

A Translation of the Nepalese Text of the Suśrutasamhitā

Dominik Wujastyk Jason Birch Andrey Klebanov
Lisa A. Brooks Paras Mehta Madhusudan Rimal
Deepro Chakraborty Harshal Bhatt Jane Allred
et alii

Draft of 5th March 2025
© The Authors

Contents

Introduction	11
The date of the Suśrutasamhitā	11
The Nepalese Version	14
The vulgate	15
The Translation	16
 Part 1. Sūtrasthāna	 19
Sūtrasthāna 1: The Origin of Medical Knowledge	17
Literature	17
Translation	17
 Sūtrasthāna 2: The Initiation of a Student	 25
Literature	25
Translation	25
 Sūtrasthāna 3: The Table of Contents	 27
Literature	27
Translation	27
 Sūtrasthāna 10: Diagnosis	 29
 Sūtrasthāna 11: Preparing and using caustics	 31
 Sūtrasthāna 13: On Leeches	 33
Literature	33
Translation	33

Sūtrasthāna 14: On the Properties of Blood	41
Previous scholarship	41
Translation	41
Sūtrasthāna 16: Repairing Pierced Ears	49
Previous literature	49
Translation	49
Sūtrasthāna 28: Unfavourable Prognosis in Patients with Sores	59
Literature	59
Translation	59
Sūtrasthāna 46: The Rules about Food and Drink	61
Introduction	61
 Part 2. Nidānasthāna	 63
Nidānasthāna 1: The Diagnosis of Diseases Caused by Wind	65
Literature	65
Subject matter	65
Translation	65
Symptoms of diseases that arise because of a combination of five-winds with other humours	70
 Part 3. Śārīrasthāna	 77
Śārīrasthāna 2: On Semen and Menstrual Fluid	79
Literature	79
Translation	79
Diagnosis by humours	80
Therapies for menstrual blood	83
During menstruation	84
Types of persons	87
Birth irregularities	89

Śārīrasthāna 3: On Conception and the Development of the Embryo	93
Literature	93
Translation	94
 Part 4. Cikitsāsthāna	 97
Cikitsāsthāna 4: On the Treatment of Wind Diseases	99
Literature	99
Translation	99
 Cikitsāsthāna 5: On the Treatment of Serious Wind Diseases	 107
Literature	107
Translation	107
 Cikitsāsthāna 15: On Difficult Delivery	 119
Literature	119
Translation	119
 Part 5. Kalpasthāna	 123
Kalpasthāna: Introduction	125
The Sequence of Chapters	125
The Spread of Indian Toxicological Lore to Medieval Islamic Au- thors	126
The <i>Kalpasthāna</i> 's diffusion	126
 Kalpasthāna 1: Protecting the King from Poison	 129
Introduction	129
The meaning of "kalpa"	129
Chapter 1 of the Kalpasthāna	129
Literature	130
Manuscript notes	131
Translation	132
[Threats to the king]	132

Kalpasthāna 2: Poisonous Plants	141
Introduction	141
Shock	142
Literature	143
Translation	144
The effects of poisons	147
Slow-acting poison	149
Kalpasthāna 3: Poisonous Insects and Animals	155
Literature	155
Translation	155
Pollution of the environment	157
The origin of poison	159
The working of poison	160
Patients beyond help	161
Kalpasthāna 4: Snakes and Envenomation	163
Introduction	163
Literature	164
The Seven Stages of Toxic Shock	165
Translation	166
[The Taxonomy of Snakes]	166
[Behaviours]	168
[Enumeration of Snakes]	170
[Breeding and Gender]	172
[Symptoms of snakebite]	173
[Summary Verses]	176
Kalpasthāna 5: Therapy for those Bitten by Snakes	179
Introduction	179
Literature	179
Translation	180
The application of mantras	181
Blood letting	182
Internal medications	182
Therapies at each pulse of toxic reaction	183
Subsequent therapies	185

Kalpasthāna 6: Rats and Rabies	191
Introduction	191
Mouse or Rat?	191
Literature	193
Translation	194
The types of rat	194
Detailed symptoms	195
The bites of wild animals	199
 Kalpasthāna 7: Beating Drums	 203
Introduction	203
Literature	203
Translation	203
 Kalpasthāna 8: Poisonous insects	 209
Introduction	209
Insect names	209
Literature	210
Translation	212
Taxonomy of insects	212
Symptoms	214
Taxonomy according to symptoms and prognosis	214
Therapies	214
Taxonomy of scorpions	214
Therapies for scorpion-sting	215
Symptoms of spider poisoning	215
Origin story for spiders	215
Taxonomy of spiders	215
Specific symptoms and treatment for spider poisoning	215
Untreatable spider poisons	216
Curable and incurable	216
Therapies for spider poisoning	216
General therapies for poisoning	216
End of the Suśrutasaṃhitā	216

Part 6. Uttarantra	217
Uttarantra 17: Preventing Diseases of the Pupil	219
Literature	219
Translation	219
[Complications]	229
[Characteristics of the probe]	229
[Complications]	230
Uttarantra 38: Diseases of the Female Reproductive System	233
Introduction	233
Literature	233
Placement of the Chapter	233
Parallels	235
Philological notes	236
Metrical alterations	236
The original opening verses	236
Translation	238
Uttarantra 39: On Fevers and their Management [draft]	241
Literature	241
Remarks on the Nepalese version	241
Translation	242
Uttarantra 65: Rules of Interpretation	243
Literature	243
Early Sources	243
The <i>Arthaśāstra</i>	244
The <i>Yuktidīpikā</i>	244
Tamil literature	245
The <i>Viṣṇudharmottarapurāṇa</i>	245
The <i>Saddanīti</i>	246
Āyurvedic literature	252
Tantrayukti-inventories	258
Earlier Listing	258
Later Listing	258
Terminology	259
1. <i>adhikaraṇa</i>	260

2. <i>yoga</i>	262
3. <i>padārtha</i>	264
3. <i>hetvartha</i>	268
5–6. <i>uddeśa</i> and <i>nirdeśa</i>	270
Notes on Significant Variants	273
...द्वितीये पादे...	273
यत्र तु सेहस्वेदाभ्यञ्जनेषु...पूर्वापरयोगसिद्धो भवति ।	273
सामवेदादयश्च वेदाः	273
...विद विन्द इत्येतयोश्च धात्वोः...	274
...धात्वोरेकार्थः । पश्चात् पदं भवति...	275
यदुक्तं साधनं भवति स हेत्वर्थः	277
...तथा माषदुग्धप्रभृतिभिर्वर्णः क्लृप्तः	277
समासवचनं समुद्देशः 	278
Characteristics of the Manuscript Transmission	278
Translation	279
Editions and Abbreviations	285
Index of Manuscripts	289
General Bibliography	291
Materia Medica	299
Abbreviations	299
Flora	302
Fauna	325
Minerals	330
Glossary	331

Introduction

What follows is a draft translation of selected chapters of the *Compendium of Suśruta* (*Suśrutasaṃhitā*). This differs from former translations, being based on the text that survives in the oldest known manuscripts of the work.¹ These old manuscripts are located in Nepal, so we refer to this as “the Nepalese version” of the work, although future research may show that this old version was more widely known.²

The date of the *Suśrutasaṃhitā*

In a previous publication, I discussed evidence showing that the *Suśrutasaṃhitā* as we have it now began to be assembled in the late centuries BCE, and was heavily revised and supplemented in the period before CE 500.³ The more detailed reflections by Meulenbeld support this dating.⁴ But we also now know, as a result of the Suśruta Project, that the work was subject to at least one further editorial campaign after the ninth century.⁵ Another recently-discovered factor affects older arguments about the dating of the work. The name “Dhanvantari” that is associated with the vulgate version of the *Suśrutasaṃhitā* is not tied in the same way to the older, Nepalese version of the text.⁶ In the late ninth century, the *Suśrutasaṃhitā* was read as a work delivered by Divodāsa, King of Kāśī, not the god Dhanvantari. The

¹ See Wujastyk et al. [2023](#) for an introduction to the Nepalese text and Wujastyk et al. [2021](#)– for background on the Suśruta Project, 2021–2024.

² For more discussion of this issue, see Wujastyk et al. [2023](#): Introduction and ch. 2.

³ Wujastyk [2003b](#): 63–64.

⁴ [HIML](#): 1A, 333–352.

⁵ Wujastyk et al. [2023](#): 16–26.

⁶ Wujastyk [2013](#); Birch, Wujastyk, Klebanov, Parameswaran, et al. [2021](#); Birch, Wujastyk, Klebanov, Rimal, et al. [2021](#); Wujastyk et al. [2023](#).

text was thoroughly re-edited after the ninth century, adding the narrative frame of the Dhanvantari attribution as well as verses from the *Carakasamhitā* and other material. It may be that at least some of this editorial work was performed by the author Candraṭa (fl. 900–1050), since several manuscript colophons of the *Suśrutasamhitā* include the statement,

The correction of textual readings in the treatise of Suśruta was done by Candraṭa the son of the doctor Tīsaṭa, after studying the commentary of Jejjaṭa.⁷

The disassociation of Dhanvantari from the *Suśrutasamhitā* affects several historical arguments that were summarized by Meulenbeld about the relationship of the work to the *Carakasamhitā* and other works. Former arguments based on the priority of the *Carakasamhitā* to the *Suśrutasamhitā* can no longer stand, since the Nepalese version does not include many of the passages from the *Carakasamhitā* on which these arguments rest. A particularly striking example of this occurs in the *Sūtrasthāna*.

In the standard, printed edition or vulgate text of the *Suśrutasamhitā*, chapter ten of the *Sūtrasthāna* is dedicated to the topic of becoming a professional physician. The title of the chapter is interesting: “how to start being a secular practitioner,” (विशिकानुप्रवेशनीयमध्यायम्). The word I translate as “secular practitioner” is, etymologically, “without a top-knot,” i.e., a person who is not wearing a religious tuft of hair on the back of the head following tonsure. The text’s choice of words points to a felt distinction of the doctor as not being a religious functionary.⁸ The fourth passage of the chapter, describes how a physician takes note of omens on the way to a patient’s home, and then how he diagnoses the patient:

Then he should approach the house of the sick person according to the favourableness of the messenger, the reason given, omens, and good-luck signs. After sitting down, he should have a good look at the sick person, he should palpate them and interrogate them. Diseases are mostly understandable through these three means of gaining knowledge. That is what some people say, but it is not correct. There are six means of gaining

⁷ Wujastyk 2024.

⁸ Some commentators interpreted the word विशिखा to mean “path, road.” This sense is not known outside the present passage. I would suggest it is an attempt to reverse engineer the chapter’s title to mean something like the Pali *sotāpanna*.

knowledge about diseases, i.e., by the five senses, hearing etc., and by interrogation.⁹

As we see, the text first proposes a three-part method of diagnosis and then immediately distances itself from that statement and provides a different six-part procedure. One has the sense of hearing two voices.

Who were the “some people” being referred to? The three-part diagnostic procedure is found in the *Carakasamhitā* (Ca.ci.25.22). For that reason, this passage has been taken as evidence that the authors of the *Suśrutasamhitā* knew the Caraka text and were responding to it. This is one of the pieces of evidence that is used to argue that the *Suśrutasamhitā* is chronologically later than the *Carakasamhitā*. In the Nepalese version of the *Suśrutasamhitā*, however, the passage is much simpler and omits this second, distancing, voice:

Then, arriving at the house of the sick person according to the favourableness of the messenger, the reason given, omens, and good-luck signs, he should sit down. Then, he should have a good look at the sick person, he should palpate them and interrogate them. Through these three means of gaining knowledge it can be known whether life will be long or life will be short.¹⁰

The passage referring to the *Carakasamhitā* is absent.

Luckily, for this part of the *Suśrutasamhitā*, the learned commentary of Cakrapāṇidatta (fl. 1075) survives. It was edited and published in 1939 by Yādavaśarman T. Ācārya. Commenting on the passage, Ācārya stated that this extra passage was not known to Cakrapāṇidatta.¹¹ Thus, we can say that it was added to the text of the *Suśrutasamhitā* some time between the oldest Nepalese manuscript (878 CE) and Cakrapāṇidatta’s time, i.e., the eleventh century.

The fact that this reference to the *Carakasamhitā* is not present in the early Nepalese version of the *Suśrutasamhitā* means that the argument about chronological priority cannot be sustained.

9 दूतनिमित्तशकुनमङ्गलानुलोम्येनातुरगृहमभिगम्य, उपविश्य, आतुरमभिपश्येत्स्पृशेत्पृच्छेच्च; त्रिभिरेतैर्विज्ञानोपायै रोगाः प्रायशो वेदितव्या इत्येके; तत्तु न सम्यक्, षड्विधो हि रोगाणां विज्ञानोपायः, तद्यथा — पञ्चभिः श्रोत्रादिभिः प्रश्नेन चेति ॥ ४ ॥

10 ततो दूतनिमित्तशकुनमङ्गलानुलोम्येनातुरगृहमागम्योपविश्यातुरमभिपश्येत्स्पृशेच्च त्रिभिरेतैर्विज्ञानोपायैः दीर्घमायुषोल्पायुषो वेदितव्यः ।

11 अयं पाठश्च चक्रासंगतः.

Evidently, Candrāṭa or some other editor added material from the *Carakasamhitā* to the *Suśrutasaṃhitā* after the ninth century. A piece of evidence that remains independent of the above issues is the remark by the learned commentator Cakrapāṇidatta (fl. 1075, Bengal) that Dr̥ḍhabala (fl. ca. 300–500 CE) knew and made use of the *Suśrutasaṃhitā*.¹² This provides a latest date for the *Suśrutasaṃhitā* in the period before Dr̥ḍhabala. This also shows that much of the text of the *Carakasamhitā* in its present form, as reconstructed by Dr̥ḍhabala, postdates the *Suśrutasaṃhitā*.

The Nepalese Version

The Nepalese version has been reconstructed on the basis of three manuscripts from Kathmandu,

1. MS Kathmandu KL 699 (siglum K),
2. MS Kathmandu NAK 1-1079 (N), and
3. MS Kathmandu NAK 5-333 (H).

The first of these MSS is the oldest, dated to CE 878.¹³ It covers most of the *Suśrutasaṃhitā*, but lacks the *Nidānasthāna* and the *Śārīrasthāna* (see Fig. 1). The second is undated but is datable on palaeographical grounds to the twelfth or thirteenth centuries.¹⁴ It contains the *Sūtrasthāna* and *Nidānasthāna* but breaks off shortly afterwards. The third manuscript, H, is the most complete, supporting the text of the whole of the *Suśrutasaṃhitā*. It is dated CE 1513.¹⁵ The text of manuscript H follows K very closely but is probably not a direct apograph.¹⁶ I conjecture that it was either copied from an intermediary that followed K very closely or from an ancestor of K.¹⁷

¹² Cakrapāṇi ad *Carakasamhitā* 8.12.39 (Ca 1941: 735) (see also HIML: 1A, 132, 350–351).

¹³ Klebanov 2021a: 15.

¹⁴ Klebanov 2021a: 17–18.

¹⁵ I follow the arguments of Klebanov (2021a: 21–26) on the interpretation of the colophon although, as he pointed out, some interpret the date as CE 1573.

¹⁶ Chakraborty 2022.

¹⁷ “...as neither my own research ... nor the study undertaken in Harimoto ... could determine any linear connection between any of the Nepalese manuscripts of the SS, one may assume that [there exists] an older common ancestor of both of the manuscripts K and H.” (Klebanov 2021b: 21).

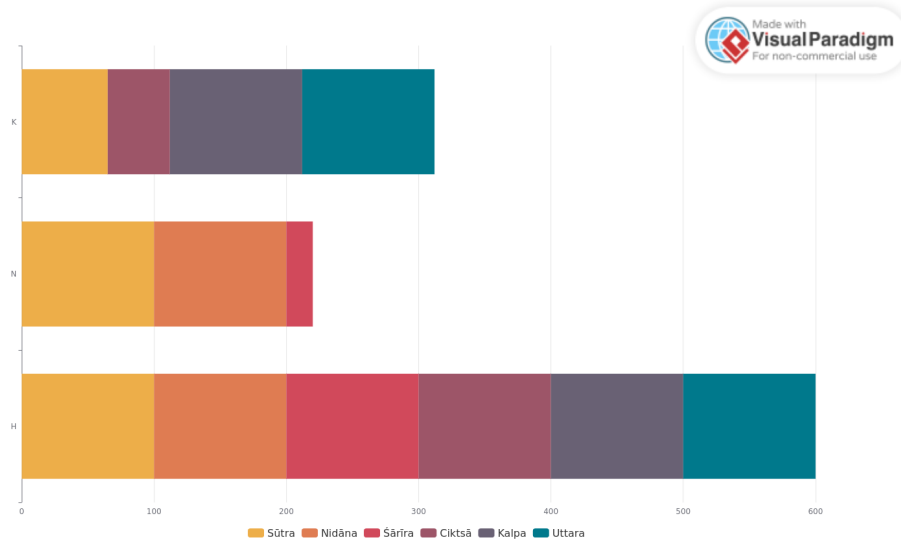


Figure 1: Coverage of the text by MSS K, N and H.

The vulgate

The version of the *Suśrutasaṃhitā* that we refer to as “the vulgate” is the version of the text that circulates in print today in multiple editions. The most careful and authoritative edition is that of Y. T. Ācārya and N. R. Ācārya (Su1938).¹⁸ It is telling that this edition includes the commentary of Ḍalhaṇa (b. ca. 1175) and, for the *Nidānasthāna*, also that of Gayadāsa (fl. ca. 1000). These important authors commented on a text that is, broadly speaking, what we call “the vulgate.” But they both mentioned quite often that the manuscripts they were consulting contained other versions of the text and in a high number of cases, these variations match the Nepalese version.¹⁹ It is possible that Gayadāsa and Ḍalhaṇa, through their commentarial work on the text, participated in shaping “the vulgate.”

The scholar Rudolph Hoernle was also aware of this cleavage in the transmission-history of the *Suśrutasaṃhitā*. But with the more limited materials available to him at the turn of the twentieth century he drew

¹⁸ This and the following issues have been discussed by Wujastyk et al. (2023: 2 and ch. 3).

¹⁹ E.g., see the discussion in footnote 165 below.

the line a little differently. He referred to the text of the *Śārīrasthāna* of the *Suśrutasaṃhitā*, transmitted in the printed editions of his day, as “the Traditional Recension.”

The recension which is found in Jīvānanda’s and all other prints,²⁰ and which, in the sequel, will be referred to as the Traditional Recension, has in its favour not only all available manuscripts, but also all ancient commentaries on the Compendium of Suśruta, Or, shortly, the Traditional Recension is supported by the whole body of existing witnesses.²¹

However, Hoernle was unfortunately not aware of the Nepalese manuscripts of the *Suśrutasaṃhitā*, which at the time he was writing were in Nepalese libraries that had not yet been explored by scholars of the time. The contrast that Hoernle was drawing was between the Traditional Recension and the *Śārīrasthāna* of the *Carakasaṃhitā* as printed by the influential Bengali scholar, Kavirāja Gaṅgādhara Ray (1798–1885).²²

The Translation

The translation follows the methods of rigorous philological care and modern principles of translation theory.²³ Major differences in sense from the vulgate text are marked **in this manner**, but the differences are so pervasive and fine-grained that most have not been explicitly marked.

The text-historical state of the *Suśrutasaṃhitā* bears many resemblances to other early textual transmissions in South Asia. The situation was articulated particularly clearly for the case of Pāli by von Hinüber (1978), in the opening of his chapter,

...we cannot go back beyond the council of Aluvihāra (Ālokavihāra) under Vaṭṭagāmaṇī Abhaya (29–17 B.C.) where the Pāli

20 Hoernle listed four, S. M. Gupta 1835–36; Su 1889; Vīrasvāmi 1900–09; Govindjī et al. 1901.

21 Hoernle 1907: 68.

22 Ray 1868–70. Hoernle’s evaluation of this edition was not entirely kind: “I have not been able to discover for it any authority whatsoever. ... it is probably that the recension of Gaṅgādhara is a reconstruction of his own to meet those of the difficulties which he had noticed” (Hoernle 1907: 70). For a full account of the genesis of this edition, see Pecchia 2022.

23 See Wujastyk 2003b: intro. and Wujastyk 2021: 81–83 for an overview.

canon was written down for the first time in Ceylon. This is the very starting point of our tradition handed down to us by the monks of the Mahāvihāra. About recensions of the Pāli canon different from the Mahāvihāra tradition and deviating from its wording... we scarcely have any knowledge at all.

