Draft Translation of the Nepalese Version of the *Suśrutasaṃhitā*

Dominik Wujastyk Jason Birch Lisa A. Brooks
Paras Mehta Madhusudan Rimal
Deepro Chakraborty Harshal Bhatt Jan Gerris
et alii

Draft of 23rd August 2025

Contents

Introduction **11**
The date of the Suśrutasaṃhitā 11
The Nepalese Version 14
The vulgate 15
The Translation 16

Part 1. Sūtrasthāna **19**

Sūtrasthāna 1: The Origin of Medical Knowledge **21**
Literature 21
Translation 21
In praise of surgery 24

Sūtrasthāna 2: The Initiation of a Student **29**
Literature 29
Translation 29

Sūtrasthāna 3: The Table of Contents **31**
Literature 31
Translation 31

Sūtrasthāna 10: Diagnosis **33**

Sūtrasthāna 11: Preparing and using caustics **35**

Sūtrasthāna 13: On Leeches **37**
Literature 37
Translation 37

Sūtrasthāna 14: On the Properties of Blood **45**
Previous scholarship 45
Translation 45

Sūtrasthāna 16: Repairing Pierced Ears **53**
Previous literature 53
Translation 53

Sūtrasthāna 28: Unfavourable Prognosis in Patients with Sores **63**
Literature 63
Translation 63

Sūtrasthāna 46: The Rules about Food and Drink **65**
Introduction 65

Part 2. Nidānasthāna 67

Nidānasthāna 1: The Diagnosis of Diseases Caused by Wind **69**
Literature 69
Subject matter 69
Translation 69
Symptoms of diseases that arise because of a combination of the five breaths with bile and phlegm 74

Part 3. Śārīrasthāna 85

Śārīrasthāna 2: On Semen and Menstrual Fluid **87**
Literature 87
Translation 87
Diagnosis by humours 88
Therapies for menstrual blood 91
During menstruation 92
Types of persons 96
Birth irregularities 98

Śārīrasthāna 3: On Conception and the Development of the Embryo 101
Literature . . . 101
Translation . . . 102
Conception . . . 102
Pregnancy . . . 104
Fetal development . . . 105
Effects of the mother's experiences on the unborn child . . . 106

Part 4. Cikitsāsthāna 113

Cikitsāsthāna 4: On the Treatment of Wind Diseases 115
Literature . . . 115
Translation . . . 115

Cikitsāsthāna 5: On the Treatment of Serious Wind Diseases 123
Literature . . . 123
Translation . . . 123

Cikitsāsthāna 15: On Difficult Delivery 135
Literature . . . 135
Translation . . . 135

Part 5. Kalpasthāna 139

Kalpasthāna: Introduction 141
The Sequence of Chapters . . . 141
The Spread of Indian Toxicological Lore to Medieval Islamic Authors . . . 142
The *Kalpasthāna*'s diffusion . . . 142

Kalpasthāna 1: Protecting the King from Poison 145
Introduction . . . 145
The meaning of "kalpa" . . . 145
Chapter 1 of the Kalpasthāna . . . 145
Literature . . . 146
Manuscript notes . . . 147
Translation . . . 148

[Threats to the king] . . . 148

Kalpasthāna 2: Poisonous Plants **157**
Introduction . . . 157
Shock . . . 158
Literature . . . 159
Translation . . . 160
The effects of poisons . . . 162
Slow-acting poison . . . 165

Kalpasthāna 3: Poisonous Insects and Animals **171**
Literature . . . 171
Introduction . . . 171
Translation . . . 173
Pollution of the environment . . . 175
The origin of poison . . . 177
The working of poison . . . 177
Patients beyond help . . . 179

Kalpasthāna 4: Snakes and Envenomation **181**
Introduction . . . 181
Literature . . . 182
The Seven Stages of Toxic Shock . . . 183
Translation . . . 184
[The Taxonomy of Snakes] . . . 184
[Behaviours] . . . 186
[Enumeration of Snakes] . . . 188
[Breeding and Gender] . . . 190
[Symptoms of snakebite] . . . 191
[Summary Verses] . . . 194

Kalpasthāna 5: Therapy for those Bitten by Snakes **197**
Introduction . . . 197
Literature . . . 197
Translation . . . 198
The application of mantras . . . 199
Blood letting . . . 200
Internal medications . . . 200

Therapies at each pulse of toxic reaction . . . 201
Subsequent therapies . . . 203

Kalpasthāna 6: Rats and Rabies **209**
Introduction . . . 209
Mouse or Rat? . . . 209
Literature . . . 211
Translation . . . 212
The types of rat . . . 212
Detailed symptoms . . . 214
The bites of wild animals . . . 218

Kalpasthāna 7: Beating Drums **221**
Introduction . . . 221
Literature . . . 221
Translation . . . 221

Kalpasthāna 8: Poisonous insects **227**
Introduction . . . 227
Insect names . . . 227
Literature . . . 228
Translation . . . 230
Taxonomy of insects . . . 230
Taxonomy of scorpions . . . 237
Spiders . . . 240
Concluding remarks . . . 249
End of the Kalpasthāna . . . 250

Part 6. Uttaratantra **253**

Uttaratantra 17: Preventing Diseases of the Pupil **255**
Literature . . . 255
Translation . . . 255
[Complications] . . . 265
[Characteristics of the probe] . . . 265
[Complications] . . . 266

Uttaratantra 38: Diseases of the Female Reproductive System **269**
Introduction . . . 269
Literature . . . 269
Placement of the Chapter . . . 269
Parallels . . . 271
Philological notes . . . 272
Metrical alterations . . . 272
The original opening verses . . . 272
Translation . . . 274

Uttaratantra 65: Rules of Interpretation **277**
Literature . . . 277
Early Sources . . . 277
The *Arthaśāstra* . . . 278
The *Yuktidīpikā* . . . 278
Tamil literature . . . 279
The *Viṣṇudharmottarapurāṇa* . . . 279
The *Saddanīti* . . . 280
Āyurvedic literature . . . 286
Tantrayukti-inventories . . . 292
Earlier Listing . . . 292
Later Listing . . . 292
Terminology . . . 293
1. *adhikaraṇa* . . . 294
2. *yoga* . . . 296
3. *padārtha* . . . 298
3. *hetvartha* . . . 302
5–6. *uddeśa* and *nirdeśa* . . . 304
Notes on Significant Variants . . . 307
...द्वितीये पादे... . . . 307
यत्र तु स्नेहस्वेदाभ्यञ्जनेषु...पूर्वापरयोगसिद्धो भवति। . . . 307
सामवेदादयश्च वेदाः . . . 307
...विद विन्द इत्येतयोश्च धात्वोः... . . . 308
...धात्वोरेकार्थः। पश्चात् पदं भवति... . . . 309
यदुक्तं साधनं भवति स हेत्वर्थः . . . 311
...तथा माषदुग्धप्रभृतिभिर्व्रणः क्लिद्यते . . . 311
समासवचनं समुद्देशः | . . . 312
Characteristics of the Manuscript Transmission . . . 312

Translation 313

Editions and Abbreviations **319**

Index of Manuscripts **321**

General Bibliography **323**

Materia Medica **331**
Abbreviations 331
Flora 334
Fauna 360
Minerals 367

Glossary **369**

Part 1. Sūtrasthāna

Part 2. Nidānasthāna

Part 3. Śārīrasthāna

Part 4. Cikitsāsthāna

Part 5. Kalpasthāna

Kalpasthāna 2: Poisonous Plants

Introduction

This section begins with several lists of poisonous plants. The Sanskrit names for these plants are mostly not standard or familiar from anywhere in Sanskrit or ethnobotanical literature. It remains a historical puzzle why these particular names are so difficult to interpret. However, we are not the first to encounter these difficulties.

In the eleventh century, Cakrapāṇidatta commentated on a similar list of poisons in the *Carakasaṃhitā*, and referred to the *Suśrutasaṃhitā* on the topic.[494] He also noted that,

> In assigning the names to these plants, the main authorities are the Kirātas and Śabaras, who know about these things because they can explain these matters on the basis of a succession of teachers.[495]

About a century later, the learned commentator on the *Suśrutasaṃhitā*, Ḍalhaṇa, remarked,

> In spite of having made the greatest effort, it has been impossible to identify these plants. In the Himalayan regions, Kirātas and Śabaras are able to identify them.[496]

From the view of Sanskrit authors, Kirātas and Śabaras were tribal peoples.[497]

494 Cakrapāṇidatta on 6.23.11 (Su 1939: 571).
495 Cakrapāṇidatta on *Carakasaṃhitā* 6.23.11 (Su 1938: 571).
496 After *Suśrutasaṃhitā*, *kalpasthāna* 2.5 (Su 1938: 564).
497 Both communities are mentioned in Sanskrit literature from antiquity. The Kirātas

In the tenth or eleventh century, the author Bhikṣu Govinda cast his alchemical treatise as a dialogue with a Kirāta king called Madana who was a master of the alchemical art.[498] So there was an awareness amongst Sanskrit medical and alchemical authors of that period that different populations were a source of specialized knowledge in these domains, and the Sanskrit authors were open to these sources and indeed depended on them.

Ḍalhaṇa also recorded variant readings of these poison names from the manuscripts that he consulted of the lost commentary of Gayadāsa (fl. c. CE 1000). The identities of these poisons have thus been in doubt for at least a thousand years.[499] Firm identification has in many cases been equally impossible for us today.

One path for exploration in this situation is to attempt to reverse-engineer some identifications by considering the known toxic plants of India.[500]

Shock

An important new topic introduced in this chapter (34–39) is that of "toxic shock" (*vega*). When a patient has been poisoned, the effect of the toxin is expressed in their body in seven waves or pulses, *vegas*. At each stage, symptoms are slightly different and a different therapeutic regime is prescribed (40–44).

The Sanskrit term *vega* has a range of uses, from "impulse" to "urge, jerk, rush, speed," or "impetus." It appears in the well-known passage in

are associated especially with Eastern Nepal, the Himalayan and north-eastern regions of South Asia, while the Śabara people are mainly associated with Odisha and West Bengal. Representative studies on these communities include Elwin (1955), Roy (1970), Chatterji (1974), G. P. Singh (1990), Subba (1999), G. P. Singh (2008), and Rai (2019).

498 HIML: IIA, 620.

499 See Wujastyk 2003*b*: 80–81.

500 Valuable reference sources on Indian plant toxicology in general include Pillay 2013: chs. 10, 11 and Barceloux 2008: parts 1.II, 3 and 4. More generally Bown (NEH: 41 et passim) comments usefully of herbs in general that "it goes without saying that if they can do good, they must contain substances that in excess can poison." See for a general list of poisonous plants, see Wikipedia contributors 2025*c*.

the *Carakasaṃhitā* about avoiding illness not ignoring or suppressing "natural urges," *vegas*, such as the desire to urinate.[501]

According to the author of the *Aṣṭāṅgasaṅgraha*, Ālambāyana was the ancient authority who declared that the seven pulses (*vega*) of toxic shocks affect, successively, the seven substrata (*āśraya*) of the body, from blood to semen, and Dhanvantari originated the idea that this applied to victims of snake-bite.[502]

The commentator Indu (fl. 1000–1150) cited verses by Ālambāyana asserting that the pipes in the body carry poison to the heart, but that the heart can be protected by ghee. [503]

Literature

Meulenbeld offered an annotated overview of this chapter and a bibliography of earlier scholarship to 2002.[504]

501 See *Carakasaṃhitā* 1.7 (Ca 1941: 49–55), discussed and translated in Wujastyk 2003*b*: 7–8, 15–17.

502 *Aṣṭāṅgasaṅgraha* 6.40.35a (As 1980: 844): सप्तेति वेगा मूर्छाद्या विदेहपतिना स्मृताः ॥३४ ॥ रक्तमांसवसास्नायु तथाऽस्थ्याद्यास्त्वयः क्रमात् । आश्रयाः सप्त सप्तानामित्यालम्बायनोऽब्रवीत् ॥३५ ॥. The following verse named Dhanvantari as the originator of the idea that toxic pulses are experienced specifically by a person bitten by a snake (वेगान्धन्वन्तरिस्तद्वत्सर्पदष्टस्य मन्यते । 36ab). The commentator Indu noted that Dhanvantari was the teacher of Suśruta, i.e., that "Dhanvantari" was shorthand for *Suśrutasaṃhitā*. On Ālambāyana, see p. 212, note 715.

503 *Aṣṭāṅgasaṅgraha* 6.40.60a (As 1980): याः सिराः सर्वगात्रेषु हृदये सम्प्रतिष्ठिताः| ताभिरस्य विषं सर्वं हृदयं सम्प्रधावति ॥ घृतेन तु प्रतिच्छन्नं विषं नाति प्रपीडयेत् । निर्वाणजननं सर्पिः प्राणिनां प्राणवर्द्धनम् ॥ हृदयावरणास्तद्वद्रक्ष्या भोज्याश्च सागदाः ॥

504 HIML: IA, 290–291.

Translation

1 And now I shall explain required knowledge (*vijñānīya*) about stationary poisons.[505]

3 It is said that there are two kinds of poisons, stationary (*sthāvara*) and mobile (*jaṅgama*). The former dwells in ten sites, the latter in sixteen places.

4 Traditionally, the ten are: root, leaf, fruit, flower, bark, milky sap (*kṣīra*), pith (*sāra*), resin (*niryāsa*), minerals (*dhātu*), and the tuber.

5 In that context,

A The eight items with poisonous roots are:[506]

1. liquorice,[507]
2. sweet-scented oleander,
3. jequirity,
4. Indian aconite,[508]
5. mountain gardenia,[509] and ending with
6. leadwort,
7. country sarsaparilla,[510] and
8. medhshingi,[511]

505 No reference is made to Dhanvantari (see Birch et al. 2021). "Stationary" here is a term contrasted with "moving," and signifies plants as opposed to animals and insects.

506 Some South Asian plants with poisonous roots that we would expect to see in this list include *Croton tiglium*, L., *Calotropis* spp. (purple calotropis (*arka*), etc.), *Citrullus colocynthus* L. Schrad. (colocynth (*indravāruṇī*)), and *Ricinus communis* L. (castor-oil (*eraṇḍa*)), (CIPP).

507 Liquorice eaten in excess can be poisonous, but it is uncertain whether it is the plant intended here. T. B. Singh and Chunekar (GVDB: 124) specifically noted that the poisonous root mentioned in this passage, "remains to be identified." Cf. glossary for discussion.

508 The vulgate reads snakeroot (*sugandhā*), which can be poisonous.

509 Conjectural identification with mountain gardenia (*karahāṭa*); similar-sounding candidates also include galls (*karkaṭaka*) and mountain gardenia (*karaghāṭa*), but since this is a prose passage, there would be no reason to alter the word to fit a metre.

510 The text reads masculine *ananta*, which is not a plant name. Gayadāsa's commentary on 5.2.5 (Su 1938: 564) noted a variant reading of feminine *anantā* in place of *gargaraka*, earlier in the compound. But the feminine country sarsaparilla (*anantā*) is not a poisonous plant.

511 Meulenbeld (1989: 61, n. 3) argued that our text reads a masculine or neuter noun *vijaya*, which never signifies cannabis. However, unlike the vulgate, the unanimous readings of the Nepalese manuscripts give feminine *vijayā*. Nevertheless, even the

B the leaf-poisons include:

- poison-leaf,
- drum-giver,
- an aroid, and
- big an aroid;

C the fruits of items like: jequirity, marking-nut tree, and poison-altar (?) are

- water snowflake,
- pollen,
- bluebell barleria,
- unknown fruit poison,
- an aroid
- a large aroid
- spurge,
- crow,

D the flower-poisons include those of:

- musk mallow,
- Indian fumitory,[512]
- an aroid, and
- a large aroid.

E the bark, pith (*sāra*) and resin (*niryāsa*) of:

- gourd,
- mountain gardenia,
- an aroid, and
- munj grass;

F the milky sap of:

- water snowflake,[513]

feminine form only started to signify *Cannabis sativa* L. after the end of the first millennium (Meulenbeld 1989; Wujastyk 2002; McHugh 2021). See further notes in the glossary under medhshingi.

512 रेणु and रेणुक/-का are different plants (Indian fumitory (*reṇu*), pollen (*reṇukā*)). MS Kathmandu KL 699 reads the first; the scribe of MS Kathmandu NAK 533 added an additional -क in the margin.

513 While the identity of this plant is uncertain, the Nepalese version of the *Suśrutasaṃhitā* does not present the hopeless problem of the vulgate's reading कुमुदघ्नी (see Wujastyk 2003*b*: 140, n. 100).

- red physic nut,
- oleander spurge, and
- luffa

G the mineral (*dhātu*) poisons include:[514]

- orpiment,
- cuttle-fish bone,
- ashes, and
- vermilion.[515]

H the tubers poisons are:

- jequirity,
- Indian aconite,
- Indian mustard,
- leadwort,
- muddy (?),
- 'Virāṭa's plant',
- nutgrass,
- atis root,
- long-stamen Wendlandia (?),
- radish,
- 'alas, alas',
- big poison, and
- galls

The effects of poisons

Symptoms of root poisoning

7–10 People should know that root-poisons cause writhing (*udveṣṭana*), ranting (*pralāpa*), and delirium (*moha*), and leaf-poisons cause yawning, writhing, and wheezing (*śvāsa*).
Fruit-poisons cause swelling of the scrotum, a burning feeling and writhing. Flower-poisons will cause vomiting, distension (*ādhmāna*) and sleep (*svāpa*).

514 The following identifications are even more than usually uncertain. Note that the vulgate text specifies that there are two mineral poisons.

515 If this identification as vermilion (*rakta*) (cinnabar) is correct, it is an unexpectedly early mention of the substance.

The consumption of poisons from bark, pith (*sāra*) and resin (*niryāsa*) will cause foul breath, hoarseness (*pāruṣya*), a headache, and a discharge of phlegm (*kapha*).[516]
The milky sap (*kṣīra*)-poisons make one froth at the mouth, cause loose stool, and make the tongue feel heavy.[517] The element (*dhātu*)-poisons give one a crushing pain in the chest, make one faint and cause a burning feeling on the palate.
These poisons are classified as ones which are generally speaking lethal after a period of time.

11–17 Symptoms of tuber poisoning

The tuber-poisons, though, are severe. I shall talk about them in detail.[518]
With jequirity, there is numbness and very severe trembling.
With Indian aconite, there is rigidity of the neck, and the faeces, and urine become yellow.
With Indian mustard derivative, the wind becomes defective (*vātavaiguṇya*), there is constipation (*ānāha*), and lumps (*granthi*) start to appear.
With leadwort, there is weakness in the neck, and speech gets jumbled.[519]
With the one called muddy (?), there is a discharge (*praseka*), the faeces pour out, and the eyes turn yellow.
The 'Virāṭa's plant' (*vairāṭaka*) causes pain in the body and illness in the head.
Paralysis of one's arms and legs and trembling are said to be caused by nutgrass.[520]

516 At 1.2.6 (Su 1938: 11), Ḍalhaṇa glossed hoarseness (*pāruṣya*) as *vāgrūkṣatā*, "a rough, dry voice."
517 At 6.54.10 (Su 1938: 773), Ḍalhaṇa glossed loose stool (*viḍbheda*) as *dravapurīṣatā*, "having liquid stool."
518 See Ḍalhaṇa's comments on the impossibility of identifying the following plants, p. 157 above. All the following plant identifications are tentative in the extreme; see the glossary for discussion.
519 The verse in the Nepalese version ends with a plural verb that does not agree with the dual of the sentence subject.
520 The substitution in MS NAK 5-333 affecting 15cd is caused by an eye-skip to the word *viṣeṇa* in 2.17.

15b With big poison, one's limbs grow weak, there is a burning feeling and swelling of the belly.[521]

16a With white lotus, one's eyes go red, and one's belly becomes distended.[522]

16b With radish, one's body is drained of colour and the limbs are paralysed.[523]

17a With 'alas, alas', a man turns a dark colour (*dhyāma*), and gasps.[524]

17b With atis root one gets violent knots (*granthi*) and stabbing pains in the heart.[525]

18a With monkey (?), one leaps up, laughs, and bites.

18b-19a There are thirteen tuber-poisons that are said to be fiercely potent. These ones that have been stated are connected with ten positive qualities.[526]

Mustaka commonly refers to Cyperus rotundus, L.; the root is used in āyurveda but is not poisonous. However other dictionaries list *mustaka* amongst serious poisons, for example *Rājanighaṇṭu* (22 v. 42) and *Rasaratnasamuccaya* 16, v. 80. However, its ancient identity is still doubtful.

521 The poisonous root big poison (*mahāviṣa*) is not clearly identifiable, although *viṣā* is commonly aconite. Verse 6 above notes that there are several kinds of aconite.

522 The word *puṇḍarīka* very commonly means white lotus. The entire plant is edible and cannot be the poison intended here. T. B. Singh and Chunekar (GVDB: 252) noted that this poison is unidentified and that it is also listed as a poison in *Carakasaṃhitā*6.23.12571. At that locus, the commentator Cakrapāṇidatta referred to the present chapter in the *Suśrutasaṃhitā* and also said that the identities of these poisonous plants could only be ascertained by consulting Śabaras and Kirātas, since they alone were experts in receipt of traditional wisdom from their lineages of teachers (एतेषां च संज्ञासंबन्धे शबरकिरातादय एव तद्विद्याः प्रमाणं, ते हि गुरुप्रंपरया व्याख्यानयन्ति ॥)

523 The word *mūlaka* very commonly means the radish, *Raphanus sativus*, L. The root is edible and cannot be the poison intended here. T. B. Singh and Chunekar (GVDB: 317) noted that this poison is unidentified.

524 Identification of *hālāhala* is uncertain. It may simply be a mythical poison, or its specific identity may have been lost over the centuries. Late *nighaṇṭu*s identify it as *stomaka* = *vatsanābha*, i.e., *Aconitum napellus*, L. (*Soḍhalanighaṇṭu* p. 43).
Ḍalhaṇa on 5.2.17 (Su 1938: 564) interpreted our "gasps" as "the man laughs and grinds his teeth." But this gloss is probably displaced and intended to apply to verse 2.18.

525 T. B. Singh and Chunekar (GVDB: 407) noted that *vatsanābha* and *śṛṅgīviṣa* are two different varieties of poisonous Aconites that are difficult to distinguish.

526 This verse reads differently, and scans poorly, in the vulgate. The vulgate's प्रत्युक्तानि "are contradicted" is awkwardly explained by Ḍalhaṇa as "are stated individually" (Ḍalhaṇa on 5.2.18cd (Su 1938: 535)). "Positive" translates कुशलानि, which is not present in the vulgate.

19cd–20ab The ten are, traditionally:

- dry,
- hot,
- sharp,
- rarefied,
- fast-acting,
- pervasive,
- expansive,
- limpid,
- light, and
- indigestible.

20b Because of dryness, it may cause inflammation of the wind; because of heat it inflames the choler and blood. Because of the sharpness it unhinges the mind, and it cuts through the connections with the sensitive points (*marman*). Because it is rarified it can infiltrate and distort the parts of the body.[527]

22 Because it is fast-acting it kills quickly, and because of its pervasiveness it affects one's whole physical constitution (*prakṛti*).[528] Because of its expansiveness it enters into the humour (*doṣa*)s, bodily constiuents (*dhātu*)s, and even the impurities. Because it is limpid it overflows, and because it is light it is difficult to treat. Because it is indigestible it is hard to eliminate. Therefore, it causes suffering for a long time.

24 Any poison that is instantly lethal, whether it be stationary, mobile, or artificial, will be known to have all ten of these qualities.

Slow-acting poison

25cd–26 A poison that is old or destroyed by anti-toxic medicines, or else dried up by blazing fire, wind, or sunshine, or which has just spontaneously lost its features,[529] becomes a slow-acting poison (*dūṣīviṣa*).[530] Because

527 We read the active *vikaroti* with Ḍalhaṇa against the transmitted passive *vikriyeta*, since it must be the parts of the body that are distorted, not the poison.

528 Ḍalhaṇa on 5.2.22 (Su 1938: 565) explained this as "takes the form of pervading the whole body (*akhiladehavyāptirūpam*)."

529 Ḍalhaṇa specified that this refers to the ten qualities that are mentioned above (5.2.26 (Su 1938: 565)).

530 Ḍalhaṇa cited this verse at 1.46.83 (Su 1938: 222) while explaining *dūṣīviṣa* (see p. 167.

it has lost its potency it is no longer perceived. Because it is surrounded by phlegm (*kapha*) it has an aftermath that lasts for a very long time.

27 If he is suffering from this, the colour of his stools changes, he gets a sour, bad taste and is very thirsty. Speaking nonsensically and close to death, wandering about, he may feel faint, giddy, and aroused.[531]

28 If it lodges in his stomach (*āmāśaya*), he becomes sick because of wind and phlegm; if it lodges in his intestines (*pakvāśaya*), he becomes sick because of wind and choler. A man's hair and limbs fall away and he looks like a bird whose wings have been chopped off.

29a–c If it lodges in one of the body tissues such as chyle (*rasa*), it causes the diseases arising from the body tissues, that have been said to be wrong.[532] and it rapidly becomes inflamed on days that are nasty because of cold and wind.

29d–31 Listen to its initial symptoms (*liṅga*): it causes heaviness due to sleep, yawning, disjunction (*viśleṣa*) and horripilation (*harṣa*) and a bruising of the limbs (*aṅgamarda*).[533] Next, it causes intoxication from food (*annamada*) and indigestion, loss of appetite (*arocaka*), the condition of having a skin disease (*koṭha*) with round blotches (*maṇḍala*),[534] dwindling away (*kṣaya*) of flesh, swelling of the feet, hands, and face, the fever called *pralepaka*, vomiting and diarrhoea.[535] The slow-acting poison might cause wheezing, thirst and fever, and it might also cause distension of the abdomen.

