृक्क्रिमिनाशनी ॥

*Dhanvantari Nighaṇṭu.*

## मण्डलीविषे

‘तन्दुलजलेन पिष्टं नीलिन्या मूलमाशु नाशयति ।  
 पानेन मण्डलीविषम्..... ॥’

*Rāja Mārtanda.*

## विसर्पे

प्रातः पयसा पीता लिप्ता च विसर्पकं जयेन्नीली ।  
 तत्क्षीरं च तथाऽस्याच्छुभ्निशुभ्नौ यथा दुर्गा ॥

*Vaidya Manoramā.*

## मूत्रकृच्छ्रे

मूत्रकृच्छ्रं जयेत्पीता क्षीरेण शिखरीशिफा ।  
 अजाक्षीरेण सम्पित्य पीता नीलीजटा तथा ॥

*Vaidya Manoramā, 11-12.*

**क्षये**

‘गोक्षीरमुस्तं प्रशमाय तस्य स्यान्नीलिनीमूलमथामयस्य ॥’

*Śodhala, Gadanigraha, 2-9-80.*

**कृमिदन्ते**

नीली धात्री सुही बिष्वी हेमक्षीरी च पञ्चमी ।

*Śodhala, Gadanigraha, 3-5-170.*

**पक्वाशयगते विषे**

‘विरेचने ससर्पिष्कं तत्रोक्तं नीलिनीफलम् ।’

*Suśruta Samhitā, Kalpa, 1-46.*

**जालगर्दभे शमनाय नीलीमूललेपः**

नीलीपटोलमूलाभ्यां साज्याभ्यां लेपनं हितम् ।

जालगर्दभरोगे तु सद्यो हन्ति च वेदनाम् ॥

*Cakradatta, Kṣudraroga cikitsā, 55-23.*

**पलिते ( अन्यविकाराणां ) महानीलतैलम्**

*Cakradatta, Kṣudraroga cikitsā, 55-126-133.*

**दन्तक्रिमिहरा योगाः ( नीलिकादयाः एकोषधिप्रयोगाः )**

‘नीलीवायसजङ्घास्तुगुदीनान्तु मूलमेकैकम् ।’

*Cakradatta, Mukha (Danta) roga cikitsā, 56-31.*

**उदरे**

नीलिन्यादिचूर्णम् ।

*Caraka Samhitā, Cikitsā, 13-147.*

**सर्पविषे**

तण्डुलजलेन पिष्टं नीलिन्याः मूलमाशु नाशयति ।

पानेन मण्डलिविषं यदि वा लज्जावतीमूलम् ॥

*Rāja Mārtanḍa, 29-8.*

**गुल्मे**

नीलिन्याद्यं घृतम् ।

*Caraka Samhitā, Cikitsā, 5-176/179.*

नीलिनीत्रिवृतादन्ती पथ्या कम्पिल्लकैः सह ।

शोधनार्थं घृतं देयं सविडक्षारनागरम् ॥

*Caraka Samhitā, Cikitsā, 5-175.*

# NIMBA

**Botanical name :** Azadirachta indica A. Juss.

**Family :** Meliaceae

**Classical name :** Nimba

**Sanskrit names**

Nimba, Picumarda, Hīnguniryāsa, Picumanda, Ariṣṭa, Paribhadra, Tiktaka.

**Regional names**

Nima (Hindi); Nim (Beng.); Kadunimba (Mar.); Limarho (Guj.); Vembu, Vempu (Tam.); Nibarh (Punj.); Veppu (Mal.); Nimu (Si.); Azad darakhte hindi (Pers.); Azad darakhtul hind (Aradic); Margosa tree (Eng.).

**Description**

Shady trees, upto 25 meters tall. Bark grey, cracked and rough on mature branches. Leaves up to 30 cm. long, leaflets 5-13 or 12-16, obliquely lanceolate, 3-7 x 1-3 cm. cuneate at base; dentate at margins, crenate-serrate, oblique, upto 6 x 2 cm.

Panicles upto 30 cm. long, long peduncled. Flowers white, Ca 10 mm. across; flowers 2 merous, often upto 8-merous. Calyx 5-fid, lobes ovate. Petals oblanceolate, Ca 5 mm. Staminal tuber dilated above, 10-fid at tip; anthers exerted. Ovary globose 3-locular; style elongate; stigma 3-lobed, with a basal rim.

Fruits baccate, 1-seeded, pulpy, green when young, yellow when ripe; drupe globose, pulpy white with a very large exarillate seed. Drupes (fruit) ovoid-oblong.

**Flowering and fruiting time**

Plant flowers during February to April and it bears fruits in April-June. Flowering and fruiting during spring to summer season.

**Distribution**

Plant is commonly found throughout India and specially in drier and warmer regions of north-western and central India. It is very common, planted in gardens, along,

roadside in house premises and it also occurs as self-grown. Trees are found in both states-cultivated or planted as well as wild or natural. It is popularly planted as shade tree purifying the atmosphere at various placed. Plant is wild in dry and warm forest regions.

### **Chemical composition**

Bark contains nimbine or margosine, a resinous principle, nimbidine, nimbine 0.03, nimbosterol, a volatile oil and tannin 6%. Flowers also yield a volatile oil. Leaves contain bitter substance in lesser quantity but is more soluble in water in comparison to solubility of bark bitter substance.

Taddy or sap contains bitter substance, glucosen, glucose, colouring matter, gum protedes and ash. Ash contains potassium, iron, aluminium, calcium and carbon dioxide.

Seeds yield fixed oil upto 40 per cent which is known as margosa oil.

Margosa oil contains bitter substance, oleic acid 49-61%, linoleic acid 2-1/5%, palmitic acid 12-15%, stearic acid 14-23% etc. and nimbosterol and other contents.

### **Pharmacodynamics**

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

### **Properties and action**

Karma	: Kanḍūghna-kuṣṭhaghna Jantughna-saṅkramāṇanirodhaka- pūtiḥara Dāhapraśamana Vraṇapācana-vraṇaśodhana- vraṇaropāṇa Vedanāsthāpana Rocana-grāhī Yakṛduttejaka
-------	--

	Kṛmighna Raktaśodhaka Śotha Kaphaghna Garbhāśayottejaka Āmapācana Jvaraghna-viṣamajvaraghna Balya Cakṣusya Viṣaghna Śramahara Trṣṇānigrahaṇa Mehaghna Pittaśāmaka Keśya Dantya-mukhdourgandhyahara Jvaraghna Rasāyana.
<b>Roga</b>	: Kanḍū-kuṣṭha-tvagvikāra kṣudraroga Vraṇa-granthi-vidradhi-apacī- nādīvraṇa-gaṇḍamālā Visphoṭa-visarpa Śitapitta-udarda-koṭha Keśa vikāra-khālitya-pālitya Aruci-hṛllāsa-vamana (chardi)- grahaṇī-vibandha Yakṛdvikāra Kṛmiroga Amlapitta-ūrdhvag amlapitta- kaphapaittika chardi Arṣa-raktārsa Raktavikāra-raktaduṣṭijanita vikāra Upadamśa-phiraṅga Prameha-madhumeha-surāneha Balya Jvara-viṣamajvara Netraroga-nestrābhiṣyanda

Kaṣṭaprasava-sūtikāroga  
 Kāsa-śvāsa  
 Dantaroga  
 Yoniroga.

### **Therapeutic uses**

The drug Nimba (*Azadirachta indica A. Juss.*) is anthelmintic, antiseptic, bitter, deodorant, diuretic, emmenagogue and febrifuge. It is used in blood disorders (impurities), consumption and eye diseases. Drug is useful in intermittent fevers as well as persistant low fever, leprosy, scrofula, skin diseases, ulcers and wounds. The active principle Nibmidin from the bark and the oil was found useful in tropical eosinophilia.

Nimba is chiefly used in several skin affections (tavgdoṣa and kṣudra roga); the bath with water boiled with leaves (nimba patra snāna) is most common and effective measure for treating the skin diseases. Leaves paste is applied to boil, ulcers, abscess, glandular inflammation and other similar ailing conditions. In sinus (nādīvraṇa) and scrofula (apaci), the Nimba varti is applied made with oil of Nimba. Oil is applied in rheumatic joint swelling and other diseases. Seeds are ground and applied to hairs head for destroying sira krmi (yüka-likṣa etc.). In greying of hairs (pālitya) and khālitya, a snuff of seed-oil is recommended. Leave juice or its foam is suggested to be applied over affected body part.

The seed-oil (nimba taila) is used in diabetes (madhu-meha). Nimba taila picu is suggested to be kept into vagina during coitus (sambhoga-maithuna) for avoiding conception which is a local contraceptive with promising results and effective administration carrying base of classical texts as well as pharmacological and biological, and experimented support with the trials on couple subjects, adopting contraceptive measure of Nimba tail application and showing encouraging reports of action as an antifertility drug.

The seeds powder is given in suerperal diseases (sūtikāroga) and also in painful or difficult delivery

(kaṣṭaprasava). The bark juice or decoction is given in cough (kāsa). Bark is given in fevers especially malarial and periodic fevers. The diseases caused by blood impurity, syphilis and gonorrhoea are treated with Nimba.

Bark juice mixed with honey is given in vomiting, aruci, grahaṇī, worms and liver disorders, Nimba is recommend in amlapitta (hyper acidity and peptic ulcer) and kaphapittaja chardi. Seeds are given for eradicating pile or haemorrhoids (as arśoghna drug) as an effective remedy. Seeds are also given in constipation.

Almost all the parts of Nimba (tree) are medicinal and used as preventive as well as curative remedies for a large number of diseases through a wideranging recipes and formulations prepared and administered externally and internally with suitability and clinical requirement out of rich therapeutics employing Nimba in medical systems and traditions including tribal herbal practices. Nimba is common, dependable and convinient household medicine, health protactor and useful plant remedy among folks and also urban peoples.

The wide ranging, multifarious and polyutility of Nimba makes it most popular and creditable plant source in environment, pollution, drugs, health care, cosmetics, insecticides, industry, pesticides, manures, plantation and various fields which practically support Nimba occupying leading place and separate identity nowadays.

### **Parts used**

All parts : leaves, flowers, fruits (seeds), bark, stem, branches, etc. (pañcanibma-nimba pañcāṅgam, śalāka, nīrā etc.).

### **Dose**

Juice 10-20 ml., Decoction 50-100 ml., Oil, 5-10 drops.

### **Formulations (yoga)**

Nimbādi cūrṇa, Pañcanimba cūrṇa, Pañcatikta pānaka, Nimbāriṣṭa, Nimbaharidrākhaṇḍa, Arśoghni vaṭī, Nimbādi ghṛta.

**Groups (gāṇa)**

Kaṇḍūghna, Tiktashandha (Caraka Saṁhitā), Āragvadhādi, Guḍūcyādi, Lākṣādi (Suśruta Saṁhitā).

## A. KAIDARYA

**Botanical name**

*Murraya koenigii* Spreng. syn. *Bergera Koenigii* Linn.

**Family : Rutaceae****Description**

A small pubescent tree with a short trunk and a close shady crown; leafless during short time in the hot season, all parts with a powerful peculiar smell. Leaflets 11-25 from an oblique base ovate-lanceolate, 1 in. long. Flowers white, in terminal corymbose panicles. Ovary 2-celled, style short, cylindrical. Fruits 1/2 in. diam. black rugose.

**Distribution**

Plant occurs in outer Himalaya, from the Ravi eastward, ascending to 5,000 ft. Assam, Chittagong, Burma, Upper and lower. Evergreen and deciduous forests of the Peninsula often as underwood.

***Murraya exotica* Linn.**

A large shrub or small tree, evergreen youngest parts pubescent. Bark ash-grey, wood white, close-grained, resembling boxwood. Leaflets usually 5-7 quite glabrous, shining, 1-3 in long. Flowers campanulate, 1 in. long, white, fragrant, in short axillary and terminal corymbs. Ovary linear, 2-celled, style filiform, stigma capitate. Berries 1/2 in. long, red, acuminate at both ends, 2-seeded.

**Flowering and fruiting time**

Plant flowers during the period from March to September, and fruiting stage begins afterwards.

**Distribution**

Plant occurs in outer Himalaya from the Jumna eastward, ascending to 4,500 ft. Assam, Burma, Upper and lower Satpura range. Hills of the Peninsula.

Gendhla, Gandhela, Karhinim, Karhipatta, Kathnim (Hindi); Kariberu (Kan.); Kare paku (Tel.) are regional names of *Murraya Koenigii* Spregn. Curry Leaf Tree.

Karinim, Marchula (North-west); Bilyar (U.P. Doon valley); Otali (Kol.); Karcpara (Tel.); Konji (Tam.); Thanatka (Burm.) are regional names of *Murraya exotica* Linn. syn. *Murraya paniculata* (Linn.) Jacq. Orange Jasmine Tree.

## B. MAHĀNIMBA

**Botanical name :** *Melia azedarach* Linn.

**Family :** Meliaceae

### Description

A medium-sized deciduous tree, young shoots and inflorescence sparsely clothed with deciduous stellate hairs; heartwood light-red; annual rings marked by of a large vessels.

Pinnac 3-4 pair, more or less opposite. Leaflets 3-12, ovate-lanceolate, more or less, deeply serrate, sometimes lobed.

Flowers lilac, with a strong honey-scent. Staminal tube purple, 1/3 in. long, teeth linear; anthers glabrous, shorter than or long as teeth. Stigma clavate 5-toothed.

Drupe yellow when ripe, 1/4 in. long.

### Flowering and fruiting time

Plant flowers in March-May and fruiting in cold season. Leafless in December-March.

### Distribution

It is cultivated and naturalised throughout India and Burma. It stands more cold than *Azadirachte indica* Linn. (Nimba).

Plant occurs in lower regions in Himalaya at 2,000-3,000 feet altitude (602-914.4 meters) normally and it may ascend to higher elevation. It is found in Kashmir, Southern India and various other regions in India. It also grows in Afghanistan, Persia and China.

### **Chemical composition**

The active and potent principle of plant drug is a non-crystalline, yellowish, bitter and resinous substance. It contains sugar. Outer portion of bark contains tannin. Inner bark is potent part of the plant. Fruits contain a toxic constituent. Besides an antipyretic bitter principle margosin is yielded which is alike Azadirachta indica Linn. (Nimba). Fixed oil of fruit-kernel (seed) contains sulphur and seeds (kernel) oil is similar to Margosa oil or Nimba taila (oil of seeds of Azadirachta indica Linn.)

### **Pharmacodynamics**

Rasa	: Tikta, kaṭu, kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Anuṣṭha
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśamaka Vātaśamana

### **Properties and action**

Karma	: Arśoghna Kuṣṭhaghna Kṛmighna Raktaśodhana Kaṭupouṣṭika-balya (lower dose) Garbhāśaya saṅkocaka Pramehaghna
Roga	: Arśa Kuṣṭha-tvagvikāra Raktaduṣṭijanya vikāra Prameha Jvara

### **Therapeutic uses**

#### **A. Kaidarya**

The leaves of *Murraya paniculata* (Linn.) Jacq. are reported to possess antibacterial (antibiotic) activity against *Micrococcus poyogenes* and *Escherichia coli*.

The drug Kaidarya is also named as miṣṭanimba (or mithaneem or karpineem) which is obtained from the plant *Murraya koenigii* Spreng, especially leaves; its various

parts such as leaves, fruits, roots and bark are medicinally useful. The leaves are extensively employed as flavouring in curries and chutneys; the leaves are commonly mixed, fried and used in various food articles and dietary regimens in some regions of country in particular.

The leaves, root and bark of Kaidarya are, in general, considered tonic, stomachic and carminative. Leaves are used orally in dysentery and diarrhoea, and also for checking vomiting. Leaves are topically applied on bruises and eruptions. The juice of the root is taken to relieve pain associated with kidney. The fruits are edible.

The leaves, rootbark and twigs are also medicinally useful of this plant.

### B. Mahānimba

The drug Mahānimba is also named as ramyaka and dreka, (Bakain or mahaneem) which is obtained from *Melia azedarach* Linn., especially roots, fruit, leaves and bark having medicinal utility.

Mahānimba is anti-haemorrhoidal (arśoghna) herbal agent, with anthelmintic, analgesic, antidermatosis, wound healing, carminative, astringent, haemostatic, blood purifying, acbolic, febrifuge, bitter tonic and poison countering and germicidal properties.

The root bark is given in sciatica. It is used in piles, worms (round worms), cough, asthma, dysmenorrhoea, prameha, eye and skin affections, leprosy, periotic fevers, poison (ratbite), general debility, blood impurities, gulma and vāta vyādhi.

**Parts used :** Root-root bark (fresh), Inner bark, Leaves, Flowers, Fruits-seeds, Seeds kernel oil.

### Dose

Seeds powder 1/2-1 gm., Bark 6 gm. - 12 gm., Bark decoction 30 gm. - 60 gm., Leaves juice 12 gm. - 24 gm., Leaves powder 2 gm. - 4 gm.

## NIMBA ( निम्ब )

निम्बस्तिक्तः कटु पाके लघुः शीतोऽग्निवातकृत् ॥

ग्राह्यहृदो जयेत् पित्तकफमेहज्वरकृमीन्।  
कुष्ठकासारुचिश्वासहल्लासश्वयथुव्रणान् ॥

*Kaiyadeva Nighantu, Oṣadhi varga, 879-880.*

### निम्बप्रवालम् (कोमलपत्रम्)

ग्राहि प्रवालं निम्बस्य रक्तपित्तकफकृमीन्।  
कुष्ठघ्रं वातजननं नेत्ररोगान् विनाशयेत्॥

*Kaiyadeva Nighantu, Oṣadhi varga, 881.*

### निम्बपत्रम्

‘तद्वत् पत्राणि निम्बस्य व्रणधानि विशेषतः।’

*Kaiyadeva Nighantu, Oṣadhi varga, 881-882.*

### निम्बपत्रस्य शलाका:

शलाका निम्बपत्रस्य कासश्वासविनाशिनी।  
कृमिन्ना तु वरिष्ठाः स्यात् कुष्ठज्वरविनाशिनी॥

*Kaiyadeva Nighantu, Oṣadhi varga, 882-882.*

### निम्बपुष्पम्

चक्षुष्यं निम्बपुष्पञ्च कृमिपित्तविषप्रणुत्।  
वातलं कटुपाकं स्यात् सर्वारोचकनाशनम्॥

*Kaiyadeva Nighantu, Oṣadhi varga, 883-884.*

### निम्बफलम्

फलं तिकं रसे पाके कटुकं भेदनं लघु॥  
अरूक्षमुष्णं कुष्ठघ्रं गुल्मार्शःकृमिमेहनुत्।

*Kaiyadeva Nighantu, Oṣadhi varga, 884-885.*

### निम्बपक्वफलम्

निम्बस्य पक्वं मधुरं सतिकं स्त्रिधं फलं शोणितपित्तरोगे।  
कफे प्रशस्तं नयनामयघ्रं क्षतक्षयघ्रं गुरु पिच्छिलञ्च॥

*Kaiyadeva Nighantu, Oṣadhi varga, 885.*

### निम्बदन्तधावनम्

‘निम्बश्च तिक्के श्रेष्ठः कषाये खदिरस्तथा।’

*Suśruta Saṃhitā, Cikitsā, 24-6.*

### निम्बबीजमज्जा

‘निम्बबीजस्य मज्जा च कृमिकुष्ठविशोधनः।’

*Kaiyadeva Nighantu, Oṣadhi varga, 886.*

### निष्पगुणाः

निष्पः शीतो लघुर्गाही कटुपाकोऽग्निवातनुत् ।

अहृद्यः श्रमतृट्कासश्वासच्चरासुचिकृमिप्रणुत् ।

ब्रणपित्तकफच्छर्दिकुष्ठहलासमेहनुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 93-94.*

### निष्पपञ्चाङ्गम्

निष्पवृक्षस्य पञ्चाङ्गं रक्तदोषहरं मतम् ।

पित्तं कण्डूं ब्रणं दाहं कुष्ठं चैव विनाशयेत् ॥

*So. Vi.*

### निष्पस्य पत्रफलयोर्गुणाः

क. निष्पपत्रं स्मृतं नेत्रं कृमिपित्तविषप्रणुत् ।

वातलं कटुपाकञ्च सर्वारोचककुष्ठनुत् ॥

ख. निष्पफलं रसे तिर्कं पाके तु कटुभेदनम् ।

स्निग्धं लघूष्णं कुष्ठप्नं गुल्मार्शःकृमिमेहनुत् ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 95-96.*

प्रभद्रकः प्रभवति शीततिक्तकः:

कफब्रणकृमिविमिशोफशान्तये ।

बलासभिद्बहुविषपित्तदोषजिद्

विशेषतो हृदयविदाहशान्तिकृत् ॥

*Rāja Nighaṇṭu, Prabhadrādi varga, 10.*

निष्पस्तिक्तरसः शीतो लघुः श्लेष्मास्त्रपित्तनुत् ।

कण्डूकुष्ठब्रणान् हन्ति लेपाहारादिशीलितः ॥

अपक्रं पाचयेच्छोथं ब्रणं पक्रं विशोधयेत् ।

*Dhanvantari Nighaṇṭu.*

### पलिते निष्पतैलनस्यप्रयोगः

निष्पस्य तैलं प्रकृतिस्थमेव नस्तो निषिक्तं विधिना यथावत् ।

मासेन गोक्षीरभुजो नरस्य यथाग्रभूतं पलितं निहन्ति ॥

*Vṛndamādhava, 57, 93.*

*Bhaiṣajya Ratnāvalī, Cakradatta, 55-124.*

### तृष्णाचिकित्सायां निष्पप्रसवरसः

‘हितं भवेच्छर्दनमेव चात्र तसेन निष्पप्रसवोदकेन ।’

*Cakradatta, Trishṇā cikitsā, 16-10.*

## व्रणेषु कृमिनाशनार्थम्

‘लेपो हि झुनिम्बकृतोऽथवा ।’

*Bhāvaprakāśa, Cikitsā, 47-69.*

## वल्मीकरोगे निष्वत्तैलम्

*Cakradatta, 55-10.*

## योनिदृढीकरणार्थम्

प्रक्षालितं तु बहुशः पिचुमन्दतोयैः निष्वत्त्वचा तदनुनिर्मितः धूपकार्यम् ।

स्त्रीणां नितम्बकुहरं प्रविमुक्तगन्धं पैच्छिल्यदोषरहितं च भवेत् प्रगाढम् ॥

*Śodhala.*

## कुष्ठे

यः खादेदभयारिष्टे अरिष्टामलके तथा ।

स जयेत्सर्वं कुष्ठन्तु मासादूर्ध्वं न संशयः ॥

*Śodhala, Gadanigraha, 2-36-87.*

## गण्डमालायाम्

‘.....तैलेन वारिष्टभवं.....नस्यम् ।’

*Śodhala.*

## रसायने

निष्वस्य तैलं प्रकृतिस्थमेव नस्ये निषिक्तं मधुना यथावत् ।

मासेन गोक्षीरभुजो नरस्य जराग्रदूतं पलितं निहिन्ति ॥

*Śodhala.*

## कुष्ठे

यो निष्वपत्रशतमति जलेन पिष्टम्

पिष्टान्नभुक् समयमेकमृतुत्रयं ना ।

कुष्ठानि तस्य विषमानि चिरोत्थितानि

सिंहोद्धते मृगगणाः इव यान्ति नाशम् ॥

*Śodhala.*

## व्रणशोधनार्थम्

‘निष्वपत्राणि सम्पिण्य मधुना व्रणशोधनम् ।’

*Harīta Saṃhitā, Cikitsā, 35.*

## दन्तरोगे

‘क्राथश्च निष्वमूलस्य दन्तरोगनिवारणः ।’

*Harīta Saṃhitā, 3-46-14.*

## विषप्रतिकारे

‘.....निष्प्रफलानि च ।  
उष्णोदकेन पीतानि जयेयुः तत्क्षणाद्विषम् ।’

*Harīta Saṁhitā, Cikitsā, 3-56-11.*

## वातरक्ते

पटोलनिष्प्रपत्राणि क्रथित्वा मधुसंयुतम् ।  
पाचनं वातरक्तानां तथा च शमनानि च ॥  
काञ्जिकेन च सम्प्लवं पिचुमर्ददलानि च ।

## पित्तकफजनितशूलसहितीव्राम्लपित्ते पञ्चनिष्प्रशक्तुयोगः

एकोऽशः पञ्चनिष्प्रनां द्विगुणो वृद्धदारुकः ।  
शकुर्दशगुणो देयः शर्करामधुरीकृतः ॥  
शीतेन वारिणा पीतः शूलं पित्तकफोत्थितम् ।  
निहन्ति चूर्णं सक्षौद्रमम्लपित्तं सुदारुणम् ॥

*Cakradatta, Amlapitta cikitsā, 52/28-29.*

लेपनं शस्यते तस्य वातरक्तप्रशान्तये ॥

*Harīta Saṁhitā, Cikitsā, 25.*

## दूषितव्रणशोधनार्थं निष्प्रपत्रादि-शोधनकेसरीलेपः

निष्प्रपत्रं तिला दन्ती त्रिवृत्सैन्धवमाक्षिकम् ।  
दुष्टव्रणप्रशमनो लेपः शोधनकेसरी ॥

*Cakradatta, Vraṇaśotha cikitsā, 44-28.*

## पलिते निष्प्रतैलनस्यम्

निष्प्रस्य बीजानि हि भावितानि भृङ्गस्य तोयेन तथाऽशनस्य ।  
तैलन्तु तेषां विनिहन्ति नस्यादुग्धान्नभोक्तुः पलितं समूलम् ॥

*Vṛndamādhava, 57-92.*

*Cakradatta, Kṣudraroga cikitsā, 55-123.*

## सुखप्रसवार्थम्

कट्या बद्धं योषितां सत्प्रसूतिं  
कूर्यान्तूलं निष्प्रवृक्षोद्धवं वा ॥

*Rāja Mārtanḍa.*

## शिशोः ज्वरे

निष्प्रस्य पत्रं माक्षिकं सर्पियुक्तन्तु धूपनम् ।  
ज्वरवेगं निहन्त्याशु बालानान्तु विशेषतः ॥

*Baṅgasena.*

**पालित्ये**

निम्बबीजतैलम्

Śāringadhara Samhitā, 2-9-152.

**नेत्ररोगे**

शुण्ठी निम्बदलैः पिण्डः सुखोष्णः स्वल्पसैन्धवः ।

धार्याश्वक्षुषि सङ्क्षेपाच्छोथकण्डूव्यथापहः ॥

Śāringadhara Samhitā, 3-13-29.

Baṅgasena.

**कफजहद्रोगे**

‘निम्बकोषातकीभ्यां वाम्यं हृदि कफोत्थिते ।’

Baṅgasena, Hydroga, 26.

**मूत्रकृच्छ्रे**

निम्बशरीः सङ्क्षुण्णा मृत्पात्रैः सायमप्सु विनिमग्राः ।

प्रातस्ताः पुनरापः पित्तो प्रकृच्छ्रमपहन्युः ॥

Siddha Bhaisajya Maṇimāla, 4-5-38.

**कामलायाम्**

‘.....निम्बस्य वा रसः ।

प्रातर्माक्षिकसंयुक्तः शीलितः कामलापहः ॥’

Cakradatta.

**उदर्दकोठादौ**

निम्बस्य पत्राणि सदा घृतेन ।

धात्रीविमिश्रान्यथवोपयुज्यात् ॥

विस्फोटकोठक्षतशीतपित्त-

कण्डवस्त्रपित्तं सहसा च हन्यात् (जह्यात्) ।

Vṛndamādhava, 52-8.

Cakradatta, Udardkoṭhaśītāpitta cikitsā, 50-9.

**क्रिमिषु**

‘निम्बपत्रसमुद्भूतं रसं क्षौद्रयुतं पिबेत् ।’

Bhāvapratkāśa, Cikitsā, 7-24.

**पित्तज-रक्तजोपदंशचिकित्सायां निम्बादिचूर्णम्**

Cakradatta, 47-6.

