

# A Translation of the Nepalese Text of the *Suśrutasamhitā*

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# Contents

<b>Sūtrasthāna</b>	<b>7</b>
<b>Sūtrasthāna 1: The Origin of Medical Knowledge</b>	<b>9</b>
Literature . . . . .	9
Translation . . . . .	9
<b>Sūtrasthāna 2: The Initiation of a Student</b>	<b>17</b>
Literature . . . . .	17
Translation . . . . .	17
<b>Sūtrasthāna 3: The Table of Contents</b>	<b>19</b>
Literature . . . . .	19
Translation . . . . .	19
<b>Sūtrasthāna 13: On Leeches</b>	<b>21</b>
Literature . . . . .	21
Translation . . . . .	21
<b>Sūtrasthāna 14: On Blood</b>	<b>29</b>
Previous scholarship . . . . .	29
Translation . . . . .	29
<b>Sūtrasthāna 16: Repairing Pierced Ears</b>	<b>37</b>
Previous literature . . . . .	37
Translation . . . . .	37
<b>Sūtrasthāna 28: Unfavourable Prognosis in Patients with Sores</b>	<b>47</b>
Literature . . . . .	47
Translation . . . . .	47

<b>Nidānasthāna</b>	<b>49</b>
<b>Nidānasthāna 1: The Diagnosis of Diseases Caused by Wind</b>	<b>51</b>
Literature . . . . .	51
Translation . . . . .	51
 <b>Śārīrasthāna</b>	 <b>59</b>
<b>Śārīrasthāna 2: On Semen and Menstrual Fluid</b>	<b>61</b>
Literature . . . . .	61
Conceptual background . . . . .	61
Translation . . . . .	61
JG translation . . . . .	62
 <b>Cikitsāsthāna</b>	 <b>65</b>
<b>Cikitsāsthāna 4: On the Treatment of Wind Diseases</b>	<b>67</b>
Literature . . . . .	67
Translation . . . . .	67
 <b>Cikitsāsthāna 5: On the Treatment of Serious Wind Diseases</b>	 <b>73</b>
Literature . . . . .	73
Translation . . . . .	73
 <b>Cikitsāsthāna 15: On Difficult Delivery</b>	 <b>85</b>
Literature . . . . .	85
Translation . . . . .	85
 <b>Kalpasthāna</b>	 <b>89</b>
<b>Kalpasthāna 1: Protecting the King from Poison</b>	<b>91</b>
Introduction . . . . .	91
Literature . . . . .	92
Manuscript notes . . . . .	92
Translation . . . . .	93
[Threats to the king] . . . . .	93

<b>Kalpasthāna 2: Poisonous Plants</b>	<b>103</b>
Introduction . . . . .	103
Literature . . . . .	104
Translation . . . . .	104
The effects of poisons . . . . .	108
Slow-acting poison . . . . .	111
The invincible ghee . . . . .	116
Curing the ‘slow-acting’ poison . . . . .	116
<b>Kalpasthāna 3: Poisonous Insects and Animals</b>	<b>117</b>
Literature . . . . .	117
Translation . . . . .	117
The origin of poison . . . . .	121
Patients beyond help . . . . .	123
<b>Kalpasthāna 4: Snakes and Invenomation</b>	<b>125</b>
Introduction . . . . .	125
Literature . . . . .	125
Translation . . . . .	127
[Types of snake] . . . . .	130
[Symptoms of snakebite] . . . . .	134
<b>Uttaratantra</b>	<b>139</b>
<b>Uttaratantra 17: Preventing Diseases of the Pupil</b>	<b>141</b>
Literature . . . . .	141
Translation . . . . .	141
[Complications] . . . . .	151
[Characteristics of the probe] . . . . .	151
[Complications] . . . . .	151
<b>Uttaratantra 38: Diseases of the Female Reproductive System</b>	<b>155</b>
Introduction . . . . .	155
Literature . . . . .	155
Placement of the Chapter . . . . .	155
Parallels . . . . .	157
Philological notes . . . . .	158

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Metrical alterations . . . . .	158
The original opening verses . . . . .	158
Translation . . . . .	160
<b>Uttaratantra 39: On Fevers and their Management [draft]</b>	<b>143</b>
Literature . . . . .	143
Remarks on the Nepalese version . . . . .	143
Translation . . . . .	143
<b>Uttaratantra 65: Rules of Interpretation</b>	<b>157</b>
Literature . . . . .	157
Early Sources . . . . .	157
Terminology . . . . .	163
Characteristics of the Manuscript Transmission . . . . .	163
Translation . . . . .	163
<b>Editions and Abbreviations</b>	<b>169</b>
<b>Index of Manuscripts</b>	<b>179</b>
<b>Bibliography</b>	<b>181</b>
<b>Materia Medica Reference Works</b>	<b>207</b>
<b>Materia Medica</b>	<b>213</b>
<b>Glossary</b>	<b>225</b>

# **Sūtrasthāna**





# Sūtrasthāna 2: The Initiation of a Student

## Literature

[HIML](#): IA, 204; Preisendanz [2007](#); Wujastyk [2012](#): 82–83, *et passim*.

## Translation



**Nidānasthāna**



# Śārīrasthāna



**Cikitsāsthāna**







# Kalpasthāna



# Kalpasthāna 4: Snakes and Invenomation

## Introduction

The fourth chapter of the Kalpasthāna of the *Suśrutasamhitā* addresses the topic of snake bites and snake venom. Unusually for the Nepalese version of the *Suśrutasamhitā*, the discussion is framed as a question from Suśruta to the wise Dhanvantari. Suśruta's questions are about the number of snakes, how they are classified, the symptoms of their bites and the pulses or stages of toxic shock experienced by a victim of snakebite and related topics. The taxonomy of snakes is presented in tabular form in Figures 1 and 2.<sup>407</sup>

## Literature

A brief survey of this chapter's contents and a detailed assessment of the existing research on it to 2002 was provided by Meulenbeld.<sup>408</sup> There also exists an substantial herpetological literature from colonial India as well as more recent studies of snakes in the context of cultural and religious life.

The ophiological literature of the colonial period began in the late nineteenth century with the work of Fayrer, whose publication included striking colour paintings of snakes.<sup>409</sup> Fayrer provided a biological taxonomy

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407 On the idea of notational variants in scientific translation, see Elshakry 2008; Sarukkai 2016; Wujastyk 2021a: 81–83.

408 HIML: IA, 292–294. In addition to the translations mentioned by Meulenbeld (HIML: IB, 314–315), a translation of this chapter was included in P. V. Sharma 1999–2001: 3, 35–45.

409 Fayrer 1874, first published in 1872.

of snakes as well as chapters on mortality statistics during the nineteenth century, treatment and effects of poison, and experimental data. Ewart (1878) included descriptions of appearance and behaviour of poisonous snakes and sometimes their local names and reproducing Fayrer's illustrations.<sup>410</sup> Wall (1913: 75–124) provided a useful analysis of the medical effects of snake envenomation in India arranged by the varied symptomology of different snakes. He also discussed the difference between the symptoms of toxicity and fright (69–75) and also the difficulties arising out of uncertainty about the effects of snake-bite (124–126). The *Suśrutasamhitā* too recognized the emotional and somatic effects of fright (see note 422 below). Wall (1921) provided a wealth of detail of the snakes of Sri Lanka, including line drawings.

Doniger (2015) provided a good survey of snakes as protagonists in religious literature from the *Atharvaveda* through the epics, *Purāṇas* and Buddhist literature. Semeka-Pankratov (1979) traced semiotics of the term *nāga* through Vedic, Pali and Sanskrit literature. Slouber (2016: 31–33 *et passim*) discussed the *Suśrutasamhitā*'s *Kalpasthāna* as a precursor and influence on later Tantric traditions of snake-bite interpretation and therapy. In particular, the Tantric *Kriyākālaguṇottara* text that Slouber presented divided snakes into two basic categories, divine and mundane, as the *Suśrutasamhitā* does.<sup>411</sup> But unlike the *Suśrutasamhitā*, in the *Kriyākālaguṇottara* the chief taxonomic principle for both groups is the four *varṇas*.

A discussion of this chapter specifically in the light of the Nepalese manuscripts was published by Harimoto.<sup>412</sup> After a close comparative reading of lists of poisonous snakes, Harimoto concluded that, “the Nepalese version is internally consistent while the [vulgate] editions are not.” Harimoto showed how the vulgate editions had been adjusted textually to smooth over inconsistencies, and gave insights into these editorial processes.<sup>413</sup>

410 Calling his work a supplement to Fayrer (1874), but also being cited by Fayrer, Ewart 1878 evidently also collected local indigenous knowledge from his “snake-man” (p. 22).

411 Slouber 2016: 144–145.

412 Harimoto 2011: 101–104.

413 The two editions that Harimoto noted, Su 1938 and Su 1889, present identical texts.

## Translation

- 1 Now we shall explain the procedure (*kalpa*) about what should be known concerning the venom in those who have been bitten by snakes.<sup>414</sup>
- 3 Suśruta, grasping his feet, questions the wise Dhanvantari, the expert in all the sciences.
- 4 “My Lord, please speak about the number of snakes, and their divisions, the symptoms of someone who has been bitten, and the knowledge about the successive shocks (*vega*) of poisoning”.<sup>415</sup>
- 5 On hearing his query, that distinguished physician spoke.  
“The venerable snakes such as Vāsukī and Takṣaka are uncountable.
- 6–gab “They are snake-lords who support the earth, as bright as the ritual fire, ceaselessly roaring, raining and scorching. They hold up the earth, with its oceans, mountains and continents. If they are angered, they can destroy the whole world with a breath and a look. Honour to them. They have no role here in medicine.  
“The ones that I shall enumerate in due order are those mundane ones with poison in their fangs who bite humans.<sup>416</sup>
- 9cd–10 “There are eighty kinds of snakes and they are divided in five ways: Darvīkaras, Maṇḍalins, Rājīmats, and Nirviṣas. And Vaikarañjas that are traditionally of three kinds.<sup>417</sup>
- 11 “Of those, there are twenty and six hooded snakes, and the same number of Maṇḍalins are known. There are thirteen Rājīmats.<sup>418</sup>

414 The *Sarvāṅgasundarī*, commenting on 1.16.17 (Ah 1939: 246), glossed कल्प as प्रयोग.

415 The expression “successive shocks” translates वेग, which in other contexts may mean “(natural) urge.” Here, it is rather the discrete stages or phases of physiological reaction to envenomation. Cf. the symptoms of cobra poisoning described by Wall (1913: 80).

416 The next few verses are discussed in detail by Harimoto (2011: 101–104), who shows that in the taxonomy of snakes, the Nepalese version of the *Suśrutasaṃhitā* has greater internal coherence than the vulgate recension.

417 Harimoto (2011) translated these names as “hooded,” “spotted,” “striped,” “harmless,” and “hybrid.” Figure 1 shows the taxonomy described in the vulgate text; Figure 2 shows the different and more logical division of the Nepalese version of the *Suśrutasaṃhitā*.

418 The phrasing of this śloka is awkward.

Or “There are 20 phanins and 6 maṇḍalins. The same number are known. There are 13 Rājīmats.” Or even, “there are 20 Phanins and six of them are Maṇḍalins.” Are phanins really the same as darvīkaras?

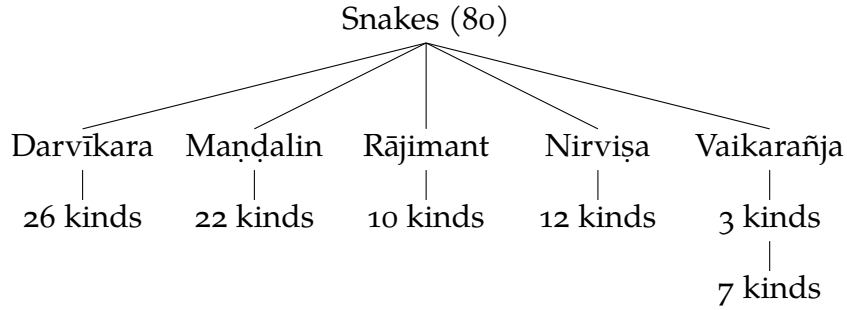


Figure 1: The taxonomy of snakes in the vulgate, 5.4.9–13ab (Su 1938: 571).

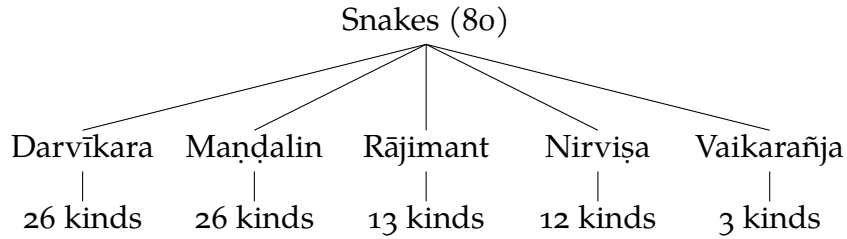


Figure 2: The taxonomy of snakes in the Nepalese version.

- 12 “There are said to be twelve Niriviṣas and, according to tradition, three Vaikarañjas.
- 13–14ef “If they are trodden on, ill-natured or provoked or even just looking for food, those very angry snakes will bite. And that is said to happen in three ways: serpented (*sarpita*), torn (*darita*) and thirdly without venom (*nirviṣa*). Some experts on this want to add “hurt by the snake’s body”.<sup>419</sup>
- 15–16 “The physician can recognize the following as “ophidian (*sarpita*)”: Where a rearing snake makes one, two or more puncture-marks of its teeth, when they are deep and without much blood,<sup>420</sup> accompanied

419 This might refer to constriction. The phrase reads like a commentarial addition rather than the main text of the *Suśrutasamhitā*.

420 The word उद्धृत “aroused” was glossed by Ḍalhaṇa at 5.4.15 (Su 1938: 571) as उन्मोद्य, a word not found as such in standard dictionaries (MW; KEWA; AyMahā; Apte). Semantic considerations suggest that the word is not related to  $\sqrt{muṭ}$  “break” or *mūta*/*mūṭa* “woven basket.” Perhaps it is related to the Tamil மோதி (*mōṭi*), whose meanings include “arrogance, grandeur, display” (DED<sub>2</sub>:#5133) or to faintly-documented forms like *moṭyate* “is twisted” (CDIAL: #10186). Ḍalhaṇa’s उन्मोद्य may thus mean “twisting up” or “making an arrogant display.”