32 These various disorders are of many different types: one poison may produce madness, while another one may cause constipation (*ānāha*), and yet another may ruin the semen. One may cause emaciation, while another pallid skin disease (*kuṣṭha*).

33 Something is "corrupted" by repetitively keeping to bad locations, times, foods, and sleeping in the daytime. Or, traditionally, "corrupting poison" (slow-acting poison (*dūṣī-viṣa*)) is so called because it may

531 Similar symptoms of slow-acting poison are described at 2.7.11–13 (Su 1938: 296) in the context of contamination dropsy (*duṣyodara*). This this may explain why the vulgate inserted reference to this disease at this point.

532 The expression *ayathāyathoktān* "stated to be unsuitable" is hard to understand here, but is clearly transmitted in the Nepalese version.

533 Ḍalhaṇa 5.2.30ab (Su 1938: 565) glossed "disjunction" as the loss of function of the joints in regard to movement.

534 The last ailment could perhaps be ringworm.

535 The *pralepaka* fever was described by Ḍalhaṇa, at 6.39.52 (Su 1938: 675), as an accumulation of phlegm in the joints. Its symptoms are described in 6.39.54

corrupt (*dūṣayet*) the body tissue (*dhātu*)s.

34- The stages of toxic shock

In the first shock of having taken a stationary poison, a person's tongue becomes dark brown and stiff, he grows faint, and panics.

35 In the second, he trembles, feels exhausted, has a burning feeling, as well as a sore throat. When the poison reaches the stomach (*āmāśaya*), it causes pain in the chest (*hṛd*).

36 In the third, his palate goes dry, he gets violent pain (*śūla*) in the stomach (*āmāśaya*), and his eyes become weak, swollen and yellow.

37 In the fourth shock, it causes the intestines and stomach to be exhausted (*sāda*), he gets hiccups, a cough, a rumbling in the gut (*antra*), and his head becomes heavy too.

38 In the fifth he dribbles phlegm (*kapha*), goes a bad colour, his ribs crack (*parśvabheda*), all his humours are irritated, and he also has a pain in his intestines (*pakvādhāna*).

39a In the sixth, he loses consciousness and he completely loses control of his bowels.

39b In the seventh, there are breaks in his shoulders, back and loins, and he stops breathing.[536]

Remedies for the stages of slow poisoning

40 In the first shock of the poison, the physician should make the man, who has vomited and been sprinkled with cold water, drink an antidote (*agada*) mixed with with honey and ghee.

41a In the second, he should make the man who has vomited and been purged drink as before;

41b on the third, drink an antidote and a beneficial nasal medicine (*nasya*) as well as an eye salve (*añjana*).

536 Here at 5.2.24 (Su 1938: 566) Ḍalhaṇa glossed *sannirodha* as "complete cessation, i.e., of breath" (*sannirodhaḥ samyaṅnirodhaḥ, ucchvāsasya iti śeṣaḥ*). The manuscripts all read *skanda* where *skandha* must be intended; this confusion is known from Buddhist Hybrid Sanskrit (Edgerton 1953: 2, 608).

42a In the fourth, the physician should make him drink an antidote that is salt with a little oil.[537]

42b In the fifth, he should be prescribed the antidote together with a decoction (*kvātha*) of honey and liquorice.

43 In the sixth, the cure (*siddhi*) is the same as for diarrhoea. And in the seventh, he perishes.[538]

44 In between any one of these shocks, once the above treatment has been done, he should give the patient the following cold gruel (*yavāgū*) together with ghee and honey, that will take away the poison.

45–46 A gruel (*yavāgū*) made of the following items in a stewed juice (*niḥkvātha*) destroys the two poisons: luffa,[539] wild celery,[540] velvet-leaf, sunflower,[541] heart-leaved moonseed, myrobalan siris, and Indian

---

537 At 6.52.30 (Su 1938: 769) Ḍalhaṇa noted that *sindhu* can be interpreted as salt (*saindhava*).

538 The vulgate text here is quite different, recommending that the patient have medicated powder blown up his nose. It may be possible to detect the evolution of the Nepalese अवसीदेत् to the vulgate's अवपीडश्. The vulgate version is hard to construe, and we see Ḍalhaṇa struggling to interpret it in his commentary on 5.2.43ab (Su 1938: 566). This sternutatory is, however, recommended in the Nepalese version at 5.5.30ab (Su 1938: 576), for the seventh shock of poisoning by a striped snake (*rājimat*). It is possible the text migrated from that location to this.
Another difference at this point is that the Nepalese version also does not support the vulgate's passage on the crow's foot (*kākapada*) therapy (Wujastyk 2003*b*: 145, n. 106). The same is the case at 5.5.24 (Su 1938: 575) and the clear description at 5.5.45 (Su 1938: 577), in neither of which is the therapy supported in the Nepalese version. This therapy seems unknown to the Nepalese transmission. The therapy may have migrated into the vulgate *Suśrutasaṃhitā* from the *Carakasaṃhitā* 6.23.66–67 (Ca 1941: 574).

539 At 4.10.8 (Su 1938: 449) Ḍalhaṇa glossed कोशवती as देवदाली and at 4.18.20 (Su 1938: 472) as कटुकोशातकी, vocabulary pointing to *Cucumis cylindrica*, *Cucumis actangula* or *Luffa echinata*. See glossary under ??.

540 A plant often cited in *Suśrutasaṃhitā*, but rarely in *Carakasaṃhitā* (GVDB: 4). Ḍalhaṇa glossed it here, 5.2.45 (Su 1938: 566), as *ajamodā*, wild celery, but noted that others consider it to be *moraṭa*, rajmahal hemp. There is considerable complexity surrounding the identification of *moraṭa*/*mūrvā* and related synonyms (GVDB: 314-316). Taking *agnika* as a short reference to *agnimantha*, often identified as migraine tree, might be plausible, since that is antitoxic or anti-inflammatory, but such a short reference is not known elsewhere.

541 At 5.2.45 (Su 1938: 566) Ḍalhaṇa said that this plant has leaves like the *paṭola*, pointed gourd, T. B. Singh and Chunekar (GVDB: 280, 443) argued plausibly that this is a synonym for *arkapuṣpī*, panacea twiner, as Ḍalhaṇa also stated in 1.45.120 (Su 1938: 206), and the leaves of Holostemma and Trichosanthes are indeed strikingly similar. The

cherry, white siris, the two kinds of turmeric,[542] and the two kinds of hairy-fruited eggplant,[543] hogweed, peas, the three heating spices, the two kinds of Indian sarsaparilla[544] and blue water-lily.

The Invincible Ghee

47–49 There is a famous ghee called "Invincible". It rapidly destroys all poisons but is itself unconquered. It is prepared with a mash (*kalka*) of the following plants: liquorice, crape jasmine, costus, deodar, peas, Indian madder, cardamom and cherry, cobra's saffron, blue water-lily, sugar, embelia, sandalwood, malabathrum, foxtail millet, rosha grass, the two turmerics,[545] the two Indian nightshades,[546] the two kinds of Indian sarsaparilla,[547] beggarweed, and heart-leaf sida.

Curing the 'slow-acting' poison

50–52 Someone suffering from "slow-acting poison (*dūṣīviṣa*)" should be well sweated, and purged both top and bottom. Then he should be made to drink the following eminent antidote which removes "slow-acting poison:"
Take long pepper, rosha grass, spikenard, lodh tree, cardamom, natron, scented pavonia, red ochre, as well as gold, and pondweed.
This antitoxin, taken with honey, eliminates slow-acting poison. It is called the "enemy of slow-acting poison (*dūṣīviṣāri*)," and it is not prohibited in other situations.

53–54 If there are any other side-effects (*upadrava*), such as fever, a burning feeling, hiccups, constipation (*ānāha*), depletion of the semen, distension, diarrhoea, fainting, skin problems, bellyache (*jaṭhara*), madness, trembling, then one should treat each one in its own terms, using antitoxic medicines.

---

appearance of the plant, a creeper with sun-like flowers, fits the name. But there remains much controversy about the identities of these candidates (e.g., ADPS: 195–198).

542 I.e., turmeric and Indian barberry.
543 I.e., hairy-fruited eggplant and yellow-berried nightshade.
544 I.e., country sarsaparilla and black creeper.
545 I.e., turmeric and Indian barberry.
546 I.e., hairy-fruited eggplant and yellow-berried nightshade.
547 I.e., country sarsaparilla and black creeper.

55 For a prudent person, the slow-acting poison can be cured (*sādhya*) immediately. It is treatable (*yāpya*) if it is of a year's standing. Other than this, it should be avoided for the person who eats unwholesome things.

Part 6. Uttaratantra

Editions and Abbreviations

As 1980 — Āṭhavale, Anaṃta Dāmodara (1980) (ed.), *अष्टाङ्गसङ्ग्रहः श्रीमद्वृद्धवाग्भटविरचितः इन्दुव्याख्यासहितः* [= *Vāgbhaṭa's Aṣṭāṅgasaṅgraha with Indu's Commentary*] (Puṇe: M. A. Āṭhavale, Śrīmad Ātreya Prakāśanam), ARK: https://n2t.net/ark:/13960/s25bwqsd0n7.

Ca 1941 — Ācārya, Yādavaśarma Trivikrama (1941) (ed.), *महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलिता* (3rd edn., Mumbayyāṃ: Nirnaya Sagara Press), ARK: https://n2t.net/ark:/13960/t48q2f20n.

CDIAL — Turner, R. L. (1966–85), *A Comparative Dictionary of the Indo-Aryan Languages* (2nd edn., London, New York, Toronto: Oxford University Press), ISBN: 0197135501, URL: http://n2t.net/ark:/13960/t2n69n06g; v. 2: *Indexes* by D. R. Turner (OUP, London, 1969), v. 3: *Phonetic Analysis* by R. L. and D. R. Turner (OUP, London, 1971), v. 4: *Addenda and Corrigenda* ed. J. C. Wright (SOAS, London, 1985). Online database at http://dsal.uchicago.edu/dictionaries/soas/.

DED2 — Burrow, Thomas, and Emeneau, Murray B. (1984), *A Dravidian Etymological Dictionary* (2nd edn., Oxford: Clarendon Press), ARK: https://n2t.net/ark:/13960/s24rgc5rsz0, URL: http://dsal.uchicago.edu/dictionaries/burrow/.

EWA — Mayrhofer, Manfred (1992–2001), *Etymologisches Wörterbuch des Altindoarischen* (Heidelberg: Carl Winter, Universitätsverlag), ISBN: 3-533-03826-2.

HIML — Meulenbeld, Gerrit Jan (1999–2002), *A History of Indian Medical Literature*, 5 vols. (Groningen: E. Forsten), ISBN: 9069801248.

KEWA — Mayrhofer, Manfred (1953–72), *Kurzgefaßtes etymologisches Wörterbuch des Altindoarischen; a Concise Etymological Sanskrit Dictionary* (Heidelberg: Carl Winter, Universitätsverlag).

Mahākośa — Jośī, Veṇīmādhavaśāstrī, and Jośī, Nārāyaṇa Harī (1968), *आयुर्वेदीय महाकोशः अर्थात् आयुर्वेदीय शब्दकोशः संस्कृत–संस्कृत* (Mumbaī: Mahārāṣṭra Rājya Sāhityta āṇi Saṃskṛti Maṃḍaḷa), ARK: https://n2t.net/ark:/13960/t22c41g8t.

MW — Monier-Williams, Monier, Leumann, E., Cappeller, C., et al. (1899), *A Sanskrit–English Dictionary Etymologically and Philologically Arranged, New Edition* (Oxford: Clarendon Press); 1970 reprint.

PWK — Böhtlingk, Otto (1879), *Sanskrit-wörterbuch in kürzerer fassung* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), URL: https://www.sanskrit-lexicon.uni-koeln.de/scans/PWScan/2020/web/, accessed 18/05/2023.

Śabdasindhu — Gupta, Umeśachandra, and Sena, Nagendra Nātha (1983), *वैद्यक-शब्दसिन्धुः* = *Vaidyaka-Śabdasindhuḥ* (3rd edn., Varanasi & Delhi: Chaukhambha Orientalia); 3rd ed. first published in 1914.

Su 1938 — Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (1938) (eds.), *श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता* (3rd edn., Bombay: Nirṇayasāgara Press), ARK: https://n2t.net/ark:/13960/t09x0sk1h; HIML: IB, 313, edition cc ('the vulgate').

Su 1939 — Ācārya, Yādavaśarma Trivikrama, and Śarman, Nandakiśora (1939) (eds.), *सुश्रुतसंहितायाः सूत्रस्थानम्. श्रीचक्रपाणिदत्तविरचितया भानुमतीव्याख्याया समेतम्* = *Sushrut-sañhitā (sūtra Sthān) with Bhānumatī Commentary by Chakrapāṇi Datta with Introduction by Gaṇanāth Sen* (Śrīsvāmi Lakṣmīrāma Nidhi Granthamālā = Shrī Swāmī Lakshmī Rām Trust Series, 1; [Jaipur]: Śyāmasundara Śarman), ARK: https://n2t.net/ark:/13960/s207htc1xpj; Printed at the Nirṇayasāgara Press, Bombay.

WEP — Wiersema, John H., and León, Blanca (2016), *World Economic Plants:* (2nd edn., Boca Raton: CRC Press), ISBN: 9781466576810.

Index of Manuscripts

Numbers after the final colon refer to pages in this book.

Kathmandu KL 699: 161
Kathmandu NAK 533: 161

NAK 5-333: 163

General Bibliography

Ācārya, Yādavaśarma Trivikrama (1941) (ed.), *महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलिता* (3rd edn., Mumbayyāṃ: Nirnaya Sagara Press), ARK: https://n2t.net/ark:/13960/t48q2f20n.

Ali, Salim, and Ripley, S. Dillon (1983), *Handbook of the Birds of India and Pakistan, Together with Those of Bangladesh, Nepal, Bhutan, and Sri Lanka. Compact Edition*, 10 vols. (Delhi: Oxford University Press).

Ball, Valentine (1888), "On the Identification of the Animals and Plants of India Which Were Known to Early Greek Authors," *Proceedings of the Royal Irish Academy*, 2 (1879–1888)/6: 302–46, URL: https://www.jstor.org/stable/20651530.

Barceloux, Donald G. (2008), *Medical Toxicology of Natural Substances. Foods, Fungi, Medicinal Herbs, Plants, and Venomous Animals* (Hoboken, NJ, etc.: John Wiley & Sons), ISBN: 047172761X.

Bellini, Marco (2025), "The Byzantine Alchemist Christianos and His Procedures on Indian Lac," *Ambix*, 72/2 (Mar.): 127–42, ISSN: 1745-8234. DOI: https://doi.org/10.1080/00026980.2025.2481338.

Birch, Jason, et al. (2021), "Further Insight into the Role of Dhanvantari, the Physician to the Gods, in the Suśrutasaṃhitā," *Academia Letters*. DOI: https://doi.org/10.20935/AL2992.

Böhtlingk, Otto (1879), *Sanskrit-wörterbuch in kürzerer fassung* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), URL: https://www.sanskrit-lexicon.uni-koeln.de/scans/PWScan/2020/web/, accessed 18/05/2023.

Breton, P. (1826), "On the Native Mode of Couching," *Transactions of the Medical and Physical Society of Calcutta*, 2: 341–82, ARK: https://n2t.net/ark:/13960/t3dz8nn5t, URL: https://archive.org/details/s8id13658440/page/338/mode/2up, accessed 02/06/2021.

Burnell, Arthur Coke (1880), *A Classified Index to the Sanskrit Mss. in the Palace at Tanjore* (London: Trübner), ARK: https://n2t.net/ark:/13960/t4xh86j61; Bheḷasaṃhitā described on pp. 67 ff.

Burrow, Thomas (1948), "Dravidian Studies VII," *Bulletin of the School of Oriental and African Studies (London)*, 12/2: 365–96, URL: https://www.jstor.org/stable/608752.

—— (1971), "Spontaneous Cerebrals in Sanskrit," *Bulletin of the School of Oriental and African Studies*, 34/3: 538–59. DOI: https://doi.org/10.1017/s0041977x00128538, URL: https://www.jstor.org/stable/613901.

Byrski, Maria Christopher (1981), "Is there a Sanskrit Word for Pumice," *Indologica Taurinensia*, 8–9, URL: http://www.asiainstitutetorino.it/Indologica/volumes/vol08-09/vol_08-09_art09_byrski.pdf.

Chatterji, Suniti Kumar (1974), *Kiraata-Jana-Kṛti* (2nd edn., Calcutta: The Asiatic Society), ARK: https://n2t.net/ark:/13960/t47q4b12c; 1998 reprint.

Cox, Whitney (2011), "Saffron in the Rasam," in Y. Bronner, L. McCrea, and W. Cox (eds.), *South Asian Texts in History: Critical Engagements with Sheldon Pollock* (Asia Past & Present: New Research from AAS, 7; Ann Arbor: Association for Asian Studies), chap. 8, 177–201, ISBN: 9780924304637, ARK: https://n2t.net/ark:/13960/t5r89k36f; reprinted Delhi, 2016.

Dave, K. N. (1985), *Birds in Sanskrit Literature* (Delhi: Motilal Banarsidass), ISBN: 0-89581-676-8, ARK: https://n2t.net/ark:/13960/t2c94cv80.

Deshpande, Vijaya (1999), "Indian Influences on Early Chinese Ophthalmology: Glaucoma As a Case Study," *Bulletin of the School of Oriental and African Studies*, 62: 306–22. DOI: https://doi.org/10.1017/S0041977X00016724.

—— (2000), "Ophthalmic Surgery: A Chapter in the History of Sino-indian Medical Contacts," *Bulletin of the School of Oriental and African Studies*, 63/3: 370–88, ISSN: 0041-977X. DOI: https://doi.org/10.1017/s0041977x00008454.

Deuti, Kaushik (2020), *Skinks of India*, ed. Sujoy Raha and Probath Bag (Kolkata: Zoological Survey of India), ISBN: 9788181715517.

Diedrich, Veronica, Zweerink, Kara, and Elder, Brandon (2024), "Plant Dermatitis," *Emergency Medicine Clinics of North America*, 42/3: 613–38, ISSN: 0733-8627. DOI: https://doi.org/10.1016/j.emc.2024.03.001.

Edgerton, Franklin (1953), *Buddhist Hybrid Sanskrit Grammar and Dictionary* (William Dwight Whitney Linguistic Series; New Haven: Yale University Press); vol. 1: Grammar, vol. 2: Dictionary.

Edgeworth, M. Pakenham (1851), "Descriptions of Some Unpublished Species of Plants from North-Western India," *Transactions of the Linnean Society of London*, 20: 23–92, ARK: https://n2t.net/ark:/13960/t9x060p3b.

Elwin, Verrier (1955), *The Religioin of an Indian Tribe* (London, Glasgow, New York, etc.: Oxford University Press), ARK: https://n2t.net/ark:/13960/t0tr5kj79.

Froese, R., and Pauly, D. (2022) (eds.), "Fishbase: The Global Encyclopedia about Fish," URL: https://www.fishbase.org.au/v4.

Geeta, R., and Gharaibeh, Waleed (2007), "Historical Evidence for a Pre-Columbian Presence of Datura in the Old World and Implications for a First Millennium Transfer from the New World," *Journal of Biosciences*, 32/S3: 1227–44, ISSN: 0973-7138. DOI: https://doi.org/10.1007/s12038-007-0132-y.

Gode, P. K., and Karve, C. G. (1957–59) (eds.), *Revised and Enlarged Edition of Prin. V. S. Apte's the Practical Sanskrit-English Dictionary* (Poona: Prasad Prakashan), ARK: https://n2t.net/ark:/13960/t3gx47212, accessed 20/10/2017.

Gupta, Śyāmacaraṇa (1887), *আয়ুর্বেদার্থ চন্দ্রিকা* [= *Āyurvedārtha candrikā*] (Calcutta), ARK: https://n2t.net/ark:/13960/t5w71k903.

Hellwig, Oliver (2009), *Wörterbuch Der Mittelalterlichen Indischen Alchemie* (Groningen: Barkhuis & University of Groningen, University Library), ISBN: 9789077922620. DOI: https://doi.org/10.2307/j.ctt22728hs, URL: https://www.academia.edu/1268947/, accessed 19/06/2020.

Hoernle, A. F. Rudolf (1907), *Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body* (Oxford: Clarendon Press), ARK: https://n2t.net/ark:/13960/t1pg9cq8b.

Khan, Zihan Rahman, et al. (2018), "Medicinal Values of Aquatic Plant Genus Nymphoides Grown in Asia: A Review," *Asian Pacific Journal of Tropical Biomedicine*, 8/2: 113–9, ISSN: 2221-1691. DOI: https://doi.org/10.4103/2221-1691.225615.

Kokoszko, Maciej, and Rzeźnicka, Zofia (2018), "Malabathron (μαλάβαθρον) in Ancient and Early Byzantine Medicine and Cuisine," *Medicina Nei Secoli Arte E Scienza / Journal of History of Medicine*, 30/2: 579–616, ISSN: 0394-9001, URL: https://rosa.uniroma1.it/rosa01/medicina_nei_secoli/article/view/1551.

Lienhard, Siegfried (1978), "On the Meaning and Use of the Word Indragopa," *Indologica taurinensia*, 6: 177–88, URL: https://tinyurl.com/Lienhard1978, accessed 06/02/2021; The indragopa is a 'red velvet mite'.

Lüde, Saskia, et al. (2016), "Adverse Effects of Plant Food Supplements and Plants Consumed as Food: Results from the Poisons Centres-Based PlantLIBRA Study: Adverse Effects of PFS and Plants Consumed as Food," *Phytotherapy Research*, 30/6: 988–96, ISSN: 0951-418X. DOI: https://doi.org/10.1002/ptr.5604.

Maxwell-Lefroy, Harold (1909), *Indian Insect Life. A Manual of the Insects of the Plains (Tropical India)* (Calcutta, Simla, etc.: Thacker, Spink & Co.), ARK: https://n2t.net/ark:/13960/t40s7sf4r.

McHugh, James (2012), "The Disputed Civets and the Complexion of the God: Secretions and History in India," *Journal of the American Oriental Society*, 132/2: 245, ISSN: 0003-0279. DOI: https://doi.org/10.7817/jameroriesoci.132.2.0245.

—— (2013), "Blattes de Byzance in India: Mollusk Opercula and the History of Perfumery," *Journal of the Royal Asiatic Society of Great Britain & Ireland*, 23/1: 53–67, ISSN: 2051-2066. DOI: https://doi.org/10.1017/s1356186312000727.

—— (2021), *An Unholy Brew: Alcohol in Indian History and Religions* (New York: Oxford University Press), 416 pp., ISBN: 9780199375936.

Menon, Vivek (2014), *Indian Mammals: A Field Guide* (Gurgaon: Hachette India), ISBN: 978-93-5009-760-1.

Meulenbeld, Gerrit Jan (1974*b*), *The Mādhavanidāna and Its Chief Commentary: Chapters 1–10. Introduction, Translation, and Notes* (Leiden: Brill), ISBN: 978-90-04-03892-9, ARK: https://n2t.net/ark:/13960/t25b8q97g.

—— (1989), "The Search for Clues to the Chronology of Sanskrit Medical Texts As Illustrated by the History of Bhaṅgā (cannabis Sativa Linn.)," *Studien zur Indologie und Iranistik*, 15: 59–70.

—— (2009), *The Trees Called Śigru (Moringa sp.), along with a Study of the Drugs Used in Errhines* (eJim Supplements; Groningen: Barkhuis), ISBN: 978-90-77922-52-1. DOI: https://doi.org/10.2307/j.ctt22728b6.

Olivelle, Patrick (2005), *Manu's Code of Law: A Critical Edition and Translation of the Manava-dharmasastra*, With the editorial assistance of Suman Olivelle (South Asia research; New York: Oxford University Press), ISBN: 0195171462.

Osbaldeston, Tess Anne, and Wood, R. P. A. (2000), *Dioscorides. De Materia Medica. Being an Herbal with Many Other Medicinal Materials Written in Greek in the First Century of the Common Era. A New Indexed Version in Modern English* [Introductory Notes by R. P. Wood] (Johannesburg: IBIDIS Press), ISBN: 9780620234351. DOI: https://doi.org/10.5281/

zenodo.15330582, URL: https://web.archive.org/web/20160301000627/http://panaceavera.com/dematerialindex.html, accessed 01/03/2016.

Pillay, V. V. (2013), *Modern Medical Toxicology* (New Delhi: Jaypee Brothers Pvt. Ltd), ISBN: 9789350259658.

Pillay, Vijay V., and Sasidharan, Anu (2019), "Oleander and Datura Poisoning: An Update," *Indian Journal of Critical Care Medicine*, 23/Supplement 4: 5250–5. DOI: https://doi.org/10.5005/jp-journals-10071-23302.

Poudel, Ram C., et al. (2013), "Yews (Taxus) along the Hindu Kush-Himalayan Region: Exploring the Ethnopharmacological Relevance among Communities of Mongol and Caucasian Origins," *Journal of Ethnopharmacology*, 147/1: 190–203, ISSN: 0378-8741. DOI: https://doi.org/10.1016/j.jep.2013.02.031.

Rādhākāntā Deva, Rājā (1876), *शब्दकल्पद्रुमः = Shabda Kalpadrumah, Or, the Tree Bearing All the Words That May Be Wished For* (Calcutta: Baradākānta Mitra & Co. at the New Bengal Press), ARK: https://n2t.net/ark:/13960/t9x10x61b.

Rai, Rishu (2019), "Kirata Tribes of Colonial Darjeeling: Historical Understanding through Discourse Analysis," *International Journal of Research and Analytical Reviews*, 6/1: 390–9, URL: https://www.ijrar.org/papers/IJRAR19J5465.pdf.