**रक्तपित्ते**

पटोलनिम्बवेत्राग्रप्लक्षवेतसपल्लवाः ।

शाकार्थं शाकसात्प्यानां...हिताः ॥

*Bhāvaprakāśa, Cikitsā, 9-98.*

**कुष्ठरोगचिकित्सायां पञ्चनिष्ठकावलेहम्**

*Bhāvaprakāśa, Kuṣṭharogādhikāra, 54/64-63.*

**कुष्ठे**

‘....निष्ठपटोलस्य..... ।

इति षट् कषायोष्णाः कुष्ठघ्नाः निर्दिष्टाः.... ।

.....स्नाने पाने च मताः ।’

*Caraka Samhitā, Cikitsā, 7.*

**दाहज्वरे**

मधुफाणितयुक्तेन निष्ठपत्राभ्यसाऽपि वा ।

दाहज्वरार्त्तं मतिमान् वामयेत् क्षिप्रमेव च ॥

*Suśruta Samhitā, Uttara, 39-282.*

**कफजतृष्णायाम्**

‘हितं भवेच्छर्दनमेव चात्र तत्सेन निष्ठप्रसादोदकेन ।’

*Suśruta Samhitā, Uttara, 48.*

**सुरामेहे**

‘सुरामेहिनं निष्ठकषायम् ।’

*Suśruta Samhitā, Cikitsā, 11-9.*

**पद्मिनीकण्टके वमनार्थं निष्ठोदकम्**

निष्ठोदकेन वमनं पद्मिनीकण्टके हितम् ।

निष्ठोदककृतं सर्पिः सक्षौद्रं पानमिष्यते ॥

**अरुंषिकायाम्**

‘अरुंषिकाहते रक्ते सेचयन्निष्ठवारिणा ।’

*Suśruta Samhitā, Cikitsā, 20-27.*

**जातसत्त्वे कुष्ठे**

‘निष्ठक्वार्थं जातसत्त्वः पिबेद्वा ।’

*Suśruta Samhitā, Cikitsā, 9.*

**पद्मिनीकण्टके**

‘निष्ठारग्वधयोः क्वाथो हित उत्सादने भवेत् ।’

*Suśruta Samhitā, Cikitsā, 20.*

## खालित्ये पालित्ये च

‘मासं वा निष्प्रजं तैलं क्षीरभुक् नावयेद् यतिः ।’

*Aṣṭāṅga Hṛdaya, Uttara, 24-34.*

## कुष्टे निष्प्रव्याथस्य बहुविधप्रयोगाः

‘....निष्प्रखदिराश्च ।

स्वाने पाने लेपे क्रिमिकुष्टनुत् सगोमूत्रः ।’

*Caraka Saṃhitā, Cikitsā, 7-158.*

## कफजप्रदरे

‘मद्यैनिष्प्रगुदूच्यौ वा कफजेऽसृग्दरे पिबेत् ।’

*Caraka Saṃhitā, Cikitsā, 30-99.*

## नेत्रप्रकोपशमनाय निष्प्रपत्रगुटिकाप्रयोगः

पिष्टैनिष्प्रस्य पत्रैरतिविमलतरैर्जातिसिन्धूथमिश्रा  
अन्तर्गर्भं दधाना पटुतरगुटिका पिष्टलोधेन भृष्टा ।  
तूलैः सौवीरसान्द्रैरतिशयमृदुभिर्वैष्टिता सा समन्ता-  
च्यक्षुकोपप्रशान्तिं चिरमुपरि दृशोभ्राम्यमाणा करोति ॥

*Cakradatta, Netraroga cikitsā, 59-35.*

## उन्मादे निष्प्रादिधूपः

*Cakradatta, Unmāda cikitsā, 20-48.*

## उग्रगलितकुष्टे

प्रपतन्तु लसीकाप्रस्तुतेषु गात्रेषु जन्तुजाधेषु ।  
मूत्रं निष्प्रविडङ्गे स्नानं पानं प्रदेहश्च ॥

*Caraka Saṃhitā, Cikitsā, 7-157.*

## सर्वकुष्टे पञ्चनिष्प्रचूर्णम्

*Cakradatta, 50/74-83.*

## कुष्टेषु निष्प्रघृतम्

‘.....निष्प्रघृतं.... ।

कुष्टेषु रक्तपित्तप्रबलेषु भिषण्जितं सिद्धम् ॥’

कुष्टादयाः चिकित्सार्थं तिक्तषट्पलकं घृतम् ।

*Caraka Saṃhitā, Cikitsā, 1-135.*

*Cakradatta, Kuṣṭha cikitsā, 50/93-97.*

## रक्ताशें प्रतिसारणम्

‘....निष्प्रघृताभ्यां..... ।

दाहे क्लेदे च गुद्रभंशे गुदजाः प्रतिसारणीयाः स्युः ॥’

*Caraka Saṃhitā, Cikitsā, 221.*

**कामलायां प्रातः कालिकयोगम्**

‘...निष्पत्त्य वा रसम्।

शीतं मधुयुतं प्रातः कामलार्तः पिबेत्रः ॥’

*Caraka Saṁhitā, Cikitsā, 16-63.*

**व्रणशोधनरोपणार्थं**

लेपान्निष्पदलैः कल्को व्रणशोधनरोपणः ।

भक्षणाच्छर्दिमन्दाग्निपित्तश्रेष्ठकृमीन्हरेत् (कृमीन् जयेत्) ॥

व्रणा निष्पदले वर्त्या सूक्ष्मान् हि सन्धिमर्मजान् ॥

*Sārṅgadhara Saṁhitā, 2-5-5,*

*Bhāvaprakāśa, Vraṇaśothādhikāra, 47-60.*

**ब्रणे निष्पादिधूपनम्**

निष्पत्त्रवचाहिङ्गुसर्पिलवणसर्षपैः ।

धूपनं स्याद् ब्रणे रूक्षकृमिकण्डूरुजाऽपहम् ॥

*Bhāvaprakāśa, Madhyakhanda, 47-70.*

**पद्मिनीकण्टके निष्पादिधृतम्**

चतुर्गुणेन निष्पोत्थपत्रक्वाथेन गोधृतम् ।

पचेत्ततस्तु निष्पत्त्य कृतमालस्य पत्रजैः ॥

कल्कैर्भूयः पचेत्सिद्धं तत्पिबेत्पलसम्मितम् ।

पद्मिनीकण्टकाद्रोगान्मुक्तो भवति नान्यथा ॥

*Bhāvaprakāśa, Kṣudrarogādhikāra, 141-142.*

**योनि ( पूययुक्त ) रोगे योनिशोधनार्थम्**

योन्यां तु पूयस्त्राविण्यां शोधनद्रव्यनिर्मितैः ।

सगोमूत्रैः सलवणैः पिण्डैः सम्पूरणं हितम् ॥

*Bhāvaprakāśa, Yonirogādhikāra, 70-42.*

**व्रणशोधनरोपणार्थं निष्पत्त्रादिवर्त्तिः**

निष्पत्त्रधृतक्षौद्रदार्वामधुकसंयुता ।

वर्त्तिस्तिलानां कल्को वा शोधयेद्रोपयेत् व्रणान् ॥

*Cakradatta, 44-35.*

**कुष्ठोपचारार्थं निष्पत्त्रासेवनम्**

यः खादेदभ्याऽरिष्टमरिष्टमालकानि वा ।

स जयेत् सर्वकुष्ठानि मासादूध्वं न संशयः ॥

*Cakradatta, 50-64; Śodhala, 2-36-37.*

योनिविकारे

प्रक्षालितं तु बहुशः पिचुमन्दतोयैः निष्कृत्वचा तदनुनिर्मितधूपकार्यम् ।  
स्त्रीणां नितम्बकुहरं प्रविमुक्तगन्धं पैच्छिल्यदोषरहितञ्च भवेत् प्रगाढम् ॥

*Gadanigraha, 6-9-14.*

विषप्रतिषेधे

मयूरं निष्कृपत्राभ्यां खादे मेषगते रवौ ।  
अब्दमेकं न भीतिः स्याद् विषार्तस्य न संशयः ॥

*Vṛndamādhava, 68-2.*

स्तन्यशोधने

निष्कृवेत्राग्रकुलकवार्ताकामलकैः शृतान् ।  
सव्योषसैन्धवान् यूषान् दापयेत् स्तन्यशोधनम् ॥

*Caraka Saṃhitā, Cikitsā, 30-259.*

नेत्ररोगे निष्क्व:

लौहस्य पात्रे सङ्घृष्टो रसो निष्कृफलोद्धवः ।  
किञ्चिद् घनो बहिर्लेपानेत्रबाधां व्यपोहति ॥

*Śāringadhara Saṃhitā, 3-13-35.*

निष्कृपत्रैः कृतं चूर्णं लोध्रचूर्णसमन्वितम् ।  
वस्त्रबद्धं जले क्षिं पूरणं नेत्ररोगनुत् ॥

*Baṅgasena, Netraroga, 117.*

ब्रणे

‘निष्कृकोलकपत्राणि कषायाः शोधना मताः ।’

*Caraka Saṃhitā, Cikitsā, 25-84.*

निष्कृपत्रमधुभ्यां तु युक्तः संशोधनः स्मृतः ।  
पूर्वाभ्यां सर्पिषा चापि युक्तश्चाप्युपरोपणः ॥

*Sūśruta Saṃhitā, Cikitsā, 1-68.*

पूर्वाभ्यां सर्पिषा चापि युक्तश्चाप्युपरोपणः ।  
निष्कृपत्रतिलैः कल्पको मधुना ब्रणशोधनः ।  
रोपणः सर्पिषा युक्तो यवकल्पेऽप्ययं विधिः ॥

*Vṛndamādhava, 44-28.*

पदमिनीकण्टके

‘निष्कृदककृतं सर्पिः सक्षौद्रं पानमिष्यते ।’

*Vṛndamādhava, 57-20.*

निष्पारगवधयोः कल्को हित उत्सादने भवेत्।

*Suśruta Samhitā, Cikitsā, 20.*  
*Aṣṭāṅga Saṅgraha, Uttara, 37-6.*  
*Vṛndamādhava, 57-20.*

### त्वक्रोगे

धत्तूरनिष्पत्ताम्बलीपत्राणां स्वरसैः पृथक् ।

अस्य प्रलेपमात्रेण पामाद्रद्रुविचर्चिकाः ॥

कण्डूश्च रक्सश्चैव प्रशमं यान्ति वेगातः ॥

*Śāringadhara Samhitā, 3-52-53.*

### दाहे

बदरीपलवोत्थश्च तथैवारिष्टकोद्धवः ।

फेनिलायाश्य यः फेनस्तैर्दहलेपनं शुभम् ॥

*Caraka Samhitā, Cikitsā, 14-160.*

‘तृइदाहमोहाः प्रशमं प्रयान्ति

निष्प्रवालोस्थितफेनलेपात् ।’

*Vaidya Jivanam, 1-28.*

### अम्लपित्ते

एकोऽशः पञ्चनिष्पानां द्विगुणो वृद्धदारुकः ।

सकुर्दशगुणो देयः शर्करामधुरीकृतः ॥

शीतेन वारिणा पीतं शूलं पित्तकफोदभवम् ।

निहन्ति चूर्णं सक्षोद्रमम्लपित्तं सुदुस्तरम् ॥

*Vṛndamādhava, 53-18-19.*

### शोथे

निष्पाङ्कोटोरुबुकानां तकार्याः कुटजस्य च ।

नक्तमालस्य वैशम्यं पत्रक्वाथोऽवगाहनः ॥

*Kāśyapa Samhitā, p. 344.*

### कुष्ठे

यो निष्पत्रशतमत्ति जलेन पिष्टं पिष्टनभुक् समयमेकमृतुत्रयं वा ।

कुष्ठानि तस्य विषमानि सिंहोद्धते मृगगणा इव यान्ति नाशम् ॥

*Gadanigraha, 2-36-99.*

पञ्चनिष्पचूर्णम् ।

*Vṛndamādhava, 51-60/68.*

## रक्ताशार्सि

मूलकमुत्कीर्यं महत्तत्र पिधाय पिचुमन्दमज्जानम् ।

पुटपाकरीतिपक्वं पिष्ठा गुटिकीकृतं निहन्त्यर्थः ॥

*Siddha Bhaisajya Maṇimālā, 4-238.*

**ज्वरे**

धृतं निम्बस्य पत्राणि मूलं पुष्टं फलं त्वचम् ।

अरिष्टो नाम धूपोऽयमरिष्टं कुरुते क्षणात् ॥

*Kāśyapa Saṃhitā, p. 171.*

## A. KAIDARYA ( क. कैडर्य )

कैडर्योऽन्यो महानिम्बो रामणो रमणस्तथा ।

गिरिनिम्बो महारिष्टः शुक्लशालः कफाह्यः ॥

*Rāja Nighaṇṭu, Prabhadrādi, 17.*

‘कैटर्यः’

*Caraka Saṃhitā, Sūtra, 4-10.*

‘कैडर्यः’

*Suśruta Saṃhitā, Cikitsā, 18-22.*

## B. MAHĀNIMBA ( ख. महानिम्ब )

महानिम्बो मदोद्रेकः कार्मुकः केशमुष्टिकः ।

काकाण्डो रम्यकोऽक्षीरो महातिकोऽहिमद्वुमः ॥

*Rāja Nighaṇṭu, Op. Cit., 11.*

**महानिम्बगुणाः**

महानिम्बोहिमः रूक्षस्तिक्तो ग्राही कषायकः ।

कफपित्तमस्त्वच्छर्दिकुष्ठहल्लासरक्तजित् ॥

प्रमेहश्वासगुल्मार्शोमूषिकाविषनाशनः ।

*Bhāvaprakāśa Nighaṇṭu.*

महानिम्बस्त्वशिशिरः कषायः कटुतिक्तकैः ।

अस्त्रदाहबलासध्नो विषमज्वरनाशनः ॥

*Rāja Nighaṇṭu, Op. Cit., 12.*

**नेत्ररोगे**

महानिम्बफलोद्धूता पिण्डी वा पित्तनाशिनी ।

*Śāringadhara Samhitā, 3-13-26.*

**गृध्रसी**

बृहन्निम्बतरोर्मूलं वारिणा परिपेषिता ।

तद् पीतं नाशयेत् क्षिप्रमसाध्यामपि गृध्रसीम् ॥

*Gadanigraha.*

**वातव्याधौ**

रम्यकघृतम् ।

*Sūrṣuta Samhitā, Cikitsā, 4-27.*

‘महानिम्बजटाकल्को गृध्रसीनाशनः स्मृतः ।’

*Śāringadhara Samhitā, 2-5-6.*

बृहन्निम्बतरोः सारो वारिणा परिपेषितः ।

स पीतो नाशयेत् क्षिप्रमसाध्यामपि गृध्रसीम् ॥

*Bhāvaprakāśa, Cikitsā, 24-141.*

**प्रमेहे**

महानिम्बस्य बीजानि पिण्डा षट्सम्मितानि च ।

पलतण्डुलतोयेन घृतनिष्कद्वयेन च ॥

एकीकृत्य पिबेच्चानु हन्ति मेहं चिरन्तनम् ॥

*Śāringadhara Samhitā, 2-12, 205-206.*

**क्रिमिरोगे**

महानिम्बस्य पत्राणां रसो हि पलमानतः ।

पानात् क्रिमिभवं दोषं सद्यो हन्ति च निश्चितम् ॥

*Vaidya Vallabha, 5-14.*

**अशार्द्धसि**

‘लवणोत्तम....महापिचुमन्द्युतान् ।’

*Aṣṭāṅga Hṛdaya, Cikitsā, 8-161.*

## NIMBUKA

**Botanical name**

Citrus aurantifolia (christm.) Swingle.,

Syn. Citrus medica var. acida watt., Limonia aurantifolia Christon.

**Family :** Rutaceac

**Classical name :** Nimbūka

**Sanskrit names**

Nimbūka, Nimbū.

**Regional names**

Nibu, Nimbu, Kagaji nibu (Hindi); Kagazi lebu, Patinembu (Beng.); Limbu, Kagaji limbu (Mar.); Limu, Limun (Da.); Limu (Arabic); Limu, Lumu-e-kagaji (Pers.); Lime (Eng.).

**Description**

Small trees, 3-6 meters tall, with stout, stiff thorns. Leaves unifoliolate, pale green, oblong to elliptic, ovate. Flowers solitary or clustered in the axil, white or pinkish outside. Fruits globose with thin rind, yellow when ripe pulp pale, very sour not mamillate.

**Flowering and fruiting time**

It bears flowers and fruits during the period from July to June.

**Distribution**

It is planted almost throughout India. Grown in gardens for popularly edible fruits (lime).

**Chemical composition**

Fruit juice contains citric acid 7-10%, phosphoric acid, malic acid, sugar and other constituents. Pericarp (fruit rind) yield an volatile oil, a bitter glucoside, hesperidin (particularly in white portion of rind).

Lime fruit (juice) contains Vitamin C in high quantity.

**Pharmacodynamics**

Rasa	: Amla
Gunā	: Tīkṣṇa, laghu
Vīrya	: Uṣṇa-anuṣṇa
Vipāka_	: Amla
Doṣakarma	: Kaphavātanāśana

**Properties and action**

Karma	: Rocana-dīpana-pācana
-------	------------------------

Anulomana-pittasāraka  
 Trṣṇānigrahaṇa  
 Mukhaśodhana-sugandhi  
 Chardinigrahaṇa-utkleśahara  
 Arśoghna  
 Raktaśodhaka  
 Mūtrala  
 Svedajanana  
 Jvaraghna  
 Cakṣuṣya  
 Hṛdyā  
 Viṣaghna  
 Kṛmighna  
 Śoṣahara  
 Varṇya  
 Santarpaṇa

**Roga** : Aruci-agnimāndya-bhaktadveṣa  
 Ajirṇa-ānāha-ādhmāna-visūcikā  
 Chardi-utkleṣa-hṛllāsa  
 Udaravikāra-viṣṭambha-vibandha  
 Arṣa-baddha-gudodara  
 Raktapitta  
 Pittavikāra  
 Dāha-trṣṇā  
 Vātaghna  
 Mūtravikāra-mūtrakṛcchra  
 Pāṇḍu-kāmalā-yakṛdvikāra  
 Jvara  
 Raktadoṣa-Raktavikāra  
 Viṣa-garaviṣa  
 Kṛmiroga  
 Śoṣa.

### Therapeutic uses

The drug Nimbūka is anthelmintic, appetizer, astringent, refrigerant and tonic. It is used in anorexia, cough, rheumatism, vomiting and weak eye-sight. The juice is traditionally given as effective anti-dehydration agent in actions helpful in the ailing conditions and abnor-

malities in human body in accordance to pharmacological consideration in Indian medicine.

The fruit-juice has high content of vitamin C and it is anti-scorbutic properties. It is highly acidic, but it allays or pacifies pitta humor (pitta doṣa śāmaka). Nimbūka (kagaji nibu) has higher content of citric acid than Jambira (Jambiri nibu). Nimbūka is very popular fruit of sour or acidic taste which is most commonly used in food, diet and employed in a number of dishes and preparations of household utility (including achār, salād etc.) mainly its acid juice is of multipurpose used in cooking and eating variously. On the other hand, the fruit of lime (nimbu ka phala) is highly medicinal and frequently used in medicine in various forms and recipes on account of its medicinal potentialities. Lime juice (nimbu ka svaraṣa) has preventive as well as curative effects as its normal and constant use in different modes is health protective, prophylactic of certain seasonal and other ailments; and its administration in therapeutics is variously made as a single drug as well as an ingredient or adjuvant of several traditional recipes and formulations of classical importance. In addition, the lime juice (nimbu ka svaraṣa) is employed as bhāvanā dravya in preparation of some drug formulations and it is used in śodhana, māraṇa-bhasmīkaraṇa and some other pharmaceutical processes (under rasaśāstra and bhaiṣajya kalpanā). Besides wide ranging utility of lime (nimbu ka) in health, diet and disease, it is utilised for cosmetic purposes.

**Part used :** Fruit, seeds, rind.

**Dose**

Juice 3-6 gm.; 6-12 gm., Seeds and Rind 0.5-1 gm.,  
Fruit edible.

## NIMBŪKA ( निम्बूक )

निम्बूकं निम्बुकं चान्यद् राजशब्दादिपूर्वकम् ।  
निम्बूकमम्लं वातग्रं दीपनं रुचिवर्धनम् ॥  
गररोगविषघ्वंसि कफोत्कलेशि च पित्तलम् ।

शर्कराचौरराजाख्यं निष्ठूकं मधुरं गुरु ॥  
 वातपित्तसपिच्छर्दिरुष्णाशोषहरं परम् ।  
 चौरं स्वादु कषायाम्लं रुक्षं गुर्वास्यशोधनम् ॥  
 विशदं रोचनं हृदयं शीतलं ग्राहि वातलम् ।  
 छर्दस्तकफपित्तम् विष्टम्भाशर्देविबन्धनुत् ॥

*Kaiyadeva Nighantu, Osadhi varga, 327-330.*

### निष्ठूकफलम्

निष्ठूफलं प्रक्षितमम्लरसं कटूष्णं  
 गुल्मामवातहरमग्निविवृद्धिकारि ।  
 चक्षुष्यमेतदथ कासकफार्तिकण्ठ-  
 विच्छर्दिहारि परिपक्वमतीव रुच्यम् ॥

*Rāja Nighantu, Āmrādi varga, 174.*

निष्ठूः स्त्री निष्ठूकं क्लीबे निष्ठूकमपि कीर्तितम् ।

निष्ठूकमम्लं वातलं दीपनं पाचनं लघु ॥

*Bhāvaprakāśa Nighantu, Āmrādiphala varga, 136.*

### अन्यच्च

निष्ठूकं कृमिसमूहनाशनं तीक्ष्णमम्लमुदरग्रहापहम् ।  
 वातपित्तकफशूलिने हितं कष्टनष्टरुचिरोचनं परम् ॥  
 त्रिदोषवहिक्षयबालरोग-निपीडितानां विषविह्लानाम् ।  
 मन्दानले बद्धगुदे प्रदेयं विषूचिकायां मुनयो वदन्ति ॥

*Bhāvaprakāśa Nighantu, Āmrādiphala varga, 137-138.*

### मिष्टनिष्ठूफलम्

मिष्टनिष्ठूफलं स्वादु गुरु मारुतपित्तनुत् ॥  
 गलरोगविषध्वंसिकफोत्क्लेशि च रक्तहृत् ।  
 शोषारुचितृषाच्छर्दिहरं बल्यञ्च बृंहणम् ॥

*Bhāvaprakāśa Nighantu, Āmrādiphala varga, 139-140.*

मधुरो मधुजम्बीरः शिशिरो वातपित्तजित् ।

शोषघ्रसन्तर्पणो वृद्ध्यः श्रमघ्नः पुष्टिकारकः ॥

*Dr. Gu. Vo.*

तृष्णाशूलकफोत्क्लेशिच्छर्दिश्वासनिवारणम् ।

वातश्रेष्ठविबन्धनं जम्बीरं गुरु पित्तलम् ॥

*Dhanvantari Nighantu.*

रोचनो दीपनः तीक्ष्णः सुगन्धिः मुखबोधनः ।

जम्बीरः कफवातघ्रः कृमिप्रो भुक्तपाचनः ॥

*Caraka Samhitā, Sūtra, 27-161.*

अम्लपित्ते

‘जम्बीरस्वरसः पीतः सायं हन्त्यम्लपित्तकम् ।’

*Cakradatta.*

घृतस्य परिपाकाय

‘घृतस्य परिपाकाय जम्बीरस्य रसो हितः ॥’

*Bhāvaprakāśa.*

मसूरिकाप्रादुर्भावे

‘जम्बीरनीरपरिपीतगुडं नराणाम्  
आरम्भकालसमग्रेषु मसूरिकार्त्तिम् ।  
सद्यः शामं नयति गोपयसा प्रभाते..... ॥’

*Vaidya Manoramā.*

कर्णशूले

जम्बीरनीरभृततेलमपि प्रशस्तम्  
कर्णे सशूलिनि रहस्य पराङ्मुखे च ॥

*Vaidya Manoramā.*

## NIRGUNDI

**Botanical name :** Vitex negundo Linn.

**Family :** Verbenaceae

**Classical name :** Nirgundi

**Sanskrit names :** Nirguṇḍī, Sinduvāra, Sinduka.

**Regional names**

Samhalu, Meurhi (Hindi); Sevai (Kumaon region, U.P.); Son-i (Jaunsar, U.P. hills); Shimalu, Samalu, Chhatimal, Nishinda (U.P. hills, Garhwal); Nigad, Nirgundi (Mar.); Nagad, Nagod (Guj.); Nishinda (Beng.); Tellavavili (Tel.); Nouchi (Tam.); Indrani (Mal.); Bailnekki (Kann.); Aslak (Arab.); Pajamust (Pers.); Five-leaved-chaste (Eng.).

**Description**

A deciduous shrub with thin grey bark and spread-

ing branches. Leaves 3-5 foliolate (simple and more distinctly crenate on luxuriant young shoots), with a raised line across the stem at the base of the petioles. Leaflets lanceolate, 1-5 by 3-1.3 in., the lowest pair smallest, sessile or sub-sessile; the middle pair, if present, more or less distinctly petiolulate, the odd leaflet largest and with a petiolule .3-.6 in. long; entire or distantly crenate above the middle, glabrescent above, grey-pubescent beneath.

Panicles upto 12 in. long. Calyx .1-.15 in., 5-toothed. Corolla .2-.5 in. bluish or purplish-white; limb spreading, 2-lipped, 5-lobed, middle lobe of the lower tip the largest. Stamens 4, didynamous, exerted. Ovary 2-4 celled, 4-ovuled; style filiform, shortly 3-lobed.

Fruit a succulent drupe supported by the more or less accrescent calyx .15-.25 in. diam., globose, black when ripe; endocarp mormally 4-celled.

### **Flowering and fruiting time**

Plant flowers in June-August and fruits is December-January. Generally flowering stage begins during summers and rains, and fruiting during cold season.

### **Distribution**

Plant occurs throughout India in warm regions in wild state. It is also planted in hedge form or hedge-rows in villages and as garden hedge, It is found along Nallas, river beds and stony rivulets. Plant is found in the valleys and lower areas in Uttar Pradesh hilly region and specially in Siwaliks and Terai belts.

### **Kinds and varieties**

Another kind of Nirguṇḍī is botanically known as Vitex trifolia Linn. Kartari Nirguṇḍī (Śaligram Nighaṇṭu, 3, p. 251) is also indicated as Nirguṇḍibheda.

There are two varieties in classical texts viz. Nilapuṣpi and Śvetapuṣpi which are names as Nirguṇḍī and Śvetapuṣpi, considered blue and white varieties, respectively.

### **Pharmacodynamics**

Rasa : Kaṭu, tikta

Guṇa	: Laghu, rūkṣa
Viryā	: Uṣṇa
Vipāka	: Kāṭu
Doṣakarma	: Kaphavātaśāmaka

**Properties and action**

Karma	: Vedanāsthāpana Vātaghna Śothahara Vraṇaropanā-śodhana Kuṣṭhaghna Kaṇḍūghna Medhya Kaphaghna-kāsahara Mūtrājanana Ārtavajanana Balya Rasāyana Cakṣuṣya Āmapācana Keśya Jantughna Dīpana-pācana (āmapācana) Yakṛduttejaka Kṛmighna.
Roga	: Vātavyādhi-gṛdhraśī-āmavāta-sandhvāta Śirahśūla-vedanāyukta vikāra Śotha (śopha)-sandhiśotha-abhighātajaśotha-vṛṣaṇaśotha Garbhāśayaśotha-gudaśotha Pakvāśayaśotha Kaṇṭhaśotha-nāsāśotha-pratiṣyāya Mukhapāka Karṇāśūla-karṇasrāva-pūtikarṇa Viṣa-sarpaviṣa-mūṣikaviṣa Sarvavraṇa-nāḍīvraṇa-duṣṭavraṇa Dantodbhedanavedanā Snāyukaroga Rājayakṣmā

Sūtikāroga-Rajahṛīcchra  
 Granthi-apaci-gaṇḍamālā  
 Apasmāra  
 Aṅgamarda  
 Keśaroga-pālitya  
 Netraroga  
 Kāsa-śvāsa-phupphusa (āvaraṇa)  
 śotha  
 Mūtrāghāta  
 Jvara-viṣamajvara

### **Therapeutic uses**

The drug Nirgunḍī is an effective analgesic and anti-inflammatory herbal agent. It is useful as alterative, antipyretic, anodyne and anti-periodic. Drug is used in rheumatism, nervous disorders, haemophilic disorders, alternate fevers, colic, dyspepsia, skin diseases, spleenic and liver enlargement and worms. It is used in conditions stimulating malaria. Nirgunḍī is used in medicine both externally as well as internally; and the different parts e.g. leaves, roots, flowers, seeds etc. are employed in medicine and mostly the leafy part, bark and roots are utilised in medicinal purposes (almost all the parts of Nirgunḍī plant).