Similarly, the manuscript evidence for the *Suśrutasaṃhitā* that is available today allows us to reconstruct a version of the work after it was consolidated into a text of five parts with a sixth or “later” (*uttara*) and somewhat different part already appended to the first five. The prehistory of the work before this form is tantalizingly unknown to us. That the work was assembled from diverse sources and that many hands were involved is without doubt. The oldest surviving manuscript, MS Kathmandu KL 699, gives us physical evidence for the state of the text in the ninth century. We have little insight into the formational processes affecting the text before that time. But what we can see plainly is that the text was edited pervasively after that time, being influenced especially by the commentators Jejjāṭa, Candrāṭa, Gayadāsa and Cakrapāṇidatta and the editor Candrāṭa. However, a clear picture of how these later editorial processes took place will only be possible as a result of further research into a wider manuscript base.

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 2002.¹⁴³

Subject matter

It is notable that this nosological part of the *Suśrutasamhitā* opens with a chapter on diseases of wind (*vāta*). In all other major Āyurvedic works, including the *Carakasamhitā*, 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 *Suśrutasamhitā*, fever is not addressed at all in the first five sections of the work, but only in the thirty-ninth chapter of the Uttaratāntra, 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.

¹⁴³ HIML: IA, 234. (Ruben 1954) studied the wind doctrines in the *Carakasamhitā*.

- 3 After holding the feet of Dhanvantari, the foremost of the upholders of righteousness who emerged out of nectar, Suśruta makes this enquiry.¹⁴⁴
- 4 O King! O best of orators! Explain the location and types of diseases of the wind, whether in its natural state or disordered.¹⁴⁵
- 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*).¹⁴⁶ It has inconceivable power. It is the leader of the humours¹⁴⁷ and the ruler of the multitude of diseases.
It moves fast, it moves constantly, it is located in the stomach and in the rectum.¹⁴⁸
- 9cd Now, learn from me the characteristics of wind as it moves inside the body.¹⁴⁹
- 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.¹⁵⁰

144 Explain the nectar myth.

145 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.

146 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.

147 Ḍalhaṇa on 2.1.8 (Su 1938: 257) interpreted नेता “leader” as प्रेरक “impeller.”

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

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

150 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 ‘इन्द्रियार्थोपसंप्राप्तिः 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

add foot-
note here

add refs to
Divodāsa as
king.

- 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:¹⁵¹
1. prāṇa,
 2. udāna,
 3. samāna,
 4. vyāna,
 5. apāna.¹⁵²

The above five types of wind remain in their state of equality and support the body.¹⁵³

- 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.¹⁵⁴ It mostly causes diseases like hiccups and wheezing (*śvāsa*).
- 14cd–15 Since it is the one that flows upwards, that highest of winds is called *udāna*.¹⁵⁵ Special acts like speech and singing are all initiated by it. It particularly causes diseases above the neck (*jatru*).¹⁵⁶
- 16–17ab The *samāna* wind flows in the receptacles of raw and of digested matter.¹⁵⁷ Assisting the digestive fire (*agni*), it cooks food and separates out

“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.

151 See Zysk 1993. Zysk (2007: S110) translated the following descriptions of the winds.

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

153 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 ।.

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

155 The sentence plays on the sound उत्- ऊर्ध्व- in the qualifiers (उदान, ऊर्ध्वम्, उत्तम). 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.

156 Ḍalhaṇa noted that “above the *jatru*” would include eyes, nose, ears, face, and head. Meulenbeld cited discussions on the difficulties of interpreting the term जत्रु (Meulenbeld 1974b: 465). Hoernle (1907: §§62, 98) translated *jatru* as “neck, windpipe”. See also Hoernle’s notes on the expression “above the *jatru*” (idem, 237–238).

157 The “receptacle of raw matter” (आमाशय) is described at 1.21.12 (Su 1938: 102) as one

- the substances produced from it.¹⁵⁸
 It mainly causes abdominal swelling (*gulma*), diminished digestive fire (*agnisaṅga*) and diarrhoea.¹⁵⁹
- 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**.¹⁶⁰ Angered, it causes diseases that generally exist throughout the whole body.
- 19–20ab The apāna resides in the place of digested food and, at the right moment, it draws wind, urine, and feces, as well as semen, fetus and menstrual blood downwards. Angered, it causes terrible diseases located in the bladder and rectum.
- 20cd–21ab Irritated vyāna and apāna winds cause defects of semen and urinary diseases (*prameha*). Simultaneously aggravated, they surely destroy the body.¹⁶¹
- 21cd–22ab From here, I shall describe all the diseases, located in the various places of the body, that are caused by wind that is irritated in various ways.
- 22cd–24 Aggravated wind in the stomach causes diseases like vomiting, as well as disorientation (*moha*), fainting, thirst, heart-seizure (*hṛdgraha*), and pain in the flanks.¹⁶² It also causes rumbling of the bowels, gripes (*śūla*), swollen belly, painful urine and feces, constipation, and pain in the sacrum (*trika*).¹⁶³ Aggravated wind in the ears etc., destroys the senses.
- 25abc–29 Located in the skin, it causes discolouration (*vaivarṇya*), throbbing,

of the locations of phlegm, and the place where food arrives, just above the location 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.

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

159 Ḍalhaṇa on 1.11.8 (Su 1938: 46) described अग्निसङ्ग as “the fire is stuck, dissolved.”

160 The vulgate text reads पञ्चधा “in five ways,” and Ḍalhaṇa listed five kinds of movement (Ḍalhaṇa on 2.1.18 (Su 1938: 260)).

161 Ḍalhaṇa on 2.1.21ab (Su 1938: 261) clarified that this refers to all five winds being aggravated at once.

162 On “disorientation,” Ḍalhaṇa on 2.1.23ab (Su 1938: 261) noted that the condition was नैवात्यन्तं चित्तनाशः “not the complete loss of awareness.”

163 Hoernle (1907: 140) attributed the quite different interpretation of त्रिक by Ḍalhaṇa on 1.21.14 (Su 1938: 102) to “the decay of anatomical knowledge subsequent to the time of Suśruta.”

dryness, numbness (*supti*), itching (*cumucumāyana*), and pricking pain.¹⁶⁴ Located in the flesh, painful lumps.¹⁶⁵ Located in the fat, it causes slightly painful lumps that are not wounds.

Located in the ducts, it causes acute pain, contraction and filling up of the duct.¹⁶⁶ When it reaches the sinews, it paralyses the network of sinews, and causes them to tremble. Located in the joints, it destroys the joints and it causes sharp pain and swelling. It causes a splitting of the bones, when it acts there, and dryness as well as sharp pain; and when it is in the marrow, it causes an sickness that never abates. Wind located in the semen, it causes the non-production or faulty production of semen.¹⁶⁷

30–31ab Wind moves incrementally from the hand to the foot, the head, and the bodily tissues. Or it may pervade people’s entire bodies, causing stiffness, convulsion, numbness (*svāpa*), swelling, and acute pain everywhere.

164 Maas (2008) definitively clarified the contrasting त्वक्-first and (usually) रस-first models of the bodily elements (*dhātu*) as distinct historical formulations in the earliest medical literature. Das 2003: 267–282 also explored this issue, including the observation that the *Bhedaśaṃhitā* seems to have taught that रस “chyle” was the sources of menstrual blood, in contrast to the *Kāśyapaśaṃhitā* that assigned this role to त्वक् “skin.” In their comments on this passage, Gayadāsa and Ḍalhaṇa both tried to square the circle of these contrasting models by suggesting that त्वक् “skin” should be understood to mean रस “chyle” (on 2.1.25 (Su 1938: 262)). Gayadāsa explained in more detail that chyle is located in the skin and therefore, the expression त्वक्स्थ “located in the skin” should, by extension, be read as रसस्थ “located in the chyle.” He proposed the parallel with the well-known grammatical example of figurative meaning, गङ्गायां घोषः “the village on the Ganges,” which means, really, “the village on the bank of the Ganges” (on this example of figurative meaning, *lakṣaṇā*, see Kunjunni Raja 1963: ch. 6; Jhalakīkar 1978: 698–699).

165 At this point, the vulgate has a passage that is not present in the Nepalese witnesses. It gives more symptoms of wind in the skin and then addresses wind in the blood: “(wind in the skin) may cause prickling, splitting of the skin and peeling; and when it is in the blood, it causes wounds” (Su 1938: 261). The commentators Gayadāsa and Ḍalhaṇa were aware that this passage was missing in some of their manuscripts. Gayadāsa said that this was because some authors noticed that वातरक्त “wind-blood” would be discussed later in the chapter. But they both thought this absence was incorrect (Su 1938: 262).

166 According to Ḍalhaṇa सिराकुञ्चनं is also known as कुटिला सिरा (Su 1938: 262), which may refer to varicose veins.

167 Ḍalhaṇa and Gayadāsa both suggest that a faulty production विकृतां प्रवृत्तिम् is too fast, too slow, knotty and discoloured Su 1938: 262.

Symptoms of diseases that arise because of a combination of five-winds with other humours

- 31cd–32ab In the stated locations, wind that is compounded causes compounded afflictions.¹⁶⁸ And located in the limbs, it can cause a multitude of diseases.¹⁶⁹

Prāṇa

- 34cd–35ab Prāṇa covered by bile causes vomiting and a burning sensation and when covered by phlegm it causes weakness, exhaustion, lassitude and **loss of the sense of taste**.¹⁷⁰

Udāna

- 35cd–36ab When udāna is joined with bile there is bewilderment (*moha*), fainting (*mūrchā*), dizziness (*bhrama*) and exhaustion. And when covered by phlegm there is exhilaration and an absence of perspiration, slow digestion, and coldness.¹⁷¹

Samāna

- 36cd–37ab When is samāna is combined with bile there is perspiration, a burning sensation, a temperature and fainting (*mūrchā*). When in contact with phlegm there is horripilation of the limbs during feces and urine.

¹⁶⁸ Ḍalhaṇa on 2.1.31cd (Su 1938: 262) explained “wind that is compounded” as wind being mixed with bile and phlegm.

¹⁶⁹ The Nepalese version omits passages 2.1.32cd–33ab which are about the diseases that arise when contaminated wind mixes with cough, phlegm and blood (Su 1938: 263).

¹⁷⁰ वैरस्य “loss of the sense of taste” may refer to ageusia. The vulgate reads वैवर्ण्य “loss of colour” (Su 1938: 263). The vulgate’s footnote 1 says that the palm-leaf manuscript reads वैश्वर्य but this is not correct. The palm-leaf manuscript whose readings were sent to Trivikrama Ācārya was witness N, which reads वैरस्य.

¹⁷¹ The expression “exhilaration and an absence of perspiration” translates the Nepalese version’s अस्वेदहर्षः as if it were a dvandva. The vulgate has the easier dvandva, अस्वेदहर्षौ “lack of sweating and also exhilaration” 2.1.36ab (Su 1938: 263). Perhaps the Nepalese reading is an Epic form of m. sing. dvandva as described by Oberlies (2003: 361–362, n. 3).

Apāna

- 37cd–38ab When apāna is associated with bile there is a burning sensation, a temperature and blood in the urine.¹⁷² When covered with phlegm there is a feeling of heaviness in the lower body and coldness.

Vyāna

- 38cd–39ab Vyāna wind surrounded by bile causes a burning sensation, tossing of the limbs and fatigue and surrounded by phlegm it causes stiffening limbs, uddanḍaka? and pain in the swelling.
¹⁷³ Instead of this verse, Nepalese version has a different hemistich here which is स्तम्भनोद्दण्डकश्चापि शोथशूलं कफावृते ||.
- 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.??
- 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 Gout¹⁷⁴.
- 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 ¹⁷⁵ 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.

¹⁷² The This probably describes hematuria. Again we have an Epic m. sing. dvandva.

¹⁷³ Nepalese version omits next verse which is गुरुणि सर्वगात्राणि स्तम्भनं चास्थिपर्वणाम् | लिङ्गं कफावृते व्याने चेष्टास्तम्भस्तथैव च || The verse describes other diseases that cause by contaminated vyāna mix with cough and phlegm. *Su* 1938: 264.

¹⁷⁴ In the medical term वातरक्त is known as Gout. Cakrapāṇi called it आढ्यरोगः Caraka-saṃhitā sū.14.18 and ci.28.66

¹⁷⁵ Gayadāsa suggests सर्वे दुष्टाः शोणितं चापि nominative plural instead of locative singular.

- 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*) ¹⁷⁶. If wind mixed with phlegm stays excessively in the arteries, it stiffens 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 धनुस्तम्भ Tetanus. When vitiated wind accumulated in the regions of finger, ankle, abdomen, heart, chest, and throat swiftly attack on the group of vein 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 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 ¹⁷⁷.
- 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 (*pakṣāṅghāta*). ¹⁷⁸ 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. ¹⁷⁹.

176 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.

177 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.

178 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 (*apakṣāṅghāta*) is known as hemiplegia.

179 This verse is not available in vulgate. It deals with the symptoms when bile and

- 63 A paralysis (*pakṣāghāta*) caused by wind ¹⁸⁰ 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. Gaya-dāsa 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, rigidity 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 eyes, eyebrows and cheeks.¹⁸¹ 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*).

¹⁸²

phlegm mix with the wind. It is already discussed in su.2.1.38.

¹⁸⁰ Here the term शुद्धवात suggests the meaning of the wind that is devoid of bile and phlegm.

¹⁸¹ Ḍalhaṇa suggests नेत्रादीनाम् इत्यादि शब्दात् भूगण्डादि उपसङ्ग्रहः

¹⁸² Both the MSS N and H read विश्वञ्चि instead of the vulgate reading विश्वाची. There is no

- 76 Vitiated wind and blood in the joint of knee causes synovitis of knee joint (*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 (*kalāyakañja*).
- 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 (*pādadaḥa*).
- 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 called अवबाहुक.¹⁸³
- 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*).¹⁸⁴
- 85 Vitiated wind penetrating into the cheekbones, temporal bones, head and neck causes piercing pain in the ears. It is called ear-ache (*karṇaśūla*).¹⁸⁵
- 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.

such word found in other Āyurveda texts.

183 Ḍaḥaṇa and Gayadāsa both have defined two diseases i.e., अंसशोष and अवबाहुक respectively.

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

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

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 and causes pain in the heart and sides.
186

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 वाताष्टीला. A tumour of similar shape rose obliquely in the abdomen obstructing the passage of wind, faeces and urine should be known as प्रत्यष्टीला.

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 (*gr̥dhrasī*) paralysis of arms and back (*viśvañci*) synovitis of knee join (*kroṣṭukaśīrṣa*) lathyrism (*kalāyakhañja*) vātakaṇṭaka (*vātakaṇṭaka*) avabāhuka (*avabāhuka*) tūnī (*tūnī*) pratitūnī (*pratitūnī*) tympanites (*ādhmāna*) pratyādhmāna (*pratyādhmāna*) vātāṣṭhīlā (*vātāṣṭhīlā*) pratyāṣṭhīlā (*pratyāṣṭhīlā*)

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

Part 3. Śārīrasthāna

Part 4. Cikitsāsthāna

Part 5. Kalpasthāna

Part 6. Uttarat Tantra

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 Astāṅgahṛidaya* (6th edn., Mumbayyām: Nirṇayasāgara Press), ARK: <https://n2t.net/ark:/13960/t3tt6967d>.
- Ca 1941 Ācārya, Yādavaśarma Trivikrama (1941) (ed.), *महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवल्लिता* (3rd edn., Mumbayyām: Nirṇaya Sagara Press), ARK: <https://n2t.net/ark:/13960/t48q2f20n>.
- CDIAL Turner, R. L. (1966–85), *A Comparative Dictionary of the Indo-Aryan Languages* (2nd edn., London, New York, Toronto: Oxford University Press), ISBN: 0197135501, URL: <http://n2t.net/ark:/13960/t2n69n06g>; v. 2: *Indexes* by D. R. Turner (OUP, London, 1969), v. 3: *Phonetic Analysis* by R. L. and D. R. Turner (OUP, London, 1971), v. 4: *Addenda and Corrigenda* ed. J. C. Wright (SOAS, London, 1985). Online database at <http://dsal.uchicago.edu/dictionaries/soas/>.
- DED₂ Burrow, Thomas, and Emeneau, Murray B. (1984), *A Dravidian Etymological Dictionary* (2nd edn., Oxford: Clarendon Press), ARK: <https://n2t.net/ark:/13960/s24rgc5rsz0>, URL: <http://dsal.uchicago.edu/dictionaries/burrow/>.

- EWA Mayrhofer, Manfred (1992–2001), *Etymologisches Wörterbuch des Altindoarischen* (Heidelberg: Carl Winter, Universitätsverlag), ISBN: 3-533-03826-2.
- HIML Meulenbeld, Gerrit Jan (1999–2002), *A History of Indian Medical Literature*, 5 vols. (Groningen: E. Forsten), ISBN: 9069801248.
- KEWA Mayrhofer, Manfred (1953–72), *Kurzgefaßtes etymologisches Wörterbuch des Altindoarischen; a Concise Etymological Sanskrit Dictionary* (Heidelberg: Carl Winter, Universitätsverlag).
- Mahākośa* Jośī, Veṇīmādhavaśāstrī, and Jośī, Nārāyaṇa Harī (1968), *आयुर्वेदीय महाकोशः अर्थात् आयुर्वेदीय शब्दकोशः संस्कृत-संस्कृत* (Mumbaī: Mahārāṣṭra Rājya Sāhitya āṇi Saṃskṛti Maṇḍala), ARK: <https://n2t.net/ark:/13960/t22c41g8t>.
- MW Monier-Williams, Monier, Leumann, E., Cappeller, C., et al. (1899), *A Sanskrit–English Dictionary Etymologically and Philologically Arranged, New Edition* (Oxford: Clarendon Press); 1970 reprint.
- PWK Böhtlingk, Otto (1879), *Sanskrit-wörterbuch in kürzerer fassung* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), URL: <https://www.sanskrit-lexicon.uni-koeln.de/scans/PWScan/2020/web/>, accessed 18/05/2023.
- Śabdasindhu* Gupta, Umeśachandra, and Sena, Nagendra Nātha (1983), *वैद्यक-शब्दसिन्धुः = Vaidyaka-Śabdasindhuh* (3rd edn., Varanasi & Delhi: Chaukhambha Orientalia); 3rd ed. first published in 1914.
- Su 1889 Bhaṭṭācāryya, Jivānanda Vidyāsāgara (1889) (ed.), *सुश्रुतः सूत्र-निदान-शारीर-चिकित्सा-कल्पोत्तर-तन्त्र-कल्पित आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सुश्रुतनामधेयेन तच्छिष्येण विरचितः* (3rd edn., Calcutta: Sarasvatī Press), ARK: <https://n2t.net/ark:/13960/t1nh6j09c>; HIML: IB, 311, edition b.
- Su 1938 Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (1938) (eds.), *श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता*

सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press), ARK:
<https://n2t.net/ark:/13960/t09x0sk1h>; HIML: IB, 313,
edition cc ('the vulgate').

Index of Manuscripts

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

Kathmandu KL 699: 14, 17

Kathmandu NAK 1-1079: 14

Kathmandu NAK 5-333: 14

General Bibliography

- Ācārya, Yādavaśarma Trivikrama (1941) (ed.), *महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलित्ता* (3rd edn., Mumbayyām: Nirnaya Sagara Press), ARK: <https://n2t.net/ark:/13960/t48q2f20n>.
- Ali, Salim, and Ripley, S. Dillon (1983), *Handbook of the Birds of India and Pakistan, Together with Those of Bangladesh, Nepal, Bhutan, and Sri Lanka. Compact Edition*, 10 vols. (Delhi: Oxford University Press).
- Ball, Valentine (1888), "On the Identification of the Animals and Plants of India Which Were Known to Early Greek Authors," *Proceedings of the Royal Irish Academy*, 2 (1879–1888)/6: 302–46, URL: <https://www.jstor.org/stable/20651530>.
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Parameswaran, Madhu K., et al. (2021), "Further Insight into the Role of Dhanvantari, the Physician to the Gods, in the Suśrutasaṃhitā," *Academia Letters*. DOI: <https://doi.org/10.20935/AL2992>.
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Rimal, Madhusudan, et al. (2021), "Dalhaṇa and the Early 'Nepalese' Version of the Suśrutasaṃhitā." DOI: <https://doi.org/10.20935/al3733>.
- Böhtlingk, Otto (1879), *Sanskrit-wörterbuch in kürzerer fassung* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), URL: <https://www.sanskrit-lexicon.uni-koeln.de/scans/PWScan/2020/web/>, accessed 18/05/2023.
- Burrow, Thomas (1948), "Dravidian Studies VII," *Bulletin of the School of Oriental and African Studies* (London), 12/2: 365–96, URL: <https://www.jstor.org/stable/608752>.