Roy, B. K. (1970), *The Savar: A Scheduled Tribe in West Bengal* (New Delhi: Office of the Registrar General), URL: https://censusindia.gov.in/nada/index.php/catalog/32384/download/35565/42925_1961_SAV.pdf.

Saraswat, K. S. (1991), "Archaeobotanical Remains in Ancient Cultural and Socio-Economical Dynamics of the Indian Subcontinent," *Palaeobotanist*, 40: 514–45. DOI: https://doi.org/10.54991/jop.1991.1797.

Sastri, P. P. S. (1933), *A Descriptive Catalogue of the Sanskrit Manuscripts in the Tanjore Maharaja Serfoji's Sarasvati Mahal Library Tanjore: Natya, Sangita, Kamasastra, Vaidya & Jyotisa, nos. 10650 – 11737* (Srirangam: Sri Vani Vilas Press), ARK: https://n2t.net/ark:/13960/t3nw8bc12.

Semalty, Mona, et al. (2010), "Semecarpus anacardium Linn.: A review," *Pharmacognosy Reviews*, 4/7: 88, ISSN: 0973-7847. DOI: https://doi.org/10.4103/0973-7847.65328.

Sharma, Priya Vrat (1982), *Ḍalhaṇa and his Comments on Drugs* (Delhi: Munshiram Manoharlal).

Singh, G. P. (1990), *The Kirātas in Ancient India. A Historical Study of their Life, Culture and Civilization* (Delhi: Gian Publishing House), ISBN: 9788121203296.

Singh, Girish P. (2008), *Researches into the History and Civilization of the Kirātas* (New Delhi: Gyan Publishing House), 572 pp., ISBN: 8121202817; Includes bibliographical references (p. [503]-526) and index.

Śiromaṇi, Bharatacandra (1873) (ed.), *चतुर्वर्गचिन्तामणि-दानखण्डम्* (Calcutta: Asiatic Society of Bengal), ARK: https://n2t.net/ark:/13960/t1rf9jd94.

Spiers, Carmen S. (2022), "The Semantics of Sharpness and the Prohibition of the Pungent: Garlic, Sanskrit śigru(ka)-, and Old Persian *θigra(ka)-," *Indo-Iranian Journal*, 65/2: 93–121, ISSN: 1572-8536. DOI: https://doi.org/10.1163/15728536-06501002, URL: https://hal.science/hal-03703996v1/file/SPIERS%20The%20Semantics%20of%20Sharpness.pdf.

Subba, Tanka Bahadur (1999), *Politics of Culture: A Study of Three Kirata Communities in the Eastern Himalayas* (1st edn., Chennai [u.a.]: Orient Longman), ISBN: 8125016937.

Suvedī, K. S., and Tīvārī, N. (2000) (eds.), *सौश्रुतनिघण्टुः: ग्रन्थादौ विस्तृतेन ग्रन्थवैशिष्ट्य-प्रकाशकेनोपोद्घातेन अवसाने च द्रव्याणामनेकभाषानामावली-पर्यायसङ्ग्रहाभ्यां समलङ्कृतः सुश्रुतसंहितायां प्रयुक्तानामौषधद्रव्याणां पर्याय-गुणकर्मवर्णात्मको ऽपूर्वग्रन्थः* (Belajhuṇḍī, Ḍāṅ: Mahendrasaṃskṛtaviśvavidyālayaḥ).

Talwar, P. K., and Kacker, R. K. (1984), *Commercial Sea Fishes of India* (Calcutt: Zoological Survey of India), ARK: https://n2t.net/ark:/13960/t5s841v5m.

Varshney, R. K. (2000), "First Authentic Record of the Lac Insect from Gujarat," *Bionotes*, 2/2: 27, URL: https://tinyurl.com/varshney2000, accessed 24/09/2024.

Vogel, Jean (1962), *The Goose in Indian Literature and Art* (Arts & Letters, XXVII; Leiden), 1952, ARK: https://n2t.net/ark:/13960/t9j425x5z.

Wiersema, John H., and León, Blanca (2016), *World Economic Plants:* (2nd edn., Boca Raton: CRC Press), ISBN: 9781466576810.

Wikipedia contributors (2025*a*), "Hottentotta tamulus," *Wikipedia, The Free Encyclopedia* (21 June), URL: https://en.wikipedia.org/w/index.php?title=Hottentotta_tamulus&oldid=1293018226, accessed 21/06/2025.

—— (2025*b*), "Koel," *Wikipedia, The Free Encyclopedia*, URL: https://en.wikipedia.org/wiki/Koel, accessed 12/08/2025.

—— (2025*c*), "List of Poisonous Plants — Wikipedia, the Free Encyclopedia," URL: https://en.wikipedia.org/wiki/List_of_poisonous_plants, accessed 09/07/2025.

—— (2025*d*), "Malabathrum," URL: https://en.wikipedia.org/wiki/Malabathrum, accessed 12/08/2025.

Woodcock, Martin W. (1980), *Collins Handguide to the Birds of the Indian Subcontinent, Including India, Pakistan, Bangladesh, Sri Lanka and Nepal* (Collins), ISBN: 0-00-219712-X; Reprinted 1990.

Wujastyk, Dominik (2002), "Cannabis in Traditional Indian Herbal Medicine," in Ana Salema (ed.), *Āyurveda at the Crossroads of Care and Cure. Proceedings of the Indo-European Seminar on Ayurveda held at Arrábida, Portugal, in November 2001* (Lisbon: Centro de História de Além-Mar, Universidade Nova de Lisboa), 45–73, ISBN: 972-98672-5-9, URL: https://www.academia.edu/188844/, accessed 27/05/2019.

—— (2003*a*), "Black Plum Island," in *2nd International Conference on Indian Studies. Proceedings* (Kraków: Jagiellonian University, Institute of Oriental Philology and Księgarnia Akademicka), 637–49.

—— (2003*b*), *The Roots of Ayurveda: Selections from Sanskrit Medical Writings* (Penguin Classics; 3rd edn., London, New York, etc.: Penguin Group), ISBN: 0-140-44824-1.

Yule, Henry, and Burnell, Arthur Coke (1903), *Hobson-Jobson: A Glossary of Colloquial Anglo-Indian Words and Phrases, and of Kindred Terms, Etymological, Historical, Geographical and Discursive* (London: John Murray), ISBN: 81-215-0109-1, ARK: https://n2t.net/ark:/13960/t1zc7wm8w; Often reprinted.

Materia Medica

Abbreviations

ADPS — Sivarajan, V. V., and Balachandran, Indira (1994), *Ayurvedic Drugs and Their Plant Sources* (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).

AVS — Warrier, P. K., Nambiar, V. P. K., and Ramankutty, C. (1994–96) (eds.), *Indian Medicinal Plants: A Compendium of 500 Species. Vaidyaratnam P. S. Varier's Arya Vaidya Sala, Kottakal* (Madras: Orient Longman).

BIA — Prater, S. H. (1993), *The Book of Indian Animals* (3rd edn., Bombay, Delhi, etc.: Oxford University Press), ARK: https://n2t.net/ark:/13960/t6356w32f; 4th impression of 3rd corrected 1980 edition.

Chevillard — Chevallier, Andrew (2000), *The Encyclopedia of Herbal Medicine*, ed. Penny Warren et al. (1st edn., New York: Dorling Kindersley), ISBN: 9780751303148, ARK: https://n2t.net/ark:/13960/s2bh76qc88s.

Chopra — Chopra, R. N., Nayar, S. L., and Chopra, I. C. (1956), *Glossary of Indian Medicinal Plants* (3rd reprint, 1992, New Delhi: Council of Scientific and Industrial Research); vol. 2: R. N. Chopra, I. C. Chopra, and Varma (Chopra$_{sup}$).

Chopra IDG — Chopra, R. N., Chopra, I. C., Handa, K. L., et al. (1958), *Chopra's Indigenous Drugs of India* (2nd edn., Calcutta: Dhur & Sons), ARK: https://n2t.net/ark:/13960/t9673t140.

Chopra$_{sup}$ — Chopra, R. N., Chopra, I. C., and Varma, B. S. (1969), *Supplement to Glossary of Indian Medicinal Plants* (Reprint 1986, New Delhi: National Institute of Science Communication), ISBN: 8185038872.

CIPP — Pillay, V. V. (2010), "Common Indian Poisonous Plants," in D. A. Warrell, T. M. Cox, and J. D. Firth (eds.), *Oxford Textbook of Medicine* (5th edn., Oxford University Press), 1371–5. DOI: https://doi.org/10.1093/med/9780199204854.003.090302.

Dutt — Dutt, Uday Chand (1922), *The Materia Medica of the Hindus…with a Glossary of Indian Plants by George King. Revised Edition…by Binod Lall Sen and Ashutosh Sen and Pulin Krishna Sen* (Krishnadas Sanskrit Studies; 3rd edn., Calcutta: Madan Gopal Dass for the Adi-Ayurveda Machine Press), ARK: https://n2t.net/ark:/13960/t59c7tg9z; Reprinted Varanasi: Chowkhamba Saraswatibhavan, 1980.

Dymock — Dymock, William, Warden, C. J. H., and Hooper, David (1890), *Pharmacographia Indica: A History of the Principal Drugs of Vegetable Origin Met with in British India* (London, Bombay, Calcutta: Kegan Paul), URL: https://tinyurl.com/dymock1890, accessed 16/03/2023.

GJM1 — Meulenbeld, Gerrit Jan (1974*a*), "Sanskrit Names of Plants and their Botanical Equivalents," in id., *The Mādhavanidāna and Its Chief Commentary: Chapters 1–10. Introduction, Translation, and Notes* (Leiden: Brill), chap. Appendix Four, 520–611, ARK: https://n2t.net/ark:/13960/t25b8q97g.

GJM2 — Meulenbeld, Gerrit Jan (1988), "G. J. Meulenbeld's Additions to his "Sanskrit Names of Plants and their Botanical Equivalents"," in Rahul Peter Das, *Das Wissen von der Lebensspanne der Bäume: Surapālas Vṛkṣāyurveda* (Stuttgart: Franz Steiner Verlag), chap. Appendix 1, 425–65, ISBN: 9783515046633; Supplement to GJM1.

GVDB — Singh, Thakur Balwant, and Chunekar, K. C. (1972), *Glossary of Vegetable Drugs in Brhattrayī* (Varanasi: Chowkhamba Sanskrit Series Office), ARK: https://n2t.net/ark:/13960/s2cvp72x58j.

HK — Hilgenberg, Luise, and Kirfel, Willibald (1941), *Vāgbhaṭa's Aṣṭāṅgahṛdayasaṃhitā, ein altindisches Lehrbuch der Heilkunde, aus dem Sanskrit ins Deutsche übertragen mit Einleitung, Anmerkungen und Indices* (Leiden: Brill), ARK: https://n2t.net/ark:/13960/t52h05616.

IGP — Griffiths, Mark (1994), *The New Royal Horticultural Society Index of Garden Plants* (London: Macmillan), ARK: https://n2t.net/ark:/13960/t2q61gn9z.

IHR — Khare, C. P. (2004), *Indian Herbal Remedies: Rational Western Therapy, Ayurvedic and Other Traditional Usage, Botany* (Berlin and Heidelberg: Springer), ISBN: 978-3-642-62229-8. DOI: https://doi.org/10.1007/978-3-642-18659-2, ARK: https://n2t.net/ark:/13960/t2p67054f.

Issar — Issar, T. P. (1994), *Blossoms of Bangalore* (Bangalore: T. P. Issar).

IW — Israel, Samuel, et al. (1988), *Indian Wildlife: Sri Lanka Nepal* (Insight Guides; Singapore etc.: APA Publications), ISBN: 9780245545238, ARK: https://n2t.net/ark:/13960/s2p9d5pqd1w.

K&B — Kirtikar, K. R., Basu, B. D., and an I.C.S (1987), *Indian Medicinal Plants*, ed. E. Blatter, J. F. Caius, and K. S. Mhaskar, 8 vols. (2nd edn., Dehradun: International Book Distributors); First published in Allahabad, 1918.

MBG — Missouri Botanical Garden (2024), "Missouri Botanical Garden: Plant Finder," Missouri Botanical Garden, URL: https://bit.ly/MissouriPlantfinder.

NEH — Bown, Deni (2001), *New Encyclopedia of Herbs and Their Uses* (2nd edn., London, New York etc: .Dorling Kindersly).

NK — Nadkarni, K. M. (1982), *Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes*, ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, URL: https://tinyurl.com/Nadkarni1982; First published in 1954.

Peter — Peter, K. V. (2012) (ed.), *Handbook of Herbs and Spices* (Food Science, Technology and Nutrition, 228; 2nd edn., Oxford, Cambridge, Philadelphaia, New Delhi: Woodhead Publishing), ISBN: 9780857090393.

Potter$_{rev}$ — Wren, R. C., Williamson, Elizabeth M., and Evans, Fred J. (1994), *Potter's New Cyclopaedia of Botanical Drugs and Preparations* (Saffron Walden: C. W. Daniel Company Ltd.); Reprint of revised 1988 edition.

POWO — Kew Gardens (2024), "Plants of the World," Royal Botanic Gardens, URL: https://powo.science.kew.org.

Reptiles — Daniel, J. C. (1983), *The Book of Indian Reptiles* (Bombay: Oxford University Press).

Trees — Bole, P. V., and Vaghani, Yogini (1986), *Field Guide to the Common Trees of India* (Bombay, Delhi, Oxford, etc.: World Wildlife Fund – India and Oxford University Press), ISBN: 0-19-561595-6; 4th reprint.

Watt$_{Comm}$ — Watt, George (1908), *The Commercial Products of India, Being an Abridgement of "the Dictionary of the Economic Products of India"* (London: John Murray), ARK: https://n2t.net/ark:/13960/t8cg7dm79.

Watt$_{Dict}$ — Watt, George (1889–96), *A Dictionary of the Economic Products of India* (Calcutta: Dept. Revenue and Agriculture, Government of India), URL: https://tinyurl.com/watt1889, accessed 28/04/2021.

WDMPP — Quattrocchi, Umberto (2012), *CRC World Dictionary of Medicinal and Poisonous Plants: Common Names, Scientific Names, Eponyms, Synonyms, and Etymology* (Boca Raton, FL: CRC Press), ISBN: 978-1-4822-5064-0, ARK: https://n2t.net/ark:/13960/s2k3j7xg2ff.

Flora

a large aroid (*mahākarambha*) name from etymology; see an aroid (*karambha*) : 161

agarwood (*aguru*) Aquilaria malaccensis Lam., GVDB: 3 : 118, 119, 224

'alas, alas' (*hālāhala*) unknown. See Cf. *Soḍhalanighantu* p.43 (sub *bola*) = *stomaka* = Indian aconite (*vatsanābha*) : 162, 164

Alexandrian laurel (*punnāga*) Calophyllum inophyllum, L. See AVS: 1, 338, NK: 1, #425 : 205, 224

amaranth (*taṇḍulīya*) see prickly amaranth (*taṇḍulīyaka*) : 206

an aroid (*karambha*) probably a plant belonging to Araceae, GVDB: 76 for useful discussion. E.g., Alocasia macrorrhiza (L.) G.Don is an Old World aroid occuring in S. Asia and has poisonous sap; any part of the aroid Colocasia spp. chewed or eaten raw can cause burning pain and buccal swelling, salivation, difficulty breathing, swallowing or speaking. E.g., C. esculenta (L.) is native to India and has these properties, WDMPP: 1060–62. The same source (2847–2848) gives the extremely irritant Pergularia daemia (Forssk.) Chiov. as *karambha*. Cf. taro (*piṇḍāluka*) *karambha* is possibly a syn. for plumed cockscomb (*indīvara*), GVDB: 76, 44–45 : 161, 334, 351

Arabian jasmin (*tṛṇaśūnya*) see Arabian jasmine (*mallikā*), GVDB: 190 MW: 453 says Jasminium sambac. GVDB: 190 also suggest screw-pine (*ketaka*) : 334

Arabian jasmine (*mallikā*) Jasminum sambac (L.) Aiton, GVDB: 300 : 334

Arabian jasmine (*tṛṇaśūlya*) probably an alternative pronunciation for Arabian jasmin (*tṛṇaśūnya*), GVDB: 190 : 224

arjun (*arjuna*) Terminalia arjuna (Roxb.) Wight & Arn., see HK: 738, GVDB: 61 : 50, 90, 221, 246, 335

arjun tree (*kakubha*) Terminalia arjuna (Roxb.) Wight & Arn., GVDB: 61. But these authors also point out that this plant is sometimes cited togteher with arjun (*arjuna*), so it may be bluebell barleria (*ārtagala*) (see GVDB: 39 for extensive discussion) : 245

Asoka tree (*aśoka*) Saraca indica Linn., GVDB: 26 : 119, 121, 206, 224, 256, 346

atis root (*śṛṅgīviṣa*) Aconitum heterophyllum, Wall. ex Royle. See AVS: 1, 42, NK: 1, #39 : 162, 164

axlewood (*dhava*) Anogeissus latifolia (Roxb. ex DC.) Wall. ex Guill & Perr. See AVS: 1, 163 f, Chopra: 20 : 50, 89, 175, 221, 224

bamboo (*vaṃśa*) Bambusa arundinacea (Retz.) Willd. : 245

bamboo leaves (*veṇupatrikā*) Bambusa bambos, Druce, NK: 1, #307. But GVDB: 380 argues for Setaria glauca Beauv. : 153

banyan (*nyagrodha*) Ficus benghalensis, L., GVDB: 356, HK: 748 : 335

banyan (*vaṭa*) see banyan (*nyagrodha*) : 90, 93, 246

barley (*yava*) Hordeum vulgare, L. See HK: 752 : 129

barley ash (*yavakṣāra*) The preparation method is described at GVDB: 327 : 132, 335

barley ash (*yavanāla*) see barley ash (*yavakṣāra*), GVDB: 327 : 215

bayberry (*kaṭphala*) M. esculenta Buch.-Ham. ex D.Don, which is is native to the Himalaya, from Kashmir to Assam, as well as S. China and SE Asia. Nageia nagi (Thunb.) Kuntze (syn of Myrica nagi Thunb.), as suggested by T. B. Singh and Chunekar (GVDB: 66), is native to East Asia, not India : 206

bearded premna (*vasuka*) Premna barbata Wall. (← *vasuhaṭṭa*), according to Cakrapāṇidatta. See the discussion by T. B. Singh and Chunekar (GVDB: 362–363), where other candidate species such as Osmanthus, Calotropis, and Trianthema are discussed. T. B. Singh and Chunekar (GVDB: 363) note that when *vasuka* is mentioned with *vasira*, two varieties of salt are often meant (see *vasukavasirā*). See also NK: #1299 who identifies it with Indigofera enneaphylla, Linn. (Birdsville Indigo), apparently without controversy : 90

beautyberry (*śyāmā*) Callicarpa macrophylla, Vahl. See AVS: 1, 334, NK: 1, #420 : 124, 151, 153, 207

beggarweed (*aṃśumatī*) see beggarweed (*śālaparṇī*), GVDB: 1, mentioning that the pair of these refers to beggarweed and hare foot uraria : 169, 216

beggarweed (*sthirā*) see beggarweed (*śālaparṇī*), GVDB: 458 : 216, 245

beggarweed (*vidārigandhā*) see beggarweed (*śālaparṇī*) : 59, 129, 239, 348

beggarweed (*śālaparṇī*) Desmodium gangeticum (L.) DC. See Dymock: 1, 428, GJM1: 602, NK: 1, #1192; ADPS: 382, 414 and AVS: 2, 319, 4.366 are confusing : 335

beleric myrobalan (*bibhītaka*) Terminalia bellirica Roxb. One of the components of the three myrobalans (*triphalā*) GVDB: 274, 196 : 356

Bengal quince (*bilva*) Aegle marmelos (L.) Corr. See AVS: 1, 62, Chevillard: 161, NK: 1, #62, i(MW: 732a) : 89, 119, 121, 126, 207, 336, 341, 354

big poison (*mahāviṣa*) unknown : 162, 164

bitter gourd (*paṭolī*) see pointed gourd (*paṭola*), cite[233]gvdb : 206

bitumen (*adrija*) → *śilājit*. A tar-like, black, resinous rock exudate. See

Mahākośa: 1, 21 : 187

black Bengal quince (*kṛṣṇaśrīphalikā*) GVDB: 412, on *śrīphala*, synonym of Bengal quince (*bilva*) fruit : 342

black creeper (*kālānusārī*) Ichnocarpus frutescens R. Br. or Cryptolepis buchanani Roemer & Schultes. Probably a synonym for *kṛṣṇasārivā* (GVDB: 94–95). I. frutescens has dark, rust-colored stems, so has been preferred here. However, Cryptolepis grandiflora, Wight, also has black stems. Synonym of *kālānusāriṇī*, *kālānusārivā*. *kālanusārya* may be a synonym of *tagara*, itself hard to identify : 205, 336

black creeper (*pālindī*) Ichnocarpus frutescens, (L.) R.Br. or Cryptolepis buchanani, Roemer & Schultes. See AVS: 3, 141, 145, 203, NK: 1, #1283, 1210, ADPS: 434. Ḍalhaṇa on SS 5.1.82 identified *pālindī* with *trivṛt* (turpeth) and T. B. Singh and Chunekar (GVDB: 246) supported this as a usual identification : 153, 156, 169, 206

black nightshade (*kākamācī*) Solanum nigrum, Linn., GVDB: 86–87. May also be the less poisonous S. dulcamara, "bittersweet nightshade," K&B: 1, 889–892 : 217, 223, 339

black pepper (*marica*) Piper nigrum, L. See ADPS: 294, NK: 1, #1929. Known to ancient Greek authors (Ball 1888: 341) : 130, 222, 256, 341, 356

black sarsaparilla (*kālānusārivā*) see Indian sarsaparilla (*sārivā*); see also black creeper (*kālānusārī*). Problems about identifying this plant are discussed at GVDB: 94–95 and GVDB: 429–431 : 224

blackboard tree (*saptachada*) Alstonia scholaris R. Br. GVDB: 420 : 152, 336

blackboard tree (*saptaparṇa*) see blackboard tree (*saptachada*) : 222

blackbuck (*hariṇa*) Antilope cervicapra, L. See BIA: 270 IW: 95, 165, *et passim* : 156

blue water-lily (*utpala*) Nymphaea stellata, Willd. See GJM1: 528, IGP 790; Dutt: 110, NK: 1, #1726 : 41, 110, 151, 169, 224, 256, 257, 340

bluebell barleria (*kuravaka*) see bluebell barleria (*kuruvaka*) : 207

bluebell barleria (*kuruvaka*) Or *kurubaka*. T. B. Singh and Chunekar (GVDB: 108) notes that this is sometimes listed as a type of rice, as at *Suśrutasaṃhitā* 1.46.8 (Su 1938: 215). Further discussion at GVDB: 447–448, sub bluebell barleria (*saireyaka*), where *kurubaka* is said to be identifiable with *baka* and *būka*. T. B. Singh and Chunekar (GVDB) finally propose a red-flowering Rhododendron, admitting that this is a novel suggestion : 161, 336

bluebell barleria (*sahā*) see bluebell barleria (*sahācara*), GVDB: 428 : 128, 215

bluebell barleria (*sahācara*) see bluebell barleria (*saireyaka*), GVDB: 427 : 336

bluebell barleria (*saireyaka*) A Barleria, perhaps B. cristata L. that is particularly well-known in South India. Four kinds are distinguished in ayurveda, based on the colour of their flowers. See substantive discussion at GVDB: 444–449 : 336

bluebell barleria (*ārtagala*) A variety of bluebell barleria (*saireyaka*), q.v.; GVDB: 39 argue for Xanthium strumarium L., "clotbur" and for Acanthus ilicifolius Linn., which is not native to S. Asia. See also GVDB: 446 : 335

bread flower (*āsphota*) GVDB: 41 argue for Vallaris solanacea (Roth ex Roem. & Schult.) Kuntze. This has the right distribution in S. Asia POWO: s.v. : 217

bull's head (*gokṣura*) Tribulus terrestris L. GVDB: 144–145, 193. A component of lesser five roots : 336