The leaves are ground and paste is prepared which is externally applied to wounds, ulcers, swollen joins, inflammation, painful organs, headache, testicular inflammation and various other ailments including skin afflictions. Decoction is used as gargle in stomatitis and Kaṇṭhaśālūka. Fumigation of dried leaves is used in headache and catarrhal affection. Decoction is used for Kaṭiṣnāna (bath upto waist or tub-bath with nirgunḍī jala).

The leaves are ground (kalka) and cooked in oil (preferably tila taila or sesame oil) for preparing Nirgunḍī taila (by following process of taila pāka). It is locally applied to inflamed and painful conditions of organs, rheumatism, vātavyādhi, sprain, trauma, ulcers, wounds, sinus, abscess, foetid ear, bruises, otorrhoea, gaṇḍamālā, earache, headache, neuritis, sciatica, nervine complaints, painful and swollen joints and other various ailments. It is also useful as massage oil and in different modes of topical

administration which is a safely indicated recipe with multiutility as medicinal oil. Nirgundī taila is very effective remedy supported with promising results based on large number of trials, cases and experiences in practice.

The drug Nirgundī is useful in dysmenorrhoea, debility, weak vision, cough, dysuria, pleurisy, lungs complaints, puerperal disorders, consumption, epilepsy, fever, guinea worm, asthma, foetid ear, poison (viṣa), intrinsic haemorrhage (rakta-pitta) and plihodara, agnimāndya, āmadoṣa, śotha and vātakapha vikāra. It is also a rasāyana and balya drug.

**Parts used :** Leaves, roots, seeds, flowers.

**Dose**

Leaves juice 10-20 ml., Root bark powder 3-6 gm., Seeds powder 3-6 gm.

**Formulations (yoga) :** Nirgundī taila, Nirgundī kalpa.

**Groups (gaṇa)**

Viśaghna, Krimighna (Caraka Saṃhitā), Surasādi (Suśruta Saṃhitā).

## NIRGUNDĪ ( निर्गुण्डी )

**शिशोः दन्तोद्धेदने**

प्राचीगतं पाण्डुरसिन्दुवारमूलं शिशूनां गलके निबद्धम्।

करोति दन्तोद्धववेदनायाः निःसंशयः नामकाण्डमेव ॥

*Rāja Mārtāṇḍa.*

**सर्वब्रणे**

समूलपत्रां निर्गुण्डीं पीडियित्वा रसेन तु ।

तेन सिद्धं समं तैलं नाडीदुष्टव्रणापहम् ॥

हितं पानापचीनान्तु पानाभ्यञ्जननावनैः ।

विविधेषु च स्फोटेषु तथा सर्वब्रणेषु च ॥

*Cakradatta.*

**राजयक्षमणि निव्याधिकरणे**

समूलफलपत्रायाः निर्गुण्डयाः स्वरसैः घृतम् ।

सिद्धं पीत्वा क्षयक्षीणो निर्व्याधिः भाति देववत् ॥

*Cakradatta, 10-82.*

### सिन्दुक-निर्गुण्डीगुणकर्माणि

सिन्दुकः स्मृतिदस्तिक्तः कषायः कटुको लघुः ।

केश्यो नेत्रहितो हन्ति शूलहत् काससिद्धिदः ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 115.*

कटूष्णा नीलनिर्गुण्डी तिक्ता रूक्षा च कासजित् ।

श्रैष्मशोफसमीरार्तिप्रदराध्मानहारिणी ॥

*Rāja Nighaṇṭu, Śatāhvādi varga.*

निर्गुण्डी कटुतिक्तोष्णा कृमिकुष्ठरुजापहा ।

वातश्रैष्मप्रशमनी प्लीहगुल्मारुचीर्जयेत् ॥

*Dhanwantari Nighaṇṭu.*

### सिन्दुवारपत्रम्

कृमिकुष्ठरुचिश्रैष्मव्रणाष्ठीला हि तद्विधा ।

सिन्दुवारदलं जन्तुवातश्रैष्महरं लघु ॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga.*

### सिन्दुवारः

सिन्दुवारः कटुस्तिक्तः कफवातक्षयापहः ।

कुष्ठकण्डूतिशमनः शूलहत् काससिद्धिदः ॥

*Rāja Nighaṇṭu, Śatāhvādi varga, 115.*

### अपस्मारे निर्गुण्डीवन्दाकम्

निर्गुण्डीभववन्दाकनावनस्य प्रयोगतः ।

उपैति सहसा नाशमपस्मारो महागदः ॥

*Bhāvaprakāśa, Madhyakhaṇḍa, 23-14.*

### निर्गुण्डी

निर्गुण्डी तुवरा तिक्ता मेध्या शीतोष्णा सा लघुः ॥

चक्षुष्या दीपनी केश्या कफानिलविषापहा ।

हन्त्यरोचकशूलामगुल्मभेदोब्रणक्रिमीन् ॥

शोफ कुष्ठप्रतिशयायश्वासकासांश्च सा द्विधा ।

शेफालिका तयोः पथ्या विषपित्तविनाशिनी ॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 127-129.*

## निर्गुणडीपत्रम्

‘श्रेष्ठानिलघं लघु दीपनीयं निर्गुण्डकाया कृमिघातिपत्रम्।’

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 129.*

## निर्गुणडीपुष्टम्

निर्गुणडीपुष्टं तिक्कोष्णं कृमिवातकफापहम्।

गुल्मप्लीहारुचीः कुष्ठं कण्डूं शोफं जयेत् कटु॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 130.*

## शेफालिका

.....सा द्विधा।

शेफालिका तयोः पथ्या विषपित्तविनाशिनी॥

*Kaiyadeva Nighaṇṭu, Oṣadhi varga, 129.*

## सिन्दुवारपत्रम्

‘सिन्दुवारदलं जन्तुवातश्वेष्महरं लघु।’

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 115.*

## सिन्दुवारः

सिन्दुवारः श्वेतपुष्टः सिन्दुकः सिन्दुवारकः।

नीलपुष्टी तु निर्गुण्डी शेफाली सुवहा च सा॥

*Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 113.*

## नाडीव्रणादौ निर्गुणडीतैलम्

निर्गुण्डया मूलपत्राभ्यां गृहीत्वा स्वरसं ततः॥

तेन सिद्धं समं तैलं नाडीकुष्ठानिलार्तिषु।

हितं पामापचीनां च पानाभ्यञ्जनपूरणम्॥

*Caraka Saṃhitā, Cikitsā, 28-134-135.*

*Vṛndamādhava, 47-19/20.*

## नीलनिर्गुण्डी

कटूष्णा नीलनिर्गुण्डी तिक्का रूक्षा च कासजित्।

श्वेष्मशोफसमीरार्तिप्रदराध्मानहारिणी॥

*Rāja Nighaṇṭu, Śatāhvādi varga, 154.*

## स्नायुकरोगे निर्गुणडीपत्रस्वरससघृतपानम्

*Cakradatta, 53-41.*

## असाध्यगृधसीविकारे

शेफालिकादलैः क्वाथो मृद्घग्निपरिपाचितः।

दुर्वारं गृध्रसीरोगं पीतमात्रं प्रणाशयेत्॥

*Bhāvaprakāśa, Madhyakhaṇḍa,*

*Cikitsāprakaraṇam, Vātavyādhyaadhikāra, 24-142.*

*Cakradatta, Vātavyādhya cikitsā, 22-41.*

### स्नायुकरोगे

गव्यं सर्पिस्त्र्यहं पीत्वा निर्गुण्डीस्वरसं त्र्यहम्।

पिबेत्स्नायुकमत्युग्रं हन्त्यवश्यं न संशयः॥

*Vṛndamādhabava, 55-18.*

*Bhāvaprakāśa, Snāyukarogādhikāra, 57-7.*

### राजयक्षमारोगे निर्गुण्डीघृतम्

समूलफलपत्राया निर्गुण्ड्याः स्वरसैर्घृतम्।

सिद्धं पीत्वा क्षतक्षीणो निर्वाधिभाति देववत्॥

*Cakradatta, Rāja yakṣmādhikāra, 10-82.*

### गण्डमालारोगे निर्गुण्डीनस्यम्

गण्डमालाऽमयात्तानां नस्यकर्मणि योजयेत्।

निर्गुण्ड्याश्च शिफां सम्यग् वारिणा परिपेषिताम्॥

*Cakradatta, Galagāṇḍādi cikitsā, 41-20.*

### दारुणगण्डमालायां निर्गुण्डीतैलम्

निर्गुण्डीस्वरसेनाथ लाङ्गलीमूलकल्कितम्।

तैलं नस्यान्त्रिहन्त्याशु गण्डमालां सुदारुणाम्॥

*Cakradatta, 41-27.*

### नाडीव्रणचिकित्सायां निर्गुण्डीतैलम्

समूलपत्रां निर्गुण्डों पीडियित्वा रसेन तु।

तेन सिद्धं समं तैलं नाडीदुष्टव्रणापहम्॥

हितं पानाऽपचीनान्तु पानाभ्य(ङ्ग)ञ्जनावनैः।

विविधेषु च स्फोटेषु तथा सर्वव्रणेषुय॥

*Cakradatta, Naḍīvrāṇa cikitsā, 44/20-21.*

### कासश्वासयोः

‘निर्गुण्डपत्रस्वरसे च पक्वा सर्पिः कफोत्थं  
विनिहन्ति कासम्।’

*Suśruta Samhitā, Uttara, 52-30.*

निर्गुण्डीपत्रनिर्यासिसाधितं कासजिद् घृतम्।

घृतं रसे विडङ्गानां व्योषगर्भस्त्र साधितम्॥

*Aṣṭāṅga Hṛdaya, Cikitsā, 3-57.*

निर्गुण्डीकुण्डलीपथ्यामरिचैः समभागिकैः ।

क्राथो लवणसंयुक्तः कासश्वासविकारनुत् ॥

*Vaidya Manoramā, 3-11.*

### गण्डमालायाम्

गण्डमालामयात्तानां नस्यकर्माणि योजयेत् ।

निर्गुण्ड्यास्तु शिफां सम्यग्वारिणा परिपेषिताम् ॥

### गण्डमालारोगे निर्गुण्डीयोगः

निर्गुण्डीतैलम्

*Vrndamādhava, 41-52.*

*Śāringadhara Samhitā, 2-1-95.*

### अपस्मारे

‘निर्गुण्डीमूलकं जग्ध्वा ह्यपस्मराद् विमुच्यते ।’

*Rasaratna Samuccaya, 21-57.*

### पूतिकर्णे

निर्गुण्डीस्वरसे तैलं सिन्धुधूमरजोगुडः ।

पूरणं पूतिकर्णस्य शमनं मधुसंयुतम् ॥

*Baṅgasena, Karṇaroga, 89.*

### वातव्याधौ

एरण्डतैलं निर्गुण्डीस्वरसञ्च पृथक्-पृथक्-

पीत्वा कटिप्रदेशस्थं वातं जित्वा सुखी भवेत् ॥

*Vaidya Manoramā, 12-8.*

निर्गुण्डीमूलचूर्णन्तु कर्षं तैलेन लेहयेत्

सन्धिवातः कटिवातः कम्पवातञ्च शाम्यति ॥

*Rasaratna Samuccaya, 21-164.*

### सूतिकारोगे

संयोजितो दलितया कणाया कवोष्णो निर्गुण्डकालशुननागरजःकषायः ।

पीतो निहन्ति कफमारुतकोपजातं सूत्यामयं सकलमेव सुदुस्तरञ्च ॥

*Yogaratnākara, p. 425.*

### विषप्रतिकारार्थम् सर्पविषे

सिन्धुवारस्य मूलं च श्वेता च गिरिकर्णिका ।

पानं दर्वीकरैर्दैषे नस्यं समधु पाकलम् ॥

*Caraka Samhitā, Cikitsā, 23-195.*

*Aṣṭāṅga Hṛdaya, Uttara, 26-57.*

### मूर्खिकविषे

‘सहे ससिन्धुवारे च लिह्यात्त्र समाक्षिके ।’

*Suśruta Saṃhitā, Kalpa, 7-21.*

### सामान्यविषे

‘शीतं निह्यादचिरात् प्रदेहो विषं शिरीषस्तु ससिन्धुवारः ।’

*Caraka Saṃhitā, Sūtra, 3-28.*

### श्रेष्ठमज्जरे

सिन्दुवारदलक्राथः सोषणः कफजे ज्वरे ।

जङ्घयोश्च बले क्षीणे कर्णे वा पिहिते पिबेत् ॥

*Cakradatta, 1-105.*

सिन्दुवारदलक्राथं कणाढयं कफजे ज्वरे ।

जङ्घयोश्च बले क्षीणे कर्णे च पिहिते पिबेत् ॥

*Bhāvaprakāśa, Cikitsā, 1-382.*

### रक्तपित्ते

‘.....वटाक्षिमुक्ताङ्गरसिन्धुवारजः हितञ्च शाकं घृतसंस्कृतं सदा ।’

*Suśruta Saṃhitā, Uttara, 45-16.*

## NISPĀVA-ŚIMBĪ

### Botanical name

Lablab purpureus (L.) Sweet., Lablab purpurea (L.) Sweet.

Syn. Dolichos purpurea L., D. purpureus L., Dolichos lablab L.

**Family :** Fabaceae (Papilionaceae)

**Classical name :** Niṣpāva-Śimbī

**Sanskrit names**

Niṣpāva, Śimbī, Mādhvīkā, Rājaśimbī, Vallaka, Niṣpāvī, Śvetaśimbī, Vallīśimbī, Latāśimbī, Palaṅkaśā, Vṛttā, Maduśarkāra.

**Regional names :** Sem (Hindi).

**Description**

Annual or perennial climbing herbs. Twinning plant cultivated mostly as an annual. Leaves pinnately 3-

foliolate, stipulate; petioles 1-18 cm. long; leaflets broadly ovate, acuminate, 5-12 x 4-10 cm., glabrous or pubescent.

Flowers axillary, peduncled; peduncles and racemes 15-22 cm. long pedicels fascicled. Calyx 3-6 mm. long teeth deltoid. Corolla much exerted purple or white; standard 12-15 mm. long, auriculate with appendages; Keel incurved, rostrate. Stamens diadelphous, 9-1. Ovary nearly sessile; style bearded along inner edge; stigma terminal.

Pods flat, strap shaped, upto 10x4 cm., 2-5-seeded.

### **Flowering and fruiting time**

Plant flowers and fruits during the period from November to April. Farming seasons.

### **Distribution**

It is cultivated commonly for its pod-vegetable. Various forms are under horticultural practice (vegetable farming) in India.

### **Kinds and varieties**

There are various types and kinds of source plant producing sem or bean (*Nispāva* or *Śimbī*) such as *Dolichos lablab* Linn. Var. *typicus* Prain (Lablab Bean, Bonavist Bean, Hyacinth Bean, Indian Butter Bean) and *D. lablab* var. *lignosus* Prain (Australian Pea, Field Bean).

Classically, some varieties and kinds of *Nispāva* (*śimbī*) are mentioned in texts of *materia medica* and medicine such as *Nispāva*, *Vṛtta niṣpāvi*, *Nispāvīdvaya*, *Vallīśimba-latā śimbī*, *Kaṭu-madhura niṣpāva* and *Rāja śimbī* incorporated in *Śākavarga* of Indian medical system.

### **Chemical composition**

Analysis of pods gives following values : moisture 82.4, protein 4.5, fat 0.1, mineral matter 1.0, fibre 2.0, carbohydrates 10.0 per cent; it contains calcium 0.05, phosphorous 0.06%, iron 1.67 mg./100 g. and nicotinic acid 0.8 mg./100 g. The vitamin C content varies from 7.33 to 10.26 mg./100 g. for cooked samples and 0.77-1.12 mg./100 g. uncooked samples; the increase in vitamin C content on cooking is attributed to the softening of the pulp which facilitates extraction.

Difference in properties in view of different factors related to kinds, stages, parts use and forms of Niṣpāva (śimbi).

### Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Rūkṣa, guru
Vīrya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Śleṣmahara-vātapittakara

### Properties and action

Karma	: Rocana-dīpana Viṣṭambhi Medhya Saṅgrāhi Balya-puṣṭidā Viṣaghna Kṛmighna Kaṇḍūghna Stanyajanana Vidāhi Kaṇṭhaśodhana.
Roga	: Agnimāndya Viṣa Dourbalya Kṛmi Kuṣṭha Tvagvikāra-pāmā Sotha Mūtrala Kaṇṭharoga.

### Therapeutic uses

The seeds of Niṣpāva or Śimbi are considered febrifuge, stomachic, anti-spasmodic and aphrodisiac.

Lablab bean is popular as a vegetable all over the country. The pods in most types, retain their tenderness until they attain full size; therefore the seeds alone can be utilised afterwards. Favoured types are those which have good flavour and thick, fleshy skin with particularly and

practically no fibre. Young pods may be salted or steamed and sun dried for preservation. Pods and seeds are used also as cattle feed. The plant is used as fodder for cattle. Pods are most dietary article as vegetable (śimbīśaka) prepared and consumed in domestic food practices.

Besides various types (of source plant), kinds and varieties, the mode and form of usage, stages, parts and recipes (in medicine as well as diet) are supposed to make difference in regard to medicinal properties and effect of Niṣpāva in human body depending on therapeutic administration as well as dietary consumption keeping the medicinal efficacy, food value and nutrient potentiality. Certain disqualities of Niṣpāva, particularly when used in excess or constantly, are also indicated which has duly been considered in indigenous medicine while suggesting Śimbī (niṣpāva) as wholesome (pathya-hita) and unwholesome (apathyā-ahita) food vegetable article to patients of various diseases.

**Part used :** Pod, seed.

**Dose :** 1-3 gm., 3-6 gm., Edible (vegetable).

## NISPĀVA ( निष्पाव )

**निष्पावः ( राजशिश्वीबीजम् )**

- क. निष्पावो राजशिश्वः स्यादुलकः श्वेतशिश्विकः ।
- ख. निष्पावो मधुरो रूक्षो विपाकेऽस्त्वा गुरुः सरः ॥
- कषायः स्तन्यपित्ताच्चमूत्रवातविबन्धकृत् ।
- विदाह्यष्ठो विषश्रेष्ठशोथहच्छुक्रनाशनः ॥

*Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 46-47.*

**वल्लीशिश्वः लताशिश्वीफलम्**

- फलं तु वल्लीशिश्वस्य मूत्रदोषकरं गुरु ।
- पित्तलं स्वादु तिर्तं च कुष्ठपामाहरं परम् ॥
- विषघ्नं दीपनं चोष्णं कृमिघ्नमनिलापहम् ।

*Kaiyadeva Nighaṇṭu, Dhānya varga, 64-65.*

**निष्पावी**

निष्पावी ग्रामजादिः स्यात् फलिनी नखपूर्विका ।

मण्डपी फलिका शिम्बी ज्ञेया गुच्छफला च सा ॥  
विशालफलिका चैव निष्पाविश्विपिटा तथा ।

*Rāja Nighaṇṭu, Mūlakādi varga, 191.*

### वृत्तनिष्पावी

अन्याऽङ्गुलीफला चैव नखनिष्पाविका स्मृता ।  
वृत्तनिष्पाविका ग्राम्या नखपुच्छफला शराः ॥

*Rāja Nighaṇṭu, Mūlakādi varga, 192-192.*

### निष्पावीद्वयम्

निष्पावी द्वौ हरिच्छुभ्रौ कषायौ मधुरौ रसौ ।  
कण्ठशुद्धिकरौ मेध्यौ दीपनीरुचिकारकौ ।  
सङ्ग्राहि समवीर्यं स्यादोषच्छेष्टं द्वितीयकम् ॥

*Rāja Nighaṇṭu, Mūlakādi varga, 193.*

### निष्पावः

मधुरः श्वेतनिष्पावो माध्वीका मधुशर्करा ।  
पलङ्गषा स्थूल शिम्बी वृत्ता मधुसिता सिता ॥  
मधुशर्करा सुरुच्या मधुराल्पकषायका ।  
शिशिरा वातुला बल्याऽप्याध्मानगुरुपुष्टिदा ॥

*Rāja Nighaṇṭu, Śālyādi varga, 107-108.*

### कटुनिष्पावः

सोऽन्यश्च कटुनिष्पावः कटुकोऽस्त्रप्रदो गुरुः ।  
वातलः कफदो रुक्षः कषायो विषदोषनुत् ॥

*Rāja Nighaṇṭu, Śālyādi varga, 109-110.*



# **THERAPEUTIC INDICATION OF DRUGS**

## **Abordifacient**

Indravāruṇī  
Guñjā  
Lāṅgali

## **Abscess**

Atasī  
Citraka  
Daśamūla  
Guggulu  
Karañja  
Kumāri

## **Agnimāndya-Deficient-digestion**

Ajamodā  
Āmalakī  
Ārdraka  
Arka  
Haritakī  
Jambū  
Karañja (Kaṇṭakī)  
Kupīlu  
Marica

## **Alcoholism**

Amlavetasa  
Bhārṅgī  
Dādima  
Drākṣā  
Hingu  
Hribera

## **Alopecia (Baldness)**

Bhallātaka  
Bṛhatī  
Dhattūra

Gokṣura

Guñjā  
Indravāruṇī  
Kākādanī  
Karañja  
Lāṅgali

## **Āmavāta-Rheumatic Arthritis**

Ajamodā  
Āragvadha  
Daśamūla  
Dhānyaka  
Eraṇḍa  
Gokṣura  
Guggulu  
Guḍuci  
Harītakī  
Kulattha  
Lakuca  
Mūlaka  
Muṇḍī

## **Amlapitta-Acid gastritis (hyperacidity)**

Bhṛngarāja  
Guḍuci  
Guggulu  
Harītakī  
Jambīra  
Jiraka  
Kaṭukī  
Nārikela  
Nimba

## **Anaemia**

Āmalakī

Asana	Māśaparṇī
Citraka	Mudgaparṇī
Dādima	Munjātaka
Dantī	Muśalī
Dāruharidrā	<b>Arthritis</b>
Daśamūla	Indravārunī
Drākṣā	Guggulu
Haridrā	Ketakī
Harītakī	<b>Asthma-Śvāsa</b>
Īku	Aguru
Kākādanī	Ankoṭa
Pancamūla (laghu)	Ārdraka
Madhūka	Arka
Mātuluṅga	Aśvagandhā
Mūlaka	Bibhītaka
<b>Anorexia</b>	Bhāringī
Āmlikā	Bhṛngarāja
Āmra	Bṛhatī
Ārdraka	Coraka
Bṛhatī	Daśamūla
<b>Apaci-scrofula</b>	Devadāru
Bhallātaka	Guggulu
Bhṛngarāja	Haridrā
Girikarṇikā	Māmsī
Lāṅgali	Marica
Madhūka	Mātuluṅga
Muṇḍī	Mūlaka
<b>Aphrodisiac</b>	Nirguṇḍī
Āmalakī	Harītakī
Añkoṭa	Kadalī
Aśvattha	Kākodumbara
Bhallātaka	Kaṇṭakārī
Godhūma	Karkaṭaśrīngī
Gokṣura	Karpūra
Kapikacchu	Kāsamarda
Karkaṭaśrīngī	Kuṣmāṇḍa
Kokilākṣa	Kulattha
Madhūka	<b>Bhasmaka-Excessive Digestion</b>
Māṣa	Apāmārga

Kola-Badara	<b>Gravels-Śarkarā</b>
<b>Burn</b>	Ajamodā
Aśvattha	Apāmārga
Nārikela	Darbha
Madhuka	Kadamba
Dhātakī	Karavīra
Kumārī	Nārikela
<b>Burning sensation</b>	<b>Chest-pain</b>
Āmalakī	Balā
Badarī	Eraṇḍa
Caṇaka	Jīvantī
Karkandhu-Badara	<b>Colic-śūla</b>
Mallikā	Agastya Ajamodā
Nimba	Āmalakī
<b>Calculus-Āśmarī</b>	Amlavetasa
Amlavetasa	Apāmārga
Apāmārga	Aśvattha
Bibhītaka	Babbūla
Darbha	Dhanvana
Ervāru	Eraṇḍa
Gokṣura	Godhūma
Harīdrā	Haridrā
Harītakī	Harītakī
Jāti	Hiṅgu
Kalamba	Kaṇṭakīkarañja
Kaṇṭakārī	Kulattha
Karkoṭa	Laghu-pañcumūla
Kataka	Lavaṅga
Kaṭukālābu	<b>Consumption-Śoṣa</b>
Kṣirī vṛkṣa	Arjuna
Kulattha	Aśvagandhā
Kunduru	Aśvattha
Kuśa	Balā
Kusumbha	Daśamūla
Māṁsi	Drākṣā
Mātulūṅga	Gokṣura
Mayūraśikhā	Kākajāṅghā
Moraṭa	Kharjūra
	Kuṣmāṇḍa

Laghupañcamūla	Āmalakī
Madayantī	Amlikā
Madhūka	Ādraka
Mandūkaparṇī	Arka
Mūlaka	Badarī
Nāgabalā	Bhārngī
Nirguṇḍī	Bhṛngarāja
<b>Coryza-Pratiṣyāya</b>	Bibhitaka
Amlikā	Bṛhatī
Ādraka	Citraka
Citraka	Daśamūla
Coraka	Devadāru
Dāruharidrā	Drākṣā
Dhattūra	Eraṇḍa
Harītakī	Godhūma
Jayā	Guḍūcī
Kaṇṭakarī	Hapuṣā
Madhūlikā	Hareṇukā
Maṇḍūkaparṇī	Haridrā
Marica	Harītakī
Mūlaka	Jivantī
<b>Cosmetic</b>	Ikṣu
Jātī	Kākādanī
Harīdrā	Kākamācī
Japā	Kakodumbara
Kumārī	Kamala
Āmalakī	Kaṇṭakarī
Bhṛngarāja	Karkaṭaśṛṅgī
Madayantī	Kārpāsa
Mallikā	Kāsamarda
Ketaki	Khadira
Nārikela	Kharjūra
Nimbūka	Kulattha
<b>Cough</b>	Kūṣmāṇḍa
Abhiṣuka	Kuṭaja
Agastya	Madhūlikā
Aguru	Bṛhat pañcamūla
Ahiphena	Māṁsi
Ajagandhā	Maṇḍūkaparṇī

Marica	Gajapippali
Māṣaparnī	Hapuṣā
Mudga	Haritaki
Mudgaparnī	Hṛivera
Mūlaka	Jambū
Mustaka	Jātiphala
Nirguṇḍī	Jīvantī
<b>Cyst-Tumour</b>	Kañcaṭa
Dantī	Kapittha
Drākṣā	Kārpasa
Madhūka	Kāśmarya
Mūlaka	Kaṭphala
<b>Depilatory</b>	Keśarāja
Bhallātaka	Kuṭaja
Kośātakī	Laghu-Pañcamūla
Kusumbha	Lājā
Madhūka	Loṇikā
Mūlaka	Mallikā
<b>Diarrhoea</b>	Masūra
Ahiphena	Mocarasa
Ajamodā	Mūlaka
Amlikā	Mustaka
Āmra	Nicula
Arka	<b>Diseases of Mouth</b>
Arjuna	Arimeda
Ativiṣā	Dāruharidrā
Babbūla	Drākṣā
Badarī	Jīvantī
Bibhitaka	Bakula
Bilva	Khadira
Cāṅgerī	Lavaṅga
Cavya	Māṁsi
Citraka	<b>Inflammation of Lip</b>
Dādima	Rohinī
Daśamūla	Eraṇḍakarkaṭī
Dhānyaka	<b>Stomatitis</b>
Dhātakī	Āmāra
Durālabhā	Aśvattha
Eraṇḍa	Jātī