- Burrow, Thomas (1971), "Spontaneous Cerebrals in Sanskrit," *Bulletin of the School of Oriental and African Studies*, 34/3: 538–59. DOI: <https://doi.org/10.1017/s0041977x00128538>, URL: <https://www.jstor.org/stable/613901>.
- Byrski, Maria Christopher (1981), "Is there a Sanskrit Word for Pumice," *Indologica Taurinensia*, 8–9, URL: http://www.asiainstitutetorino.it/Indologica/volumes/vol08-09/vol_08-09_art09_byrski.pdf.
- Chakraborty, Deepro (2022), "NAK 5/333 is not a direct copy of KL 699: further evidence." DOI: <https://doi.org/10.5281/ZENODO.6537884>.
- Cox, Whitney (2011), "Saffron in the Rasam," in Y. Bronner, L. McCrea, and W. Cox (eds.), *South Asian Texts in History: Critical Engagements with Sheldon Pollock* (Asia Past & Present: New Research from AAS, 7; Ann Arbor: Association for Asian Studies), chap. 8, 177–201, ISBN: 9780924304637, ARK: <https://n2t.net/ark:/13960/t5r89k36f>; reprinted Delhi, 2016.
- Das, Rahul Peter (2003), *The Origin of the Life of a Human Being. Conception and the Female According to Ancient Indian Medical and Sexological Literature* (Indian Medical Tradition; Delhi: Motilal Banarsidas), ISBN: 81-208-1998-5.
- Dave, K. N. (1985), *Birds in Sanskrit Literature* (Delhi: Motilal Banarsidass), ISBN: 0-89581-676-8, ARK: <https://n2t.net/ark:/13960/t2c94cv80>.
- Deuti, Kaushik (2020), *Skinks of India*, ed. Sujoy Raha and Probath Bag (Kolkata: Zoological Survey of India), ISBN: 9788181715517.
- Diedrich, Veronica, Zweerink, Kara, and Elder, Brandon (2024), "Plant Dermatitis," *Emergency Medicine Clinics of North America*, 42/3: 613–38, ISSN: 0733-8627. DOI: <https://doi.org/10.1016/j.emc.2024.03.001>.
- Edgeworth, M. Pakenham (1851), "Descriptions of Some Unpublished Species of Plants from North-Western India," *Transactions of the Linnean Society of London*, 20: 23–92, ARK: <https://n2t.net/ark:/13960/t9x060p3b>.
- Froese, R., and Pauly, D. (2022) (eds.), "Fishbase: The Global Encyclopedia about Fish," URL: <https://www.fishbase.org.au/v4>.

- Govindjī, Śāstrī Kālidās, Jīvanrām, Vaidyarāj Prabhurām, and Prabhurām, Papat (1901) (eds.), *सुश्रुत आयुर्वेद. गुजराती भाषान्तर* = [*Suśrutasaṃhitā with a Gujarati Translation*] (Mumbai: Nirṇaya Sāgara Press), ARK: <https://n2t.net/ark:/13960/t08w8r74f>; edition *r in HIML.
- Gupta, Sri Madhusudana (1835–36) (ed.), *Āyur-veda-prakāśa* [Also Called *Suśruta-saṃhitā*] by *Suśruta*. *The Suśruta, or System of Medicine, Taught by Dhanwantari, and Composed by His Disciple Suśruta*, 2 vols. (Calcutta: Education Press and Baptist Mission Press), ARK: <https://n2t.net/ark:/13960/t6841qw6x>.
- Gupta, Śyāmacaraṇa (1887), *आयुर्वेदार्थ चन्द्रिका* [= *Āyurvedārtha candrikā*] (Calcutta), ARK: <https://n2t.net/ark:/13960/t5w71k903>.
- Hellwig, Oliver (2009), *Wörterbuch Der Mittelalterlichen Indischen Alchemie* (Groningen: Barkhuis & University of Groningen, University Library), ISBN: 9789077922620. DOI: <https://doi.org/10.2307/j.ctt22728hs>, URL: <https://www.academia.edu/1268947/>, accessed 19/06/2020.
- Hoernle, A. F. Rudolf (1907), *Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body* (Oxford: Clarendon Press), ARK: <https://n2t.net/ark:/13960/t1pg9cq8b>.
- Jhalakīkar, Bhīmācārya (1978), *न्यायकोशः (सकलशास्त्रोपकारकन्यायादिशास्त्रीयपदार्थप्रकाशकः)* = *Nyāyakośa or Dictionary of Technical Terms of Indian Philosophy* (Poona: Bhandarkar Oriental Research Institute), ARK: <https://n2t.net/ark:/13960/t4cp7242f>.
- Khan, Zihan Rahman, et al. (2018), “Medicinal Values of Aquatic Plant Genus *Nymphoides* Grown in Asia: A Review,” *Asian Pacific Journal of Tropical Biomedicine*, 8/2: 113–9, ISSN: 2221-1691. DOI: <https://doi.org/10.4103/2221-1691.225615>.
- Klebanov, Andrey (2021a), “On the Textual History of the *Suśrutasaṃhitā* (1): A Study of Three Nepalese Manuscripts,” *ejIM: Electronic Journal of Indian Medicine*, 12/1: 1–64. DOI: <https://doi.org/10.21827/ejim.12.1.37385>.
- (2021b), “On the Textual History of the *Suśrutasaṃhitā*, (2): An Anonymous Commentary and its Identified Citations,” in Toke Lindegaard Knudsen, Jacob Schmidt-Madsen, and Sara Speyer (eds.), *Body and Cosmos: Studies in Early Indian Medical and Astral Sciences*

- in Honor of Kenneth G. Zysk* (Leiden, Boston: Brill), 110–39. DOI: https://doi.org/10.1163/9789004438224_008.
- Kokoszko, Maciej, and Rzeźnicka, Zofia (2018), “Malabathron (μαλάχα-θρον) in Ancient and Early Byzantine Medicine and Cuisine,” *Medicina Nei Secoli Arte E Scienza / Journal of History of Medicine*, 30/2: 579–616, ISSN: 0394-9001, URL: https://rosa.uniroma1.it/rosa01/medicina_nei_secoli/article/view/1551.
- Kunjunni Raja, K. (1963), *Indian Theories of Meaning* (Madras: The Adyar Library and Research Centre), URL: <https://archive.org/details/in.ernet.dli.2015.495203>, accessed 09/01/2018; 2 ed., 1969.
- Lienhard, Siegfried (1978), “On the Meaning and Use of the Word Indragopa,” *Indologica taurinensia*, 6: 177–88, URL: <https://tinyurl.com/Lienhard1978>, accessed 06/02/2021; The indragopa is a ‘red velvet mite’.
- Maas, Philipp André (2008), “The Concepts of the Human Body and Disease in Classical Yoga and Āyurveda,” *Wiener Zeitschrift für die Kunde Südasiens = Vienna Journal of South Asian Studies*, 51: 125–62. DOI: <https://doi.org/10.1553/wzkslis123>.
- Maxwell-Lefroy, Harold (1909), *Indian Insect Life. A Manual of the Insects of the Plains (Tropical India)* (Calcutta, Simla, etc.: Thacker, Spink & Co.), ARK: <https://n2t.net/ark:/13960/t40s7sf4r>.
- McHugh, James (2012), “The Disputed Civets and the Complexion of the God: Secretions and History in India,” *Journal of the American Oriental Society*, 132/2: 245, ISSN: 0003-0279. DOI: <https://doi.org/10.7817/jameroriesoci.132.2.0245>.
- (2013), “Blattes de Byzance in India: Mollusk Opercula and the History of Perfumery,” *Journal of the Royal Asiatic Society of Great Britain & Ireland*, 23/1: 53–67, ISSN: 2051-2066. DOI: <https://doi.org/10.1017/s1356186312000727>.
- (2021), *An Unholy Brew: Alcohol in Indian History and Religions* (New York: Oxford University Press), 416 pp., ISBN: 9780199375936.
- Menon, Vivek (2014), *Indian Mammals: A Field Guide* (Gurgaon: Hachette India), ISBN: 978-93-5009-760-1.

- Meulenbeld, Gerrit Jan (1974b), *The Mādhavanidāna and Its Chief Commentary: Chapters 1–10. Introduction, Translation, and Notes* (Leiden: Brill), ISBN: 978-90-04-03892-9, ARK: <https://n2t.net/ark:/13960/t25b8q97g>.
- Oberlies, Thomas (2003), *A Grammar of Epic Sanskrit* (Indian Philology and South Asian Studies, 5; Berlin: De Gruyter), ISBN: 9783110144482. DOI: <https://doi.org/10.1515/9783110899344>.
- Osbaldeston, Tess Anne, and Wood, R. P. A. (2000), *Dioscorides. De Materia Medica. Being an Herbal with Many Other Medicinal Materials Written in Greek in the First Century of the Common Era. A New Indexed Version in Modern English* [Introductory Notes by R. P. Wood] (Johannesburg: IBIDIS Press), ISBN: 0-620-23435-0, URL: <https://web.archive.org/web/20160301000627/http://panaceavera.com/demateriaindex.html>.
- Pecchia, Cristina (2022), “Ayurveda, Philology and Print: On the First Printed Edition of The Carakasamhitā and Its Context,” *South Asian History and Culture*, 13/1: 112–34. DOI: <https://doi.org/10.1080/19472498.2022.2036402>.
- Poudel, Ram C., et al. (2013), “Yews (Taxus) along the Hindu Kush-Himalayan Region: Exploring the Ethnopharmacological Relevance among Communities of Mongol and Caucasian Origins,” *Journal of Ethnopharmacology*, 147/1: 190–203, ISSN: 0378-8741. DOI: <https://doi.org/10.1016/j.jep.2013.02.031>.
- Rādhākāntā Deva, Rājā (1876), *शब्दकल्पद्रुमः = Shabda Kalpadrumah, Or, the Tree Bearing All the Words That May Be Wished For* (Calcutta: Baradākānta Mitra & Co. at the New Bengal Press), ARK: <https://n2t.net/ark:/13960/t9x10x61b>.
- Ray, Kavirāja Gaṅgādhara (1868–70) (ed.), *चरकसंहिता ... श्रीमद्-गङ्गाधर-कविराज-कविरत्न-विरचितया जल्प-कल्प-तरु-समाख्यया व्याख्यया सहितम् तेनैव संशोधितम्* = [The Carakasamhitā edited by Kavirāja Gaṅgādhara with his Commentary Jalpakalpatāru] (Calcutta: Samvada Jnanaratnakara Press).
- Ruben, Walter (1954), “Medizin (Caraka) und Logik (Nyāya) (um 100 u. Z.),” in id., *Geschichte der indischen Philosophie* [collected articles] (Berlin: Deutscher Verlag), chap. 21, 212–22, ARK: <https://n2t.net/ark:/13960/t9v18cc78>.

- Saraswat, K. S. (1991), "Archaeobotanical Remains in Ancient Cultural and Socio-Economical Dynamics of the Indian Subcontinent," *Palaeobotanist*, 40: 514–45. DOI: <https://doi.org/10.54991/jop.1991.1797>.
- Semalty, Mona, et al. (2010), "Semecarpus anacardium Linn.: A review," *Pharmacognosy Reviews*, 4/7: 88, ISSN: 0973-7847. DOI: <https://doi.org/10.4103/0973-7847.65328>.
- Sharma, Priya Vrat (1982), *Dalhana and his Comments on Drugs* (Delhi: Munshiram Manoharlal).
- Śiromaṇi, Bharatacandra (1873) (ed.), *चतुर्वर्गचिन्तामणि-दानखण्डम्* (Calcutta: Asiatic Society of Bengal), ARK: <https://n2t.net/ark:/13960/t1rf9jd94>.
- Suvedī, K. S., and Tivārī, N. (2000) (eds.), *सौश्रुतनिघण्टुः ग्रन्थादौ विस्तृतेन ग्रन्थ-वैशिष्ट्यप्रकाशकेनोपोद्धातेन अवसाने च द्रव्याणामनेकभाषानामावली-पर्यायसङ्ग्रहाभ्यां समलङ्कृतः सुश्रुतसंहितायां प्रयुक्तानामौषधद्रव्याणां पर्याय-गुणकर्मवर्णात्मकोऽपूर्वग्रन्थः* (Belajhundi, Dān: Mahendrasaṃskṛtaviśvavidyālayaḥ).
- Talwar, P. K., and Kacker, R. K. (1984), *Commercial Sea Fishes of India* (Calcutt: Zoological Survey of India), ARK: <https://n2t.net/ark:/13960/t5s841v5m>.
- Varshney, R. K. (2000), "First Authentic Record of the Lac Insect from Gujarat," *Bionotes*, 2/2: 27, URL: <https://tinyurl.com/varshney2000>, accessed 24/09/2024.
- Vīrasvāmi (1900–09) (ed.), [*Suśrutasaṃhitā*] (Madras); unidentified edition mentioned by Hoernle (1907: 68); date uncertain.
- Vogel, Jean (1962), *The Goose in Indian Literature and Art* (Arts & Letters, XXVII; Leiden), 1952, ARK: <https://n2t.net/ark:/13960/t9j425x5z>.
- Von Hinüber, Oskar (1978), "On the Tradition of Pali Texts in India, Ceylon and Burma," in Heinz Bechert (ed.), *Buddhism in Ceylon and Studies on Religious Syncretism in Buddhist Countries* (Gottingen: Vandenhoeck & Ruprecht), 48–60, ISBN: 9783525823873.
- Woodcock, Martin W. (1980), *Collins Handguide to the Birds of the Indian Sub-continent, Including India, Pakistan, Bangladesh, Sri Lanka and Nepal* (Collins), ISBN: 0-00-219712-X; Reprinted 1990.

- Wujastyk, Dominik (2003a), "Black Plum Island," in *2nd International Conference on Indian Studies. Proceedings* (Kraków: Jagiellonian University, Institute of Oriental Philology and Księgarnia Akademicka), 637–49.
- (2003b), *The Roots of Ayurveda: Selections from Sanskrit Medical Writings* (Penguin Classics; 3rd edn., London, New York, etc.: Penguin Group), ISBN: 0-140-44824-1.
- (2013), "New Manuscript Evidence for the Textual and Cultural History of Early Classical Indian Medicine," in *Medical Texts and Manuscripts in Indian Cultural History*, ed. Dominik Wujastyk, Anthony Cerulli, and Karin Preisendanz (New Delhi: Manohar), 141–57, URL: <https://www.academia.edu/4125988/>.
- (2021), "A New Translation of Carakasamhitā, Vimānasthāna, Chapter 1, Based on the Vienna Critical Edition," in Toke Lindegaard Knudsen, Jacob Schmidt-Madsen, and Sara Speyer (eds.), *Body and Cosmos. Studies in Early Indian Medical and Astral Sciences in Honor of Kenneth G. Zysk* (Leiden, Boston: Brill), chap. 6, 77–109. DOI: https://doi.org/10.1163/9789004438224_007.
- Wujastyk, Dominik, et al. (2021–), "The Suśruta Project: The Textual and Cultural History of Medicine in South Asia Based on Newly-Discovered Manuscript Evidence," ed. Dominik Wujastyk, Jason Birch, Andrey Klebanov, et al., URL: <https://sushrutaproject.org>, accessed 21/01/2023.
- Wujastyk, Dominik (2024), "Candraṭa's editing of the Suśrutasaṃhitā," version 2, The Suśruta Project (12 Sept.), URL: <https://sushrutaproject.org/2024/09/12/candrata/>, accessed 29/09/2023; first published 2023-07-04.
- Wujastyk, Dominik, et al. (2023), *On the Plastic Surgery of the Ears and Nose. The Nepalese Version of the Suśrutasaṃhitā* (Heidelberg: Heidelberg Asian Studies Publishing), ISBN: 978-3-948791-63-6. DOI: <https://doi.org/10.11588/hasp.1203>.
- Zysk, Kenneth G. (1993), "The Science of Respiration and the Doctrine of the Bodily Winds in Ancient India," *Journal of the American Oriental Society*, 113: 198–213. DOI: <https://doi.org/10.2307/603025>.
- (2007), "Revisited," *Journal of the Royal Anthropological Institute* (N.S.), S105–S115.

Materia Medica

Abbreviations

ADPS	Sivarajan, V. V., and Balachandran, Indira (1994), <i>Ayurvedic Drugs and Their Plant Sources</i> (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).
AVS	Warrier, P. K., Nambiar, V. P. K., and Ramankutty, C. (1994–96) (eds.), <i>Indian Medicinal Plants: A Compendium of 500 Species</i> . Vaidyaratnam P. S. Varier's Arya Vaidya Sala, Kottakal (Madras: Orient Longman).
BIA	Prater, S. H. (1993), <i>The Book of Indian Animals</i> (3rd edn., Bombay, Delhi, etc.: Oxford University Press), ARK: https://n2t.net/ark:/13960/t6356w32f ; 4th impression of 3rd corrected 1980 edition.
Chevillard	Chevallier, Andrew (2000), <i>The Encyclopedia of Herbal Medicine</i> , ed. Penny Warren et al. (1st edn., New York: Dorling Kindersley), ISBN: 9780751303148, ARK: https://n2t.net/ark:/13960/s2bh76qc88s .
Chopra	Chopra, R. N., Nayar, S. L., and Chopra, I. C. (1956), <i>Glossary of Indian Medicinal Plants</i> (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), <i>Chopra's Indigenous Drugs of India</i> (2nd edn., Calcutta: Dhur & Sons), ARK: https://n2t.net/ark:/13960/t9673t140 .

- Chopra^{sup} Chopra, R. N., Chopra, I. C., and Varma, B. S. (1969), *Supplement to Glossary of Indian Medicinal Plants* (Reprint 1986, New Delhi: National Institute of Science Communication), ISBN: 8185038872.
- Dutt Dutt, Uday Chand (1922), *The Materia Medica of the Hindus...with a Glossary of Indian Plants by George King. Revised Edition...by Binod Lall Sen and Ashutosh Sen and Pulin Krishna Sen* (Krishnadas Sanskrit Studies; 3rd edn., Calcutta: Madan Gopal Dass for the Adi-Ayurveda Machine Press), ARK: <https://n2t.net/ark:/13960/t59c7tg9z>; Reprinted Varanasi: Chowkhamba Saraswatibhavan, 1980.
- Dymock Dymock, William, Warden, C. J. H., and Hooper, David (1890), *Pharmacographia Indica: A History of the Principal Drugs of Vegetable Origin Met with in British India* (London, Bombay, Calcutta: Kegan Paul), URL: <https://tinyurl.com/dymock1890>, accessed 16/03/2023.
- GJM1 Meulenbeld, Gerrit Jan (1974a), "Sanskrit Names of Plants and their Botanical Equivalents," in id., *The Mādhavanidāna and Its Chief Commentary: Chapters 1–10. Introduction, Translation, and Notes* (Leiden: Brill), chap. Appendix Four, 520–611, ARK: <https://n2t.net/ark:/13960/t25b8q97g>.
- GJM2 Meulenbeld, Gerrit Jan (1988), "G. J. Meulenbeld's Additions to his "Sanskrit Names of Plants and their Botanical Equivalents"," in Rahul Peter Das, *Das Wissen von der Lebensspanne der Bäume: Surapālas Vṛkṣāyurveda* (Stuttgart: Franz Steiner Verlag), chap. Appendix 1, 425–65, ISBN: 9783515046633; Supplement to GJM1.
- GVDB Singh, Thakur Balwant, and Chuneekar, K. C. (1972), *Glossary of Vegetable Drugs in Brhatrayi* (Varanasi: Chowkhamba Sanskrit Series Office), ARK: <https://n2t.net/ark:/13960/s2cvp72x58j>.
- HK Hilgenberg, Luise, and Kirfel, Willibald (1941), *Vāgbhaṭa's Aṣṭāṅgaḥṛdayasaṃhitā, ein altindisches Lehrbuch der Heilkunde, aus dem Sanskrit ins Deutsche übertragen mit Einleitung, Anmerkungen und Indices* (Leiden: Brill), ARK: <https://n2t.net/ark:/13960/t52h05616>.