bull's head (*trikaṇṭaka*) → bull's head (*gokṣura*) GVDB: 193. A component of

lesser five roots : 348
bulrush (*kaśeru*) "Two species, Scirpus kysoor Roxb., and S. grossus Linn. f., are used" GVDB: 85. Also *kaśeruka* and *kaseru* : 124, 125, 128
camphor (*karpūra*) Camphora officinarum, Nees. or Dryobalanops aromatica, Gaertn.f., nom cons. The latter is native to the Malay Archipelago. See GVDB: 82, IGP: 253; see also camphor (*śītaśiva*) : 337
camphor (*śītaśiva*) rarely mentioned. Taken as rock salt (*saindhava*) or shami tree (*śamī*), etc., by some authors, GVDB: 402. Ḍalhaṇa on 5.6.18 (Su 1938: 581) glossed it as camphor (*karpūra*), but noticed other interpretations : 224, 337
cardamom (*elā*) Elettaria cardamomum, Maton. See AVS: 2, 360, NK: 1, #924, Potter$_{rev}$: 66 : 118, 119, 169, 177, 205, 206, 214, 224, 245, 337, 356
cardamom (*kṣudrailā*) see cardamom (*elā*), GVDB: 128. This expression, "small cardamom" is only used at *Suśrutasaṃhitā* Kalpasthāna 6.17 : 224
carray cheddie (*viśvadevā*) → *gāṅgerukī* Canthium parviflorum, Lam. See AVS: 1, 366 f. Or Sida rhombifolia Linn. (GVDB: 372, 444 ff. et passim) : 93
castor oil tree (*gandharvahasta*) see castor-oil (*eraṇḍa*). GVDB: 135, K&B: 3, 2277 : 55, 121
castor-oil (*eraṇḍa*) Ricinus communis, L. See NK: 1, #2145, Chopra: 214 : 60, 160, 337
castor-oil tree (*vardhamāna*) see castor-oil (*eraṇḍa*), GVDB: 361 : 222
catechu (*khadira*) Senegalia catechu (L.f.) P. J. Hurter & Mabb = Acacia catechu Willd. GVDB: 129–130 : 90
certain minerals (*tārāvitāra*) Unknown. It is not even certain that these are minerals. The variant reading in the vulgate, *tāraḥ sutāraḥ* was glossed by Ḍalhaṇa on 5.3.14 (Su 1938: 568) as follows *tāro rūpyaṃ, sutāraḥ pāradaḥ*, "tāra means silver; sutāra means mercury." : 176
chaff (*kāṇḍana*) The word *kāṇḍana* is not found in dictionaries; *kaṇḍana* is threshing, separating the chaff from the grain in a mortar. Cf. Hemādri's *Caturvargacintāmaṇi* (PWK: 2, 8) (Śiromaṇi 1873: 1, 138: 21, citing the *Vāyupurāṇa*) : 43, 353
champak (*campaka*) Magnolia champaca (L.) Baill. ex Pierre, GVDB: 154 : 224
chebulic myrobalan (*harītakī*) Terminalia chebula Retz. GVDB: 466 : 127, 152, 224, 356
cherry (*elavālu*) Prunus cerasus, L. See GVDB: 58 for a thoughtful discussion NK: 1, #2037. : 169, 224, 337
cherry (*elavāluka*) see cherry (*elavālu*) : 222
chinaberry tree (*mahānimba*) Melia azedarach L., GVDB: 302 : 343
chir pine (*sarala*) Pinus roxburghii, Sarg. GVDB: 423 : 89, 128, 222, 224
cinnamon (*tvac*) Cinnamomum cassia, Blume. See NK: 1, #579 : 216, 224, 245, 337, 356
cinnamon (*tvak*) see cinnamon (*tvac*) : 206
cinnamon (*varāṅga*) see cinnamon (*tvac*), GVDB: 360 : 222
citron (*mātuluṅga*) Citrus medica, Linn. GVDB: 276, 306. Also spelled *mātuliṅga, mātulaṅga, mātulāṅga* : 89, 126, 131, 132, 206, 240
cluster fig (*udumbara*) Ficus racemosa, L. See ADPS: 487 : 221
cobra's saffron (*nāgapuṣpa*) → nāgakeśara. Mesua ferrea, L. See NK: 1, #1595, GVDB: 220 : 169
cogongrass (*balvaja*) possibly Imperata cylindrica (L.) P. Beauv. GVDB: 271 describe the debate about this identity : 245
coleus (*hrīvera*) Coleus vettiveroides K.C.Jacob, GVDB: 474, where it is stated that this is a synonym for

scented pavonia (*bālaka*), also a disputed plant. See POWO: https://powo.science.kew.org/taxon/446211-1. Some say this is Pavonia odorata, Willd., "scented pavonia" : 246, 354

colocynth (*indravāruṇī*) Citrullus colocynthis (L.) Schrad., GVDB: 46. The two varieties of this plant are discussed by (ADPS: 180–183); the first is agreed to be colocynth, the second is debated but is likely to be a Curcubitaceae : 160, 222, 224, 338

colocynth (*mṛgādanī*) see colocynth (*indravāruṇī*) GVDB: 46, 318 : 206

common smilax (*śvadaṃśtra*) Smilax aspera L., GVDB: 414 : 89

convolvulus (*lakṣmaṇā*) Sivarajan and Balachandran (ADPS: 273–275) suggest Ipomoea marginata (Desr.) Verdc. or I. obscura (Linn.) AVS: 3, 237–238 suggests Ipomoea sepiaria Roxb. (looks like a little boy (*putraka*), and generates a boy (*putrajananī*), according to the *Bhāvaprakāśa*). Sivarajan and Balachandran (ADPS: 273–275) firmly reject Mandragora officinalis which is European; but possible consideration could be given to Mandragora caulescens C.B.Clarke, a variant that is known in South Asia. Cf. GVDB: 346–347. NK: #1546, #2323 suggests Mandragora officinalum, Linn., known as *putrada* : 93

coriander (*dhānyaka*) Coriandrum sativum L., GVDB: 213 : 338

coriander (*kustumburya*) see coriander (*dhānyaka*), GVDB: 113 : 224

corky coral tree (*pāribhadra*) Erythrina suberosa Roxb. See GVDB: 245 : 175, 338

corky coral tree (*pāribhadraka*) see corky coral tree (*pāribhadra*) : 121, 221

costus (*kuṣṭha*) Dolomiaea costus (Falc.) Kasana & A. K. Pandey. See GVDB: 112, NK: 1, #2239. Known to ancient Greek authors (Ball 1888: 345) : 118, 119, 126, 153, 169, 177, 205, 206, 214, 222, 224, 245, 246

cottony jujube (*kākolī*) Ziziphus mauritiana, Lam. See IGP: 1233, NK: 1, #2663; IGP 1233. Cf. NK: 1, #1170 : 117, 125, 126, 202

country mallow (*atibalā*) Abutilon indicum, (L.) Sweet, but may be other kinds of mallow, e.g., Sida rhombifolia, L.. See NK: 1, #11, IGP: 1080, NK: 1, #2300, ADPS: 71, 77, and cf. heart-leaf sida (*balā*) : 59, 125, 128, 314

country mallow (*sahadevā*) see *balā* (GVDB: 428). Contains ephedrine : 93, 128

country sarsaparilla (*ananta-poison*) see country sarsaparilla (*anantā*), with which I conjecturally identify this poisonous root plant. See footnote 510, p. 160 : 160

country sarsaparilla (*anantā*) Hemidesmus indicus, (L.) R. Br. See ADPS: 434, AVS: 3, 141–145, NK: 1, #1210. But see GVDB: 13 for complications that may suggest that it is to be equated with *sārivā*, which may sometimes be Cryptolepis or Ichnocarpus fruitescens R. Rr. (GVDB: 429-431) : 59, 160, 169, 176, 338

crape jasmine (*tagara*) Tabernaæmontana divaricata (L.) R.Br. ex Roem. & Schultes. See GJM1: 557, AVS: 5, 232. Synonym of *nata*. But some say Valeriana jatamansi, Jones. See GVDB: 173–174 for discussion (and charming comments on brain-liquid testing). Some say *tagara* is Indian rose-bay or Indian valerian or a Nymphoides (see water snowflake (*kumudavatī*)), but there remain many historical questions about the ancient and regional identities of this plant See,

e.g., AVS: 5, 334, 345. See also IGP: 1147, K&B: 1, 796, #758 : 118, 119, 126, 153, 169, 205, 224, 342, 358

crimson trumpet-flower tree (*pāṭalā*) Stereospermum chelonides, (L. f.) A. DC. See GJM1: 573, AVS: 5, 192 ff, ADPS: 362 f, AVS: 3, 1848 f, IGP 1120, Dymock: 3, 20 ff : 341, 358

croton tree (*nāgadantī*) Croton persimilis Müll.Arg., GVDB: 222 : 222, 339, 353

croton tree (*nāgavinnā*) Croton persimilis Müll.Arg. GVDB: 222 I have taken this as croton tree (*nāgadantī*) because of context in *Suśrutasaṃhitā* Kalpasthāna 5 : 207

crow (*kāka-plant*) an unidentified poisonous plant apparently called "crow." T. B. Singh and Chunekar (GVDB: 86) note that several drugs named after the crow are unidentifiable. Thus, black nightshade (*kākamācī*) is toxic, but this is a stretch : 161

cucumber (*trapuṣa*) Cucumis sativus L., GVDB: 191 : 340

datura (*dhattūra*) Datura metel, L. See AVS: 2, 305 (cf. *Abhidhānamañjarī*), NK: 1, #796 ff. Potter$_{rev}$: 292 f, ADPS: 132. See Geeta and Gharaibeh 2007 and related literature for the evidence that all Datura species are originally a New World genus, introduced to S. Asia in pre-Columbian times. Note that *dhattūra* is mentioned three times the *Suśrutasaṃhitā* (4.17.37, 5.7.52, 53) but never in the *Carakasaṃhitā* or the *Bhelasaṃhitā* : 56, 339

datura (*dhuttūrakā*) see datura (*dhattūra*) : 219

deodar (*bhadradāru*) Cedrus deodara, (Roxb.ex D.Don) G. Don. See AVS 41, NK: 1, #516 : 50, 125, 129, 169, 222

deodar (*devadāru*) Cedrus deodara (Roxb.) Loud. GVDB: 206–207 : 89, 126, 224, 314, 339

deodar (*suradāru*) see deodar (*devadāru*) : 205

devil's dung (*hiṅgu*) Ferula foetida Regel., GVDB: 471–472 : 90, 91, 205

dried ginger (*nāgara*) → dried ginger (*śuṇṭhī*) GVDB: 221–222 : 91, 205

dried ginger (*śuṇṭhī*) Zingiber officinale, Roscoe. See ADPS: 50, NK: 1, #2658, AVS: 5, 435, IGP: 1232 : 124, 339, 356

dried meat (*vallūra*) MW: 929, *Mahākośa*: 1, 730. The term is used, rarely, in both the CS (1.5.10) and SS (1.13. 16, 6.42.75–76). It is a Dravidian loanword and occurs in the *Arthaśāstra* etc. (KEWA: 3, 167) : 42

drum-giver (*lambaradā*) uknown; name from etymology. Cf. GVDB: 348 : 161

durva grass (*dūrvā*) Cynodon dactylon (L.) Pers., GVDB: 205, where some questions are raised about white and green varietals : 245, 343, 354

elixir salve (*rasāñjana*) cf. Indian barberry (*añjana*) : 50, 60, 344

embelia (*viḍaṅga*) Embelia ribes, Burm. f., ADPS: 507, AVS: 2, 368, NK: 1, #929, Potter$_{rev}$: 113. Poisonous to fish and mammals, WEP: 271 : 50, 89, 119, 169, 205, 206, 222

emblic myrobalan (*āmalaka*) Phyllanthus emblica, L. See AVS: 4, 256 : 90, 127, 128, 242, 243, 256, 356

emetic nut (*madana*) Randia dumetorum, Lamk., GVDB: 291–292 and NK: 1, #2091 : 152, 316, 350

false daisy (*bhṛṅga*) Eclipta prostrata (L.) L. See GVDB: 288, but this is a new-world species : 89, 344

fermented rice-water (*dhānyāmla*) → *kāñjī, kāñjikā, sauvīra*. GVDB: 458, NK: 2, appendix VI, #18 : 57, 58

fern (*ajaruhā*) Nephrodium species GVDB: 7, uncertain. Perhbaps Christella dentata(Forssk.) Brownsey & Jermy, which is reported to have folk

applications against skin diseases in India : 155

fire-flame bush (*dhātakī*) Woodfordia fruticosa (L.) Kurz. See AVS: 5, 412, NK: 1, #2626. Known to ancient Greek authors (Ball 1888: 344) : 90, 152

five roots (*pañcamūla*) Described at *Suśrutasaṃhitā* 1.38.66–69 (Su 1938: 169). There are two *pañcamūla*s, the *laghupañcamūla* (the lesser five roots) and *bṛhatpañcamūla* (greater five roots), with differing properties. Combined they are called *daśamūla* (ten roots). See also *Mahākośa*: 1, 468 : 89

flame-of-the-forest (*kiṃśuka*) see flame-of-the-forest (*palāśa*), GVDB: 97–98 : 214

flame-of-the-forest (*palāśa*) Butea monosperma (Lam.) Taub. GVDB: 241. *pālāśa* in some sources : 90, 121, 340

flax (*atasī*) Linum usitatissimum, L. See NK#1495 : 125

foxtail millet (*priyaṅgu*) also *śyāmā*. Setaria italica (L.) P. Beauvois GVDB: 263–264, GJM1: 576. The most widely-grown species of millet in Asia. Some say Callicarpa macrophylla, Vahl. See AVS: 1, 334, NK: 1, #420. The fruits of S. italica and C. macroyphylla are similar. See also GVDB: 413, where the authors suggest that *priyaṅgu* is meant by *gondī* or *gondanī* and may have originally been called *gundrabīja* : 50, 169, 177, 205, 206, 246, 256, 340, 344

foxtail millet (*priyaṅgū*) see foxtail millet (*priyaṅgu*) : 224

fragrant lotus (*saugandhika*) A type of white water-lily (*kumuda*) or blue water-lily (*utpala*), GVDB: 457 : 41

fruit of the marking-nut (*āruṣkara*) see marking-nut tree (*aruṣkara*). "āruṣkara = aruṣkara phala" ADPS: 23; see also MW: 151 : 206

gajpipul (*gajapippalī*) GVDB: 469, 132, syn. *hastipippalī*. A controversial plant, but the conjecture of T. B. Singh and Chunekar that Scindapsus officinalis (Roxb.) Schott is the more ancient identity is accepted here : 340, 363

gajpipul (*hastipippalī*) see gajpipul (*gajapippalī*), GVDB: 469, 132 : 222

galangal (*galaṅgala*) Alpinia galanga (L.) Sw. Identified with grey orchid in Kerala (ADPS: 398). The name is borrowed from Chinese, perhaps via Persian or Arabic (Peter: 2, 304), and the name does not occur in early āyurvedic literature (GVDB) : 341

galls (*karkaṭa*) almost impossible to identify with certainty, GVDB: 78–80. Perhaps Toxicodendron succedaneum (L.) Kuntze, 1891, see NK: 1, #2136. Sometimes identified with cucumber (*trapuṣa*), which however is not toxic : 162, 340

galls (*karkaṭaka*) see galls (*karkaṭa*) : 160

garjan oil tree (*aśvakarṇa*) Dipterocarpus turbinatus Gaertn. f. See GVDB: 28, Chopra: 100 : 175, 221, 224

giant potato (*kṣīravidārī*) possibly → *kṣīraśukla*. Ipmoea mauritiana, Jacq. See ADPS: 510, AVS: 3, 222, AVS: 3, 1717 ff : 125, 345, 349, 351, 353

ginger (*mahauṣadha*) Zingiber officinale, Roscoe. See ADPS: 50, NK: 1, #2658, IGP: 1232 : 156

gold (*hema*) gold : 169

gold and sarsaparilla (*surendragopa*) Unknown. Ḍalhaṇa on 5.3.15 (Su 1938: 568) glossed *surendra* as "gold" and *gopā* as "Indian sarsaparilla." He also noted other opinions that *surendra* was "Tellicherry bark" : 176

golden shower tree (*rājadruma*) see golden shower tree (*āragvadha*) : 175

golden shower tree (*rājavṛkṣa*) see golden shower tree (*āragvadha*) : 89

golden shower tree (*āragvadha*) Cassia

fistula L. GVDB: 37–38, ADPS: 48, AVS: 2, 11 ff, AVS: 2, 854, IGP: 215. Known to ancient Greek authors (Ball 1888: 343). The plant has many synonyms : 127, 204, 214, 216, 340

gourd (*alābu*) Lagenaria siceraria Standl. GVDB: 25. Some say Lagenaria vulgaris, Seringe (NK: 1, #1419) but this is not appropriate for blood-letting : 37, 38, 152, 202

gourd (*vallija*) see gourd (*vallīja*) : 161

gourd (*vallīja*) This is a guess. According to some lexical sources, syn. for black pepper (*marica*) (MW: 929). See NK: 1, #1929. T. B. Singh and Chunekar (GVDB: 362) note that *vallīphala* may be wax gourd (*kūṣmāṇḍa*), which I follow. The related spiny bitter gourd has poisonous seeds, but not flowers. Commenting on *Bṛhatsaṃhitā* 8.13ab and 16.24ab, Bhaṭṭotpala glossed it as *mudgādi*, "mung beans etc." : 341

grapes (*drākṣā*) Vitis vinifera L. GVDB: 208–209 : 206

greater five roots (*bṛhatpañcamūla*) Described at *Suśrutasaṃhitā* 1.38.68–69 (Su 1938: 169). Consists of Bengal quince, migraine tree, Indian trumpet tree, crimson trumpet-flower tree, and white teak : 340, 346, 356

green gram (*māṣa*) Vigna radiata (L.) R. Wilcz. See ADPS: 296, IGP 1204 : 50, 125, 315

grey orchid (*rāsnā*) Vanda tessellata (Roxb.) Hook. ex G.Don, usually. But Pluchea lanceolata, Oliver & Hiern, is a more common identification in Punjab and Gujarat (GVDB: 337–338); Alpinia galanga (L.) Sw. is more common in Kerala (ADPS: 398; Peter: 2, 303–318), though this is usually identified with galangal. As all authorities note, the identification of this plant is debated. Sivarajan and Balachandran (ADPS: 398–401) note that sources describe it as having leaves like cardamom and sweet-smelling roots and that "there is great confusion with regard to the identity of the drug." : 89, 124, 126, 205, 245, 340

gummy gardenia (*pṛthvīkā*) ← *hiṅgupatrikā*, Gardenia gummifera L.f., GVDB: 257, q.v. for discussion : 206, 224

hairy bergenia (*pāṣāṇabheda*) Bergenia ligulata (Wall.) Engl. GVDB: 246–247 : 90

hairy-fruited eggplant (*bṛhatī*) Solanum lasiocarpum Dunal. (syn. S. ferox, L. & S. indicum L.), GVDB: 277–278, who discuss the two kinds of *bṛhatī*, which may be large and small eggplants (Solanum melongena L.). See also ADPS: 100, NK: 1, #2329, AVS: 5, 151, IHR: 429–430 : 121, 127, 168, 169, 215, 216, 348

halfa grass (*darbha*) Demostachya bipinnnata Stapf. GVDB: 201. Synonym of *kuśa* : 92, 125

halfa grass (*kuśa*) Desmostachya bipinnata, (L.) Stapf. GVDB: 111, AVS: 2, 326 : 125, 199, 222, 245

hare foot uraria (*kroṣṭakamekhalā*) see hare foot uraria (*pṛśniparṇī*) *Mahākośa*: 1, 246. *kroṣṭaka* can mean "jackal" *śṛgāla*, as in *śṛgālavinna*, "a kind of *pṛśnaparṇī*) *Mahākośa*: 1, 839 : 206

hare foot uraria (*pṛthakparṇī*) → hare foot uraria (*pṛśniparṇī*) and rajmahal hemp (*mūrvā*) GVDB: 257. A component of lesser five roots : 127, 348

hare foot uraria (*pṛśnaparṇī*) see pṛśniparṇī : 335

hare foot uraria (*pṛśniparṇī*) → *sahā*? Uraria lagopoides, DC. and U. picta Desv. See GVDB: 257–258, GJM1: 577, Dymock: 1, 426, AVS: 1, 750 ff, NK: 1, #2542; ADPS: 382, AVS: 2, 319 and AVS: 4, 366 are confusing. Also called *pṛthakparṇī*. A component of lesser five roots : 124, 125, 341

heart-leaf sida (*balā*) Sida cordifolia, Linn. See ADPS: 71, NK: 1, #2297. On the various types of heart-leaf sida (*balā*), see GVDB: 270–271, who point out that there are several species of Sida, e.g., S. acuta, S. rhombifolia, S. spinosa and S. cordifolia that may all be types of *balā* : 59, 125, 128, 130, 169, 314, 338, 342

heart-leaved moonseed (*amṛtā*) Tinospora cordifolia(Thunb.) Miers., synonym of *guḍūcī*. See ADPS: 38, NK: 1, #2472, 624, Dastur #229, GVDB: 17–18. Also *amṛta*, m. : 153, 168, 216, 217

heart-leaved moonseed (*guḍūcī*) Tinospora cordifolia, (Thunb.) Miers. ADPS: 38, NK: 1, #2472 & #624, Dastur #229, GVDB: 141–142. Also identified as Cocculus cordifolius DC. by Nadkarni (NK) and others (see also the Tropicos botanical database). Also commonly called *amṛtā* : 89, 126

heart-leaved moonseed (*somavallī*) Tinospora cordifolia (Thunb.) Miers. GVDB: 456. Likely, but uncertain : 153

heart-leaved moonseed creeper (*amṛtavalli*) See *amṛtā* : 314

hedge caper (*hiṃsrā*) Capparis sepiaria L., GVDB: 471, IHR: 124, K&B: 1, 109 : 342

hedge caper (*kākādanī*) synonym of hedge caper (*hiṃsrā*), GVDB: 88, 471, IHR: 124, K&B: 1, 109. This name is not used in the *Carakasaṃhitā*. At 5.7.31 (Su 1938: 583), Ḍalhaṇa glossed *kādādanī* as black Bengal quince (*kṛṣṇaśrīphalikā*). GVDB: vi, 471 note that they have identified *kākādanī* as Cardiospermum halicacabum L. "balloonvine" : 217

henna (*madayantikā*) Lawsonia inermis, L. See AVS: 3, 303, NK: 1, #1448, Potter$_{rev}$: 151 : 154

hibiscus (*ambaṣṭhā*) possibly Hibiscus rosa-sinensis L. T. B. Singh and Chunekar (GVDB: 18–19) discuss the confusions surrounding the identity of this plant, and especially between this plant and velvet-leaf (*pāṭhā*); they must be different items. T. B. Singh and Chunekar propose that *ambaṣṭhā* is either the fruit of Hibiscus or the galls of a Quercus or Tamarix species. According to Meulenbeld 1974*b*: 599, *vanakārpāsī* is more likely a name for a hibiscus : 207

Himalayan birch (*bhūja*) see Himalayan birch (*bhūrja*) : 222

Himalayan birch (*bhūrja*) Betula utilis D. Don, GVDB: 287 : 342

Himalayan mayapple (*vakra*) Podophyllum hexandrum, Royle (NK: #1971), K&B: 1, 68. But perhaps a synonm of crape jasmine (*tagara*, *nata* q.v. (GVDB: 354)) : 177, 205, 206, 216, 217, 245

Himalayan yew (*sthauṇeya*) see Himalayan yew (*sthauṇeyaka*) : 224

Himalayan yew (*sthauṇeyaka*) T. B. Singh and Chunekar (GVDB: 458–459) suggested Taxus baccata L., but that tree is endemic to the Mediterraenean and not South Asia. Poudel et al. 2013 show that T. contorta Griff., T mairei (Lemée & Lév.) and T. wallichiana Zucc. are distributed in the Hindu Kush - Himalaya region. The Nepalese name Thuṇeraka is etymologically cognate with the Sanskrit name. T. contorta is of medicinal importance, so its common name is used here : 205, 342

hog plum (*āmrātaka*) Spondias pinnata (L.f.) Kurz, GVDB: 37, ADPS: 36–37. A member of the *ambaṣṭhādi* group : 110, 246

hogweed (*punarnavā*) Boerhaavia diffusa, L. See ADPS: 387, AVS: 1, 281, NK: 1, #363 : 127, 154, 168, 207, 342, 343

hogweed (*punarṇavā*) see hogweed (*punarnavā*) : 216

hogweed (*punarṇṇavā*) see hogweed (*punarnavā*) : 219

hogweed (*varṣābhu*) see hogweed (*varṣābhū*) : 216
hogweed (*varṣābhū*) see hogweed (*punarnavā*). According to GVDB: 361, it is Trianthema portulacastrum L., but this is mainly known from Africa and the new world. The name is often considered a synonym for hogweed (*punarnavā*) : 343
Holostemma creeper (*jīvantī*) → *sūryavallī*? Holostemma ada-kodien, Schultes. See ADPS: 195, AVS: 3, 167, 169, NK: 1, #1242 : 128, 351
holy basil (*surasa*) Ocimum tenuiflorum, Linn. GVDB: 438–439. Not always distinguished from O. basilicum L., Watt$_{Dict}$: 5, 443 : 207, 240
honey (*kṣaudra*) Eight varieties of honey are described in the *Suśrutasaṃhitā* (NK: 2, Appendix 192). *Kṣaudra* is the product of a small bee of tawny colour, called *kṣudra* : 133, 156, 256, 257
horned pondweed (*śaivāla*) also *śaivāla*, *śevāra*. Zannichellia palustris L. The uncertainties of this identification are discussed by T. B. Singh and Chunekar (GVDB: 409). Sometimes identified with durva grass (*dūrvā*) (GVDB: 409). Identified as Ceratophyllum demersum Linn. ("hornwort") by AVS: 2, 56–57x : 126, 343, 352
hornwort (*jalaśūka*) → *jalanīlikā*. Ceratophyllum demersum, L. See AVS: 2, 56, IGP: 232. T. B. Singh and Chunekar (GVDB: 166) suggest horned pondweed. Ḍalhaṇa noted on 1.16.19 (Su 1938: 79) that some people interpret it as a poisonous, hairy, air-breathing, underwater creature : 59
horse gram (*kaulattha*) See horse gram (*kulattha*) : 200
horse gram (*kulattha*) Macrotyloma uniflorum (Lam.) Verdcourt, syn. Dolichos biflorus, L., D. uniflorus, Lam., GVDB: 109, POWO: sub Macrotyloma uniflorum : 129, 130, 204, 225, 343
horseradish tree (*akṣīva*) see horseradish tree (*śigru*). GVDB: 2–3, 27 discusses the contradictions in identifying this plant. I am adopting the most common traditional identification with *śigru* (Meulenbeld 2009: 77, note 12), although chinaberry tree (*mahānimba*) is also likely. The suggestion by T. B. Singh and Chunekar about the name being an erroneous reading for *akṣīra*[*aśmantaka*] cannot stand since the name occurs in a ninth-century *Suśrutasaṃhitā* manuscript. This occurrence in the *Suśrutasaṃhitā* was not known to the definitive study by Meulenbeld (2009: 77–78) : 246, 247
horseradish tree (*madhukaśigru*) See horseradish tree (*śigru*), GVDB: 398–399 : 221
horseradish tree (*muruṅgī*) see horseradish tree (*śigru*), (GVDB: 311) : 206
horseradish tree (*śigru*) Moringa oleifera Lam. See IGP: 759, GJM1: 603, Dymock: 1, 396, GVDB: 398–399, K&B: 1, 396–399, #336. The definitive study is that by Meulenbeld (2009), who suggested that the name may have denoted pungent, pro-pitta plants, while Spiers (2022) took this further, suggesting that "*śigru*" may historically have referred more generally to plants with a sharp taste, perhaps including garlic : 126, 127, 343
hyacinth beans (*niṣpāva*) Lablab purpureus (L.) Sweet (1826) GVDB: 228 : 115
Indian aconite (*ativiṣā*) Aconitum ferox , Wall. ex Ser., or perhaps A. heterophyllum Wall. ex Royle, GVDB: 12, NK: 1, #39. Also called "atis roots" or just *viṣā*. A. ferox is also called aconite, monkshood, wolfsbane, etc. A. ferox is extremely poisonous. See also Indian aconite (*vatsanābha*). It grows

especially in mountainous Sikkim : 116, 154, 156, 177, 222, 224, 344

Indian aconite (*bhaṅgurā*) alternate name of Indian aconite (*ativiṣā*) or foxtail millet (*priyaṅgu*), MW: 744; in SS 5.2.5, I have taken it as the former. GVDB: 288 have *bhaṅgarā* as a variant of false daisy (*bhṛṅga*), but that is not toxic : 344