- by a little ring of spots (*cuñcumālaka*),<sup>421</sup> lead to degeneration, and are close together and swollen.
- 17 Where there are streaks with blood, whether it be blue or white, the physican should recognize that to be “torn (*darita*),” having a small amount of venom.
- 18 The physician can recognize the locations of the bites of a person in a normal state as being free from poison, when the location is not swollen, and there is little corrupted blood.
- 19 The wind of a timid person who has been touched by a snake can get irritated by fear. It causes swelling.<sup>422</sup> That is “hurt by a snake’s body.”
- 20 Locations bitten by sick or frightened snakes are known to have little poison. Similarly, a site bitten by very young or old snakes has little poison.
- 21 Poison does not progress in a place frequented by eagles,<sup>423</sup> gods, holy sages, **spirits**, and saints, or in places full of herbs that destroy poison.<sup>424</sup>

grammar

Note that पद “puncture-mark” (more literally, “footprint”) is being used in the same sense as in 1.13.19 (Su 1938: 57) when describing the marks on the body where a knife scarifies the skin before leeching. See footnote 49.

421 The usual dictionary lexeme is चञ्चु, not चुञ्चु as in the Nepalese witnesses. We translate “spots” following Ḍalhaṇa and Gayadāsa on 5.4.15 (Su 1938: 571), where they described a group of spots or swellings at the site of the bite. On the history of the word मालक, see Kieffer-Pülz 1996.

422 Wall (1913: 69) remarked on the difficulty of separating toxicity symptoms from the psychosomatic effects of terror:

The gravity of symptoms due to fright does not appear to me to be sufficiently recognised, though there is no doubt in my mind that fatal cases from this cause are abundant, especially among the timid natives of this country.

Wall went on to give several case studies in which patients experienced syncope or even died as a result of bites from toxicologically harmless creatures.

423 Ḍalhaṇa on 5.4.21 (Su 1938: 571) identified the सुपर्ण as a गरुड. On the bird called सुपर्ण, Dave (1985: 72 ff, 514) too noted that it may be a synonym for Garuḍa, and in some contexts may refer to the Golden Eagle, Golden Oriole, Lammergeyer, etc. Dave (1985: 199 ff, 492) noted again that the Garuḍa is a mythical bird but may refer to the Himalayan Golden Eagle and other species of eagle. He pointed out that historically, The original physical basis for गरुड as the नागाशी (snake-eater) was most probably the Sea-Eagle who picks up sea-snakes from the sea or sand-beach and devours them on a nearby tree... (Dave 1985: 201).

Dave continued with interesting reference to Śrīharṣa’s *Nāgānanda*.

424 For “spirits” the Nepalese version has भूत while the vulgate reads यक्ष.



### [Types of snake]

- 22 Darvīkara snakes are known to have hoods, to move rapidly, and to have rings, ploughs, umbrellas, crosses, and hooks on them.
- 23 Maṇḍalin snakes are known for being large and slow-moving. They are decorated with many kinds of circles. They are like a flaming fire because of their poisons.
- 24 Rājimant snakes are smooth and traditionally said to be, as it were, mottled with multicoloured streaks across and above.

### [Classes of snake]

- 25 Snakes that shine like pearls and silver, and that are amber and that shine like gold, and smell sweet are traditionally thought of as being of the Brāhmaṇa caste.
- 26 Warrior snakes, however, are those that look glossy and get very angry. They have the mark of the sun, the moon, the earth, an umbrella and bitumen.
- 27 Merchant snakes may traditionally be black, shine like diamond or have a red colour or be grey like pigeons.
- 28 Any snakes that are coloured like a buffalo and a tiger, with rough skin and different colours are known as servants.<sup>425</sup>
- 31 All snakes that are variegated (Rājīmats) move about during the first watch of the night. The rest, on the other hand, the Maṇḍalins and the Darvīkaras, are diurnal.<sup>426</sup>
- 29 Wind is irritated by all hooded snakes; bile by Maṇḍalins and phlegm by those with many stripes.
- 30 Because of the two classes having greater, lesser or equal class, there is the characteristic of irritating two humours.  
And he will explain the opposing view that is to be known as a result of the non-union of a male and female.<sup>427</sup>

<sup>425</sup> Presumably “different” from the earlier-mentioned castes.

The sequence of the following three verses is slightly different from the vulgate (5.4.29–31 (Su 1938: 572)).

<sup>426</sup> The readings of the vulgate, that Rājīmats are active in the early night, the Maṇḍalins in the later night, and Darvīkaras in the day, seem clearer.

<sup>427</sup> The sense of the last phrase here is quite different from the vulgate, which says only that “details” will be explained below.

## [Enumeration of snakes]

34.1 In that context, here are the Darvīkaras.

- |  |   |
|--|---|
| 1. The Black snake ( <i>kṛṣṇasarpa</i> );              | ( <i>mahāpadma</i> );                     |
| 2. The Big Black ( <i>mahākṛṣṇa</i> );                 | 16. The Grass Flower ( <i>apuṣpa</i> );   |
| 3. The Black Belly ( <i>kṛṣṇodara</i> );               | 17. The Curd Mouth                        |
| 4. The All Black ( <i>sarvakṛṣṇa</i> ); <sup>428</sup> | ( <i>dadhimukha</i> );                    |
| 5. The White Pigeon                                    | 18. The Lotus Mouth                       |
| ( <i>śvetakapota</i> ); <sup>429</sup>                 | ( <i>puṇḍarikamukha</i> );                |
| 6. The Rain Cloud ( <i>valāhako</i> );                 | 19. The Brown Hut Mouth                   |
| 7. The Great Snake                                     | ( <i>babhrūkuṭīmukha</i> );               |
| ( <i>mahāsarpa</i> );                                  | 20. The Variegated ( <i>vicitra</i> );    |
| 8. The Conch Keeper                                    | 21. The Flower Sprinkle Beauty            |
| ( <i>śaṃkhaṭāla</i> );                                 | ( <i>puṣpābhikīrṇābha</i> );              |
| 9. The Red Eye ( <i>lohitākṣa</i> );                   | 22. The Mountain Snake                    |
| 10. The Gavedhuka ( <i>gavedhuka</i> );                | ( <i>girisarpa</i> );                     |
| 11. The Snake Around                                   | 23. The Straight Snake                    |
| ( <i>parisarpa</i> );                                  | ( <i>rjusarpa</i> );                      |
| 12. The Break Hood                                     | 24. The White Rip ( <i>śvetadara</i> );   |
| ( <i>khaṇḍaphaṇa</i> );                                | 25. The Big Head ( <i>mahāśīrṣa</i> );    |
| 13. The Kūkuṭa ( <i>kūkuṭa</i> );                      | and                                       |
| 14. The Lotus ( <i>padma</i> );                        | 26. The Hungry Sting ( <i>alagarda</i> ); |
| 15. The Great Lotus                                    |   |

34.2 Here are the Maṇḍalins

- |  |  |
|--|--|
| 1. The Mirror Ring                       | 9. The Big Jackfruit                     |
| ( <i>ādarśamaṇḍala</i> );                | ( <i>mahāpanasaka</i> );                 |
| 2. The White Ring                        | 10. The Bamboo Leaf                      |
| ( <i>śvetamaṇḍala</i> );                 | ( <i>veṇupatraka</i> );                  |
| 3. The Red Ring ( <i>raktamaṇḍala</i> ); | 11. The Kid ( <i>śīsuka</i> );           |
| 4. The Speckled ( <i>prṣata</i> );       | 12. The Intoxicator ( <i>madanaka</i> ); |
| 5. The Gift of God ( <i>devadinna</i> ); | 13. The Morning Glory                    |
| 6. The Pilindaka ( <i>pilindaka</i> );   | ( <i>pālindaka</i> );                    |
| 7. The Big Cow Snout                     | 14. The Stretch ( <i>tantuka</i> );      |
| ( <i>vṛddhagonasa</i> );                 | 15. The Pale as a Flower                 |
| 8. The Jackfruit ( <i>panasaka</i> );    | ( <i>puṣpapāṇḍu</i> );                   |

<sup>428</sup> Not in vulgate.

<sup>429</sup> The vulgate adds The Big Pigeon (*mahākapota*).

- |                                      |  |
|--------------------------------------|--|
| 16. The Six Part ( <i>ṣaḍaṅga</i> ); | 22. The Hand Decoration                              |
| 17. The Flame ( <i>agnika</i> );     | ( <i>hastābharaṇaka</i> );                           |
| 18. The Brown ( <i>babhru</i> );     | 23. The Tatra ( <i>tatra</i> ); <sup>430</sup>       |
| 19. The Ochre ( <i>kaṣāya</i> );     | 24. The Mark ( <i>citraka</i> );                     |
| 20. The Khaluṣa ( <i>khaluṣa</i> );  | 25. The Deer Foot ( <i>eṇīpada</i> ). <sup>431</sup> |
| 21. The Pigeon ( <i>pārāvata</i> );  |  |

34.3 Here are the Rājīmats.<sup>432</sup>

- |   |  |
|---|--|
| 1. The Lotus ( <i>puṇḍarīka</i> );          | 7. The Grass Drier ( <i>trṇaśoṣaka</i> );            |
| 2. The Stripe Speckle ( <i>rājicitra</i> ); | 8. The White Jaw ( <i>svetahanu</i> );               |
| 3. The Finger Stripe ( <i>aṅgulirāji</i> ); | 9. The Grass Flower                                  |
| 4. The Two Finger Stripe                    | ( <i>darbhapuṣpa</i> ); <sup>433</sup>               |
| ( <i>dvyāṅgulirāji</i> );                   | 10. The Red Eye ( <i>lohitākṣa</i> ); <sup>434</sup> |
| 5. The Drop Stripe ( <i>bindurāji</i> );    | 11. The Ringed ( <i>cakraka</i> );                   |
| 6. The Mud ( <i>kardama</i> );              | 12. The Worm Eater ( <i>kikkisāda</i> );             |

34.4 Here are the Nirviṣas.

- |   |  |
|---|--|
| 1. The Rain Cloud ( <i>valāhako</i> ); <sup>435</sup> | 8. The Two-day ( <i>dvyāhika</i> );        |
| 2. Thei Snake Flag ( <i>ahipatāka</i> );              | 9. The Milk Flower                         |
| 3. The White Leaf ( <i>śukapatra</i> );               | ( <i>kṣīrikāpuṣpa</i> );                   |
| 4. The Goat Swallow                                   | 10. The Flower All ( <i>puṣpasakalī</i> ); |
| ( <i>ajagara</i> );                                   | 11. The Chariot of Light                   |
| 5. The Stimulator ( <i>dīpyaka</i> );                 | ( <i>jyotīratha</i> );                     |
| 6. The Ilikinī ( <i>ilikinī</i> );                    | 12. The Little Tree ( <i>vrkṣaka</i> );    |
| 7. The Year-Snake ( <i>varṣāhika</i> );               |  |

34.5 The Vaikaraṇjas originate out of contrary unions amongst the three colours.<sup>436</sup> Thus:

1. The Mākuli (*mākuli*);

varṇa  
means "col-  
our" else-  
where?

430 This seems implausible, but otherwise the list of Maṇḍalins would be short.

431 The list is short by one item. Perhaps the one of the snakes named in the vulgate, *citramaṇḍala*, *gonasa* or *piṅgala*, should be considered here.

432 The following list is one item short. The vulgate text, however, has several names that do not appear in the Nepalese Rājīmat list, for example *Sarṣapaka* and *Godhūmaka*.

433 Also in the Darvīkara list.

434 Also in the Darvīkara list.

435 Also in the Darvīkara list.

436 The word *varṇa* in this chapter normally means "colour" not "class." ("Class is expressed by "jāti.") While *kṛṣṇasarpa* is clearly a colour-type, it is less obvious that *gonasī* is a special colour, and *rājīmat* is a group of snakes.

2. The Poṭa Throat (*poṭagala*);
3. The Oil Stripe (*snigdharāji*);

Amongst those, the Mākuli (*mākuli*); is born when a male Black Snake mates with a female Cow Snout (*gonasa*), or the reverse. The Poṭa Throat (*poṭagala*) is born when a male Rājila mates with a female Cow Snout (*gonasa*) or the reverse. The Oily Stripe (*snigdharāji*) is born when a male Black Snake mates with a female Rājimat, or the reverse. Their poison is like that of their father, because it is the superior one out of the two; but others say it is like the mother. Thus eighty of these snakes have been described.

35 Amongst them, males have large eyes, tongues and heads.<sup>437</sup> Females have small eyes, tongues and heads. Neuters have both characteristics, and are slow to exert themselves or be angry.<sup>438</sup>

36 In that context we shall give instruction in a general way about the sign of having been bitten by any of the snakes.

For what reason?

Because poison acts quickly, like a fire with an oblation, a honed sword, or a thunderbolt.<sup>439</sup> And ignored for even a period of time, it can drag the patient away. There is not even an opportunity to follow the literature.<sup>440</sup>

And when the symptom of being bitten is stated, there will be three ways of treating it because there are three kinds of snake. Therefore we shall explain it in three ways. “For this is good for people who are ill, and it removes confusion and in this very case it prevents all symptoms”.<sup>441</sup>

437 The vulgate includes the snake’s mouth in this and the next list.

438 The reading मन्दचेष्टाक्रोधा is an awkward compound; possibly the original reading was मन्दचेष्टा: + अक्रोधा and sandhi was applied twice.

439 Perhaps the image suggested by “a fire with an oblation” is that of the Pravargya, in which a large flame rises suddenly from the ritual fire.

440 The idea seems to be that there is no time to consult the verbose āyurvedic teachings. The “extensive meaning of the collection of statements (वाक्समूहार्थविस्तार)” is singled out as one of Āyurveda’s virtues in 5.8.142 (Su 1938: 594). Alternatively, perhaps the patient is unable to understand what the doctor is saying to him.

