A Translation of the Nepalese Text of the *Suśrutasaṃhitā*

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Part 1. Sūtrasthāna

Part 2. Nidānasthāna

Nidānasthāna 1: The Diagnosis of Diseases Caused by Wind

Literature

Meulenbeld offered an annotated overview of this chapter and a bibliography of earlier scholarship to 2002.[137]

Subject matter

It is notable that this nosological part of the *Suśrutasaṃhitā* opens with a chapter on diseases of wind (*vāta*). In all other major Āyurvedic works, including the *Carakasaṃhitā*, the first chapter in the section on nosology deals with the symptoms of fever (*jvara*). This is almost a defining feature of works on nosology. But in the *Suśrutasaṃhitā*, fever is not addressed at all in the first five sections of the work, but only in the thirty-ninth chapter of the Uttaratantra, which is exceptionally long at about three hundred verses.

The present chapter describes the diseases caused by vitiated wind and wind's mixing with other humours. Contemporary Ayurvedic physicians consider these diseases to include rheumatism.

We have not translated the terms prāṇa ...because the text defines them.

complete this thought

Translation

1 And now we shall explain the chapter about the aetiology of wind diseases.

137 HIML: IA, 234. (Ruben 1954) studied the wind doctrines in the *Carakasaṃhitā*.

add footnote here

add refs to Divodāsa as king.

3 After holding the feet of Dhanvantari, the foremost of the upholders of righteousness who emerged out of nectar, Suśruta makes this enquiry.[138]

4 O King! O best of orators! Explain the location and types of diseases of the wind, whether in its natural state or disordered.[139] .

5–9 On hearing his words, the venerable sage spoke. This lordly wind is declared to be self-born because it is independent, constant and omnipresent. It is worshipped by the whole world. Amongst all beings, it is the self of all. During creation, continued existence and destruction, it is the cause of beings.

It is unmanifest though its actions are manifest; it is cold, dry, light, and mobile. It moves horizontally, has two attributes and is full of dust (*rajas*).[140] It has inconceivable power. It is the leader of the humours[141] and the ruler of the multitude of diseases.

It moves fast, it moves constantly, it is located in the stomach and in the rectum.[142]

9cd Now, learn from me the characteristics of wind as it moves inside the body.[143]

10 Wind connects the senses and the sense objects. Unvitiated, it maintains a state of equality between the humours (*doṣa*), the bodily tissues (*dhātu*) and heat (*agni*) and the rightness (*ānulomya*) of actions.[144]

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138 Explain the nectar myth.

139 MSS H and N both read भूपते instead of कोपनैः in the vulgate: instead of addressing the king, the vulgate is saying "by irritations of the wind...." The vulgate also has Suśruta asking about कर्म, whereas in the Nepalese version he asks only about the types of diseases. Note that Dhanvantari is here addressed as king, a title associated elsewhere with Divosdāsa.

140 According to Ḍalhaṇa on 2.1.8 (Su 1938: 257), the two qualities are sound and tangibility. The word रजस् could also refer to the quality of activity in the three-quality (*guṇa*) theory, which is how Ḍalhaṇa interpreted it. On the semantic field of रजस्, see Das 2003: 14 note 26 and ff.

141 Ḍalhaṇa on 2.1.8 (Su 1938: 257) interpreted नेता "leader" as प्रेरक "impeller."

142 MS H read आशुचारी, which we have translated ("moves fast"), but MS N and the commentators of the vulgate read आशुकारी, "quick-acting."

143 Ḍalhaṇa and Cakrapāṇidatta both interpreted मे as an ablative (2.1.8 (Su 1938: 258)).

144 According to Ḍalhaṇa on 1.6.3 (Su 1938: 23), सम्पत्तिः=सम्पन्नता. According to Ḍalhaṇa, Gayadāsa read इन्द्रियार्थोपसंप्राप्तिं but Ḍalhaṇa did not accept this on the grounds that it was too verbose: गयदासाचार्यस्तु इमं श्लोकं `इन्द्रियार्थोपसंप्राप्तिऽ इत्यादि कृत्वा पठति, स च विस्तरभयान्न लिखितः । But witnesses H and N suggest the reading इन्द्रियार्थोपसम्पत्तिः. The expression "qualities" is used advisedly. It is almost universal practice to refer to

11 Just as the fire is divided into five types by name, place and their actions, similarly, one type of air is divided into five types based on name, place, action and diseases.

12 Five types of wind:[145]

1. prāṇa,
2. udāna,
3. samāna,
4. vyāna,
5. apāna.[146]

The above five types of wind remain in their state of equality and support the body.[147]

13–14ab The wind that flows through the mouth is called the vital wind (*prāṇa*), the sustainer of the body. It causes food to enter within and supports the breaths.[148] It mostly causes diseases like hiccups and wheezing (*śvāsa*).

14cd–15 The wind which flows upwards, which is the best among winds, is called udāna.[149] Special acts like speech and singing are all initiated by it. It particularly causes diseases above the collar bone (*jatru*).[150]

16–17ab The samāna wind flows in the receptacles of raw and of digested matter.[151] Assisting the digestive fire (*agni*), it cooks food and separates out

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"balance" or "equilibrium" in such contexts, but this misrepresents the metaphor that the Sanskrit sources are using. As the commentators on *Aṣṭāṅgahṛdayasaṃhitā* 1.1.20 (Ah 1939: 14) make abundantly clear, the expression *doṣasāmya* means "equality of humours," as in *quantitative* equality, not balance.

145 See Zysk 1993; 2007.

146 We use the Sanskrit terms which are generally recognizable to English readers.

147 According to Ḍalhaṇa on 2.1.12 (Su 1938: 259), स्थान=साम्य, यापयन्ति=धारयन्ति. All the manuscripts read प्राणोदानः समानश्च व्यानोपानस्तथैव च । against the vulgate's प्राणोदानौ समानश्च व्यानश्चापान एव च ।.

148 According to Ḍalhaṇa on 2.1.13–14ab (Su 1938: 259), प्राण also resides in the throat and nose.

149 According to Ḍalhaṇa on 2.1.14cd–15 (Su 1938: 260), the places of udāna wind are not mentioned here, but it also flows in the navel, stomach and throat. In yoga literature, it is more common for prāṇa to be called the principle breath.

150 Ḍalhaṇa noted that "above the collar bone" would include eyes, nose, ears, face, and head. Meulenbeld cited discussions on the difficulties of interpreting the term जत्रु (Meulenbeld 1974*b*: 465).

151 The "receptacle of raw matter" (आमाशय) is described at 1.21.12 (Su 1938: 102) as one of the locations of phlegm, and the place where food arrives, just above the location

the substances produced from it.[152]
It mainly causes abdominal swelling (*gulma*), diminished digestive fire (*agnisaṅga*) and diarrhoea.[153]

17cd–18 The vyāna moves everywhere in the body, active in making chyle (*rasa*) flow. It also makes sweat and blood flow as well as causing movement in every respect.[154] Angered, it makes diseases that generally exist throughout the whole body.

19– The apāna resides in the place of digested food and, at the right moment, it draws down wind, urine and feces and also semen, fetus and menstrual blood.

20cd–21ab Irritated vyāna and apāna wind causes defect of semen and gonorrhea, while simultaneous contamination of all the five winds surely leads to death.

21cd–22ab I shall therefore describe all the diseases caused by the contamination of winds staying in the various places of the body.

22cd–24ab Contaminated wind in the stomach causes disease like vomiting, loss of consciousness, fainting, thirst, heart-seizure, pain in lateral sides of stomach. It also causes rumbling of the bowels, acute pain, inflated belly, pain while discharging urine and feces, suppression of urine and pain in the loins.

24cd Contaminated wind residing in the ear causes loss of function of the Newa senses.

25–29 Residing in the skin,[155] contaminated wind causes discolouration of skin, throbbing of parts of the body, dryness, numbness, itching, pricking pain, swelling. It being inherent in the flesh of body causes swelling with pain and being inherent with the fat of the body causes swelling

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of bile, and where the food is moistened and broken down for easy digestion. The "receptacle of digested matter" (पक्वाशय) is described at 1.21.6 (Su 1938: 100) as being located below the navel and above the pelvis and rectum.

152 Gayadāsa had the same reading सहायवान् as the Nepalese version (Su 1938: 260, note 1 and the text of the *Nyācacandrikā*). This suggests that it is the samāna that cooks food, while the vulgate reading involves the equal participation of digestive fire.

153 Ḍalhaṇa on 1.11.8 (Su 1938: 46) described अग्निसङ्ग as "the fire is stuck, dissolved."

154 The vulgate text reads पञ्चधा "in five way," and Ḍalhaṇa listed five kinds of movement (Ḍalhaṇa on 2.1.18 (Su 1938: 260)).

155 Ḍalhaṇa and Gayadāsa both suggest त्वक्=रस. Gayadāsa explained that chyle stays in the skin and therefore, in the verse त्वक्स्थ should be read as रसस्थ as we read secondary meaning in the sentences like गङ्गायां घोषः.

with slight pain but do not become wound.[156]
Residing in the artery it causes acute pain, contraction and filling up of the artery.[157] It stuns, vibrates and destroys[158] the muscle tissues by residing in the muscle. Residing in the joints it causes pain and swelling. Residing in the bone it causes fracture and dryness of bones which also cause to acute pain and, in the marrow, it dries up marrow which may never be cured. Residing in the semen it causes non-production and distorted production of semen.[159]

30–31ab Contaminated wind moves from the hand, foot, head, then it may be omnipresent or pervade the entire body of men and causes stiffness, convulsion, numbness and acute pain.

31cd–32ab Wind (5 types) mixed with other doṣas (bile etc.) in the places mentioned above produces mixed types of pains.

34cd–35ab Prāṇa wind surrounded by bile causes vomiting and burning sensation, by phlegm it causes weakness, exhaustion, laziness and bad taste.

35cd–36ab Udāna wind surrounded by bile causes loss of consciousness, stupor, dizziness and fatigue, by phlegm it causes absence of perspiration, slowness of digestion, sensation of coldness.

36cd–37ab Samāna wind surrounded by bile causes perspiration, a burning sensation, heat and stupor, association with phlegm it causes erection in urine, feces and limbs.

37cd–38ab Apāna wind associated with bile causes a burning sensation, heat and the voiding of blood with urine, with phlegm it causes a feeling of heaviness in the lower part of the body and coldness.

38cd–39ab Vyāna wind surrounded by bile causes a burning sensation, tossing of the limbs and fatigue, by phlegm it causes stiffening limbs, uddaṇḍaka? and pain in the swelling.

40–41 Persons who are of delicate nature, follow faulty diet and lifestyle, ? also afflicted with intoxicating drinks, sexual enjoyment, exercise causes vitiation of wind and blood.??

156 The MS H does not read व्रणांश्च रक्तगो ग्रन्थीन् सशूलान् मांससंश्रितः . against the vulgate. (Su 1938: 261).

157 According to Ḍalhaṇa सिराकुञ्चनं is also known as कुटिला सिरा (Su 1938: 262)

158 Ḍalhaṇa and Gayadāsa both suggest the meaning of हन्ति for being not capable of both stretching and contraction. सन्धिगतः संधीन् हन्ति प्रसारणाकुञ्चनयोरसामर्थ्यं करोति (Su 1938: 262) ...