Indian aconite (*subhaṅgurā*) see Indian aconite (*bhaṅgurā*), it's usual form, without the prefix *su-* "good" : 160

Indian aconite (*vatsanābha*) Aconitum ferox, Wall. ex Ser. Cf. AVS: 1, 47 (A. Napellus, L., which is European and now taxonomically separated from A. ferox), NK: 1, #42, Potter$_{rev}$: 4 f. A. chasmanthum Stapf ex Holmes according to GVDB: 357, but that is distributed in Pakistan, Afghanistan and Tibet, Mongolia and Siberia. "*vatsanābha*" occurs in only once in the *Carakasaṃhitā* and thrice in the *Suśrutasaṃhitā* (Ca4.23.11571, Su5.2. 5, 6, 12564) : 162, 163, 334, 343

Indian aconite (*viṣā*) see Indian aconite (*ativiṣā*), GVDB: 12, 373 : 352

Indian barberry (*añjana*) see Indian barberry (*dāruharidrā*) Cf. elixir salve (*rasāñjana*) : 60, 155, 339

Indian barberry (*dāruharidrā*) Berberis holstii Engl., Dymock: 1, 65, NK: 1, #335, #685, GJM1: 562, IGP: 141, GVDB: 203 : 168, 169, 240, 344, 356

Indian barberry (*dārvī*) see Indian barberry (*dāruharidrā*) : 257

Indian barberry (*kālīyaka*) see Indian barberry (*dāruharidrā*) : 153

Indian bat tree (*śuṅgā*) → *parkaṭīvṛkṣa* according to *Śabdasindhu*: 1058; idem also suggests *vaṭavṛkṣa*, i.e., Ficus benghalensis Linn. and *āmrātaka*, Spondias pinnata (L.f.) Kurz. (native to S.E Asia but naturalized in S. Asia). Contrasted with *vaṭa* at *Suśrutasaṃhitā* 3.2.32. Cf. MW: 1081. : 93

Indian bdellium-tree (*guggula*) See Indian bdellium-tree (*guggulu*) : 205, 249

Indian bdellium-tree (*guggulu*) Commiphora wightii (Arn.) Bhandari (GVDB: 140). This is a flowering shrub or small tree that produces a fragrant resin commonly called *guggulu*. The name sometimes refers to the plant and sometimes to the resin. Known to ancient Greek authors (Ball 1888: 340) : 133, 344

Indian beech (*naktamāla*) Pongamia pinnata, (L.) Pierre. See AVS: 4, 339, NK: 1, #2003 : 50, 121

Indian cherry (*śelu*) Cordia myxa, L. non Forssk. See GJM1: 529 (2), IGP: 291b, cf. AVS: 3, 1677 f; cf. AVS: 2, 180 (C. dichotoma, Forst.f.), NK: 1, #672 (C. latifolia, Roxb.). See Indian cherry (*śleṣmātakī*) : 127, 168, 246, 247

Indian cherry (*śelū*) see Indian cherry (*śleṣmātakī*), GVDB: 408 : 224

Indian cherry (*śleṣmātaka*) see Indian cherry (*śleṣmātakī*) : 246

Indian cherry (*śleṣmātakā*) see Indian cherry (*śleṣmātakī*) : 221

Indian cherry (*śleṣmātakī*) Cordia dichotoma G. Forst., AVS: 2, 180–183. See POWO: C. dichotoma; Cordia myxa L., according to T. B. Singh and Chunekar (GVDB: 413–414), although they also suggest C. dichotoma (synonym of C. wallichii G. Don.) and C. rothii (synonym of Cordia sinensis Lam.) : 206, 344

Indian dill (*śatapuṣpā*) Anethum graveolens L. May also be Foeniculum vulgare Mill. See GVDB: 388 for discussion : 128, 224, 246

Indian elm (*cirabilva*) Holoptelea integrifolia (Roxb.) Planch. GVDB: 158, who also say that *pūtika* is a synonym; but that must be different than *pūtikā* : 344

Indian elm (*ciribilva*) see Indian elm

(*cirabilva*) : 221

Indian frankincense (*agamṛttikā*) see Indian frankincense (*śallakī*), according to Ḍalhaṇa's comment on *Suśrutasaṃhitā* 5.7.29. A variant form of Indian frankincense (*agavṛttikā*) : 216

Indian frankincense (*agavṛttikā*) see Indian frankincense (*nagavṛttikā*), GVDB: 3, 392 : 345

Indian frankincense (*gajavṛttikā*) Boswellia serrata Roxb.; equated with Indian frankincense (*śallakī*) by some, GVDB: 392. See also Indian frankincense (*nagavṛttikā*) : 206

Indian frankincense (*nagavṛttikā*) see Indian frankincense (*agavṛttikā*) : 345

Indian frankincense (*śallakī*) Boswellia serrata Roxb., GVDB: 392 : 216, 345

Indian fumitory (*parpaṭa*) the ancient plant is probably impossible to identify, and many alternatives are used today, including especially Fumaria species (GVDB: 239–240). I have cholsen Fumaria indica (Hausskn.) Pugsley, which can be poisonous : 345

Indian fumitory (*reṇu*) see Indian fumitory (*parpaṭa*), GVDB: 339. To be distinguished from pollen (*reṇukā*) : 161

Indian ipecac (*payasyā*) Uncertain. Possibly Tylophora indica (Burm.f.) Merr. Perhaps a synonym of panacea twiner, giant potato, purple roscoea, and plants like asthma plant and Gulf sandmat (GVDB: 237–238). Also "curds" when not a plant : 59, 126, 351

Indian jujube (*sauvīraka*) Zizphus jujuba Mill., GVDB: 458, MBG: sub jujuba : 125, 200

Indian kudzu (*vidārī*) → *payasyā*. Pueraria tuberosa (Willd.) DC. See ADPS: 510, AVS: 1, 792 f, AVS: 4, 391; not Dymock: 1, 424 f. See GJM2: 444, 451, AVS: 1, 187, but AVS: 3, 1719 = Ipmoea mauritiana, Jacq : 59, 89

Indian laurel (*plakṣa*) Ficus microcarpa, L. f. See ADPS: 377 : 222

Indian madder (*mañjiṣṭhā*) Rubia cordifolia, L. See IGP, Chopra: 215, GVDB: 289 : 55, 169, 205, 206, 215, 222

Indian mottled eel (*varmimatsya*) Almost certainly the mottled eel. MW: 962c noted that the *varmi* fish "is commonly called *vāmi*." The "vam fish," or "বান মাছ (*bān māch*)" in Bengal, is a marine and freshwater eel, *Anguilla bengalensis*. It is the most common eel in Indian inland waters and a prized food fish (Froese and Pauly 2022). However, some NIA languages identify the "vam" fish with the Indian Pike Conger, *Congresox talabonides* (Bleeker) (Talwar and Kacker 1984: 235, 236) : 39

Indian mustard (*sarṣapa*) Brassica juncea, Czern. & Coss. See AVS: 1, 301, NK: 1, #378, GVDB: 426–427 : 42, 162, 222, 246, 345

Indian mustard derivative (*sārṣapa*) this would normally mean "derived from Indian mustard (*sarṣapa*)." Excessive consumption of mustard oil can be harmful. This seems not to fit in a list of tuber poisons (SS 5.2.11–17). However, the *Sauśrutanighaṇṭu* (156) gives *rakṣoghnā* as a synonym for *sarṣapā*. This can be *Semecarpus anacardium*, L.f., which has some poisonous parts ("the black fruit is toxic and produces a severe allergic reaction if it is consumed or its resin comes in contact with the skin" Semalty et al. 2010). But this is still not a tuber product : 163

Indian pennywort (*maṇḍūkaparṇī*) Centella asiatica (L.) Urban. See GVDB: 290, ADPS: 289–291 : 207

Indian sarsaparilla (*sugandhikā*) see Indian sarsaparilla (*śvetasārivā*) GVDB: 430, 436 : 206, 224

Indian sarsaparilla (*sārivā*) → *anantā*. The *śveta* variety is Hemidesmus indicus, (L.) R. Br. ADPS: 434, AVS: 3, 141–145,

NK: 1, #1210, GVDB: 430; and the black form, black creeper, *pālindī*. Ichnocarpus frutescens, (L.) R.Br. or Cryptolepis buchanani, Roemer & Schultes AVS: 3, 141, 145, 203, NK: 1, #1283, 1210, ADPS: 429–430 : 169, 336, 340, 346

Indian sarsaparilla (*śvetasārivā*) Hemidesmus indicus, (L.) R. Br. See Indian sarsaparilla (*sārivā*). ADPS: 434, AVS: 3, 141–145, NK: 1, #1210, GVDB: 430 : 345

Indian snakeroot (*nākulī*) see Indian snakeroot (*sarpagandhā*). See GVDB: 219 for discussion of the difficulties in this identification : 244

Indian snakeroot (*sarpagandhā*) Rauvolfia serpentina, (L.) Benth. ex Kurz. See NK: 1, #2099, ADPS: 439, GVDB: 425; cf. SS 5.5.76–78 : 207, 346

Indian snakeroot (*sarvagandhā*) common spelling in Nepalese MSS for Indian snakeroot (*sarpagandhā*), q.v. : 216

Indian symphorema (*ananta*) Not in GVDB but MW: 25 says "*sinduvāra*" on no authority (see Indian symphorema : 222

Indian symphorema (*sinduvāra*) T. B. Singh and Chunekar (GVDB: 435) settles on Symphorema polyandrum Wight as the identity of this plant. Other authors choose Vitex negundo Linn. See further NK: 1, #2603 (cf. use of leaves), IGP: 1210a, MW: 1088b. Discussion by GVDB: 433–435 : 205, 207, 215, 224, 346

Indian trumpet tree (*śyonāka*) Oroxylum indicum (L.) Benth. ex Kurz. GVDB: 172–173. A component of greater five roots : 346

Indian trumpet tree (*ṭiṇṭuka*) → Indian trumpet tree (*śyonāka*). Oroxylum indicum (L.) Benth. ex Kurz. GVDB: 172–173. A component of greater five roots : 341

Indian trumpet tree (*ṭuṇṭuka*) see Indian trumpet tree (*śyonāka*), GVDB: 172–173 : 222

Indian willow (*vañjala*) see Indian willow (*vañjula*) : 245

Indian willow (*vañjula*) see Indian willow (*vetasa*); see GVDB: 356 for discussion. Doubts about this identification go back as far as Jejjaṭa (Ḍalhaṇa on 5.8.105 (Su 1938: 592)). T. B. Singh and Chunekar (GVDB: 356) noted that this is a tree in the *nyagrodha* group and has sometimes been equated with Asoka tree (*aśoka*) and sometimes with sandan (*tiniśa*) : 126, 222, 245, 346, 359

Indian willow (*vetasa*) Salix tetrasperma Roxb, GVDB: 380–381, q.v. for the argument that this is not the same as rattan (*vetra*). The identification of *vetasa* with Salix caprea L. is unlikely since the distribution of that S. caprea does not include S. Asia : 346

indigo (*nīlinī*) Indigofera tinctoria, L. See NK: 1, #1309. GVDB: 229–230 propose that this may differ from indigo (*nīlī*), and be rather the Ipomoea hederacea Jacq., "ivy-leaved morning glory." But that plant is native to the Americas, as are most Ipomoea species. I. tinctoria was known to ancient Greek authors (Ball 1888: 343) : 217, 346

indigo (*nīlā*) see indigo (*nīlinī*). Although T. B. Singh and Chunekar (GVDB: 229) refer to an unidentified creeper mentioned in *Carakasaṃhitā* Ci.1-4.7, the use in the Nepalese *Suśrutasaṃhitā* 5.6.24 is likely to refer to indigo (*nīlī*) : 216

indigo (*nīlī*) see indigo (*nīlinī*) : 224, 346

Indrajao (*indrayava*) see *vṛkṣaka* (Indrajao) Holarrhena pubescens Wall. ex G.Don 1837 GVDB: 376, 45 and 84 : 116

Indrajao (*vṛkṣaka*) → *indrayava*, *indrabīja*, *kaliṅga*, and *kuṭaja*. Holarrhena pubescens Wall. ex G.Don 1837

GVDB: 376, 45 and 84 : 91, 314, 346
ironwood tree (*nāgakeśara*) Mesua ferrea L. GVDB: 220 : 356
itchytree (*nicula*) Barringtonia acutangula (L.) Gaertn., GVDB: 224 : 222
jambul (*jambū*) Syzygium cumini, (L.) Skeels. See ADPS: 188, NK: 1, #967, Potter$_{rev}$: 168, Wujastyk 2003*a* : 152, 257
jequirity (*guñjā*) Abrus precatorius, L. See AVS: 1, 10, NK: 1, #6, Potter$_{rev}$: 168. Jequirity contains a dangerous toxin called Abrin in its seeds and to a lesser extent in its leaves, but apparently not in its roots or bulb. Abrin is not harmful if eaten, but an infusion of the bruised (not boiled) seeds injected or rubbed in the eyes can be fatal (NK: # 6). The dose can be quite small. See further jequirity (*kālakūṭa*) : 160, 161
jequirity (*kālakūṭa*) see jequirity (*kālakūṭā*) : 163, 347
jequirity (*kālakūṭā*) possibly Abrus precatorius, L. Cf. RRS 21.14. See AVS: 1, 10, NK: 1, #6, Potter$_{rev}$: 168. The Nepalese witnesses agree on the feminine form, *kālakūṭā*, while the more normal gender is masculine. The etymology of the name *kāla-kūṭa*, "black-top," fits with the striking appearance of jequirity seeds. GVDB: 93 does not attempt to identify the plant. The *Rasaratnasamuccaya* of pseudo-Vāgbhaṭa (21.14) says that the *kālakūṭa* poison is similar to "crow's beak" (*kākacañcu*), which is a more certain name for jequirity. Another hypothesis for the name, which could be translated "time/death-peak" might connect it with Sandakphu mountain, whose name is Lepcha for "the height of the poisonous plant" because of the abundance of Aconitum ferox on the mountain : 162, 347
koda millet (*kodrava*) Paspalum scrobiculatum L., GVDB: 119 : 133
kumkum tree (*kampillaka*) Mallotus philippensis (Lam.) Muell.Arg., GVDB: 74. AVS: 3, 375–379 describes the different plant used in Kerala, with the variant name *kampippāla* and and ADPS: 203–205 cites this as a good example of how Sanskrit plant identities can be misinterpreted in Kerala : 347
kumkum tree (*kampilya*) see kumkum tree (*kampillaka*) : 119, 245
kutki (*kaṭukā*) Picrorhiza kurroa Royle ex Benth. (GVDB: 64–65) : 116, 133, 347, 350
kutki (*kaṭurohaṇī*) → kutki (*kaṭukā*), GVDB: 66, 64–65 : 205
kutki (*kaṭurohiṇī*) see kutki (*kaṭukā*), GVDB: 66, 64–65 : 224
leadwort (*agniśikhā*) Plumbago zeylanica (or rosea?), L. See NK: 1, #1966, 1967. The roots of both rose and white leadwort are very toxic. : 347
leadwort (*citraka*) Plumbago zeylanica (or indica?), L. See RĀ. 6.124, ADPS: 119, NK: 1, #1966, 1967 : 50, 90, 116, 121, 132, 205
leadwort (*pālaka*) → citraka. Plumbago zeylanica (indica? rosea?), L. See Rā. 6.124, ADPS: 1, 119, NK: 1, #1966, 1967 : 162, 163
leadwort (*vidyutśikhā*) see leadwort (*agniśikhā*) : 160
lemongrass (*lāmajja*) Cymbopogon iwarancusa (Jones ex Roxb.) Schult. See NK: 1, #176, POWO: https://powo.science.kew.org/taxon/396948-1. GVDB: 350 points out that the identity of this grass remains uncertain, though it one of the two *uśīra*s. The Linnean name C. iwarancusa derives from William Jones' use of the Sanskrit name *jvarāṅkuśa* for this plant : 150, 347, 348, 357
lemongrass (*lāmajjaka*) see lemongrass (*lāmajja*) : 245, 246

lemongrass (*uśīrabheda*) see lemongrass (*lāmajja*) : 357
lesser five roots (*laghupañcamūla*) Described at *Suśrutasaṃhitā* 1.38.66–67 (Su 1938: 169). Consists of bull's head, hairy-fruited eggplant, yellow-berried nightshade, hare foot uraria, and beggarweed : 336, 337, 340, 341, 356, 360
liquorice (*klītaka*) Glycyrrhiza glabra, L. GVDB: 123–124 discuss the many difficulties in identifying this plant, and suggest Hygrophila auriculata Schumach (marsh barbel) and Sesbania bispinosa (Jacq.) W.Wight) (prickly sesban), neither of which is noted for toxic roots (as mentioned in SS 5.2.5). Lüde et al. 2016 identify G. glabra as a cause of poisoning, sometimes severe, when used as a food, but do not specifically mention the root : 160
liquorice (*madhuka*) also *yaṣṭi*(*ka*/*kā*), *yaṣṭīmadhuka*, Glycyrrhiza glabra, L. AVS: 3, 84, NK: 1, #1136, GVDB: 329 f. : 59, 89, 124–129, 131, 156, 167, 169, 205, 221, 224, 246, 257, 348
liquorice (*yaṣṭī*) see liquorice (*madhuka*) : 206
liquorice (*yaṣṭīmadhuka*) see liquorice (*madhuka*) : 60
lodh tree (*lodhra*) Symplocos racemosa, Roxb. See GJM1: 597, ADPS: 279 f, NK: 1, #2420. T. B. Singh and Chunekar (GVDB: 351–352) notes that there are two varieties, S. racemosa, qualified as śāvara, and S. crataegoides Buch.-Ham. for *paṭṭikā lodhra* : 50, 169, 205, 257
long pepper (*kṛṣṇā*) see long pepper (*pippalī*) : 256
long pepper (*māgadha*) see long pepper (*pippalī*) : 155
long pepper (*pippali*) see long pepper (*pippalī*) : 205
long pepper (*pippalī*) Piper longum, L. See ADPS: 374, NK: 1, #1928, GVDB: 249–250, but cf. AVS: 3, 245 : 89, 90, 121, 127, 128, 132, 133, 156, 169, 222, 225, 256, 314, 348, 356
long pepper root (*pippalīmūla*) see long pepper (*pippalī*) : 222
long-stamen Wendlandia (?) (*prapauṇḍarīka*) See the substantial discussion by T. B. Singh and Chunekar (GVDB: 261). They note that it is used mainly in eye troubles and frequently with liquorice, than which it is has been said to be thicker, and sweet in taste. A candidate they suggest is Wendlandia heynei (Schult.) Santapau & Merchant (formerly W. exserta), native to India; I have accepted that provisionally : 162, 205, 224, 348
long-stamen Wendlandia (?) (*tilaka*) see long-stamen Wendlandia (?) (*prapauṇḍarīka*), GVDB: 183–184. Sometimes thought to be a synonym of viburnum (*tilvaka*), q.v., but this is probably erroneous : 224, 358
lotus (*nalina*) see sacred lotus (*kamala*), GVDB: 218 : 256, 257
lotus stalk (*mṛṇāla*) "Leaf stalk of sacred lotus" GVDB: 318 : 126
luffa (*jālinī*) see luffa (*koṣātakī*), GVDB: 168 : 162, 214, 215
luffa (*kośavatī*) see luffa (*koṣātakī*) : 168
luffa (*koṣātakī*) Luffa cylindrica, (L.) M. J. Roem. or L. acutangula, (L.) Roxb. ADPS: 252–253, NK: 1, #1514 etc. "Kośātakī appears to be used in a general way for all the fruit drugs of the family Cucurbitaceae which have a net-like structure of fibres in the pulp. It thus includes nearly all Luffa species..." GVDB: 121 : 348
mahua (*madhūka*) Madhuca longifolia, (J. Koenig) J. F. Macbride. See AVS: 3, 362 f. Known to ancient Greek authors (Ball 1888: 339–340) : 89, 260–262
maidenhair fern (*haṃsāhvayā*) Adiantum lunaluatum Burm f. GVDB: 463 : 314

malabathrum (*patra*) Cinnamomum tamala, (Buch.-Ham.) Nees. See AVS: 2, 84, NK: 1, #589. Other common names include Indian bay leaf etc., but the plant has an ancient history in the classical world as "malabathrum." See Ball 1888: 341, who also suggests that the chief source of the plant in India is Assam. See also Wikipedia contributors 2025*d*. Kokoszko and Rzeźnicka (2018: 581) discuss the abbreviations "leaf" (φύλλα, *folium*) in the Mediterranean world that parallels the Sanskrit usage. Kokoszko and Rzeźnicka 2018: 584 note that Dioscorides (fl. 1st cent. CE) stated that malabathrum came from India, although Dioscorides' description of malabathrum is of a plant like a Nymphoides indica (L.) Kuntze, not a tree (Osbaldeston and Wood 2000: 17) : 118, 119, 126, 153, 169, 214, 224, 356