<b>Stiffness of Tongue</b>	Harītakī
Marica	
<b>Diseases of Nose</b>	<b>Tonsillitis</b>
Devadāru	Jātī
<b>Nasal Polypus</b>	<b>Upajihvikā</b>
Kaṇṭakālabū	Jātī
<b>Diseases of Teeth</b>	<b>Diseases of Women</b>
Babbūla	Daśāmūla
Bakula	Muṇḍī
Dugdhikā	Pippali
Kṣirīvṛkṣa	
Mallikā	<b>Amenorrhoea</b>
Nimba	Indravāruṇī
<b>Dental Caries</b>	Japā
Arka	Kulattha
Bākucī	Kumārī
Guñjā	
Hiṅgu	<b>Leucorrhoea</b>
Kākajaṅghā	Dāruharidrā
Kamala	Dhātakī
Kaṭutumbī	Lodhra
Mātuluṅga	Aśoka
<b>Loose Mouth</b>	
Daśamūla	<b>Mastitis</b>
Mustaka	Dhattūra
<b>Dentition</b>	Kumārī
Pippali	
<b>Toothache</b>	<b>Menorrhagia-Asṛgdara</b>
Girikarṇika	Alābū
Bakula	Āmalaki
Haritamañjarī	Apāmārga
<b>Distaste/Abnormal taste in mouth</b>	Āruka
Ikṣu	Aśoka
Kharjūra	Atibalā
<b>Diseases of Throat</b>	Badarī
Arka	Balā
Eraṇḍakarkaṭī	Bhūmyāmalakī
Badarī	Candana
	Dāruharidrā
	Guḍūcī
	Japā
	Kadalī
	Kākodumbara
	Ketekī

Kuśa	<b>Disorders of Vaginal-Organic Change or Displacement</b>
Lākṣā	Ārdraka
Madhūka	Harītakī
Nāgkeśara	
<b>Puerperal Disorders</b>	<b>Disorders of Semen</b>
<b>Sūtikā Roga</b>	Haritakī
Daśamūla	Jyotiṣmatī
Nirguṇḍī	
<b>Somaroga</b>	<b>Drowsiness</b>
Āmalakī	
Amlikā	
Kadali	
Kumuda	
<b>Sterility</b>	<b>Dysentery</b>
Asthisamphāra	Ajamodā
Aśvagandhā	Bākucī
Bākucī	Bhṛṅgarāja
Bṛhatī (śveta)	Dāruharidrā
Dhātakī	Dugdhikā
Eraṇḍa	Kaṇtaki-karañja
Kaṇṭakāri śveta	Dugdhikā
Māṣaparṇī	Lakuca
Nāgakeśara	Lodhra
<b>Disorders of Vagina-genital tract (Yonivyāpad)</b>	Loṇikā
Arka	Marica
Himṣrā	
Kaṭutumbī	
Kṣirīvrkṣa	
Mūṣikaparṇī	
Nimba	
<b>Slimy and Lax Vagina</b>	<b>Dysuria</b>
Āmra	Atibalā
Bhaṅgā	Apāmārga
<b>Vaginal pain</b>	Darbha
Apāmārga	Elā
Bhṛṅgarāja	Ervāru
Eraṇḍa	Gokṣura
	Hapusā
	Jātī
	Kadalī
	Kadamba
	Kamala
	Kārpāsa
	Kāsa
	Ketakī
	Kumārī
	Kumuda
	Kuśa
	Kusumbha

Laghu-pañcamūla	Foetid Ear
Mūlaka	Guggulu
Nimba	Jātī
<b>Ear Diseases</b>	Nirgunḍī
Amlikā	<b>Krimikarṇa</b>
Apāmārga	Jambū
Arka	<b>Otorrhoea</b>
Bhūrja	Dhava
Bṛhatī	Apāmārga
Kaṇṭakārī	Bilva
Karpūra	Kārpāsa
Kaṭutumbī	<b>Emaciation</b>
Lakuca	Aśvagandhā
Lāṅgalī	Iksu
Madhūka	<b>Emetic</b>
Pañca-valkala	Jīmūta
<b>Deafness</b>	Ariṣṭaka
Apāmārga	Madana
Bākucī	Madhūlaka
Bilva	<b>Epilepsy</b>
Daśamūla	Agastya
<b>Earache</b>	Brāhma
Amlikā	Coraka
Apāmārga	Daśamūla
Arka	Ketakī
Bhūrja	Kumārī
Bilva	Madana
Bṛhatī	Māṁsi
Ārdraka	Kaṇṭakārī
Aśvattha	Karavīra
Devadāru	Kāsa
Drākṣā	Kataka
Eraṇḍa	<b>Eruptive Boils-Visphoṭaka</b>
Hingu	Dugdhikā
Jambīra	Guḍuci
Jhaṇḍū	Kirāta
Mātulunīga	Karañja
Mahat-pañcamūla	Khadira

<b>Erysepalas-Visarpa</b>	Apāmārga
Agnimantha	Arka
Āmalakī	Babbūla
Āragvadha	Bhṛṅgarāja
Ārtagala	Bibhītaka
Aśvagandhā	Bilva
Balā	Cakṣuṣyā
Bhūrja	Candana
Candana	Dāruharidrā
Dāḍima	Darbha
Dāruharidrā	Devadāru
Dhava	Droṇapuṣpi
Dūrvā	Eraṇḍa
Guñjā	Girikarṇikā
Hrīdrā	Guḍuci
Hrībera	Hareṇukā
Ikṣu	Harītaki
Kaṇṭaka-Pañcamūla	Bibhītaka
Karañja	Āmalakī
Kṣīrīvṛkṣa	Jivantī
Madhūka	Kadali
Madhuka	Kākamācī
Mātuluṅga	Kamala
Mudga	Karañja
Mūlaka	Karavellaka
Muñjātaka	Karavīra
Mustaka	Kaśeru
Nala	Kataka
<b>Granthi-Visarpa</b>	Lakuca
Bibhītaka	Lodhra
Daśamūla	Madhuka
<b>Excessive perspiration</b>	Madhūka
Kulattha	Mahānimba
<b>Excessive sleep</b>	Mallikā
Kulattha	Māṁsi
<b>Eye Diseases</b>	Marica
Ārtagala	Meśāśringa
Āmalakī	Mudga
Amlikā	Mustaka

Nimba	Āmra
<b>Conjunctivitis</b>	Āragvadha
Dantī	Ārdraka
Dhātakī	Bilva
Eraṇḍa	Bṛhatī
Kaṇṭakari	Dāḍima
Kaṭuka	Darbha
<b>Visionary defects-Timira</b>	Daśamūla
Daśamūla	Devadāru
Elā	Dhanvana
Eraṇḍa	Dhānyaka
Guñjā	Dhattūra
Harītakī	Drākṣā
Jīvantī	Eraṇḍa
Asana	Guḍūci
Cakṣusyā	Hareṇukā
Marica	Harītakī
<b>Night-Blindness</b>	Hrībera
Agastya	Jīmūta
Bhṛṅgarāja	Jīraka
Eraṇḍa	Jīvantī
Jīvantī	Kaṇṭakārī
Marica	Kaṇṭaki-karañja
<b>Eye Pain</b>	Kāravellaka
Bhūmyāmalakī	Karkoṭaka
<b>Eye-sight Improvement</b>	Kāśmarya
Asana	Kaṭphala
Karīra	Kaṭukā
<b>Eyelids affection-Pakṣmakopa</b>	Kirātatikta
Harītakī	Kulattha
<b>Piṣṭaka-Netravikāra</b>	Kupīlu
Bṛhatī	Kuṭaja
<b>Fainting</b>	Pañcamūla (laghu)
Āmalakī	Lāja
Ārdraka	Madana
Harītakī	Pañcamūla (māhat)
<b>Fever</b>	Mūrvā
Agastya	Mustaka
Āmalakī	Nala

Nāri-kala	Madhūka
Nimba	Nyagrodha
<b>Chronic Fever</b>	<b>Flatulence</b>
Guḍūcī	Ajamodā
Daśamūla	Harītakī
Candana (rakta)	Hiṅgu
<b>Malarial Fever</b>	Jīraka
Ajagandhā	<b>Foul smell in Body</b>
Bhallātāka	Campaka
Bhārīngī	Candana
Bhūṣṭṛṇa	Hilamocikā
Coraka	Jātī
Dronapuṣṭī	Mātulūṅga
Guḍūcī	Pūtika
Harītakī	<b>Fracture</b>
Hingu	Amlikā
Jīraka-śveta	Arjuna
Jīraka-kṛṣṇa	Asthisamīhāra
<b>Filaria</b>	Aśvattha
Arka	Dhātakī
Asana	Godhūma
Bākuci	Nyagrodhādi gaṇa
Balā	Lākṣā
Citraka	Madhūka
Devadāru	Māṁsi
Dhattūra	Mañjiṣṭhā
Eraṇḍa	<b>Fumigation</b>
Guḍūcī	Coraka
Haridrā	Jaṭāmāṁsi
Harītakī	Nimba
Jingīnī	<b>Galacto-depurant (Stanyaśodhana)</b>
Kāsamarda	Ajamodā
Kebuka	Daśamūla
Khadira	Guḍūcī
<b>Fistula-in-ano</b>	Harītakī
Guggulu	Jīvakādyagaṇa
Haridrā	Katukā
Jātī	Kirātatikta
Khadira	

Nimba	Jhaṇḍū
<b>Galactogogue</b>	<b>Grahanī-roga</b>
(Stanyajanana)	
Darbha	Aṅkoṭa
Madhuka	Arjuna
<b>Gaṇḍamāla (Cervical adenitis)</b>	Ativiṣā
Āragvadha	Bhārṅgī
Ārka	Bilva
Girikarṇikā	Bṛhatī
Arka	Candana
Godhūma	Cāṅgerī
Guñjā	Coraka
Indravāruṇī	Daśamūla
Kāñcanāra	Drākṣā
Kośātakī	Duralabhā
Kuļattha	Hariākī
Muṇḍī	Ikṣī
Nirguṇḍī	Kadalī
<b>Giddiness</b>	Kharjūra
Durālabhā	Kirātatikta
Drākṣā	Madhūka
<b>Goitre</b>	Mahat Pañcamūla
Ajagandhā	Marica
Balā	Masūra
Bhārṅgī	Mūrvā
Devadāru	<b>Hair Greying (Pālitya)</b>
Girikarṇikā	Āmalakī
Haṁsapadī	Bhṛngarāja
Hastikarṇa	Dugdhikā
Jalakumbhī	Indravāruṇī
Kāñcanāra	Japā
Karkāru	Kāśmarī
Kaṭukālābu	Kumuda
Nicula	Madhuka
<b>Gonorrhoea</b>	Mallikā
Āmra	Nimba
Arjuna	<b>Gulma</b>
Dāḍima	Ajagandhā
Japā	Amlavetasa
	Amlikā

Arka	Madhuka
Bhallātaka	Mucakunda
Dhānyaka	<b>Suryāvarta</b>
Drākṣā	Bhṛngarāja
Eraṇḍa	<b>Head-evacuation</b>
Hapusā	Kaṭphala
Harītakī	<b>Heart-diseases</b>
Hingu	Āmalakī
Kampillaka	Arjuna
Kaṇṭaki karañja	Āruka
Ketakī	Aśvagandhā
Kulattha	Bibhītaka
Kumārī	Daśamūla
Kuṣṭha	Dāḍima
Mahat-pañcamūla	Godhūma
Mātuluṅga	Drākṣā
Nīlinī	Elā
<b>Haematuria</b>	Candana
Gokṣura	Kaṭukā
<b>Haemorrhage</b>	Kulattha
Arimeda	Laghu-pañcamūla
Bhūmyāmalakī	Nāgabalā
Dhanvana	Nimba
Dūrvā	<b>Headache</b>
Lajjālu	Badarī
Lodhra	Coraka
<b>Head-diseases</b>	Kuṇkuma
Abhiṣūka	Kumārī
Akṣoṭa	Kuṣṭha
Apāmārga	Mucakunda
Kaṭukā	<b>Hernia</b>
Madhūkā	Bhārngī
Māṣa	Godhūma
<b>Headache</b>	Harītakī
Badarī	<b>Hiccough</b>
Coraka	Aguru
Kuṇkuma	Āmalakī
Kumārī	Amlavetasa
Kuṣṭha	Arka

Candana  
Candraśūra  
Coraka  
Devadāru  
Harītakī<sup>1</sup>  
Ikṣu

**Hoarseness of Voice**

Ajāmodā  
Āmalakī  
Ārtagala  
Balā  
Citraka  
Badarī  
Haṁsapadī  
Haridrā  
Khadira  
Ksīrivṛkṣa  
Madhuka  
Malayavacā  
Maṇḍukaparnī

**Incontinence of Urine**

Campaka

**Indigestion**

Ajāmodā  
Āmra  
Dhānyaka  
Jambīra  
Harītakī  
Lavaṅga

**Inflammation**

Agnimantha  
Atasī  
Aśvattha

**Insanity**

Brāhmī  
Cāngerī  
Coraka  
Daśamūla  
Dhattūra

Hareṇukā  
Hingu  
Indravāruṇī  
Jaṭāmāṁsi  
Jyotiṣmatī  
Maṁsi  
Maṇḍuka-parṇī

**Insomnia**

Apāmārga  
Aśvagandhā  
Bhārṅgi  
Kokilākṣa

**Jaundice**

Āmalakī  
Ankoṭa  
Apāmārga  
Āragvadha  
Arka  
Bhūmyamalakī  
Bilva

Dantī<sup>2</sup>  
Dāruharidrā

Dronapuṣpi  
Guḍūci

Haridrā  
Harītakī<sup>3</sup>  
Indravāruṇī  
Jimūtaka

Kākadanī  
Karkotaka

Kaṭuka  
Kaṭukālābū

Kumārī  
Mūlaka  
Muṇḍi  
Nimba  
Maṇḍukaparṇī  
Mātuluṅga

<b>Halimaka</b>	<b>Mole</b>
Guḍūcī	Eraṇḍa
Mustaka	
<b>Kṣataksīna</b>	<b>Psoriasis</b>
(Wasting with chest-wound)	Hāṁsapadī
Abhiṣūka	
Akṣoṭaka	<b>Ringworm</b>
Balā	Amlikā
Jīvakādyagaṇa	Dugdhikā
Lākṣā	
Nāgabalā	<b>Vārāhadanṣṭra</b>
	Bhṛṅgarāja
<b>Kṣudraroga (minor diseases)</b>	<b>Vyaṅga</b>
Bākucī	(Freckles and Shade-Face)
Bhaṅgā	Agnimantha
Haridrā	Āmalakī
Harītakī	Amlikā
Karañja	Dāḍima
Karavīra	Haridrā
<b>Alasa</b>	Īngudī
Kaṇṭakārī	Jambū
<b>Cracks in Feet (sole)</b>	Jātī
Dhattūra	Kapittha
Jātī	Mañjiṣṭhā
Kaṭutumbī	Masūra
Nārikela	Muśalī
<b>Dandruff</b>	<b>Wart</b>
Ahiphena	Indravārunī
Āmra	
Guñjā	<b>Whitlow</b>
Harītakī	Haridrā
Kodrava	Harītakī
Madhuka	Kāśmari
<b>Head-boils</b>	<b>Kuṣṭha</b>
Arka	Adhopuṣpī
Kuṣṭha	Āmalakī
Nimba	Amlavetasa
<b>Jālakagardabha</b>	Āragvadha
Āmalakī	Arka
	Arjuna
	Asana
	Bākucī
	Bhallātaka

Bhārṅgī	Kākajaṅghā
Bhūrja	Liver Enlargements
Cakramarda	Harītakī
Citraka	Kālamegha
Dantī	Kākamācī
Dāruharidrā	Kaṭuka
Devadāru	Kumārī
Dhātakī	Mental disorders
Dhava	Girikarṇikā
Godhūma	Brāhma
Guḍūcī	Maṇḍūkaparṇī
Guñjā	Kuṣṭha
Haridrā	Jyotiṣmatī
Harītakī	Devadāru
Iṅgudi	Kūṣmāṇḍa
Jalakumbhī	Jatāmāṁśī
Jīmūta	Nacrosis
Kākamācī	Harītakī
Karañja	Kuṣṭha
Karavīra	Obesity
Kārpāsa	Agnimantha
Kaṭukā	Asana
Khadira	Atimuktaka
Kośātakī	Babbūla
Kṛṣṇa vetrā	Badarī
Kuṭaja	Bilva
Lakuca	Citraka
Lodhra	Eraṇḍa
Maṁśī	Gavedhukā
Manjiṣṭha	Guggulu
Mūlaka	Harītakī
Mūrvā	Mahatpañcamūla
Muṣkaka	Marica
Nimba	Muṇḍī
Mudgaparṇī	Obstetric disorders
Sidhma	Abortion
Apāmārga	Kamala
Jyotiṣmatī	Kaśeru
Bāṇa	Nyagrodhādigaṇa

<b>Difficult labour</b>	Citraka
Apāmārga	Daśamūla
Atibalā	Devadāru
Balā	Eraṇḍa
Bhūrja	Girikarṇikā
Lāngalī	Guggulu
<b>Hastening Delivery</b>	Harītakī
Godhūma	Kākamācī
Jīmūtaka	Karīra
Lāngalī	Kārpāsa
<b>Placenta Expulsion</b>	Kaṭutumbī
Kaṭukālābū	Kiratatikta
Lāngalī	Kuṣṭha
<b>Kikkisa</b>	Māṁsi
Āragvadha	Māṇaka
Karavīra	Mūlaka
<b>Pregnancy pain</b>	Nimba
Balā	<b>Pain</b>
Drākṣā	Lavaṅga
Ervāru	<b>Paediatric Disorders</b>
<b>Puerperal disorders</b>	Āmalakī
Methikā	Ativiṣā
<b>Purṣavana</b>	Ārdraka
Kaṇṭakārī-śveta	Bhūrja
Lakṣmaṇā	Bilva
<b>Stabilising Foetus</b>	Brāhma
Bhṛīṅgarāja	Bṛhatī
Dūrvā	Coraka
Kaśeruka	Hrībera
<b>Oedema</b>	Kamala
Agurū	Kuṣṭha
Agnimantha	Madhūlikā
Alābū	Muṇḍī
Amlikā	<b>Ahipūtanā</b>
Āmra	Badarī
Ārdraka	Karañja
Bibhitaka	<b>Asthmā</b>
Bilva	Dhānyaka
Caṇḍā	

<b>Bālagraha</b>	Arjuna
Ajagandhā	Arka
Aralu	Āsphotā
Āsphotā	Bhallātaka
<b>Bālaśoṣa-Marasmus</b>	Bhārṅgī
Aśvagandhā	Bilva
<b>Neo-natal conjunctivitis</b>	Bṛhatī
Jambū	Cāṅgerī
<b>Cough</b>	Citraka
Dhānyaka	Dantī
<b>Grahaṇīroga</b>	Dhānyaka
Jambū	Eraṇḍa
<b>Umbilical Inflammation</b>	Guḍuci
Candana	Hapuṣā
<b>Oedema</b>	Haridrā
Marica	Harītakī
<b>Earlobes Piercing (Karnavedhana)</b>	Hribera
Pancavalkala	Jalakumbhī
<b>Promoting Earlobes Growth (Karṇapāli samvardhana)</b>	Kaṇṭakārī
Guñjā	Kapittha
<b>Proctitis</b>	Kola
Dāruharidrā	Kovidāra
<b>Rasāyana</b>	Kulattha
Madhuka	Kuśa
Māṁsi	Lāṅgalī
<b>Medhya</b>	Loṇikā
Kuṣṭha	Madhuka
Brāhmī	Mahānimba
Maṇḍukaparnī	Māṁsi
<b>Piles-Haemorrhoids</b>	Manjiṣṭhā
Adhaḥpuṣpī	Mūlaka
Agnimantha	<b>Bleeding Piles-Raktarsa</b>
Alābū	Amlikā
Āmalakī	Balā
Amlavetasa	Candan
Apāmārga	Cukrikā
Ārdraka	Dādima
	Dugdhikā
	Dūrvā

Jhaṇḍu	Gavedhukā
<b>Rabies</b>	Haridrā
Dhattūra	Hilamocikā
Jalavetasa	Jambīra
Kākodumbora	Jayā
Nala	Kāñcanāra
<b>Rat-poisoning</b>	Khadira
Āsphotā	Karavellaka
Ingudī	Mātuluṅga
Kākādanī	<b>Prameha</b>
Kakamācī	Aguru
Kośātakī	Agnimantha
<b>Scorpion-sting</b>	Āmalakī
Apāmārga	Āragvadha
Jayantī	Asana
Kārpāsa	Aśvattha
Kāsamarda	Atasī
<b>Snake-poison</b>	Bhūmyāmalaki
Amlikā	Candana
Dravantī	Citraka
Girikarṇikā	Dāruharidrā
Hareṇukā	Dhanvana
Kākajaṅghā	Godhūma
Kovidāra	Guḍūcī
Kuṣṭha	Haridrā
Lajjālū	Harītakī
Maṇjiṣṭhā	Kampillaka
Mayura-śikhā	Kataka
Nākulī	Khadira
<b>Spider-poisoning</b>	Kṣīrīvṛkṣa
Arkaparṇī	Kusumbha
Hrībera	Kuṭaja
Kārpāsa	Madayantī
<b>Pox</b>	Mahānimba
Āmalakī	Manjiṣṭhā
Amlikā	Mocarasa
Badarī	Mustaka
Candana	Nimba
Dāḍima	

<b>Ikṣumeha</b>	Hṛibera
Jayā	Ikṣu
<b>Madhumeha-Kṣoudrameha</b>	Iṅgudī
(Diabetes)	Jambū
Kadara	Lājā
Jambū	Kākodumbara
Bilva	Kamala
Bimbī	Karañja
Meśasṛṅgī	Kāśmarya
Methikā	Khadira
Kārvellaka	Kharjura
<b>Śukrameha</b>	Kiratatikta
Arjuna	Kovidāra
<b>Prolapse of Rectum</b>	Kumuda
Amlikā	Kāśmarya
Cāṅgerī	Khadira
Kamala	Lodhra
Kārvellaka	Madayantī
<b>Purgative</b>	Madhuka
Arka	Madhūka
Dantī	Mallikā
Kārvellaka	Mocarasa
Kṛṣṇabīja	Mudga
<b>Raktapitta</b>	Nimba
<b>(Intrinsic haemorrhage)</b>	<b>Rasayana</b>
Āmalakī	Aguru
Āmra	Āmalakī
Anjira	Añkoṭa
Arjuna	Asana
Asana	Aśvagandhādi gaṇa
Atimuktaka	Atibalā
Balā	Bākuci
Candana	Balā
Dāḍima	Bhallātaka
Drākṣā	Bhaṅgā
Duralabhbā	Bhṛṅgarāja
Dūrvā	Bilva
Gokṣura	Brāhmī
Harītakī	Citraka

Copacīnī-dvīpāntaravacā	<b>Sinus</b>
Darbha	Apāmārga
Dhava	Bhṛīngarāja
Gokṣura	Cañcu
Haimavatī vacā	Karañja
Harītakī	Karcūra
Hapuṣā	Kodrava
Hastikarṇa	Kumbhīka
<b>Medhya-rasāyana</b>	Mocarasa
<b>(Intellect Promoting)</b>	Nirgaṇḍī
Āmalakī	Jātī
Brāhmī	<b>Skin diseases</b>
Guḍūcī	Aguru
Jyotiṣmatī	Āmra
Madhuka	Ārvadha
Maṇḍūkaparṇī	Arjuna
Mātsyākṣī	Arka
<b>Re-pigmentation</b>	Dhattura
Bākucī	Dūsravā
Bhallātaka	Cakramarda
<b>Retention of Urine</b>	Bākucī
Darbha	Khadira
Drākṣā	Kuṭaja
Durālabhā	Nimba
Harītakī	<b>Splenomegaly</b>
<b>Scrotal Enlargement</b>	Amlavetasa
Arka	Āmra
Balā	Arka
Dāruharidrā	Badarī
Eraṇḍa	Guḍūcī
Guggulu	Karañja
Harītakī	Kumārī
Indravaruṇī	<b>Sun-stroke</b>
Jayā	Ādhakī
Kākādanī	Āmalakī
Kośāmra	Āmra
Lajjālu	Cincā
Madhuka	<b>Suppression of Urine</b>
Nakuli	Āmalakī

Āragvadha	<b>Thirst (Trṣṇā)</b>
Elā	Āmalakī
Kaṇṭakārī	Āmra
Kuṅkuma	Aśvattha
<b>Syphilis</b>	Balā
Copacīnī	Daṇḍima
Ākarakarabha	Dhānyaka
<b>Poisoning-Viṣa</b>	Drākṣā
Ajagandhā	Guḍūcī
Aṅkoṭa	Harītaki
Aralu	Haridrā
Arimeda	Ikṣu
Arka	Kaṇṭakārī
Aśvattha	Kārpāsa
Ativiṣā	Karpūra
Bākuci	Kāśmarya
Bandhūka	Kola
Bhallātaka	Laghu-pañcamūla
Bhāringī	Madhuка
Bhūrja	Mudga
Candana	Mudgaparnī
Carmakaṣā	Muñjātaka
Coraka	Mustaka
Dāruharidrā	Nimba
Hamsapadī	<b>Udararoga (Abdominal Disorders)</b>
Haridrā	Ajagandhā
Jātī	Āragvadha
Jīmūtaka	Ārdraka
Jīvantī	Aśvagandhā
Kapitha	Babbūla
Khadira	Bilva
Kṛṣnavetra	Caṇaka
Madhuka	Cavicā
Mallikā	Citraka
Maṁsi	Dantī
Mudgaparnī	Devadāru
Mustaka	Dravantī
Nimba	Eraṇḍa

Guggulu	Agastya	
Hapuṣā	Akṣoṭa	
Harītakī	Āmalakī	
Jyotiṣmatī	Aśvattha	
Kaṇṭakārī	Atasī	
Kakādani	Balā	
Kodrava	Candana	
Mahat-pañcamūla	Daśamūla	
Māṇaka	Dhānyaka	
Maṇḍūkaparnī	Eraṇḍa	
Nīlinī	Godhūma	
<b>Urticaria (śitapitta)</b>		
Agnimantha	Guḍūci	
Āmalakī	Guggulu	
Ārdraka	Haṁsapadi	
Candana	Haridrā	
Kaṇṭakārī	Harītaki	
Kāśmarī	Jivakādyagaṇa	
Kulattha	Karavellaka	
Madhūka	Karīra	
Mūlaka	Kāśmarī	
Nimba	Kokilākṣa	
<b>Urustambha</b>		
Agnimantha	Lāṅgali	
Ajagandhā	Madhuka	
Āragvadha	Modhuśigru	
Arka	Māmśi	
Aśvagandhā	Maṣaparnī	
Bhallātaka	Muṇḍī	
Guggulu	Muṇjātaka	
Haritakī	Mustaka	
Kākamācī	Nikocaka	
Karaṇja	Nimba	
<b>Uṣnavāta</b>		
Candana	<b>Vātavyādhī</b>	
<b>Vātarakta (Gout etc.)</b>		
Abhiṣuka	Ajagandhā	
Adhaḥpuṣpi	Amlikā	
Āḍhakī	Ārdraka	
	Aśoka	
	Asthisaṁhāra	
	Aśvagandhā	
	Balā	

Bhallātaka	Veneral Diseases-Ratija roga
Daśamūla	(S. T. D.)
Devadāru	<b>Upadāmśa (Soft-Chancre)</b>
Eraṇḍa	Āragvadha
Godhūma	Bābbūla
Hapuṣā	Bhṛīgarāja
Haridrā	Dāḍima
Harītakī	Dāruharidrā
Hiṅgu	Harītakī
Kapikacchu	Karavīra
Kārpāsa	Kṣirīvṛkṣa
Kunduru	
Kuṅkuma	
Māṁsi	<b>Viṣūcikā</b>
Māṇa	(Gastro-enteritis)
Methikā	Apāmārga
Mūlaka	Arka
Muṣṭaka	Elā
Mahānimba	Jīraka
Mahat-pañcamūla	Kāravellaka
Nirgunḍī	Kupīlu
<b>Apastamba</b>	Lavaṅga
Amlavetasa	Muśalī
<b>Avabāhuka</b>	
Balā	<b>Vitiligo-leucoderma</b>
Guñjā	(Śvitra)
Ingudi	Asana
Kākodumbara	Bākuci
Lakuca	Bhallātaka
<b>Gṛdhrasī (Sciatica)</b>	Bhṛīgarāja
Guggulu	Bibhītaka
<b>Khallī (Cramps)</b>	Citraka
Kuṣṭha	Girikarṇikā
<b>Kroṣṭusīrsa</b>	Hṛībera
(Chronic arthritis)	Kākodumbara
Guggulu	Khadira
<b>Hanugraha (Lock-Jaw)</b>	
Bimbī	<b>Vomiting (Chardi)</b>
	Āmra
	Āmalakī
	Badarī
	Bhūṣṭra
	Bilva

Candana	Māhānimba
Dhānyaka	Mūśikaparṇī
Drākṣā	Nārikela
Durālabhā	Kadamba
Dūrvā	Kampillaka
Elā	Kandalī
Gavedhukā	Kapikacchu
Guḍūcī	Karañja
Harītakī	Kebuka
Hṛibera	Kulattha
Jambīra	<b>Gunieaworm</b>
Jambū	Babbūla
Jātī	Bhallātaka
Jīraka	<b>Wound (Vraṇa)</b>
Kaṇṭakikarañja	Aguru
Kapiṭṭha	Ajagandhā
Karañja	Amlikā
Karkaṭaśringī	Āpāmārga
Kharjūra.	Āragvadha
Kiratatikta	Arjuna
Lājā	Arka
Madhuka	Āsphoṭa
Māṁsi	Aśvagandhā
Masūra	Aśvattha
Mātulunīga	Atasi
Mudga	Bākuci
Mūrvā	Balā
Mustaka	Bhārṇigī
Nārikela	Bhṛṅgarāja
<b>Wasting (Kārṣya)</b>	Bhūrja
Agastya	Dantī
Balā	Daruharidrā
Madhuka	Devadāru
<b>Warms (Helminthiasis)</b>	Dhāttūra
Āmalakī	Dravantī
Bhallātaka	Dūrvā
Bhūstṛṇa	Eraṇḍa
Bimbī	Gāṅgerukī
Devadāru	Godhūma

Guggulu	Karavīra
Indravāruṇī	Khadira
Inḍudi	Kośāmra
Jambū	Kṣīrīvṛkṣa
Jātī	Kuśa
Jīvantī	Kuṭaja
Jyotiṣmatī	Lakuca
Kadalī	Lodhra
Kadamba	Madhuka
Kampillaka	Mahat pañcamūla
Kaṅguka	Meṣaśṛṅga
Karañja	Nārikela
Kārvellaka	Nimba



## **TECHNICAL-MEDICAL TERMINOLOGY**

<b>Abhiṣyanda</b>	: Conjunctivitis, a kind of eye-diseases.
<b>Ādhmānakara(ī)</b>	: Causing flatulence, abdominal abnormal condition.
<b>Ādhmāna</b>	: A disorder in which there is an excessive collection of gas in the stomach; gas in the digestive tract due to fermentation or decomposition, vitiation-aggravation of Vāta.
<b>Ānāha, Āṭopa</b>	: Different stages or ailing conditions of Ādhmāna and related disorders of gastro-intestinal tract. Condition characterized in hardness in abdomen caused by wind in excess in bowels.
<b>Adhimāmsa</b>	: Swelling, big and painful, in molar teeth causing salivation.
<b>Ahipūtanaka</b>	: Scabies in anus.
<b>Ajakājata</b>	: Staphyloma, a kind of eye-diseases.
<b>Āmavāta</b>	: Rheumatic arthritis.
<b>Amla</b>	: Sour, acidic
<b>Amlapitta</b>	: Acid gastritis, or known as Hyper acidity characterized by hyperacidity, burning sensation, abnormal feeling of stomach, abdominal pain, biliary nausea and other symptoms.
<b>Anyatovāta</b>	: A disease of eye having intense pain in eye-brows or eye-ball due to aggravated Vāta.
<b>Apacī</b>	: Scrofula; glandular enlargement.
<b>Apatantraka</b>	: A vātic-disorder characterized by fits of convulsions with loss of consciousness.
<b>Ardhāngavāta</b>	: Hemiplegia.
<b>Ardita</b>	: Facial paralysis.