159 Ḍalhaṇa and Gayadāsa both suggest that a distorted production विकृतां प्रवृत्तिम् is too fast, too slow, knotty and discolored.

42 Riding elephant, horse and camel, lifting great weights, consuming vegetables which are pungent, hot, sour, alkali and being frequently distressed situation causes contamination of wind.

43–44 Blood flowing in the body blocks the passage of contaminated wind which moves quickly in the body. Excessively irritated wind–being contaminated by wind and dominance of wind, it is called वातरक्त Gout[160].

45-46 Vātarakta causes – pricking pain, dryness, loos of sensation in the feet. Contaminated Bile mixed with blood causes sharp burning sensation, excessive heat and soft swelling with red color in the feet. Contaminated Phlegm mixed with the blood causes itching in the feet. It makes feet white, cold, dry, thick and hard. All defects [161] in the blood contaminated by humours (wind, bile, phlegm) manifest their symptoms in the feet.

48 This disease spreads all over the body like rat poison by staying in feet or sometimes hands.

49 Gout spreads in the knee and the skin bursts and starts bleeding makes it incurable. It is mitigatable if it is of a year's old.

50–51 When vitiated wind enters in the all arteries it causes quickly convulsions again and again and because of frequent contractions (*ākṣepa*) it is called convulsions (*ākṣepaka*).

52–56 Because in this situation a person often sees darkness and fall, it calls spasmodic contraction (*apatānaka*) [162] . If wind mixed with phlegm stays excessively in the arteries, it stiffs body like a staff and it is called दण्डापतानकः epilepsy with convulsions. Vitiated wind entered in the arteries and bends the body like a bow, it is called धनुःस्तम्भ Tetanus. When vitiated wind accumulated in the regions of finger, ancle, abdomen, heart, chest, and throat swiftly attack on the group of vain and ligaments, it gets a person's eyes stuck, chin stuns, side breaks and vomiting phlegm he moves inwards like a bow and this situation is known as emprosthotonos (*antarāyāma*). When vitiated wind attacks on outside ligaments, body of a person will stretch forward like a bow. In this

160 In the medical term वातरक्त is known as Gout. Cakrapāṇi called it आढ्यरोगः Caraka-saṃhitā sū.14.18 and ci.28.66

161 Gayadāsa suggests सर्वे दुष्टाः शोणितं चापि nominative plural instead of locative singular.

162 Gayadāsa accepted the Nepalese reading ताम्यते which vulgate does not read. Gayadāsa gives definition of अपतानक as येनापताम्यते means a situation in that a person sees the dark.

situation, if the chest, hip or thigh break, wise men call it incurable.

58 Aggravated phlegm and bile mixed with wind or only vitiated wind causes fourth convulsive disease due to trauma.

59 Convulsions due to miscarriage, excessive bleeding, and injury are incurable [163].

60–62 When excessively agitated and strong wind flows in the arteries which spread downward, upward, and sideways, it loses the joints and kills the other side of body. The best of physicians calls it paralysis (*pakṣāghāta*). [164] Then half of his entire body becomes inefficient and unconscious. Afflicted by wind he suddenly falls or dies.

62.1 Bile integrates with wind causes burning sensation, affliction, and infatuation. When it integrates with phlegm causes coldness, morbid swelling, and heaviness. [165].

63 A paralysis (*pakṣāghāta*) caused by wind [166] is curable with most difficulty. It becomes curable when caused by bile and phlegm mix with the wind. It becomes incurable when caused by the loss of bodily constituents.

64–66 Verses from 64–66 are not found in the Nepalese manuscripts. These verses discuss the term spasmodic contradiction (*āpatantraka*) which is the same as अपतानक. Ḍalhaṇa commented on ni.1.64-66 (Su 1938:267) that because of having the similar condition in both situations, some scholars do not read the अपतन्त्रक. In the verse ni.1.59 Ḍalhaṇa commented that the आक्षेपक and अपतानक is same (Su 1938:266) and again he suggested that the अपतानक and अपतन्त्रक both are similar condition. Therefore, आक्षेपक, अपतानक and अपतन्त्रक should be the same. Gayadāsa further commented that the Caraka has not read आक्षेपक as अपतानक and therefore described the अपतन्त्रक separately (Su 1938:267).

67 This verse also not found in the Nepalese Manuscripts. The verse describes rigidity of neck (*manyāsthambha*). According to Ḍalhaṇa, rigid-

163 According to Ḍalhaṇa convulsion (*ākṣepaka*) is also known as अपतानक (Su 1938:266). He further mentions that even if fortunately, it is cured, it cripples the limb.

164 In the ca.6.28.55 पक्षाघात is described as monoplegia (*ekāṅgaroga*). In that case it damages one of the limbs. In the medical terms paralysis (*apakṣāghāta*) is known as hemiplegia.

165 This verse is not available in vulgate. It deals with the symptoms when bile and phlegm mix with the wind. It is already discussed in su.2.1.38.

166 Here the term शुद्धवात suggests the meaning of the wind that is devoid of bile and phlegm.

ity of neck is a prior symptom of spasmodic contradiction.

68–72 By speaking very loudly, eating hard foods, excessively laughing and yawning, lifting heavy loads and sleeping in an awkward position, vitiated wind lodges into face painfully and produces paralysis of the jaw-bones (*ardita*) disease. In that case, half of the face and neck become curved, head trembles, speech hindrances, deformity occurs in the eys, eyebrows and cheeks.[167] Experts in diseases call this disease spasm of the jaw-bones (*ardita*).

73 Spasm of the jawbones cannot be cured when it stays in a person for three years, who is very weak, stays without blinking, trembles, and constantly speaks gibberish.

74 Arteries of Heel and toes stricken by vitiated wind prevents stretching of thighs. This disease is known as sciatica (*gṛdhrasī*).

75 Arteries which run to the tips of fingers from behind the roots of the upper arm affected by vitiated wind terminates all activities of arms and back. This disease is called paralysis of arms and back (*viśvañci*).[168]

76 Vitiated wind and blood in the joint of knee causes synovitis of knee join (*kroṣṭukaśīrṣa*). In this extremely painful situation, the shape of swelling in knee joints seems like a head of Jackal.

77 Vitiated wind resides in the waist attacks on the arteries of thigh causes limpness (*khañja*) and when it attacks on both the thighs a person becomes lame (*paṅgu*).

78 A person who trembles at the beginning of walking or walks limping and whose foot joint has become loose is called lathyrism (*kalāyakhañja*).

79 Vitiated wind residing in the ankle-joint causes pain when one steps on uneven ground. This disease occurs is called वातकण्टक.

80 Vitiated wind mixed with bile and blood cause burning sensation in feet. It should be declared as burning sensation in feet (*pādadāha*).

81 A person whose feet tingle and become insensible due to vitiation of phlegm and wind is called पादहर्ष.

82 Vitiated wind lying in the shoulder dries the shoulder joints and it is called अंसशोष. It also bends the arteries of shoulder, and this disease is

167 Ḍalhaṇa suggests नेत्रादीनाम् इत्यादि शब्दात् भ्रूगण्डादि उपसङ्ग्रहः

168 Both the MSS N and H read विश्वञ्चि instead of the vulgate reading विश्वाची. There is no such word found in other Āyurveda texts.

called अवबाहुक. [169]

83 Vitiated wind singly or mixed with phlegm cover the channel of ears causes deafness.

84 Vitiated wind saturated with phlegm covering the arteries which conduct the sound of speech makes a person inactive (*akriya*), dumb (*mūka*). He mumbles (*mimmira*) through the nose and stammers (*gadgad*).[170]

85 Vitiated wind penetrating into the cheekbones, temporal bones, head and neck causes piercing pain in the ears. It is called ear-ache (*karṇaśūla*).[171]

86–87 The pain that arises from the bladder or feces goes down as if it were breaking the rectum and..... ? is called तूनी, whereas the pain, rising upward from the rectum extending up to the region of the intestines, is called प्रतितूनी.

88–89 Retention of vitiated wind inside abdomen causes distension of the stomach and flatulence and intense pain and rumbling inside, is called tympanites (*ādhmāna*). Vitiated wind mixed with phlegm causes प्रत्याध्मान. It rises in the stomach anda causes pain in the heart and sides. [172]

90–91 A knotty stone-like tumour caused by wind appearing in the stomach having an elevated shape and stretched upward direction which obstructing the passage of faeces and urine should be known as वाताष्ठीला. A tumour of similar shape rose obliquely in the abdomen obstructing the passage of wind, faeces and urine should be known as प्रत्यष्ठीला.

Names of diseases discussed in the chapter 2.1

Gout (*vātarakta*) convulsion (*ākṣepaka*) paralysis of one side (*pakṣāghāta*) paralysis of the jaw-bones (*ardita*) sciatica (*gṛdhrasī*) paralysis of arms and back (*viśvañci*) synovitis of knee join (*kroṣṭukaśīrṣa*) lathyrism (*kalāyakhañja*) (*vātakaṇṭaka*) (*avabāhuka*) (*tūnī*) (*pratitūnī*) tympanites (*ādhmāna*) (*pratyādhmāna*) (*vātāṣṭhīlā*) (*pratyaṣṭhīla*)

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169 Ḍalhaṇa and Gayadāsa both have defined two diseases i.e., अंसशोष and अवबाहुक respectively.

170 Nepalese Manuscripts read मिर्म्मिर instead of the Vulgate's reading मिन्मिण. Dictionary of MW suggests the meaning of मिर्म्मिर = having fixed unwinking eyes which is not relevant to the disease of tongue.

171 In the medical terms, this disease is known as Otitis.

172 There's an addition in MS N. नाभेरधस्तात् संजातः संचारी यदि वाऽचलः

Part 3. Śārīrasthāna

Part 4. Cikitsāsthāna

Part 5. Kalpasthāna

Part 6. Uttaratantra

Editions and Abbreviations

Ah 1939 — Kuṃṭe, Aṇṇā Moreśvara, Navare, Kṛṣṇaśāstrī, and Parādkar, Hariśāstrī (1939) (eds.), *श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्रीमदरुणदत्तविरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेदरसायनाह्वया टीकया च समुल्लसितम्* = *The Astāngahṛidaya* (6th edn., Muṃbayyām: Nirṇayasāgara Press), ARK.

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

CDIAL — Turner, R. L. (1966–85), *A Comparative Dictionary of the Indo-Aryan Languages* (London, New York, Toronto: Oxford University Press), ISBN: 0197135501, URL; 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/.

DED_2 — Burrow, Thomas, and Emeneau, Murray B. (1984), *A Dravidian Etymological Dictionary* (2nd edn., Oxford: Clarendon Press), ARK, URL.

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* (Muṃbaī: Mahārāṣṭra Rājya Sāhityta āṇi Saṃskṛti Maṃḍaḷa), ARK.

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, accessed 18/05/2023.