- IGP Griffiths, Mark (1994), *The New Royal Horticultural Society Index of Garden Plants* (London: Macmillan), ARK: <https://n2t.net/ark:/13960/t2q61gn9z>.
- IHR Khare, C. P. (2004), *Indian Herbal Remedies: Rational Western Therapy, Ayurvedic and Other Traditional Usage, Botany* (Berlin and Heidelberg: Springer), ISBN: 978-3-642-62229-8. DOI: <https://doi.org/10.1007/978-3-642-18659-2>, ARK: <https://n2t.net/ark:/13960/t2p67054f>.
- Issar Issar, T. P. (1994), *Blossoms of Bangalore* (Bangalore: T. P. Issar).
- IW Israel, Samuel, et al. (1988), *Indian Wildlife: Sri Lanka Nepal* (Insight Guides; Singapore etc.: APA Publications), ISBN: 9780245545238, ARK: <https://n2t.net/ark:/13960/s2p9d5pqd1w>.
- K & B Kirtikar, K. R., Basu, B. D., and an I.C.S (1987), *Indian Medicinal Plants*, ed. E. Blatter, J. F. Caius, and K. S. Mhaskar, 8 vols. (2nd edn., Dehradun: International Book Distributors); First published in Allahabad, 1918.
- MBG Missouri Botanical Garden (2024), "Missouri Botanical Garden: Plant Finder," Missouri Botanical Garden, URL: <https://bit.ly/MissouriPlantfinder>.
- NEH Bown, Deni (2001), *New Encyclopedia of Herbs and Their Uses* (2nd edn., London, New York etc.: Dorling Kindersly).
- NK Nadkarni, K. M. (1982), *Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes*, ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, URL: <https://tinyurl.com/Nadkarni1982>; First published in 1954.
- Peter Peter, K. V. (2012) (ed.), *Handbook of Herbs and Spices* (Food Science, Technology and Nutrition, 228; 2nd edn., Oxford, Cambridge, Philadelphia, New Delhi: Woodhead Publishing), ISBN: 9780857090393.

- Potter_{rev} Wren, R. C., Williamson, Elizabeth M., and Evans, Fred J. (1994), *Potter's New Cyclopaedia of Botanical Drugs and Preparations* (Saffron Walden: C. W. Daniel Company Ltd.); Reprint of revised 1988 edition.
- POWO Kew Gardens (2024), "Plants of the World," Royal Botanic Gardens, URL: <https://powo.science.kew.org>.
- Reptiles Daniel, J. C. (1983), *The Book of Indian Reptiles* (Bombay: Oxford University Press).
- Trees Bole, P. V., and Vaghani, Yogini (1986), *Field Guide to the Common Trees of India* (Bombay, Delhi, Oxford, etc.: World Wildlife Fund – India and Oxford University Press), ISBN: 0-19-561595-6; 4th reprint.
- Watt_{Comm} Watt, George (1908), *The Commercial Products of India, Being an Abridgement of "the Dictionary of the Economic Products of India"* (London: John Murray), ARK: <https://n2t.net/ark:/13960/t8cg7dm79>.

Flora

- aconite leaf (?) (*viṣapatrikā*) Unknown. Cf. perhaps, [Indian aconite](#) (*viṣā*) (but that is feminine). Cf. [GVDB](#): 373, "unidentified": 145
- agarwood (*aguru*) *Aquilaria malaccensis* Lam., [GVDB](#): 3: 102, 103, 206
- 'alas, alas' (?) (*hālāhala*) unknown. See Cf. *Soḍhalanighantu* p.43 (sub *bola*) = *stomaka* = [Indian aconite](#) (*vatsanābha*): 146, 148
- Alexandrian laurel (*punnāga*) *Calophyllum inophyllum*, L. See [AVS](#): 1, 338, [NK](#): 1, #425: 187, 206
- amaranth (*tanḍulīya*) see [amaranth](#) (*tanḍulīyaka*): 188
- amaranth (*tanḍulīyaka*) *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 *tanḍulīyaka*, but *A. spinosus* L. is better known and attested in S. Asia in the first millennium BCE ([Saraswat 1991](#)): 137, 195, 199, 204, 302
- Arabian jasmin (*tṛṇaśūnya*) see [Arabian jasmine](#) (*mallikā*), [GVDB](#): 190 [MW](#): 453 says *Jasminium sambac*. [GVDB](#): 190 also suggest [screwpine](#) (*ketaka*): 302
- Arabian jasmine (*mallikā*) *Jasminum sambac* (L.) Aiton, [GVDB](#): 300: 302
- Arabian jasmine (*tṛṇaśūlya*) probably an alternative pronunciation for [Arabian jasmin](#) (*tṛṇaśūnya*), [GVDB](#): 190: 206
- arjun (*arjuna*) *Terminalia arjuna*, Bedd. See [HK](#): 738: 46, 82, 203
- Asoka tree (*aśoka*) *Saraca indica* Linn.,

- GVDB: 26 : 103, 105, 188, 206, 220, 318
 atis root (*śṛṅgīviṣa*) Aconitum
 heterophyllum, Wall. ex Royle. See
 AVS: 1, 42, NK: 1, #39 : 146, 148
 axlewood (*dhava*) Anogeissus latifolia
 (Roxb. ex DC.) Wall. ex Guill & Perr.
 See AVS: 1, 163 f, Chopra: 20 : 46, 81,
 158, 203, 206
 bamboo leaves (*veṇupatrikā*) Bambusa
 bambos, Druce. See NK: 1, #307 : 137
 banyan (*nyagrodha*) Ficus benghalensis, L.,
 GVDB: 356, HK: 748 : 303
 banyan (*vaṭa*) see banyan (*nyagrodha*) :
 82, 85
 barley (*yava*) Hordeum vulgare, L. See
 HK: 752 : 113
 barley ash (*yavakṣāra*) The preparation
 method is described at GVDB: 327 :
 116, 303
 barley ash (*yavanāla*) see barley ash
 (*yavakṣāra*), GVDB: 327 : 196
 bayberry (*katphala*) 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 : 188
 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 : 81
 beautyberry (*śyāmā*) Callicarpa
 macrophylla, Vahl. See AVS: 1, 334,
 NK: 1, #420 : 108, 135, 137, 189
 beggarweed (*aṃśumatī*) see beggarweed
 (*śālaparṇī*), GVDB: 1, mentioning that
 the pair of these refers to beggarweed
 and ?? : 153, 198
 beggarweed (*sthīrā*) see beggarweed
 (*śālaparṇī*), GVDB: 458 : 198
 beggarweed (*vidārigandhā*) see
 beggarweed (*śālaparṇī*) : 55, 113, 314
 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 : 303
 beleric myrobalan (*bibhītaka*) Terminalia
 bellirica Roxb. One of the components
 of the three myrobalans (*triphalā*)
 GVDB: 274, 196 : 321
 Bengal quince (*bilva*) Aegle marmelos (L.)
 Corr. See AVS: 1, 62, Chevillard: 161,
 NK: 1, #62, i(MW: 732a) : 81, 103, 105,
 110, 189, 303, 308, 320
 big poison (?) (*mahāviṣa*) unknown :
 146, 148
 big thorn apple (?) (*mahākarambha*)
 Perhaps Datura metel, L.?. See thorn
 apple (*karambha*) : 145
 bitter gourd (*paṭolī*) see pointed gourd
 (*paṭola*), cite[233]gvdb : 188
 bitumen (*adrija*) → *śilājī*. A tar-like, black,
 resinous rock exudate. See
 Mahākośa: 1, 21 : 169
 black Bengal quince (*kṛṣṇaśrīphalikā*)
 GVDB: 412, on *śrīphala*, synonym of
 Bengal quince (*bilva*) fruit : 309
 black creeper (*kālānusārī*) Ichnocarpus
 frutescens R. Br. or Cryptolepis
 buehneri Roemer & Schultes.
 Probably a synonym for *kṛṣṇasārīvā*
 (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 *kālānusārīṇī*,

- kālānusārivā*. *kālānusārya* may be a synonym of *tagara*, itself hard to identify : 187, 304
- black creeper (*pāṇḍī*) *Ichnocarpus frutescens*, (L.) R.Br. or *Cryptolepis buehneri*, Roemer & Schultes. See AVS: 3, 141, 145, 203, NK: 1, #1283, 1210, ADPS: 434. Ḍalhaṇa on SS 5.1.82 identified *pāṇḍī* with *trivṛt* (*turpeth*) and Singh and Chuneekar (GVDB: 246) supported this as a usual identification : 137, 140, 153, 188
- black nightshade (*kākamācī*) *Solanum nigrum*, Linn., GVDB: 86–87. May also be the less poisonous *S. dulcamara*, “bittersweet nightshade,” K & B: 1, 889–892 : 198, 205, 306
- black pepper (*marica*) *Piper nigrum*, L. See ADPS: 294, NK: 1, #1929. Known to ancient Greek authors (Ball 1888: 341) : 114, 204, 220, 308, 321
- black sarsaparilla (*kālānusārivā*) see Indian sarsaparilla (*sārivā*); see also black creeper (*kālānusāri*). Problems about identifying this plant are discussed at GVDB: 94–95 and GVDB: 429–431 : 206
- blackboard tree (*saptachada*) *Alstonia scholaris* R. Br. GVDB: 420 : 136, 304
- blackboard tree (*saptaparna*) see blackboard tree (*saptachada*) : 204
- blackbuck (*hariṇa*) *Antelope cervicapra*, L. See BIA: 270 IW: 95, 165, *et passim* : 140
- blue water-lily (*utpala*) *Nymphaea stellata*, Willd. See GJM1: 528, IGP 790; Dutt: 110, NK: 1, #1726 : 37, 135, 153, 206, 220, 221, 307
- bluebell barleria (*kuravaka*) see bluebell barleria (*kuruvaka*) : 189
- bluebell barleria (*kuruvaka*) Or *kurubaka*. Singh and Chuneekar (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 Chuneekar (GVDB) finally propose a red-flowering *Rhododendron*, admitting that this is a novel suggestion : 145, 304
- bluebell barleria (*sahā*) see bluebell barleria (*sahācara*), GVDB: 428 : 112, 197
- bluebell barleria (*sahācara*) see bluebell barleria (*saireyaka*), GVDB: 427 : 304
- 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 : 304
- bread flower (*āśphota*) GVDB: 41 argue for *Vallisneria spiralis* (Roth ex Roem. & Schult.) Kuntze. This has the right distribution in S. Asia POWO: s.v. : 199
- bull’s head (*gokṣura*) *Tribulus terrestris* L. GVDB: 144–145, 193. A component of lesser five roots : 304
- bull’s head (*trikaṇṭaka*) → bull’s head (*gokṣura*) GVDB: 193. A component of lesser five roots : 314
- bulrush (*kaśeru*) “Two species, *Scirpus kysoor* Roxb., and *S. grossus* Linn. f., are used” GVDB: 85. Also *kaśeruka* and *kaseru* : 108, 109, 112
- calabash gourd (*kūṣmāṇḍa*) → *pūṣpaphala*. *Benincasa hispida*, (Thunb.) Cogn. See AVS: 2, 1127; cf. AVS: 1, 261 : 308
- camphor (*karpūra*) → *śītaśiva*. *Cinnamomum camphora*, (L.) Sieb. See IGP 253 : 304
- 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 : 206
- cardamom (*elā*) *Elettaria cardamomum*, Maton. See AVS: 2, 360, NK: 1, #924,

- Potter_{rev}: 66 : 102, 103, 153, 159, 187, 188, 196, 206, 305
- cardamom (*kṣudrailā*) see [cardamom](#) (*elā*), [GVDB](#): 128. This expression, “small cardamom” is only used at *Suśrutasaṃhitā* Kalpasthāna 6.17 : 206
- carray cheddie (*viśvadevā*) → *gāṅgerukī* *Canthium parviflorum*, Lam. See [AVS](#): 1, 366 f. Or *Sida rhombifolia* Linn. ([GVDB](#): 372, 444 ff. et passim) : 85
- castor oil tree (*gandharvahasta*) see [castor-oil](#) (*eraṇḍa*). [GVDB](#): 135, K & B: 3, 2277 : 51, 105
- castor-oil (*eraṇḍa*) *Ricinus communis*, L. See [NK](#): 1, #2145, [Chopra](#): 214 : 56, 305
- castor-oil tree (*vardhamāna*) see [castor-oil](#) (*eraṇḍa*), [GVDB](#): 361 : 204
- catechu (*khadira*) *Senegalia catechu* (L.f.) P. J. Hurter & Mabb = *Acacia catechu* Willd. [GVDB](#): 129–130 : 82
- 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 pāradah*, “tāra means silver; sutāra means mercury.” : 158
- 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*) : 39, 319
- champak (*campaka*) *Magnolia champaca* (L.) Baill. ex Pierre, [GVDB](#): 154 : 206
- chebulic myrobalan (*haritakī*) *Terminalia chebula* Retz. [GVDB](#): 466 : 111, 136, 206, 321
- cherry (*elavālu*) *Prunus cerasus*, L. See [GVDB](#): 58 for a thoughtful discussion [NK](#): 1, #2037 : 153, 206, 305
- cherry (*elavālu*) see [cherry](#) (*elavālu*) : 204
- chir pine (*sarala*) *Pinus roxburghii*, Sarg. [GVDB](#): 423 : 81, 112, 204, 206
- cinnamon (*tvac*) *Cinnamomum cassia*, Blume. See [NK](#): 1, #579 : 198, 206, 305
- cinnamon (*tvak*) see [cinnamon](#) (*tvac*) : 188
- cinnamon (*varāṅga*) see [cinnamon](#) (*tvac*), [GVDB](#): 360 : 204
- citron (*mātuluṅga*) *Citrus medica*, Linn. [GVDB](#): 276, 306. Also spelled *mātuliṅga*, *mātulaṅga*, *mātulāṅga* : 81, 110, 115, 116, 188
- cluster fig (*udumbara*) *Ficus racemosa*, L. See [ADPS](#): 487 : 203
- cobra’s saffron (*nāgapuṣpa*) → *nāgakeśara*. *Mesua ferrea*, L. See [NK](#): 1, #1595, [GVDB](#): 220 : 153
- 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* : 204, 206, 305
- colocynth (*mṛgādanī*) see [colocynth](#) (*indravāruṇī*) [GVDB](#): 46, 318 : 188
- common smilax (*śvadaṃśtra*) *Smilax aspera* L., [GVDB](#): 414 : 81
- 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* : 85
- coriander (*dhānyaka*) *Coriandrum sativum* L., [GVDB](#): 213 : 306

- coriander (*kustumburya*) see [coriander](#) (*dhānyaka*), [GVDB](#): 113 : 206
- corky coral tree (*pāribhadra*) *Erythrina suberosa* Roxb. See [GVDB](#): 245 : 158, 306
- corky coral tree (*pāribhadraka*) see [corky coral tree](#) (*pāribhadra*) : 105, 203
- costus (*kuṣṭha*) *Dolomiaea costus* (Falc.) Kasana & A. K. Pandey. See [GVDB](#): 112, [NK](#): 1, #2239. Known to ancient Greek authors (Ball 1888: 345) : 102, 103, 110, 137, 153, 159, 187, 188, 196, 204, 206
- cottony jujube (*kākolī*) *Ziziphus mauritana*, Lam. See [IGP](#): 1233, [NK](#): 1, #2663; [IGP](#) 1233. Cf. [NK](#): 1, #1170 : 101, 109, 110, 184
- 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 : 55, 109, 112, 280
- country mallow (*sahadevā*) → *balā* ([GVDB](#): 428). Contains ephedrine : 85, 112
- 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 frutescens* R. Rr. ([GVDB](#): 429–431) : 55, 145, 153, 158
- crape jasmine (*tagara*) *Tabernaemontana 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 : 102, 103, 110, 137, 153, 187, 206, 310, 323
- 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 : 308, 323
- croton tree (*nāgadantī*) *Croton persimilis* Müll.Arg., [GVDB](#): 222 : 204, 306, 318
- croton tree (*nāgavinnā*) *Croton persimilis* Müll.Arg. [GVDB](#): 222 I have taken this as [croton tree](#) (*nāgadantī*) because of context in *Suśrutasaṃhitā* Kalpasthāna 5 : 189
- crow (?) (*kāka*₂) an unidentified poisonous plant apparently called “crow.” Singh and Chuneekar ([GVDB](#): 86) note that several drugs named after the crow are unidentifiable. [Black nightshade](#), (*kākamācī*) is toxic, but this is a stretch : 145
- datura (*dhattūra*) *Datura metel*, L. See [AVS](#): 2, 305 (cf. *Abhidhānamāñjarī*), [NK](#): 1, #796 ff. [Potter_{rev}](#): 292 f, [ADPS](#): 132 : 52, 306
- datura (*dhuttūrakā*) see [datura](#) (*dhattūra*) : 200
- deodar (*bhadradāru*) *Cedrus deodara*, (Roxb.ex D.Don) G. Don. See [AVS](#) 41, [NK](#): 1, #516 : 46, 109, 113, 153, 204
- deodar (*devadāru*) *Cedrus deodara* (Roxb.) Loud. [GVDB](#): 206–207 : 81, 110, 206, 280, 306
- deodar (*suradāru*) see [deodar](#) (*devadāru*) : 187
- devil’s dung (*hiṅgu*) *Ferula foetida* Regel., [GVDB](#): 471–472 : 82, 83, 187
- dried ginger (*nāgara*) → [dried ginger](#) (*śuṇṭhī*) [GVDB](#): 221–222 : 83, 187
- dried ginger (*śuṇṭhī*) *Zingiber officinale*, Roscoe. See [ADPS](#): 50, [NK](#): 1, #2658, [AVS](#): 5, 435, [IGP](#): 1232 : 108, 306, 321
- 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): 38
- drum-giver (?) (*lambarādā*) Unknown; cf. GVDB: 348: 145
- elixir salve (*rasāñjana*) cf. Indian barberry (*añjana*): 46, 56, 311
- embelia (*viḍaṅga*) Embelia ribes, Burm. f. See ADPS: 507, AVS: 2, 368, NK: 1, #929, Potter_{rev}: 113: 46, 81, 103, 153, 187, 188, 204
- emblic myrobalan (*āmalaka*) Phyllanthus emblica, L. See AVS: 4, 256: 81, 111, 112, 220, 321
- emetic nut (*karaghāṭa*) Probably a synonym for *karahāṭa* (emetic nut), q.v., GVDB: 74: 307
- emetic nut (*karaghāṭaka*) see emetic nut (*karahāṭa*): 146, 203
- emetic nut (*karahāṭa*) Randia dumetorum, Lamk. See GVDB: 291–292 and NK: 1, #2091. Singh and Chuneekar (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.: 307
- emetic nut (?) (*karaṭā*) Not in GVDB. Cf. perhaps *karahāṭa* (emetic nut): 144
- emetic nut (*madana*) Randia dumetorum, Lamk. See NK: 1, #2091: 136, 282
- false daisy (*bhṛṅga*) Eclipta prostrata (L.) L. See GVDB: 288: 81
- false daisy (*subhaṅgurā*) (su)bhaṅgura = bhṛṅga? Eclipta prostrata (L.) L. See GVDB: 288: 144
- fermented rice-water (*dhānyāmla*) → *kāñjī*, *kāñjikā*, *sauvīra*. GVDB: 458, NK: 2, appendix VI, #18: 53, 54
- 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: 139
- fire-flame bush (*dhātakī*) Woodfordia fruticosa (L.) Kurz. See AVS: 5, 412, NK: 1, #2626. Known to ancient Greek authors (Ball 1888: 344): 82, 136
- five roots (*pañcamūla*) Described at *Suśrutasamhitā* 1.38.66–69 (Su 1938: 169). There are two *pañcamūlas*, 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: 81
- flame-of-the-forest (*kiṃśuka*) see flame-of-the-forest (*palāśa*), GVDB: 97–98: 196
- flame-of-the-forest (*palāśa*) Butea monosperma (Lam.) Taub. GVDB: 241. *pālāśa* in some sources: 82, 105, 307
- flax (*ataśī*) Linum usitatissimum, L. See NK#1495: 109
- foxtail millet (*priyaṅgu*) also *śyāmā*. Setaria italica (L.) P. Beauvois GVDB: 263–264, GJM1: 576. The most widely-grown species of millet in Asia. Some say Callicarpa macrophylla, Vahl. See AVS: 1, 334, NK: 1, #420. The fruits of S. italica and C. macrophylla 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*: 46, 153, 159, 187, 188, 220, 307
- foxtail millet (*priyaṅgū*) see foxtail millet (*priyaṅgu*): 206
- fragrant lotus (*saugandhika*) A type of white water-lily (*kumuda*) or blue water-lily (*utpala*), GVDB: 457: 37
- fruit of the marking-nut (*āruṣkara*) see marking-nut tree (*aruṣkara*). “āruṣkara = aruṣkara phala” ADPS: 23; see also MW: 151: 188
- 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 : 308, 326
- gajpipul (*hastipippalī*) see [gajpipul](#) (*gajapippalī*) , [GVDB](#): 469, 132 : 204
- 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](#)) : 308
- galls (?) (*karkaṭa*) almost impossible to identify with certainty, [GVDB](#): 78–80. Perhaps *Rhus succedanea*, L. See [NK](#): 1, #2136 : 146
- garjan oil tree (*aśvakarṇa*) *Dipterocarpus turbinatus* Gaertn. f. See [GVDB](#): 28, [Chopra](#): 100 : 158, 203, 206
- giant potato (*kṣīravidārī*) possibly → *kṣīraśukla*. *Ipomoea mauritiana*, Jacq. See [ADPS](#): 510, [AVS](#): 3, 222, [AVS](#): 3, 1717 ff : 109, 312, 315, 316, 318
- ginger (*mahaśadha*) *Zingiber officinale*, Roscoe. See [ADPS](#): 50, [NK](#): 1, #2658, [IGP](#): 1232 : 140
- gold (*hema*) gold : 153
- 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” : 159
- golden shower tree (*rājadruma*) see [golden shower tree](#) (*āragvadha*) : 158
- golden shower tree (*rājavarṣa*) see [golden shower tree](#) (*āragvadha*) : 81
- 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 : 111, 186, 196, 198, 308
- gourd (*alābu*) *Lagenaria siceraria* Standl. [GVDB](#): 25. Some say *Lagenaria vulgaris*, Seringe ([NK](#): 1, #1419) but this is not appropriate for blood-letting : 33, 34, 136, 184
- gourd (*vallīja*) see [gourd](#) (*vallīja*) : 146
- 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.” : 308
- grapes (*drākṣā*) *Vitis vinifera* L. [GVDB](#): 208–209 : 188
- greater five roots (*brhatpañcamūla*) 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](#) : 307, 313, 321
- green gram (*māṣa*) *Vigna radiata* (L.) R. Wilcz. See [ADPS](#): 296, [IGP](#) 1204 : 46, 109, 281
- 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.” : 81, 108, 110, 187, 308