441 In the next passage, the symptoms of snake poisoning are indeed explained under three headings.

### [Symptoms of snakebite]

- 37 In this context, the poison of a Darvīkara causes the skin, nails, eyes, mouth, urine, feces, and the bitemark to be black; there is driness, the joints hurt and the head feels heavy; the waist, back and neck feel weak; there is yawning, the voice becomes faint, there is gurgling, paralysis, dry throat, cough, wheezing, and hiccups; the wind goes upwards, the patient convulses with sharp pain, black saliva dribbles out, foam appears, the ducts (*srotas*) are blocked and every kind of pain that is due to wind.<sup>442</sup>

The poison of a Maṇḍalin causes the skin, nails, eyes, teeth, mouth, urine, feces, bitemark to be yellow; there is a desire for cold, a temperature, giving off fumes,<sup>443</sup> a burning feeling, thirst, intoxication, fainting, fever, haemorrhaging (*śonitāgamana*), and the degeneration of the flesh and fat above and below. There is swelling, suppuration of the bite, metamorphopsia (*viparītadarśana*), anger caused by the suffering, and every kind of pain that is due to bile.<sup>444</sup>

The poison of a Rājīmat causes the skin, nails, eyes, teeth, mouth, urine, feces, and bitemark to be pale; there is a cold fever, the hair stands on end, there is stiffness and swelling of the limbs including the site of the bite. There is a discharge of viscous phlegm, vomiting, itchy eyes, and a rattling sound. The breath is obstructed and there is every kind of pain due to phlegm.

- 38 In that context, “someone bitten by a male gazes upwards, by a female horizontally, and by a neuter, downwards.” One bitten by a pregnant snake has a pale face and becomes swollen (*ādhmāta*). One bitten by a recently-delivered snake is afflicted with abdominal pain and urinates

442 Cf. the similar symptoms of snake venom poisoning by the so-called Brahmin warriors of Harmatelia described by the classical author Diodorus Siculus (fl. ca. 30-60 BCE) (Eggermont 1975: 108).

443 The term “giving of fumes (परिधूपयन)” is not in MW: 596 as such, although परिधूपन, परिधूमन and परिधूमायन are cited and referred to the *Suśrutasaṃhitā*. “Giving off fumes (परिधूपन)” is listed at *Suśrutasaṃhitā* 2.6.13 (Su 1938: 291) amongst the symptoms of urinary disease caused by phlegm. The editors note a variant reading परिधूमायन but do not tell us in which manuscript (Su 1938: 291, n. 3). Ḍalhaṇa on 2.6.13 (Su 1938: 292) glossed परिधूपन as “hot all over (समन्ततस्तापः)” and in our current passage as “hot over the whole body (सर्वाङ्गसन्तापः)” (Su 1938: 573). See also AyMahā: 1, 429: धूमायन “अङ्गानां धूमोद्गमनमिव” citing the *Suśrutasaṃhitā*.

444 Ghosh et al. (2023) describes visual disturbances due to snake envenomation.

with blood. One bitten by a hungry snake craves food. Those bitten by an old snake have delayed and slow reactions. And one bitten by a young snake is fast and keen. One bitten by a non-venomous snake has the characteristic mark of non-poisoning.<sup>445</sup> Some that are bitten by a blind snake become blind. A constrictor (*ajagara*) is deadly because it swallows, not because of poison.

### [Toxic Pulses]

- 39 In that context, all snake toxins have seven toxic impulses (*viṣavega*).

[**Darvīkaras**] Thus, at the first pulse of the Darvīkaras the poison corrupts the blood. That corrupted blood turns black. Because of that, blackness and a feeling of ants crawling about on the body develop.<sup>446</sup> In the second pulse, it corrupts the flesh. That causes extreme blackness and lumps.

In the third, it corrupts the fat. That causes a discharge at the bite, heaviness of the head and an eclipse of the vision.<sup>447</sup>

In the fourth, it penetrates the trunk of the body (*koṣṭha*). From there, it irritates the humors, particularly phlegm. That causes exhaustion and oozing phlegm, and dislocation of the joints.

In the fifth pulse, it penetrates the bones. That causes breaking of the joints, hiccups and burning.

In the sixth pulse, it penetrates the marrow. That causes humours in the seat of fire in the gut (*grahaṇī*), heaviness of the limbs, diarrhoea, pain in the heart and fainting.<sup>448</sup>

In the seventh, it penetrates the semen and greatly irritates the vyāna breath (*vyāna*), and causes the phlegm (*kapha*) to run imperceptibly out of the tubes (*srotas*). That causes the appearance of mucous (*śleṣman*),

445 The grammar of अविषलिङ्गम् is not quite right; it should be a masculine or plural bahuvrīhi.

446 Strictly, we would expect a dual verb here, instead of the plural of the witnesses.

447 Ḍalhana on 5.4.39 (Su 1938: 574) glossed the last expression as “blockage of the vision (दृष्ट्यवरोध).”

448 The “seat of fire in the gut (ग्रहणी)” is an ayurvedic organ in the digestive tract that does not correspond to any specific organ known to contemporary anatomy. For discussion, see AyMahā: v. 1, 304; Meulenbeld 1974b: 619; Das 2003: 544–545.

breaking of the hips, back and shoulders, impediment to all movements and shortness of breath.

[**Mandalins**] Thus, at the first pulse of the Mandalins, the poison corrupts the blood. Corrupted by that, it turns yellow. That causes a yellow appearance and a feeling of heat all over (*paridāha*).

In the second pulse, it corrupts the flesh. And that causes the limbs to be very yellow and an extreme feeling of heat all over (*paridāha*), and swelling at the bite.

In the third, it corrupts the fat. That causes a discharge at the black bite and sweating.

In the fourth, it penetrates as before and brings on fever.

In the fifth, it causes heat in all the limbs.

In the sixth and seventh, it is the same as before.

[**Rājīmats**] Thus, in the first pulse of the Rājīmats, the poison corrupts the blood. Corrupted by that, it turns yellow. It causes a person to have hair standing on end and a pale appearance.

In the second pulse, it corrupts the flesh. That causes him to become pale and to become extremely benumbed (*jāḍya*).

In the third, it corrupts the fat. That causes moistness of the bite and runny eyes and nose.

In the fourth, it is the same as before. After penetrating, it brings on manyāstambha (*stiffness of the neck*) and heaviness of the head.

In the fifth, speech is confused and there is a cold fever.

In the sixth and seventh, it is the same as before.

40 There are verses on this.

*It is well known that there are seven layers of skin (kalā) in between the bodily tissues (dhātu). Poison enters into these one by one and causes the toxic pulse (vega).*

41 *The interval taken by the deathly substance (kālakaḥ), propelled (√ūh) by air, to cut the layers of skin (kalā) is traditionally called the "pulse interval (vegāntara)".*<sup>449</sup>

449 Dāhṇa on 5.4.41 ([Su 1938: 574](#)) glossed कालकल्प as मृत्युसदृशं विषं "the poison resembles death."

- 42      *In the first pulse, an animal has a swollen body, is distressed and broods.*<sup>450</sup>
- In the second, it dribbles somewhat,<sup>451</sup> the hair stands up on its body, and it has pain (√pīḍ) in the heart.*
- 43      *The third stage brings headache and it breaks the ears and necks.*<sup>452</sup>
- 44
- 45

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450 The verb √प्रध्वै "meditate, be thoughtful, brood" is unexpected here. Ḍalhana on 5.4.42 (Su 1938: 574) noted a variant reading that omitted the vulgate's variant ध्यायति प्रथमे "at first it broods."

451 The Nepalese witnesses use लालि-, not लाला-, for "saliva."

452 The scribe of MS H emended the text to read कण्ठग्रीव with the vulgate. Intransitive use of pass. भञ्ज्.





# **Uttaratantra**



# Editions and Abbreviations

Ah 1939

Kuṃṭe, Anṇā Moreśvara, Navare, Kṛṣṇaśāstrī, and Parādkar, Hariśāstrī (1939) (eds.), श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्रीमदरुणदत्तविरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेदरसायनाह्वया टीकया च समुल्लसितम् = *The Astāṅgahṛidaya* (6th edn., Muṃbayyām: Nirṇayasāgara Press), [ark:/13960/t3tt6967d](https://nirṇayasāgara.org/ark:/13960/t3tt6967d).

Anup

*Anup Sanskrit Library.*

Apte

Apte, Vaman Shivaram (1992), *The Practical Sanskrit-English Dictionary* (Kyoto: Rinsen Book Company), ISBN: 4-653-00038-7; Reprinted from Gode and Karve 1957–59.

*Arthaśāstra*

Kangle, R. P. (1960), *The Kauṭīliya Arthaśāstra* (University of Bombay Studies Sanskrit, Prakrit and Pali, 1; Bombay: University of Bombay), accessed 23/09/2021.

AS

*Asiatic Society.*

As 1980

Āṭhavale, Anaṃta Dāmodara (1980) (ed.), अष्टाङ्गसङ्ग्रहः श्रीमद्वाग्भटविरचितः इन्दुव्याख्यासहितः [= *Vāgbhaṭa's Aṣṭāṅgasāṅgraha with Indu's Commentary*] (Pune:

- M. A. Āṭhavale, Śrīmad Ātreya Prakāśanam), [ark :/ 13960 / s25bwqsd0n7](#).
- AyMahā Jośī, Veṇīmādhavaśāstrī, and Jośī, Nārāyaṇa Harī (1968), आयुर्वेदीय महाकोशः अर्थात् आयुर्वेदीय शब्दकोशः संस्कृत-संस्कृत (Mumbai: Mahārāṣṭra Rājya Sāhitya āṇi Saṃskṛti Maṃḍala), [ark :/ 13960 / t22c41g8t](#).
- Bhela 1921 Mookerjee, Ashutosh, and Ananta Krishna Shastri, Vedantabisharad (1921) (eds.), *The Bhela Samhita. Sanskrit Text* (Calcutta: University of Calcutta), [ark :/ 13960 / t3sv3157j](#); Based on two copies made of the Thanjavur codex unicus (MS Thanjavur TMSSML 10773, Burnell 1880:63–4, P. P. S. Sastri 1933:#11085).
- Bhela 2000 Krishnamurthy, K. H. (2000), *Bhela-saṃhitā. Text with English Translation, Commentary and Critical Notes* (Haridas Ayurveda Series, 8; Varanasi: Chaukhambha Visvabharati).
- BL *British Library*.
- Ca 1941 Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकहृदबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलिता (3rd edn., Mumbayyām: Nirnaya Sagara Press), [ark:/13960/t48q2f20n](#).

- CDIAL Turner, R. L. (1966–85), *A Comparative Dictionary of the Indo-Aryan Languages* (London, New York, Toronto: Oxford University Press), ISBN: 0197135501, [URL](#); With *Indexes* compiled by Dorothy Rivers Turner (OUP, London, 1969), *Phonetic Analysis* by R. L. and D. R. Turner (OUP, London, 1971), and *Addenda and Corrigenda* edited by J. C. Wright (School of Oriental and African Studies, London, 1985).
- DED<sub>2</sub> Burrow, Thomas, and Emeneau, Murray B. (1984), *A Dravidian Etymological Dictionary* (2nd edn., Oxford: Clarendon Press), [ark :/13960/t4wj06g26](#), [URL](#).
- EWA Mayrhofer, Manfred (1986–2001), *Etymologisches Wörterbuch des Altindoarischen* (Heidelberg: Carl Winter, Universitätsverlag), ISBN: 3-533-03826-2.
- Garuḍapurāṇa* Pāṇḍeya, Rāmateja (1963) (ed.), *श्रीकृष्णद्वैपायनव्यासप्रणीतं गरुडपुराणम्* (Vidyabhawan Prachya Vidya Granthamala, 3; reprint, Caukhambā Vidyābhavana, Paṇḍita-Pustakālaya: Kāśī), [ark :/13960/t6pz7tg7j](#).
- HIML Meulenbeld, Gerrit Jan (1999–2002), *A History of Indian Medical Literature*, 5 vols. (Groningen: E. Forsten), ISBN: 9069801248.
- IOLR Eggeling, Julius, et al. (1887–1935), *Catalogue of the Sanskrit Manuscripts in the Library of the India Office*

- (London: Secretary of State for India), [ark:/13960/s2kbb5zcrg9](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63868-p0071-9).
- KEWA Mayrhofer, Manfred (1953–72), *Kurzgefaßtes etymologisches Wörterbuch des Altindoarischen; a Concise Etymological Sanskrit Dictionary* (Heidelberg: Carl Winter, Universitätsverlag).
- KL *Kaiser Library*.
- Mānasollāsa Shrigondekar, Gajanan K. (1925–61) (ed.), *मानसोल्लासः = Mānasollāsa [or Abhilaṣitārthacintāmaṇi] of King Someśvara* (Gaekwad's Oriental Series; Baroda: Oriental Institute), [ark :/ 13960 / t87h8tn95](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63868-p0071-9); v. 2: [ark:/13960/t3gz41v8m](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63868-p0071-9).
- MN<sub>1</sub> Ācārya, Yādavaśarma Trivikrama (1920) (ed.), *महामतिश्रीमाधवकर-प्रणीतं माधवनिदानम् श्रीविजयरक्षित-श्रीकण्ठदत्ताभ्यां विरचितया मधुकोशाख्यव्याख्या, श्रीवाचस्पतिवैद्यविरचितया आतङ्कदर्पणव्याख्याया विशिष्टांशेन च समुल्लसितम् = Mādhavanidāna by Mādhavakara with the Two Commentaries, Madhukosha by Vijayarakshita & Shrikanthadatta and Ātankadarpaṇa by Vāchaspati Vaidya* (1st edn., Bombay: Nirnaya Sagara Press), [ark:/13960/t9z08jn5j](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63868-p0071-9).
- MN<sub>3</sub> Ācārya, Yādavaśarma Trivikrama (1932) (ed.), *महामतिश्रीमाधवकर-प्रणीतं माधवनिदानम् श्रीविजयरक्षित-श्रीकण्ठदत्ताभ्यां विरचितया मधुकोशाख्यव्याख्या, श्रीवाचस्पतिवैद्यविरचितया आतङ्कदर्पणव्याख्याया विशिष्टांशेन च*

- समुल्लसितम् = *Mādhavanidāna* by Mādhavakara with the Two Commentaries, *Madhukosha* by Vijayarakshita & Shrikānthadatta and *Ātankadarpaṇa* by Vāchaspati Vaidya (3rd edn., Bombay: Nirnaya Sagara Press), [ark : / 13960 / t66452x0h](https://nir.nir.org/ark:/13960/t66452x0h); Reprinted Varanasi: Chowkhambha, 1986.
- 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.
- NAK *National Archives of Kathmandu.*
- NCC Raghavan, V., et al. (1949–), *New Catalogus Catalogorum, an Alphabetical Register of Sanskrit and Allied Works and Authors*, 39 vols. (Madras University Sanskrit Series; Madras: University of Madras); v.1: revised edition, 1968. Searchable at <https://vmlt.in/ncc/>.
- NGMCP NGMCP (2014), “Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue,” Universität Hamburg and Deutsche Forschungsgemeinschaft, [URL](https://ngmcp.uni-hamburg.de/).
- PW Böhtlingk, Otto, and Roth, Rudolph (1855–75), *Sanskrit-Wörterbuch* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), [URL](https://www.sanskrit-worterbuch.de/), accessed 18/05/2023.