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Su 1938 — Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (1938) (eds.), *श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्य-व्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यप-ञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता* (3rd edn., Bombay: Nirṇayasāgara Press), ARK; HIML: IB, 313, edition cc ('the vulgate').

Index of Manuscripts

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

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

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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; 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.
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.
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.

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; 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, 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.

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.

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.

IGP — Griffiths, Mark (1994), *The New Royal Horticultural Society Index of Garden Plants* (London: Macmillan), ARK.

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, ARK.

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.
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.
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; 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.
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POWO	Kew Gardens (2024), "Plants of the World," Royal Botanic Gardens, URL.
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.

Flora

aconite leaf (?) (*viṣapatrikā*) Unknown. Cf. perhaps, Indian aconite (*viṣā*) (but that is feminine). Cf. GVDB: 373, "unidentified" : 139

agarwood (*aguru*) Aquilaria malaccensis Lam., GVDB: 3 : 98, 99, 200

'alas, alas' (?) (*hālāhala*) unknown. See Cf. *Soḍhalanighantu* p.43 (sub *bola*) = *stomaka* = Indian aconite (*vatsanābha*) : 140, 142

Alexandrian laurel (*punnāga*) Calophyllum inophyllum, L. See AVS: 1, 338, NK: 1, #425 : 181, 200

amaranth (*taṇḍulīya*) see amaranth (*taṇḍulīyaka*) : 182

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) : 131, 189, 193, 198, 286

Arabian jasmin (*tṛṇaśūnya*) see Arabian jasmine (*mallikā*), GVDB: 190 MW: 453 says Jasminium sambac. GVDB: 190 also suggest screwpine (*ketaka*) : 286

Arabian jasmine (*mallikā*) Jasminum sambac (L.) Aiton, GVDB: 300 : 286

Arabian jasmine (*tṛṇaśūlya*) probably an alternative pronunciation for Arabian jasmin (*tṛṇaśūnya*), GVDB: 190 : 200

arjun (*arjuna*) Terminalia arjuna, Bedd. See HK: 738 : 44, 78, 197

Asoka tree (*aśoka*) Saraca indica Linn., GVDB: 26 : 99, 101, 182, 200, 210, 302

atis root (*śṛṅgīviṣa*) Aconitum heterophyllum, Wall. ex Royle. See AVS: 1, 42, NK: 1, #39 : 140, 142

axlewood (*dhava*) Anogeissus latifolia (Roxb. ex DC.) Wall. ex Guill & Perr. See AVS: 1, 163 f, Chopra: 20 : 44, 77, 152, 197, 200

bamboo leaves (*veṇupatrikā*) Bambusa bambos, Druce. See NK: 1, #307 : 131

banyan (*nyagrodha*) Ficus benghalensis, L., GVDB: 356, HK: 748 : 286

banyan (*vaṭa*) see banyan (*nyagrodha*) : 78, 81

barley (*yava*) Hordeum vulgare, L. See HK: 752 : 109

barley ash (*yavakṣāra*) The preparation method is described at GVDB: 327 : 112, 286

barley ash (*yavanāla*) see barley ash (*yavakṣāra*), GVDB: 327 : 190

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 Singh and Chunekar (GVDB: 66), is native to East Asia, not India : 182

bearded premna (*vasuka*) Premna barbata Wall. (← *vasuhaṭṭa*), according to Cakrapāṇidatta. See the discussion by Singh and Chunekar (GVDB: 362–363), where other candidate species such as Osmanthus, Calotropis, and

Trianthema are discussed. 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 : 78

beautyberry (*śyāmā*) Callicarpa macrophylla, Vahl. See AVS: 1, 334, NK: 1, #420 : 104, 129, 131, 183

beggarweed (*aṃśumatī*) see beggarweed (*śālaparṇī*), GVDB: 1, mentioning that the pair of these refers to beggarweed and ?? : 147, 192

beggarweed (*sthirā*) see beggarweed (*śālaparṇī*), GVDB: 458 : 192

beggarweed (*vidārigandhā*) see beggarweed (*śālaparṇī*) : 53, 109, 297

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 : 287

beleric myrobalan (*bibhītaka*) Terminalia bellirica Roxb. One of the components of the three myrobalans (*triphalā*) GVDB: 274, 196 : 305

Bengal quince (*bilva*) Aegle marmelos (L.) Corr. See AVS: 1, 62, Chevillard: 161, NK: 1, #62, i(MW: 732a) : 77, 99, 101, 106, 183, 287, 292, 303

big poison (?) (*mahāviṣa*) unknown. : 140, 142

big thorn apple (?) (*mahākarambha*) Perhaps Datura metel, L.?. See thorn apple (*karambha*) : 139

bitter gourd (*paṭolī*) see pointed gourd (*paṭola*), cite[233]gvdb : 182

bitumen (*adrija*) → *śilājit*. A tar-like, black, resinous rock exudate. See *Mahākośa*: 1, 21 : 163

black Bengal quince (*kṛṣṇaśrīphalikā*) GVDB: 412, on *śrīphala*, synonym of Bengal quince (*bilva*) fruit : 293

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 : 181, 287

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 Singh and Chunekar (GVDB: 246) supported this as a usual identification : 131, 134, 147, 182

black nightshade (*kākamācī*) Solanum nigrum, Linn., GVDB: 86–87. May also be the less poisonous S. dulcamara, "bittersweet nightshade," K & B: 1, 889–892 : 192, 199, 290

black pepper (*marica*) Piper nigrum, L. See ADPS: 294, NK: 1, #1929. Known to ancient Greek authors (Ball 1888: 341) : 110, 198, 210, 292, 305

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 : 200

blackboard tree (*saptachada*) Alstonia scholaris R. Br. GVDB: 420 : 130, 287

blackboard tree (*saptaparṇa*) see blackboard tree (*saptachada*) : 198

blackbuck (*hariṇa*) Antilope cervicapra, L. See BIA: 270 IW: 95, 165, *et passim* : 134

blue water-lily (*utpala*) Nymphaea stellata, Willd. See GJM1: 528, IGP 790; Dutt: 110, NK: 1, #1726 : 35, 129, 147, 200, 210, 211, 291

bluebell barleria (*kuravaka*) see bluebell barleria (*kuruvaka*) : 183

bluebell barleria (*kuruvaka*) Or *kurubaka*. 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*. Singh and Chunekar (GVDB) finally propose a red-flowering Rhododendron, admitting that this is a novel suggestion : 139, 288

bluebell barleria (*sahā*) see bluebell barleria (*sahācara*), GVDB: 428 : 108, 191

bluebell barleria (*sahācara*) see bluebell barleria (*saireyaka*), GVDB: 427 : 288

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 : 288

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. : 193

bull's head (*gokṣura*) Tribulus terrestris L. GVDB: 144–145, 193. A component of lesser five roots : 288

bull's head (*trikaṇṭaka*) → bull's head (*gokṣura*) GVDB: 193. A component of lesser five roots : 297

bulrush (*kaśeru*) "Two species, Scirpus kysoor Roxb., and S. grossus Linn. f., are used" GVDB: 85. Also *kaśeruka* and *kaseru* : 104, 105, 108

calabash gourd (*kūṣmāṇḍa*) → puṣpaphala. Beninkasa hispida, (Thunb.) Cogn. See AVS: 2, 1127; cf. AVS: 1, 261 : 292

camphor (*karpūra*) → *śītaśiva*. Cinnamomum camphora, (L.) Sieb. See IGP 253 : 288

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 : 200

cardamom (*elā*) Elettaria cardamomum, Maton. See AVS: 2, 360, NK: 1, #924, Potter$_{rev}$: 66 : 98, 99, 147, 153, 181, 182, 190, 200, 288

cardamom (*kṣudrailā*) see cardamom (*elā*), GVDB: 128. This expression, "small cardamom" is only used at *Suśrutasaṃhitā* Kalpasthāna 6.17 : 200

carray cheddie (*viśvadevā*) → *gāṅgerukī* Canthium parviflorum, Lam. See AVS: 1, 366 f. Or Sida rhombifolia Linn. (GVDB: 372, 444 ff. et passim) : 81

castor oil tree (*gandharvahasta*) see castor-oil (*eraṇḍa*). GVDB: 135, K & B: 3, 2277 : 49, 101

castor-oil (*eraṇḍa*) Ricinus communis, L. See NK: 1, #2145, Chopra: 214 : 54, 288

castor-oil tree (*vardhamāna*) see castor-oil (*eraṇḍa*), GVDB: 361 : 198

catechu (*khadira*) Senegalia catechu (L.f.) P. J. Hurter & Mabb = Acacia catechu Willd. GVDB: 129–130 : 78

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." : 153

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*) : 37, 302

champak (*campaka*) Magnolia champaca (L.) Baill. ex Pierre, GVDB: 154 : 200

chebulic myrobalan (*harītakī*) Terminalia chebula Retz. GVDB: 466 : 107, 130, 200, 305
cherry (*elavālu*) Prunus cerasus, L. See GVDB: 58 for a thoughtful discussion NK: 1, #2037. : 147, 200, 289
cherry (*elavāluka*) see cherry (*elavālu*) : 198
chir pine (*sarala*) Pinus roxburghii, Sarg. GVDB: 423 : 77, 108, 198, 200
cinnamon (*tvac*) Cinnamomum cassia, Blume. See NK: 1, #579 : 192, 200, 289
cinnamon (*tvak*) see cinnamon (*tvac*) : 182
cinnamon (*varāṅga*) see cinnamon (*tvac*), GVDB: 360 : 198
citron (*mātuluṅga*) Citrus medica, Linn. GVDB: 276, 306. Also spelled *mātuliṅga, mātulaṅga, mātulāṅga* : 77, 106, 111, 112, 182
cluster fig (*udumbara*) Ficus racemosa, L. See ADPS: 487 : 197
cobra's saffron (*nāgapuṣpa*) → nāgakeśara. Mesua ferrea, L. See NK: 1, #1595, GVDB: 220 : 147
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 : 198, 200, 289
colocynth (*mṛgādanī*) see colocynth (*indravāruṇī*) GVDB: 46, 318 : 182
common smilax (*śvadaṃṣtra*) Smilax aspera L., GVDB: 414 : 77
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* : 81
coriander (*dhānyaka*) Coriandrum sativum L., GVDB: 213 : 289
coriander (*kustumburya*) see coriander (*dhānyaka*), GVDB: 113 : 200
corky coral tree (*pāribhadra*) Erythrina suberosa Roxb. See GVDB: 245 : 152, 289
corky coral tree (*pāribhadraka*) see corky coral tree (*pāribhadra*) : 101, 197
costus (*kuṣṭha*) Dolomiaea costus (Falc.) Kasana & A. K. Pandey. See GVDB: 112, NK: 1, #2239. Known to ancient Greek authors (Ball 1888: 345) : 98, 99, 106, 131, 147, 153, 181, 182, 190, 198, 200
cottony jujube (*kākolī*) Ziziphus mauritanica, Lam. See IGP: 1233, NK: 1, #2663; IGP 1233. Cf. NK: 1, #1170 : 97, 105, 106, 178
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 : 53, 105, 108, 270
country mallow (*sahadevā*) → *balā* (GVDB: 428). Contains ephedrine : 81, 108
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) : 53, 139, 147, 152
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 : 98, 99, 106, 131, 147, 181, 200, 293, 306