- gummy gardenia (*pr̥thvikā*) ← *hiṅgupatrikā*, *Gardenia gummifera* L.f., **GVDB**: 257, q.v. for discussion : 188, 206
- hairy bergenia (*pāṣāṇabheda*) *Bergenia ligulata* (Wall.) Engl. **GVDB**: 246–247 : 81
- hairy-fruited eggplant (*br̥hatī*) *Solanum lasiocarpum* Dunal. (syn. *S. ferox*, L. & *S. indicum* L.), **GVDB**: 277–278, who discuss the two kinds of *br̥hatī*, which may be large and small eggplants (*Solanum melongena* L.). See also **ADPS**: 100, **NK**: 1, #2329, **AVS**: 5, 151, **IHR**: 429–430 : 105, 111, 152, 153, 196, 198, 314
- halfa grass (*darbha*) *Demostachya bipinnata* Stapf. **GVDB**: 201. Synonym of *kuśa* : 84, 109
- halfa grass (*kuśa*) *Desmostachya bipinnata*, (L.) Stapf. **GVDB**: 111, **AVS**: 2, 326 : 109, 181, 204
- hare foot uraria (*kroṣṭakamekhalā*) see **hare foot uraria** (*pr̥śniparṇī*) *Mahākośa*: 1, 246. *kroṣṭaka* can mean “jackal” *śṛgāla*, as in *śṛgālavinna*, “a kind of *pr̥śniparṇī*” *Mahākośa*: 1, 839 : 188
- hare foot uraria (*pr̥thakparṇī*) → **hare foot uraria** (*pr̥śniparṇī*) and **rajmahal hemp** (*mūrvā*) **GVDB**: 257. A component of **lesser five roots** : 111, 314
- hare foot uraria (*pr̥śniparṇī*) → *sahā*? *Uria lagopoides*, DC. and *U. picta* Desv. See **GVDB**: 257–258, **GJM**₁: 577, **Dymock**: 1, 426, **AVS**: 1, 750 ff, **NK**: 1, #2542; **ADPS**: 382, **AVS**: 2, 319 and **AVS**: 4, 366 are confusing. Also called *pr̥thakparṇī*. A component of **lesser five roots** : 108, 109, 309
- heart-leaf sida (*balā*) *Sida cordifolia*, Linn. See **ADPS**: 71, **NK**: 1, #2297 : 55, 109, 112, 114, 153, 280
- heart-leaved moonseed (*amṛtā*) → *guḍūcī*. *Tinospora cordifolia*, (Willd.) Hook.f. & Thoms.? See **ADPS**: 38, **NK**: 1, #2472, 624, **Dastur** #229 : 137, 152, 198
- 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**) : 81, 110
- heart-leaved moonseed (*somavallī*) *Tinospora cordifolia* (Thunb.) Miers. **GVDB**: 456. Likely, but uncertain : 137
- heart-leaved moonseed creeper (*amṛtavallī*) See *amṛtā* : 280
- hedge caper (*hiṃsrā*) *Capparis sepia* L., **GVDB**: 471, **IHR**: 124, **K & B**: 1, 109 : 309
- hedge caper (*kākādanī*) synonym of **hedge caper** (*hiṃsrā*), **GVDB**: 88, 471, **IHR**: 124, **K & B**: 1, 109. This name is not used in the *Carakasamhitā*. At 5.7.31 (**Su** 1938: 583), Ḍalhaṇa glossed *kākādanī* as **black Bengal quince** (*kṛṣṇaśrīphalikā*). **GVDB**: vi, 471 note that they have identified *kākādanī* as *Cardiospermum halicacabum* L. “balloonvine” : 198
- henna (*madayantikā*) *Lawsonia inermis*, L. See **AVS**: 3, 303, **NK**: 1, #1448, **Potter**_{rev}: 151 : 138
- hibiscus (?) (*ambaṣṭhā*) possibly *Hibiscus rosa-sinensis* L.? Singh and Chuneekar (**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 Chuneekar propose that *ambaṣṭhā* is either the fruit of *Hibiscus* or the galls of a *Quercus* or *Tamarix* species. According to Meulenbeld 1974b: 599, *vanakārpāsī* is more likely a name for a hibiscus : 189
- Himalayan birch (*bhūja*) see **Himalayan birch** (*bhūrja*) : 204
- Himalayan birch (*bhūrja*) *Betula utilis* D. Don, **GVDB**: 287 : 309
- Himalayan mayapple (*vakra*) *Podophyllum hexandrum*, Royle

- (NK: #1971), K & B: 1, 68. But perhaps a synonym of **crape jasmine** (*tagara, nata* q.v. (GVDB: 354)) : 159, 187, 188, 198
- Himalayan yew (*sthauneya*) see **Himalayan yew** (*sthauneyaka*) : 206
- Himalayan yew (*sthauneyaka*) Singh and Chuneekar (GVDB: 458–459) suggested *Taxus baccata* L., but that tree is endemic to the Mediterranean 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 : 187, 310
- hogweed (*punarnavā*) Boerhaavia diffusa, L. See ADPS: 387, AVS: 1, 281, NK: 1, #363 : 111, 138, 152, 189, 310
- hogweed (*punarnavā*) see **hogweed** (*punarnavā*) : 197
- hogweed (*punarnavā*) see **hogweed** (*punarnavā*) : 200
- hogweed (*varṣābhū*) see **hogweed** (*varṣābhū*) : 197
- 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*) : 310
- Holostemma creeper (*jīvantī*) → *sūryavallī*? *Holostemma ada-kodien*, Schultes. See ADPS: 195, AVS: 3, 167, 169, NK: 1, #1242 : 112, 316
- holy basil (*surasa*) *Ocimum tenuiflorum*, Linn. GVDB: 438–439 : 189
- 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* : 117, 140, 220, 221
- horned pondweed (*śaivāla*) also *śaivāla, śevāra*. *Zannichellia palustris* L. The uncertainties of this identification are discussed by Singh and Chuneekar (GVDB: 409). Sometimes identified with **scutch grass** (*dūrvā*) (GVDB: 409). Identified as *Ceratophyllum demersum* Linn. (“hornwort”) by AVS: 2, 56–57x : 110, 310, 317
- hornwort (*jalaśūka*) → *jalanīlikā*. *Ceratophyllum demersum*, L. See AVS: 2, 56, IGP: 232. Singh and Chuneekar (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 : 55
- horse gram (*kaulattha*) See **horse gram** (*kulattha*) : 182
- horse gram (*kulattha*) *Macrotyloma uniflorum* (Lam.) Verdcourt, syn. *Dolichos biflorus*, L., *D. uniflorus*, Lam., GVDB: 109, POWO: sub *Macrotyloma uniflorum* : 113, 114, 186, 207, 310
- horseradish tree (*madhukaśigru*) *Moringa oleifera* Lam., GVDB: 398–399. See **horseradish tree** (*śigru*) : 203
- horseradish tree (*murungī*) see **horseradish tree** (*śigru*) (GVDB: 311) : 188
- horseradish tree (*śigru*) *Moringa oleifera* Lam. See IGP: 759, GJM1: 603, Dymock: 1, 396, GVDB: 398–399 : 110, 111, 310
- hyacinth beans (*niṣpāva*) *Lablab purpureus* (L.) Sweet (1826) GVDB: 228 : 99
- 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 : 100,

- 138, 140, 159, 204, 206, 311
- 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 *Carakasamhitā* and thrice in the *Suśrutasamhitā* (Ca4.23.11571, Su5.2. 5, 6, 12564) : 146, 147, 302, 310
- Indian aconite (*viṣā*) see *Indian aconite* (*ativiṣā*), *GVDB*: 12, 373 : 302, 317
- Indian barberry (*añjana*) see *Indian barberry* (*dāruharidrā*) Cf. *elixir salve* (*rasañjana*) : 56, 139, 307
- Indian barberry (*dāruharidrā*) *Berberis holstii* Engl., *Dymock*: 1, 65, *NK*: 1, #335, #685, *GJM1*: 562, *IGP*: 141, *GVDB*: 203 : 152, 153, 311, 321
- Indian barberry (*dārvi*) see *Indian barberry* (*dāruharidrā*) : 221
- Indian barberry (*kālīyaka*) see *Indian barberry* (*dāruharidrā*) : 137
- Indian bat tree (*śuṅgā*) → *parkaṭīvrkṣa* according to *Śabdasindhu*: 1058; idem also suggests *vaṭavrkṣa*, i.e., *Ficus benghalensis* Linn. and *āmṛātaka*, *Spondias pinnata* (L.f.) Kurz. (native to S.E Asia but naturalized in S. Asia). Contrasted with *vaṭa* at *Suśrutasamhitā* 3.2.32. Cf. *MW*: 1081. : 85
- Indian bdellium-tree (*guggula*) See *Indian bdellium-tree* (*guggulu*) : 187
- 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) : 117, 311
- Indian beech (*naktamāla*) *Pongamia pinnata*, (L.) Pierre. See *AVS*: 4, 339, *NK*: 1, #2003 : 46, 105
- 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*) : 111, 152
- Indian cherry (*śelū*) see *Indian cherry* (*śleṣmātakī*), *GVDB*: 408 : 206
- Indian cherry (*śleṣmātakā*) see *Indian cherry* (*śleṣmātakī*) : 203
- Indian cherry (*śleṣmātakī*) *Cordia dichotoma* G. Forst., *AVS*: 2, 180–183. See *POWO*: C. dichotoma; *Cordia myxa* L., according to Singh and Chuneekar (*GVDB*: 413–414), although they also suggest C. dichotoma (synonym of C. wallichii G. Don.) and C. rothii (synonym of *Cordia sinensis* Lam.) : 188, 311
- Indian dill (*śatapuspā*) *Anethum graveolens* L. May also be *Foeniculum vulgare* Mill. See *GVDB*: 388 for discussion : 112, 206
- Indian elm (*cirabilva*) *Holoptelea integrifolia* (Roxb.) Planch. *GVDB*: 158, who also say that *pūtika* is a synonym; but that must be different than *pūtikā* : 311
- Indian elm (*ciribilva*) see *Indian elm* (*cirabilva*) : 203
- Indian frankincense (*agamṛttikā*) see *Indian frankincense* (*śallakī*), according to Ḍalhaṇa's comment on *Suśrutasamhitā* 5.7.29. A variant form of *Indian frankincense* (*agavṛttikā*) : 198
- Indian frankincense (*agavṛttikā*) see ?? (*nagavṛttikā*), *GVDB*: 3, 392 : 311
- Indian frankincense (*gajavṛttikā*) *Boswellia serrata* Roxb.; equated with *Indian frankincense* (*śallakī*) by some, *GVDB*: 392. See also ?? (*nagavṛttikā*) :

- 188
- Indian frankincense (*śallakī*) *Boswellia serrata* Roxb., *GVDB*: 392 : 198, 311
- 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 chosen *Fumaria indica* (Hausskn.) Pugsley, which can be poisonous : 312
- Indian fumitory (*reṇu*) see [Indian fumitory](#) (*parpaṭa*), *GVDB*: 339. To be distinguished from [pollen \(?\)](#) (*reṇukā*) : 145
- Indian ipecac (*payasyā*) Uncertain. Possibly *Tylophora indica* (Burm.f.) Merr. Perhaps a synonym of [panacea twiner](#), [giant potato](#), [purple roscoe](#), and [plants like asthma plant and Gulf sandmat](#) (*GVDB*: 237–238). Also “curds” when not a plant : 55, 110, 316
- Indian jujube (*sauvīraka*) *Zizphus jujuba* Mill., *GVDB*: 458, *MBG*: sub jujuba : 109, 182
- 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 = *Ipomoea mauritiana*, Jacq : 55, 81
- Indian laurel (*plakṣa*) *Ficus microcarpa*, L. f. See *ADPS*: 377 : 204
- Indian madder (*mañjiṣṭhā*) *Rubia cordifolia*, L. See *IGP*, *Chopra*: 215, *GVDB*: 289 : 51, 153, 187, 188, 197, 204
- 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) : 35
- Indian mustard (*sarṣapa*) *Brassica juncea*, Czern. & Coss. See *AVS*: 1, 301, *NK*: 1, #378, *GVDB*: 426–427 : 38, 146, 204, 315
- Indian pennywort (*maṇḍūkapaṇṇī*) *Centella asiatica* (L.) Urban. See *GVDB*: 290, *ADPS*: 289–291 : 189
- Indian sarsaparilla (*sugandhikā*) see [Indian sarsaparilla](#) (*śvetasārivā*) *GVDB*: 430, 436 : 188, 206
- 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, *pāṇḍī*. *Ichnocarpus frutescens*, (L.) R.Br. or *Cryptolepis buehneri*, Roemer & Schultes *AVS*: 3, 141, 145, 203, *NK*: 1, #1283, 1210, *ADPS*: 429–430 : 153, 304, 308, 312
- Indian sarsaparilla (*śvetasārivā*) *Hemidesmus indicus*, (L.) R. Br. See [Indian sarsaparilla](#) (*sārivā*). *ADPS*: 434, *AVS*: 3, 141–145, *NK*: 1, #1210, *GVDB*: 430 : 312
- Indian snakeroot (*sarpagandhā*) *Rauvolfia serpentina*, (L.) Benth. ex Kurz. See *NK*: 1, #2099, *ADPS*: 439, *GVDB*: 425; cf. SS 5.5.76–78 : 189, 312
- Indian snakeroot (*sarvagandhā*) common spelling in Nepalese MSS for [Indian snakeroot](#) (*sarpagandhā*), q.v. : 198
- Indian symphorema (*ananta*) Not in *GVDB* but *MW*: 25 says “*sinduvāra*” on no authority (see [Indian symphorema](#) : 204
- Indian symphorema (*sinduvāra*) Singh and Chuneekar (*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 : 187, 189, 197, 206, 312
 Indian trumpet tree (*śyonāka*) *Oroxylum indicum* (L.) Benth. ex Kurz.
 GVDB: 172–173. A component of greater five roots : 313
 Indian trumpet tree (*ṭiṇṭuka*) → Indian trumpet tree (*śyonāka*). *Oroxylum indicum* (L.) Benth. ex Kurz.
 GVDB: 172–173. A component of greater five roots : 308
 Indian trumpet tree (*ṭiṇṭuka*) see Indian trumpet tree (*śyonāka*),
 GVDB: 172–173 : 204
 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) : 198, 313
 indigo (*nīlā*) see indigo (*nīlinī*). Although Singh and Chuneekar (GVDB: 229) refer to an unidentified creeper mentioned in *Carakasamhitā* Ci.1-4.7, the use in the Nepalese *Suśrutasaṃhitā* 5.6.24 is likely to refer to indigo (*nīlī*) : 197
 indigo (*nīlī*) see indigo (*nīlinī*) : 206, 313
 Indrajao (*indrayava*) see *vr̥kṣaka* (Indrajao)
Holarrhena pubescens Wall. ex G.Don 1837 GVDB: 376, 45 and 84 : 100
 Indrajao (*vr̥kṣaka*) → *indrayava*, *indrabīja*, *kaliṅga*, and *kuṭaja*. *Holarrhena pubescens* Wall. ex G.Don 1837
 GVDB: 376, 45 and 84 : 83, 280, 313
 itchytree (*nicula*) *Barringtonia acutangula* (L.) Gaertn., GVDB: 224 : 204
 jambul (*jambū*) *Syzygium cumini*, (L.) Skeels. See ADPS: 188, NK: 1, #967, Potter_{rev}: 168, Wujastyk 2003a : 136, 221
 jequirity (*guñjā*) *Abrus precatorius*, L. See AVS: 1, 10, NK: 1, #6, Potter_{rev}: 168. See further jequirity (*kālakūṭa*) : 144, 145
 jequirity (*kālakūṭa*) see jequirity (*kālakūṭa*) : 147, 313
 jequirity (*kālakūṭā*) possibly *Abrus precatorius*, L. Cf. RRS 21.14. See AVS: 1, 10, NK: 1, #6, Potter_{rev}: 168. The Nepalese witnesses agree on the feminine form, *kālakūṭā*, while the more normal gender is masculine. The etymology of the name *kāla-kūṭa*, “black-top,” fits with the striking appearance of jequirity seeds.
 GVDB: 93 does not attempt to identify the plant. The *Rasaratnasamuccaya* of pseudo-Vāgbhaṭa (21.14) says that the *kālakūṭa* poison is similar to “crow’s beak” (*kākacañcu*), which is a more certain name for jequirity. Another hypothesis for the name, which could be translated “time/death-peak” might connect it with Sandakphu mountain, whose name is Lepcha for “the height of the poisonous plant” because of the abundance of *Aconitum ferox* on the mountain : 146, 313
 kutki (*kaṭukā*) *Picrorhiza kurroa* Royle ex Benth. (GVDB: 64–65) : 100, 117, 313, 316
 kutki (*kaṭurohaṇī*) → kutki (*kaṭukā*), GVDB: 66, 64–65 : 187
 kutki (*kaṭurohiṇī*) see kutki (*kaṭukā*), GVDB: 66, 64–65 : 206
 leadwort (*agniśikhā*) *Plumbago zeylanica* (or *rosea*?), L. See NK: 1, #1966, 1967 : 313
 leadwort (*citraka*) *Plumbago zeylanica* (or *indica*?), L. See RĀ. 6.124, ADPS: 119, NK: 1, #1966, 1967 : 46, 82, 100, 105, 116, 187
 leadwort (*pālaka*) → *citraka*. *Plumbago zeylanica* (*indica*? *rosea*?), L. See Rā. 6.124, ADPS: 1, 119, NK: 1, #1966, 1967 : 146, 147
 leadwort (*vidyutśikhā*) see leadwort (*agniśikhā*) : 144
 lemon grass (*uśīrabheda*) → *lāmajja*.
Cymbopogon jwarancusa (Jones ex