- PWK Böhlingk, Otto (1879), *Sanskrit-wörterbuch in kürzerer fassung* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), [URL](#), accessed 18/05/2023.
- RORI *Rajasthan Oriental Research Institute.*
- Su 1889 Bhaṭṭācāryya, Jīvānanda Vidyāsāgara (1889) (ed.), *सुश्रुतः. सूत्र-निदान-शारीर-चिकित्सा-कल्पोत्तर-तन्त्र-कल्पित आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सुश्रुतनामधेयेन तच्छिष्येण विरचितः* (3rd edn., Calcutta: Saratī Press), [ark : / 13960 / t1nh6j09c](#); [HIML](#): IB, 311, edition b.
- Su 1915 Ācārya, Yādavaśarma Trivikrama (1915) (ed.), *सुश्रुतसंहिता, सुश्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = The Sushrutasamhita of Sushruta, the Nibandhasangraha Commentary of Shri Dalhaṇāchārya* (Mumbayyām: Nirṇayasāgarāmudrāyantrālaye), [ark : / 13960 / t3sv0mt50](#), accessed 29/07/2020; [HIML](#): IB, 312 edition \*v.
- Su 1931 Ācārya, Yādavaśarma Trivikrama (1931) (ed.), *सुश्रुतसंहिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, महर्षिणा सुश्रुतेन विरचिता, सूत्र-निदान-शारीर-चिकित्सा-कल्पस्थानोत्तरतन्त्रात्मकः. आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = The Sushrutasamhitā of Sushruta with the Nibandhasangraha Commentary of Shree Dalhaṇāchārya* (2nd edn., Mumbayyām: Pāṇḍuraṅga Jāvajī

- at the Nirṇayasāgaramudrāyan-trālaye), [ark : / 13960 / t9j41sg94](https://nirayasa.org/ark:/13960/t9j41sg94), accessed 09/06/2020; [HIML:IB](https://nirayasa.org/HIML:IB), 312 edition \*v.
- Su 1938 Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाख्यव्याख्या च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (3rd edn., Bombay: Nirṇayasāgara Press), [ark : / 13960 / t09x0sk1h](https://nirayasa.org/ark:/13960/t09x0sk1h); [HIML:IB](https://nirayasa.org/HIML:IB), 313, edition cc ('the vulgate').
- Su 1938<sup>2</sup> Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (2004) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता, श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाख्यव्याख्या च समुल्लसिता (Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of the third, 1938 edition (Su 1938).
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## **Index of Manuscripts**

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

Thanjavur TMSSML 10773: 170



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# Materia Medica

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

aconite leaf (?) (*viṣapatrikā*) Unknown. Cf. perhaps, *vatsanābha* (wolfsbane). Cf.

GVDB: 373 : 105

‘alas, alas’ (*hālāhala*) unknown. See Cf. Soḍhalanighantu p.43 (sub bola) = stomaka = vatsanābha :

Alexandrian laurel (*punnāga*)

Calophyllum inophyllum, L. See

AVS: 1, 338, NK: 1, #425 :

amaranth (*taṇḍulīyaka*) Amaranthus hypochondriacus, L. See King 321,

NK: 1, #144, Potter<sup>rev</sup>: 15. Cf.

AVS: 1, 121 : 98

arjun (*arjuna*) Terminalia arjuna, Bedd.

See HK : 34

ash gourd (*kūṣmāṇḍa*) → puṣpaphala.

Beninkasa hispida, (Thunb.) Cogn. See

AVS: 2, 1127; cf. AVS: 1, 261 :

atis root (*śṛṅgīviṣa*) Aconitum

heterophyllum, Wall. ex Royle. See

AVS: 1, 42, NK: 1, #39 :

axlewood (*dhava*) Anogeissus latifolia

(Roxb. ex DC.) Wall. ex Guill & Perr.

See AVS: 1, 163 f, Chopra: 20 : 34, 120

bamboo leaves (*veṇupatrikā*) Bambusa

bambos, Druce. See NK: 1, #307 : 98

banyan (*nyagrodha*) Ficus bengalensis, L.

See HK :

barley (*yava*) Hordeum vulgare, L. See

HK : 79

bearded premna (*vasuka*) Premna barbata

Wall. (← *vasuhatṭa*), according to

Cakrapāṇidatta. See the discussion by T. B. Singh and Chunekar

(GVDB: 362–363), where other candidate species such as Osmanthus, Calotropis, and Trianthema are discussed. T. B. Singh and Chunekar

(GVDB: 363) note that when *vasuka* is mentioned with *vasira*, two varieties of salt are often meant (see ??). See also

NK: #1299 who identifies it with

Indigofera enneaphylla, Linn.

(Birdsville Indigo), apparently without controversy :

beautyberry (*priyangu*) → śyāmā.

Callicarpa macrophylla, Vahl. See

AVS: 1, 334, NK: 1, #420. Some say also Setaria italica Beauv. GVDB: 263–264.

See also GVDB: 413 : 34, 116, 121

beautyberry (*śyāmā*) Callicarpa

macrophylla, Vahl. See AVS: 1, 334,

NK: 1, #420 : 74, 96, 98

beggarweed (*aṃśumatī*) Desmodium

gangeticum (L.) DC (Dymock: 1, 428,

GJM1: 602, NK: 1, #1192; ADPS: 382,

414 and AVS: 2, 319, 4.366 are

confusing) : 116

beggarweed (*vidārigandhā*) → śālapanṇī.

Desmodium gangeticum (L.) DC. See

Dymock: 1, 428, GJM1: 602, cf. NK: 1,

#1192; ADPS: 382, 414 and AVS: 2, 319,

4.366 are confusing : 43, 79

beggarweed (*śālapanṇī*) → sthirā.



- Desmodium gangeticum (L.) DC. See *Dymock*: 1, 428, *GJM*1: 602, *NK*: 1, #1192; *ADPS*: 382, 414 and *AVS*: 2, 319, 4.366 are confusing:
- Bengal quince (*bilva*) *Aegle marmelos* (L.) Corr. See *AVS*: 1, 62, Chevallier 159, *NK*: 1, #62, (*MW*: 732a) : 63, 70, 72, 76
- 'big poison' (*mahāviṣa*) unknown. See ? :
- 'big thorn apple' (*mahākarambha*) *Datura metel*, L.?. See thorn apple (*karambha*) :
- bitumen (*adrija*) → *śilājī*. A tar-like, black, resinous rock exudate. See *AyMahā*: 1, 21 : 130
- black cardamom (*Xhareṇu*) *Amomum subulatum*, Roxb.?. See *PVS Caraka* 2.734, *AVS*: 1, 128, *NK*: 1, #154, *pace GVDB*: 467–468 :
- black creeper (*pālindī*) *Ichnocarpus frutescens*, (L.) R.Br. or *Cryptolepis buechanani*, Roemer & Schultes. See *AVS*: 3, 141, 145, 203, *NK*: 1, #1283, 1210, *ADPS*: 434. Ḍalhaṇa on SS 5.1.82 identified *pālindī* with *trivṛt* (turpeth) and T. B. Singh and Chuneekar (*GVDB*: 246) supported this as a usual identification : 98, 101, 115, 116
- black pepper (*marica*) *Piper nigrum*, L. See *ADPS*: 294, *NK*: 1, #1929 : 79
- black pepper (*vallīja*) → *marica*. *Piper nigrum*, L.?. See *NK*: 1, #1929; Rā.6.115, Dha.4.85, Dha.2.88 :
- blackboard tree (*saptachada*) *Alstonia scholaris* R. Br. *GVDB*: 420 : 97
- blackbuck (*hariṇa*) *Antelope cervicapra*, L. See *BIA*: 270 *IW*: 95, 165, *et passim* : 101
- 'blade' (*kartariya*) unknown. See ? :
- blue water-lily (*utpala*) *Nymphaea stellata*, Willd. See *GJM*1: 528, *IGP* 790; *Dutt*: 110, *NK*: 1, #1726 : 25, 96, 115, 116
- bottle gourd (*ālābūka*) *Lagenaria siceria* (Molina) Standl. See *IGP* 645, *NK*: 1, #1419 :
- bulrush (*kaṣeru*) "Two species, *Scirpus kysoor* Roxb., and *S. grossus* Linn. f. are used" *GVDB*: 85. Also *kaṣeruka* and *kaseru* : 74, 75, 78
- calamine lotion (*amṛtāsaṅga*) → *amṛtāsaṅga*. Zinc carbonate. See *NK*: 2, #56 :
- camphor (*karpūra*) → *śītaśiva*. *Cinnamomum camphora*, (L.) Sieb. See *IGP* 253 :
- cannabis (*vijayā*) *Cannabis sativa*, L. See *AVS*: 1, 356, *NK*: 1, #442 :
- caper (*karīra*) *Capparis decidua* (Forsk.) Edgew. See *AVS*: 1, 368, (*MW*: 255b) :
- cardamom (*elā*) *Elettaria cardamomum*, Maton. See *AVS*: 2, 360, *NK*: 1, #924, *Potter<sub>rev</sub>*: 66 : 70, 116, 121
- carmarī (*carmarī*) unknown. See ? :
- carray cheddie (*gāṅgerukī*) → *viśvadevā*. *Canthium parviflorum*, Lam. See *AVS*: 1, 366 f :
- cassia cinnamon (*patra*) *Cinnamomum tamala*, (Buch.-Ham.) Nees. See *AVS*: 2, 84, *NK*: 1, #589 : 70, 76, 98, 116
- castor oil tree (*gandharvahaṣṭa*) → *eraṇḍa*. *GVDB*: 135, *K&B*: 3, 2277 : 39, 72
- castor-oil (*eraṇḍa*) *Ricinus communis*, L. See *NK*: 1, #2145, *Chopra*: 214 : 44
- certain minerals (*tārāvitāra*) Unknown. It is not even certain that these are minerals. The variant reading in the vulgate, *tāraḥ sutāraḥ* was glossed by Ḍalhaṇa on 5.3.14 (*Su* 1938: 568) as follows *tāro rūpyaṃ, sutāraḥ pāradaḥ*, "tāra means silver; sutāra means mercury." : 120
- Ceylon iron wood (*kṣīrikā*) *Mimusops hexandra*, Roxb. (*GVDB*: 126–127) :
- 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*) : 26, 213
- chebulic myrobalan (*harītakī*) *Terminalia chebula* Retz. *GVDB*: 466 : 77, 97
- cherry (*elavālu*) *Prunus cerasus*, L.?. See *BVDB* 58, *NK*: 1, #2037, *GVDB*: 58 : 116

- chital deer (*pr̥ṣata*) *Axis axis*, Erxleben. See [BIA](#): 292, [IW](#): 93 : 101
- ‘choice tree’ (*varadāru*) unknown. See ? :
- chukar partridge (*cakora*) *Alectoris chukar*. See [Woodcock](#) 1980: 45 :
- cinnamon (*tvac*) *Cinnamomum cassia*, Blume. See [NK](#): 1, #579 :
- citron (*mātuluṅga*) *Citrus medica*, Linn. [GVDB](#): 276, 306. Also spelled *mātuliṅga*, *mātulaṅga*, *mātulāṅga* : 63, 76, 81, 82
- cluster fig (*udumbara*) *Ficus racemosa*, L. See [ADPS](#): 487 :
- cobra’s saffron (*nāgapuṣpa*) → *nāgakeśara*. *Mesua ferrea*, L. See [NK](#): 1, #1595, [GVDB](#): 220 : 116
- common crane (*krauñca*) *Grus grus*. See [Woodcock](#) 1980: 47 :
- common mallow (*suvarcalā*) perhaps *Malva sylvestris*, L. A difficult plant to identify, see T. B. Singh and Chuneekar ([GVDB](#): 280, 440–441) :
- common mallow (*sūryāvarta*) *Malva sylvestris*, L. *Cakrapānidatta* and *Ḍalhaṇa* identify it with *suvarcalā*, itself a difficult plant to identify. Perhaps *Helianthus*, see T. B. Singh and Chuneekar ([GVDB](#): 280) :
- corky coral tree (*pāribhadra*) *Erythrina suberosa* Roxb. See [GVDB](#) 245 : 120
- costus (*kuṣṭha*) *Saussurea costus*, Clarke. See [NK](#): 1, #2239 : 70, 76, 98, 116, 121
- cottony jujube (*kākolī*) *Ziziphus mauritana*, Lam. See [IGP](#): 1233, [NK](#): 1, #2663; [IGP](#) 1233. Cf. [NK](#): 1, #1170 : 69, 75, 76
- 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 : 43, 75, 78, 163
- country sarsaparilla (*anantā*) *Hemidesmus indicus*, (L.) R. Br. See [ADPS](#): 434, [AVS](#): 3, 141–5, [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) : 43, 105, 115, 116, 120
- crape jasmine (*nata*) → crape jasmine [GVDB](#): 215 : 208, 210
- crape jasmine (*tagara*) *Tabernaemontana divaricata* (L.) R.Br. ex Roem. & Schultes. See [GJM](#)1: 557, [AVS](#): 5, 232. Synonym of crape jasmine. 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, but there remain many historical questions about the ancient and regional identities of this plant See, e.g., [AVS](#): 5, 334 : 70, 76, 98, 116, 208, 210
- crimson trumpet-flower tree (*pāṭalā*) *Stereospermum chelonides*, (L. f.) A. DC. See [GJM](#)1: 573, [AVS](#): 5, 192 ff, [ADPS](#): 362 f, [AVS](#): 3, 1848 f, [IGP](#) 1120, [Dymock](#): 3, 20 ff : 120
- cucumber (*trapusa*) *Cucumis sativus*, L. See [AVS](#): 2, 231, [NK](#): 1, #731 :
- cuscut grass (*uśīra*) *Andropogon murcatus*, Retz. Also “vetiver grass.” See [NK](#): 1, #180 : 98
- ‘dangling’ (*lambā*) unknown. See ? :
- datura (*dhattūra*) *Datura metel*, L. See [AVS](#): 2, 305 (cf. *Abhidhānamāñjarī*), [NK](#): 1, #796 ff. [Potter<sub>rev</sub>](#): 292 f, [ADPS](#): 132 : 40
- deodar (*bhadradāru*) *Cedrus deodara*, (Roxb.ex D.Don) G. Don. See [AVS](#) 41, [NK](#): 1, #516 : 34, 74, 79, 116
- deodar (*devadāru*) *Cedrus deodara* (Roxb.) Loud. [GVDB](#): 206–207 : 63, 76, 163
- dhaman tree (*dhanvaṅga*) → *dhammaṇa*? *Grewia tiliaefolia*, Vahl. See [AVS](#): 3, 104, [IK](#), [AVS](#): 1, 386, [IGP](#) 529 (*tiliifolia*) :
- dried ginger (*śuṇṭhī*) *Zingiber officinale*,