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 : 292, 307

croton tree (*nāgadantī*) Croton persimilis Müll.Arg., GVDB: 222 : 198, 290, 301

croton tree (*nāgavinnā*) Croton persimilis Müll.Arg. GVDB: 222 I have taken this as croton tree (*nāgadantī*) because of context in *Suśrutasaṃhitā* Kalpasthāna 5 : 183

crow (?) (*kāka2*) an unidentified poisonous plant apparently called "crow." Singh and Chunekar (GVDB: 86) note that several drugs named after the crow are unidentifiable. Black nightshade, (*kākamācī*) is toxic, but this is a stretch : 139

datura (*dhattūra*) Datura metel, L. See AVS: 2, 305 (cf. *Abhidhānamañjarī*), NK: 1, #796 ff. Potter$_{rev}$: 292 f, ADPS: 132 : 50, 290

datura (*dhuttūrakā*) see datura (*dhattūra*) : 194

deodar (*bhadradāru*) Cedrus deodara, (Roxb.ex D.Don) G. Don. See AVS 41, NK: 1, #516 : 44, 105, 109, 147, 198

deodar (*devadāru*) Cedrus deodara (Roxb.) Loud. GVDB: 206–207 : 77, 106, 200, 270, 290

deodar (*suradāru*) see deodar (*devadāru*) : 181

devil's dung (*hiṅgu*) Ferula foetida Regel., GVDB: 471–472 : 78, 79, 181

dried ginger (*nāgara*) → dried ginger (*śuṇṭhī*) GVDB: 221–222 : 79, 181

dried ginger (*śuṇṭhī*) Zingiber officinale, Roscoe. See ADPS: 50, NK: 1, #2658, AVS: 5, 435, IGP: 1232 : 104, 290, 305

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) : 35

drum-giver (?) (*lambaradā*) Unknown; cf. GVDB: 348 : 139

elixir salve (*rasāñjana*) cf. Indian barberry (*añjana*) : 44, 54, 294

embelia (*viḍaṅga*) Embelia ribes, Burm. f. See ADPS: 507, AVS: 2, 368, NK: 1, #929, Potter$_{rev}$: 113 : 44, 77, 99, 147, 181, 182, 198

emblic myrobalan (*āmalaka*) Phyllanthus emblica, L. See AVS: 4, 256 : 78, 107, 108, 210, 305

emetic nut (*karaghāṭa*) Probably a synonym for *karahāṭa* (emetic nut), q.v., GVDB: 74 : 290

emetic nut (*karaghāṭaka*) see emetic nut (*karaghāṭa*) : 140, 197

emetic nut (*karahāṭa*) Randia dumetorum, Lamk. See GVDB: 291–292 and NK: 1, #2091. Singh and Chunekar (GVDB: 74, 77–78) noted that it may be a synonym for *karaghāṭa*, emetic nut, and pointed rather to Gardenia turgida Roxb. on the basis of local knowledge in U. P. : 290

emetic nut (?) (*karaṭā*) Not in GVDB. Cf. perhaps *karahāṭa* (emetic nut) : 138

emetic nut (*madana*) Randia dumetorum, Lamk. See NK: 1, #2091 : 130, 272

false daisy (*bhṛṅga*) Eclipta prostrata (L.) L. See GVDB: 288 : 77

false daisy (*subhaṅgurā*) (su)bhaṅgura = bhṛṅga? Eclipta prostrata (L.) L. See

GVDB: 288 : 138
fermented rice-water (*dhānyāmla*) → *kāñjī, kāñjikā, sauvīra*. GVDB: 458, NK: 2, appendix VI, #18 : 51, 52
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 : 133
fire-flame bush (*dhātakī*) Woodfordia fruticosa (L.) Kurz. See AVS: 5, 412, NK: 1, #2626. Known to ancient Greek authors (Ball 1888: 344) : 78, 130
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 : 77
flame-of-the-forest (*kiṃśuka*) see flame-of-the-forest (*palāśa*), GVDB: 97–98 : 190
flame-of-the-forest (*palāśa*) Butea monosperma (Lam.) Taub. GVDB: 241. *pālāśa* in some sources : 78, 101, 291
flax (*atasī*) Linum usitatissimum, L. See NK#1495 : 105
foxtail millet (*priyaṅgu*) → *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* : 44, 147, 153, 181, 182, 210, 291
foxtail millet (*priyaṅgū*) see foxtail millet (*priyaṅgu*) : 200
fragrant lotus (*saugandhika*) A type of white water-lily (*kumuda*) or blue water-lily (*utpala*), GVDB: 457 : 35
fruit of the marking-nut (*āruṣkara*) see marking-nut tree (*aruṣkara*). "āruṣkara = aruṣkara phala" ADPS: 23; see also MW: 151 : 182
gajpipul (*gajapippalī*) GVDB: 469, 132, syn. *hastipippalī*. A controversial plant, but the conjecture of Singh and Chunekar that Scindapsus officinalis (Roxb.) Schott is the more ancient identity is accepted here : 291, 309
gajpipul (*hastipippalī*) see gajpipul (*gajapippalī*), GVDB: 469, 132 : 198
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) : 292
galls (?) (*karkaṭa*) almost impossible to identify with certainty, GVDB: 78–80. Perhaps Rhus succedanea, L. See NK: 1, #2136 : 140
garjan oil tree (*aśvakarṇa*) Dipterocarpus turbinatus Gaertn. f. See GVDB: 28, Chopra: 100 : 152, 197, 200
giant potato (*kṣīravidārī*) possibly → *kṣīraśukla*. Ipmoea mauritiana, Jacq. See ADPS: 510, AVS: 3, 222, AVS: 3, 1717 ff : 105, 295, 299, 300, 302
ginger (*mahauṣadha*) Zingiber officinale, Roscoe. See ADPS: 50, NK: 1, #2658, IGP: 1232 : 134
gold (*hema*) gold : 147
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" : 153
golden shower tree (*rājadruma*) see golden

shower tree (*āragvadha*) : 152
golden shower tree (*rājavṛkṣa*) see golden shower tree (*āragvadha*) : 77
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 : 107, 180, 190, 192, 291, 292
gourd (*alābu*) Lagenaria siceraria Standl. GVDB: 25. Some say Lagenaria vulgaris, Seringe (NK: 1, #1419) but this is not appropriate for blood-letting : 31, 32, 130, 178
gourd (*vallija*) see gourd (*vallīja*) : 140
gourd (*vallīja*) This is a guess. According to some lexical sources, syn. for black pepper (*marica*) (MW: 929). See NK: 1, #1929. Singh and Chunekar (GVDB: 362) note that *vallīphala* may be calabash 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." : 292
grapes (*drākṣā*) Vitis vinifera L. GVDB: 208–209 : 182
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 : 291, 296, 305
green gram (*māṣa*) Vigna radiata (L.) R. Wilcz. See ADPS: 296, IGP 1204 : 44, 105, 271
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." : 77, 104, 106, 181, 291
gummy gardenia (*pṛthvīkā*) ← *hiṅgupatrikā*, Gardenia gummifera L.f., GVDB: 257, q.v. for discussion : 182, 200
hairy bergenia (*pāṣāṇabheda*) Bergenia ligulata (Wall.) Engl. GVDB: 246–247 : 78
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 : 101, 107, 146, 147, 190, 192, 297
halfa grass (*darbha*) Demostachya bipinnnata Stapf. GVDB: 201. Synonym of *kuśa* : 80, 105
halfa grass (*kuśa*) Desmostachya bipinnata, (L.) Stapf. GVDB: 111, AVS: 2, 326 : 105, 175, 198
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 : 182
hare foot uraria (*pṛthakparṇī*) → hare foot uraria (*pṛśniparṇī*) and rajmahal hemp (*mūrvā*) GVDB: 257. A component of lesser five roots : 107, 297
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 : 104, 105, 292
heart-leaf sida (*balā*) Sida cordifolia, Linn. See ADPS: 71, NK: 1, #2297 : 53, 105, 108, 110, 147, 270
heart-leaved moonseed (*amṛtā*) → *guḍūcī*. Tinospora cordifolia, (Willd.) Hook.f. & Thoms.? See ADPS: 38, NK: 1, #2472, 624, Dastur #229 : 131, 146, 192
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) : 77, 106
heart-leaved moonseed (*somavallī*) Tinospora cordifolia (Thunb.) Miers. GVDB: 456. Likely, but uncertain : 131
heart-leaved moonseed creeper (*amṛtavalli*) See *amṛtā* : 270
hedge caper (*hiṃsrā*) Capparis sepiaria L., GVDB: 471, IHR: 124, K & B: 1, 109 : 293
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" : 192
henna (*madayantikā*) Lawsonia inermis, L. See AVS: 3, 303, NK: 1, #1448, Potter$_{rev}$: 151 : 132
hibiscus (?) (*ambaṣṭhā*) possibly Hibiscus rosa-sinensis L.? 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. 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 : 183
Himalayan birch (*bhūja*) see Himalayan birch (*bhūrja*) : 198
Himalayan birch (*bhūrja*) Betula utilis D. Don, GVDB: 287 : 293
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)) : 153, 181, 182, 192
Himalayan yew (*sthauṇeya*) see Himalayan yew (*sthauṇeyaka*) : 200
Himalayan yew (*sthauṇeyaka*) 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 : 181, 293
hogweed (*punarnavā*) Boerhaavia diffusa, L. See ADPS: 387, AVS: 1, 281, NK: 1, #363 : 107, 132, 146, 183, 293
hogweed (*punarṇavā*) see hogweed (*punarnavā*) : 191
hogweed (*punarṇṇavā*) see hogweed (*punarnavā*) : 194
hogweed (*varṣābhu*) see hogweed (*varṣābhū*) : 191
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*) : 293
Holostemma creeper (*jīvantī*) → *sūryavallī*? Holostemma ada-kodien,