Malay beechwood (*śrīparṇī*) → *kāśmarī*. Gmelina arborea Linn., GVDB: 412, 96–97 : 89

maloo creeper (*aśmantaka*) T. B. Singh and Chunekar (GVDB: 27) note that thisis the name of two different drugs, Piliostigma malabaricum (Roxb.)Benth. or Phanera vahlii. (Wight & Arn., 1834) Benth. (non-lactiferous), and Ficus cordifolia Roxb. (lactiferous). I have selected P. vahlii in this context because of its abundance in S. Asia and its Himalayan and Nepalese distribution : 207, 221

mango (*āmra*) Mangifera indica Linn. GVDB: 37 : 110, 152, 207, 222, 256

mangosteen (*amla*) Garcinia pedunculata Roxb. ex Buch.-Ham. See GVDB: 20–21 : 204, 240

marking-nut tree (*aruṣkara*) see marking-nut tree (*bhallātaka*) : 161, 340

marking-nut tree (*bhallātaka*) Semecarpus anacarium, L. See NK: 1, #2269, AVS: 5, 98, ADPS: 85–86, GVDB: 23, 283 : 121, 155, 349

marsh barbel (*ikṣuraka*) Hygrophila auriculata (Schumach.) Heine (syn. Asteracantha longifolia (L.) Nees.), GVDB: 42–43 : 222

medhshingi (*vijayā-poison*) Dolichandrone falcata (Wall. ex DC.) Seem. This identification is tenuous. The *Sauśrutanighaṇṭu* gives a number of synonyms for *vijayā* (Suvedī and Tīvārī 2000: 5.77, 10.143). But one of them, *viṣāṇī* (also *meṣaśṛṅgī*), is sometimes equated with *Dolichandrone falcata* (*DC.*) *Seemann*, GVDB: 373 f; ADPS: 518, a plant used as an abortifacient and fish poison (NK: #862) : 160, 161

migraine tree (*agnimantha*) Premna corymbosa, Rottl. See AVS 1927, ADPS: 21, NK: 1, #2025, AVS: 4, 348; GJM1: 523: = P. integrifolia/serratifolia, L : 168, 341

milk-white (*kṣīraśuklā*) An unidentified plant. GVDB: 126: see purple roscoea and giant potato : 59, 353

monkey (?) (*markaṭa*) T. B. Singh and Chunekar (GVDB: 299) said of *markaṭa*, "an unidentified vegetable poison." Cf. Suvedī and Tīvārī 2000: v.36 for synonyms that lead to the non-toxic jujube tree : 164

mountain gardenia (*karaghāṭa*) synonym for mountain gardenia (*karaghāṭaka*) and probably mountain gardenia (*karahāṭa*), q.v., GVDB: 74 : 160, 350

mountain gardenia (*karaghāṭaka*) see mountain gardenia (*karahāṭa*) : 161, 221, 349

mountain gardenia (*karahāṭa*) Ceriscoides turgida (Roxb.) Tirveng. (syn. Gardenia turgida), following the suggestion of GVDB: vi, 77 made partly on the basis of local knowledge in U. P. The ripe fruit of C. turgida is

poisonous. Other authors suggest identity with emetic nut (*madana*), q.v. T. B. Singh and Chunekar (GVDB: 74, 77–78) noted that *karahāṭa* may be a synonym for mountain gardenia (*karaghāṭa*) : 160, 349

mountain gardenia (*karaṭā*) see mountain gardenia (*karaghāṭa*), as read for *karaṭā* in the vulgate text of SS 5.2.5. Not in GVDB as such. This poisonous root cannot at present be securely identified, although mountain gardenia has poisonous fruits. Monier-Williams et al. (MW: 255) cite an unknown lexical source that equates *karaṭa* (mn.) with safflower (*Carthamus tinctorius*, L.), but this plant does not have a poisonous root either : 160

muddy (?) (*kardama*) unknown. : 162, 163

mulberry (*kramuka*) probably the mulberry (*tūda*); see discussion by T. B. Singh and Chunekar (GVDB: 122) : 206

mulberry (*tūda*) Morus indica L., GVDB: 189 : 350

mung beans (*mudga*) Phaseolus radiatus L. GVDB: 310–311 : 125, 128, 263

mung beans (*māṣaka*) Phaseolus mungo Linn. GVDB: 308 : 153

munj grass (*nārācaka*) Saccharum bengalense, Retz.?. See NK: 1, #2184 : 161

munj sweetcane (*muñja*) Tripidium bengalense (Retz.) H.Scholz., GVDB: 309, 391. Synonym of munj sweetcane (*śara*) : 245

munj sweetcane (*śara*) Tripidium bengalense (Retz.) H.Scholz., GVDB: 309, 391 : 350

musk mallow (*latākastūrikā*) Abelmoschus moschatus Medik., GVDB: 348 : 350

musk mallow (*ullaka*) kutki (*kaṭukā*) or musk mallow (*latākastūrikā*), according to GVDB: 54; I have chosen the latter identity since A. moschatus can cause phototoxic dermatitis (Diedrich et al. 2024: 621) : 350

musk mallow (*ullika*) see musk mallow (*ullaka*) : 161

myrobalan (*abhayā*) Terminalia chebula, Retz. See ADPS: 172, NK: 1, #2451, Potter$_{rev}$: 214 : 116, 168, 177

myrobalans (*pathyā*) Terminalia chebula Retz. See NK: 1, #2451 : 256

natron (*suvarcikā*) Sodium carbonate. NK: 2, #45. Ḍalhaṇa identifies *suvarcikā* with svarjikṣāra 4.8.50 (Su 1938: 441) : 132, 169, 205

neem (*picumarda*) see neem tree (*nimba*), GVDB: 247–248 : 221

neem tree (*nimba*) Azadirachta indica A. Juss., GVDB: 226 : 56, 314, 350

nutgrass (*kuruvinda*) Unknown. Ḍalhaṇa on 5.3.15 (Su 1938: 568) glossed the term as nutgrass, but noted other opinions that it was a whetstone or a very special metallic gem. T. B. Singh and Chunekar (GVDB: 108) added that it could be a variety of rice, *ṣaṣṭika dhānya* : 176

nutgrass (*mustaka*) Cyperus rotundus, L. See ADPS: 316, AVS: 2, 296, NK: 1, #782 : 162, 163

nutgrass (*mustā*) Cyperus rotundus, L. See ADPS: 316, AVS: 2, 296, NK: 1, #782 : 350

odal oil plant (*iṅgudi*) see odal oil plant : 214

odal oil plant (*iṅgudī*) Kirtikar et al. (K&B: 5, 79) also firmly identify *iṅgudī* as Sarcostigma kleinii Wight & Arn., a liana well known in the Western Ghats and widely used in āyurveda, including for skin diseases. Balanites agyptiaca (L.) Delile, GVDB: 43 is an African plant and unlikely to be the original āyurvedic *iṅgudi*. : 350

oleander spurge (*mahāvṛkṣa*) see oleander spurge (*snuhī*), GVDB: 302-303 : 221

oleander spurge (*nandā*) see oleander spurge (*snuhī*), GVDB: 215 : 355

oleander spurge (*snuhā*) see oleander spurge (*snuhī*) : 121, 162, 215

oleander spurge (*snuhī*) Euphorbia neriifolia, L., or E. antiquorum, L. See ADPS: 448, AVS: 2, 388, AVS: 3, 1, NK: 1, #988, IGP: 457b. T. B. Singh and Chunekar (GVDB: 459) discuss the two varieties distinguished by Caraka on the basis of their spines. Euphorbia all share the feature of having a poisonous, latex-like sap : 350, 351, 355

orchid tree (*kovidāra*) Bauhinia purpurea Linn. or B. variegata Linn. (probably the former), GVDB: 120, AVS: 1, 256–260. The fruit of *kovidāra* is contrasted with the mango in Patañjali's *Mahābhāṣya* (on P1.2.45, varttika 8) : 200

paddy rice (*śāli*) Oryza sativa, Linn. GVDB: 395–396 mentioning 33 Sanskrit sub-variety names; AVS: 4, 193 : 43, 353

painted uraria (*pṛṣṇaparṇikā*) see painted uraria (*pṛṣṇaparṇī*) : 244

painted uraria (*pṛṣṇaparṇī*) Uraria picta (Jacq.) Desv. ex DC. and U. lagopoides DC are both to be used for this plant according to GVDB: 257–258. See also IHR: 188–190 : 216, 351

pale Java tea (*arjaka*) Orthosiphon pallidus Royle ex Benth., GVDB: 24, based on Ḍalhaṇa's descriptions, and by Sharma 1982: 127, #60. But Ocimum basilicum L., according to AVS: 4, 160 : 224

panacea twiner (*arkapuṣpī*) → *arkaparṇī*, Tylophora indica (Burm. f.) Merr. GVDB: 23–24. Maybe identical to Indian ipecac, giant potato and similar sweet, milky plants. See GVDB: 24, 127, 238, 441, 443 for discussion. For discussion in the context of Holostemma creeper, see ADPS: 195 and AVS: 3, 171. The etymology of the name suggests Helianthus annus Linn., but this plant is native to the Americas : 168, 345

peas (*hareṇu*) Pisum sativum, L. T. B. Singh and Chunekar (GVDB: 419–420, 467–468) note that two plants are usually meant under this name, but there is no agreement on the identity of the second. Synonym of peas (*satīna*). GVDB: 468 make an argument for Symphorema polyandrum Wight : 126, 168, 169, 177, 206, 245, 256, 351, 352

peas (*hareṇukā*) see peas (*hareṇu*) : 224

peas (*satīna*) see peas (*hareṇu*), GVDB: 419-420 : 351

peepul tree (*aśvattha*) Ficus religiosa, L. See ADPS: 63. Known to ancient Greek authors (Ball 1888: 338–339) : 179

periploca of the woods (*meṣaśṛṅga*) Gymnema sylvestre (Retz.) R. Br. See AVS: 3, 107, NK: 1, #1173 : 155

phalsa (*parūṣaka*) Grewia asiatica Linn., GVDB: 238 : 90

plants like asthma plant and Gulf sandmat (*dugdhikā*) synonym of plants like asthma plant and Gulf sandmat (*kṣīriṇī*), GVDB: 204–205, 127 : 351

plants like asthma plant and Gulf sandmat (*kṣīriṇī*) various milky plants, perhaps including Euphorbia hirta Linn. (asthma plant) and E. microphylla Heyne (Gulf sandmat) (GVDB: 127) : 345, 351

plants like asthma plant and Gulf sandmat (*yavaphalā*) synonym of plants like asthma plant and Gulf sandmat (dugdhikā), and plants like asthma plant and Gulf sandmat (*kṣīriṇī*), q.v., GVDB: 327, 127 : 224

plumed cockscomb (*indīvara*) Uncertain; possibly Celosia argentea Linn. (which is not toxic). But see the useful discussion in GVDB: 44–45. Possibly another name for an aroid (*karambha*), q.v. : 334

pointed gourd (*paṭola*) Trichosanthes dioica, Roxb., GVDB: 232–233 : 126, 168, 335

poison-altar (?) (*viṣavedikā*) Unknown. Possibly, at a guess, strychnine tree (*viṣamuṣṭika*)? GVDB: 373 Or Indian aconite (*viṣā*) : 161

poison-leaf (*viṣapatrikā*) Name from etymology. Perhaps the "leaf of Indian aconite (*viṣā*)" (but that is feminine). Cf. GVDB: 373, "unidentified" : 161

pollen (*reṇukā*) An unidentifiable plant. Perhaps a misreading for peas (*hareṇu*), although this is a long shot. T. B. Singh and Chunekar (GVDB: 339) suggest, on no authority, the synonyms *vṛkṣaruhā, māṃsarohiṇī*, or *durvā*, none of which help : 161, 345

pomegranate (*dāḍima*) Punica granatum Linn. GVDB: 201–202 : 89, 90, 131, 132, 207, 216

pondweed (*paripelavā*) Normally a neuter noun. T. B. Singh and Chunekar (GVDB: 238, 264–265, 409) argued that *plava* and *śaivāla* are the same thing, and may be either Zannichellia palustris, L., or Potamogeton pectinatus, L : 169

pondweed (*śevāla*) Zannichellia palustris L. See horned pondweed : 41, 42

pongame oiltree (*karañja*) see pongame oiltree (*karañjikā*) : 133, 216, 245

pongame oiltree (*karañjikā*) T. B. Singh and Chunekar (GVDB: 74–76) discuss complications, but probably Pongamia pinnata (L.) Pierre in *Suśrutasaṃhitā* 5.6.3 : 222, 352

powdered ruffle lichen (*śaileya*) Parmotrema perlatum (Huds.) M.Choisy (1952), although there are some inconsistencies in groups and synonyms. See GVDB: 408–409, AVS: 4, 222–225. The plant has a notably complex taxonomic history : 224, 352

powdered ruffle lichen (*śaileyaka*) see powdered ruffle lichen (*śaileya*) : 205

prickly amaranth (*taṇḍulīyaka*) Amaranthus spinosus L. See GVDB: 174, Dutt: 321, NK: 1, #144, Potter$_{rev}$: 15. Cf. AVS: 1, 121. Amaranth (etym. amṛta!) is a large family, many originally endemic to S. America. A. hypochondriacus L. is sometimes identified with *taṇḍulīyaka*, but A. spinosus L. is better known and attested in S. Asia in the first millennium BCE (Saraswat 1991). See also WEP: 45 : 153, 214, 217, 222, 334

prickly chaff-flower (*apāmārga*) Achyranthes aspera, L. See GVDB: 14, GJM1: 524 f, AVS: 1, 39, ADPS: 44 f, AVS: 3, 2066 f, Dymock: 3, 135 : 55, 59, 125, 223, 245, 352

prickly chaff-flower (*vasira*) also *vaśīra*. Perhaps Achyranthes aspera, L. GVDB: 362 describes several possible identities, including *sūryāvarta*, prickly chaff-flower and *markaṭatṛṇa*. See also *vasukavasira* (GVDB: 363) : 90

prickly-leaved elephant's foot (*gojihvā*) syn. *gojī*. Elephantopus scaber, L. See AVS: 2, 357. T. B. Singh and Chunekar (GVDB: 145–146) argue that *gojihvā śāka* is Launaea asplenifolia (Willd) Hook. f. (creeping Launaea), a plant with Himalayan to SE Asian distribution : 352

prickly-leaved elephant's foot (*gojī*) T. B. Singh and Chunekar (GVDB: 145–146) observe that this plant name is unique to the *Suśrutasaṃhitā*. Since the usage is similar to that of prickly-leaved elephant's foot (*gojihvā*), q.v, it is almost certain to be the same plant. : 222

products of the wood-apple (*kāpitta*) a reading in the Nepalese MSS for products of the wood-apple (*kāpittha*), q.v. : 217

products of the wood-apple (*kāpittha*) relating to or derived from the wood-apple (*kapittha*) : 352

purging nut (*dravantī*) Jatropha curcas, L.

See AVS: 3, 261, NK: 1, #1374. A.k.a. *mūṣikaparṇī*. But J. curcas is a New World species : 353
purging nut (*mūṣikā*) Jatropha curcas, L. See AVS: 3, 261, NK: 1, #1374 : 155
purging nut (*putraśreṇī*) Commonly identified as croton tree (*nāgadantī*), GVDB: 253 "a variety of red physic nut (*dantī*)." But it appears in a list with *nāgadantī* at *Suśrutasaṃhitā* 5.6.3, and Ḍalhaṇa identified it there as purging nut (*dravantī*) : 222
purging nut tree (*mūṣikakarṇī*) Jatropha curcas, L. AVS: 3, 261, NK: 1, #1374, GVDB: 317. GVDB: 317; ADPS: 23–25 discuss this issue well : 153, 154
purple calotropis (*arka*) Calotropis gigantea, (L.) R. Br. See ADPS: 52, AVS: 1, 341, NK: 1, #427, Potter$_{rev}$: 57, Chopra IDG: 305–308 : 50, 59, 121, 160, 200, 219, 221, 244
purple fleabane (*somarājī*) see scurfy pea (*bākucī*), but GVDB: 455–456 note that two areas of therapy (antitoxin, antileucoderma) may point to two plants being used under this name or a different plant with two active ingredients. A particular candidate is Baccharoides anthelmintica (L.) Moench. : 224
purple roscoea (*kṣīrakākolī*) GVDB: 89 notes that many physicians use *Roscoea procera* Wall. in this context. But the identification is uncertain. Possibly connected to milk-white or giant potato : 125, 345, 349
radish (*mūlaka*) Raphanus sativus, L. See NK: 1, #2098 : 130, 162, 164
rajmahal hemp (*moraṭa*) → *mūrvī*, Marsdenia tenacissima (Roxb.) Wight et Arn. Good discussion at GVDB: 314–316, 324 : 168
rajmahal hemp (*mūrvā*) Gongronemopsis tenacissima (Roxb.) S.Reuss, Liede & Meve (= Marsdenia tenacissima (Roxb.) Moon), GVDB: 314–316. One of the twenty-two drugs in the group *madanādi*. T. B. Singh and Chunekar and ADPS: 310–313 discuss the long controversy about the identity of this plant. Sansevieria roxburghiana Schult. & Schult.f. ("Indian bowstring hemp") was preferred by Meulenbeld (GJM1: 590) and the sources he cited, including NK: 1, #2216, K&B: 4, 2457; ADPS: 310 mention this identity as being local to Bengal, but note that the plant is not a creeper : 128, 341
rattan (*vetra*) Calamus rotang, L. See AVS: 1, 330, NK: 1, #413. T. B. Singh and Chunekar (GVDB: 381) prefer C. tenuis, Roxb., which is also native to S. and S.E. Asia : 346
realgar (*manaḥśilā*) Arsenii disulphidium NK: 2, #11 : 246, 256
red gourd (*bimbī*) Coccinia indica, W. & A. See PVS 1994.4.715; NK: 1, #534 : 152
red ochre (*gairika*) Hellwig 2009: 140–141. NK: 2, #40; the same source, at #6, gives kaoolinum or china clay : 169, 205, 207, 224, 256, 257
red physic nut (*dantī*) Baliospermum solanifolium (Burm.) Suresh, GVDB: 200 : 119, 162, 217, 222, 353
resin of white dammer tree (*sarjarasa*) GVDB: 424–425. See white dammer tree (*sarja*) : 128, 224
rice grains (*taṇḍula*) Oryza sativa, Linn. Same as paddy rice (*śāli*) GVDB: 174; or just "grains" : 43
rice-grain chaff (*śālitaṇḍulakāṇḍana*) See chaff : 43
rosha grass (*dhyāmaka*) Cymbopogon martinii (Roxb.) Wats. See AVS: 2, 285, NK: 1, #177 : 169, 205, 224
royal jasmine (*mālatī*) Jasminium grandiflorum, L. See NK: 1, #1364, ADPS: 285–288 : 153, 353
royal jasmine (*sumanā*) see royal jasmine (*mālatī*), GVDB: 437 : 224

sacred fig (*pippala*) Ficus religiosa L., GVDB: 248 etc. : 246, 247

sacred lotus (*kamala*) Nelumbo nucifera, Gaertn., GVDB: 73–74, Dutt: 110, NK: 1, #1698 : 348, 354

sacred lotus (*padma*) see sacred lotus (*kamala*), GVDB: 235–236 : 41, 110, 126, 153, 224, 245, 359

safflower (*kusumbha*) Carthamus tinctorius L. GVDB: 113 : 240, 249

saffron (*bāhlīka*) syn. of saffron (*kuṅkuma*), q.v., GVDB: 273–274 : 222

saffron (*kuṅkuma*) Crocus sativus Linn., GVDB: 100. On the history of confusions between saffron and turmeric, see Cox 2011 : 217, 354

sage-leaved alangium (*aṅkolla*) Alangium salvifolium (Linn. f.) Wang., GVDB: 5–6. See also AVS: 1, 77; cf. NK: 1, #88 : 152, 207, 214, 217, 354

sage-leaved alangium (*aṅkoṭha*) see sage-leaved alangium (*aṅkolla*) : 221

sal group of trees (*śālasārādi*) *śālasārādi* is a group (*gaṇa*) of twenty-three trees listed at 1.38.8–9 (Su 1938: 165), *Mahākośa*: 1, 898 : 90

sal tree (*śālā*) Shorea robusta, Gaertn.f. See AVS: 5, 124 : 256

sandalwood (*candana*) Santalum album, L. See ADPS: 111, NK: 1, #2217. See GVDB: 152–153 for discussion of types, including white and red (Pterocarpus santalinus (L.f.)) : 91, 126, 128, 169, 200, 206, 224, 245, 246, 359

sandan (*tiniśa*) Ougeinia oojeinensis (Roxb.) Hochr. GVDB: 181, q.v. for discussion about whether *tiniśa* and *syandana* are to be separated. If other trees are in the frame for either name, T. B. Singh and Chunekar (GVDB) suggest Lagerstroemeia parviflora Roxb. (*sidhraka*/*siddhaka*) and L. flos-reginae Retz. (*jārula* by some). See GVDB: 432 : 221, 224, 346

sappanwood (*pattāṅga*) Also *pattaṅga*. Caesalpinia sappan, L. AVS: 1, 323, K&B: 2, 847 f, GVDB: 234 : 50, 60

scarlet mallow (*bandhujīva*) Pentapetes phoenicea, L. NK: #1836, GVDB: 268 : 154

scented pavonia (*bālaka*) Pavonia odorata, Willd. See ADPS: 498, NK: 1, #1822. But GVDB: 273 argue for Coleus vettiveroides K.C.Jacob; see coleus (*hrīvera*) : 169, 338

scented pavonia (*toya*) → bālaka? Pavonia odorata, Willd. ADPS: 498, NK: 1, #1822 : 224

scramberry (*tālīsapatra*) see scramberry (*tālīśa*) : 224

scramberry (*tālīśa*) T. B. Singh and Chunekar (GVDB: 179, 458–459) discusses the several identifications and regional differences in identifying this plant. Taxus baccata Linn. is a common candidate, as is Flacourtia jangomas (Lour.) Raeusch. (scramberry) : 126, 257, 354

screw-pine (*ketaka*) Pandanus odorifer (Forssk.) Kuntze, GVDB: 116 (not P. tectorius that is from eastern Indonesia–PNG–Australia) : 334

scurfy pea (*bākucī*) Identified as Cullen corylifolia (L.) Medik. ADPS: 69–70, GVDB: 272 : 353

scutch grass (*granthilā*) see durva grass (*dūrvā*), *Mahākośa*: 1, 303, citing the *Rājanighaṇṭu*. It should be an aromatic in this context. Monier-Williams et al.: 371 said "two kinds of Dūrvā grass and of a kind of Cyperus" on lexical authority, perhaps also the *Rājanighaṇṭu* where it is listed amongst sweet-smelling plants. Other sources identify it as Cissus quadrangularis, L., i.e., Veltd grape (Ś. Gupta 1887: 272), or Bengal quince (*bilva*) : 224

sedge (*kuṭannaṭa*) → *plava*, *tagara*, or *śyonāka*, according to commentators (GVDB: 102–103). T. B. Singh and

Chunekar leans towards the *plava*, but that plant too is difficult to identify. Various sources identify *kuṭannaṭa* as Cyperus rotundus L., C, scariosus R. Br., Oroxylum indicum (L,) Benth. ex Kurz (= Bignonia Indica L.) or even Cinnnamomum verum J.Presl. The Cyperus genus comprises about 700 species of sedges, and I have chosen "sedge" as a generic indication of the likely identity of this plant : 205, 355

sedge (*kuṭannaṭā*) see sedge (*kuṭannaṭa*) : 224

sesame (*tila*) Sesamum indicum L. GVDB: 183. Known to ancient Greek authors (Ball 1888: 344) : 224, 225

sesame oil (*taila*) Sesamum indicum L. GVDB: 183 : 59, 200

shami tree (*śamī*) Prosopis cineraria (L.) Druce GVDB: 390 : 221, 337

sickle senna (*cakramarda*) Senna tora (L.) Roxb. GVDB: 150 : 240

silk-cotton tree (*śālmalī*) Bombax malabarica. See Issar: 152 : 224

siris (*śirīṣa*) Albizia lebbeck, Benth. See AVS: 1, 81, NK: 1, #91, GVDB: 399–400. Cf. white siris : 168, 200, 214, 215, 217, 223, 224, 240, 245, 256, 359

siris seeds (*śirīṣamāṣaka*) Albizia lebbeck, Benth. See AVS: 1, 81, NK: 1, #91 : 152, 215

small-flowered crape myrtle (*sidhraka*) Lagerstroemia parviflora Roxb., GVDB: 432 : 175

smooth angelica (*coraka*) Angelica glauca Edgw. GVDB: 161. Distribution: Afghanistan, Himalaya, western Tibet (POWO). Edgeworth even recorded the indigenous name "chura" (Edgeworth 1851: 53) : 207, 222, 355

smooth angelica (*taskara*) see smooth angelica (*coraka*), GVDB: 176 : 224

snake mallow (*nāgabalā*) perhaps Sida veronicaefolia Lam.; see GVDB: 221 for discussion : 125

snakeroot (*sugandhā*) → *sarpagandhā* Rauvolfia serpentina Benth. ex. Kurz. See *sarpagandhā*. But may be Aristolochia indica Linn. Has been identified with *nākulī*, or *gandhanākulī*. See (GVDB: 219, 436) : 160

spikenard (*jaṭā*) see spikenard (*jaṭāmāṃsī*) : 215, 224

spikenard (*jaṭāmāṃsī*) Nardostachys jatamansi (D.Don) DC, GVDB: 163. See also NK: 1, #1691. Known to ancient Greek authors (Ball 1888: 343–344) : 355

spikenard (*māṃsī*) see spikenard (*jaṭāmāṃsī*) : 169, 206, 224

spikenard (*nalada*) see spikenard (*jaṭāmāṃsī*) : 150, 206, 224, 245

spiny bitter gourd (*karkāruka*) Momordica cochinchinensis (Lour.) Spreng., (Thunb.) Cogn. SeeAVS: 2, 1135, IGP 754 (or Benincasa hispida?AVS: 2, 1127; cf. AVS: 1, 261). M cochinchinensis has poisonous seeds (NEH: 279) : 341

spurge (*nandanā*) an unknown poisonous plant, a.k.a. (equally obscurely) *udīmānaka*, GVDB: 215 (where it is m.). Perhaps a synonym of oleander spurge (*snuhī*), like oleander spurge (*nandā*) : 161

spurge (*saptalā*) T. B. Singh and Chunekar (GVDB: 421–422) discuss the four candidates for this plant, three of which are Euphorbias : 130, 207

strychnine tree (*viṣamuṣṭika*) Strychnos nux vomica Linn., GVDB: 373 : 352

sugar (*sitā*) Ḍalhaṇa makes this equation at 1.37.25 (Su 1938: 162) : 169, 206

sugar (*śarkara*) Saccharum officinarum, Linn. NK: #2182 : 156

sugar cane (*ikṣu*) Saccharum officinarum, Linn. NK: #2182 : 156

sunflower (*sūryavallī*) → *ādityavallī*, *sūryamukhī*, Helianthus annūs Linn. GVDB: 35, 443 : 168

sweet flag (*vacā*) Acorus calamus Linn. See

GVDB: 352–355 : 125, 132, 222
sweet plants (*madhuravarga*) The sweet plants are enumerated at *Suśrutasaṃhitā* 1.42.11. See also GVDB: 127 : 59
sweet-scented oleander (*aśvamāraka*) Nerium oleander, L. See ADPS: 223, NK: 1, #1709, GVDB: 77, which discusses the white and red forms. The roots are highly toxic, as are most parts of the plant, (Pillay and Sasidharan 2019) : 160
tall reed (*nala*) Phragmites karka (Retz.) Trin. ex Steud, GVDB: [217] : 125, 126, 245
taro (*piṇḍāluka*) conjecturally Colocasia esculenta (Linn.), GVDB: 248. A member of the *āluka* group, ibid. : 334
teak (*śāka*) Tectona grandis, L.f. See AVS: 5, 245, (MW: 1061) : 221
Tellicherry bark (*kuṭaja*) Holarrhena pubescens Wall. ex G.Don, with Wrightia tinctoria and W. arborea considered GVDB: 101–102, ADPS: 267–270 : 121, 221, 340
ten roots (*daśamūla*) Described at *Suśrutasaṃhitā* 1.38.70–71 (Su 1938: 169) as a combination of the lesser five roots and the greater five roots : 340
the four *jāta* drugs (*caturjāta*) a group of four drugs, cinnamon (*tvac*), malabathrum (*patra*), cardamom (*elā*), and ironwood tree (*nāgakeśara*) GVDB: 152 : 356
the four *jāta* drugs (*caturjātaka*) see the four *jāta* drugs (*caturjāta*) : 240
the three myrobalans (*triphalā*) chebulic myrobalan beleric myrobalan and emblic myrobalan (*harītakī bibhītaka* and *āmalaka*) One of the most-often mentioned drugs in the Bṛhattrayī GVDB: 194–196 : 119, 205, 206, 215, 217, 335
the three pungent drugs (*kaṭutrika*) see the three pungent drugs (*trikaṭu*) : 217, 224
the three pungent drugs (*trikaṭu*) dried ginger, long pepper, and black pepper (*śuṇṭhī*, *pippalī*, and *marica*) GVDB: 193 : 205, 356
the three pungent drugs (*vyoṣa*) see the three pungent drugs (*trikaṭu*), GVDB: 382–383 : 216, 240
the two types of clitoria (*śvete*) see white clitoria (*śvetā*) : 224
the two types of turmeric (*haridre*) see turmeric (*haridrā*) and Indian barberry (*dāruharidrā*), GVDB: 465–466 : 224
three heating spices (*tryūṣaṇa*) śuṇṭhī (Dried ginger) Zingiber officinale, Roscoe. ADPS: 50, NK: 1, #2658, AVS: 5, 435, IGP 1232, pippalī (long pepper) Piper longum, L.ADPS: 374, NK: 1, #1928, and marica (black pepper) Piper nigrum, L.ADPS: 294, NK: 1, #1929 : 91, 168
three-leaved caper (*varuṇa*) Crataeva magna (Lour.) DC. See AVS: 2, 202; cf. NK: 1, #696 : 155, 207, 222, 356
three-leaved caper (*varuṇaka*) see three-leaved caper (*varuṇa*) : 224
toothbrush tree (*pīlu*) Salvadora oleoides Dcne. GVDB: 251. T. B. Singh and Chunekar also mention S. persica L., but that is native to Africa, Syria and the Arabian peninsula (POWO: taxon/urn:lsid:ipni.org:names:779348-1). Also commonly called Vann : 124, 242, 243
toothed-leaf limonia (*surasī*) Naringi crenulata (Roxb.) Nicolson (formerly Limonia crenulata Roxb.), GVDB: 439 : 206, 224
top layer of fermented liquor (*surāmaṇḍa*) K&B: 2, 502, NK: 2, appendix VI, #49, McHugh 2021: 39 : 57, 58
tree cotton (*kārpāsa*) Gossypium arboreum L. ADPS: 231, *pace* the identifications of T. B. Singh and Chunekar (GVDB: 92, 247), since G. barbadense L. is native to South America and G. herbaceum L. is