- Roxb.) Schult.. See [NK](#): 1, #176: [322](#)
 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](#): [304](#), [307](#), [309](#), [321](#), [325](#)
 liquorice (?) (*klitaka*) *Glycyrrhiza glabra*,
 L.? [GVDB](#): 123–124 discuss the many
 difficulties in identifying this plant: [144](#)
 liquorice (*madhuka*) also *yaṣṭi*(*ka/kā*),
yaṣṭīmadhuka, *Glycyrrhiza glabra*, L.
[AVS](#): 3, 84, [NK](#): 1, #1136, [GVDB](#): 329 f.:
[55](#), [81](#), [108–113](#), [115](#), [140](#), [151](#), [153](#), [187](#),
[203](#), [206](#), [221](#), [314](#)
 liquorice (*yaṣṭī*) see [liquorice](#) (*madhuka*):
[188](#)
 liquorice (*yaṣṭīmadhuka*) see [liquorice](#)
 (*madhuka*): [56](#)
 lodh tree (*lodhra*) *Symplocos racemosa*,
 Roxb. See [GJM1](#): 597, [ADPS](#): 279 f,
[NK](#): 1, #2420. Singh and Chuneekar
 ([GVDB](#): 351–352) notes that there are
 two varieties, *S. racemosa*, qualified as
śāvāra, and *S. crataegoides* Buch.-Ham.
 for *paṭṭikā lodhra*: [46](#), [153](#), [187](#), [221](#)
 long pepper (*kṛṣṇā*) see [long pepper](#)
 (*pippalī*): [220](#)
 long pepper (*māgadhā*) see [long pepper](#)
 (*pippalī*): [139](#)
 long pepper (*pippalī*) see [long pepper](#)
 (*pippalī*): [187](#)
 long pepper (*pippalī*) *Piper longum*, L. See
[ADPS](#): 374, [NK](#): 1, #1928,
[GVDB](#): 249–250, but cf. [AVS](#): 3, 245: [81](#),
[105](#), [111](#), [112](#), [116](#), [117](#), [140](#), [153](#), [204](#), [207](#),
[220](#), [280](#), [314](#), [321](#)
 long pepper root (*pippalīmūla*) see [long](#)
[pepper](#) (*pippalī*): [204](#)
 long-stamen *Wendlandia* (?)
 (*prapaunḍarika*) See the substantial
 discussion by Singh and Chuneekar
 ([GVDB](#): 261). They note that it is used
 mainly in eye troubles and frequently
 with liquorice, than which it 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: [146](#),
[187](#), [206](#), [314](#)
 long-stamen *Wendlandia* (?) (*tilaka*) see
[long-stamen Wendlandia](#) (?)
 (*prapaunḍarika*), [GVDB](#): 183–184.
 Sometimes thought to be a synonym of
[viburnum](#) (*tilvaka*), q.v., but this is
 probably erroneous: [206](#), [323](#)
 lotus (*nalina*) see [sacred lotus](#) (*kamala*),
[GVDB](#): 218: [220](#), [221](#)
 lotus stalk (*mṛṇālā*) “Leaf stalk of [sacred](#)
[lotus](#)” [GVDB](#): 318: [110](#)
 luffa (*jālīnī*) see [luffa](#) (*koṣātakī*),
[GVDB](#): 168: [146](#), [196](#)
 luffa (*koṣavatī*) see [luffa](#) (*koṣātakī*): [152](#)
 luffa (*koṣātakī*) *Luffa cylindrica*, (L.) M. J.
 Roem. or *L. acutangula*, (L.) Roxb.
[ADPS](#): 252–253, [NK](#): 1, #1514 etc.
 “*Koṣātakī* 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: [314](#)
 mahua (*madhūka*) *Madhuca longifolia*, (J.
 Koenig) J. F. Macbride. See [AVS](#): 3,
 362 f. Known to ancient Greek authors
 (Ball 1888: 339–340): [81](#), [224–226](#)
 maidenhair fern (*haṃsāhvayā*) *Adiantum*
lunulatum Burm f. [GVDB](#): 463: [280](#)
 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) : 102, 103, 110, 137, 153, 195, 196, 206
- Malay beechwood (*śrīparṇī*) → *kāśmarī*. *Gmelina arborea* Linn., [GVDB](#): 412, 96–97 : 81
- maloo creeper (*aśmantaka*) Singh and Chuneekar ([GVDB](#): 27) note that this is 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 : 189, 203
- mango (*āmra*) *Mangifera indica* Linn. [GVDB](#): 37 : 136, 189, 204, 220
- mangosteen (*amla*) *Garcinia pedunculata* Roxb. ex Buch.-Ham. See [GVDB](#): 20–21 : 186
- 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 *Sauśrutaniḥṣaṇṭu* (156) gives *rakṣoghṇā* 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) : 147
- marking-nut tree (*aruṣkara*) see [marking-nut tree](#) (*bhallātaka*) : 145, 307
- marking-nut tree (*bhallātaka*) *Semecarpus anacardium*, L. See [NK](#): 1, #2269, [AVS](#): 5, 98, [ADPS](#): 85–86, [GVDB](#): 23, 283 : 105, 139, 315
- marsh barbel (*ikṣuraka*) *Hygrophila auriculata* (Schumacher.) Heine (syn. *Asteracantha longifolia* (L.) Nees.), [GVDB](#): 42–43 : 204
- medhshingi (*vijayā-2*) *Dolichandrone falcata* (Wall. ex DC.) Seem. The *Sauśrutaniḥṣaṇṭu* gives a number of synonyms for *vijayā* (Suvedī and Tivārī 2000: 5.77, 10.143). But one of them, *viṣāṇī* (also *meṣaśṛṅgi*), is sometimes equated with *Dolichandrone falcata* (DC.) Seemann ([GVDB](#): 373 f; [ADPS](#): 518, a plant used as an abortifacient and fish poison ([NK](#): #862) : 145
- migraine tree (*agnimantha*) *Premna corymbosa*, Rottl. See [AVS](#) 1927, [ADPS](#): 21, [NK](#): 1, #2025, [AVS](#): 4, 348; [GJM1](#): 523: = *P. integrifolia/serratifolia*, L : 152, 308
- milk-white (*kṣīraśuklā*) An unidentified plant. [GVDB](#): 126: see [purple roscoe](#) and [giant potato](#) : 55, 318
- monkey (?) (*markaṭa*) Singh and Chuneekar ([GVDB](#): 299) said of *markaṭa*, “an unidentified vegetable poison.” Cf. Suvedī and Tivārī 2000: v.36 for synonyms that lead to the non-toxic jujube tree : 148
- muddy (?) (*kardama*) unknown. : 146, 148
- mulberry (*kramuka*) probably the [mulberry](#) (*tūda*); see discussion by Singh and Chuneekar ([GVDB](#): 122) : 188
- mulberry (*tūda*) *Morus indica* L., [GVDB](#): 189 : 315
- mung beans (*mudga*) *Phaseolus radiatus* L. [GVDB](#): 310–311 : 109, 112, 227
- mung beans (*māṣaka*) *Phaseolus mungo* Linn. [GVDB](#): 308 : 137
- munj grass (*nārācaka*) *Saccharum bengalense*, Retz.?. See [NK](#): 1, #2184 : 146

- musk mallow (*latākastūrikā*) *Abelmoschus moschatus* Medik., *GVDB*: 348 : 316
- 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) : 316
- musk mallow (*ullika*) see musk mallow (*ullaka*) : 145
- myrobalan (*abhayā*) *Terminalia chebula*, Retz. See *ADPS*: 172, *NK*: 1, #2451, *Potter_{rev}*: 214 : 100, 152, 159
- myrobalans (*pathyā*) *Terminalia chebula* Retz. See *NK*: 1, #2451 : 220
- natron (*suvarcikā*) Sodium carbonate. *NK*: 2, #45. Ḍalhaṇa identifies *suvarcikā* with *svarjikṣāra* 4.8.50 (*Su* 1938: 441) : 116, 153, 187
- neem (*picumarda*) see neem tree (*nimba*), *GVDB*: 247–248 : 203
- neem tree (*nimba*) *Azadirachta indica* A. Juss., *GVDB*: 226 : 52, 280, 316
- 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 Chuneekar (*GVDB*: 108) added that it could be a variety of rice, *ṣaṣṭika dhānya* : 159
- nutgrass (*mustaka*) *Cyperus rotundus*, L. See *ADPS*: 316, *AVS*: 2, 296, *NK*: 1, #782 : 146, 148
- nutgrass (*mustā*) *Cyperus rotundus*, L. See *ADPS*: 316, *AVS*: 2, 296, *NK*: 1, #782 : 316
- odal oil plant (*īṅgudī*) see odal oil plant : 195
- odal oil plant (*īṅgudī*) Kirtikar et al. (K & B: 5, 79) also firmly identify *īṅgudī* 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 *īṅgudī* : 316
- oleander spurge (*mahāvṛkṣa*) see oleander spurge (*snuhī*), *GVDB*: 302–303 : 203
- oleander spurge (*nandā*) see oleander spurge (*snuhī*), *GVDB*: 215 : 321
- oleander spurge (*snuhā*) see oleander spurge (*snuhī*) : 105, 146, 197
- 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 Chuneekar (*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 : 316, 321
- 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) : 182
- paddy rice (*śāli*) *Oriza sativa*, Linn. *GVDB*: 395–396 mentioning 33 Sanskrit sub-variety names; *AVS*: 4, 193 : 39, 319
- painted uraria (*prṣṇaparṇī*) *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 : 198
- 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 : 206
- 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 annuus* Linn., but this plant is native to the Americas : [152](#), [312](#)
- peas (*hareṇu*) *Pisum sativum*, L. Singh and Chuneekar ([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 : [110](#), [152](#), [153](#), [159](#), [188](#), [220](#), [317](#)
- peas (*hareṇukā*) see [peas](#) (*hareṇu*) : [206](#)
- peas (*satīna*) see [peas](#) (*hareṇu*), [GVDB](#): 419–420 : [317](#)
- peepul tree (*aśvattha*) *Ficus religiosa*, L. See [ADPS](#): 63. Known to ancient Greek authors (Ball 1888: 338–339) : [161](#)
- periploca of the woods (*meṣaśṛṅga*) *Gymnema sylvestre* (Retz.) R. Br. See [AVS](#): 3, 107, [NK](#): 1, #1173 : [139](#)
- phalsa (*parūṣaka*) *Grewia asiatica* Linn., [GVDB](#): 238 : [82](#)
- plants like asthma plant and Gulf sandmat (*dugdhikā*) synonym of [plants like asthma plant and Gulf sandmat](#) (*kṣīriṇī*), [GVDB](#): 204–205, 127 : [317](#)
- 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) : [312](#), [317](#)
- 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 : [206](#)
- 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. : [321](#)
- pointed gourd (*paṭola*) *Trichosanthes dioica*, Roxb., [GVDB](#): 232–233 : [110](#), [152](#), [303](#)
- poison-altar (?) (*viṣavedikā*) Unknown. Possibly, at a guess, [strychnine tree](#) (*viṣamuṣṭika*)? [GVDB](#): 373 Or [Indian aconite](#) (*viṣā*) : [145](#)
- pollen (?) (*reṇukā*) An unidentifiable plant. Perhaps a misreading for [peas](#) (*hareṇu*), although this is a long shot. Singh and Chuneekar ([GVDB](#): 339) suggest, on no authority, the synonyms *vṛkṣaruhā*, *māmsarohiṇī*, or *durvā*, none of which help : [145](#), [312](#)
- pomegranate (*dāḍima*) *Punica granatum* Linn. [GVDB](#): 201–202 : [81](#), [82](#), [115](#), [116](#), [189](#), [198](#)
- pondweed (*paripelavā*) Normally a neuter noun. Singh and Chuneekar ([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. : [153](#)
- pondweed (*śevāla*) *Zannichellia palustris* L. See [horned pondweed](#) : [37](#), [38](#)
- pongame oiltree (*karañja*) see [pongame oiltree](#) (*karañjikā*) : [117](#), [198](#)
- pongame oiltree (*karañjikā*) Singh and Chuneekar ([GVDB](#): 74–76) discuss complications, but probably *Pongamia pinnata* (L.) Pierre in *Suśrutasaṃhitā* 5.6.3 : [204](#), [317](#)
- 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 : [206](#), [317](#)
- powdered ruffle lichen (*śaileyaka*) see [powdered ruffle lichen](#) (*śaileya*) : [187](#)
- 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: 51, 55, 109, 205, 318
- 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): 81
- prickly-leaved elephant's foot (*gojihvā*) syn. *gojī*. *Elephantopus scaber*, L. See AVS: 2, 357. Singh and Chuneekar (GVDB: 145–146) argue that *gojihvā śāka* is *Launaea asplenifolia* (Willd) Hook. f. (creeping *Launaea*), a plant with Himalayan to SE Asian distribution: 318
- prickly-leaved elephant's foot (*gojī*) Singh and Chuneekar (GVDB: 145–146) observe that this plant name is unique to the *Suśrutasamhitā*. 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.: 204
- products of the wood-apple (*kāpitta*) a reading in the Nepalese MSS for products of the wood-apple (*kāpittha*), q.v.: 199
- products of the wood-apple (*kāpittha*) relating to or derived from the wood-apple (*kapittha*): 318
- purging nut (*dravantī*) *Jatropha curcas*, L. See AVS: 3, 261, NK: 1, #1374. A.k.a. *mūṣikaparṇī*: 318
- purging nut (*mūṣikā*) *Jatropha curcas*, L. See AVS: 3, 261, NK: 1, #1374: 139
- purging nut (*putraśreṇī*) Commonly identified as croton tree (*nāgadantī*), GVDB: 253 “a variety of red physic nut (*dentī*).” But it appears in a list with *nāgadantī* at *Suśrutasamhitā* 5.6.3, and Ḍaḥaṇa identified it there as purging nut (*dravantī*): 204
- purging nut tree (*mūṣikakarṇī*) *Jatropha curcas*, L. AVS: 3, 261, NK: 1, #1374, GVDB: 317. GVDB: 317; ADPS: 23–25 discuss this issue well: 137, 138
- purple calotropis (*arka*) *Calotropis gigantea*, (L.) R. Br. See ADPS: 52, AVS: 1, 341, NK: 1, #427, Potter_{rev}: 57, Chopra IDG: 305–308: 46, 55, 105, 182, 200, 203
- purple fleabane (*somarājī*) see scurfy pea (*bākcū*), 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.: 206
- purple roscoeia (*kṣīrakākoli*) GVDB: 89 notes that many physicians use *Roscoeia procera* Wall. in this context. But the identification is uncertain. Possibly connected to milk-white or giant potato: 109, 312, 315
- pussy willow (*vetasa*) *Salix caprea* L., GVDB: 380–381, q.v. for the argument that this is not the same as rattan (*vetra*): 318
- pussywillow (*vañjula*) see pussy willow (*vetasa*); Singh and Chuneekar (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*): 110, 204
- radish (*mūlaka*) *Raphanus sativus*, L. See NK: 1, #2098: 114, 146, 148
- rajmahal hemp (*moraṭa*) → *mūrvī*, *Marsdenia tenacissima* (Roxb.) Wight et Arn. Good discussion at GVDB: 314–316, 324: 152
- 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 Chuneekar 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 : 112, 309
- rattan (*vetra*) *Calamus rotang*, L. See **AVS:** 1, 330, NK: 1, #413. Singh and Chuneekar (GVDB: 381) prefer *C. tenuis*, Roxb., which is also native to S. and S.E. Asia : 318
- realgar (*manahṣilā*) *Arsenii disulphidium* NK: 2, #11 : 220
- red gourd (*bimbī*) *Coccinia indica*, W. & A. See PVS 1994.4.715; NK: 1, #534 : 136
- red ochre (*gairika*) Hellwig 2009: 140–141. NK: 2, #40; the same source, at #6, gives kaolinum or china clay : 153, 187, 189, 206, 220, 221
- red physic nut (*dantī*) *Baliospermum solanifolium* (Burm.) Suresh, GVDB: 200 : 103, 146, 198, 204, 318
- resin of white dammer tree (*sarjarasa*) GVDB: 424–425. See white dammer tree (*sarja*) : 112, 206
- rice grains (*taṇḍula*) *Oriza sativa*, Linn. Same as paddy rice (*śālī*) GVDB: 174; or just “grains” : 39
- rice-grain chaff (*śālitaṇḍulakāṇḍana*) See chaff : 39
- rock salt (*saindhava*) See NK: 2, M#48, WattComm: 963–971 : 38, 81, 116, 187, 220, 304
- rosha grass (*dhyāmaka*) *Cymbopogon martinii* (Roxb.) Wats. See **AVS:** 2, 285, NK: 1, #177 : 153, 187, 206
- royal jasmine (*mālatī*) *Jasminium grandiflorum*, L. See NK: 1, #1364, **ADPS:** 285–288 : 137, 319
- royal jasmine (*sumanā*) see royal jasmine (*mālatī*), GVDB: 437 : 206
- sacred lotus (*kamala*) *Nelumbo nucifera*, Gaertn., GVDB: 73–74, Dutt: 110, NK: 1, #1698 : 314, 319
- sacred lotus (*padma*) see sacred lotus (*kamala*), GVDB: 235–236 : 37, 110, 137, 206, 324
- saffron (*bāhlīka*) syn. of saffron (*kuṇkuma*), q.v., GVDB: 273–274 : 204
- saffron (*kuṇkuma*) *Crocus sativus* Linn., GVDB: 100. On the history of confusions between saffron and turmeric, see Cox 2011 : 198, 319
- sage-leaved alangium (*aṅkolla*) *Alangium salvifolium* (Linn. f.) Wang., GVDB: 5–6. See also **AVS:** 1, 77; cf. NK: 1, #88 : 136, 189, 196, 198, 319
- sage-leaved alangium (*aṅkoṭha*) see sage-leaved alangium (*aṅkolla*) : 203
- 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 : 82
- sal tree (*śālā*) *Shorea robusta*, Gaertn.f. See **AVS:** 5, 124 : 220
- 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.)) : 83, 110, 112, 153, 182, 188, 206, 324
- 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 Chuneekar (GVDB) suggest *Lagerstroemeia parviflora* Roxb. (*sidhraka/siddhaka*) and *L. flos-reginae* Retz. (*jārula* by some). See GVDB: 432 : 203, 206, 318
- sappanwood (*pattāṅga*) Also *pattāṅga*. *Caesalpinia sappan*, L. **AVS:** 1, 323, K & B: 2, 847 f, GVDB: 234 : 46, 56
- scarlet mallow (*bandhujīva*) *Pentapetes phoenicea*, L. NK: #1836, GVDB: 268 :

- 138
- scented pavonia (*bālaka*) Pavonia odorata, Willd. See [ADPS](#): 498, [NK](#): 1, #1822 : 153
- scented pavonia (*toya*) → *bālaka*? Pavonia odorata, Willd. [ADPS](#): 498, [NK](#): 1, #1822 : 206
- scramberry (*tālīsapatra*) see [scramberry](#) (*tālīśa*) : 206
- scramberry (*tālīśa*) Singh and Chuneekar ([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) : 110, 221, 320
- screwpine (*ketaka*) Pandanus tectorius Parkinson ex Du Roi, [GVDB](#): 116 : 302
- scurfy pea (*bākucī*) Identified as Cullen corylifolia (L.) Medik. [ADPS](#): 69–70, [GVDB](#): 272 : 318
- scutch grass (*dūrvā*) Cynodon dactylon (Linn.) Pers., [GVDB](#): 205 : 310, 320
- 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*) : 206
- sedge (*kuṭannaṭa*) → *plava*, *tagara*, or *śyonāka*, according to commentators ([GVDB](#): 102–103). Singh and Chuneekar 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 *Cinnamomum 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 : 187, 320
- sedge (*kuṭannaṭa*) see [sedge](#) (*kuṭannaṭa*) : 206
- sesame (*tila*) Sesamum indicum L. [GVDB](#): 183. Known to ancient Greek authors (Ball 1888: 344) : 206, 207
- sesame oil (*taila*) Sesamum indicum L. [GVDB](#): 183 : 55, 182
- shami tree (*śamī*) Prosopis cineraria (L.) Druce [GVDB](#): 390 : 203, 304
- silk-cotton tree (*śālmālī*) Bombax malabarica. See [Issar](#): 152 : 206
- siris (*śirīṣa*) Albizia lebbeck, Benth. See [AVS](#): 1, 81, [NK](#): 1, #91, [GVDB](#): 399–400. Cf. [white siris](#) : 152, 182, 195–199, 205, 206, 220, 324
- siris seeds (*śirīṣamāśaka*) Albizia lebbeck, Benth. See [AVS](#): 1, 81, [NK](#): 1, #91 : 136, 197
- small-flowered crape myrtle (*sidhraka*) Lagerstroemia parviflora Roxb., [GVDB](#): 432 : 158
- smooth angelica (*coraka*) Angelica glauca Edgw. [GVDB](#): 161. Distribution: Afghanistan, Himalaya, western Tibet ([POWO](#)). Edgeworth even recorded the indigenous name “chura” (Edgeworth 1851: 53) : 189, 204, 320
- smooth angelica (*taskara*) see [smooth angelica](#) (*coraka*), [GVDB](#): 176 : 206
- 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) : 144
- spikenard (*jaṭā*) see [spikenard](#) (*jaṭāmāṃsī*) : 197, 206
- spikenard (*jaṭāmāṃsī*) Nardostachys jatamansi (D.Don) DC, [GVDB](#): 163. See also [NK](#): 1, #1691. Known to ancient Greek authors (Ball 1888: 343–344) :