Schultes. See ADPS: 195, AVS: 3, 167, 169, NK: 1, #1242 : 108, 300
holy basil (*surasa*) Ocimum tenuiflorum, Linn. GVDB: 438–439 : 183
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* : 113, 134, 210, 211
horned pondweed (*śaivāla*) also *śaivāla*, *śevāra*. Zannichellia palustris L. The uncertainties of this identification are discussed by Singh and Chunekar (GVDB: 409). Sometimes identified with scutch grass (*dūrvā*) (GVDB: 409). Identified as Ceratophyllum demersum Linn. ("hornwort") by AVS: 2, 56–57x : 106, 294, 301
hornwort (*jalaśūka*) → *jalanīlikā*. Ceratophyllum demersum, L. See AVS: 2, 56, IGP: 232. 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 : 53
horse gram (*kaulattha*) See horse gram (*kulattha*) : 176
horse gram (*kulattha*) Macrotyloma uniflorum (Lam.) Verdcourt, syn. Dolichos biflorus, L., D. uniflorus, Lam., GVDB: 109, POWO: sub Macrotyloma uniflorum : 109, 110, 180, 201, 294
horseradish tree (*madhukaśigru*) Moringa oleifera Lam., GVDB: 398–399. See horseradish tree (*śigru*) : 197
horseradish tree (*muruṅgī*) see horseradish tree (*śigru*) (GVDB: 311) : 182
horseradish tree (*śigru*) Moringa oleifera Lam. See IGP: 759, GJM1: 603, Dymock: 1, 396, GVDB: 398–399 : 106, 107, 294
hyacinth beans (*niṣpāva*) Lablab purpureus (L.) Sweet (1826) GVDB: 228 : 95
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 : 96, 132, 134, 153, 198, 200, 294
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) : 140, 141, 286, 294
Indian aconite (*viṣā*) see Indian aconite (*ativiṣā*), GVDB: 12, 373 : 286, 301
Indian barberry (*añjana*) see Indian barberry (*dāruharidrā*) Cf. elixir salve (*rasāñjana*) : 54, 133, 290
Indian barberry (*dāruharidrā*) Berberis holstii Engl., Dymock: 1, 65, NK: 1, #335, #685, GJM1: 562, IGP: 141, GVDB: 203 : 146, 147, 294, 305
Indian barberry (*dārvī*) see Indian barberry (*dāruharidrā*) : 211
Indian barberry (*kālīyaka*) see Indian barberry (*dāruharidrā*) : 131
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. : 81
Indian bdellium-tree (*guggula*) See Indian

bdellium-tree (*guggulu*) : 181
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) : 113, 294
Indian beech (*naktamāla*) Pongamia pinnata, (L.) Pierre. See AVS: 4, 339, NK: 1, #2003 : 44, 101
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*) : 107, 146
Indian cherry (*śelū*) see Indian cherry (*śleṣmātakī*), GVDB: 408 : 200
Indian cherry (*śleṣmātakā*) see Indian cherry (*śleṣmātakī*) : 197
Indian cherry (*śleṣmātakī*) Cordia dichotoma G. Forst., AVS: 2, 180–183. See POWO: C. dichotoma; Cordia myxa L., according to 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.) : 182, 295
Indian dill (*śatapuṣpā*) Anethum graveolens L. May also be Foeniculum vulgare Mill. See GVDB: 388 for discussion : 108, 200
Indian elm (*cirabilva*) Holoptelea integrifolia (Roxb.) Planch. GVDB: 158, who also say that *pūtika* is a synonym; but that must be different than *pūtikā* : 295
Indian elm (*ciribilva*) see Indian elm (*cirabilva*) : 197
Indian frankincense (*agamṛttikā*) see Indian frankincense (*śallakī*), according to Ḍalhaṇa's comment on *Suśrutasaṃhitā* 5.7.29. A variant form of Indian frankincense (*agavṛttikā*) : 192
Indian frankincense (*agavṛttikā*) see ?? (*nagavṛttikā*), GVDB: 3, 392 : 295
Indian frankincense (*gajavṛttikā*) Boswellia serrata Roxb.; equated with Indian frankincense (*śallakī*) by some, GVDB: 392. See also ?? (*nagavṛttikā*) : 182
Indian frankincense (*śallakī*) Boswellia serrata Roxb., GVDB: 392 : 192, 295
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 : 295
Indian fumitory (*reṇu*) see Indian fumitory (*parpaṭa*), GVDB: 339. To be distinguished from pollen (?) (*reṇukā*) : 139
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 : 53, 106, 300
Indian jujube (*sauvīraka*) Zizphus jujuba Mill., GVDB: 458, MBG: sub jujuba : 105, 176
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 : 53, 77
Indian laurel (*plakṣa*) Ficus microcarpa, L. f. See ADPS: 377 : 198
Indian madder (*mañjiṣṭhā*) Rubia cordifolia, L. See IGP, Chopra: 215, GVDB: 289 : 49, 147, 181, 182, 191, 198
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) : 33

Indian mustard (*sarṣapa*) Brassica juncea, Czern. & Coss. See AVS: 1, 301, NK: 1, #378, GVDB: 426–427 : 36, 140, 198, 298

Indian pennywort (*maṇḍūkaparṇī*) Centella asiatica (L.) Urban. See GVDB: 290, ADPS: 289–291 : 183

Indian sarsaparilla (*sugandhikā*) see Indian sarsaparilla (*śvetasārivā*) GVDB: 430, 436 : 182, 200

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 : 147, 287, 291, 296

Indian sarsaparilla (*śvetasārivā*) Hemidesmus indicus, (L.) R. Br. See Indian sarsaparilla (*sārivā*). ADPS: 434, AVS: 3, 141–145, NK: 1, #1210, GVDB: 430 : 296

Indian snakeroot (*sarpagandhā*) Rauvolfia serpentina, (L.) Benth. ex Kurz. See NK: 1, #2099, ADPS: 439, GVDB: 425; cf. SS 5.5.76–78 : 183, 296

Indian snakeroot (*sarvagandhā*) common spelling in Nepalese MSS for Indian snakeroot (*sarpagandhā*), q.v. : 192

Indian symphorema (*ananta*) Not in GVDB but MW: 25 says "*sinduvāra*" on no authority (see Indian symphorema : 198

Indian symphorema (*sinduvāra*) 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 : 181, 183, 191, 200, 296

Indian trumpet tree (*śyonāka*) Oroxylum indicum (L.) Benth. ex Kurz. GVDB: 172–173. A component of greater five roots : 296

Indian trumpet tree (*ṭiṇṭuka*) → Indian trumpet tree (*śyonāka*). Oroxylum indicum (L.) Benth. ex Kurz. GVDB: 172–173. A component of greater five roots : 292

Indian trumpet tree (*ṭuṇṭuka*) see Indian trumpet tree (*śyonāka*), GVDB: 172–173 : 198

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) : 192, 296

indigo (*nīlā*) see indigo (*nīlinī*). Although 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*) : 191

indigo (*nīlī*) see indigo (*nīlinī*) : 200, 296

Indrajao (*indrayava*) see *vṛkṣaka* (Indrajao) Holarrhena pubescens Wall. ex G.Don 1837 GVDB: 376, 45 and 84 : 96

Indrajao (*vṛkṣaka*) → *indrayava*, *indrabīja*, *kaliṅga*, and *kuṭaja*. Holarrhena pubescens Wall. ex G.Don 1837 GVDB: 376, 45 and 84 : 79, 270, 296

itchytree (*nicula*) Barringtonia acutangula

(L.) Gaertn., GVDB: 224 : 198
jambul (*jambū*) Syzygium cumini, (L.) Skeels. See ADPS: 188, NK: 1, #967, Potter$_{rev}$: 168, Wujastyk 2003 : 130, 210
jequirity (*guñjā*) Abrus precatorius, L. See AVS: 1, 10, NK: 1, #6, Potter$_{rev}$: 168. See further jequirity (*kālakūṭa*) : 138, 139
jequirity (*kālakūṭa*) Abrus precatorius, L.? Cf. RRS 21.14. See AVS: 1, 10, NK: 1, #6, Potter$_{rev}$: 168. 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 : 140, 141, 297
kutki (*kaṭukā*) Picrorhiza kurroa Royle ex Benth. (GVDB: 64–65) : 96, 113, 297, 299
kutki (*kaṭurohaṇī*) → kutki (*kaṭukā*), GVDB: 66, 64–65 : 181
kutki (*kaṭurohiṇī*) see kutki (*kaṭukā*), GVDB: 66, 64–65 : 200
leadwort (*agniśikhā*) Plumbago zeylanica (or rosea?), L. See NK: 1, #1966, 1967 : 297
leadwort (*citraka*) Plumbago zeylanica (or indica?), L. See RĀ. 6.124, ADPS: 119, NK: 1, #1966, 1967 : 44, 78, 96, 101, 112, 181
leadwort (*pālaka*) → citraka. Plumbago zeylanica (indica? rosea?), L. See Rā. 6.124, ADPS: 1, 119, NK: 1, #1966, 1967 : 140, 141
leadwort (*vidyutśikhā*) see leadwort (*agniśikhā*) : 138
lemon grass (*uśīrabheda*) → *lāmajja*. Cymbopogon jwarancusa (Jones ex Roxb.) Schult.. See NK: 1, #176 : 306
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 : 288, 291–293, 305, 309
liquorice (?) (*klītaka*) Glycyrrhiza glabra, L.? GVDB: 123–124 discuss the many difficulties in identifying this plant : 138
liquorice (*madhuka*) also *yaṣṭi*(*ka*/*kā*), *yaṣṭīmadhuka*, Glycyrrhiza glabra, L. AVS: 3, 84, NK: 1, #1136, GVDB: 329 f. : 53, 77, 104–109, 111, 134, 145, 147, 181, 197, 200, 211, 297
liquorice (*yaṣṭī*) see liquorice (*madhuka*) : 182
liquorice (*yaṣṭīmadhuka*) see liquorice (*madhuka*) : 54
lodh tree (*lodhra*) Symplocos racemosa, Roxb. See GJM1: 597, ADPS: 279 f, NK: 1, #2420. 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* : 44, 147, 181, 211
long pepper (*kṛṣṇā*) see long pepper (*pippalī*) : 210
long pepper (*māgadha*) see long pepper (*pippalī*) : 133
long pepper (*pippali*) see long pepper (*pippalī*) : 181
long pepper (*pippalī*) Piper longum, L. See ADPS: 374, NK: 1, #1928, GVDB: 249–250, but cf. AVS: 3, 245 : 77, 78, 101, 107, 108, 112, 113, 134, 147, 198, 201, 210, 270, 297, 305
long pepper root (*pippalīmūla*) see long pepper (*pippalī*) : 198
long-stamen Wendlandia (?) (*prapauṇḍarīka*) See the substantial discussion by 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 : 140, 181, 200, 298

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 : 200, 306

lotus (*nalina*) see sacred lotus (*kamala*), GVDB: 218 : 210, 211

lotus stalk (*mṛṇāla*) "Leaf stalk of sacred lotus" GVDB: 318 : 106

luffa (*jālinī*) see luffa (*koṣātakī*), GVDB: 168 : 140, 190

luffa (*kośavatī*) see luffa (*koṣātakī*) : 146

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 : 298

mahua (*madhūka*) Madhuca longifolia, (J. Koenig) J. F. Macbride. See AVS: 3, 362 f. Known to ancient Greek authors (Ball 1888: 339–340) : 77, 214–216

maidenhair fern (*haṃsāhvayā*) Adiantum lunaluatum Burm f. GVDB: 463 : 270

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. 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) : 98, 99, 106, 131, 147, 189, 190, 200