native to Africa : 56, 357

tree cotton (*picu*) See tree cotton (*kārpāsa*) : 58, 60

tree of heaven (*arala*) probably Alianthus excelsa Roxb., GVDB: 21–22 : 221

turmeric (*gaurī*) Curcuma longa, L. See ADPS: 169, AVS: 2, 259, NK: 1, #750 : 126

turmeric (*haridrā*) Curcuma longa Linn. GVDB: 465. On the history of confusions between saffron and turmeric, see Cox 2011 : 127, 168, 177, 205, 356

turmeric (*rajanī*) Curcuma longa, L. ADPS: 169, AVS: 2, 259, NK: 1, #750 : 42, 169, 206, 217, 240, 244

turpeth (*trivṛt*) → *tṛvrtā*. Operculina turpethum (Linn.) Silva Manso = Ipmoea turpethum R. Br. GVDB: 197. : 119, 156, 205, 316, 336

turpeth (*tṛvṛt*) The common spelling in Nepalese MSS of *trivṛt* : 216, 217

two kinds of salt (*vasukavasira*) See the discussion by T. B. Singh and Chunekar (GVDB: 362–363), who note that when *vasuka* is mentioned together with *vasira*, two varieties of salt are often meant (see *vasukavasirā*) : 89

unknown fruit poison (*veṇuka*) see unknown fruit poison (*veṇukā*) : 161

unknown fruit poison (*veṇukā*) Bambusa bambos, Druce?. See NK: 1, #307, GVDB: 380. The Nepalese transmission has the m. *veṇuka*, not the f. *veṇukā* T. B. Singh and Chunekar (GVDB: 380) note that this is an unknown fruit-poison : 357

velvet bean (*svayaṃguptā*) Mucuna pruriens (L.) DC., GVDB: 461, who say that the plant is known in the *Carakasaṃhitā* but not the *Suśrutasaṃhitā*. Watt (Watt$_{Dict}$: 5, 286) noted that the English names Cowhage or Cowitch are derived from the Hindi name of M. pruriens, *Kiwach*, Skt. *kapikacchu*, supported by Yule and Burnell (1903: 268) : 256, 357

velvet bean (*ārṣabhī*) see velvet bean (*ṛṣabhī*) and velvet bean (*svayaṃguptā*). *Mahākośa*: 1, 94, citing the *Rājanighaṇṭu* 3.50, 201 : 215

velvet bean (*ṛṣabhī*) see velvet bean (*svayaṃguptā*), MW: 226, GVDB: 56 : 357

velvet-leaf (*pāṭhā*) Cissampelos pariera, L. See ADPS: 366, NK: 1, #592, GJM1: 573, AVS: 1, 95; cf. AVS: 2, 277 : 50, 91, 116, 132, 168, 205, 206, 342

velvet-mite (*indragopa*) Kerria lacca (Kerr.). Lienhard 1978 : 151

verbena (*bhārgī*) see verbena (*bhārṅgī*) : 206, 224

verbena (*bhārṅgī*) → phañjī. Clerodendrum serratum (L.) Moon or C. serratum; see AVS: 2, 121, ADPS: 87 : 357

verbena (*phañjī*) Clerodendrum serratum, L. See AVS: 2, 121, ADPS: 87 : 154

vetiver (*uśīra*) Chrysopogon zizanioides (L.) Roberty, also called "khus." NK: 1, #180, GVDB: 54 identify it as vetiver. Commentators normally identify two types of *uśīra*, the other being the same as lemongrass (*lāmajja*) : 90, 153, 200, 245, 246, 357

vetiver and lemon grass (?) (*uśīre*) "the two uśīras," perhaps vetiver (*uśīra*) and lemongrass (*uśīrabheda*) : 224

viburnum (*tilva*) see viburnum (*tilvaka*) : 216

viburnum (*tilvaka*) Viburnum nervosum D.Don. In their thoughtful article, T. B. Singh and Chunekar (GVDB: 185–186) separate *tilvaka* from *lodhra*, a conflation they attribute to Dṛḍhabala. They identify V. nervosum because of its use under a similar local name in Garhawal and Gangotri and the match with its purging properties mentioned in ayurvedic literature.

AVS: 5, 219 makes the same separation, noting that in Kerala the plant Jatropha curcas L. is used. But that is a native of the new world. Cf. many Viburnum varieties listed by Griffiths (IGP: 1200 ff.). POWO confirms that V. nervosum has an appropriate Himalayan distribution. *Tilvaka* is also sometimes wrongly considered to be a synonym of long-stamen Wendlandia (?) (*tilaka*), GVDB: 185–186 : 119, 222, 348, 357, 358

viburnum extract (*tailvaka*) see viburnum (*tilvaka*), GVDB: 185, also a ghee compound of viburnum (*tilvaka*) : 256

'Virāṭa's plant' (*vairāṭaka*) unknown. See ? : 162, 163

water hyssop (*brāhmī*) Bacopa monnieri (L.) Pennel, GVDB: 281, who describe the substitutes that are mistakenly used in some places : 245

water snowflake (*kumudavati*) see water snowflake (*kumudavatī*) : 161

water snowflake (*kumudavatī*) This is an unidentifiable plant whose name means, etymologically, "with lilies." MW: 292 gives Nymphoides indica (L.) Kuntze (formerly Villarsia indica) on no authority; I have used the common name of N. indica as a possiblity, but this is not known to be poisonous; on the contrary, it is used medicinally (Khan et al. 2018). N. indica is illustrated on p. 6 of the Voynich manuscript. Khan et al. (2018) assert that this is the same plant as *tagara*, although this is not a widely-held view (see crape jasmine (*tagara*)) : 161, 338, 358

watered buttermilk (*udaśvit*) MW: 183 : 152

wax gourd (*kūṣmāṇḍa*) Benincasa hispida, (Thunb.) Cogn. See AVS: 2, 1127; cf. AVS: 1, 261 : 341

weaver's beam tree (*mokṣaka*) see weaver's beam tree (*muṣkaka*) : 358

weaver's beam tree (*muṣkaka*) Schrebera swietenioides, Roxb. See AVS: 5, 88, Lord, NK: 1, #2246, GVDB: 242–243 : 121, 175, 358

weaver's beam tree (*pāṭalī*) usually a synonym for crimson trumpet-flower tree (*pāṭalā*), but T. B. Singh and Chunekar (GVDB: 242–243) argue that it is weaver's beam tree (*mokṣaka*) because some authors distinguish two colours (unlike *pāṭalā*) : 121, 221, 224

weaver's beam tree (*viśalyā*) Schrebera swieteniodes Roxb. ← *kuberākṣī*. T. B. Singh and Chunekar (GVDB: 371) notes that this name is a synonym for many other plants, including *lāṅgālī, indravāruṇi, guḍūcī* etc. Ḍalhaṇa identified it with *pāṭalā, kāṣṭhapāṭalā*, and *agniśikhā* tree, all of which may be called *śvetamokṣaka* or *kuberākṣī* : 205

weevil wort (*tālamūlikā*) GVDB: 178–179 : 358

weevil wort (*tālapatrī*) → *tālamūlikā*, weevil wort, q.v. GVDB: 178 : 207

white calotropis (*alarka*) Calotropis procera, (Ait.) R. Br. See NK: 1, #428, Chopra: 46b, Chopra IDG: 305–308 : 59

white clitoria (*śvetā*) Clitoria ternatea, L. See AVS: 2, 129, NK: 1, #621. GVDB: 416–417 notes that there are two types, *kṣudrā* (white, according to Ḍalhaṇa) and *mahā* (blue, according to Ḍalhaṇa). Sometimes given as a synonym for winged-stem canscora, but sometimes as a contrasting plant : 153, 206, 216, 219, 223, 356

white cutch tree (*somavalka*) Acacia polyacantha, Willd. See AVS: 1, 30, IGP 7, GJM1: 602, AVS: 2, 935; *pace* NK: 1, #1038 : 154, 175

white dammer tree (*sarja*) Vateria indica, L. See NK: 1, #2571, AVS: 5, 349 f, AVS: 1, 292 f, Chopra: 253a. T. B. Singh and Chunekar (GVDB: 424) discussed whether this term might be broadened

to any resinous tree and decided against : 50, 89, 353, 359
white dammer tree (*sarjja*) see white dammer tree (*sarja*) : 221
white lotus (*puṇḍarīka*) see sacred lotus (*padma*), GVDB: 252 : 164
white sandalwood (*bhadraśriya*) Santanlum album Linn. See white sandalwood (*bhadraśrī*) : 126, 224
white sandalwood (*bhadraśrī*) Santanlum album Linn. see sandalwood (*candana*) GVDB: 152, 282 and *Carakasaṃhitā* ci.4.102 (Ca 1941: 434) where it is contrasted with *lohitacandana* : 91, 359
white siris (*jalavetasa*) Ḍalhaṇa (5.8.105 (Su 1938: 592)) thought that this was Indian willow (*vañjula*), but he noted that Jejjaṭa thought it was *kambukā*, an unidentified plant he interpreted as white siris (*kiṇihī*). AVS: 3, 172–174 identify *jalavetasa* as Homonoia riparia Lour., willow-leaved water croton, and include a survey of the confusions about this plant in various texts; they make their judgment about H. riparia on the basis of its medical effects. See siris (*śirīṣa*) : 245
white siris (?) (*kapītana*) T. B. Singh and Chunekar (GVDB: 72–73) note that this stands for at least two plants, milky and non-milky. For the latter type, they propose Albizia procera (Roxb.) Benth., Thespesia (hibiscus-like, but not endemic to S. Asia) or Spondias (cashew). Six different identifications are made by Monier-Williams et al. (MW: 251), without authority : 221
white siris (*kaṭabhī*) Albizia procera (Roxb.) Benth. or A. lebbeck (Linn.) Benth. GVDB: 63–64, AVS: 1, 81–84. See siris (*śirīṣa*) : 200, 355
white siris (*kiṇihī*) Albizia procera (Roxb.) Benth., GVDB: 98, which also discusses past confusions; NK: 1, #93. See siris (*śirīṣa*) : 168, 206, 245, 359
white teak (*kārśmarī*) see white teak (*kāśmarī*) : 257
white teak (*kāśmarya*) see white teak (*kāśmarī*) : 224
white teak (*kāśmaryā*) see white teak (*kāśmarī*) : 90
white teak (*kāśmarī*) also *kāśmarya, kārśmarī, madhuparṇī*. Gmelina arborea, Roxb. See GJM1: 543, Trees: 51, ADPS: 240, GVDB: 96–97 : 126, 128, 341, 359
white teak (*madhuparṇī*) see white teak (*kāśmarī*) : 89
white water-lily (*kumuda*) Nymphaea alba, Linn., GVDB: 105 : 41, 110, 224, 340
white-bark acacia (*arimeda*) Vachellia leucophloea (Roxb.) Maslin, Seigler & Ebinger. See AVS: 1, 23, T. B. Singh and Chunekar (GVDB: 22, 33) : 50, 222
wild asparagus (*bahuputrā*) Asparagus racemosus, Willd. See further wild asparagus (*śatāvarī*) Possibly a syn. for *nandana*. The bark of wild asparagus is toxic : 154
wild asparagus (*śatāvarī*) Asparagus racemosus, Willd. See ADPS: 441, AVS: 1, 218, NK: 1, #264, IGP: 103, AVS: 4, 249 ff, Dymock: 3, 482 ff : 124–126, 128, 262, 359
wild celery (*agnika*) → may be *bhallātaka, lāṅgalī, ajamodā, moraṭa, or agnimantha*, GVDB: 4. Uncertain A plant often cited in *Suśrutasaṃhitā*, but rarely in *Carakasaṃhitā* (GVDB: 4). Ḍalhaṇa glossed it at 5.2.45 (Su 1938: 566) as *ajamodā* but noted that others consider it to be *moraṭa*. There is considerable complexity surrounding the identification of *moraṭa*/*mūrvā* itself and related synonyms (GVDB: 314-316) : 168, 359
wild celery (*ajamodā*) Apium graveolens, L. Sometimes identified with *agnika* (wild celery), q.v. : 168, 205
wild Himalayan cherry (*padmaka*) Prunus

cerasoides D.Don, GVDB: 236, AVS: 4, 353–355. MW: 585 is wide of the mark : 126–128, 205, 206, 224, 245, 246

wild spider flower (*ajagandhā*) possibly Cleome gynandra L. (syn. Gynandropis gynandra L.); possibly also Basil (Ocimum basilicum Linn. or Crested Late Summer Mint (Elsholtzia ciliata Willd.) (GVDB: 6). But E. ciliata is not native to South Asia : 132

wild spider flower (*tailaparṇika*) see wild spider flower : 224

wild spider flower (*tilaparṇī*) Cleome gynandra L., GVDB: 184–185, but see the discussion of the other drug plants sometimes intended by this name : 360

wild sugar cane (*kāṇḍekṣu*) Saccharum spontaneum L., GVDB: 90 : 89

wild sugarcane (*kāśa*) Saccharum spontaneum L. GVDB: 96 : 125, 245

winged-stem canscora (*girihvā*) see winged-stem canscora (*girikarṇikā*) : 206

winged-stem canscora (*girikarṇikā*) sometimes → *śvetā*, in which case possibly Clitoria ternatea, L., see AVS: 2, 129, NK: 1, #621. Since *śvetā* and *girihvā* are cited as separate constitutents of one formula (e.g., *Suśrutasaṃhitā* 5.5.75 (Su 1938: 579) they cannot be the same plant. GVDB: 138–139 argued for Symphorema polyandrum Wight, which they also assigned to *sinduvāra*. When discussing *śaṅkhapuṣpī*, another possible synonym, Sivarajan and Balachandran (ADPS: 425–427) also suggest Canscora alata (Roth) Wall. (syn of Canscora decussata Schultes & Schultes f.) and Convulvulus pluricaulis Chois. The former has a more appropriate distribution and is chosen here : 360

winged-stem canscora (*giryāhvā*) see winged-stem canscora (*girikarṇikā*) : 358

Withania (*aśvagandhā*) Withania somnifera (L.) Dunal. See AVS: 5, 409 f, Dymock: 2, 566 f, 150, GVDB: 29, Chevillard: 152 : 59, 120, 127, 206

wood-apple (*kapittha*) Limonia acidissima, L. See AVS: 3, 327, NK: 1, #1021 : 127, 153, 155, 207, 216, 217, 221, 256, 352

woody turmeric (*kāleyaka*) Coscinium fenestratum (Goetgh.) Colebr., GVDB: 95. See V. K. Gupta et al. 2015: 173–175 : 224

woody-fruit jujube (*ghoṇṭā*) Ziziphus xylopyrus (Retz.) Willd., GVDB: 149 : 360

woody-fruit jujube (*gopaghoṇṭā*) see woody-fruit jujube (*ghoṇṭā*) : 222

yeast (*kiṇva*) MW: 282, EWA: 1, 350 : 249

yellow-berried nightshade (*kaṇṭakārī*) Solanum virginianum L. (syn. Solanum surattense Burm. f. and Solanthum xanthocarpum, Schrad. & Wendl.) GVDB: 68–69. See also IHR: 430. A component of lesser five roots : 348, 360

yellow-berried nightshade (*kṣudrā*) see yellow-berried nightshade (*kaṇṭakārī*), ADPS: 100, NK: 1, #2329, AVS: 5, 164 : 168, 169

Fauna

ant (*pipīlika*) MW: 627 : 235

arala rat (*arala-animal*) a hapax legomenon in Sanskrit, probably a Dravidian loan word or cognate from forms like Pengo, Manḍa, Kuwi etc., *orli, urli*, etc., DED$_2$: #994 : 212, 215

arrow-coloured (*śaravarṇa*) unknown frog, name from etymology : 234

aṭakī (*aṭakī*) unknown : 231
bad-marked rat (*kuliṅga*) etymologically, “having bad-marks” MW: 286, but unidentifiable : 212, 215
beaked (*tuṇḍikerī*) neologism insect-name based on the etymology of *tuṇḍa*. Probably *tuṇḍikera* and *tuṇḍicela* are variants of the same lexeme. *ṭuṇḍa* is “Nicht überzeugend erklärt” according to Mayrhofer (EWA: 1, 653), who refers to a possible non-Indo-European origin (ibid. v. 3, 249 on *tundikā, tundikerī* refers to plants only). But Burrow 1971: 544 derived the term plausibly from √*tud* “peck” : 230, 366
bee (*bhramara*) bee or bumble-bee, MW: 769, etc. : 175, 231
bee (*makṣikā*) MW: 771. May sometimes refer to a fly : 174, 236
bee (*śilīmukha*) MW: 1073 : 365
bhaṭābha (*bhaṭābha*) unknown : 231
black (*kṛṣṇa-maśaka*) unknown; name based on etymology : 236
black drongo (*dhūmyāṭa*) Dicrurus adsimilis, Bechstein, Dave 1985: 63, 65, 199 : 150
black monitor lizard (*kṛṣṇagodhā*) unknown, name from etymology : 231
black rat (*kṛṣṇa*) perhaps the widespread Black Rat or Common House Rat, Rattus Rattus L., BIA: 210 : 212, 214
black scorpion (*kṛṣṇa-vṛścika*) unknown; name from etymology. Possibly a Heterometrus, since they are large, black and have low toxicity : 237
black-beak (*kṛṣṇatuṇḍa*) unknown insect, name based on etymology; MW: 307. But possibly “black-belly” based on the lexeme *tunda*, CDIAL: 1, #5858 : 231
black-coloured (*kṛṣṇavarṇa*) unknown frog, name from etymology : 234
black-face (*kṛṣṇamukhā*) an unidentified spider : 244, 247
brahman woman ant (*brāhmaṇī*) unknown; meaning from etymology : 235
brown (*kapilā*) unknown; meaning from etymology : 236
brown rat (*kapila-animal*) name from etymology; unidentified; see tawny rat (*aruṇa*) : 212, 215, 366
brown scorpion (*śyāva-vṛścika*) unknown; name from etymology : 237
brown spider (*kapilā-spider*) an unidentified spider : 244, 245
bull (*vṛṣabha*) MW: 1012, etc. Bos taurus, Linn. : 150
cavity (*kuhara*) unknown frog, name from etymology : 234
celestial (*svarga-insect*) unknown insect, name based on etymology : 231
centipede (*śatapadi*) see centipede (*śatapādaka*) : 175
centipede (*śatapāda*) see centipede (*śatapādaka*) : 234
centipede (*śatapādaka*) the name’s meaning is, “hundred-foot” MW: 1049, CDIAL: 1, #12281 : 231, 361
chital deer (*pṛṣata*) Axis axis, Erxleben. BIA: 295–296. In *Suśrutasaṃhitā* 5.5.71 (Su 1938: 579) it seems to be specifically the musk that is meant. so the reference may be to the Musk Deer (Moschus moschiferus L.). But all species produce musk, so *pṛṣata* may also be simply Chital or Spotted Deer. See also IW: 93 : 150, 156, 206
chukar partridge (*cakora*) Alectoris chukar, J. E. Gray, Woodcock 1980: 45, distributed from NW India to Nepal and Assam : 150
civet (*mārjāra*) BIA: ch. 4 *et passim*, McHugh 2012 : 206
colourless (*vivarṇā*) unknown; meaning from etymology : 236
common crane (*krauñca*) Grus grus, Linn., Woodcock 1980: 47, Dave 1985: ch. 62 : 150
common myna (*sārikā*) see common myna (*śārikā*) : 150
common myna (*śārikā*) Acridotheres tristis

tristis, L., etc. See Ali and Ripley 1983: #1006, Dave (1985: 28 ff.), Woodcock (1980: 119) : 174, 361
cone snail (*śambūka*) a bivalve or snail (MW: 1055), but presumably a poisonous one such as the cone-snail : 174
cook-fish insect (*pākamatsya*) unknown insect, name based on etymology. A kind of fiery insect according to Ḍalhaṇa on 5.3.5 (Su 1938: 567) : 174, 231
cough-spider (*kasanā-spider*) an unidentified spider : 244, 246
cricket (*ucciṭiṅga*) The suggestion "cricket" is from Assamese *usaṅgā* and Bengali *cuiṅgā, ucuṅgā*, CDIAL: 1, #1645, although they are not venemous. Unlikely: a crab, MW: 173. The cricket may appear to have a sting, although it does not Maxwell-Lefroy 1909: 102 : 174, 175, 230
crow-egg (*kākāṇḍā*) an unidentified spider : 244, 247
dark blue scorpion (*mecaka*) unknown; name from etymology : 237
deer-foot (*eṇīpadī*) an unidentified spider : 244, 247
devout (*brahmaṇīkā*) unknown insect, name based on etymology : 231
dish-creeper (*śarāvakurdi*) unknown insect, name based on etymology. See *śarāvakurda* "creeping among dishes" (MW: 1057), (apparently also the name of a snake) : 174
district (*maṇḍala*) unknown; name based on etymology : 236
droplet (*bindula*) unknown insect, name based on etymology. Ḍalhaṇa on 5.8.9 (Su 1938: 586) noted that some people read *viluṭa* instead of *bindula* : 231
drummer (*dundubhaka*) unknown insect, name based on etymology. But may be connected with a variant of *tunda*/*tund* "belly" CDIAL: 1, #5858. **tunda-bhaka* might then mean "belly-croaker/puffer" : 231
elephant (*hastin*) unknown; name based on etymology : 236
enemy-liquor (*arimedaka*) unknown insect, name based on etymology. Perhaps a variant of *ali-* "bee", CDIAL: 1, #716 or *āla* "poison" CDIAL: 1, #1352 : 174, 231
fidgety rat (*capala*) from the etymology of the word. Unidentifiable mouse or rat. It is probably too much of a stretch to connect it with Dravidian forms like Kui *superi* "shrew-mouse", DED_2: #2675 : 212, 215
fierce-purple scorpion (*ugradhūmra*) unknown; name from etymology : 238
fiery insect (*agnikīṭa*) see fire centipede (*agni-centipede*) : 231, 362
finger-ant (*aṅgulikā*) unknown; meaning from etymology : 235
fire centipede (*agni-centipede*) unknown insect, name based on etymology. Cf. Marāṭhī *āghī* "a kind of stinging fly" CDIAL: 1, #57 : 362
fire-centipede (*agniprabhā*) uncertain; same as the fire centipede (*agni-centipede*) and cf. fiery insect (*agnikīṭa*) : 236
fire-face (*agnimukhā*) an unidentified spider : 244, 246, 247
fish-bone (*kaṇṭaka*) MW: 245; cf. *Manu* 8.95 (Olivelle 2005: 172, 677) : 175
five-black (*pañcakṛṣṇa*) unknown, etymologically "five-black" : 231
five-venom (*pañcālaka*) unknown insect, name based on etymology : 231
five-white (*pañcaśukla*) unknown, etymologically "five-white" : 231
fondling rat (*lālana*) based on etymology. An unknown rat or mouse : 212, 214
frog (*dardura*) frog. CDIAL: 6198 also gives "lizard, chameleon" for Khotanese *dodór*, though this may be < *dardru-*. : 234
frown (*bhṛkuṭī*) unknown frog, name from etymology : 234, 236

gajpipul rat (*vasira-animal*) unknown type of rat or mouse. "*Vasira*," equated with *gajapippalī* is usually the name of the liana Scindapsus officinalis (Roxb.) Schott (GVDB: 132, 362) (see gajpipul (*gajapippalī*)). Lianas are known for providing a habitat for many arboreal animals, including rodents. The vulgate *Suśrutasaṃhitā* reads *haṃsira* as the name of this rat : 212, 214

garland-virtue (*mālāguṇī*) an unidentified spider : 244, 247

goldie (*sauvarṇikā*) an unidentified spider : 244, 246, 247

grain-coloured (*lājavarṇā*) an unidentified spider : 244, 247

greenish (*harita-frog*) unknown frog, name from etymology : 234

grey peacock-pheasant (*jīvajīvaka*) Polyplectron bicalcaratum, Linn., Dave 1985: 270, 273, 274, 281 : 150

hairy scorpion (*romaśa*) unknown; name from etymology : 237

hairy-head scorpion (*romaśīrṣa*) unknown; name from etymology : 238

horn (*śṛṅga*) see horned (*śṛṅgī*). Unknown insect : 175

horned (*śṛṅgī*) unknown, based on etymology : 230, 363

hornet (*kaṇabha*) Possibly connected with *kaṇa* "grain of corn or rice" (MW: 245), but more likely a loan word from Dravidian *kaṭampai* etc., "a kind of hornet, wasp" DED$_2$: #1117 : 174, 231

house gecko (*gṛhagolikā*) see house gecko (*gṛhagoḍikā*) : 233

house gecko (*gṛhagoḍikā*) MW: 362, CDIAL: 1, #4324. Hemacandra's *Abhidhānacintāmaṇi* (4.364) mentions that *gṛhagodhikā* and *gṛhagolikā* are synonyms (Rādhākāntā Deva 1876: 691a, *sub māṇikyā*) : 174, 363

house shrew (*chuchundara*) Suncus murinus (Linnaeus, 1766), Wikipedia, BIA: 168–169 and plate 38. Probably a Dravidian loan word related to Tamil *cuṇṭaṉ*, "grey musk shrew," see DED$_2$: #2661 and CDIAL: 1, #5053 : 212, 215

hundred-creeper (*śatakurda*) unknown insect, name based on etymology. Cf. *śarāvakurda* "creeping among dishes" (MW: 1057), apparently also the name of a snake. : 230

hundred-kulimbhaka (*śatakulimbhaka*) unknown insect class. Perhaps centipedes : 230

hundred-woody (*śatadārukā*) see woody (*dāruka*). MW: 1049 : 174, 367

iguana (*godheraka*) The गौधेरक is described in the *Carakasaṃhitā* as a four-legged snake born of a Indian monitor lizard that is similar to a black snake and has several species (6.23.134 (Ca 1941: 577)). CDIAL: 1, #4286 identifies this as an iguana : 233, 236, 364