<b>Arjuna</b>	: Subconjunctival haemorrhage, a kind of eye-diseases.
<b>Arma</b>	: Pterygium; a kind of eye-diseases.
<b>Avabāhuka</b>	: Pain in arms caused by aggravation of Vāta in shoulder joint.
<b>Ākhuviṣa</b>	: Rat-poisoning
<b>Āmadoṣa</b>	: It broadly refers to food intoxication usually associated with faulty digestion (and impaired metabolism).
<b>Atisāra</b>	: Diarrhoea; diarrhoeal complains.
<b>Āyuṣkara</b>	: Promotion of life.
<b>Agnidīpana</b>	: Stimulating the factor of gastro-intestinal digestion.
<b>Agnidagdha</b>	: Burn
<b>Aguru</b>	: Light (not heavy).
<b>Anuṣṭaṇa</b>	: Not hot or less (little) hot.
<b>Ajīrṇa</b>	: Indigestion
<b>Annadravaśūla</b>	: Gastric ulcer, Acute gastritis
<b>Anulomana</b>	: Regulating the bowel movement or function, intestinal function (e.g. Vātānulomana as carminative), helping in putting or sending in right direction.
<b>Apasmāra</b>	: Epilepsy, Epileptic.
<b>Arṣa</b>	: Piles; haemorrhoids or haemorrhoidal.
<b>Āyuvardhana</b>	: Promoting Life, longevity.
<b>Aruci</b>	: Anorexia, anorectic.
<b>Asthibhagna</b>	: Bone fracture.
<b>Asthisandhāṇīya</b>	: Promoting healing of bone fractures.
<b>Aparāpātana (niṣkramaṇa)</b>	: Expulsion of placenta (delivery of foetus; obstetrics).
<b>Alarka, śvāna- kukkura dāmṣṭra-</b>	
<b>Viṣa</b>	: Dog-bite, rabies.
<b>Asra-rakta</b>	: Blood.
<b>Āśmarī</b>	: Calculus, stone; various kinds of Mūtrāśmarī-urinary organs and Pittāśmarī-gall bladder.

<b>Atisāra-Āmātisāra</b>	: Diarrhoea, dysentery; gastro-enteritis.
<b>Āsyavairasya-muskhavirasatā</b>	: Tastelessness of mouth; Tasteless state of Vocal Cavity (mouth orific-tongue taste sense).
<b>Agnimāndya</b>	: Achylla, Dyspepsia (Mandāgni).
<b>Antrasula</b>	: Intestinal colic.
<b>Āntraśotha</b>	: Enteritis (Grahaṇī).
<b>Arbuda</b>	: Tumour
<b>Anśughāta</b>	: Sun-stroke.
<b>Atyagni, Tivrāgni</b>	: Excessive hunger.
<b>Adhimantha</b>	: Glucoma
<b>Apāthyā</b>	: Unwholesome, Unsuitable, Unfavourable (harmful).
<b>Bālagraha</b>	: Seizures in children causing various syndromes (grahavādhā, Bhūtavādhā).
<b>Bhaṣmaka</b>	: Excessive hunger and digestion causing loss of dhātus, imaciaition and debility.
<b>Bālaroga, Bālāmaya,</b>	
<b>Bālavikāra</b>	: Children diseases; Paediatrics.
<b>Baddhamūtra</b>	: Anurea.
<b>Balya</b>	: Promoting, body strength, muscular strength, resistance to diseases tonic, decay and degeneration; combating the virulence of the disease and capacity to inhibit or neutralise the cause of the diseases.
<b>Bandhyātvā</b>	: Sterility.
<b>Bhagandara</b>	: Fistula-in-ano.
<b>Bhedana</b>	: Purgation, purgative.
<b>Bhrama</b>	: Giddiness, mental confusion and delusion.
<b>Bṛihāna</b>	: Promoting body buck.
<b>Bodhana</b>	: Awakening or arousing.
<b>Buddhiprada</b>	: Promoting intellectual faculties.
<b>Bhūtavādhā</b>	: Demnological effects to cause ailing condition.
<b>Bhagaśotha</b>	: Vulvitis.

<b>Carmadala</b>	: Psoriasis; the skin disease.
<b>Cakṣuṣya</b>	: Beneficial to the eyes.
<b>Chardi</b>	: Vomiting
<b>Carmoroga</b>	: Skin diseases.
<b>Chedana</b>	: Expectorant
<b>Cirapākī</b>	: Taking a long time to get digested.
<b>Caturthika/</b>	
<b>Viṣama jvara</b>	: Malarial periodic/quartan fever.
<b>Caladanta</b>	: Loose teeth.
<b>Dhūpana</b>	: Fumigation.
<b>Duṣṭavrāṇa</b>	: Indolent, foul and sloughy ulcers.
<b>Dāhahara,</b>	
<b>Dāhapraśamana</b>	: Refrigerant, relieving burning sensation.
<b>Dadru</b>	: Ringworm; scaly and exudative affections of the skin.
<b>Dantaroga</b>	: Dental diseases.
<b>Dantya</b>	: Dentrifrice, promoting teeth or dental health, curing dental ailments.
<b>Dīpāna-pācana</b>	: Gastro-stimulant and digestive.
<b>Dīpana, Dīpaniya</b>	: Gastro-stimulant, improving digestion.
<b>Dhātupuṣṭikara</b>	
<b>Dhātuvardhaka</b>	: Nourishing improving and promoting body tissues; nutrient tissue homologues nourishing the tissue.
<b>Dr̥stiprasādana</b>	: Capable or potent for improving and protecting vision.
<b>Carmadala</b>	: Psoriasis, the tidious skin diseases; common chronic inflammation of the skin, marked by rounded reddened patches which are covered with dry silvery scales.
<b>Galagāṇḍa</b>	: Goitre; a disease of thyroid gland.
<b>Gandamāla</b>	: Cervical adenitis causing a chain of swollen gland in neck.
<b>Grahanīroga</b>	: A kind of disorders of intestineal or digestive tract particulary Grahanī (organ), the seat of agni, causing loss of appetite, indigestion, constipation

	attenuating with diarrhoea and malabsorption. Malabsorption, syndrome/chronic, amoebiasis/ cotitis.
<b>Granthi visarpa</b>	: A type of erysepalas causing inflammation of gland with high fever, pain and other associated signs and symptoms.
<b>Gulma</b>	: Abdominal lump caused by accumulation of wind and other causes.
<b>Garbhāśayaśodhana,</b>	
<b>Garbhāśayaśamso-</b>	: Indicated to cleanse the uterus.
<b>dhana</b>	
<b>Garbhāśayaśaithily</b>	: Uterine Inertia.
(śithilitā)	
<b>Garbhapātana</b>	: Inducing abortion.
<b>Garbhapātakara</b>	: Abortifacient.
<b>Garbhasthāpana</b>	: Promoting conception (pregnancy).
<b>Grahanavādha</b>	: Psychiatric involvement and its bad effects behind anomalies of abnormalcy (bodily, psychosomatic or psychic).
<b>Granthiroga</b>	: Glandular enlargement, swelling and other symptoms.
<b>Grāhi</b>	: Astringent property.
<b>Galaroga-śotha</b>	: Throat affections (also tonsilitis, pharyngitis.)
<b>Gudaroga</b>	: Rectal ailments; proctological disorders.
<b>Grēdrasī</b>	: Sciaticā.
<b>Guṇa</b>	: Properties, physical qualities of substances.
<b>Hikkā</b>	: Hiccough
<b>Hṛdroga</b>	: Heart-diseases; heart trouble.
<b>Hṛdrujā</b>	: Heart pain; angina-pectoris.
<b>Hṛdyā</b>	: Cardial, Cardiac or Cardiac Tonic.
<b>Hṛdyāvasādaka</b>	: Cardiac depressant.
<b>Hṛllāsa</b>	: Nausea (Utkleśa).
<b>Halimaka</b>	: Advanced stage or case of Jaundice.
<b>Ikṣumeha</b>	: Glycosuria

<b>Indralupta</b>	: Baldness
<b>Jälakagardabha</b>	: A syndrome like erysepalas causing fever and swelling.
<b>Jalodara</b>	: Ascites (Dakodara).
<b>Jantughna, jantunāśana</b>	: Anthelmintic, vermifuge, also referring anti-microbial, antiprotozol, anti-bacterial, antiparasitic, disinfectant etc. and other similar actions (krmighna).
<b>Jaraṇa</b>	: Digestive
<b>Jīrnajvara</b>	: Chronic fever
<b>Jvaraghna</b>	: Antipyretic, antiperiodic or febrifuge
<b>Jihvājādya</b>	: Stiffness (palsy) of tongue.
<b>Jīvanīya</b>	: Promoting life.
<b>Kikkisa</b>	: Stria gravidarum.
<b>Kitibha</b>	: A skin disease causing darkness, roughening and hardness of skin.
<b>Kṣatakṣīna</b>	: Wasting condition of body in general due to chest-wound.
<b>Kukkurakāsa</b>	: Whooping cough.
<b>Kukūṇaka</b>	: Ophthalmia neonatorum, a kind of eye diseases, characterized by inflammation of eye in new born child.
<b>Kunakha</b>	: Onychia (Cippa)
<b>Kuṣṭha</b>	: Generally disease of skin and particularly leprosy (the former known as kṣudrakuṣṭha) and the latter as mahākuṣṭha.
<b>Kuṣṭhaghna</b>	: Anti-leprotic.
<b>Kāmalā</b>	: Jaundice, also related to hepatitis.
<b>Kadara</b>	: Corns.
<b>Kandū</b>	: Skin condition(s) associated with itching; scabies.
<b>Kanḍūghna</b>	: Anti-pruritic; indicated in skin affections e.g. scabies, itchy troubles and other similar complaints.
<b>Kanthyā, kanthaviśodhana (śodhana)</b>	: Curing, cleaning and improving throat

	disorders for function. Soothing to the throat (Svarya-soothing to in the throat and voice).
<b>Kāsa</b>	: Cough, bronchitis.
<b>Kṣāra</b>	: Alkaline, alkalies, ash.
<b>Kītaviṣa</b>	: Insect poison.
<b>Kapha</b>	: Primal constituent of living body; generally known as phlegm; a component of Tridoṣa, tri-humours of (Vāta, Pitta and Kapha).
<b>Karṇanāda</b>	: Tinnitus; a kind of ear diseases.
<b>Karṇaśūla,</b>	
<b>Karṇapīḍā</b>	
<b>(Karṇārti)</b>	: Earached, a symptom or type of ear disorders.
<b>Karṇapidi(a)kā</b>	: Furuncles in the ear.
<b>Karṇabādharya</b>	: Deafness; Ear disease.
<b>Karṇapūya,</b>	
<b>Karṇasrāva</b>	: Otorrhoea; bleeding, pus formation an the ear; a kind of ear diseases.
<b>Kaṣāya</b>	: Astringent.
<b>Klaibya, Klībatā</b>	: Impotence.
<b>Karṣaśna</b>	: Promoting slimming of the body.
<b>Karkaṭārbuda</b>	: Cancer.
<b>Katu</b>	: Pungent, in taste.
<b>Kastārtava</b>	: Dysmenorrhoea.
<b>Kītamāraka</b>	: Insecticidal, anthelmintic, vermifuge. (Krmighna and jantughna).
<b>Kṣaya, Yakṣmā-</b>	
<b>rājayakṣmā</b>	: Pthisis, consumption (Tuberculosis, pulmonary tuberculosis).
<b>Krmighna,</b>	
<b>Krimghna</b>	: Anthelmintic.
<b>Keśya</b>	: Promoting the growth of hairs.
<b>Kukṣiśūla</b>	: Abdominal colic.
<b>Kṣudāśamanī</b>	: Hunger.
<b>Mukhaśodhana</b>	: Indicated or useful to cleanse the mouth.
<b>Mukhapāka</b>	: Stomatitis, Aphtas.

<b>Makkala</b>	: Post-partuni pain.
<b>Marutaparyaya</b>	: A disease of eye causing pain in eye-lids, brow and-eye ball alternately.
<b>Maśaka</b>	: Mole
<b>Madakārī, Mādini,</b>	
<b>Mādaka</b>	: An intoxicating effect; Intoxication, toxicating exhilarating.
<b>Madhura</b>	: Sweet.
<b>Madhumeha</b>	: Diabetes; diabetes mellitus. Hypoglycaemia.
<b>Madātyaya</b>	: Alcoholism; effect of excessive use of alcohol.
<b>Madhumehaghna,</b>	
<b>Madhumehahara</b>	: Hypoglycaemic action.
<b>Mada</b>	: Necrosis.
<b>Medhya, Medhājana,</b>	
<b>Medhyakara,</b>	
<b>Medhākara</b>	: Promoting memory and intellect.
<b>Mādaka</b>	: Narcotic.
<b>Mastiṣkabalya</b>	: Brain tonic; promoting, strengthening faculties, function and organ (brain in general).
<b>Masūrikā</b>	: Variola; Measles, Pox.
<b>Mūtrakṛchrahara</b>	: Indicated in dysurea.
<b>Mūḍhagarbha</b>	: Difficult and delayed labour. Abnormal posture of foetus.
<b>Mukhaśodhana</b>	: Indicated or useful to cleanse the mouth
<b>Mūrchā</b>	: Spells of fainting.
<b>Mūtradoṣahara</b>	: Indicated to cleanse the urine.
<b>Mūtravirecaniya</b>	: Promoting increased micturition.
<b>Mṛduvirecaka,</b>	
<b>Mṛdurecaka</b>	: Latative, mild-purgative.
<b>Mukharoga</b>	: Diseases of the oral cavity; ailments of (under E.N.T. diseases) mouth.
<b>Laghu</b>	: Light; easy to digest.
<b>Lūtahara</b>	: Indicated, useful in and countering spider-bite poisoning effect.
<b>Lavaṇa</b>	: Salt, salty; saline.

<b>Lekhana</b>	: Aids in reducing corpulency; act of scaping, reduction of body eight.
<b>Netra roga,</b> <b>Cakṣuroga,</b> <b>Nayanaroga,</b> <b>Locanavikāra</b>	: Diseases of the eye; ophthalmic diseases (ophthalmology).
<b>Netrya</b>	: Beneficial to the structure, function and preventive, (also hygiene) of eyes and their ailments (also curative).
<b>Naktāndhya</b>	: Night blindness.
<b>Nidranāśana,</b> <b>Nidrājanāna</b>	: Causing insomnia.
<b>Nāsāroga</b>	: Nasal diseases (E.N.T.)
<b>Nādīvrana</b>	: Sinus or Fistula.
<b>Naṣṭārtava</b>	: Amenorrhoea.
<b>Phakkaroga</b>	: Rickets (Bālaroga).
<b>Pothakī</b>	: Trachoma.
<b>Pitta</b>	: Primal constituent of the living body, a component of Tridoṣa, tri-humours (vāta-pitta-kapha); generally known as bite.
<b>Phiraṅga</b>	: Syphilis; the venereal disease (S.T.D.).
<b>Plīhodara</b>	: Splenomegaly.
<b>Pravāhikā</b>	: Sprue (Grahaṇī).
<b>Padminīkanṭaka</b>	: Pale spots in skin surrounded by thorny structures.
<b>Pakṣmakopa</b>	: Entropion.
<b>Pariṇāmaśūla</b>	: Abdominal pain during digestion or on empty stomach.
<b>Pilla</b>	: Chronic eye diseases resulting in watering and itching of eye and bluered vision.
<b>Piṣṭaka</b>	: A disease of the characterized by elevated white spot in conjunctiva.
<b>Pūyameha</b>	: Gonorrhoea.
<b>Pradara</b>	: Excessive discharge of menstrual blood menorrhagia.
<b>Prameha</b>	: A group of diseases kinds or

	syndromes of anomalies of urine mainly or commonly with increased frequency and turbidity of urine; characterised by specific symptoms (in different types of Prameha).
<b>Punsavana</b>	: Measures prescribed for reversal of sex in foetus during the pregnancy period.
<b>Pācana</b>	: Digestive
<b>Pāmā</b>	: Scabies
<b>Pañcamahābhuta</b>	: Five-elemental theory of structural and functional (basic constituents composing all the substances-universe)
<b>Pāñduroga</b>	: Anaemia
<b>Pathya</b>	: Wholesome, suitable.
<b>Pāñduhara,</b>	
<b>Pāñdughna</b>	: Anti-anaemic; indicated in treatment of anaemia (Pāñduroga).
<b>Paramavṛṣya</b>	: Promoting optimum virility.
<b>Pīnasa</b>	: Chronic rhinitis.
<b>Pināśahara,</b>	
<b>Pinasaghna,</b>	
<b>Pinasanāśīnī</b>	: Indicated in the treatment of chronic rhinitis.
<b>Picchila</b>	: Sticky, gummy.
<b>Pārśvaśūla</b>	: Chestpain.
<b>Pipāsāśamana</b>	: Relieving polydypsia.
<b>Piḍikā</b>	: Boil.
<b>Pittaśāmaka</b>	: Anti-bilious.
<b>Pittavirecana</b>	: Cholagogue (Pittasāraka)
<b>Pradara,</b>	
<b>śvetapradara</b>	: Leucorrhoea.
<b>Pliharogahara,</b>	
<b>Plihodara</b>	: Indicated in splenomegaly.
<b>Prasekaśamana</b>	: Palliative of excessive salivation.
<b>Prativiṣa</b>	: Antidote to poison.
<b>Prabhāva</b>	: Specific and characteristic action.
<b>Raktagulma</b>	: A lump formed in uterus due to accumulation of menstrual blood in females (other types of gulma)

<b>Rasāyana</b>	: Alterative, restorative, rejuvenation.
<b>Raktapitta</b>	: Intrinsic haemorrhage due to vitiation of rakta (blood) and pitta (bile).
<b>Raktameha</b>	: Bilharzia.
<b>Raktapradara</b>	: Metrorrhagia
<b>Rasa</b>	: Taste.
<b>Rohinī</b>	: Diphtheria; a disease (infections), diseases of the throat and the air passage which becomes inflamed and swollen and are coated with a fibrinous exudate.
<b>Rucya, Rucikara,</b>	
<b>Rocana</b>	: Appetizer, increasing appetite.
<b>Śaiśavīya vāta</b>	: Poliomelyitis
<b>Śankhaka</b>	: Severe encephalitis causing intense headache particularly in temples (often fatal).
<b>Sidhma</b>	: A type of Kuṣṭha characterized by white or coppery circular spots like flowers of bottle-gourd often in chest leaving dust or rubbing.
<b>Snehana</b>	: uncation.
<b>Sirāharṣa</b>	: Advanced stage of śirotpāta (paninus).
<b>Śitapitta</b>	: Urticaria, an allergic disease of systemic origin marked by rashes, redness painful and itching elevations of the skin.
<b>Stanotthāpana</b>	: Elevation of breasts.
<b>Somaroga</b>	: A womans disease causing increased flow of urine with incontinence and consequent dehydration and debility. (variously interpreted as gynaecological, hormonal and/or metabolic disease).
<b>Śukra</b>	: Corneal opacity (avrāṇa śukra) and corneal ulcer (savṛāṇa śukra); the eye-diseases (of cornea).
<b>Śūla</b>	: Colic, ache, pain; disease or symptom.
<b>Sūryāvartta</b>	: A type of headache beginning with sun-

rise and increasing gradually with the movements of the sun and subsiding at sunset.

<b>Śuṣkākṣipāka</b>	: Blepharospasm.
<b>Śrama</b>	: Exertion (Klānta).
<b>Stambhaka (rakta)</b>	: Haemostatic, styptic; anti-haemorrhagic.
<b>Soumya, saumya</b>	: Promoting steady state equilibrium (of dosās-sāriṛa and mānasa).
<b>Sandhiviślesa</b>	: Dislocation of joint(s).
<b>Sarpaviṣa,</b>	
<b>sarpadamśa</b>	: Snake-bite poison; venom.
<b>Sarvakanḍū</b>	: Pruritis of multiple etiology.
<b>Śarkarāniśūdana</b>	: Hypoglycaemic (madhuraka-śamana).
<b>Śarkarāśmarī</b>	: Urinary gravel.
<b>Śiroroga</b>	: Cranial diseases; ailments of headache.
<b>Śuklameha</b>	: Albuminuria.
<b>Śirahśūla</b>	: Headache.
<b>Śodhana</b>	: Purification, radical elimination of morbid substances.
<b>Śvayathu-śopha</b>	: Inflammation (śotha).
<b>Śvitra</b>	: Leucoderma (vitiligo).
<b>Śvāsa</b>	: Asthma; dyspnoea, bronchial asthma.
<b>Stanārbuda</b>	: Breast tumour.
<b>Śukrakṛta</b>	: Spermatogenetic
<b>Śvāsahara</b>	: Anti-tussive, anti-asthmatic.
<b>Stanaśotha</b>	: Inflammation of breast.
<b>Stanyajanana</b>	: Galactogogue
<b>Svedajanana</b>	: Diaphoretic; promoting perspiration or diaphoresis.
<b>Śukra-retas-vīrya</b>	: Semen
<b>Śukravikāra</b>	: Seminal diseases.
<b>Śotha</b>	: Oedema; General Ansarca
<b>Sarvāṅga-śotha</b>	: Ekaṅgaśotha-Localised inflammation, oedema swelling.
<b>Timira</b>	: Defects of vision. Cataract.
<b>Tikta</b>	: Bitter.
<b>Trṣṇānigrahaṇa</b>	: Relieving thirst.

<b>Tūṇī</b>	: Colic pain occurring in the iliac or pelvic region of the abdomen.
<b>Tvagvikāra</b>	: Cutaneous affections; skin diseases.
<b>Tvacya</b>	: Promoting the skin health; palliative for skin diseases, preventive and curative.
<b>Tridoṣa</b>	: Doctrine of Tridoṣa consisting Vāta, Pitta and Kapha; the tri-humoral theory of Āyurveda. Three basic factors in the living body responsible for health and disease (equilibrium or balance maintaining health and disturbance in equilibrium or imbalance causes disease in body).
<b>Trt(d)</b>	: Thirst.
<b>Udara</b>	: Abdominal enlargement.
<b>Udāvartta</b>	: Upward movement of vāyu.
<b>Unmantha</b>	: Swelling with itching in earpinnae.
<b>Upadamśa</b>	: Soft-chancro; a venereal disease.
<b>Upakuṣa</b>	: Inflamed gums with haemorrhage and foul smell.
<b>Urustambha</b>	: Paraplegia.
<b>Uṣṇavāta</b>	: Dysuria associated with burning sensation yellow urine or haematuria.
<b>Unmatta</b>	: Inducing psychotropic effects (i.e.) (stimulating the central nervous system.)
<b>Udaraśūla</b>	: Abdominal colic.
<b>Udarda</b>	: Śitapitta, Koṭha-Udarda; allied to urticaria and advanced or severe stage patches on skin.
<b>Uṣṇa</b>	: Hot, heat.
<b>Unmāda</b>	: Insanity, mental disease.
<b>Utklesa</b>	: Nausea, retching (Hṛllāsa).
<b>Ubhayatobhāgahara</b>	: Purification-Samśodhana (Adhobhāgahara-Urdhvabhāgahara : Purgation-Emesis).
<b>Udgāra</b>	: Eructation.

<b>Vātaghnā</b>	: Anti-vāta; indicated in diseases of nervous system.
<b>Varāhadāmstra</b>	: A syndrome causing inflammation in skin with burning : redness, intense pain, itching and fever.
<b>Vātarakta</b>	: A disease caused by vitiation of vāta and rakta, and characterized by rashes, anaesthetic patches and pain in joint, Gout.
<b>Vātavyādhi</b>	: A group of diseases caused specifically by aggravated vāta such as pain, convulsion, paralysis and other several symptoms.
<b>Vertigo</b>	: Bhrama.
<b>Vidārikā</b>	: Inflammation of lymphatic glands in axilla and groin.
<b>Vṛddhi</b>	: Scrotal enlargement.
<b>Viśūcikā</b>	: Gastro-enteritis with piercing pain.
<b>Viśalya</b>	: Extracting foreign body.
<b>Vyānga</b>	: Dark shade on face caused by stress and excessive exercise.
<b>Vīrya</b>	: Potency, energy, power.
<b>Vājikarana</b>	: Aphrodisiac; sexual tonic.
<b>Vāta</b>	: A principal, prime and dominant component of Tridoṣa, tri-humours (the causative factors of normalcy as well as abnormalcy of body). general known as wind or gas.
<b>Vamanopaga</b>	: emetic, aid to emetics or emesis.
<b>Varnya</b>	: Useful in promoting complexion of the skin. (pigmentation).
<b>Vastiropa</b>	: Diseases of urinary system, particularly urinaly bladder.
<b>Vāṅkṣaṇagranthi</b>	: Inguinal glands.
<b>Vayasthāpana</b>	: Promoting longevity.
<b>Vedanāsthāpana</b>	: analgesic, anodyne, local anaesthetic.
<b>Vipāka</b>	: Digestion and metabolism.
<b>Vibandha</b>	: Constipation
<b>Vidāhī</b>	: Causing burning sensation.