Malay beechwood (*śrīparṇī*) → *kāśmarī*. Gmelina arborea Linn., GVDB: 412, 96–97 : 77

maloo creeper (*aśmantaka*) 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 : 183, 197

mango (*āmra*) Mangifera indica Linn. GVDB: 37 : 130, 183, 198, 210

mangosteen (*amla*) Garcinia pedunculata Roxb. ex Buch.-Ham. See GVDB: 20–21 : 180

marking nut tree (?) (*sārṣapa*) this would normally mean "connected with mustard," (Indian mustard (*sarṣapa*)) and excessive consumption of mustard oil can be harmful. 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) : 141

marking-nut tree (*aruṣkara*) see

marking-nut tree (*bhallātaka*) : 139, 291
marking-nut tree (*bhallātaka*) Semecarpus anacarium, L. See NK: 1, #2269, AVS: 5, 98, ADPS: 85–86, GVDB: 23, 283 : 101, 133, 299
marsh barbel (*ikṣuraka*) Hygrophila auriculata (Schumach.) Heine (syn. Asteracantha longifolia (L.) Nees.), GVDB: 42–43 : 198
medhshingi (*vijayā*-2) Dolichandrone falcata (Wall. ex DC.) Seem. 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) : 139
migraine tree (*agnimantha*) Premna corymbosa, Rottl. See AVS 1927, ADPS: 21, NK: 1, #2025, AVS: 4, 348; GJM1: 523: = P. integrifolia/serratifolia, L : 146, 292
milk-white (*kṣīraśuklā*) An unidentified plant. GVDB: 126: see purple roscoea and giant potato : 53, 302
monkey (?) (*markaṭa*) 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 : 142
muddy (?) (*kardama*) unknown. : 140, 142
mulberry (*kramuka*) probably the mulberry (*tūda*); see discussion by Singh and Chunekar (GVDB: 122) : 182
mulberry (*tūda*) Morus indica L., GVDB: 189 : 299
mung beans (*mudga*) Phaseolus radiatus L. GVDB: 310–311 : 105, 108, 216
mung beans (*māṣaka*) Phaseolus mungo Linn. GVDB: 308 : 131
munj grass (*nārācaka*) Saccharum bengalense, Retz.?. See NK: 1, #2184 : 140
musk mallow (*latākastūrikā*) Abelmoschus moschatus Medik., GVDB: 348 : 299
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) : 299
musk mallow (*ullika*) see musk mallow (*ullaka*) : 139
myrobalan (*abhayā*) Terminalia chebula, Retz. See ADPS: 172, NK: 1, #2451, Potter$_{rev}$: 214 : 96, 146, 153
myrobalans (*pathyā*) Terminalia chebula Retz. See NK: 1, #2451 : 210
natron (*suvarcikā*) Sodium carbonate. NK: 2, #45. Ḍalhaṇa identifies *suvarcikā* with svarjikṣāra 4.8.50 (Su 1938: 441) : 112, 147, 181
neem (*picumarda*) see neem tree (*nimba*), GVDB: 247–248 : 197
neem tree (*nimba*) Azadirachta indica A. Juss., GVDB: 226 : 50, 270, 299
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. Singh and Chunekar (GVDB: 108) added that it could be a variety of rice, *ṣaṣṭika dhānya* : 153
nutgrass (*mustaka*) Cyperus rotundus, L. See ADPS: 316, AVS: 2, 296, NK: 1, #782 : 140, 142
nutgrass (*mustā*) Cyperus rotundus, L. See ADPS: 316, AVS: 2, 296, NK: 1, #782 : 299
odal oil plant (*iṅgudi*) see odal oil plant : 189
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*. : 299
oleander spurge (*mahāvṛkṣa*) see oleander spurge (*snuhī*), GVDB: 302-303 : 197
oleander spurge (*nandā*) see oleander spurge (*snuhī*), GVDB: 215 : 304
oleander spurge (*snuhā*) see oleander spurge (*snuhī*) : 101, 140, 191
oleander spurge (*snuhī*) Euphorbia neriifolia, L., or E. antiquorum, L. See ADPS: 448, AVS: 2, 388, AVS: 3, 1, NK: 1, #988, IGP: 457b. 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 : 300, 304
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) : 176
paddy rice (*śāli*) Oriza sativa, Linn. GVDB: 395–396 mentioning 33 Sanskrit sub-variety names; AVS: 4, 193 : 37, 302
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 : 192
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 : 200
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 : 146, 295
peas (*hareṇu*) Pisum sativum, L. 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 : 106, 146, 147, 153, 182, 210, 300, 301
peas (*hareṇukā*) see peas (*hareṇu*) : 200
peas (*satīna*) see peas (*hareṇu*), GVDB: 419-420 : 300
peepul tree (*aśvattha*) Ficus religiosa, L. See ADPS: 63. Known to ancient Greek authors (Ball 1888: 338–339) : 156
periploca of the woods (*meṣaśṛṅga*) Gymnema sylvestre (Retz.) R. Br. See AVS: 3, 107, NK: 1, #1173 : 133
phalsa (*parūṣaka*) Grewia asiatica Linn., GVDB: 238 : 78
plants like asthma plant and Gulf sandmat (*dugdhikā*) synonym of plants like asthma plant and Gulf sandmat (*kṣīriṇī*), GVDB: 204–205, 127 : 300
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) : 295, 300
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 : 200
plumed cockscomb (*indīvara*) Uncertain; possibly Celosia argentea Linn. But see

the useful discussion in GVDB: 44–45. Possibly another name for thorn apple (*karambha*), q.v. : 305

pointed gourd (*paṭola*) Trichosanthes dioica, Roxb., GVDB: 232–233 : 106, 146, 287

poison-altar (?) (*viṣavedikā*) Unknown. Possibly, at a guess, strychnine tree (*viṣamuṣṭika*)? GVDB: 373 Or Indian aconite (*viṣā*) : 139

pollen (?) (*reṇukā*) An unidentifiable plant. Perhaps a misreading for peas (*hareṇu*), although this is a long shot. Singh and Chunekar (GVDB: 339) suggest, on no authority, the synonyms *vṛkṣaruhā, māṃsarohiṇī*, or *durvā*, none of which help : 139, 295

pomegranate (*dāḍima*) Punica granatum Linn. GVDB: 201–202 : 77, 78, 111, 112, 183, 192

pondweed (*paripelavā*) Normally a neuter noun. 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 : 147

pondweed (*śevāla*) Zannichellia palustris L. See horned pondweed : 35

pongame oiltree (*karañja*) see pongame oiltree (*karañjikā*) : 113, 192

pongame oiltree (*karañjikā*) Singh and Chunekar (GVDB: 74–76) discuss complications, but probably Pongamia pinnata (L.) Pierre in *Suśrutasaṃhitā* 5.6.3 : 198, 301

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 : 200, 301

powdered ruffle lichen (*śaileyaka*) see powdered ruffle lichen (*śaileya*) : 181

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 : 49, 53, 105, 199, 301

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) : 78

prickly-leaved elephant's foot (*gojihvā*) syn. *gojī*. Elephantopus scaber, L. See AVS: 2, 357. 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 : 301

prickly-leaved elephant's foot (*gojī*) 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. : 198

products of the wood-apple (*kāpitta*) a reading in the Nepalese MSS for products of the wood-apple (*kāpittha*), q.v. : 193

products of the wood-apple (*kāpittha*) relating to or derived from the wood-apple (*kapittha*) : 301

purging nut (*dravantī*) Jatropha curcas, L. See AVS: 3, 261, NK: 1, #1374. A.k.a. *mūṣikaparṇī* : 301

purging nut (*mūṣikā*) Jatropha curcas, L. See AVS: 3, 261, NK: 1, #1374 : 133

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*) : 198

purging nut tree (*mūṣikakarṇī*) Jatropha curcas, L. AVS: 3, 261, NK: 1, #1374, GVDB: 317. GVDB: 317; ADPS: 23–25 discuss this issue well : 131, 132

purple calotropis (*arka*) Calotropis gigantea, (L.) R. Br. See ADPS: 52, AVS: 1, 341, NK: 1, #427, Potter$_{rev}$: 57, Chopra IDG: 305–308 : 44, 53, 101, 176, 194, 197

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. : 200

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 : 105, 295, 299

pussy willow (*vetasa*) Salix caprea L., GVDB: 380–381, q.v. for the argument that this is not the same as rattan (*vetra*) : 302

pussywillow (*vañjula*) see pussy willow (*vetasa*); Singh and Chunekar (GVDB: 356) note that this is a tree in the *nyagrodha* group and has sometimes been equated with Asoka tree (*aśoka*) and sometimes with sandan (*tiniśa*) : 106, 198

radish (*mūlaka*) Raphanus sativus, L. See NK: 1, #2098 : 110, 140, 142

rajmahal hemp (*moraṭa*) → *mūrvī*, Marsdenia tenacissima (Roxb.) Wight et Arn. Good discussion at GVDB: 314–316, 324 : 146

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*. 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 : 108, 292

rattan (*vetra*) Calamus rotang, L. See AVS: 1, 330, NK: 1, #413. Singh and Chunekar (GVDB: 381) prefer C. tenuis, Roxb., which is also native to S. and S.E. Asia : 302

realgar (*manaḥśilā*) Arsenii disulphidium NK: 2, #11 : 210

red gourd (*bimbī*) Coccinia indica, W. & A. See PVS 1994.4.715; NK: 1, #534 : 130

red ochre (*gairika*) Hellwig 2009: 140–141. NK: 2, #40; the same source, at #6, gives kaoolinum or china clay : 147, 181, 183, 200, 210, 211

red physic nut (*dantī*) Baliospermum solanifolium (Burm.) Suresh, GVDB: 200 : 99, 140, 192, 198, 301

resin of white dammer tree (*sarjarasa*) GVDB: 424–425. See white dammer tree (*sarja*) : 108, 200

rice grains (*taṇḍula*) Oriza sativa, Linn. Same as paddy rice (*śāli*) GVDB: 174; or just "grains" : 37

rice-grain chaff (*śālitaṇḍulakāṇḍana*) See chaff : 36

rock salt (*saindhava*) See NK: 2, M#48, Watt$_{Comm}$: 963–971 : 36, 77, 112, 181, 210, 288

rosha grass (*dhyāmaka*) Cymbopogon martinii (Roxb.) Wats. See AVS: 2, 285, NK: 1, #177 : 147, 181, 200

royal jasmine (*mālatī*) Jasminium grandiflorum, L. See NK: 1, #1364, ADPS: 285–288 : 131, 303

royal jasmine (*sumanā*) see royal jasmine (*mālatī*), GVDB: 437 : 200

sacred lotus (*kamala*) Nelumbo nucifera, Gaertn., GVDB: 73–74, Dutt: 110, NK: 1, #1698 : 298, 303

sacred lotus (*padma*) see sacred lotus (*kamala*), GVDB: 235–236 : 35, 106, 131, 200, 307

saffron (*bāhlīka*) syn. of saffron (*kuṅkuma*), q.v., GVDB: 273–274 : 198

saffron (*kuṅkuma*) Crocus sativus Linn., GVDB: 100 : 192, 303

sage-leaved alangium (*aṅkolla*) Alangium salvifolium (Linn. f.) Wang., GVDB: 5–6. See also AVS: 1, 77; cf. NK: 1, #88 : 130, 183, 190, 192, 303

sage-leaved alangium (*aṅkoṭha*) see sage-leaved alangium (*aṅkolla*) : 197

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 : 78

sal tree (*śālā*) Shorea robusta, Gaertn.f. See AVS: 5, 124 : 210

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.)) : 79, 106, 108, 147, 176, 182, 200, 307