- 320, 321
 spikenard (*māṃsī*) see [spikenard](#)
 (*jaṭāmāṃsī*) : 153, 188, 206
 spikenard (*nalada*) see [spikenard](#)
 (*jaṭāmāṃsī*) : 134, 188, 206
 spiny bitter gourd (*karkāruka*) *Momordica*
cochinchinensis (Lour.) Spreng.,
 (Thunb.) Cogn. See [AVS](#): 2, 1135, [IGP](#)
 754 (or *Beninkasa*
hispida? [AVS](#): 2, 1127; cf. [AVS](#): 1, 261).
M. cochinchinensis has poisonous seeds
 ([NEH](#): 279) : 308
 spurge (?) (*nandanā*) an unknown
 poisonous plant, a.k.a. (equally
 obscurely) *udīmānaka*, [GVDB](#): 215
 (where it is m.). Perhaps a synonym of
[oleander spurge](#) (*snulhī*), like [oleander](#)
[spurge](#) (*nandā*) : 145
 spurge (*saptalā*) Singh and Chunekar
 ([GVDB](#): 421–422) discuss the four
 candidates for this plant, three of
 which are *Euphorbias* : 114, 189
 strychnine tree (*viṣamuṣṭika*) *Strychnos*
nux vomica Linn., [GVDB](#): 373 : 317
 sugar (*sitā*) Ḍalhaṇa makes this equation
 at 1.37.25 ([Su 1938](#): 162) : 153, 188
 sugar (*śarkara*) *Saccharum officinarum*,
 Linn. [NK](#): #2182 : 140
 sugar cane (*ikṣu*) *Saccharum officinarum*,
 Linn. [NK](#): #2182 : 140
 sunflower (*sūryavallī*) → *āḍityavallī*,
sūryamukhī, *Helianthus annuus* Linn.
[GVDB](#): 35, 443 : 152
 sweet flag (*vacā*) *Acorus calamus* Linn. See
[GVDB](#): 352–355 : 109, 116, 204
 sweet plants (*madhuravarga*) The sweet
 plants are enumerated at
Suśrutasamhitā 1.42.11. See also
[GVDB](#): 127 : 55
 sweet-scented oleander (*aśvamāraka*)
Nerium oleander, L. See [ADPS](#): 223,
[NK](#): 1, #1709, [GVDB](#): 77, which
 discusses the white and red forms : 144
 teak (*śāka*) *Tectona grandis*, L.f. See
[AVS](#): 5, 245, ([MW](#): 1061) : 203
 Tellicherry bark (*kuṭaja*) *Holarrhena*
pubescens Wall. ex G.Don, with
Wrightia tinctoria and *W. arborea*
 considered [GVDB](#): 101–102,
[ADPS](#): 267–270 : 105, 203, 308
 ten roots (*daśamūla*) Described at
Suśrutasamhitā 1.38.70–71 ([Su 1938](#): 169)
 as a combination of the [lesser five roots](#)
 and the [greater five roots](#) : 307
 the three myrobalans (*triphālā*) [chebulic](#)
[myrobalan](#) [beleric myrobalan](#) and
[emblic myrobalan](#) (*harītakī bibhītaka*
 and *āmalaka*) One of the most-often
 mentioned drugs in the *Bṛhatrayī*
[GVDB](#): 194–196 : 103, 187, 188, 197,
 198, 303
 the three pungent drugs (*kaṭutrika*) see [the](#)
[three pungent drugs](#) (*trikaṭu*) : 199, 206
 the three pungent drugs (*trikaṭu*) dried
[ginger](#), [long pepper](#), and [black pepper](#)
 (*śuṇṭhī*, *pippalī*, and *marica*) [GVDB](#): 193 :
 187, 321
 the three pungent drugs (*vyoṣa*) see [the](#)
[three pungent drugs](#) (*trikaṭu*),
[GVDB](#): 382–383 : 198
 the two types of clitoria (*śvete*) see [white](#)
[clitoria](#) (*śvetā*) : 206
 the two types of turmeric (*haridre*) see
[turmeric](#) (*haridrā*) and [Indian barberry](#)
 (*dāruharidrā*), [GVDB](#): 465–466 : 206
 thorn apple (*karambha*) *Datura metel*, L.
 See [GVDB](#): 76 for useful discussion.
 Also, [AVS](#): 2, 305 (cf.
Abhidhānamāñjarī), [NK](#): 1, #796 ff.
[Potter](#)_{rev}: 292 f, [ADPS](#): 132. Possibly the
 same plant as [plumed cockscomb](#)
 (*indīvara*) ([GVDB](#): 76, 44–45) : 145, 146,
 303, 317
 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 : 83, 152
 three-leaved caper (*varuṇa*) *Crataeva magna* (Lour.) DC. See AVS: 2, 202; cf. NK: 1, #696 : 139, 189, 204, 322
 three-leaved caper (*varuṇaka*) see [three-leaved caper](#) (*varuṇa*) : 206
 toothed-leaf limonia (*surasī*) *Naringi crenulata* (Roxb.) Nicolson (formerly *Limonia crenulata* Roxb.), GVDB: 439 : 188, 206
 top layer of fermented liquor (*surāmaṇḍa*) K & B: 2, 502, NK: 2, appendix VI, #49, McHugh 2021: 39 : 53, 54
 tree cotton (*kārpāsa*) *Gossypium arboreum* L. ADPS: 231, *pace* the identifications of Singh and Chunekekar (GVDB: 92, 247), since *G. barbadense* L. is native to South America and *G. herbaceum* L. is native to Africa : 52, 322
 tree cotton (*picu*) See [tree cotton](#) (*kārpāsa*) : 54, 56
 tree of heaven (*arala*) probably *Alianthus excelsa* Roxb., GVDB: 21–22 : 203
 turmeric (*gaurī*) *Curcuma longa*, L. See ADPS: 169, AVS: 2, 259, NK: 1, #750 : 110
 turmeric (*haridrā*) *Curcuma longa* Linn. GVDB: 465. On the history of confusions between saffron and turmeric, see Cox 2011 : 111, 152, 159, 187, 321
 turmeric (*rajanī*) *Curcuma longa*, L. ADPS: 169, AVS: 2, 259, NK: 1, #750 : 38, 153, 188, 198
 turpeth (*trivṛt*) → *trivṛtā*. *Operculina turpethum* (Linn.) Silva Manso = *Ipomoea turpethum* R. Br. GVDB: 197 : 103, 140, 187, 282, 304
 turpeth (*trivṛt*) The common spelling in Nepalese MSS of *trivṛt* : 198
 two kinds of salt (*vasukavasira*) See the discussion by Singh and Chunekekar (GVDB: 362–363), who note that when *vasuka* is mentioned together with *vasira*, two varieties of salt are often meant (see *vasukavasirā*) : 81
 unknown fruit poison (*veṇuka*) see [unknown fruit poison](#) (*veṇukā*) : 145
 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 Chunekekar (GVDB: 380) note that this is an unknown fruit-poison : 322
 velvet bean (*svayamguptā*) *Mucuna pruriens* (L.) DC., GVDB: 461, who say that the plant is known in the *Carakasamhitā* but not the *Suśrutasaṃhitā* : 220, 322
 velvet bean (*āṛṣabhī*) see [velvet bean](#) (*ṛṣabhī*) and [velvet bean](#) (*svayamguptā*). *Mahākośa*: 1, 94, citing the *Rājanighaṇṭu* 3.50, 201 : 196
 velvet bean (*ṛṣabhī*) see [velvet bean](#) (*svayamguptā*), MW: 226, GVDB: 56 : 322
 velvet-leaf (*pāṭhā*) *Cissampelos pariera*, L. See ADPS: 366, NK: 1, #592, GJM1: 573, AVS: 1, 95; cf. AVS: 2, 277 : 46, 83, 100, 116, 152, 187, 188, 309
 velvet-mite (*indragopa*) *Kerria lacca* (Kerr.). Lienhard 1978 : 135
 verbena (*bhārgī*) see [verbena](#) (*bhārrīgī*) : 188, 206
 verbena (*bhārrīgī*) → *phañjī*. *Clerodendrum serratum* (L.) Moon or *C. serratum*; see AVS: 2, 121, ADPS: 87 : 322
 verbena (*phañjī*) *Clerodendrum serratum*, L. See AVS: 2, 121, ADPS: 87 : 138
 vetiver (*uśīra*) *Chrysopogon zizanioides* (L.) Roberty, also called “khus.” NK: 1, #180, GVDB: 54 identify it as vetiver : 82, 137, 182, 322
 vetiver and lemon grass (?) (*uśīre*) “the two uśīras,” perhaps [vetiver](#) (*uśīra*) and [lemon grass](#) (*uśīrabheda*) : 206
 viburnum (*tilva*) see [viburnum](#) (*tilvaka*) : 198

- viburnum (*tilvaka*) *Viburnum nervosum* D. Don. In their thoughtful article, Singh and Chuneekar (GVDB: 185–186) separate *tilvaka* from *lodhra*, a conflation they attribute to Dr̥ḥabala. They identify *V. nervosum* because of its use under a similar local name in Garhwal 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 : 103, 204, 314, 322, 323
- viburnum extract (*tailvaka*) see *viburnum* (*tilvaka*), GVDB: 185, also a ghee compound of *viburnum* (*tilvaka*) : 220
- ‘Virāṭa’s plant’ (*vairāṭaka*) unknown. See ? : 146, 148
- water snowflake (?) (*kumudavati*) see *water snowflake* (?) (*kumudavatī*) : 146
- 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 possibility, 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*)) : 145, 306, 323
- watered buttermilk (*udaśvit*) MW: 183 : 136
- weaver’s beam tree (*mokṣaka*) see *weaver’s beam tree* (*muṣkaka*) : 323
- weaver’s beam tree (*muṣkaka*) *Schrebera swietenoides*, Roxb. See AVS: 5, 88, Lord, NK: 1, #2246, GVDB: 242–243 : 105, 158, 323
- weaver’s beam tree (*pāṭalī*) usually a synonym for *crimson trumpet-flower tree* (*pāṭalā*), but Singh and Chuneekar (GVDB: 242–243) argue that it is *weaver’s beam tree* (*mokṣaka*) because some authors distinguish two colours (unlike *pāṭalā*) : 105, 203, 206
- weaver’s beam tree (*viśalyā*) *Schrebera swietenoides* Roxb. ← *kuberākṣī*. Singh and Chuneekar (GVDB: 371) notes that this name is a synonym for many other plants, including *lāṅgālī*, *indravāruṇī*, *guḍūcī* etc. Ḍalhaṇa identified it with *pāṭalā*, *kāṣṭhapāṭalā*, and *agniśikhā* tree, all of which may be called *śvetamokṣaka* or *kuberākṣī* : 187
- weevil wort (*tālamūlikā*) GVDB: 178–179 : 323
- weevil wort (*tālapatrī*) → *tālamūlikā*, *weevil wort*, q.v. GVDB: 178 : 189
- white babool (*arimeda*) *Acacia leucophloea*, (Roxb.) Willd. See AVS: 1, 23 : 46, 204
- white calotropis (*alarka*) *Calotropis procera*, (Ait.) R. Br. See NK: 1, #428, Chopra: 46b, Chopra IDG: 305–308 : 55
- 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 : 137, 188, 197, 200, 205, 321
- white cutch tree (*somavalka*) *Acacia polyacantha*, Willd. See AVS: 1, 30, IGP 7, GJM1: 602, AVS: 2, 935; pace NK: 1, #1038 : 138, 158

- white dammer tree (*sarja*) *Vateria indica*, L. See [NK](#): 1, #2571, [AVS](#): 5, 349 f, [AVS](#): 1, 292 f, [Chopra](#): 253a. Singh and Chuneekar ([GVDB](#): 424) discussed whether this term might be broadened to any resinous tree and decided against: [46](#), [81](#), [319](#), [324](#)
- white dammer tree (*sarjja*) see [white dammer tree](#) (*sarja*): [203](#)
- white lotus (*punḍarīka*) see [sacred lotus](#) (*padma*), [GVDB](#): 252: [148](#)
- white sandalwood (*bhadraśrīya*) *Santalum album* Linn. See [white sandalwood](#) (*bhadraśrī*): [110](#), [206](#)
- white sandalwood (*bhadraśrī*) *Santalum album* Linn. see [sandalwood](#) (*candana*) [GVDB](#): 152, 282 and *Carakasamhitā* ci.4.102 ([Ca 1941](#): 434) where it is contrasted with *lohitacandana*: [83](#), [324](#)
- white siris (?) (*kapītana*) Singh and Chuneekar ([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: [203](#)
- white siris (*kaṭabhī*) *Albizia procera* (Roxb.) Benth. or *A. lebbeck* (Linn.) Benth. [GVDB](#): 63–64, [AVS](#): 1, 81–84. Cf. [siris](#): [182](#), [320](#)
- white siris (*kiṇihī*) *Albizia procera* (Roxb.) Benth., [GVDB](#): 98, which also discusses past confusions; [NK](#): 1, #93: [152](#), [188](#)
- white teak (*kāśmarī*) → *kāśmarī*: [221](#)
- white teak (*kāśmarya*) see [white teak](#) (*kāśmarī*): [206](#)
- white teak (*kāśmaryā*) see [white teak](#) (*kāśmarī*): [81](#)
- white teak (*kāśmarī*) → *kāśmarya*, *kāśmarī*, *madhuparṇī*. Gmelina arborea, Roxb. See [GJM1](#): 543, [Trees](#): 51, [ADPS](#): 240, [GVDB](#): 96–97: [110](#), [112](#), [308](#), [324](#)
- white teak (*madhuparṇī*) → *kāśmarī*: [81](#)
- white water-lily (*kumuda*) *Nymphaea alba*, Linn., [GVDB](#): 105: [37](#), [206](#), [307](#)
- wild asparagus (*bahuputrā*) *Asparagus racemosus*, Willd. See further [wild asparagus](#) (*śatāvārī*) Possibly a syn. for *nandana*. The bark of wild asparagus is toxic: [138](#)
- wild asparagus (*śatāvārī*) *Asparagus racemosus*, Willd. See [ADPS](#): 441, [AVS](#): 1, 218, [NK](#): 1, #264, [IGP](#): 103, [AVS](#): 4, 249 ff, [Dymock](#): 3, 482 ff: [108–110](#), [112](#), [226](#), [324](#)
- wild celery (*agnika*) → may be *bhallātaka*, *lāṅgalī*, *ajamodā*, *moraṭa*, or *agnimantha*, [GVDB](#): 4. Uncertain A plant often cited in *Suśrutasaṃhitā*, but rarely in *Carakasamhitā* ([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): [152](#), [324](#)
- wild celery (*ajamodā*) *Apium graveolens*, L. Sometimes identified with *agnika* (*wild celery*), q.v.: [152](#), [187](#)
- wild Himalayan cherry (*padmaka*) *Prunus cerasoides* D.Don, [GVDB](#): 236, [AVS](#): 4, 353–355. [MW](#): 585 is wide of the mark: [110–112](#), [187](#), [188](#), [206](#)
- 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: [116](#)
- wild spider flower (*tailaparṇika*) see [wild spider flower](#): [206](#)
- wild spider flower (*tilaparṇī*) *Cleome gynandra* L., [GVDB](#): 184–185, but see the discussion of the other drug plants sometimes intended by this name: [324](#)

wild sugar cane (*kāṇḍekṣu*) *Saccharum spontaneum* L., [GVDB](#): 90 : 81
 winged-stem canscora (*giriḥvā*) see [winged-stem canscora](#) (*girikarṇikā*) : 188
 winged-stem canscora (*girikarṇikā*) sometimes → *śvetā*, in which case possibly *Clitoria ternatea*, L., see [AVS](#): 2, 129, [NK](#): 1, #621. Since *śvetā* and *giriḥvā* are cited as separate constituents of one formula (e.g., *Suśrutasamhitā* 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 *śaṅkhaṣpī*, another possible synonym, Sivarajan and Balachandran ([ADPS](#): 425–427) also suggest *Canscora alata* (Roth) Wall. (syn of *Canscora decussata* Schultes & Schultes f.) and *Convolvulus pluricaulis* Choisy. The former has a more appropriate distribution and is chosen here : [325](#)
 winged-stem canscora (*giryāhvā*) see

[winged-stem canscora](#) (*girikarṇikā*) : [323](#)
Withania (*aśvagandhā*) *Withania somnifera* (L.) Dunal. See [AVS](#): 5, 409 f, [Dymock](#): 2, 566 f, 150, [GVDB](#): 29, [Chevallard](#): 152 : [55](#), [104](#), [111](#), [188](#)
 wood-apple (*kapittha*) *Limonia acidissima*, L. See [AVS](#): 3, 327, [NK](#): 1, #1021 : [111](#), [137](#), [139](#), [189](#), [198](#), [199](#), [203](#), [220](#), [318](#)
 woody turmeric (*kāleyaka*) *Coscinium fenestratum* (Goetgh.) Colebr., [GVDB](#): 95. See V. K. Gupta et al. [2015](#): 173–175 : [206](#)
 woody-fruited jujube (*gopaghonṭā*) *Ziziphus xylopyra* (Retz.) Willd. [GVDB](#): 147 → *ghonṭā* : [204](#)
 yellow-berried nightshade (*kaṇṭakārī*) *Solanum virginianum* L. (syn. *Solanum surattense* Burm. f. and *Solanum xanthocarpum*, Schrad. & Wendl.) [GVDB](#): 68–69. See also [IHR](#): 430. A component of [lesser five roots](#) : [314](#), [325](#)
 yellow-berried nightshade (*kṣudrā*) see [yellow-berried nightshade](#) (*kaṇṭakārī*), [ADPS](#): 100, [NK](#): 1, #2329, [AVS](#): 5, 164 : [152](#), [153](#)

Fauna

arala rat (*arala-animal*) a hapax legomenon in Sanskrit, probably a Dravidian loan word or cognate from forms like Pengo, Maṇḍa, Kuwi etc., *orli*, *urli*, etc., [DED](#)₂: #994 : [194](#), [196](#), [197](#)
 aṭakī (*aṭakī*) unknown : [213](#)
 bad-marked rat (*kuliṅga*) etymologically, “having bad-marks” [MW](#): 286, but unidentifiable : [194](#), [197](#)
 beaked (*tuṇḍikerī*) neologism insect-name based on the etymology of *tuṇḍa*. Probably *tuṇḍikera* and *tuṇḍicela* are variants of the same lexeme. *tuṇḍa* 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” : [212](#)
 bee (*bhramara*) bee or bumble-bee, [MW](#): 769, etc. : [213](#)
 bhaṭābha (*bhaṭābha*) unknown : [213](#)
 black drongo (*dhūmyāṭa*) *Dicrurus adsimilis*, Bechstein, Dave [1985](#): 63, 65, [199](#) : [134](#)
 black rat (*kṛṣṇa*) perhaps the widespread Black Rat or Common House Rat, *Rattus Rattus* L., [BIA](#): 210 : [194](#), [196](#)
 black-beak (*kṛṣṇatuṇḍa*) unknown insect,