Indian monitor lizard (*godhā*) Varanus bengalensis (Daudin, 1802), Reptiles: 58–60, ill. : 59, 107, 156, 363

Indian peafowl (*mayūra*) Pavo cristatus, Linn., Woodcock 1980: 39 : 150

Indian red scorpion (*rakta-vṛścika*) name from etymology. Likely to be the Hottentotta tamulus (Fabricius, 1798); see Wikipedia contributors 2025*a* : 238

invincible rat (*ajita*) etymological meaning; unidentifiable : 212, 215

kiṭibha (*kiṭibha*) unknown : 231

koel (*kokila*) Eudynamys scolopaceus, Linn., Wikipedia contributors 2025*b*, Woodcock 1980: 66 : 150

kokila-insect (*kokila-insect*) unknown : 231

koṇṭāgīrī (*koṇṭāgīrī*) unknown : 231

krimikara (*krimikara*) unknown : 231

kuṣṭa-insect (*kuṣṭa-insect*) unknown : 231

lac (*lākṣā*) Kerria lacca (Kerr.). See GJM1: 445, NK: 2, #32, Varshney 2000. Watt (Watt$_{Comm}$: 1053–1066) is characteristically informative, and is

definite about the antiquity of lac in India. See also Bellini 2025: 135–138 : 177, 206, 224

large Brown rat (*mahākapila*) from the etymology of the name, "large brown," perhaps a bandicoot : 216

large gecko (*galagoḍikā*) A poisonous insect, amphibian or reptile described in *Suśrutasaṃhitā* 5.8.29 (Su 1938: 588) as a biting creature that may be white, black, with red stripes or rings or spotted. It is described just after the iguanas (*godheraka*) and before centipedes. The name is unstable, e.g., गलगोलिका, गलदोडी, गलगोली. Cf. the remarks on geckos in note 562, p. 174. The similarity of names suggests that a गलगोडिका may be a non-domestic creature that looks similar to a domestic gecko. Cf. other IA parallels at CDIAL: 1, #4324, 4431, which point to a Dravidian origin for the lexeme (DED$_2$: #1125) and suggests "iguana." The tokay gecko (*Gekko gecko* (Linnaeus, 1758)) is a large gecko endemic to South Asia having a blue-gray skin with red or orange spots and speckles that may change according to its environment like a chameleon. Tokay geckos, especially males, are aggressive and territorial and can inflict a strong bite. However, many agamids and skinks are also endemic to South Asia, and have markings that could match the description of the *Suśrutasaṃhitā*. See further IW: 40, 135–136; Deuti 2020 : 94

legume-insect (*vaidala*) unknown insect, name based on etymology : 230

lentil insect (*masūrika-insect*) usually the name of a lentil or the "lentil disease," namely smallpox. But here, an insect : 230

little point (*koṭika*) unknown frog, name from etymology : 234, 236

little rat (*cikkira*) likely related to the Tuḷu "cikkeli, a small variety of mouse," and other Dravidian works related to Tamil *cikka* "small'," DED$_2$: #2495. See also CDIAL: 1, #4779 on *cikka* "mouse or muskrat," from lexical sources, and #4781 *cikkā* "small" from Drav., Burrow 1948: #141 : 212, 214, 215

little-voice (*alpavāca*) unidentified insect; possibly a wrong reading : 230

lotus-insect (*padmakīṭa*) unknown insect, name based on etymology : 231

maggot (*kīra-insect*) unknown insect. See Lahndā, Panjābī, Bengali, Oriya *kīṛā*, etc., CDIAL: 1, #3193 and similar forms in Bīhārī, Maithilī Bhojpurī, etc. Obviously a variant of *kīṭa* : 231

maṇḍalapuṣpaka (*maṇḍalapuṣpaka*) unknown : 231

massage-ant (*saṃvāhikā*) unknown; translation based on etymology : 235

matt (*aprabha*) unknown frog, name from etymology : 234

mole-rat (*kokila-animal*) Bandicota bengalensis (Gray & Hardwicke). Etymologically, "brown as a Kokila". CDIAL: 1, #4324 relates *kokila* to *golaka* but it may more likely be a Dravidian loanword from *koko, kogi, koki*, meaning "small, little, young" DED$_2$: 2030. This is possibly supported by Kannada *kok* and Telugu *golatta, koku* for the mole-rat, reported by Prater (BIA: 205) : 212, 216

mongoose (*nakula*) Urva edwardsii or the often sympatric U. auropunctatus (small Indian mongoose, usually an eater of smaller creatures than snakes) (BIA: ch. 5), On mongooses and snakes, see IW: 112; BIA: 98–99 : 156, 206

mosquito (*maśaka*) a mosquito, gnat, gadfly or any stinging fly, MW: 793, CDIAL: 1, #9917 : 231, 236

mountainous (*pārvata*) unknown; name based on etymology : 236

mudfish (*śakalimatsya*) part of a group of similar fish names, including *śākali, śakulī, śakula*, etc. CDIAL: #133 "śakula" says that the cognate Assamese *xâl* is the fish Ophiocephalus striatus (now Channa striata (Bloch)), which is native4 to India and SE Asia, and we have followed that suggestion for want of better clues : 175

myna-face (*śārikāmukha*) unknown insect, name based on etymology, cf. *śāra* etc., MW: 1066; perhaps also cf. bee (*śilīmukha*) : 230

nāhana (*nāhana*) unknown : 231

needle-beak (*sūcītuṇḍa*) unknown insect or gnat, MW: 1240 : 366

needle-mouth (*sucīmukha*) unknown, etymologically "needle-mouth' : 231

noseless (*vināsikā*) unknown insect, name based on etymology : 231

oceanic (*sāmudra*) unknown; name based on etymology : 236

outsider (*bāhyaka*) unknown insect, name based on etymology : 231

parakeet (*śuka*) Psittacula krameri, Scopoli (or P. eupatria or cyanocephala), See Woodcock 1980: 64 : 150, 217

picciṭā (*picciṭā*) unknown insect; etymologically perhaps similar to *piccaṭa* "squashed flat" (MW: 624) : 231

pigeon rat (*kapota-animal*) a rat "like a pigeon;" presumably of grey colour : 212, 216

pitcher-like (*kauṇḍinya-insect*) unknown insect, name based on etymology : 231

pot-nose wasp (?) (*kumbhīnāsa*) unknown insect, name based on etymology. Cf. the forms related to *kumbhakārī* "potters' wife" at CDIAL: 1, #3312, including Assamese *kumārni* "mason-wasp," Hindī "wasp-like insect which makes a clay nest" : 367

pot-turd (*kumbhīvarcas*) unknown insect, name based on etymology (on *-varcas*, see *Mahākośa*: 1, 725 : 231

pravalāka (*pravalāka*) unknown : 231

racket-tailed drongo (*bhṛṅgarāja*) Dicrurus paradiseus, Linn., Woodcock 1980: 123 : 150

rat (*unduru*) Also *undura* or *indūra* in some sources, including the vulgate. A common name for a rat or mouse in many S. Asian languages from Prakrit to contemporary, CDIAL: 1, #2095, Menon 2014, where it is called "house mouse" : 212, 216

red spider (*raktā-spider*) an unidentified spider : 244, 246

red-dweller (*kaṣāyavāsika*) unknown, name from etymology : 231

red-stripe (*raktarājī*) an unknown venomous insect, MW: 862 : 175

red-toothed shrew (*kaṣāyadanta*) see red-toothed shrew (*kaṣāyadaśana*) : 215

red-toothed shrew (*kaṣāyadaśana*) from the etymology of the word. Shrews in the genus Sorex (as well as others in the subfamily Soricinae) have red-pigmented teeth. Species in South Asia include Hodgsons's brown-toothed shrew (Episoriculus caudatus), the Himalayan water shrew (Chimarrogale himalayica), the Assam mole shrew (Anourosoricini assamensis) and the Giant mole shrew (A. schmidi) : 212, 365

revolver (*āvarttaka*) unidentified insect : 230

river dolphin (*śiśumāra*) Platanista gangetica (Lebeck), BIA: 313–314, plate on p. 289, MW: 1076 : 225

rock dove (*pārāvata*) Columba livia Gmelin, JF, Dave 1985: 255–256 : 249

round-bristle (*vṛttaśūka*) unknown; name based on etymology : 235

śairyaka-insect (*śairyaka-insect*) unknown : 231

śambuka (*śambuka*) unknown : 231

sarṣapaka (*sarṣapaka*) unknown : 231

scorpion (*vṛścika*) MW: 1011, etc. : 174, 237

scorpion the colour of cow's urine (*gomūtrābha*) unknown; name from etymology : 237
scorpion-fish (*varakimatsya*) *varaki* in the Nepalese MSS may possibly be an alternant of wasp (*varaṭī*). Ḍalhaṇa on 5.3.5 (Su 1938: 568) remarked that some interpreted *varakimatsya* as two items, "wasp and fish," others as a single one, "wasp-fish"; I have here taken the latter option because the terms always seem to appear together. See also HIML: 1B, 396, note 62 : 174, 175, 367
she-ass insect (*gardabhī-insect*) unknown insect, name based on etymology : 231
sheep-insect (*urabhra-insect*) unidentified insect : 230
slimy (*śleṣmaka-insect*) unknown insect, name based on etymology : 231
snake-sore (*ahikuttha*) unknown; name based on etymology : 235
sonny rat (*putraka*) unidentified mouse or rat. Perhaps related to Dravidian forms like Pengo *puṭki*, DED_2: #4257 (itself perhaps just a form related to Tamil *poṭi* "little") : 212, 214
sore-maker (*kutthuka*) unknown; name based on etymology : 235
speckle-head (*citraśīrṣa*) see speckle-head (*citraśīrṣaka*) : 171, 174
speckle-head (*citraśīrṣaka*) unknown insect, name based on etymology : 230, 366
spoṭaka (*spoṭaka*) unknown : 231
spotted (*paruṣa*) unknown insect, name based on etymology, which could be anything from dirty-coloured, stiff, or rough to shaggy : 230
spotted scorpion (*paruṣa-vṛścika*) unknown; name from etymology : 237
stench (*sthālakā*) unknown; translation based on *sthālika*, MW: 1262 : 236
sting-poison (*alaviṣa*) an unidentified spider : 244, 246
stripy (*abhirājī*) unknown insect, name based on etymology : 230
swan (*haṃsa*) Cygnus olor, Gmelin, Dave 1985: ch. 84. As Dave says, "a generic term for a large part of the Anatidae family" including Swans, Geese, Ducks and Teals. The term needs to be translated variously according to the geographical context of the usage. In the Himalayan region, "swan" is appropriate, but in more southerly peninsular India, "goose" is more likely. The dogmatism of Vogel 1962 is based on mainly southern observations and temple carvings. The discussion by Dave 1985 is nuanced and accurate : 150
sweet hoof (*nakha*) Unguis odoratus or Onycha, McHugh 2013, from which I adopt the name "sweet hoof." See especially McHugh's very interesting discussion about translating this term, pp. 56 ff. See also MW: 524 (on no authority) : 224
tawny rat (*aruṇa*) from the etymology of the word, perhaps Rattus norvegicus (Berkenhout, 1769), which is large, brown and common (it originated in central Asia and (likely) China, not Norway), and perhaps distinguishing it from the "large" brown rat : 212, 216, 217, 361
thick-head (*sthūlaśīrṣā*) unknown; meaning from etymology : 235
thin-beak (*sūkṣmatuṇḍa*) an unknown insect; c.f., beaked (*tuṇḍikerī*), needle-beak (*sūcītuṇḍa*). MW: 1240 : 175
three-ring (*trimaṇḍalā*) an unidentified spider : 244
tick-navel (*uṇḍunābha*) unknown insect; name based on etymology. Etymologically, an insect with an *uṇḍu* for a navel. Conjecturally, perhaps *uṇḍu* is a loan from Tamil *antu* "small grey-winged insect found in stored paddy" (DED_2: #150). Possibly remotely related to Dravidian lexemes

for "tick," *uḷuṅgu, uḍum, urūm, uṇṇi*, etc. DED$_2$: #591, #604. The vulgate of the *Suśrutasaṃhitā* reads pot-nose wasp (?) (*kumbhīnāsa*) "pot-nose" in place of this lexeme, q.v. : 230

tolaka (*tolaka*) unknown : 231

tortoise (*kūrma*) Perhaps Geochelone elegans (Schoepff), Reptiles: 30 and plate, MW: 1076 : 225

tuṇḍavakra (*tuṇḍavakra*) unknown : 231

tuṅgīnāsa (*tuṅgīnāsa*) unknown : 231

urine-poison (*mūtraviṣa*) an unidentified spider : 244, 246

vaki fish (*vakimatsya*) an unknown fish. Possibly a lexical variant of scorpion-fish (*varakimatsya*), q.v. : 175

valabhika (*valabhika*) unknown poisonous insect. Some similar lexemes mean "ridge of a roof, veranda", CDIAL: #11220, which is probably irrelevant : 175, 231

variegated scorpion (*karbura*) unknown; name from etymology. Possibly Isometrus maculatus (De Geer, 1778), which is brown and spotty : 237

vicitiṅga (*viciṭiṅga*) unidenitified insect (not in MW) : 230

warding off (*vāraṇī*) unknown insect, name based on etymology. Cf. Oṛiyā *bāraṇī* "charm against wild animals or noxious insects" CDIAL: 1, #11553 : 231

wasp (*vaiśvambhara*) A variant of wasp (*viśvambhara*), q.v. : 231

wasp (*varaṭi*) see wasp (*varaṭī*) : 367

wasp (*varaṭī*) MW: 923, CDIAL: #11313, 11330, etc. : 366, 367

wasp (*viśvambhara*) said to be a synonym of *gandholī*, q.v. (HIML: 1B, 395, note 59) : 174, 235, 367

wasp (*vāraṭi*) see wasp (*varaṭi*) : 175

webby spider (*jālinī-spider*) an unidentified spider : 244, 247

white frog (*śveta-dardura*) uncertain; name based on etymology : 234

white gecko (*śvetā-gṛhagolikā*) unknown; name based on etymology : 236

white rat (*śveta-animal*) from the etymology, perhaps the Mus musculus, L.., although strictly, they are agouti not white. The whitetailed wood rat (*Madromys blanfordi*, Thomas) is brown but has a distinctive white end to its tail : 212, 216

white scorpion (*śveta-vṛścika*) unknown; name from etymology : 238

white spider (*śvetā-spider*) an unidentified spider : 244, 245

wing-scorpion (*patravṛścika*) unknown insect, name based on etymology : 174, 231

woody (*dāruka*) an unknown insect; translation based on etymology. See hundred-woody (*śatadārukā*), MW: 1049 : 363

worm-dish (*krimisarāvī*) unknown insect, name based on etymology. *śarāva* "dish, plate, etc." (MW: 1057) : 231

yellow spider (*pītikā-spider*) an unidentified spider : 244, 245

Minerals

ashes (*bhasma*) ashes, corrosive when wet : 162

cuttle-fish bone (*phenāśma*) Hapax legomenon. Etymologically "foam-stone". Perhaps cuttlefish bone, or pumice (see Byrski 1981)? Dutt (Dutt: 38–42) conjectured that 'foam-stone' may be impure white arsenic obtained by roasting orpiment. : 162

gypsum (*godanta*) NK: 2, 46, #20 : 249

orpiment (*haritāla*) Arsenii trisulphidum.

See NK v. 2, p. 20 ff : 162

rock salt (*saindhava*) See NK: 2, M#48, Watt$_{Comm}$: 963–971 : 42, 89, 132, 205, 240, 248, 249, 256, 337

vermilion (*rakta*) speculative, based on *Mahākośa*: 1, 667, under *raktadhātu*, citing the *Dhanvantarīyanighaṇṭu* : 162

Glossary

ādhmāna - distension: 162
agada - antidote: 167
ajeya - invincible: 169
akhiladehavyāptirūpam - takes the form of pervading the whole body: 165
āmāśaya - stomach: 166f
ānāha - constipation: 163, 166, 169
aṅgamarda - bruising of the limbs: 166
añjana - eye salve: 167
annamada - intoxication from food: 166
antidote - *agada*: 167
antra - gut: 167
arocaka - loss of appetite: 166
āśraya - substrata: 159

be exhausted - *sāda*: 167
bellyache - *jaṭhara*: 169
bodily constiuents - *dhātu*: 165
body tissue - *dhātu*: 167
bruising of the limbs - *aṅgamarda*: 166

chest - *hṛd*: 167
chyle - *rasa*: 166
constipation - *ānāha*: 163, 166, 169
contamination dropsy - *duṣyodara*: 166
crow's foot - *kākapada*: 168
cure - *siddhi*: 168
cured - *sādhya*: 170

dark colour - *dhyāma*: 164
decoction - *kvātha*: 168
delirium - *moha*: 162
dhātu - bodily constiuents: 165 - body tissue: 167 - element: 163 - mineral: 160, 162
dhyāma - dark colour: 164
discharge - *praseka*: 163
disjunction - *viśleṣa*: 166
distension - *ādhmāna*: 162
doṣa - humour: 165
dūṣī-viṣa - slow-acting poison: 166
dūṣīviṣa - slow-acting poison: 169
dūṣīviṣāri - enemy of slow-acting poison: 169
duṣyodara - contamination dropsy: 166
dwindling away - *kṣaya*: 166

element - *dhātu*: 163
enemy of slow-acting poison - *dūṣīviṣāri*: 169
eye salve - *añjana*: 167

granthi - knots: 164 - lumps: 163
gruel - *yavāgū*: 168
gut - *antra*: 167

harṣa - horripilation: 166
hoarseness - *pāruṣya*: 163
horripilation - *harṣa*: 166
hṛd - chest: 167
humour - *doṣa*: 165

intestines - *pakvādhāna*: 167 - *pakvāśaya*: 166
intoxication from food - *annamada*: 166
invincible - *ajeya*: 169

jaṅgama - mobile: 160
jaṭhara - bellyache: 169

kākapada - crow's foot: 168
kalka - mash: 169
kapha - phlegm: 163, 166f
knots - *granthi*: 164
koṭha - skin disease: 166
kṣaya - dwindling away: 166
kṣīra - milky sap: 160f, 163
kuṣṭha - pallid skin disease: 166
kvātha - decoction: 168

liṅga - symptoms: 166
loose stool - *viḍbheda*: 163
loss of appetite - *arocaka*: 166
lumps - *granthi*: 163

maṇḍala - round blotches: 166
mash - *kalka*: 169
milky sap - *kṣīra*: 160f, 163
mineral - *dhātu*: 160, 162
mobile - *jaṅgama*: 160
moha - delirium: 162

nasal medicine - *nasya*: 167
nasya - nasal medicine: 167
niḥkvātha - stewed juice: 168
niryāsa - resin: 160f, 163

pain - *śūla*: 167
pakvādhāna - intestines: 167
pakvāśaya - intestines: 166
pallid skin disease - *kuṣṭha*: 166
parśvabheda - ribs crack: 167
pāruṣya - hoarseness: 163
phlegm - *kapha*: 163, 166f
pith - *sāra*: 160f, 163
pralāpa - ranting: 162
praseka - discharge: 163
pulses - *vega*: 159

rājimat - striped snake: 168
ranting - *pralāpa*: 162
rasa - chyle: 166
required knowledge - *vijñānīya*: 160
resin - *niryāsa*: 160f, 163
ribs crack - *parśvabheda*: 167
round blotches - *maṇḍala*: 166

sāda - be exhausted: 167
sādhya - cured: 170
saindhava - salt: 168
salt - *saindhava*: 168
sāra - pith: 160f, 163
siddhi - cure: 168
side-effects - *upadrava*: 169
skin disease - *koṭha*: 166
sleep - *svāpa*: 162
slow-acting poison - *dūṣī-viṣa*: 166
- *dūṣīviṣa*: 169
stationary - *sthāvara*: 160
stewed juice - *niḥkvātha*: 168
sthāvara - stationary: 160
stomach - *āmāśaya*: 166f
striped snake - *rājimat*: 168
substrata - *āśraya*: 159
śūla - pain: 167
svāpa - sleep: 162
śvāsa - wheezing: 162
symptoms - *liṅga*: 166

takes the form of pervading the whole body - *akhiladehavyāptirūpam*: 165
toxic shock - *vega*: 158
treatable - *yāpya*: 170

udveṣṭana - writhing: 162
upadrava - side-effects: 169

vega - pulses: 159 - toxic shock: 158
viḍbheda - loose stool: 163
vijñānīya - required knowledge: 160
viśleṣa - disjunction: 166

wheezing - *śvāsa*: 162
writhing - *udveṣṭana*: 162

yāpya - treatable: 170
yavāgū - gruel: 168

Todo list

- Cite Paul Courtright, Ganesha book. . . . 23
- Can't be "sedation" . . . 51
- complete this thought . . . 69
- add footnote here . . . 70
- add refs to Divodāsa as king. . . . 70
- find out about uttarabasti . . . 89
- Add tr. of 3.2.10.add5–3.2.10.add11 . . . 91
- 29, 30 missing? . . . 93
- Problematic passage in the edition. . . . 93
- unsolved problem . . . 98
- Perhaps *kalka* here could also mean the *Terminalia Bellerica* (विभीतक). 118
- Perhaps *kalka* here could also mean the *Terminalia Bellerica* (विभीतक). 118
- Euphorbia Antiquorum (Antique spurge) . . . 121
- The webpage https://hindi.shabd.in/vairagya-shatakam-bhag-acharya-arjun-tiwari/post/117629 says that this verse belongs to the *Nītiratna*. I could not find this text. . . . 125
- The provisional edition should be modified accordingly. . . . 127
- There, Ḍalhaṇa commented that deliberation on *avapīḍa* had been done earlier when it was mentioned. Find that description to know more details. . . . 129
- Search for the section where the treatment of *ākṣepaka* is described. 130
- Make the first letter of sentence capital. . . . 130
- ? . . . 136
- ? . . . 136
- ? . . . 136
- (?) . . . 136
- Is Dh. the teacher of Su. elsewhere? . . . 148
- Cf. Arthaśāstra 1.21.8. . . . 149

I'm still unhappy about this verse. . . . 152
Mention this in the introduction as an example of the scribe knowing the vulgate. . . . 152
fn about sadyas+ . . . 152
Bear's bile instead of deer's bile. . . . 153
punarṇṇavā in the N & K MSS . . . 154
śrita for śṛta . . . 154
explain more . . . 154
Medical difference from Sharma. . . . 155
example where the vulgate clarifies that these should be used separately; appears to be a gloss inserted into the vulgate text. . . . 155
The two uses of prāpta are hard to translate. prāptāḥ → kṣipraṃ is an example of the vulgate banalizing the Sanskrit text to make sense of a difficult passage. . . . 155
√ vyadh not √ vedh (also elsewhere and for the ears), causative optative. . . . 155
Look up the ca. reference. . . . 164
write footnote: don't repeat ativiṣā; vulgate similar to H. . . . 177
Include info on **hida-2019** . . . 183
Or "There are 20 phaṇins and 6 maṇḍalins. The same number are known. There are 13 Rājīmats." Or even, "there are 20 Phaṇins and six of them are Maṇḍalins." Are phaṇins really the same as darvīkaras? . . . 185
grammar . . . 186
ri- ṛ-? . . . 189
varṇa means "colour" elsewhere? . . . 190
write note on pariṣekān pradehāṃś . . . 202
where is cutting with a knife related to removing bile or phlegm. . . 256
maṣī burned charcoal. Find refs. . . . 256
find ref. . . . 262
Check out these refs. . . . 262
meaning of kalpa . . . 262
or a dual? . . . 267
See chapter 40 of Sūtrasthāna. . . . 316
vasā / medas / majjan . . . 316
Does bhūtādi a compound or it means ahaṅkāra or ego? . . . 317
triad? –DW . . . 317