- Roscoe. See **ADPS**: 50, **NK**: 1, #2658, **AVS**: 5, 435, **IGP**: 1232 : 74
- dried meat (*vallūra*) **MW**: 929, **AyMahā**: 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) : 25
- drum-giver (?) (*lambaradā*) Unknown; cf. **GVDB**: 348 : 105
- elixir salve (*rasāñjana*) → *añjana*. See Indian barberry : 34, 44
- embelia (*viḍaṅga*) *Embelia ribes*, Burm. f. See **ADPS**: 507, **AVS**: 2, 368, **NK**: 1, #929, **Potter<sub>rev</sub>**: 113 : 34, 70, 116
- emblic (*āmalaka*) *Phyllanthus emblica*, L. See **AVS**: 4, 256 : 77, 78
- emetic nut (*karaghāṭa*) Probably a synonym for *karahāṭa* (emetic nut), q.v., **GVDB**: 74 : 209
- emetic nut (*karahāṭa*) *Randia dumetorum*, Lamk. See **GVDB**: 291–292 and **NK**: 1, #2091. T. B. 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. : 209, 211
- emetic nut (*madana*) *Randia dumetorum*, Lamk. See **NK**: 1, #2091 : 96, 165
- false daisy (*subhaṅgurā*) (su)bhaṅgura = bhṛṅga? *Eclipta prostrata* (L.) L. See **GVDB**: 288 : 104
- fermented rice-water (*dhānyāmla*) → *kāñjī*, *kāñjikā*, *sauvīra*. **GVDB**: 458, **NK**: 2, appendix VI, #18 : 41, 42
- 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 : 100
- fire-flame bush (*dhātakī*) *Woodfordia fruticosa* (L.) Kurz. See **AVS**: 5, 412, **NK**: 1, #2626 : 97
- five-leaved chaste tree (*śephālikā*) *Vitex negundo*, L. See **NK**: 1, #2603 (cf. use of leaves), **IGP**: 1210a, **MW**: 1088b :
- flax (*atasī*) *Linum usitatissimum*, L. See **NK**#1495 : 75
- ‘foam-stone’ (*phenāśma*) unknown. See ? : fragrant lotus (*saugandhika*) A type of *kumuda* or *utpala* (**GVDB**: 457) : 25
- galls (*karkaṭa*) *Rhus succedanea*, L. See **NK**: 1, #2136 :
- garden pea (*kalāya*) *Pisum sativum*, L. See **AVS**: 4, 308, **IGP** 901; cf. **NK**: 1, #1940 :
- garjan oil tree (*aśvakarṇa*) *Dipterocarpus turbinatus* Gaertn. f. See **GVDB**: 28, **Chopra**: 100 : 120
- ‘gentle’ (*somā*) *Ruta graveolens*, L., or *Sarcostemma brevistigma*, W & A, etc. See **NK**: 1, #2179, 2228; **Potter<sub>rev</sub>**: 262 :
- giant potato (*kṣīravidārī*) possibly → *kṣīraśukla*. *Ipomoea mauritiana*, Jacq. See **ADPS**: 510, **AVS**: 3, 222, **AVS**: 3, 1717 ff : 75, 210, 212, 213
- ginger (*mahaśadha*) *Zingiber officinale*, Roscoe. See **ADPS**: 50, **NK**: 1, #2658, **IGP**: 1232 : 101
- ‘gladdener’ (*nandana*) unknown. See ? :
- gold (*hema*) gold : 116
- 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” : 120
- golden shower tree (*rājadruma*) *rājadruma* = *āragvadha*. *Cassia fistula* L. See **GVDB** 37 : 120
- golden shower tree (*āragvadha*) *Cassia fistula* L. See **GVDB** 37 : 77
- gourd (*alābu*) *Lagenaria siceraria* Standl. **GVDB**: 25. Some say *Lagenaria vulgaris*, Seringe (**NK**: 1, #1419) but this is not appropriate for blood-letting : 21, 22, 97
- green gram (*māṣa*) *Vigna radiata* (L.) R.

- Wilcz. See **ADPS**: 296, **IGP** 1204 : 34, 75, 163
- 'gutboiler' (*antrapācaka*) unknown. See ? : hare foot uraria (*prśniparṇī*) → *sahā*?  
*Uraría lagopoides*, DC. See **GJM1**: 577, **Dymock**: 1, 426, **AVS**: 1, 750 ff, **NK**: 1, #2542; **ADPS**: 382, **AVS**: 2, 319 and **AVS**: 4, 366 are confusing : 74, 75
- heart-leaf sida (*balā*) *Sida cordifolia*, Linn. See **ADPS**: 71, **NK**: 1, #2297 : 43, 75, 78, 80, 116, 163
- heart-leaved moonseed (*amṛtavallī*) See heart-leaved moonseed (*amṛtā*) : 162
- heart-leaved moonseed (*amṛtā*) → *guḍūcī*.  
*Tinospora cordifolia*, (Willd.) Hook.f. & Thoms.? See **ADPS**: 38, **NK**: 1, #2472, 624, **Dastur** #229 : 98, 114, 209
- heart-leaved moonseed (*guḍūcī*) *Tinospora cordifolia* (Willd.) Miers.  
**GVDB**: 141–142, **NK**: 1, #624, #2472 : 76
- heart-leaved moonseed (*somavallī*)  
*Tinospora cordifolia* (Thunb.) Miers.  
**GVDB**: 456. Likely, but uncertain : 98
- heliotrope (*hastīśuṇḍa*) → *ibhagandhā*?  
*Heliotropium indicum*, L. See **AVS**: 3, 136, **NK**: 1, #1203 :
- henna (*madayantikā*) *Lawsonia inermis*, L. See **AVS**: 3, 303, **NK**: 1, #1448, **Potter<sub>rev.</sub>**: 151 : 99
- hill myna (*sārikā*) *Acridotheres tristis tristis*, L., etc. See **Ali** #1006, **Dave** (1985: 28 ff.), **Woodcock** (1980: 119) :
- Himalayan mayapple (*vakra*) *Podophyllum emodi*, Wall. (**NK**: #1971). But perhaps a synonym of crape jasmine and crape jasmine (**GVDB**: 354) : 121
- Himalayan monkshood (*ativiṣā*) → *viṣā*  
*Aconitum heterophyllum* Wall.  
**GVDB**: 12, **NK**: 1, #39. Also "atis roots" : 67, 99, 101, 121
- Himalayan monkshood (*viṣā*) → *ativiṣā*  
**GVDB**: 12, 373 : 212
- hogweed (*punarnavā*) *Boerhaavia diffusa*, L. See **ADPS**: 387, **AVS**: 1, 281, **NK**: 1, #363 : 77, 99, 115
- Holostemma creeper (*jīvantī*) → *sūryavallī*? *Holostemma ada-kodien*, Schultes. See **ADPS**: 195, **AVS**: 3, 167, 169, **NK**: 1, #1242 : 78, 212
- honey (*kṣaudra*) Eight varieties of honey are described in the SS (**NK**: 2, Appendix 192). *Kṣaudra* is the product of a small bee of tawny colour, called *kṣudra* : 83, 101
- horned pondweed (*śaivāla*) also *śaivāla*, *śevāra*. *Zannichellia palustris* L. The uncertainties of this identification are discussed by T. B. Singh and Chuneekar (**GVDB**: 409). Sometimes identified with scutch grass (*dūrvā*) (**GVDB**: 409). Identified as *Ceratophyllum demersum* Linn. ("hornwort") by **AVS**: 2, 56–57x : 76, 210, 213
- hornwort (*jalanīlikā*) *Ceratophyllum demersum*, L. See **AVS**: 2, 56, **IGP** 232 :
- hornwort (*jalaśūka*) → *jalanīlikā*.  
*Ceratophyllum demersum*, L. See **AVS**: 2, 56, **IGP**: 232. T. B. 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 : 43
- horseradish tree (*śīgru*) *Moringa oleifera* Lam. See **IGP** 759, **GJM1**: 603, **Dymock**: 1, 396 : 76, 77
- hyacinth bean (*śimbī*) *Dolichos lablab*, L. See **NK**: 1, #870 :
- Indian antelope (*eṇa*) *Antelope cervicapra*, L. See **BIA**: 70 :
- Indian barberry (*añjana*) → *rasāñjana*, *dāruharidrā*. *Berberis aristata*, DC.  
**Dymock**: 1, 65, **NK**: 1, #335, **GJM1**: 562, **IGP**: 141 : 44, 100, 209
- Indian barberry (*dāruharidrā*) *Berberis aristata*, DC. See **Dymock**: 1, 65, **NK**: 1, #685, **GJM1**: 562, **IGP** 141 : 115, 116
- Indian barberry (*kālīyaka*) → *dāruharidrā*, *añjana*. *Berberis aristata*, DC. See **Dymock**: 1, 65, **NK**: 1, #685, **GJM1**: 562,

- IGP: 141: 98
- Indian beech (*naktamāla*) *Pongamia pinnata*, (L.) Pierre. See AVS: 4, 339, NK: 1, #2003: 34, 72
- Indian ipecac (*payasyā*) Uncertain. Possibly *Tylophora indica* (Burm.f.) Merr. Perhaps a synonym of *panacea* twiner, giant potato, purple *roscoea*, and plants like asthma plant and Gulf sandmat (GVDB: 237–238). Also “curds” when not a plant: 43, 76, 212
- 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: 43, 63
- Indian laburnum (*śampāka*) *Cassia fistula*, L. See ADPS: 48, AVS: 2, 11 ff, AVS: 2, 854, IGP 215:
- Indian laurel (*plakṣa*) *Ficus microcarpa*, L. f. See ADPS: 377:
- Indian madder (*mañjiṣṭhā*) *Rubia cordifolia*, L. See IGP, Chopra: 215, GVDB: 289: 39, 116
- 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): 23
- Indian mustard (*sarṣapa*) *Brassica juncea*, Czern. & Coss. See AVS: 1, 301, NK: 1, #378: 26
- Indian pennywort (*maṇḍūkapaṇṇī*) *Centella asiatica* (L.) Urban. See GVDB: 290, ADPS: 289–291:
- Indian sarsaparilla (*sārivā*) → *anantā*. *Hemidesmus indicus*, (L.) R. Br. ADPS: 434, AVS: 3, 141–5, NK: 1, #1210; and black creeper, *pāliṇḍī*. *Ichnocarpus frutescens*, (L.) R.Br. or *Cryptolepis buechanani*, Roemer & Schultes AVS: 3, 141, 3.145, 3.203, NK: 1, #1283, 1210, ADPS: 434: 115, 116, 209
- Indian snakeroot (*sarpagandhā*) *Rauvolfia serpentina*, (L.) Benth. ex Kurz. See NK: 1, #2099, ADPS: 439, GVDB: 425; cf. SS 5.5.76–78: 213
- Indian spinach (*pūtīkā*) *Basella alba*, L. See NK: 1, #318 (*rubra*), ADPS: 489, AVS: 1, 253, IGP 129b:
- indigo (*nīlinī*) *Indigofera tinctoria*, L. See NK: 1, #1309:
- Indrajao (*vrkṣaka*) → *indrayava*, *indrabīja*, *kaliṅga*, and *kuṭaja*. *Holarrhena antidysenterica* Wall. GVDB: 376, 45 and 84: 162
- jackfruit (*panasa*) *Artocarpus heterophyllus*, Lam. See NK: 1, #249, IGP 99:
- jambul (*jambū*) *Syzygium cumini*, (L.) Skeels. See ADPS: 188, NK: 1, #967, Potter<sub>rev</sub>: 168, Wujastyk 2003a: 97
- jasmine (*mālatī*) *Jasminum grandiflorum*, L. See NK: 1, #1364: 98
- jequirity (*guñjā*) *Abrus precatorius*, L. See AVS: 1, 10, NK: 1, #6, Potter<sub>rev</sub>: 168: 104, 105
- jequirity (*kālakūṭa*) *Abrus precatorius*, L.? Cf. RRS 21.14. See AVS: 1, 10, NK: 1, #6, Potter<sub>rev</sub>: 168:
- ‘juice-cooker’ (*sārapāka*) unknown. See ?:
- (?) (*karaṭā*) Not in GVDB. Cf. perhaps *karahāṭa* (emetic nut): 105
- khesari pea (*tripuṭa*) *tripuṭa* (kalāya). *Lathyrus sativus*, L. See IGP 651, NK: 1, #1439:
- koel (*kokila*) *Eudynamys scolopacea*. See Woodcock 1980: 66:
- kumudvatī (*kumudvatī*) unknown. See ?:
- lac (*jatu*) *Kerria lacca* (Kerr.). See <http://www.icar.org.in/ilri/default.htm>: ■