<b>Vikāsi</b>	: Spreading rapidly in body.
<b>Virecana</b>	: Purgative, cathartic, purging, purgation.
<b>Vranaropana</b>	: Wounds-healer.
<b>Viṣa</b>	: Poison
<b>Viṣaghna</b>	: Anti-dote.
<b>Yakṛdroga</b>	: Liver disorders
<b>Yonivyāpat</b>	: Disorders of female genital tract.
<b>Yoniviśodhana</b>	: Useful to cleanse the uterus.
<b>Yośidvikāra</b>	: Gynaecological disorders.
<b>Yonidoṣa</b>	: Vaginal/uterine disorders.
<b>Yoniśotha</b>	: Vaginitis.
<b>Yonidrāvāṇa (dravanārtham)</b>	: Inducing vaginal secretion (relevant to sexual intercourse-hastening vaginal discharge); Vajikaraṇa.
<b>Yonigāḍhikaraṇa (gadhyārtham)</b>	: Useful to check slackness of vagina.



## General Suffix pattern

(Pharmacological, pathological, clinical and therapeutical terminology in the texts of Indian medical science)

- |  |   |
|--|---|
| A. Šama, ſamana, ſāmaka<br>hara, hāraka, hr̥t<br>Nāśaka, nāśana, vināśana<br>ghna, Nut, pranūt, etc.<br>Jit, Apha Arī. | Curing, anti, eradicating,<br>pacifying alleviation,<br>reducing, allaying<br>destroying, palliative<br>indicated, useful,<br>countering etc. |
| B. Janana, janaka, ja<br>kara, kāri(ī)<br>prada, etc.  | Promoting; helping,<br>enhancing producing,<br>inducing, increasing,<br>prompting, stimulating<br>etc.  |



## **Pharmacological Glossary [ A-N : अ-० ]**

Akaṇṭhya	: Unwholesome to throat; disfavour, unhealthy or not beneficial for throat (gala, kaṇṭha) Kaṇṭhaghna.
Akledi	: Free from humidity and moisture; without kleda (moisture, humidity or wetness).
Akṣisamilana	: Eye blinking.
Akṣyupaghātakara	: Destroying, harming to eye or eye-vision.
Agada	: Anti-poison, antidote to poison, countering or checking poison; drug.
Agni, Agnikara, Agnikṛt, Agnijanana, Agnidīpana, Agnisandīpana, Agnivṛddhikara, Agni prasādhaka	: digestive fire or power, appetite; stimulating digestion; digestive and metabolic agents. Increasing or generating agni to optimum level (normal).
Agnijit	: Depressing agni (digestive or digestive fire etc.)
Agnibalaprada, Agnibalavṛddhi, Agnibalavṛddhikara, Agnivardhana	: Strengthening and promoting agni (digestive, digestion fire or digestive power etc.). Specifically promoting agni.
Agnivaisamyakara	: Making agni irregular
Anisandhukṣaṇa	: Stimulating agni (as if by fanning sandhukṣaṇa)
Agnisama	: Fire-like, hot and sharp, analogous to agni.
Agnisādana	
Agnimāndyakara,	
Agnimandatvakara	: Dipressing agni.
Agnihitatamā	: Most beneficial or wholesome for agni.
Āṅgamardapraśamana	: Pacifying bodyache.
Āngavardhana	: Promoting body-growth, promoting or helping growth or development of body as a whole and (or) body-organs or parts.

Aṅgasthirīkaraṇa	: Stabilysing the body parts
Acakṣuṣya	: Unwholesome to eye, harmful or disfavouring (unsuitable) to eyes and their physiological function. Not Cakṣuṣya (antonym)
Accham	: Clear, not-turbid, Svaccha.
Atibalaghna	: Excessively destroying strength.
Atikātu	: Excessively pungent.
Atimadhura	: Excessively sweet.
Atimūtrala	: Excessively diuretic (highly mutrala).
Atimṛdu	: Too mild or soft.
Atitikta	: Excessively bitter.
Atirūkṣa	: Too rough.
Atirocana	: Excessively relishing.
Atisāra nirbahaṇa	: Checking atisāra (diarrhoea).
Atṛptikara	: Not causing contentment. Not ṭṛptikara (antonym).
Atyagnināśana	: Checking, pacifying or countering intense agni.
Atyabhiṣyandi	: Excessive abhiṣyandi.
Atyamla	: Very sour, too sour (most acidic).
Adāhina, Adāhi,	: Causing slight burning sensation; not causing burning sensation.
Adāhakara	
Adyahkaphānulomanam	: Expelling by downward passage.
Adhahśodhana,	: Purifying or evacuating by downward passage such as purgation and enema (virecana tathā basti) Virecanāsthāpana.
Adhasamśodhana	
Adhalṣrañśī,	: Moving down on absorbing moisture; moving downwards.
Adhogāmi(ī)	
Adhobhāga,	: Eliminating impurities from onward
Adhobhāgadoshahara,	passage (purgative).
Adhobhāgahara	
Adhomārgapratartana,	: Purgative.
Adhohara, Anulomana	
Adhovātānulomana,	: Expelling flatus; carminative.
Adhovātānulomyakara	
Anulomana	: Pushing the impurities to its natural course.
Anatiguru	: Slightly heavy.
Anatisnidgha	: Slightly unctuous.
Anabhiṣyandi	: Slightly abhiṣyandi.
Analadārdhyam	: Stabilising agni.

Analottejana	: Stimulant of agni, stimulating agni.
Anāmaya, Anāmayatvakara	: Disease-free state (health); providing freedom from diseases, without diseases, disease-less state (stage) of body-health.
Anāyuṣya, Anāuṣyakara Anārogyakara	: Decreasing life-span; reducing life-span : Destroying, disturbing, affecting immunity (anti-disease resistance powers loss to vitality, loss of immunity). Disturbing or adversely affecting to immune system of body (antonym-Ārogyakara). Not proving disease-free state of health.
Anilakarṣī	: Drawing out to its own course.
Anilakopinī,	
Anilaprakopanī	: Aggravating vāta.
Anilasūdana,	
Anilāpaham	: Eliminating vāta.
Anilarogajit,	
Anilārtinut	: Eliminating vātika disorders.
Anurasa, Vyaktarasa	: Unimanifest taste.
Anulomana	: Pushing the impurities to its natural course.
Anuvāsana	: Unctuous enema.
Anuvāsanopoga	: Supporting unctuous enema.
Anuṣṭa, Kiñciduṣṭa	: Slightly hot, not hot.
Anekatā,	: Variation, diversity (differences).
Anakatvarupa (Prthakatva)	
Anekavidhakalpanā	: Various pharmaceutical forms.
Anojasya	: Depleting ojas.
Antaragni	
sandhukṣaṇa	: Fanning (stimulating) internal agni (fire).
Antrvraṇa śodhana	: Purifier of internal wound (cleanse wound).
Annadravyarucikara	: Promoting relish.
Annadveṣa,	: Aversion to food. Aruci.
Bhaktadveṣa Annāruci	
Annapāna	
prakāṅkṣakara, Ruci,	

Rucida, Rucipradame,	
Rucikara, Rucikāraka,	
Rucya, Rucyiṣya	: Desire of food, relish; causing desire of food (food and drinks).
Annasanghātabhedana	: Disintegrating the mass of food.
Apakarṣaṇa	: Reducing body weight. Lekhana.
Apatarpaṇa	: Desaturation.
Apatyajanana	: Providing fertility (apatya-progeny).
Apatyasānlanakara	: Promoting generation of progeny.
Apathya	: Unwholesome to body and mind (antonym-pathya).
Aparatva	: Relatively inferior.
Aparāprapātana	: Expelling placenta.
Amasmāraṇāśana-nut-	
vīmokṣa-hara-hṛt-apah	: Anti-epilepsy, eradicating epilepsy (curing or relieving from epilepsy).
Apicchilam	: Non-slimy (antonym-picchila).
Apratighāta	: Non-resistance.
Abalam, Dourbalya	: Debility.
Abdoṣahara (apa-dosa)	: Eliminating morbidity of body fluid.
Abhinava, nava	: Fresh
Abhiṣyandi,	
Abhiṣyanda	: Obstruction in channels due to increased mucus secretion.
Abhiṣyandakara	: Causing abhiṣyanda
Abhiṣyandāpaha,	
Ahiṣyandajaraṇa	: Digesting abhiṣyanda, anti-diuretic.
Abhyāsa	: Repetition, practice, constant or regular use.
Amla	: Sour.
Amlapittajanana,	
Amlibhūta,	
Amlapittakara,	
Amlavidāhi	: Causing amlapitta (acid gastritis or hyper acidity; cusing to burning sensation in gastric region).
Arucighna,	
Arucināśana,	
Arucipraśamana,	
Aruciprativādhaka,	
Aruciḥara,	
Arocakahara	: Alleviating, pacifying or eradicating anorexia.

Arūkṣa	: Not rough or unctuous (antonym : rūkṣa).
Artighna, Artivismaraṇīya, Artiśamana Arditanāśana, Arditāpaha	: Analgesic; relieving or blocking pain. : Anti-paralytic, alleviating facial paralysis.
Arśoghna, Arśonut, Arśohara, Arśa praśamana, Arśāśatana, Arśasamana	
Alakṣmighna	: Anti-haemorrhoid; pacifying, alleviating destroying and (or) eradicating piles.
Alakṣmyāvaham,	: Removing ugliness.
Alakṣmikara	: Causing ugliness (antonym : Laks̄mikara).
Alpamāruta	: Producing little vāta (wind).
Alpavarcasa	: Producing little varcasa (stool).
Alpavīryā	: Possessing (having) little potency (vīrya).
Avakaśakara	: Srotośodhana; making space by clearing channels.
Avadhamanam	: Vilekhanam; slimming.
Avabodhanam	: Sajñāprovodhana; resuscitation.
Avaśtambhanam	: Supporting, strengthening; sandhārakam, balapradā.
Avasādana	: Depressing (elevated wound)
Avikāri	: Harmless, not causing harm, side-effects, non-toxic, safe. Aviśādakara (antonym : vikāri)
Avidāhi	: Not causing burning sensation (antonym : vidāhi).
Aviśādakara	: Not-toxic, or free from without toxins, not causing toxic substance. (Antonym : visādakara)
Aviṣyandī	: Non-spreading. (antonym : viṣyandī).
Avṛṣya	: Non-aphrodisiac. (antonym : vṛṣya).
Ayyaktarasa	: Anurasa; unmanifest taste (rasa).
Aśmanāśana, Aśmabhit, Aśmabhedana	: Destroying, disintegrating or alleviating.

ting calculus (stone, e.g. urinary calculus or mūtrāśmari etc.). Áśmari bhedana.

Aśmari pātana,	
Aśmarībhedana,	
Aśmarināśana,	
Aśmarīhara	: Breaking, disintegrating, expelling or eradicating calculus. Áśmanāśana etc.
Aśrunivāraṇa	: Checking excessive lochrymal secretion.
Aṣṭhīlanut	: Removing enlarged prostate (aṣṭhilā-mūtrāṣṭhīlā).
Asanyoga	: Non-conjunction or spatial separation (antonym : sanyoga).
Āsara	: Non-moving, not sara (antonym : sara).
Asukha	: Unhappily or not happy (antonym : sukha).
Asoukhyā,	
Asyākdoṣaghna,	
Asṛgadōṣaṇāśana,	
Asṛgdoṣāpaha,	
Asṛgvikārahara	: Eliminating blood disorders (rakta vikāra). Raktadoṣaghna-praśamana-hara-paha-sāmaka. (antonym : asṛgdoṣakara).
Asṛkpṛasādana	: Blood-purifier. Raktaprasādana, rakta-sodhana.
Asthibalakṛta	: Strengthening bones. Asthibala vardhana.
Asthyaabhi vardhana	: Promoting growth of bones. Asthi-dhātu vivardhana.
Asrakṛta, Asrakara	: Causing haemorrhage. Raktasrāvakara.
Asraghna	: Checking stoping or countering haemorrhage; haemostatic. Rakta-rudhira-asra (blood) srāvahara. Raktastambhana, Raktastāpana, Soṇitasthāpana (also raktaskandana), Rakta-saṅgrahaṇam, Raktasāñ-grāhikam, Raktasthāpana, Raktāpaham, Rakto-paśānti etc.
Asrapittajit	: Pacifying raktapitta, Raktapitta.
Asvapnanāśana	: Eliminating loss of sleep (hypnotic).

Ahitam	: Unwholesome. Anāuşyu. (antonym : hitam, pathyam).
Ahṛdyam	: Non-cardial, unpleasant. Apriyam. (antonym : hṛdyam).
Ākhunut	: Roat-killer or rat-repellant. Mūşikā-paha.
Ākhuviṣaghna, Ākhuviṣahara, Ākhudamśa viṣa nāśana	
Ākhuviṣanirvāṇa	: Countering rat-bite-poison (ākhu viṣa-mūşikaviṣa), eradicating rat-poison.
Āgneya	: Having predominance of agni. Agni-guṇapradhānam. (antonym : soumyam).
Ātmagunāḥ Ādhmānakara, Ādhmānakāraka	: Qualities of soul (buddhi prayatnāta). Causing flatulence or ādhmāna. (antonym : ādhmānahara, anti-flatulence).
Ānanasutva vaktvakara	: Making the face skin beautiful; Mukhakāntikara, mukhamāṇḍal prabhā vardhana.
Ānāhaghna	: Alleviating hardness of bowels. Ānaha-hara.
Ānāhanāśana, Ānāhapraśamana, Ānāhabhedana, Ānāhabhedī, Ānāhavimokṣaṇa	: Alleviating, pacifying, removing or disintegrating ānāha or hardness of bowel. (antonym : ānāhakara).
Ānulomika	: Adhobhāgahara, virecana. Purgative.
Āpātabhadra	: Initially useful but harmful consequently and on constant or regular use. Āpāta sukhakara-pariṇāma duḥkha-kara.
Āpurṇarasa vīryāṇī, Āpurṇarasa pramāṇavīryam	: Fully mature; fully mature with taste (rasa) and potency (vīrya).
Āpyāyana	: Replenishing deficient dhātus.
Āmām-āma, Āmadoṣa (viṣasadṛṣa)	: Immature rasa or āmadoṣa; Apakva

	rasa. Poison-like āmadoṣa e.g. food-poison etc. Products of hypo-functioning of agni (toxins, food toxins, auto-toxins, allergic metabolites etc.).
Āmapācana, Āmajarana, Āmapraśamana, Āmayaghna	: Digesting, pacifying or alleviating āma. : Alleviating, eradicating or destroying diseases.
Āmavipācana, Āmahara, Āmaśoṣaṇa	: Specific digestive of āma; absorption of liquid in āma.
Āmaviṣodīraṇa Āmātisāraghna, Āmātisāranāśana, Āmātisārahara	: Aggravating āma poison. : Checking or alleviating diarrhoea caused by āma.
Āmāśayaśodhana, Āmāśayaviśodhana	: Cleansing stomach or purifying stomach.
Āyuprakarṣakṛt, Āyuḥprada, Āyuṣya, Āyuṣya kara (Karī)	: Providing longevity (Antonym : Anāyuṣya)
Āyurvṛddhikṛt, Āyurhitatam	: Promoting life-span, most beneficial for life-span.
Ārogyam, Ārogyakāra, Ārogyadam	: Absence of disease, (free from disease, without disease (health). Rogakṣamatva (Immunity). Rogābhava. Health-providing.
Ārdra	: Fresh, rasapūrṇa. (antonym : anārdra, śuṣka, rasa virahita etc.)
Ālasyāpahara	: Sphūrtijanana; providing energy by removing idleness.
Āśyalaghava	: Lightness in viscera.
Āśukārī	: Immediately acting.
Āśudoṣaharaṇa	: Immediately purification of doṣa; eliminating impurity immediately.
Āśubalālbhivardhana	: Promoting strength instantaneously.
Āśurohaṇa	: Immediately promptly or fastly wound-healing (active wound-healer).

Āśuvyavāyitākara,	: Helping absorption and circulation of drug (possessing and performing vyavāyi action fastly or promptly); Fast acting vyavāyi (vyavāyi action itself indicating easy and fast or quick assimilation after ingestion or application of any substance; more over 'āśu' enhances further to extent and kind of its action as 'āśuvyavāyi' or 'āśuvyavāyitākara').
Āśvaṅgābhivardhana	: Promoting growth of organs (immediately) or accelerating growth of organs (e.g. śiśuvṛddhi or child growth in paediatrics or kaumārabhṛtya); speedy or fast growth of body organs.
Āsvāsakara	: Assuring.
Āsthāpana	: Nirūha basti. Non-unctuous eneme (a method or mode of administration of medicine through rectum or guda-mārga-anus).
Āsthāpanopaga	: Supporting or helping āsthāpana (non-unctuous enema).
Āsyadourgandhyanāśana	
Āsyadourgandhyahara	: Removing foul smell of mouth, mukhadourgandhyahara. (antonym : mukhasugandhakara, asyasugandhitakara).
Āsyaroganut,	: Alleviating diseases of mouth.
Āsyarogahara	: Mouth-cleansing.
Āsyāviśodhana	: Stimulating salivary secretion
Āsyāsrāvāṇa	
Āsyavairasyahara,	: Removing abnormal taste of mouth or mukhavairaśya. (antonym : āsyasurasatvakara, mukha surasatvakaratva).
Āsyavirasatāhara	: Desire (ātmaguṇa).
Icchā	
Indriyadrḍhīkaraṇa,	
Indriyadāṛḍhyakara	: Producing stability in organs (body-organs or parts) or sense-organs also.
Indriyasthairiyakara	: Weakness or debility in sense-organs or
Indriyadourbalya	

	sensory organs (Indriyādhishṭhāna śaktikṣīṇatva).
Indriyaprasāda, Indriyasamprasāda	: Normal functioning of sense-organs (healthy state of sensory organs and their physiological function Indriya vyāpāra svābhāvika pravṛtti). Normal state of (health) sense organs.
Indriyaprasādakara	: Promoting normal functioning of sensory and motor organs.
Indriyalakara, Indriyalaprada, Indriyalaya	: Strengthening organs both sensory and motor.
Indriyabodhana	: Stimulating sense organs.
Indriyasantarpaṇa	: Saturating sense organs.
Indriyasphuṭikarana	: Producing clarity in sense-organs.
Indriyācchaya	: Clarity of sense organs. Indriyaprasāda.
Indriyopaghātakara	: Causing loss of function of sense organs.
Indriyoparodhana	: Causing obstructing in function of sense-organs.
Utkledi	: Causing excessive humidity or aggravating Kapha, pitta etc.
Utkleśajanana, Utkleśakara, Utkleśana	: Causing nausea. Hṛllāsa (nausea) janaka (causing or inducing). (Antonym : Ahṛllāsakara, Utkleśarodhi, Anutkleśaka)
Uttamāṅgaśodhana	: Head-evacuation
Uttaravātikāni	: Useful in predominance of vāta.
Utthāpana	: Elevating (developing) the body. Pustijanana.
Utsāmodakāraka, Usavāmodakara	: Stimulating and exhilarating.
Utsādana	: Elevating depressed wound (nimna vraṇothāpana).
Utsāhajanana, Utsāhakara	: Energy providing (stimulating encouraging instinct).
Udarnut, Udararogapaha	: Alleviating abdominal enlargements

	(allaying abdominal anomalies or abnormalities).
Udarbhedi	: Eliminating abdominal enlargements or consolidations (e.g. lumps) by breaking or disintegrating accumulated faecal mass.
Udarādhmānakara	: Causing tympanitis (Koṣṭhagatavāta pariṇāma).
Udardapraśamana, Udardaśamaka, Udardahara, Udardajit	: Pacifying or allaying udarda (allergic rashes) (antonym : Koṭhajanana).
Udaryāgnudīraṇa	: Jāṭharāgni dīpana, stimulating digestive fire (udaragata agni).
Udāvartajanana, Udāvartakara	: Causing udāvarta (upward movement of vāta).
Udāvartanut, Udāvartahara, Udāvartanāśana	: Alleviating udāvarta.
Udgāraśodhi, Udgāraśodhaka	: Normalising eructations by carmination.
Udvepana praśamana	: Kampana śāmaka, checking rigour.
Udveṣṭana	: Cramps in body parts; aṅgamotanam.
Unmādanāśana, Unmādanut, Unmādāpaha	: Alleviating insanity (unmāda).
Upakledana, Upkledakara, Upakledi	: Moistening; Kledana, ārdrikaraṇa.
Upacaya, Upacayakara	: Development; increase in or increasing body weight.
Upacayakṣayakara	: Diminishing body development.
Upacayavardhana	: Promoting body development.
Upacyāpaha	: Checking body development.
Uparopanā	: Supporting wound-healing.
Upalepanut	: Removing stickiness; upalepanāśaka.
Upaśamanīya	: Pacifying; śāmaka.
Upaśoṣaṇa	: Moisture-absorbing; absorbent.
Upastambha	: Supporting body.

Upastambhana	: Checking (vomiting or flatus).
Ubhayatobhāgahara,	
Ubhayatobhāgadosahara,	
Ubhayabhāga,	
Ubhayaśodhana	: Vamana-virecana dvya (ubhaya); Emetic-purgative both; Eliminating impurities both upwards and downwards.
Uraganut	: Destroying snakes; sarpa nāśaka or sarpaghna.
Urolāghava	: Lighness in throat.
Uroviśuddhi	: Purification of chest; vakṣa viśodhana.
Uraḥparidahanā	: Burning in chest.
Ullekhana	: Vomiting (vamana); lightening (laṅghna) or fasting.
Uṣṇa	: Hot property (uṣṇa guṇa) or hot potency (uṣṇa vīrya).
Uṣṇavirya	: Hot in potency, hot in touch or hot in property.
Uṣṇasañsarpa	: Hot in touch.
Uṣṇasugandhi	: Hot as well as aromatic.
Ūrugrahāpaha,	
Ūrustambhanivāraṇa,	
Ūrustambhavināśana	: Alleviating ūrustambha; anti-ūrustambha.
Ūrjaskara	: Rasāyana; ūrjaḥ praśasta śaktikara.
Ūrdhvakaphānulomana	: Pushing kapha by upward passage.
Ūrdhva gadāpaha	: Alleviating supraclavicular diseases.
Ūrdhvagam	: Emetic
Ūrdhvabhāgahara	
Ūrdhvāśodhana,	
Ūrdhvahara,	
Ūrdhvajatrugadāpaha,	
Ūrdhvajatru roga-	
vikārahara	: Ūrdhvagadāpaha (diseases under śālākya tantra i.e. Eye and E.N.T. diseases).
Ūrdhvavātahara	: Alleviating ūrdhvavāta or excessive belching.
Ūrdhvavātanulomana,	
Ūrdhvavātanulomyakara	: Carminative, vātanulomana.
Ūrdhvouṣadha	: Emetics or emetic drugs; vamana dravya.
Ūṣṇa	: Kaṭu; pungent.

Okasātmya	: Suitable by practice (wholesome or favourable to any individual in particular rather exception, normally not sātmya in general as a rule or to suitable to all).
Ojaśkara, Ojaskari	: Promoting ojas or energy providing. Ojovardhana and utsāhakara-śaktivardhana.
Ojasyam	: Wholesome for oja (by preserving and promoting diptikara or kāntivardhana - promoting lustre.
Ojovardhana, Ojovivardhana, Ojo-abhvardhana	: Promoting ojas, energy-providing and specifically promoting ojas.
Ouṣṇyam	: Hotness; uṣṇatva.
Kacāntakṛt	: Depilatory; Keśāntakara, Keśvināśakārī or keśanāsaka.
Kaṭu, Kaṭuka	: Pungent.
Kathina	: Hard guṇa (antonym : mṛdu guṇa).
Kaṇṭhya	: Beneficial for throat; also located in throat.
Kaṇṭhaparidahana	: Causing burning in throat.
Kaṇṭh baghnātiva	: Causing obstruction in throat (as if constricted).
Kaṇḍūghna, Kaṇḍūhara, Kaṇḍūśamana	: Anti-pruritic, pacifying itching.
Kaphakṣapaṇa	: Eradicating kapha.
Kaphavicchedi, Kaphakara,	
Kaphala, Kaphaja	: Increasing or causing kapha.
Kaphavicchedi	: Eliminating thick sputum.
Kaphavilāpana	: Liquifying (thick) sputum.
Kaphaviśo	: Drying kapha; kaphaśoṣaka.
Kaphahara, Kaphaghna,	
Kaphaśāmaka	: Eliminating, alleviating or pacifying kapha (provoked or increased state of kapha in abnormal state).
Kaphavṛddhikara, Kaphavivardhana Kaphavardhana	: Aggravation or increase of kapha (in

	provocation state of kapha in abnormal (state).
Karaṇa	: Instrument, means, processing. Saṅskāra, sādhana or upakaraṇa.
Karaṇalaghūni	: Lightness acquired due to processing (through saṅskāra).
Karkaśa	: Rough; khara.
Karṇaśūlaghnā,	
Karnaśulanut-praśamana-	
nivāraṇa	: Alleviating or pacifying earache.
Karṇikāpātana	: Expelling the stings.
Karṣana, Karṣanīya	: Emaciating; useful for emaciting.
Kaṣṭaya (rasa)	: Astringent (taste)
Kaṣṭaya (Kalpanā)	: A particular pharmaceutical process (bhaiṣaja-kalpanā).
Kaṣṭavibhramā	: Having difficult complications.
Kācayāpana	: Maintaining the case of cataract.
Kāthinyakara	: Producing hardness.
Kāmalāhara-paha-	
nāśana	: Alleviating jaundice (Kāmalā).
Kāyavirecana-śodhana	: Purgative.
Kāyaśithilikaraṇa	: Causing slackness in body.
Kārṣyam, Kārṣyakṛt	: Emaciation; causing emaciation.
Kāsanīrvahirṇi-	
vināśana-vivarnam-	
hantā-hara-paha	: Anti-tussive; alleviating cough.
Kilāsaghna-hanta,	
Śvitranāśana	: Alleviating vitiligo, anti-leucoderma.
Kīṭahara-nut-nāśana	: Inescicide, counteracting insect-poisoning.
Kīṭavraṇāpaha	: Alleviating wound caused by insect-sting.
Kukṣitopramardanī	: Anti-colic.
Kuṣthaghna-nāśinī-	
nibarhaṇa-nut-	
vinihantā-sūdana-	
hā-apah-uddālana	: Anti-leprotic; Alleviating; pacifying or eradicating Kuṣṭha (leprosy).
Kuṣṭhapragālana	: Causing necrosis in leprotic part (organ).
Kuṣṭhaprabādhana	: Checking advance of leprosy.
Kṛcchrarujāpaha	
(mūtrakṛcchrajanya)	: Alleviating pain of dysuria.