- name based on etymology; MW: 307.
But possibly “black-belly” based on the
lexeme *tunda*, CDIAL: 1, #5858: 213
- brown rat (*kapila-animal*) name from
etymology; unidentified; see *tawny rat*
(*aruṇa*): 194, 197
- bull (*vr̥ṣabha*) MW: 1012, etc. *Bos taurus*,
Linn.: 134
- celestial (*svarga-insect*) unknown insect,
name based on etymology: 213
- centipede (*śatapādaka*) the name’s meaning
is, “hundred-foot” MW: 1049,
CDIAL: 1, #12281: 213
- chital deer (*pr̥ṣata*) *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 *pr̥ṣata* may also be
simply Chital or Spotted Deer. See also
IW: 93: 134, 140, 188
- chukar partridge (*cakora*) *Alectoris chukar*,
J. E. Gray, Woodcock 1980: 45,
distributed from NW India to Nepal
and Assam: 134
- civet (*mārjāra*) BIA: ch. 4 *et passim*,
McHugh 2012: 188
- common crane (*kroñca*) *Grus grus*, Linn.,
Woodcock 1980: 47, Dave 1985: ch. 62:
134
- cone snail (*śambūka*) a bivalve or snail
(MW: 1055), but presumably a
poisonous one such as the cone-snail:
156
- cook-fish insect (*pākamatsya*) unknown
insect, name based on etymology. A
kind of fiery insect according to
Ḍalhaṇa on 5.3.5 (Su 1938: 567):
156, 213
- cricket (*uccīṭiṅga*) The suggestion “cricket”
is from Assamese *usaṅgā* and Bengali
cuiṅgā, *ucuṅgā*, CDIAL: 1, #1645,
although they are not venomous.
Unlikely: a crab, MW: 173. The cricket
may appear to have a sting, although it
does not Maxwell-Lefroy 1909: 102: 212
- devout (*brahmaṇīkā*) unknown insect,
name based on etymology: 213
- droplet (*bindula*) unknown insect, name
based on etymology. Ḍalhaṇa on 5.8.9
(Su 1938: 586) noted that some people
read *viluṭa* instead of *bindula*: 213
- drummer (*duṇḍubhaka*) unknown insect,
name based on etymology. But may be
connected with a variant of *tunda/tund*
“belly” CDIAL: 1, #5858. **tunda-bhaka*
might then mean
“belly-croaker/puffer”: 213
- enemy-liquor (*arimedaka*) unknown insect,
name based on etymology. Perhaps a
variant of *ali*- “bee”, CDIAL: 1, #716 or
āla “poison” CDIAL: 1, #1352: 213
- 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”,
DED₂: #2675: 194, 197
- fiery (*agni-insect*) unknown insect, name
based on etymology. Cf. Marāṭhī *āghī*
“a kind of stinging fly” CDIAL: 1, #57:
212, 326
- fiery insect (*agnikīṭa*) see *fiery*
(*agni-insect*): 213
- five-venom (*pañcālaka*) unknown insect,
name based on etymology: 213
- fondling rat (*lālana*) based on etymology.
An unknown rat or mouse: 194, 195
- 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: 194, 196
- grey peacock-pheasant (*jīvajīvaka*)

- Polyplectron bicalcaratum, Linn., Dave 1985: 270, 273, 274, 281: 134
- hill myna (*sārikā*) *Acridotheres tristis* tristis, L., etc. See Ali and Ripley 1983: #1006, Dave (1985: 28 ff.), Woodcock (1980: 119): 134
- horned (*śṛṅgī*) unknown, based on etymology: 212
- house gecko (*grhagoḍikā*) MW: 362, CDIAL: 1, #4324. Hemacandra's *Abhidhānacintāmaṇi* (4.364) mentions that *grhagodhikā* and *grhagolikā* are synonyms (*Rādhākāntā Deva* 1876: 691a, *sub māṇikyā*): 156
- house shrew (*chuchundara*) *Suncus murinus* (Linnaeus, 1766), Wikipedia, BIA: 168–169 and plate 38. Probably a Dravidian loan word related to Tamil *cunṭaṇ*, “grey musk shrew,” see DED₂: #2661 and CDIAL: 1, #5053: 194, 196
- hundred-creeper (*śatakurda*) unknown insect, name based on etymology. Cf. *śarāvākurda* “creeping among dishes” (MW: 1057), apparently also the name of a snake: 212
- hundred-kulimbhaka (*śatakulimbhaka*) unknown insect class. Perhaps centipedes: 212
- iguana (*godheraka*) The गौघेरक is described in the *Carakasamhitā* 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: 214, 327
- Indian monitor lizard (*godhā*) *Varanus bengalensis* (Daudin, 1802), Reptiles: 58–60, ill.: 55, 140, 327
- Indian peafowl (*mayūra*) *Pavo cristatus*, Linn., Woodcock 1980: 39: 134
- invincible rat (*ajita*) etymological meaning; unidentifiable: 194, 197
- kaṣāyavāsika (*kaṣāyavāsika*) unknown: 213
- kiṭibha (*kiṭibha*) unknown: 213
- koel (*kokila*) *Eudynamys scolopaceus*, Linn., Wikipedia, Woodcock 1980: 66: 134
- kokila-insect (*kokila-insect*) unknown: 213
- koṇṭāgīrī (*koṇṭāgīrī*) unknown: 213
- krīmikara (*krīmikara*) unknown: 213
- kṛṣṇagodhā (*kṛṣṇagodhā*) unknown: 213
- kuṣṭa-insect (*kuṣṭa-insect*) unknown: 213
- lac (*lākṣā*) *Kerria lacca* (Kerr.). See GJM1: 445, NK: 2, #32, Varshney 2000. Watt (WattComm: 1053–1066) is characteristically informative, and is definite about the antiquity of lac in India: 159, 188, 206
- large Brown rat (*mahākapila*) from the etymology of the name, “large brown,” perhaps a bandicoot: 197
- large gecko (*galagoḍikā*) A poisonous insect, amphibian or reptile described in *Suśrutasamhitā* 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 503, p. 156. 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 (DED₂: #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 : 86
- leaf-scorpion (*patravṛścika*) unknown insect, name based on etymology : 213
- legume-insect (*vaidala*) unknown insect, name based on etymology : 212
- lentil insect (*masūrika-insect*) usually the name of a lentil or the “lentil disease,” namely smallpox. But here, an insect : 212
- little rat (*cikkira*) likely related to the Tuḷu “cikkeli, a small variety of mouse,” and other Dravidian works related to Tamil *cikka* “small,” *DED*₂: #2495. See also *CDIAL*: 1, #4779 on *cikka* “mouse or muskrat,” from lexical sources, and #4781 *cikkā* “small” from Drav., Burrow 1948: #141 : 194, 196
- little-voice (*alpavāca*) unidentified insect; possibly a wrong reading : 212
- lotus-insect (*padmakīṭa*) unknown insect, name based on etymology : 213
- maggot (*kīra-insect*) unknown insect. See Lahndā, Panjābī, Bengali, Oriya *kīrā*, etc., *CDIAL*: 1, #3193 and similar forms in Bihārī, Maithilī Bhojpurī, etc. Obviously a variant of *kīṭa* : 213
- maṇḍalapuṣpaka (*maṇḍalapuṣpaka*) unknown : 213
- mole-rat (*kokila-animal*) *Bandicota bengalensis* (Gray & Hardwicke). Etymologically, “brown as a Kokila”. *CDIAL*: 1, #4324 relates *kokila* to *golaka* but it may more likely be a Dravidian loanword from *koko*, *kogi*, *koki*, meaning “small, little, young” *DED*₂: 2030. This is possibly supported by Kannada *kok* and Telugu *golatta*, *koku* for the mole-rat, reported by Prater (*BIA*: 205) : 194, 197
- 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 : 140, 188
- mosquito (*maśaka*) a mosquito, gnat, gadfly or any stinging fly, *MW*: 793, *CDIAL*: 1, #9917 : 213
- myna-face (*śārikāmukha*) unknown insect, name based on etymology : 212
- nāhana (*nāhana*) unknown : 213
- noseless (*vināsikā*) unknown insect, name based on etymology : 213
- outsider (*bāhyaka*) unknown insect, name based on etymology : 213
- pañcakṛṣṇa (*pañcakṛṣṇa*) unknown : 213
- pañcaśukla (*pañcaśukla*) unknown : 213
- parakeet (*śuka*) *Psittacula krameri*, *Scopoli* (or *P. eupatria* or *cyanoccephala*), See Woodcock 1980: 64 : 134, 198
- picciṭā (*picciṭā*) unknown insect; etymologically perhaps similar to *piccaṭa* “squashed flat” (*MW*: 624) : 213
- pigeon rat (*kapota-animal*) a rat “like a pigeon;” presumably of grey colour : 194, 197
- pitcher-like (*kaunḍinya-insect*) unknown insect, name based on etymology : 213
- pot-nose wasp (?) (*kumbhīnāsa*) unknown insect, name based on etymology. Cf. the forms related to *kumbhakārī* “potters’ wife” at *CDIAL*: 1, #3312, including Assamese *kumārni* “mason-wasp,” Hindi “wasp-like insect which makes a clay nest” : 329
- pot-turd (*kumbhīvarcas*) unknown insect, name based on etymology (on *-varcas*, see *Mahākośa*: 1, 725 : 213
- pravalāka (*pravalāka*) unknown : 213
- racket-tailed drongo (*bhṛṅgarāja*) *Dicrurus paradiseus*, Linn., Woodcock 1980: 123 : 134
- rat (*unduru*) Also *undura* or *indūra* in some sources, including the vulgate. A common name for a rat or mouse in many S. Asian languages from Prakrit to contemporary, *CDIAL*: 1, #2095, Menon 2014, where it is called “house

- mouse" : 194, 197
- red-toothed shrew (*kaṣāyadanta*) see
red-toothed shrew (*kaṣāyadaśana*) : 197
- 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 Hodgson'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*) : 194, 329
- revolver (*āvartaka*) unidentified insect :
212
- river dolphin (*śiśumāra*) *Platanista*
gangetica (Lebeck), *BIA*: 313–314, plate
on p. 289, *MW*: 1076 : 207
- śairyaka-insect (*śairyaka-insect*) unknown :
213
- śambuka (*śambuka*) unknown : 213
- sarṣapaka (*sarṣapaka*) unknown : 213
- she-ass insect (*gardabhī-insect*) unknown
insect, name based on etymology : 213
- sheep-insect (*urabhra-insect*) unidentified
insect : 212
- shining-like-grain (*kaṇabha*) unknown
insect, name based on etymology : 213
- slimy (*śleṣmaka-insect*) unknown insect,
name based on etymology : 213
- 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") : 194, 195
- speckle-head (*citraśīrṣaka*) unknown
insect, name based on etymology : 212
- spoṭaka (*spoṭaka*) unknown : 213
- spotted (*paruṣa*) unknown insect, name
based on etymology, which could be
anything from dirty-coloured, stiff, or
rough to shaggy : 212
- stripy (*abhirāṇī*) unknown insect, name
based on etymology : 212
- sucīmukha (*sucīmukha*) unknown : 213
- 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 : 134
- 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) : 206
- 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" ?? : 194, 197, 198, 326
- tick-navel (*uṇḍunābha*) unknown insect;
name based on etymology.
Etymologically, an insect with an *uṇḍu*
for a navel. Conjecturally, perhaps *uṇḍu*
is a loan from Tamil *antu* "small
grey-winged insect found in stored
paddy" (*DED*₂: #150). Possibly
remotely related to Dravidian lexemes
for "tick," *uḷuṅḡu*, *uḍum*, *urūm*, *uṇṇi*,
etc. *DED*₂: #591, #604. The vulgate of
the *Suśrutasaṃhitā* reads *pot-nose wasp*
(?) (*kumbhīnāsa*) "pot-nose" in place of
this lexeme, q.v. : 212
- tolaka (*tolaka*) unknown : 213
- tortoise (*kūrma*) Perhaps *Geochelone*

elegans (Schoepff), *Reptiles*: 30 and plate, *MW*: 1076 : 207
 tuṇḍavakra (*tuṇḍavakra*) unknown : 213
 tuṅgīnāsa (*tuṅgīnāsa*) unknown : 213
 vaiśvambhara (*vaiśvambhara*) unknown : 213
 valabhika (*valabhika*) unknown insect : 213
 viciṭiṅga (*viciṭiṅga*) unidentified insect (not in *MW*) : 212
 warding off (*vāraṇī*) unknown insect, name based on etymology. Cf. Oṛiyā *bāraṇī* “charm against wild animals or

noxious insects” *CDIAL*: 1, #11553 : 213
 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 : 194, 197
 worm-dish (*krimisarāvī*) unknown insect, name based on etymology. *śarāva* “dish, plate, etc.” (*MW*: 1057) : 213

Minerals

ashes (*bhasma*) ashes, corrosive when wet : 146
 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. : 146
 orpiment (*haritāla*) *Arsenii trisulphidum*. See *NK* v. 2, p. 20 ff : 146
 vermilion (*rakta*) speculative, based on *Mahākośa*: 1, 667, under *raktadhātu*, citing the *Dhanvantarīyanighaṇṭu* : 146

Glossary

abdominal swelling - *gulma*: 68
ādhmāna - tympanites: 75
agni - digestive fire: 67 - heat: 66
agnisaṅga - diminished digestive fire: 68
akriya - inactive: 74
ākṣepa - contractions: 72
ākṣepaka - convulsion: 72, 75
 - convulsions: 72
antarāyāma - emprosthotonos: 72
ānulomya - rightness: 66
apakṣāghāta - paralysis: 72
apāna - apāna: 67
apāna - *apāna*: 67
apatānaka - spasmodic contraction: 72
āpatantraka - spasmodic contradiction:
 73
ardita - paralysis of the jaw-bones: 73, 75
 - spasm of the jaw-bones: 73
avabāhuka - avabāhuka: 75
avabāhuka - *avabāhuka*: 75

bewilderment - *moha*: 70
bhrama - dizziness: 70
 bodily element - *dhātu*: 69
 bodily tissues - *dhātu*: 66
 breath - *prāṇa*: 67
 burning sensation in feet - *pādadaḥa*: 74

chyle - *rasa*: 68
 contractions - *ākṣepa*: 72
 convulsion - *ākṣepaka*: 72, 75
 convulsions - *ākṣepaka*: 72
cumucumāyana - itching: 69

dhātu - bodily element: 69 - bodily
 tissues: 66
 digestive fire - *agni*: 67
 diminished digestive fire - *agnisaṅga*: 68
 discolouration - *vaivarṇya*: 68
 disorientation - *moha*: 68
 dizziness - *bhrama*: 70
doṣa - humours: 66
 dumb - *mūka*: 74
 dust - *rajas*: 66

ear-ache - *karṇaśūla*: 74
ekāṅgaroga - monoplegia: 72
 emprosthotonos - *antarāyāma*: 72

fainting - *murchā*: 70
 fever - *jvara*: 65

gadgad - stammers: 74
 gout - *vātarakta*: 75
grdhrasī - sciatica: 73, 75
 gripes - *śūla*: 68
gulma - abdominal swelling: 68

heart-seizure - *hṛdgraha*: 68
 heat - *agni*: 66
hṛdgraha - heart-seizure: 68
 humours - *doṣa*: 66

inactive - *akriya*: 74
 itching - *cumucumāyana*: 69

jatru - neck: 67
jvara - fever: 65

kalāyakhañja - lathyrism: 74f
karṇaśūla - ear-ache: 74
khañja - limpness: 74
kroṣṭukaśīrṣa - synovitis of knee joint: 74f

lame - *paṅgu*: 74
 lathyrism - *kalāyakhañja*: 74f
 limpness - *khañja*: 74

manyāsthambha - rigidity of neck: 73
mimmira - mumbles: 74
moha - bewilderment: 70
 - disorientation: 68
 monoplegia - *ekāṅgaroga*: 72
mūka - dumb: 74
 mumbles - *mimmira*: 74
murchā - fainting: 70

neck - *jatru*: 67
 numbness - *supti*: 69 - *svāpa*: 69


pādadaḥa - burning sensation in feet: 74

- pakṣāghāta* - paralysis of one side: 75
 - paralysis: 72f
pañgu - lame: 74
 paralysis of arms and back - *viśvañci*: 73, 75
 paralysis of one side - *pakṣāghāta*: 75
 paralysis of the jaw-bones - *ardita*: 73, 75
 paralysis - *apakṣāghāta*: 72 - *pakṣāghāta*: 72f
prameha - urinary diseases: 68
prāṇa - breath: 67 - *prāṇa*: 67 - vital wind: 67
prāṇa - *prāṇa*: 67
pratitūnī - *pratitūnī*: 75
pratitūnī - *pratitūnī*: 75
pratyādhmāna - *pratyādhmāna*: 75
pratyādhmāna - *pratyādhmāna*: 75
pratyāsthilā - *pratyāsthilā*: 75
pratyāsthilā - *pratyāsthilā*: 75
rajas - dust: 66
rasa - chyle: 68
 rightness - *ānulomya*: 66
 rigidity of neck - *manyāsthambha*: 73
 sacrum - *trika*: 68
samāna - *samāna*: 67
samāna - *samāna*: 67
sciatica - *grdhrasī*: 73, 75
 spasm of the jaw-bones - *ardita*: 73
 spasmodic contraction - *apatānaka*: 72
 spasmodic contradiction - *āpatantraka*: 73
 stammers - *gadgad*: 74
śūla - gripes: 68
supti - numbness: 69
svāpa - numbness: 69
śvāsa - wheezing: 67
 synovitis of knee join - *kroṣṭukaśīrṣa*: 74f
trika - sacrum: 68
tūnī - *tūnī*: 75
tūnī - *tūnī*: 75
 tympanites - *ādhmāna*: 75
udāna - *udāna*: 67
udāna - *udāna*: 67
 urinary diseases - *prameha*: 68
vaivarṇya - discolouration: 68
vāta - wind: 65
vātakaṇṭaka - *vātakaṇṭaka*: 75
vātakaṇṭaka - *vātakaṇṭaka*: 75
vātarakta - gout: 75
vātāsthilā - *vātāsthilā*: 75
vātāsthilā - *vātāsthilā*: 75
viśvañci - paralysis of arms and back: 73, 75
 vital wind - *prāṇa*: 67
vyāna - *vyāna*: 67
vyāna - *vyāna*: 67
 wheezing - *śvāsa*: 67
 wind - *vāta*: 65

Todo list

■ Cite Paul Courtright, Ganesha book.	19
■ Can't be "sedation"	47
■ complete this thought	65
■ add footnote here	66
■ add refs to Divodāsa as king.	66
■ find out about uttarabasti	81
■ to what?	82
■ 29, 30 missing?	85
■ Problematic passage in the edition.	85
■ unsolved problem	90
■ Perhaps <i>kalka</i> here could also mean the <i>Terminalia Bellerica</i> (विभीतक).	102
■ Perhaps <i>kalka</i> here could also mean the <i>Terminalia Bellerica</i> (विभीतक).	102
■ Euphorbia Antiquorum (Antique spurge)	105
■ The webpage https://hindi.shabd.in/vairagya-shatakam-bhag-acharya-arjun-tiwari/post/117629 says that this verse belongs to the <i>Nītiratna</i> . I could not find this text.	109
■ The provisional edition should be modified accordingly.	111
■ There, Ḍalhaṇa commented that deliberation on <i>avapīḍa</i> had been done earlier when it was mentioned. Find that description to know more details.	113
■ Search for the section where the treatment of <i>ākṣepaka</i> is described.	114
■ Make the first letter of sentence capital.	114
■ ?	120
■ ?	120
■ ?	120
■ (?)	120
■ Is Dh. the teacher of Su. elsewhere?	132
■ Cf. Arthaśāstra 1.21.8.	133

■ I'm still unhappy about this verse.	136
■ Mention this in the introduction as an example of the scribe knowing the vulgate.	136
■ fn about sadyas+	136
■ Bear's bile instead of deer's bile.	137
■ punarṇṇavā in the N & K MSS	138
■ śrita for śṛta	138
■ explain more	138
■ Medical difference from Sharma.	139
■ example where the vulgate clarifies that these should be used separately; appears to be a gloss inserted into the vulgate text. . . .	139
■ The two uses of prāpta are hard to translate. prāptāḥ → kṣipram is an example of the vulgate banalizing the Sanskrit text to make sense of a difficult passage.	139
■ √ vyadh not √ vedh (also elsewhere and for the ears), causative optative.	139
■ Look up the ca. reference.	148
■ Come back to the issue of "kalpa". Look up passages in the Kośa. . . .	155
■ got to here - 2023-01 continue with table for #5	157
■ write footnote: don't repeat ativiṣā; vulgate similar to H.	159
■ Include info on hida-2019	165
■ Or "There are 20 phaṇins and 6 maṇḍalins. The same number are known. There are 13 Rājīmats." Or even, "there are 20 Phaṇins and six of them are Maṇḍalins." Are phaṇins really the same as darvīkaras?	167
■ grammar	168
■ ri- ṛ-?	171
■ varṇa means "colour" elsewhere?	172
■ write note on pariṣekān pradehāmś	184
■ where is cutting with a knife related to removing bile or phlegm. . . .	220
■ maṣī burned charcoal. Find refs.	220
■ find ref.	226
■ Check out these refs.	226
■ meaning of kalpa	226
■ or a dual?	231
■ See chapter 40 of Sūtrasthāna.	282
■ vasā / medas / majjan	282
■ Does bhūtādi a compound or it means ahaṅkāra or ego?	283

 triad? –DW	283
--	-----