- lac (*lākṣā*) *Kerria lacca* (Kerr.). See GJM1: 445, NK: 2, #32. Watt (*WattComm*: 1053–1066) is characteristically informative, and is definite about the antiquity of lac in India : 121
- lāmajja grass (*lāmajj*) *Andropogon iwarancusa*, Roxb. See NK: 1, #176 :
- lāmajja grass (*uśīrabhedā*) → *lāmajja*. *Andropogon iwarancusa*, Roxb. See NK: 1, #176 :
- leadwort (*agniśikhā*) *Plumbago zeylanica* (or *rosea*?), L. See NK: 1, #1966, 1967 :
- leadwort (*citraka*) *Plumbago zeylanica* (or *indica*?), L. See RĀ. 6.124, ADPS: 119, NK: 1, #1966, 1967 : 34, 67, 72, 82
- leadwort (*pālaka*) → *citraka*. *Plumbago zeylanica* (*indica*? *rosea*?), L. See Rā. 6.124, ADPS: 1, 119, NK: 1, #1966, 1967 :
- leadwort (*vidyutśikhā*) Synonym of *agniśikhā* (leadwort), q.v. :
- liquorice (?) (*klītaka*) *Glycyrrhiza glabra*, L.? GVDB: 123–124 discuss the many difficulties in identifying this plant : 104
- liquorice (*madhuka*) see *yaṣṭīmadhuka* : 43, 74–79, 81, 101, 114, 116
- liquorice (*yaṣṭīmadhuka*) *Glycyrrhiza glabra*, L. AVS: 3, 84, NK: 1, #1136, GVDB: 329 f. : 44
- ‘little bamboo’ (*veṇukā*) *Bambusa bambos*, Druce?. See NK: 1, #307 :
- lodh tree (*lodhra*) *Symplocos racemosa*, Roxb. See GJM1: 597, ADPS: 279 f, NK: 1, #2420. T. B. Singh and Chuneekar (GVDB: 351–352) notes that there are two varieties, *S. racemosa*, qualified as *śāvara*, and *S. crataegoides* Buch.-Ham. for *paṭṭikā lodhra* : 34, 116
- lodh tree (*rodhra*) *Symplocos racemosa*, Roxb. See ADPS: 279, NK: 1, #2420 :
- lodh tree (*śāvara*) → *lodhra*. *Symplocos racemosa*, Roxb. See ADPS: 279, NK: 1, #2420 :
- long pepper (*māgadha*) *Piper longum*, L. See NK: 1, #1928; but cf. AVS: 3, 245 : 100
- long pepper (*pippalī*) *Piper longum*, L. See ADPS: 374, NK: 1, #1928 : 72, 77, 81–83, 101, 116, 162
- lotus stalk (*mṛṇālā*) “Leaf stalk of sacred lotus” GVDB: 318 : 76
- luffa (*garāgarī*) → *gargaraka*? *Luffa echinata*, Roxb. See NK: 1, #1517 :
- luffa (*koṣātaka*) = *koṣītakī*, luffa :
- luffa (*koṣātakya*) *Luffa cylindrica*, (L.) M. J. Roem. or *L. acutangula*, (L.) Roxb. See ADPS: 252, NK: 1, #1514 etc :
- luffa (*koṣītakī*) = *koṣātakī*. *Luffa cylindrica*, (L.) M. J. Roem. or *L. acutangula*, (L.) Roxb. ADPS: 252–253, NK: 1, #1514 etc. GVDB: 121 : 97, 114, 211
- luffa gourd (*koṣavatī*) = *koṣītakī*, luffa : 114
- mahua (*madhūka*) *Madhuca longifolia*, (Koenig) Macbride. See AVS: 3, 362 f :
- maidenhair fern (*haṃsāhvayā*) *Adiantum lunulatum* Burm f. GVDB: 463 : 162
- mango (*āmra*) *Mangifera indica* Linn. GVDB: 37 : 97
- marking-nut tree (*aruṣkara*) *Semecarpus anacardium* L. See *bhallātaka* (marking-nut tree) : 105
- marking-nut tree (*bhallātaka*) *Semecarpus anacardium*, L. See NK: 1, #2269, AVS: 5, 98 : 72, 100, 211
- medhshingi (*vijayā2*) *Dolichandrone falcata* (DC.) The *Sauśrutaniḥṣṇu* gives a number of synonyms for *vijayā* (Suvedī and Tivārī 2000: 5.77, 10.143). But one of them, *viṣāṇī* (also *meṣaśṛṅgī*), is sometimes equated with *Dolichandrone falcata* (DC.) Seemann (ADPS: 518; GVDB: 373 f, a plant used as an abortifacient and fish poison (NK: #862) : 105
- Midday flower (*bandhūka*) *Pentapetes phoenicea*, L. See NK: 1, #1836, GVDB: 268 :
- migraine tree (*agnimantha*) *Premna corymbosa*, Rottl. See AVS 1927, ADPS: 21, NK: 1, #2025, AVS: 4, 348;

- GJM1: 523: = *P. integrifolia/serratifolia*, L.: 114
- milk-white (*kṣīraśuklā*) An unidentified plant. **GVDB**: 126: see purple roscoea and giant potato: 43, 213
- mongoose (*nakula*) *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 **BIA**: 98–99; **IW**: 112: 101
- monitor lizard (*godhā*) *Varanus bengalensis*, Schneider. See **Reptiles**: 58: 43, 101
- monkey jack (*lakuca*) *Artocarpus lakoocha*, Roxb. ex Buch.-Ham. See **GJM1**: 597, **IGP** 99, **IPM** 3.2338f., pace **AVS**: 1, 215: ‘muddy’ (*kardama*) unknown. See ?:
- mung beans (*mudga*) *Phaseolus radiatus* L. **GVDB**: 310–311: 75, 78, 146
- mung beans (*māṣaka*) *Phaseolus mungo* Linn. **GVDB**: 308: 98
- munj grass (*nārācaka*) *Saccharum bengalense*, Retz.?. See **NK**: 1, #2184:
- myrobalan (*abhayā*) *Terminalia chebula*, Retz. See **ADPS**: 172, **NK**: 1, #2451, **Potter<sub>rev</sub>**: 214: 67, 114, 121
- myrobalans (*pathyā*) *Terminalia chebula* Retz. See **NK**: 1, #2451:
- natron (*suvarcikā*) Sodium carbonate. **NK**: 2, #45. Ḍalhaṇa identifies *suvarcikā* with svarjikṣāra 4.8.50 (**Su 1938**: 441): 82, 116
- neem tree (*nimba*) *Azadirachta indica* A. Juss. **GVDB**: 226: 40, 162
- nutgrass (*kuruvinda*) Unknown. Ḍalhaṇa on 5.3.15 (**Su 1938**: 568) glossed the term as nutgrass, but noted other opinions that it was a whetstone or a very special metallic gem. T. B. Singh and Chunekar (**GVDB**: 108) added that it could be a variety of rice, *ṣaṣṭika dhānya*: 120
- nutgrass (*mustaka*) *Cyperus rotundus*, L. See **ADPS**: 316, **AVS**: 2, 296, **NK**: 1, #782:
- nutgrass (*mustā*) *Cyperus rotundus*, L. See **ADPS**: 316, **AVS**: 2, 296, **NK**: 1, #782: 212
- oleander spurge (*snuhī*) *Euphorbia neriifolia*, L., or *E. antiquorum*, L. See **ADPS**: 448, **AVS**: 2, 388, **AVS**: 3, 1, **NK**: 1, #988, **IGP** 457b:
- orpiment (*haritāla*) *Arsenii trisulphidum*. See **NK** v. 2, p. 20 ff:
- panacea twiner (*arkaparṇī*) See *arkapuṣpī*, panacea twiner:
- 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: 115, 210
- parakeet (*śuka*) *Psittacula krameri/eupatria/cyanocephala*. See Woodcock 1980: 64:
- peacock (*mayūra*) *Pavo cristatus*. See Woodcock 1980: 39:
- peas (*hareṇu*) *hareṇu* = *satīna*. *Pisum sativum*, L. T. B. Singh and Chunekar (**GVDB**: 419–420, 467–468) notes that two plants are usually meant under this name, but there is no agreement on the identity of the second: 76, 115, 116, 121
- peepul tree (*aśvattha*) *Ficus religiosa*, L. See **ADPS**: 63: 123
- periploca of the woods (*meṣaśṛīga*) *Gymnema sylvestre* (Retz.) R. Br. See **AVS**: 3, 107, **NK**: 1, #1173: 100
- pheasant peacock (*jīvajīvaka*) *jīvajīvaka* ?. See ?:
- 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) : 210
- 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. : 214
- pointed gourd (*paṭola*) *Trichosanthes dioica*, Roxb. GVDB: 232–233 : 76, 114
- poison berry (*brhatī*) *Solanum violaceum*, Ortega. See ADPS: 100, NK: 1, #2329, AVS: 5, 151 : 72, 77, 115, 116
- poison-altar (?) (*viṣavedikā*) Unknown. Possibly, at a guess, *viṣamuṣṭika* (strychnine tree)? GVDB: 373 Or *viṣā* (Himalayan monkshood) : 105
- pomegranate (*dādīma*) *Punica granatum* Linn. GVDB: 201–202 : 63, 81, 82
- pondweed (*paripelavā*) Normally a neuter noun. T. B. Singh and Chunekar (GVDB: 238, 264–265, 409) argued that *plava* and *śaivāla* are the same thing, and may be either *Zannichellia palustris*, L., or *Potamogeton pectinatus*, L. : 116
- pondweed (*śevāla*) *Zannichellia palustris* L. See horned pondweed : 25
- portia tree (*pārīṣa*) *Thespesia populnea* (L.) Sol. ex. Corr. See ADPS: 352 :
- prickly chaff-flower (*apāmārga*) *Achyranthes aspera*, L. See GJM1: 524 f, AVS: 1, 39, ADPS: 44 f, AVS: 3, 2066 f, Dymock: 3, 135 : 39, 43, 75
- prickly chaff-flower (*vasīra*) also *vaśīra*. Perhaps *Achyranthes aspera*, L. GVDB: 362 describes several possible identities, including *sūryāvarta*, prickly chaff-flower and *markaṭatṛṇa*. See also two kinds of salt (GVDB: 363) :
- prickly chaff-flower (*vaśīra*) See prickly chaff-flower :
- prickly-leaved elephant's foot (*gojihvā*) → *gojī*. *Elephantopus scaber*, L. See AVS: 2, 357 :
- purging nut (*dravantī*) → *mūṣikaparnī*. *Jatropha curcas*, L. See AVS: 3, 261, NK: 1, #1374 :
- purging nut (*mūṣikā*) *Jatropha curcas*, L. See AVS: 3, 261, NK: 1, #1374 : 100
- purple calotropis (*arka*) *Calotropis gigantea*, (L.) R. Br. See ADPS: 52, AVS: 1, 341, NK: 1, #427, Potter<sub>rev</sub>: 57, Chopra IDG: 305–308 : 34, 43, 72
- purple calotropis (*khadyotaka*) → *arka*? *Calotropis gigantea*, (L.) R. Br. See ADPS: 52, AVS: 1, 341, NK: 1, #427, Potter<sub>rev</sub>: 63 :
- 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 : 75, 210, 212
- racket-tailed drongo (*bhr̥ṅgarāja*) *Dicrurus paradiseus*. See Woodcock 1980: 123 :
- radish (*mūlaka*) *Raphanus sativus*, L. See NK: 1, #2098 : 79, 80
- rajmahal hemp (*moraṭa*) → *mūrvī*, *Marsdenia tenacissima* (Roxb.) Wight et Arn. Good discussion at GVDB: 314–316, 324 : 114
- rajmahal hemp (*mūrvī*) → *moraṭa*, *Marsdenia tenacissima* (Roxb.) Wight et Arn. Good discussion at GVDB: 314–316, 324 :
- rattan (*vetra*) *Calamus rotang*, L. See AVS: 1, 330, NK: 1, #413 :
- red chalk (*gairika*) *gairika* : 116
- red gourd (*bimbī*) *Coccinia indica*, W. & A. See PVS 1994.4.715; NK: 1, #534 : 97
- ribbed gourd (*karkoṭaka*) *Luffa acutangula*, (L.) Roxb.? (*Mormodica cochinchinensis*, Spreng.? Cf. *Luffa tuberosa*). See AVS: 3, 347 (NK: 1, #1640 1643; NK: 1, #1520) :
- rice grains (*taṇḍula*) *Oriza sativa*, Linn. Same as unhusked rice (*śālī*) GVDB: 174; or just "grains" : 26
- rice-grain chaff (*śālitaṇḍulakāṇḍana*) See