Kṛmighna-ghnī-nāśana-	
nut-sūdana	
(krimighna etc.)	: Anthelmintic
Kṛṣṇakarma	: Blackening agent; Kṛṣṇī karaṇa.
Keśanāśana, Keśaghna	
Keśopaghātakara	: Depilatory; destroying or causing falling of hairs.
Keśakṛṣnatākara	: Blackening hairs.
Keśarañjana	: Colouring hairs; dyeing (blackening) hairs.
Keśadairdhya-kara	: Lengthening hairs.
Keśabahutvakara	: Making hairs profuse.
Keśabṛñhaṇa	: Promoting growth of hairs.
Keśamārdavakara	: Smoothening hairs.
Keśasnigdhatākara	: Making hairs unctuous.
Keśopaghātakara	: Causing falling of hairs.
Kesya	: Beneficial for hairs.
Koṭhpaha-vināśana	: Alleviating koṭha; urticaria allergy and its severe stage; mandal.
Kopana, prakasa	: Aggravating factor.
Koṣṭha vāta prakopiṇi	: Wind-forming
Kuṣṭhavātahā-vātaghna-	
nāśana-śāmaka	: Checking wind-forming in abdomen.
Koṣṭha vidāhī	: Causing burning in abdomen.
Koṣṭha viśuddhi	: Evacuation (purgative).
Koṣṇa	: Warm; Alpoṣṇa or İṣadoṣṇa.
Kriyāsamarthatam	: Most effective; kriyāmadhikatama sāmarthyā.
Kriyaasāmarthyā	: Effectivity, efficacy, capability for activity or drug action.
Klamahara,	
Klamāpaham	: Removing or eliminating malaise.
Klinna	: Moist, ārdra.
Klibatahara,	
Klibatvanāśana	: Removing impotency; aphrodisiac (vājīkaraṇa).
Klibatvakara,	
Klibatvajanana	: Causing impotency or making impotent (antonym : aphrodisiac, vājīkaraṇa).
Kledanam, Kledī	: Moistening.
Kledahara-ājuṣaṇa,	

Kledāpaha	: Removing or absorbing moisture (kleda).
Kṣaṇam	: Injuring; kṣārakarma, kṣatakāraka.
Kṣatādipācana	: Suppurating wounds etc.
Kṣatoṣma nigṛha	: Preservation (to control or maintain) wound-heat; vraṇoṣmā.
Kṣayāpaha-nāśana-hara	: Alleviating consumption.
Kṣaraṇa	: Necrosis of tissues or aggravation of doṣas.
Kṣīṇa kṣata sandhānakara	: Healing, unifying; sandhānīya.
Kṣīrajanana,	
Kṣīrasanjanana	: Galactogogue; stanyajanana.
Kṣīraviśodhana	: Galacto-depurant; stanyaśodhana.
Kṣīradourgandhyānāśana (ni)	: Removing foul smell of breast-milk.
Kṣīravaivartyanāśana	: Removing discolouration of breast-milk.
Khamārdavakara	: Smoothening channels; srotomārdavakara.
Khavaiguṇya, Khavaiguṇyakara	: Abormality or anomaly in channels; srotovaiguṇya. Causing srotovaiguṇya.
Khara, Kharatva	: Rough; karkaśa; roughness. (antonym : ślakṣaṇa).
Khālītyāpaham	: Alleviating baldness; khālītyanāśana.
Khālītyāpādana	: Causing baldness; khalityajanana.
Gaṇḍanut,	
Gaṇḍanāśana,	
Gaṇḍavilāpana	: Alleviating enlarged glands.
Gandha	: Smell.
Gandhādhyā-yan	: Aromatic, odorous; sugandhita.
Garahara-jit-hara-hari	: Counteracting garaviṣa (artificial poison).
Garbhakoṣṭhaśodhana	: Cleansing uterus; garbhāśaya śodhana-viśodhana.
Garbhadām,	
Garbhadā	: Promoting conception (garbha).
Garbhadhāraṇa	
Garbhasthāpana	: Stabilising foetus or foetus-stabilising; garbhasthāpana, prajāsthāpana.
Garbharodhaka	: Contraceptive.

<b>Garbhaśātana,</b>	
<b>Garbhapātana</b>	: Abortion, abortive, abortifacient.
<b>Garbhāśaya viśuddhi,</b>	
<b>Garbhāśaya śodhana</b>	: Cleansing of uterus.
<b>Garbhāśaya-garbhasthanamārga snehana</b>	: Lubricating uterus and vaginal passage.
<b>Garbhopaghātakara</b>	: Causing teratological disorders; garbhavikṛti kara.
<b>Galaroganut,</b>	
<b>Galāmayaghna (i),</b>	
<b>Galāmaya vināśana</b>	: Alleviating throat disorders (diseases or ailments).
<b>Galaśoṣanut</b>	: Eliminating dryness of throat.
<b>Gudakīlahā</b>	: Arsoghna, alleviating gulakīlamarṣa.
<b>Gudakaṇḍūnāśana</b>	: Alleviating anal itching (pruritis ani).
<b>Gudapraguṇīkarana</b>	: Making rectum firm.
<b>Gudabhransāpahānāśana</b>	: Removing rectal prolapse.
<b>Gudarujāpaham,</b>	
<b>Gudaśulahara,</b>	
<b>Gudārtināśana</b>	: Alleviating pain in anus (rectal pain).
<b>Guru, Gurutā,</b>	
<b>Gurupakam</b>	: Heavy in property (guru guṇa); heavy in digestion (gurupāki-guruviryā).
<b>Gurvādaya</b>	: Gurvādi guṇas; gurvādi vināśati guṇāḥ (physical properties, twenty in number).
<b>Gulmaghnā-nāśana-nibarhaṇa-nut-prabhedana-bhedana-paham-saithilya-janānī (anana)</b>	: Destroying, abdominal lump; breaking and slackening — alleviating gulma (lump in udara or abdomen).
<b>Gṛdhraśirogāpaham-hara-nāśana</b>	: Alleviating sciatica (gṛdhraśī).
<b>Gaurava,</b>	
<b>Gauravakarāṇī</b>	: Heaviness in body by increase of weight; heaviness in digestion or sealing of heaviness; causing heaviness.
<b>Granthi vilāpana</b>	: Removing cyst (granthi-gaṇḍa) or glandular swelling.

Graharogaghnam,	
Graharogohara,	
Grahanāśana,	
Grahāmayanāśana	: Alleviating disorders caused by grahas (seizures). Destroyer of grahas (seizures).
Grahaṇīdoṣa nut-	
praśamana,	
Grahaṇīduṣaṇam,	
Grahaṇīnut,	
Grahaṇībalavardhana	: Affecting grahaṇī; Pacifying, alleviating or removing disorders of grahaṇī; potentiating the functions of grahaṇī.
Glapanā, Glānikara,	
Glanyabhinnivṛttikaram	: Causing malaise.
Ghana	: Solid, compact; sāndra (antonym : śūṣira)
Ghṛtavyāpatprāśamana-	
nāśinī-nāśana	: Pacifying adverse effects of ghee (consumption).
Ghrāṇāsrāvaṇa	: Increasing nasal secretion.
Ghrāṇādiprahālādana	: Exhilarating to nasal and other sense organs.
Cakṣuprasādana	: Pleasing to eyes; netraprasādana.
Cakṣurvirecava	: Stimulating lachrymal secretion.
Cakṣuṣya	: Beneficial (wholesome and good) for eyes (protecting or preserving eye-health as a whole and also preventive as well as curative effects of drugs and food etc.-auṣadhānna including āhāravīhāra-possessing cakṣuṣya action).
Calah	: Moving; gatiśila (vāyoh guṇah).
Cāturthika-vināśana-	
nivāraṇa-hara	: Alleviating or removing quartan fever.
Cetanā	: Consciousness
Cetovikārakarm	: Causing mental disorders
Cetovikāranut,	
Cetovikāraghna	: Alleviating mental disorders, psychiatric measures; manovikāranāśana.
Cyāvana	: Decreasing dhātus; dhātukṣayakara.
Cherdana	: Emesis; vamana. Emetic(s); vaman dravyam (dravyāṇi).

Chardinigrahaṇa	: Anti-emetic; chardihara, vamanahara, vamighnam. (antonym : emetic, vamanakāri, vāmaka, chardijanana).
Chardātiyoga praśamana	: Checking frequent vomiting; atiśaya chardi sāmana.
Chettā	: Cutting, separating.
Chedana	: Expectorant etc.; sleṣmanilhsāraka etc.
Chedanīya	: Excision; śastrakarma.
Jaṭharāghnāni	: Desaturating; apatarpaṇakaraka. Channel-cleansing; srotahśodhana (srotoviśodhana).
Jaṭharāgnivṛddhi	: Alleviating udararoga (abdominal enlargements); Udararogaharāṇi, udararogoharam.
Jaṭharāpaham	: Stimulation of digestive fire.
Jaḍatākaram	: Alleviating udararoga; udarrogaharam.
Jaraṇah, Jaraṇīyah	: Causing stiffness in limbs.
Jarakṛt	: Digestant; pācana.
Jarāvyādhi praśamana	: Causing premature senility; śighra jarā vārdhakyakara.
Jarjarīkaraṇam	: Alleviating senility and diseases.
Jādyakara	: Making the body shattared.
Jihvāviśodhana	: Causing stiffness.
Jīrnajvarahara, Jīrnajvarāpaha	: Tongue-cleaning; jihvendriyavīśodhana.
Jīvana, Jīvanīya	: Alleviating chronic fever.
Jvaraghna-nāśana-hara- nut-śamana-apaha	: Vitaliser; prāṇaśaktivardhana.
Jvaravardhana	: Antipyretic, febrifuge; pacifying or alleviating fever.
Tatra yogyatvam	: Aggravating fever.
Tanu	: Effectivity.
Tandrākara	: Thin (avahalam); lean (kr̥śam), Lean-
Tandrāpaham,	-ness (Tanutām).
Tandropaśamanīya	: Causing drowsiness.
Tamakaśamana	: Removing drowsiness; pacifying drowsiness.
	: Relieving bronchial asthma (tamaka śvāsa); pacifying feeling of darkness (tamaka).

Taruṇaprāyam	: Almost fresh.
Tareṇyah	: Young; abhinava.
Tarpaṇa	: Satiating; trptikara. Causing thirst; ṛṣṇājanaka.
Tarpaṇam	: A specific dietary preparation (tarpaṇa lājasaktavah).
Tāpanakaram,	
Tāpanah	: Producing heat.
Tāluśoṣaghna-hara-	
sāmaka	: Removing dryness of palate.
Tiktaḥ	: Bitter (taste-rasa).
Timirghna	: Alleviating defects of vision.
Tikṣṇa	: Irritant, sharp, intense (tikṣṇa : guṇa) (antonym : manda guṇa)
Tikṣṇavirecana	: Drastic purgative.
Tivrarūkṣāḥ	: Fast and rough.
Tulyaguṇah	: Having similar property.
Tuvara	: Astringent; kaṣāya.
Tuṣṭidam, pradam	: Providing contentment, satisfying.
Trptikara	: Satiating
Trptighna	: Alleviating feeling of satiety.
Tejorūpāvaham	: Providing glow and complexion.
Trṣāpaham,	
Trṣṇāghnam-nigrahaṇa-	
praśamana-praśānti-	
haram-atiyoga	
praśamana	: Allaying or pacifying thirst; pacifying excessive thirst or over thirst.
Trṣṇājanana	: Causing thirst.
Tridoṣaśamana-hara-	
nāśaka-ghna-apah-	
śamanī	: Pacifying or allaying tri-humors or three doṣa - vāta, pitta and kapha-in abnormal state (viṣama-vṛddha).
Tvakpraduṣaṇa	: Affecting skin and causing skin diseases.
Tvakprasādakara	: Making skin pleasant.
Tvaksthriṅkaraṇa	: Providing firmness to skin.
Tvagāgnityanam	: Stimulating heat of the skin.
Tvaggrahaṇam	: Attaining (covering of) skin.
Tvagdoṣaprabādhana	: Checking skin diseases.
Tvagviśuddhikara	: Purifying skin.
Tvagdoṣāpanayanam	: Alleviating skin diseases.

Tvacya	: Beneficial to skin (proventive, protective and curative for skin).
Dantakriminut-haraghna-nāśana	: Removing or eradicating dental caries.
Dentacalanut	: Removing looseness of teeth (caladanta sthīrikaraṇa).
Dantacyāvana	: Making the teeth weak and fall (dantapātanam).
Dantadārdhyakaram	: Providing firmness to teeth; dantasthai-ryakara.
Dantabalaṅkara	: Making teeth strong.
Dantaroganut-haranāśaka-nivāraṇa	: Alleviating dental diseases (teeth ailments).
Dantaviśodhanam	: Cleaning of teeth, tooth brush, tooth powder.
Dantaśodhana	: Removing tooth (teeth) cavity (danta sarandhra koṭara).
Dantaśouṣiryanut	
Dantaharṣa, Dantaviśāpaha	: Destroying teeth-poison (dantaja viśāpaha).
Dantaharṣaṇa	: Excessive sensitiveness of teeth (often resultant to excessive sour taste).
Dantaharsapramardana	: Relieving excessive sensitiveness of teeth.
Dantabhanśanut	: Checking fall of teeth.
Dahana	: Burning; dahana karam.
Daraṇah, Dāraṇam	: Tearing, breaking, opening.
Dāruṇa	: Hard, Kāthina.
Dārdhyakara	: Providing firmness.
Dārdhyajanana, Dārdhyāvaha	: Providing firmness.
Dāhakara, Dāhana, Dāhkarakāṇi, Dāhkārī, Dāhajanana	: Causing or producing heat (burning sensation).
Dāhajvarahara praśamana	: Pacifying fever with buring sensation.
Dāhapaṛaśamana- nivāraṇa-nirvāpaṇa- pranāśana-praśanti-	

hara-apanayana	: Pacifying burning sesnation.
Dīpanah, Dīpanam	: Stimulating digestive fire; appetizer, agni-dīpana-sandīpana etc.
Dīpanagrāhī	: Anti-diarrhoeal also being appetizer.
Dīpanapācana	: Both appetizer and digestant.
Dīpanīyah	: Useful for dīpana-karma.
Dīrgha	: Long (time); kāla, (dīrgha), dīrgha-jīvana.
Duhkha	: Pain (ātmaguṇa); painful-dukhī (dukhāyu-sukhāyu).
Daḥkhābdhanam	: Blocking of feeling of pain (anaesthetic).
Durgandha	: Foul smell; dukhada gandha
Durgandhahara	: Removing foul smell or unpleasant odour.
Durnamahṛt	: Arśoghna (anti-piles).
Durvipākakaraḥ	: Uneasily digestable (with delay).
Duṣṭavraṇaśodhana-	
viśodhana	: Cleansing dirty wounds.
Dūṣīviśāpahā	: Counteracting latent-poison.
Drknāśana	: Destroying vision.
Drkprasādanī	: Clearing vision.
Drgghnam	: Dr̥ṣṭināśana.
Dṛḍha	: Firm, st. ~ (dṛḍha śarīrāṅga, sthira).
Dṛṣṭi kandū-kleda-	
dāha-mala-rajā hara	: Relieving, alleviating and pacifying itching, watering, burning, dirt and pain of eyes.
Dṛṣṭikṣayakara	: Diminishing vision
Dṛṣṭidūṣaṇam	: Affecting vision
Dṛṣṭyāpaham	: Causing loss of vision.
Dṛṣṭi prasādana	: Clearing vision.
Dṛṣṭibalakṛt-vivṛddhi	: Promoting power of vision
Dehamṛḍukaraṇa	: Softening body parts.
Deha laghutā	: Lightness in body.
Dehavṛddhikaram	: Promoting growth of body.
Dehasandhukṣaṇam	: Stimulating development of body.
Dehasamvejanam	: Producing shocks in body parts.
Doṣadhāti	: Alleviating doṣas; doṣahara.
Doṣaghna-nirharaṇa	: Pacifying or allaying doṣas (three), Eliminating excreta.
Doṣapācana	: Digestant of dosas associated with āma; doṣavipācana.

Doṣapracyāvana	: Elimination of doṣas; doṣanirharaṇa (malośodhana).
Doṣaprasamana	: Pacifying doṣas.
Doṣala, Doṣasanjanana	: Pathogenic; vikārajanaka (vaikṛtikavikārakāri).
Doṣavilāyanam	: Expelling doṣas (kapha-pitta) after increasing their liquidity.
Doṣaviṣyandanam	: Liquification of doṣas, doṣa vilayanam.
Doṣāśāmana	: Pacifying doṣas; doṣāśāmaka.
Doṣahara-haraṇam	: Expelling or allaying doṣas; expelling impurities.
Doṣāsampravartanī,	
Doṣānulomana	: Pushing excreta out (also through their normal passages).
Doṣasancayānubandhāḥ	: Accumulation of doṣas by prolonged through use.
Doṣānubandharakṣaṇam	: Protection against association of doṣas.
Doṣāndhya	: Removing night-blindness; naktāndhya.
Doṣotkleśakaram	: Displacing doṣas after aggravating (doṣas).
Dourgandhya,	
Dourgandhyānāśana	: Foul smell; renuval of foul smell.
Dourbalyakara-kṛt	: Debilitating; dourbalyajanaka; dourbalyabhinivr̥ttikaram.
Dourbalyāpaharam	: Alleviating debility.
Dravah	: Liquid (anonym : sāndra, solid).
Dravyaguru	: Heavy by nature (dravyaprakṛti).
Dhātupuṣṭijanana	: Nourishing dhātus; dhātupuṣṭikara.
Dhātupraduṣaṇam	: Vitiating dhātus (and also normal doṣas and malas); dhātuprodūṣaka.
Dhātuvardhanam	: Promoting dhātus; dhātu vṛddhikara.
Dhṛti	: Self-control on mind and body; ātmāniyantraṇa.
Dhātusāneyakṛt-kara	: Causing homeostasis; dhātusāmya (balance, equilibrium-'dhātusāmyamārogyatā').
Dhāraṇa	: Causing to hold back the seed (semen, embryo); bijadhāraka.
Dhīsmṛtihara	: Causing loss of intellect; prajnānāśana.
Dhīdhṛtismṛtihara	: Causing loss of intellect, memory, powers of retention, recollection.

Dhidhṛtismṛti-kara	: Promoting intellect.
Dhīpradām	: Inellect-promoting; buddhivardhana
Nakhaviśapah	: Counteracting nail-poison; nakhajavisaghna ( <i>nakhakṣatya viṣa</i> ).
Nayanāmayaghna	: Alleviating diseases of eye.
Nastah pracchardam	: Head-evacuation (by snuffing); śirovirecana ( <i>nasya</i> ).
Navā	: Fresh
Nādī vraṇāpah	: Alleviating sinus ( <i>nādī vraṇa</i> ).
Nātighanam	: Slightly thick; īśat sāndra.
Nātyuṣṇāśitam	: Slightly hot and cold.
Nāmanah	: Bending the body
Nilṣārāḥ	: Devoid of essence (potency); sārahīna ( <i>nirvīrya-vīryahīna</i> )—Hīnavīrya.
Nidrāpaharam	: Removing excessive sleep.
Nidrāvardhana	: Potently hypnotic.
Nidrāhara	: Anti-hypnotic.
Ninditavyādhikara	: Causing leprosy; kuṣṭhajanana.
Nirūhaṇāni	: Exerting actions of non-unctuous enema; nirūhakarmakara.
Nirgandham	: Devoid of smell; gandharahita, gandhahīna.
Nirvapaṇam	: Dāhaśāmaka; nirvāpaṇam.
Netrakrnimighnam	: Destroying organisms (also microorganisms-pathogenic) in eyes
Netra-daha-mala-rāgarujā-śopha-upadehahara ( <i>nivāraṇa-nāśana-śāmaka-nut</i> )	: Removing, pacifying or allaying burning sensation, dirt, redness, pain, swelling and dirt in eyes ( <i>nayana-dṛṣti-cakṣu</i> ).
Netramala viśodhana	: Eliminating, eye-dirt; netraśodhana.



# PHARMACOLOGICAL ACTION OF DRUGS

## **Medhya**

Brāhma-Aindrī  
Jyotiṣmatī  
Kūṣmāṇḍa  
Maṇḍūkaparṇī

## **Madakārī**

Ahiphena  
Dhattūra  
Bhaṅgā

## **Sajñāsthāpana**

Jaṭāmāṁsi  
Kaṭphala  
Hiṅgu  
Coraka

## **Nidrājanana**

Alābū

## **Vedanāsthāpana**

Kadamba  
Jalavetasa  
Pārasīka yavāṇī  
Guggulu  
Eraṇḍa  
Añkola  
Devadāru  
Gandhaprasāriṇī  
Medasaka  
Mucakunda  
Gorakṣa  
Nirguṇḍī

## **Ākṣepajanana**

Kupilu  
Ākṣepaśamana

## **Kupilu**

Cakṣuṣya  
Cakṣuṣyā  
Kataka  
Dāruharidrā

## **Karṇya**

Bilva  
Apāmarga

## **Nasya**

Kṣavaka

## **Rasya**

Meṣāśringī

## **Svedajanana**

Kirāta

## **Svedopaga**

## **Svedapanayana**

## **Keśya**

Nārikela  
Bhṛīgarāja  
Nilinī

## **Vidāhī**

## **Snehopaga**

Drākṣā

## **Varṇya**

Kuṇkuma  
Ketakī  
Madayantikā

## **Kandughna**

Karañja  
Kośāmra  
Nimba  
Jayanti

Araṇyajīraka	Khatmi
<b>Kuṣṭaghna</b>	Kāsamarda
Khadira	<b>Kāsāhara</b>
Haridrā	Kāsamarda
Bhallātaka	Kaṇṭakārī
Ārgavadha	Bṛhatū
Bākuci	Karkaṭaśringī
Jātī	Agastya
Kākodumbara	<b>Śvāsaḥara</b>
Cakramarda	Karcūra
<b>Hṛdaya</b>	Bhārṅgī
Arjuna	Dugdhikā
Kapūra	<b>Kaṇṭhya</b>
Hṛtpatrī	Madayavacā
Karavīra	Haṁsapadī
<b>Hṛdayottejaka</b>	<b>Lālāprasekajanana</b>
Kāphīka	Kaṭuvīra
<b>Raktabhāraśamaka</b>	Ākarakarabha
Jaṭāmāṁsi	<b>Trṣṇānigrahanā</b>
Jyotiṣmāti	Dhanvayāsa
Brāhmī	Dhānyaka
<b>Śothahara</b>	Mukhavaisadyakara
Agnimantha	<b>Dantasodhana</b>
Gambhārī	Dantyādardhyakara
Mānakanda	Bakuла
Hiṁsrā	<b>Tr̥ptighna</b>
Adhalpuṣpī	Cavya
<b>Gandamālāhara</b>	Ārdraka
Kāñcanāra	Śuṇṭhī
Kāṇḍīra	<b>Rocana</b>
<b>Chedana-Śleṣmahara</b>	Amlavetasa
Bibhītaka	Dāḍima
Lavaṅga	Bijapūra
Dārusitā	Jambīra
Madhuyaṣṭi	Cāṅgerī
Mastakī	Karmaraṅga
Bola	Karamarda
Lohavāṇa	<b>Dīpana</b>
Kalā	Ativiṣā

Kalambaka	Kumārī
Citraka	Saṁśodhana
Marica	(ubhayatobhāgahara)
Jiraka	Devadālī
Kṛṣṇa jīraka	<b>Grāhī</b>
<b>Pācana</b>	Bilva
Mustaka	Jātiphala
Eraṇḍakarkaṭī	<b>Āmahara (upaśoṣana)</b>
<b>Vamana</b>	Kuṭaja
Ikṣvāku	Aralu
Dhāmārgava	<b>Stambhana</b>
Kṛtavedhana	Dhātakī
Ariṣṭaka	Bakula
Madanaphala	Āvartanī
<b>Vamanopaga</b>	Dhanvana
Hijjala	Māyāphala
<b>Puriṣajanana</b>	Mayūraśikhā
Māṣa	Akaśavallī
<b>Vātānulomana</b>	<b>Śūlapraśamana</b>
Marubaka	Ajamodā
Damanaka	Candraśūra
Miśreyā	Dhattūra
Nādīhiṅgu	<b>Kṛmighna</b>
<b>Viṣṭambhi</b>	Viḍanga
Lakuca	Palāśa
<b>Recana</b>	Couhāra
<b>Sukha-mṛduvirecana</b>	Inḡudi
Atasi	Barvari
Aśvagola	Tiktapatri-Afsantin
Mārkanḍikā	Kīṭamārī
Kṛṣṇabīja	Kampillaka
<b>Tikṣṇavirecana</b>	Bhāṇḍīra
Danti	Ākhukarṇī
Dravantī	<b>Arśoghna</b>
Arka	Mahānimba
Indravāruṇī	Karīra
Kaṅkuṣṭha	<b>Yakṛta-plīhahita</b>
Kaṭukā	Dāruharidrā
Amlaparṇī	Kākamācī

Apāmārga	Mallikā
Bhunimba-kālamegha	Stanyaśodhana
Dugdhapheni	Pāṭhā
Kāsanī	Mūtravirecanīya
<b>Sukajanana</b>	Gokṣura
Muśali	Kuśa
Makhānna	Kaśa
Kokilākṣa	Darbha
Munjātaka	Ikṣu
Kapikacchu	Bhūmyamalakī
<b>Śukaśodhana</b>	Kaṅkola
Kuṣṭha	Hapuṣā
Kaṭphala	Anānāsa
<b>Prajāsthāpana</b>	Bandaka
Dūrvā	<b>Aśmaribhedana</b>
Kamala	Kulattha
Kumuda	<b>Mūtrarasāṅgrahaṇīya</b>
Kaśeruka	Amra
<b>Garbharodhaka</b>	Jambu
Japā	Udumbara
<b>Garbhāśayasankocaka</b>	Aśvattha
Ísvari	Dhava
Annāmaya	Aśmantaka
Kālājājī	<b>Madhumehahara</b>
Kārpāsa	Bijaka
Lāñgalī	Kāravellaka
Keb(v) uka	Bimbī
Harmala	<b>Jvaraghna</b>
Ārtavajanana	Haridru
Ārtavasangrahaṇīya	Kirātatikta
Asoka	Mūrvā
Lodhra	Kāṣṭhadāru
Udumbara	<b>Viśamajvaraghna</b>
Aśvattha	Kaṭunāhī
Dhava	Kaṇṭaki karanja
Aśmantaka	Kutikta-kunayana
<b>Stanyajanana</b>	Droṇapuṣpī
Nala	<b>Dāhapraśamana</b>
<b>Stanyasangrahaṇīya</b>	Candana-śveta

Candana-rakta	Nāgadamana
Elā	Upaviṣṭa
Campaka	Guṇjā
<b>Śitapraśamana</b>	<b>Viṣaghna</b>
Aguru	Nirviṣā
Bṛhadelā	Chilahinṭa
<b>Kothapraśamana</b>	Aṅkoṭa
Āsvakarṇa	<b>Raktastambhana</b>
<b>Vranaśodhana</b>	Nāgakeśara
Gāṅgarukī	Ajāparṇa-āyapana
<b>Balya</b>	Jhaṇḍu
Balā	Kukundara
Atibalā	Jalakumbhi
Mahābalā	<b>Raktaprasādana</b>
<b>Jivanīya</b>	Manjiṣṭhā
Jivantī	Dvīpantaravacā
Mudgaparṇī	Muṇḍī
Māṣaparṇī	<b>Brñhaṇa</b>
<b>Sandhāniya</b>	Kharjūra
Lajjālu	Madhūka
Asthīśṛṅkhalā	Chatraka
<b>Rasāyana</b>	<b>Lekhana-karśana</b>
Āmalaki	Cirabilva
Hariṭtakī	<b>Angamarda-praśamana</b>
Guḍūcī	Methikā
Aśvagandhā	<b>Vraṇaropanā</b>
Nāgabalā	Māṁsarohinī



# **DRUGS WITH SIDDHA MEDICINE TERMS**

## **Ayurveda**

Ākarakarabha  
Akṣoṭa  
Aguru  
Agastya  
Agnimantha  
Āṅkola  
Ajagandhā  
Atasi  
Ātībalā  
Ātīviṣā  
Adhaḥpuṣpī  
Ārānāsa  
Annāmaya  
Aparājitā  
Apāmārga  
Āmrātaka  
Amplaparṇī  
Amlavetasa  
Amlikā  
Araṇyajīraka  
Aralu  
Arimeda  
Ariṣṭaka  
Arka  
Arjuna  
Alarka-rājārka  
Āśoka  
Āsvakarṇa  
Āsvagandhā  
Āsvattha  
Asana-Bijaka  
Asthisainhāra

## **Siddha**

Akkirakaram  
Akrottu  
Agil  
Agathi  
Thamthalai  
Azhinjil  
Alisidirai  
Patatir  
Athividayam  
Kalmudaitumbai  
Annasi  
Ergot  
Kakkanam  
Nayuruvi  
Mambulici  
Nattirevaichini  
Adavi jilakara  
Peruppi  
Valval  
Ponnamgottai  
Erukku  
Maruthu, Marutai  
Pallerukku  
Asoku  
Sara  
Amukkara  
Arasu  
Pirasaram  
Pirandai