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, Singh and Chunekar (GVDB) suggest Lagerstroemeia parviflora Roxb. (*sidhraka*/*siddhaka*) and L. flos-reginae Retz. (*jārula* by some). See GVDB: 432 : 197, 200, 302

sappanwood (*pattāṅga*) Also *pattaṅga*. Caesalpinia sappan, L. AVS: 1, 323, K & B: 2, 847 f, GVDB: 234 : 44, 54

scarlet mallow (*bandhujīva*) Pentapetes phoenicea, L. NK: #1836, GVDB: 268 : 132

scented pavonia (*bālaka*) Pavonia odorata, Willd. See ADPS: 498, NK: 1, #1822 : 147

scented pavonia (*toya*) → bālaka? Pavonia odorata, Willd. ADPS: 498, NK: 1, #1822 : 200

scramberry (*tālīsapatra*) see scramberry (*tālīśa*) : 200

scramberry (*tālīśa*) 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) : 106, 211, 303

screwpine (*ketaka*) Pandanus tectorius Parkinson ex Du Roi, GVDB: 116 : 286

scurfy pea (*bākucī*) Identified as Cullen corylifolia (L.) Medik. ADPS: 69–70, GVDB: 272 : 302

scutch grass (*dūrvā*) Cynodon dactylon (Linn.) Pers., GVDB: 205 : 294, 303

scutch grass (*granthilā*) see scutch 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*) : 200

sedge (*kuṭannaṭa*) → *plava*, *tagara*, or *śyonāka*, according to commentators (GVDB: 102–103). 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 : 181, 304
sedge (*kuṭannaṭā*) see sedge (*kuṭannaṭa*) : 200
sesame (*tila*) Sesamum indicum L. GVDB: 183. Known to ancient Greek authors (Ball 1888: 344) : 200, 201
sesame oil (*taila*) Sesamum indicum L. GVDB: 183 : 53, 176
shami tree (*śamī*) Prosopis cineraria (L.) Druce GVDB: 390 : 197, 288
sheep (*urabhra*) Ovis orientalis, Gmelin?. See BIA 249 : 205
silk-cotton tree (*śālmalī*) Bombax malabarica. See Issar: 152 : 200
siris (*śirīṣa*) Albizia lebbeck, Benth. See AVS: 1, 81, NK: 1, #91, GVDB: 399–400. Cf. white siris : 146, 176, 189–193, 199, 200, 210, 307
siris seeds (*śirīṣamāṣaka*) Albizia lebbeck, Benth. See AVS: 1, 81, NK: 1, #91 : 130, 191
small-flowered crape myrtle (*sidhraka*) Lagerstroemia parviflora Roxb., GVDB: 432 : 152
smooth angelica (*coraka*) Angelica glauca Edgw. GVDB: 161. Distribution: Afghanistan, Himalaya, western Tibet (POWO). Edgeworth even recorded the indigenous name "chura" (Edgeworth 1851: 53) : 183, 198, 304
smooth angelica (*taskara*) see smooth angelica (*coraka*), GVDB: 176 : 200
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) : 138
spikenard (*jaṭā*) see spikenard (*jaṭāmāṃsī*) : 191, 200
spikenard (*jaṭāmāṃsī*) Nardostachys jatamansi (D.Don) DC, GVDB: 163. See also NK: 1, #1691. Known to ancient Greek authors (Ball 1888: 343–344) : 304
spikenard (*māṃsī*) see spikenard (*jaṭāmāṃsī*) : 147, 182, 200
spikenard (*nalada*) see spikenard (*jaṭāmāṃsī*) : 128, 182, 200
spiny bitter gourd (*karkāruka*) Momordica cochinchinensis (Lour.) Spreng., (Thunb.) Cogn. SeeAVS: 2, 1135, IGP 754 (or Beninkasa hispida?AVS: 2, 1127; cf. AVS: 1, 261). M cochinchinensis has poisonous seeds (NEH: 279) : 292
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*) : 139
spurge (*saptalā*) Singh and Chunekar (GVDB: 421–422) discuss the four candidates for this plant, three of which are Euphorbias : 110, 183
strychnine tree (*viṣamuṣṭika*) Strychnos nux vomica Linn., GVDB: 373 : 301
sugar (*sitā*) Ḍalhaṇa makes this equation at 1.37.25 (Su 1938: 162) : 147, 182
sugar (*śarkara*) Saccharum officinarum, Linn. NK: #2182 : 134
sugar cane (*ikṣu*) Saccharum officinarum, Linn. NK: #2182 : 134
sunflower (*sūryavallī*) → *ādityavallī*, *sūryamukhī*, Helianthus annūs Linn. GVDB: 35, 443 : 146
sweet flag (*vacā*) Acorus calamus Linn. See GVDB: 352–355 : 105, 112, 198
sweet plants (*madhuravarga*) The sweet plants are enumerated at *Suśrutasaṃhitā* 1.42.11. See also GVDB: 127 : 53
sweet-scented oleander (*aśvamāraka*) Nerium oleander, L. See ADPS: 223, NK: 1, #1709, GVDB: 77, which

discusses the white and red forms : 138
teak (*śāka*) Tectona grandis, L.f. See AVS: 5, 245, (MW: 1061) : 197
Tellicherry bark (*kuṭaja*) Holarrhena pubescens Wall. ex G.Don, with Wrightia tinctoria and W. arborea considered GVDB: 101–102, ADPS: 267–270 : 101, 197, 291
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 : 291
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 : 99, 181, 182, 191, 192, 287
the three pungent drugs (*kaṭutrika*) see the three pungent drugs (*trikaṭu*) : 193, 200
the three pungent drugs (*trikaṭu*) dried ginger, long pepper, and black pepper (*śuṇṭhī*, *pippalī*, and *marica*) GVDB: 193 : 181, 305
the three pungent drugs (*vyoṣa*) see the three pungent drugs (*trikaṭu*), GVDB: 382–383 : 192
the two types of clitoria (*śvete*) see white clitoria (*śvetā*) : 200
the two types of turmeric (*haridre*) see turmeric (*haridrā*) and Indian barberry (*dāruharidrā*), GVDB: 465–466 : 200
thorn apple (*karambha*) Datura metel, L. See GVDB: 76 for useful discussion. Also, AVS: 2, 305 (cf. Abhidhānamañjarī), NK: 1, #796 ff. Potter$_{rev}$: 292 f, ADPS: 132. Possibly the same plant as plumed cockscomb (*indīvara*) (GVDB: 76, 44–45) : 139, 140, 287, 301
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 : 79, 146
three-leaved caper (*varuṇa*) Crataeva magna (Lour.) DC. See AVS: 2, 202; cf. NK: 1, #696 : 133, 183, 198, 305
three-leaved caper (*varuṇaka*) see three-leaved caper (*varuṇa*) : 200
toothed-leaf limonia (*surasī*) Naringi crenulata (Roxb.) Nicolson (formerly Limonia crenulata Roxb.), GVDB: 439 : 182, 200
top layer of fermented liquor (*surāmaṇḍa*) K & B: 2, 502, NK: 2, appendix VI, #49, McHugh 2021: 39 : 51, 52
tree cotton (*kārpāsa*) Gossypium arboreum L. ADPS: 231, *pace* the identifications of Singh and Chunekar (GVDB: 92, 247), since G. barbadense L. is native to South America and G. herbaceum L. is native to Africa : 50, 305
tree cotton (*picu*) See tree cotton (*kārpāsa*) : 52, 54
tree of heaven (*arala*) probably Alianthus excelsa Roxb., GVDB: 21–22 : 197
turmeric (*gaurī*) Curcuma longa, L. See ADPS: 169, AVS: 2, 259, NK: 1, #750 : 106
turmeric (*haridrā*) Curcuma longa Linn. GVDB: 465 : 107, 146, 153, 181, 305
turmeric (*rajanī*) Curcuma longa, L. ADPS: 169, AVS: 2, 259, NK: 1, #750 : 36, 147, 182, 192
turpeth (*trivṛt*) → *tṛvṛtā*. Operculina turpethum (Linn.) Silva Manso = Ipmoea turpethum R. Br. GVDB: 197. : 99, 134, 181, 272, 287
turpeth (*tṛvṛt*) The common spelling in Nepalese MSS of *trivṛt* : 192
two kinds of salt (*vasukavasira*) See the discussion by 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*) : 77
unknown fruit poison (*veṇuka*) see unknown fruit poison (*veṇukā*) : 139
unknown fruit poison (*veṇukā*) Bambusa bambos, Druce?. See NK: 1, #307, GVDB: 380. The Nepalese transmission has the m. *veṇuka*, not the f. *veṇukā* Singh and Chunekar (GVDB: 380) note that this is an unknown fruit-poison : 306
velvet bean (*svayaṃguptā*) Mucuna pruriens (L.) DC., GVDB: 461, who say that the plant is known in the *Carakasaṃhitā* but not the *Suśrutasaṃhitā* : 210, 306
velvet bean (*ārṣabhī*) see velvet bean (*ṛṣabhī*) and velvet bean (*svayaṃguptā*). *Mahākośa*: 1, 94, citing the *Rājanighaṇṭu* 3.50, 201 : 190
velvet bean (*ṛṣabhī*) see velvet bean (*svayaṃguptā*), MW: 226, GVDB: 56 : 306
velvet-leaf (*pāṭhā*) Cissampelos pariera, L. See ADPS: 366, NK: 1, #592, GJM1: 573, AVS: 1, 95; cf. AVS: 2, 277 : 44, 79, 96, 112, 146, 181, 182, 293
velvet-mite (*indragopa*) Kerria lacca (Kerr.). Lienhard 1978 : 129
verbena (*bhārgī*) see verbena (*bhārṅgī*) : 182, 200
verbena (*bhārṅgī*) → phañjī. Clerodendrum serratum (L.) Moon or C. serratum; see AVS: 2, 121, ADPS: 87 : 306
verbena (*phañjī*) Clerodendrum serratum, L. See AVS: 2, 121, ADPS: 87 : 132
vetiver (*uśīra*) Chrysopogon zizanioides (L.) Roberty, also called "khus." NK: 1, #180, GVDB: 54 identify it as vetiver : 78, 131, 176, 306
vetiver and lemon grass (?) (*uśīre*) "the two uśīras," perhaps vetiver (*uśīra*) and lemon grass (*uśīrabheda*) : 200
viburnum (*tilva*) see viburnum (*tilvaka*) : 192
viburnum (*tilvaka*) Viburnum nervosum D.Don. In their thoughtful article, 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 : 99, 198, 298, 306
viburnum extract (*tailvaka*) see viburnum (*tilvaka*), GVDB: 185, also a ghee compound of viburnum (*tilvaka*) : 210
'Virāṭa's plant' (*vairāṭaka*) unknown. See ? : 140, 142
water snowflake (?) (*kumudavati*) see water snowflake (?) (*kumudavatī*) : 140
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*)) : 139, 290, 306
watered buttermilk (*udaśvit*) MW: 183 : 130