- chaff: 26
- rock salt (*saindhava*) See **NK**: 2, M#48, **WattComm**: 963–971: 26, 63, 82
- rosha grass (*dhyāmaka*) *Cymbopogon martinii* (Roxb.) Wats. See **AVS**: 2, 285, **NK**: 1, #177: 116
- sacred grass (*kuśa*) *Desmostachya bipinnata*, Stapf. See **AVS**: 2, 326, Kew: 75
- sacred lotus (*kamala*) *Nelumbo nucifera* Gaertn. **GVDB**: 73–74: 211
- sacred lotus (*padma*) *Nelumbo nucifera*, Gaertn. See **NK**: 1, #1698: 25, 76, 98
- sacred lotus (*prapuṇḍarika*) *Nelumbo nucifera*, Gaertn. See Dutt 110, **NK**: 1, #1698:
- sage-leaved alangium (*aṅkolla*) *Alangium salvifolium* (Linn. f.) Wang. **GVDB**: 5–6: 97
- sage-leaved alangium (*aṅkoṭa*) *Alangium salvifolium*, (L. f.) Wang. See **AVS**: 1, 77; cf. **NK**: 1, #88:
- sal tree (*śāla*) *Shorea robusta*, Gaertn.f. See **AVS**: 5, 124:
- sandalwood (*candana*) *Santalum album*, L. See **ADPS**: 111, **NK**: 1, #2217: 76, 78, 116
- sappan wood (*pataṅga*) *Caesalpinia sappan*, L. See **AVS**: 1, 323, **AVS**: 2, 847 f:
- sappanwood (*pattāṅga*) Also *pattāṅga*. *Caesalpinia sappan*, L. **AVS**: 1, 323, **K&B**: 2, 847 f, **GVDB**: 234: 44
- scaly, red-streaked fish (*cilicima*) An unidentified fish that is absolutely not to be eaten with milk. Described in Bhela (1.12.7), Caraka (1.26.83) and Suśruta (1.20.8, 13). Circular, red streaks, round eyes and prominent scales, and “normally goes on land.”:
- scarlet mallow (*bandhujīva*) *Pentapetes phoenicea*, L. **NK**: #1836, **GVDB**: 268: 99
- scented pavonia (*bālaka*) *Pavonia odorata*, Willd. See **ADPS**: 498, **NK**: 1, #1822: 116
- scented pavonia (*toya*) → *bālaka*? *Pavonia odorata*, Willd. **ADPS**: 498, **NK**: 1, #1822: 116
- scutch grass (*dūrvā*) *Cynodon dactylon* (Linn.) Pers. (**GVDB**: 205): 210
- selu plum (*śelu*) *Cordia myxa*, L. non Forssk. See **GJM**: 529 (2), **IGP**: 291b, cf. **AVS**: 3, 1677 f; cf. **AVS**: 2, 180 (C. *dichotoma*, Forst.f.), **NK**: 1, #672 (C. *latifolia*, Roxb.): 77, 114
- sesame (*tila*) *Sesamum indicum* L. **GVDB**: 183:
- sesame oil (*taila*) *Sesamum indicum* L. **GVDB**: 183: 43
- sheep (*urabhra*) *Ovis orientalis*, Gmelin?. See **BIA** 249:
- silk-cotton tree (*śālmālī*) *Bombax malabarica*. See **Issar**: 152:
- siris (*śirīṣa*) *Albizia lebbeck*, Benth. See **AVS**: 1, 81, **NK**: 1, #91: 114
- siris seeds (*śirīṣamāśaka*) *Albizia lebbeck*, Benth. See **AVS**: 1, 81, **NK**: 1, #91: 97
- small-flowered crape myrtle (*sidhraka*) *Lagerstroemia parviflora* Roxb. See **GVDB**: 432: 120
- ‘snake mallow’ (*mahābalā*) → *sahadevā*. *Sida spinosa*, L. See **NK**: 1, #2301, **ADPS**: 74, Index Kewensis:
- ‘snake-killer’ (*sarpaghātī*) unknown. See ?:
- snakeroot (*sugandhā*) → *sarpagandhā* *Rauvolfia serpentina* Benth. ex. Kurz. See Indian snakeroot. But may be *Aristolochia indica* Linn. Has been identified with ??, or ??. See (**GVDB**: 219, 436): 104
- soda crystals (*suvarjikā*) Sodium carbonate. See **NK**: 2, #45:
- spikenard (*jaṭāmāṃsī*) *Nardostachys jatamansi* DC **GVDB**: 163, etc:
- spikenard (*māṃsī*) *Nardostachys grandiflora*, DC. See **NK**: 1, #1691: 116
- spikenard (*nalada*) → *māṃsī*. *Nardostachys grandiflora*, DC. See **NK**: 1, #1691: 95
- spiny bitter cucumber (*karkāruka*) *Momordica cochinchinensis* (Lour.)

- Spreng., (Thunb.) Cogn.  
See [AVS](#): 2, 1135, [IGP](#) 754 (or Beninkasa hispida? [AVS](#): 2, 1127; cf. [AVS](#): 1, 261) :  
strychnine tree (*viṣamuṣṭika*) Strychnos nux vomica Linn. [GVDB](#): 373 : 212  
sugar (*sitā*) Ḍalhaṇa makes this equation at 1.37.25 ([Su 1938](#): 162) : 116  
sugar (*śarkara*) Saccharum officinarum, Linn. [NK](#): #2182 : 101  
sugar cane (*ikṣu*) Saccharum officinarum, Linn. [NK](#): #2182 : 101  
sunflower (*sūryavallī*) → *ādityavallī*, *sūryamukhī*, Helianthus annuus Linn. [GVDB](#): 35, 443 : 114  
swan (*haṃsa*) haṃsa. ?. See ? :  
sweet flag (*vacā*) Acorus calamus Linn. See [GVDB](#): 352–355 : 75, 82  
sweet melon (*ervāruka*) Cucumis melo, L. See [AVS](#): 2, 227; [AVS](#): 2, 1140–3, [IGP](#) 325–6, [NK](#): 1, #729 (C. momordica) :  
sweet plants (*madhuravarga*) The sweet plants are enumerated at *Suśrutasaṃhitā* 1.42.11. See also [GVDB](#): 127 : 43  
sweet-scented oleander (*aśvamāra*) Nerium oleander, L. See [ADPS](#): 223, [NK](#): 1, #1709 :  
sweet-scented oleander (*aśvamāraka*) Nerium oleander, L. See [ADPS](#): 223, [NK](#): 1, #1709 : 104  
teak (*śāka*) Tectona grandis, L.f. See [AVS](#): 5, 245, ([MW](#): 1061) :  
Tellicherry bark (*kuṭaja*) Holarrhena pubescens Wall. ex G. Don, with Wrightia tinctoria and W. arborea considered [GVDB](#): 101–102, [ADPS](#): 267–270 : 72, 209  
thorn apple (*karambha*) Datura metel, L. See [GVDB](#): 76 for useful discussion. Also, [AVS](#): 2, 305 (cf. Abhidhānamajārī), [NK](#): 1, #796 ff. [Potter](#)<sub>rev.</sub>: 292 f, [ADPS](#): 132. Possibly the same plant as plumed cockscomb (*indīvara*) ([GVDB](#): 76, 44–45) : 105, 212  
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 : 115  
three-leaved caper (*varuṇa*) Crataeva magna (Lour.) DC. See [AVS](#): 2, 202; cf. [NK](#): 1, #696 : 100  
top layer of fermented liquor (*surāmaṇḍa*) [K&B](#): 2, 502, [NK](#): 2, appendix VI, #49, [McHugh 2021](#): 39 : 41, 42  
tree cotton (*kārpāsa*) G. arboreum L. [ADPS](#): 231. Pace the identifications of T. B. Singh and Chuneekar ([GVDB](#): 92, 247), since G. barbadense L. is native to South America and G. herbaceum L. which is native to Africa : 40, 214  
tree cotton (*picu*) See tree cotton (*kārpāsa*) : 42, 44  
turmeric (*gaurī*) Curcuma longa, L. See [ADPS](#): 169, [AVS](#): 2, 259, [NK](#): 1, #750 : 76  
turmeric (*haridrā*) Curcuma longa Linn. [GVDB](#): 465 : 77, 115, 121  
turmeric (*rajanī*) Curcuma longa, L. [ADPS](#): 169, [AVS](#): 2, 259, [NK](#): 1, #750 : 26, 116  
turpeth (*trivṛt*) → *trvṛtā*. Operculina turpethum (Linn.) Silva Manso = Ipomoea turpethum R. Br. [GVDB](#): 197. : 70, 101, 165, 207  
two kinds of salt (*vasukavasira*) See the discussion by T. B. Singh and Chuneekar ([GVDB](#): 362–363), who note that when *vasuka* is mentioned together with *vasira*, two varieties of salt are often meant (see ??) : 63  
unhusked rice (*śālī*) Oriza sativa, Linn. [GVDB](#): 395–396 : 26, 213  
various kinds of honey (*madhuvarga*) *Suśrutasaṃhitā*'s eight categories of honey. See *Suśrutasaṃhitā* 1.45.132 and [Dutt](#): 278–279 :  
velvet-leaf (*pāṭhā*) Cissampelos pariera, L.

- See [ADPS](#): 366, [NK](#): 1, #592, [GJM1](#): 573, [AVS](#): 1, 95; cf. [AVS](#): 2, 277 : 34, 67, 82, 114
- velvet-mite (*indragopa*) *Kerria lacca* (Kerr.). Lienhard 1978 : 96
- verbena (*bhāṅgī*) → *phañjī*.  
*Clerodendrum serratum*, L. See [AVS](#): 2, 121, [ADPS](#): 87 :
- verbena (*phañjī*) *Clerodendrum serratum*, L. See [AVS](#): 2, 121, [ADPS](#): 87 : 99
- ‘Virāṭa’s plant’ (*vairāṭaka*) unknown. See ? :
- watered buttermilk (*udaśvit*) [MW](#): 183 : 97
- watermelon (*kāḷindaka*) *Citrullus lanatus* (Thunb.) Matsum & Nak. See [IGP](#) 257, [NK](#): 1, #596, [AVS](#): 2, 1149 :
- weaver’s beam tree (*muṣkaka*) *Schrebera swietenoides*, Roxb. See [AVS](#): 5, 88, Lord, [NK](#): 1, #2246 : 72, 120
- ‘web-milk’ (*jālakṣīri*) unknown. See ? :
- wheat (*godhūma*) *Triticum vulgare*, L. See [HK](#) :
- white babool (*arimeda*) *Acacia leucophloea*, (Roxb.) Willd. See [AVS](#): 1, 23 : 34
- white calotropis (*alarka*) *Calotropis procera*, (Ait.) R. Br. See [NK](#): 1, #428, [Chopra](#): 46b, [Chopra IDG](#): 305–308 : 43
- white clitoria (*Xsitā*) → *śvetā*? *Clitoria ternatea*, L. See [AVS](#): 2, 129, [NK](#): 1, #621 :
- white clitoria (*giryāhvā*) → *śvetā*. *Clitoria ternatea*, L. See [AVS](#): 2, 129, [NK](#): 1, #621 :
- white clitoria (*śvetā*) → *giryāhvā*. *Clitoria ternatea*, L. See [AVS](#): 2, 129, [NK](#): 1, #621 : 98
- white cutch tree (*somavalka*) *Acacia polyacantha*, Willd. See [AVS](#): 1, 30, [IGP](#) 7, [GJM1](#): 602, [AVS](#): 2, 935; *pace* [NK](#): 1, #1038 : 99, 120
- white dammer tree (*sarja*) *Vateria indica*, L. See [NK](#): 1, #2571, [AVS](#): 5, 349 f, [AVS](#): 1, 292 f, [Chopra](#): 253a : 34
- white siris (*kiñihī*) *Albizia procera*, (Roxb.) Benth. See [GVDB](#) 98, [NK](#): 1, #93 : 115
- white teak (*kāśmarī*) → *madhuparnī*.  
*Gmelina arborea*, Roxb. See [GJM1](#): 543, [Trees](#): 51, [ADPS](#): 240 : 76, 78
- white water-lily (*kumuda*) *Nymphaea alba*, Linn. [GVDB](#): 105 : 25
- wild asparagus (*bahuputrā*) → *nandana*?  
*Asparagus racemosus*, Willd. See further wild asparagus (*śatāvarī*) : 99
- wild asparagus (*śatāvarī*) *Asparagus racemosus*, Willd. See [ADPS](#): 441, [AVS](#): 1, 218, [NK](#): 1, #264, [IGP](#): 103, [AVS](#): 4, 249 ff, [Dymock](#): 3, 482 ff : 74–76, 78, 146, 215
- wild celery (*agnika*) → may be *bhallātaka*, *lāṅgalī*, *ajamodā*, *moraṭa*, or *agnimantha*, [GVDB](#): 4. Uncertain : 114
- wild celery (*ajamodā*) *Apium graveolens*, L. : 114
- wild chinchona (*kādamba*) *Anthocephalus cadamba*, Miq. See [NK](#): 1, #204 :
- wild mustard (*saurīyaka*) *Cleome viscosa*, L.? (cf. [Rā.4.144](#)). See [AVS](#): 2, 116, [NK](#): 1, #615 :
- Withania (śvāgandhā)* *Withania somnifera* (L.) Dunal. See [AVS](#): 5, 409 f, [Dymock](#): 2, 566 f., [Chevallier](#) 150 : 43, 71, 77
- wolfsbane (*vatsanābha*) *Aconitum napellus*, L. See [AVS](#): 1, 47, [NK](#): 1, #42, [Potter<sub>rev</sub>](#): 4 f. Or *Aconitum chasmanthum* Stapf ex Holmes, [GVDB](#): 357 : 207
- wood apple (*kapittha*) *Limonia acidissima*, L. See [AVS](#): 3, 327, [NK](#): 1, #1021 : 77, 98, 100
- woodrose (*mūṣikakarṇī*) *Jatopha curcas*, L. [AVS](#): 3, 261, [NK](#): 1, #1374. [GVDB](#): 317; [ADPS](#): 23–25 discuss this issue well : 98, 99
- woodworm (*ghuṇa*) See [note to Atharvaveda 4.16](#) :
- yellow-berried nightshade (*kṣudrā*)  
*Solanum virginianum*, L. See [ADPS](#): 100, [NK](#): 1, #2329, [AVS](#): 5, 164 : 115, 116