Āśphota	Abini
Ahiphena	Thovany'
Ādhabkī	Nellikkaina
Āmalakī	Mangamaram, Mamaram
Āmra	Mangaiinji
Āmragandhiharidrā	
Āragavadha	
Ārdraka	Ingi
Āvartakī	Avaram
Bṛhadelā	Periyadan
Śaṭī	Seemaikichikkighaga
Śatapatrī	Iroja
Śatapuṣpā	Sadakuppai
Śatāvarī	Seemeithannervittan
Śarapuṇkhā	Mullukaivelai
Śallakī	Parangisambirani
Śāka	Tekku
Śakhoṭaka	Pirai
Śāla	Kungilyam
Śāliparnī	Pulladi
Śāli	Neb
Śālmalī	Purani
Śigru	Murungi
Śiriṣa	Vagai
Śuṇṭhī	Chukku
Śringāṭaka	Singara
Śaileya	Karpasi
Śleśmātaka	Naruvilli
Sosdāpuṣpā	Nithiyakalyani
Saptaparna	Pala
Samudranārikela	Kadathenagi
Sarja	Kundurukam
Sarala	Seemaidevadaru
Sarpagandhā	Amalpori
Sahadevi	Sahadevi
Sārivā	Nanniari
Śinśipā	Sisu
Sudarśana	Vishamoongi
Sūraṇa	Karnsa

Saireyaka	Chemmulli
Somavallī	Somagam
Śuṇṭhī	Uhaikkali
Svarṇakṣirī	Bramadandu
Svarṇapatrī	Nilavarai
Haridrā	Munjal
Haridru	Majakadambu
Harītakī	Kadukkai
Himsrā	Karunsurāī
Hiṅgu	Perurkayam
Avartani	Valamburi
Ikṣu	
Ikṣvāku	
Iṅgudī	
Indravaruṇī	
Īsvarī	
Isadgola	Isappa
Udumbura	Athi
Upakuñcikā	Karum seeragm
Upodikā	
Uśira	Vetiver
Rddhi	
Rśabhaka	
Eraṇḍa	Ammanakka
Eraṇḍakarkaṭī	
Ervāru-karkaṭī	Mulampazham
Elavāluka	
Elā	Ilam
Kaṅkuṣṭha	Iravakhinni
Kaṅkola	Valmilagu
Kaṭphala	Maruthu
Kaṭuka	Kaduguragini
Kaṭuparṇī	
Kaṇṭakikarañja	Kazharchi
Kaṇṭakārī	Kandamkathiri
Khadira	
Kataka	Thettran
Kadamba	Venkadambu
Kadalī	Vazhai

Kapikacchu	Poonaikkali
Kamala	Ambel
Kampillaka	Kamel
Karañja	Pungu
Karamarda	Nathuthagarai
Karavīra	Alari
Karīra	Chengan
Karkaṭaśṛṅgi	Karkatagasingi
Karcūra	Kichili Kizhangu
Karpura	Indu
Kalambaka	Maramanjal
Kaseru	Karudan
Kakajanghā	
Karṇasphoṭā	Mudukottam
Kākanāsā	Uppilankodi
Kākamācī	Manattakkali
Kakolī	
Kāñcanāra	Sivappumanchori
Kārpāsa	Paruthi
Kalambaka	Maramanjal
Kaśeru	Karudan
Kākamācī	Manattakkali
Kakodumba	Peyathi
Kāñcanāra	Sivappumanchori
Karpāsa	Paruthi
Karavellaka	Pagal
Kāsamarda	Nahuthagarai
Kāsanī	Kasinikeerai
Kiratatikta	Nilavembu
Kītamārī	Kattusuragam
Kukundara	Narakka
Kunkuma	
Kuṭaja	Kudasappalai
Kupīlu	Etti
Kumārī	Kattrazahi
Kumuda bheda (nīlotpala)	Neelotpalam
Kumbhi	
Kulanjana	Kanda
Kulattha	Kollu

Kuśa	Tharubai
Kuṣṭha	Kottam
Kusumbha	Chendurakam
Kūṣmāṇḍa	Poosani
Kṛṣṇajiraka	Semai Seearam
Kṛṣṇa sārīvā	Kattupala
Ketakī	Talī
Kebukā	Krravam
Kokilākṣa	Neelothpalam(?)
Kodrava	Varegu
Kośātaki	Pikunkai
Kośāmra	Kolama
Kozuppa	Pulitarai
Khadira	Kalippaku
Kharjūra	Periya itcham
Gangerukī	Achu
Gāñdhaprasāriṇī	Talanili
Gambhārī	Kattanam
Guggulu	Kungilyam
Gunjā	Kundrimati
Guḍūcī	Seenthil
Gundrā (Eraka)	Jambo
Goraksagaṇjā	Seru peelai
Gokṣura	Sirunenunji
Gojīhvā	Unujni
Gorakṣa	
Cakramarda	Thagarai
Caṇaka	Kodalai
Candana	Chandhanam
Candraśūra	Ahvurai
Campaka	Sambangi
Cakṣuṣyā	Mulaippal virai
Cāṅgerī	Pulai kiri
Citraka	Venkodiveli
Cirabilva	Jya
Canda	Chengan
Chatraka	Venkodiveli
Chilahiṇṭa	Kattukkodi
Jaṭāmānsī	Sadamanjil

Japā	Sambarathai
Jambīra	Elumishchai
Jambū	Naval
Jayantī	Sembai
Jalakumbhī	Agasatamarai
Jalapippalī	Paduthalai
jalavetasa	Attupalai
Jātiphala	Masikkai
Jātī	Pichippu
Jayapāla	Neervalam
Jīraka	Seeragam
Jivantī	Palakudai
Tavakṣīra	Kua
Tambūla	Nagavalli
Tarkārī	Thaluthalai
Tāla	Panai
Tālamūlī	Nilappankkizhangu
Tāliśa	
Tiniśa	Narivenguyam
Tila	El
Tilaparnī (śveta)	Kadugu
Tumburu	
Tulasī	Thulasi
Tuvaraka	Maravattai
Trivṛta	Sivathai
Taila parṇa	Karpooramaram
Trapuṣa	Vellarikkai
Tvak (darusitā)	Kiramboo
Dantī	Neeradimuthu
Dāḍima	Mathulai
Daruharidrā	Maramanjal
Dugdhikā	Ammanptharisi
Dūrva	Arugan
Devadaru	Devadhari
Dravantī	Neervalam
Dronapuṣpi	Thumbai
Dhattūra	Ervakku
Dhātakī	Velakkai
Dhānyaka	Kothamalli

Dhāmārgava	Peerkku
Nala	Moongil
Nandivṛkṣa	Kagoti
Nāḍīhiṅgu	Tikkamalli
Narikela	Thennai
Nicula (hijjala)	Kadappasi
Nimba	Vembu
Nirguṇḍi	Noohi
Nilinī	Neeli
Paṭola	Kombupudalai
Patrāṅga	Patungana
Paruṣaka	Palisa
Parṇabīja	Ranakkali
Parṇayavānī	Karpoor valli
Parpaṭa	Tusa
Palañdu	Vellai vengayam
Palāśa	Parasa
Pasupāśi (jātikoṣa)	Kallanchadi
Pāṭalā	Pathiri
Pāṭhā	Appatta
Pārasīka yavānī	Khurosani oman
Pārijāta	Pavajha mattigai
Pāribhadra	Kalyanamurunga
Pāṣāṇabheda	Padanbethi
Pippalī	Tippili
Pītakaravīra	Pachaialari
Pitamūla (mamira)	
Pīlu	Parngoli
Putrajīvaka	Karupali
Punarnava	Mukkarattai
Punnāga	Punnagam
Pūga	Kamugu
Prśniparṇī	Sithiropala
Priyāla	Mudaima
Plakṣa	Kurugu
Phalgu (anjīra)	Semaiattai
Bakula	Magilam
Badari	Ilandi
Babbūla	Karuval

Barbarī	Karunthu
Balā	Nilathuththi
Bākucī	Karpooogaarisி
Bibhītaka	Thandri
Bimbi	Koovai
Bilva	Vilvam
Bījapūra (mātuluṅga)	Kadaranathai
Bṛhatī	Papparanulli
Bola	Vellaibolam
Brāhmī (aindrī)	Neer Brami
Bhaṅgā	Kanja
Bhāṇḍīra	
Bhūnimba (Kālamegha)	Angara valli
Bhūrja	
Bṛñnarājā	Karrisalai
Manjiṣṭhā	Manjitti
Maṇḍūkaparṇī	Vauarai
Matsyākṣaka	Ponnankai
Madayantikā	Maruthondri
Madhūka	Kattuiluppu
Marica	Milagu
Mallikā	Malligi
Masūra	Masurpurpu
Mahābalā	Tannacham
Mānsarohiṇī	Somadanam
Mādhavī	Adigam
Māyaphala	Maiskkay
Māṣa	Patchaipayaru
Miśreya	Sogikeenai
Mucakunda	Vennanga
Munjātaka	Silamishri
Muṇḍī	Kottaikaranthai
Mudga	Panipayaru
Mudgaparṇī	
Muśalī	Koraikkizhangu
Mūlaka	Mullangi
Methikā	Vendhayam
Meṣaśṛṅgī	Sirukurinjan
Yava	Baillarisi

Yavānī	Omam
Yaṣṭimadhu	Athimathuram
Yuthiparṇī	Nagamalli
Raktacandana	Chanchandan
Rasona (laśuna)	Poondu
Rājabalā	Pazhampasi
Rāsnā	
Lakuca	Illangu
Lankā	Milakkay
Lajjālu	Thottal, chinungi
Latākastūrī	Kattu kasthuri
Lavaṅga	Kirambu
Lāngalī	Akkinichalam
Vaiṁśa	Moongi
Vacā	Vasambu
Vaṭa	Ali
Vatsanābha	Nabi
Vantrapuṣī	
Vanpalāṇḍu	Marovemgayam
Vanyaharidrā	Kasthuri manjal
Vandaka (bandāka)	Phulluri
Varuṇa	Maralingan
Varṣābhū	Sharunai
Vākeri (ghṛtakaraṇja)	
Vāsā	Adathodai
Vikankata	Sirukala
Viḍaṅga	Vaivilangam
Vidārī	
Vīrataru	Vidathalai
Vṛkṣāmla	Mugal
Vṛddhadāruka	Nilapoosani
Bṛhat Gokṣura	Peruneraṇjī



# PRINCIPAL AYURVEDA NAMES OF HERBAL DRUGS

Kañkuṣṭha	79	Kāñcanāra	60
Kaṅkola	69	Kāṇḍīra	73
Kaṅguka	76	Kāphīka-Kāphī	105
Kañcaṭa	67	Kājūtaka	17
Kaṇphala	208	Kāravellaka	136
Kaṭvaṅga-Aralu	221	Kālamegha	36
Kaṭāha	202	Kālinda	43
Katukā	212	Kāśa-Kāśa	184
Kaṭumāḥī (Māmajjaka)	218	Kāsanī	192
Kaṭuvīrā	225	Kāsamarda	187
Kaṇṭakārī	82	Kāṣṭhadāru-Āsapallava	108
Kaṇṭakikarañja	96	Kāṣṭhalatā-Kalambaka	208
Kataκa	205	Kirātatikta	261
Kadamba	11	Kiṭamārī	266
Kadara	247	Kiṭamārī yavānī	
Kadalī	3	(Cauhāra)	268
Kapikacchu	108	Kiṭamārī-Tiktapatrā	271
Kapittha	115	Kukundara	301
Kamala	45	Kuṇkuma	328
Kampillaka	54	Kuṭaja	369
Karañja	127	Kutiktā-Kunayana	380
Karamarda	123	Kupīlu	386
Karavīra	141	Kubjaka	298
Karkaṭaśīṅgi	158	Kumbhīka	320
Karkoṭaka	162	Kumārī	312
Karcūra	147	Kumuda	323
Karpūra	177	Kulattha	306
Karmaraṅga	168	Kuśa-Darbha	342
Kalā-Khākasī (Khūbakalan)	33	Kuṣṭha	347
Kalāya	39	Kusumbha	361
Kaśeruka	194	Kūṣmāṇḍa	353
Kākamācī	23	Kṛṣṇabīja	296
Kākādanī	20	Kṛṣṇavetra	293
Kākādanī-Śakralatā	20	Ketakī	232
Kakodumbara	28	Kaiḍarya	695
		Kokilākṣa	274

Kolakanda	Mānakanda	489
(Vanapalāñdu)	Māyāphala	556
Kośātakī-Kṛtavedhana	Māriṣa	515
Kośātakī-Dhāmārgava	Mārkaṇḍikā	517
Kośāmra	Mālaṅga (Tutamalaṅgā)	474
Khadira	Māśaparnī	540
Kharbūja	Mucakunda	590
Kharjūra	Muñjātaka	623
Khubbija (Khubbājī)	Muṇḍī	616
Lakuca	Mudga	593
Lajjālu	Mudgaparnī	599
Latākastūrikā	Muśalī	633
Lavaṅga	Mustaka	636
Lākṣā	Mūrvā	628
Lāṅgali	Mūlaka	607
Lodhra	Methikā	574
Lonikā	Meṣaśṛṅga	569
Lohavāṇa (Lobāna)	Meṣaśṛṅgi	568
Makhānna	Meṣaśṛṅgi-uttamāraṇī	569
Mañjiṣṭhā	Mokṣaka	584
Maṇḍapi	Moraṭa	629
Maṇḍukaparnī	Natapusṭikā-	
Matsyākṣaka	Adhaḥpuṣpi	680
Madanaphala	Nala	665
Madayantikā	Nāgakeśara	659
Madhuyaṣṭi	Nāgadamana	657
Madhūka	Nāgabalā	653
Madhūkapuṣpi	Nādihiṅgu	649
Madhūlikā	Nāraṅga	659
Marica	Nārikela	673
Maruvaka	Nimba	690
Mayūraśikhā	a) Nimba-kaidarya	695
Malayavacā	b) Nimba-Mahānimba	696
Mallikā	Nimbūka	710
Mastakī (Rumimastagī)	Nirguṇḍī	715
Masūra	Niṣpāva	724
Mahānimba	Nīlī	684
Mahābalā	Śakralatā	20
Māṁsarohinī	(Kākādanī)	



# BOTANICAL NAMES

## वानस्पतिक नाम

Ablemoschus moschatus Medic.	407
Acacia catechu willd.	237
A. catechu Bedd.	247
A. suma Buch-Ham.	247
A. suma Buchman.	247
Adiantum caudatum Linn.	562
Ailanthus excelsa Roxb.	221
Alocacia indica (Roxb.) Schott.	489
Aloe barbadensis Mill.	313
A. vera Tourn. ex Linn.	271
Alocacia indica (Roxb.) Schott.	489
Alpinia galanga willd.	477
A officinarum Flance.	478
Alternanthera sessilis (Linn.) R. Br.	553
Althaea officinalis Linn.	256
Amaranthus blitum var. oleracea Duthie.	515
Anacardium occidentale Linn.	117
Andrographis paniculata (Burm. L.) Wall. ex Nees.	86
Anneslia spinosa Roxb.	471
Anthocephalus cadamba (Roxb.) Miq.	11
A. chinensis (Lamk.) A. Rich.	11
A. indicus Miq.	11
Arachis hypogaea Linn.	492
Aristolochia bracteata Retz.	266
Artemisia absinthium Linn.	271
A. maritima Linn.	268
Artocarpus lakoocha Roxb.	394
Arundo donax Linn.	665
Asparagus adscendens Roxb.	633
Astercantha longifolia Nees.	274
Averrhoa carambola Linn.	168
Azadirachta indica A. Juss.	690
Bacopa monnieri (Linn.) Pennel.	496

Bassia latifolia Roxb.	441
Bauhinia purpurea L.	60
B. racemosa Lamk.	60
B. variegata Linn.	59
Benincasa hispida (Thunb.) Cogn.	353
Bergera koenigii Linn.	695
Biophytum sensitivum Dc.	383
Blumea lacera Dc.	301
B. sub-capitata Dc.	301
Briza bipinnata L.	342
Caesalpinia bonduc (L.) Roxb.	97
C. bonducella (L.) Flm.	96
C. crista Linn.	96
Calophyllum inophyllum Linn.	660
C. inophyllum Buch & Hook. f.	660
Capparis aphylla Roth.	152
C decidua Edgew.	151
Capsicum annum Linn.	225
C. annum var. acuminatum Frigh.	225
Cardiospermum halicacabum Linn.	20
Careya arborea Roxb.	320
C. herbacea Roxb.	321
Carissa carandas Linn	123
C. congesta W.	123
Carthamus tinctorius Linn	361
Cassia acuminate Dalb.	519
C. angustifolia Vahl.	517
C. occidentalis Linn.	187
C. senna L. var. senna Brenan.	517
C. sophera Linn.	188
Cassine glauca (Rottl.) Pers.	585
Catunaregan spinosa (Thunb.) Trivengadum.	431
Centella asiatica (Linn.) Urban.	495
Cichorium intybus Linn	192
Cinchona officinalis Linn	380
Cinnamomum camphora Nus. & Eberm.	177
Citrullus lanatus (Thunb.) Matsumara.	143
C. vulgaris Schrad.	143
Citrus aurantifolia (Christm.) Swingle.	710

**Section Second****819**

<i>C. aurantium</i> Linn.	669
<i>C. medica</i> var. <i>acida</i> Watt.	710
<i>C. reticulata</i> Blanco.	669
<i>C. sinensis</i> (Linn.) Osbeck.	670
<i>Cocos nucifera</i> Linn.	673
<i>Coffea arabica</i> Linn.	105
<i>C. benghalensis</i> Roxb.	106
<i>Conyza laccera</i> Burm. f.	301
<i>Coscinium fenestratum</i> Colebr.	200
<i>Costus speciosus</i> (Koenig.) Sm.	229
<i>Crocos sativus</i> Linn.	328
<i>Cucumis aristis</i> Naud.	249
<i>C. pubescens</i> Willd.	249
<i>Cucumis melo</i> L.	248
<i>C. melo</i> var. <i>culta</i> Kurz.	248
<i>Curcuma zedoria</i> Rosc.	147
<i>Cyperus esculentus</i> Linn.	639
<i>Cyperus rotundus</i> Linn.	636
<i>C. retzil</i> Kuk.	636
<i>C. rotundus</i> ssp. <i>retzil</i> Kuk.	636
<i>C. rotundus</i> ssp. <i>rotundus</i> Kern.	637
<i>C. rotundus</i> ssp. <i>tuberosus</i> (Roxb.) Kuk.	637
<i>C. scariosus</i> R. Br.	636
<i>C. tuberosus</i> Rottle	637
<i>Desmostachya bipinnata</i> Stapf.	342
<i>Diploknema butyracea</i> (Roxb.) H. J. Lamb.	418
<i>Dolichandrone falcata</i> Scem.	569
<i>Dolichos biflorus</i> Linn.	306
<i>Elate sylvestris</i> L.	251
<i>Eleusine carocana</i> Gaertn.	451
<i>Elaedendron glaucum</i> (Rottle) Pers.	585
<i>Enicostema hyssopifolium</i> (Willd.) I. C. Verdoorn	218
<i>E. littorale</i> Blume.	218
<i>Eragrostis bipinnata</i> L.	342
<i>Ervum lens</i> L.	547
<i>Eugenia aromaticus</i> (L.) Baile	409
<i>E. caryophyllus</i> (Spr.) Bull. & Harr.	409
<i>Eulophia campestris</i> Wall.	624
<i>E. nuda</i> Lindl.	625

<i>Euryale ferox</i> Salisb.	471
<i>Exacum sylvestris</i> L.	251
<i>Feronia acidissima</i> L.	115
<i>F. elephantianum</i> (Correa) Panigrahi	115
<i>F. limonia</i> (Linn.) Swingle	115
<i>F. limonia</i> Correa	115
<i>Ficus hispida</i> Linn. f.	28
<i>Foeniculum vulgare</i> Mill.	580
<i>Garcinia morella</i> Desv.	79
<i>Gardenia gummifera</i> Linn. f.	649
<i>G. lucida</i> Roxb.	650
<i>G. resinifera</i> Roth.	650
<i>Gloriosa superba</i> Linn.	398
<i>Glycyrrhiza glabra</i> Linn.	456
<i>Gossypium arboreum</i> L.	172
<i>G. barbadense</i> L.	172
<i>G. herbaceum</i> Linn.	170
<i>G. hirsutum</i> L.	171
<i>Grewia hirsuta</i> Vahl.	653
<i>Gymnema sylvestre</i> R. Br.	568
<i>Habradendron cambagioides</i> Grahans.	79
<i>Hibiscus abelmoschus</i> Linn.	407
<i>Holarrhena antidysenterica</i> (Linn.) Wall. ex G. Don.	369
<i>Hydrocotyle asiatica</i> Linn.	495
<i>Hygrophilla auriculata</i> (Schum.) Reine.	274
<i>H. spinosa</i> T. Anders.	274
<i>Indigofera tinctoria</i> Linn.	684
<i>Jpomoca nil</i> (Linn.) Roth.	296
<i>Jasminum sambac</i> (Linn.) Ait.	480
<i>Jussiae repens</i> Linn.	67
<i>J. adschendens</i> L.	67
<i>Lablab purpureus</i> (L.) Sweet.	724
<i>L. purpurea</i> (L.) Sweet.	724
<i>Laccifer (tuchardia) lacca</i> Kerr. (zoological name)	388
<i>Lathyrus sativus</i> Linn.	39
<i>Lallemantia royleanum</i> Benth.	474
<i>Lawsonia inermis</i> Linn.	436
<i>Lens culinaria</i> Medic	547
<i>L. esculenta</i> Moench.	547

**Section Second****821**

Litsaea chinensis Lamk.	564
L. glutinosa (Lour.) C. B. Robins	564
L. polyantha Juss.	565
L. sebifera Pers.	564
Luffa acutangula (Linn.) Thunb.	288
L. cylindrica (Linn.) M. J. Roem.	285
Ludwigia adscendens (L.) Hara	67
Macrotyloma uniflorum (Lamk.) Verdo	306
Madhuca indica J. F. Gmelin.	410
M. longifolia (Koenig) Macbride.	442
M. longifolia ssp. latifolia (Roxb.) Chiv.	410
Maerua arenaria (Dc.) Hook. L. & Thoms.	629
Mallotus philippinensis Muell-Arg.	54
Malva sylvestris Linn.	
Majorana hortensis Moench.	526
Marsdenia tenacissima W. & A.	628
Menispermum acuminatum Lam.	
Melia azedarach Linn.	696
Mesua coromandelianum Wight.	659
M. ferrea Linn.	659
M. pedunculata wight	659
M. speciosa chois.	659
Mimosa catechu Linn. f.	237
M. pudica Linn.	382
M. suma Roxb.	247
Mitragyna parviflora (Roxb.) Korth.	12
Momordica charantia Linn.	136
M. dioica Linn.	162
M. balsamina (wall.) W. & A.	182
Murraya exotica Linn.	695
Murraya koenigii Spreng.	695
Mucuna prurita Hook.	108
M. nigricans (Lour.) Steud.	110
Myrica esculenta Buch-Ham.	208
Musa paradisiaca Linn.	8
M. sapientum Linn.	8
Nauclea parviflora Roxb.	112
Nelumbo nucifera Gaertn.	45
Nelumbium speciosum Willd.	45

<i>Nerium undicum</i> Mill.	141
<i>Nymphaea nouchali</i> Burm. f.	323
<i>N. nelumbo</i> L.	45
<i>N. pubescens</i> Willd.	324
<i>N. rubra</i> Roxb. ex Andrews.	324
<i>Nerium indicum</i> Mill.	141
<i>Ocimum kilimandascharicum</i> Guerke.	178
<i>Orchis latifolia</i> Linn.	623
<i>Orchocarpus longifolius</i> Buch-Ham.	660
<i>Origanum majorana</i> Linn.	525
<i>O. vulgare</i> Linn.	526
<i>Pandanus fascicularis</i> Lamk.	232
<i>P. odoratissimus</i> Linn. f.	232
<i>P. tectorius</i> Soland ex Parkinson.	232
<i>Pentapetes acerifolium</i> willd.	590
<i>Pergularia daemia</i> (Forsk.) chow.	569
<i>Phanera variegata</i> (L.) Benth.	60
<i>Phaseolus mungo</i> Linn.	553
<i>P. radiatus</i> Linn.	593
<i>P. trilobata</i> L.	599
<i>P. trilobatus</i> (L.) Schreb.	599
<i>P. trilobus</i> Ait.	599
<i>Phoenix sylvestre</i> (L.) Roxb. .	251
<i>Picrorrhiza kurroa</i> Royle ex Benth.	69
<i>Piper cubeba</i> Linn.	505
<i>P. nigrum</i> Linn.	212
<i>Pistacia integerrima</i> Stewart ex Brandis	158
<i>P. oleosa</i> Lour.	281
<i>Pistacia lentiscus</i> Linn.	544
<i>Polyalthia longifolia</i> Thw.	198
<i>Pongamia pinnata</i> (L.) Pierre.	127
<i>Portulaca oleracea</i> Linn.	424
<i>P. quadrifida</i> Linn.	424
<i>Pterospermum acerifolium</i> willd.	590
<i>Quercus alex</i> Linn.	560
<i>Q. incana</i> Roxb.	560
<i>Q. infectoria</i> oliver.	556
<i>Q. dilatata</i> Lindl. ex Royle.	560
<i>Randia dumetorum</i> (Retz.) Poir.	431

<i>R. spinosa</i> Poir.	431
<i>Ranunculus scleratus</i> Linn.	73
<i>Raphanus sativus</i> Linn.	607
<i>Rhus chinensis</i> Mill.	559
<i>R. semialata</i> Merr.	559
<i>Rosa brumonii</i> Lindl.	298
<i>R. moschata</i> Mill.	298
<i>Saccharum spontaneum</i> Linn.	184
<i>Sansevieria roxburghiana</i> Schult. f.	657
<i>S. hycinthoides</i> (Linn.) Druce.	658
<i>Saussurea costus</i> (Fale) Lipsch.	417
<i>S. lappa</i> C. B. Clarka.	417
<i>Schleichera oleosa</i> (Lour.) Oken.	281
<i>S. trijuga</i> Willd.	281
<i>Schrebera swietenioides</i> Roxb.	584
<i>Scirpus grossus</i> L.	194
<i>S. kysoor</i> Roxb.	194
<i>Senna officinalis</i> Roxb.	76
<i>Setaria italica</i> Beauv.	517
<i>Sida rhombifolia</i> (Linn.) Mast.	468
<i>S. rhombifolia</i> Roxb. ex Fleming.	468
<i>S. rhombifolia</i> var. <i>rhomboidea</i> Mast. (Roxb. ex Fleming)	468
<i>Sissymbrium irio</i> Linn.	33
<i>Solanum nigrum</i> Linn.	23
<i>S. surattense</i> Burm. f.	82
<i>S. xanthocarpum</i> Schrad. & Wendle.	82
<i>Soymida febrifuga</i> (Roxb.) A. Juss.	
<i>Sphaeranthus indicus</i> Linn.	616
<i>S. senegalensis</i> Dc.	616
<i>Stephegyne parviflora</i> korth.	12
<i>Sterculia villosa</i> Roxb.	202
<i>Strychnos nuxvomica</i> Linn.	336
<i>S. potatorum</i> Linn.	205
<i>Styrax benzoin</i> Dryand.	428
<i>Symplocos crataegoides</i> Ham.	416
<i>Syzygium aromaticum</i> . (Linn.) Merrill & Perry	409
<i>Swertia alata</i> Roxb.	261
<i>S. angustifolia</i> Buch-Ham.	261



**COLLECTION OF VARIOUS**  
→ HINDUISM SCRIPTURES  
→ HINDU COMICS  
→ AYURVEDA  
→ MAGZINES

**FIND ALL AT [HTTPS://DSC.GG/DHARMA](https://dsc.gg/dharma)**

Made with



By

Avinash/Shashi

Icreator of  
hinduism  
server!

S. chirata Buch-Ham.	261
S. chirayita (Roxb. ex Fleming) Kurst.	261
Tentrantha longifolia Jacq.	564
T. monopetala Roxb.	565
Teramnus labialis Spreng.	540
Thevetia peruviana (Pers.) K. Schum.	142
Tiliacoria acuminata (Linn.) Hook. & Thoms.	293
T. racemosa Colebr.	293
Trichodesma indicum R. Br.	681
Trigonella foenum-graceum Linn.	574
Urginea indica Kunth.	278
Uvaria longifolia Sonner.	198
Vigna mungo (L.) Hopper.	531
V. radiata (Linn.) Wilezet.	593
V. trilobatus (L.) Verdicourt.	599
Vitex negundo Linn.	715
V. trifolia Linn.	716
Wrightia tinctoria R. Br.	370
W. tomentosa Roem. & Schum.	371
Xeromphis spinosa (Thunb.) Kesw.	451