weaver's beam tree (*mokṣaka*) see weaver's beam tree (*muṣkaka*) : 307
weaver's beam tree (*muṣkaka*) Schrebera swietenioides, Roxb. See AVS: 5, 88, Lord, NK: 1, #2246, GVDB: 242–243 : 101, 152, 307
weaver's beam tree (*pāṭalī*) usually a synonym for crimson trumpet-flower tree (*pāṭalā*), but Singh and Chunekar (GVDB: 242–243) argue that it is weaver's beam tree (*mokṣaka*) because some authors distinguish two colours (unlike *pāṭalā*) : 101, 197, 200
weaver's beam tree (*viśalyā*) Schrebera swieteniodes Roxb. ← *kuberākṣī*. 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* : 181
weevil wort (*tālamūlikā*) GVDB: 178–179 : 307
weevil wort (*tālapatrī*) → *tālamūlikā*, weevil wort, q.v. GVDB: 178 : 183
white babool (*arimeda*) Acacia leucophloea, (Roxb.) Willd. See AVS: 1, 23 : 44, 198
white calotropis (*alarka*) Calotropis procera, (Ait.) R. Br. See NK: 1, #428, Chopra: 46b, Chopra IDG: 305–308 : 53
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 : 131, 182, 191, 194, 199, 305
white cutch tree (*somavalka*) Acacia polyacantha, Willd. See AVS: 1, 30, IGP 7, GJM1: 602, AVS: 2, 935; *pace* NK: 1, #1038 : 132, 152
white dammer tree (*sarja*) Vateria indica, L. See NK: 1, #2571, AVS: 5, 349 f, AVS: 1, 292 f, Chopra: 253a. Singh and Chunekar (GVDB: 424) discussed whether this term might be broadened to any resinous tree and decided against : 44, 77, 302, 307
white dammer tree (*sarjja*) see white dammer tree (*sarja*) : 197
white lotus (*puṇḍarīka*) see sacred lotus (*padma*), GVDB: 252 : 142
white sandalwood (*bhadraśriya*) Santanlum album Linn. See white sandalwood (*bhadraśrī*) : 106, 200
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* : 79, 307
white siris (?) (*kapītana*) 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 : 197
white siris (*kaṭabhī*) Albizia procera (Roxb.) Benth. or A. lebbeck (Linn.) Benth. GVDB: 63–64, AVS: 1, 81–84. Cf. Cf. siris : 176, 304
white siris (*kiṇihī*) Albizia procera (Roxb.) Benth., GVDB: 98, which also discusses past confusions; NK: 1, #93 : 146, 182
white teak (*kārśmarī*) → *kāśmarī* : 211
white teak (*kāśmarya*) see white teak (*kāśmarī*) : 200
white teak (*kāśmaryā*) see white teak (*kāśmarī*) : 78
white teak (*kāśmarī*) → *kāśmarya, kārśmarī, madhuparṇī*. Gmelina arborea, Roxb. See GJM1: 543, Trees: 51, ADPS: 240, GVDB: 96–97 : 106, 108, 292, 307

white teak (*madhuparṇī*) → *kāśmarī* : 77
white water-lily (*kumuda*) Nymphaea alba, Linn., GVDB: 105 : 35, 200, 291
wild asparagus (*bahuputrā*) Asparagus racemosus, Willd. See further wild asparagus (*śatāvarī*) Possibly a syn. for *nandana*. The bark of wild asparagus is toxic : 132
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 : 104–106, 108, 216, 308
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) : 146, 308
wild celery (*ajamodā*) Apium graveolens, L. Sometimes identified with *agnika* (wild celery), q.v. : 146, 181
wild Himalayan cherry (*padmaka*) Prunus cerasoides D.Don, GVDB: 236, AVS: 4, 353–355. MW: 585 is wide of the mark : 106–108, 181, 182, 200
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 : 112
wild spider flower (*tailaparṇika*) see wild spider flower : 200
wild spider flower (*tilaparṇī*) Cleome gynandra L., GVDB: 184–185, but see the discussion of the other drug plants sometimes intended by this name : 308
wild sugar cane (*kāṇḍekṣu*) Saccharum spontaneum L., GVDB: 90 : 77
winged-stem canscora (*girihvā*) see winged-stem canscora (*girikarṇikā*) : 182
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 : 308
winged-stem canscora (*giryāhvā*) see winged-stem canscora (*girikarṇikā*) : 307
Withania (*aśvagandhā*) Withania somnifera (L.) Dunal. See AVS: 5, 409 f, Dymock: 2, 566 f, 150, GVDB: 29, Chevillard: 152 : 53, 100, 107, 182
wood-apple (*kapittha*) Limonia acidissima, L. See AVS: 3, 327, NK: 1, #1021 : 107, 131, 133, 183, 192, 193, 197, 210, 301
woody turmeric (*kāleyaka*) Coscinium fenestratum (Goetgh.) Colebr., GVDB: 95. See V. K. Gupta et al. 2015: 173–175 : 200
woody-fruited jujube (*gopaghoṇṭā*) Ziziphus xylopyra (Retz.) Willd. GVDB: 147 → *ghoṇṭā* : 198
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 : 297, 309

yellow-berried nightshade (*kṣudrā*) see yellow-berried nightshade (*kaṇṭakārī*), ADPS: 100, NK: 1, #2329, AVS: 5, 164 : 146, 147

Fauna

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 : 188, 190, 191

bad-marked rat (*kuliṅga*) etymologically, "having bad-marks" MW: 286, but unidentifiable : 188, 191

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" : 205

black drongo (*dhūmyāṭa*) Dicrurus adsimilis, Bechstein, Dave 1985: 63, 65, 199 : 128

black rat (*kṛṣṇa*) perhaps the widespread Black Rat or Common House Rat, Rattus Rattus L., BIA: 210 : 188, 190

brown rat (*kapila-animal*) name from etymology; unidentified; see tawny rat (*aruṇa*) : 188, 191

bull (*vṛṣabha*) MW: 1012, etc. Bos taurus, Linn. : 128

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 : 128, 134, 182

chukar partridge (*cakora*) Alectoris chukar, J. E. Gray, Woodcock 1980: 45, distributed from NW India to Nepal and Assam : 128

civet (*mārjāra*) BIA: ch. 4 *et passim*, McHugh 2012 : 182

common crane (*kroñca*) Grus grus, Linn., Woodcock 1980: 47, Dave 1985: ch. 62 : 128

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 : 188, 191

fondling rat (*lālana*) based on etymology. An unknown rat or mouse : 188, 189

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 : 188, 190

grey peacock-pheasant (*jīvajīvaka*) Polyplectron bicalcaratum, Linn., Dave 1985: 270, 273, 274, 281 : 128

hill myna (*sārikā*) Acridotheres tristis tristis, L., etc. See Ali and Ripley 1983: #1006, Dave (1985: 28 ff.), Woodcock (1980: 119) : 128

horned (*śṛṅgī*) unknown, based on

etymology : 205

house shrew (*chuchundara*) Suncus murinus (Linnaeus, 1766), Wikipedia, BIA: 168–169 and plate 38. Probably a Dravidian loan word related to Tamil *cuṇṭaṇ*, "grey musk shrew," see DED_2: #2661 and CDIAL: #5053 : 188, 190

hundred-kulimbhaka (*śatakulimbhaka*) unknown insect class. Perhaps centipedes : 205

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 : 205, 310

Indian monitor lizard (*godhā*) Varanus bengalensis (Daudin, 1802), Reptiles: 58–60, ill. : 53, 134, 310

Indian peafowl (*mayūra*) Pavo cristatus, Linn., Woodcock 1980: 39 : 128

invincible rat (*ajita*) etymological meaning; unidentifiable : 188, 191

koel (*kokila*) Eudynamys scolopaceus, Linn., Wikipedia, Woodcock 1980: 66 : 128

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 : 153, 182, 200

large Brown rat (*mahākapila*) from the etymology of the name, "large brown," perhaps a bandicoot : 191

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 474, p. 150. 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 : 82

lentil insect (*masūrika-insect*) usually the name of a lentil or the "lentil disease," namely smallpox. But here, an insect : 205

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: #4779 on *cikka* "mouse or muskrat," from lexical sources, and #4781 *cikkā* "small" from Drav., Burrow 1948: #141 : 188, 190

mole-rat (*kokila-animal*) Bandicota bengalensis (Gray & Hardwicke). Etymologically, "brown as a Kokila". CDIAL: #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) : 188, 191

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 : 134, 182

parakeet (*śuka*) Psittacula krameri, Scopoli (or P. eupatria or cyanocephala), See Woodcock 1980: 64 : 128, 192

pigeon rat (*kapota-animal*) a rat "like a pigeon;" presumably of grey colour : 188, 191

racket-tailed drongo (*bhṛṅgarāja*) Dicrurus paradiseus, Linn., Woodcock 1980: 123 : 128

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: #2095, Menon 2014, where it is called "house mouse" : 188, 191

red-toothed shrew (*kaṣāyadanta*) see red-toothed shrew (*kaṣāyadaśana*) : 191

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) : 188, 311

river dolphin (*śiśumāra*) Platanista gangetica (Lebeck), BIA: 313–314, plate on p. 289, MW: 1076 : 201

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") : 188, 189

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 : 128

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) : 200

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" ?? : 188, 191, 192, 309

tortoise (*kūrma*) Perhaps Geochelone elegans (Schoepff), Reptiles: 30 and plate, MW: 1076 : 201

tyalpavāca (*tyalpavāca*) unidentified insect; possibly a wrong reading : 205

uccitiṅga (*ucciṭiṅga*) unidenitified insect (unlikely: a crab, MW: 173) : 205

uṇḍu-navel (*uṇḍunābha*) unknown. 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). The vulgate of the *Suśrutasaṃhitā* reads *kumbhī-nāsa* "pot-nose" in place of this lexeme : 205

viciṭiṅga (*viciṭiṅga*) unidenitified insect (not in MW) : 205

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 : 188, 191

Minerals

ashes (*bhasma*) ashes, corrosive when wet : 140

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. : 140

orpiment (*haritāla*) Arsenii trisulphidum. See NK v. 2, p. 20 ff : 140

vermilion (*rakta*) speculative, based on *Mahākośa*: 1, 667, under *raktadhātu*, citing the *Dhanvantarīyanighaṇṭu* : 140

Glossary

@ - *avabāhuka*: 71

- *pratitūnī*: 71 - *pratyādhmāna*: 71
- *pratyaṣṭhīla*: 71

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burning sensation in feet - *pādadāha*: 70

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khañja - limpness: 70
kroṣṭukaśīrṣa - synovitis of knee join: 70f

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limpness - *khañja*: 70

manyāsthambha - rigidity of neck: 69
mimmira - mumbles: 71
monoplegia - *ekāṅgaroga*: 69
mūka - dumb: 71
mumbles - *mimmira*: 71

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- Perhaps *kalka* here could also mean the *Terminalia Bellerica* (विभीतक). 98
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