## Glossary

√*pīḍ* (pain): 137

√*ūh* (propelled): 136

*ādarśamaṇḍala* (the mirror ring): 131

*ādhmāta* (swollen): 134

*agnika* (the flame): 132

*ahipatāka* (thei snake flag): 132

*ajagara* (the goat swallower): 132

*ajagara* (constrictor): 135

*alagarda* (the hungry sting): 131

*aṅgulirāji* (the finger stripe): 132

*apuṣpa* (the grass flower): 131

*babhru* (the brown): 132

*babhrūkuṭīmukha* (the brown hut mouth): 131

benumbed (*jāḍya*): 136

*bindurāji* (the drop stripe): 132

blockage of the vision (*dr̥ṣṭyavarodha*): 135

bodily tissues (*dhātu*): 136

*cakraka* (the ringed): 132

*citraka* (the mark): 132

constrictor (*ajagara*): 135

cow snout (*gonasa*): 133

*cuñcumālaka* (little ring of spots): 129

*dadhimukha* (the curd mouth): 131

*darbhapuṣpa* (the grass flower): 132

*darita* (torn): 128f

deathly substance (*kālakalpa*): 136

*devadinna* (the gift of god): 131

*dhātu* (bodily tissues): 136

*dhīpyaka* (the stimulator): 132

*dr̥ṣṭyavarodha* (blockage of the vision): 135

ducts (*srotas*): 134

*dvayāhika* (the two-day): 132

*dvyaṅgulirāji* (the two finger stripe): 132

*eṇīpada* (the deer foot): 132

extensive meaning of the collection of statements (*vāksamūhārthavistāra*): 133

feeling of heat all over (*paridāha*): 136

*gavedhuka* (the gavedhuka): 131

*girisarpa* (the mountain snake): 131

giving of fumes (*paridhūpāyana*): 134

giving off fumes (*paridhūpana*): 134

*gonasa* (cow snout): 133

*grahaṇī* (seat of fire in the gut): 135

haemorrhaging (*śonitāgamana*): 134

*hastābharanaka* (the hand decoration): 132

hot all over (*samantatastāpaḥ*): 134

hot over the whole body (*sarvāṅgasantāpaḥ*): 134

*ilikinī* (the ilikinī): 132

*jāḍya* (benumbed): 136

*jyotīratha* (the chariot of light): 132

*kalā* (layers of skin): 136

*kālakalpa* (deathly substance): 136

*kalpa* (procedure): 127

*kapha* (phlegm): 135

*kardama* (the mud): 132

*kaśāya* (the ochre): 132

*khaluṣa* (the khaluṣa): 132

*khaṇḍaphaṇa* (the break hood): 131

*kikkisāda* (the worm eater): 132

*koṣṭha* (trunk of the body): 135

*kṣṇasarpa* (the black snake): 131

*kṣṇodara* (the black belly): 131

*ksīrikāpuṣpa* (the milk flower): 132

*kūkuṭa* (the kūkuṭa): 131

layers of skin (*kalā*): 136

little ring of spots (*cuñcumālaka*): 129

*lohitākṣa* (the red eye): 131f

*madanaka* (the intoxicator): 131

*mahākapota* (the big pigeon): 131

*mahākṣṇa* (the big black): 131

*mahāpadma* (the great lotus): 131

*mahāpanasaka* (the big jackfruit): 131

*mahāsarpa* (the great snake): 131

- mahāśīrṣa* (the big head): 131  
*mākuli* (mākuli): 133  
*mākuli* (mākuli): 133  
*mākuli* (mākuli): 132  
*mākuli* (mākuli): 132  
*manyāstambha* (stiffness of the neck): 136  
*metamorphopsia* (*viparītadarśana*): 134  
*mucous* (*śleṣman*): 135  
  
*nirviṣa* (without venom): 128  
  
oil stripe (*snigdharāji*): 133  
oily stripe (*snigdharāji*): 133  
ophidian (*sarpita*): 128  
  
*padma* (the lotus): 131  
pain ( $\sqrt{pīḍ}$ ): 137  
*pāḷindaka* (the morning glory): 131  
*panasaka* (the jackfruit): 131  
*pārāvata* (the pigeon): 132  
*paridāha* (feeling of heat all over): 136  
*paridhūpana* (giving off fumes): 134  
*paridhūpāyana* (giving of fumes): 134  
*parisarpa* (the snake around): 131  
*phlegm* (*kapha*): 135  
*pilindaka* (the pilindaka): 131  
*poṭa throat* (*poṭagala*): 133  
*poṭagala* (poṭa throat): 133  
*procedure* (*kalpa*): 127  
*propelled* ( $\sqrt{ūh}$ ): 136  
*prṣata* (the speckled): 131  
*pulse interval* (*vegāntara*): 136  
*puṇḍarīka* (the lotus): 132  
*puṇḍarīkamukha* (the lotus mouth): 131  
*puṣpābhikīrṇnābha* (the flower sprinkle beauty): 131  
*puṣpapāṇḍu* (the pale as a flower): 131  
*puṣpasakalī* (the flower all): 132  
  
*rājicitra* (the stripe speckle): 132  
*raktamaṇḍala* (the red ring): 131  
*ṛjusarpa* (the straight snake): 131  
  
*ṣaḍaṅga* (the six part): 132  
*samantatastāpaḥ* (hot all over): 134  
*śaṁkhaṇḍa* (the conch keeper): 131  
  
*sarpita* (ophidian): 128  
*sarpita* (serpented): 128  
*sarvakṛṣṇa* (the all black): 131  
*sarvāṅgasantāpaḥ* (hot over the whole body): 134  
seat of fire in the gut (*grahāṇī*): 135  
serpented (*sarpita*): 128  
*śīśuka* (the kid): 131  
*śleṣman* (mucous): 135  
*snigdharāji* (oil stripe): 133  
*snigdharāji* (oily stripe): 133  
*śonitāgamana* (haemorrhaging): 134  
*srotas* (tubes): 135  
*srotas* (ducts): 134  
*stiffness of the neck* (*manyāstambha*): 136  
*successive shocks* (*vega*): 127  
*śukapatra* (the white leaf): 132  
*śvetadara* (the white rip): 131  
*svetahanu* (the white jaw): 132  
*śvetakapota* (the white pigeon): 131  
*śvetamaṇḍala* (the white ring): 131  
*swollen* (*ādhmāta*): 134  
  
*tantuka* (the stretch): 131  
*tatra* (the tatra): 132  
the all black (*sarvakṛṣṇa*): 131  
the bamboo leaf (*veṇupatraka*): 131  
the big black (*mahākṛṣṇa*): 131  
the big cow snout (*vṛddhagonasa*): 131  
the big head (*mahāśīrṣa*): 131  
the big jackfruit (*mahāpanasaka*): 131  
the big pigeon (*mahākapota*): 131  
the black belly (*kṛṣṇodara*): 131  
the black snake (*kṛṣṇasarpa*): 131  
the break hood (*khaṇḍaphaṇa*): 131  
the brown (*babhru*): 132  
the brown hut mouth  
(*babhrūkuṭīmukha*): 131  
the chariot of light (*jyotīratha*): 132  
the conch keeper (*śaṁkhaṇḍa*): 131  
the curd mouth (*dadhimukha*): 131  
the deer foot (*eṇīpada*): 132  
the drop stripe (*bindurāji*): 132  
the finger stripe (*aṅgulirāji*): 132  
the flame (*agnika*): 132  
the flower all (*puṣpasakalī*): 132



the flower sprinkle beauty  
 (*puṣpābhikīrṇābha*): 131  
 the gavedhuka (*gavedhuka*): 131  
 the gift of god (*devadinna*): 131  
 the goat swallower (*ajagara*): 132  
 the grass drier (*trṇaśoṣaka*): 132  
 the grass flower (*apuṣpa*): 131  
 the grass flower (*darbhapuṣpa*): 132  
 the great lotus (*mahāpadma*): 131  
 the great snake (*mahāsarpa*): 131  
 the hand decoration (*hastābharaṇaka*):  
 132  
 the hungry sting (*alagarda*): 131  
 the ilikinī (*ilikinī*): 132  
 the intoxicator (*madanaka*): 131  
 the jackfruit (*panasaka*): 131  
 the khaluṣa (*khaluṣa*): 132  
 the kid (*śiśuka*): 131  
 the kūkuṭa (*kūkuṭa*): 131  
 the little tree (*vrkṣaka*): 132  
 the lotus (*puṇḍarīka*): 132  
 the lotus (*padma*): 131  
 the lotus mouth (*puṇḍarīkamukha*): 131  
 the mark (*citraka*): 132  
 the milk flower (*kṣīrikāpuṣpa*): 132  
 the mirror ring (*ādarśamaṇḍala*): 131  
 the morning glory (*pālindaka*): 131  
 the mountain snake (*girisarpa*): 131  
 the mud (*kardama*): 132  
 the ochre (*kaṣāya*): 132  
 the pale as a flower (*puṣpapāṇḍu*): 131  
 the pigeon (*pārāvata*): 132  
 the pilindaka (*pilindaka*): 131  
 the rain cloud (*valāhako*): 131f  
 the red eye (*lohitākṣa*): 131f  
 the red ring (*raktamaṇḍala*): 131  
 the ringed (*cakraka*): 132  
 the six part (*ṣaḍaṅga*): 132  
 the snake around (*parisarpa*): 131  
 the speckled (*prṣata*): 131

the stimulator (*dīpyaka*): 132  
 the straight snake (*rjusarpa*): 131  
 the stretch (*tantuka*): 131  
 the stripe speckle (*rājicitra*): 132  
 the tatra (*tatra*): 132  
 the two finger stripe (*dvyāṅgulirāji*): 132  
 the two-day (*dvyāhika*): 132  
 the variegated (*vicitra*): 131  
 the white jaw (*svetahanu*): 132  
 the white leaf (*śukapatra*): 132  
 the white pigeon (*śvetakapota*): 131  
 the white ring (*śvetamaṇḍala*): 131  
 the white rip (*śvetadara*): 131  
 the worm eater (*kikkisāda*): 132  
 the year-snake (*varṣāhika*): 132  
 thei snake flag (*ahipatāka*): 132  
 torn (*darita*): 128f  
 toxic impulses (*viṣavega*): 135  
 toxic pulse (*vega*): 136  
*trṇaśoṣaka* (the grass drier): 132  
 trunk of the body (*koṣṭha*): 135  
 tubes (*srotas*): 135  
  
*vāksamūhārthavistāra* (extensive meaning  
 of the collection of statements): 133  
*valāhako* (the rain cloud): 131f  
*varṣāhika* (the year-snake): 132  
*vega* (successive shocks): 127  
*vega* (toxic pulse): 136  
*vegāntara* (pulse interval): 136  
*veṇupatraka* (the bamboo leaf): 131  
*vicitra* (the variegated): 131  
*viparītadarśana* (metamorphopsia): 134  
*viṣavega* (toxic impulses): 135  
*vrddhagonasa* (the big cow snout): 131  
*vrkṣaka* (the little tree): 132  
*vyāna* (vyāna breath): 135  
*vyāna* breath (*vyāna*): 135  
  
 without venom (*nirviṣa*): 128



# Todo list

■ Can't be "sedation" . . . . .	35
■ JG in the light of your reflections, I removed "women's fertile". I've put śārīram back in. . . . .	61
■ JG could you provide a standard citation reference for this information? . . . . .	61
■ I have replaced the plant-names with entries from my plant database. . . . .	63
■ This is a change we should make in the edition. . . . .	67
■ You need not give all the grammatical details about śrotādi. Assume you are talking to knowledgeable Sanskrit scholars. . . . .	68
■ Perhaps <i>kalka</i> here could also mean the <i>Terminalia Bellerica</i> (विभीतक). . . . .	70
■ Euphorbia Antiquorum (Antique spurge) . . . . .	72
■ The webpage <a href="https://hindi.shabd.in/vairagya-shatakam-bhagacharya-arjun-tiwari/post/117629">https://hindi.shabd.in/vairagya-shatakam-bhagacharya-arjun-tiwari/post/117629</a> says that this verse belongs to the <i>Nītiratna</i> . I could not find this text. . . . .	75
■ The provisional edition should be modified accordingly. . . . .	77
■ There, Ḍalhaṇa comments that deliberation on <i>avapīḍa</i> had been done earlier when it was mentioned. Find that description to know more details. . . . .	79
■ Search for the section where the treatment of <i>ākṣepaka</i> is described. . . . .	80
■ Make the first letter of sentence capital. . . . .	80
■ ? . . . . .	86
■ ? . . . . .	86
■ ? . . . . .	86
■ (?) . . . . .	86
■ Cf. Arthaśāstra 1.21.8. . . . .	94
■ I'm still unhappy about this verse. . . . .	97



■ Mention this in the introduction as an example of the scribe knowing the vulgate. . . . .	97
■ fn about sadyas+ . . . . .	97
■ Bear's bile instead of deer's bile. . . . .	98
■ punarṇavā in the N & K MSS . . . . .	99
■ śrita for śṛta . . . . .	99
■ explain more . . . . .	100
■ Medical difference from Sharma. . . . .	100
■ example where the vulgate clarifies that these should be used separately; appears to be a gloss inserted into the vulgate text. . . .	100
■ 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. . . . .	100
■ √ vyadh not √ vedh (also elsewhere and for the ears), causative optative. . . . .	100
■ -> ativiṣa . . . . .	110
■ Look up the ca. reference. . . . .	110
■ Come back to the issue of "kalpa". Look up passages in the Kośa. . . .	117
■ write footnote: don't repeat ativiṣā; vulgate similar to H. . . . .	121
■ material corresponds to SS.1.45.205ab, where it describes how alcohol affects the body. . . . .	123
■ 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? . . . . .	127
■ grammar . . . . .	129
■ ri- ṛ-? . . . . .	131
■ varṇa means "colour" elsewhere? . . . . .	132
■ where is cutting with a knife related to removing bile or phlegm. . . .	142
■ maṣi burned charcoal. Find refs. . . . .	142
■ find ref. . . . .	147
■ Check out these refs. . . . .	148
■ meaning of kalpa . . . . .	148
■ or a dual? . . . . .	153
■ Footnote here about who is speaking to whom. . . . .	143
■ a kind of asthma? . . . . .	149
■ Not happy with the last part. . . . .	149
■ connecting with the previous pāda? . . . . .	149

■ (atyartha? excessive?) . . . . .	150
■ for...dvādaśādikaḥ)? not clear to me, is it dvādaśādhikaḥ? . . . . .	150
■ (any better medical terms for them?) . . . . .	150
■ (since the word lagha is not clear to me) . . . . .	151
■ (Not too happy with it.) . . . . .	151
■ (not sure about it) . . . . .	151
■ (Not in vulgate) . . . . .	151
■ (I am looking for a better translation) . . . . .	151
■ (I'd need to rework on it). . . . .	152
■ (I'd need to rework on it and think about the sequencing of the number). . . . .	152
■ (āmadoṣa? Not too sure) . . . . .	152
■ (2nd hemistich is incomplete) . . . . .	152
■ (not too sure about the meaning of vyapada) . . . . .	152
■ not so sure about sodāvarte . . . . .	152
■ not so sure about it, MW mentions others like Cordia Myxa and Alangium hexapetalum . . . . .	153
■ not sure about it . . . . .	153
■ (sāmāhāya- any better word?) . . . . .	153
■ Not so happy with this translation . . . . .	154
■ ( Not happy with it) . . . . .	155
■ (the second hemistich is incomplete) . . . . .	155
■ can śṛta mean here boiled milk? Not happy with the last part . . .	155
■ the rest of the text is unclear to me . . . . .	155
■ (not so sure about it). [ ghṛtābhyaṅgonavasthāsu should it be like ghṛtābhyaṅgo 'navasthāsu?, svedā lepaḥ ghṛtābhyaṅgonavas- thāsu ca yojayet] (Not so happy with the translation) . . . . .	156
■ See also Ḍalhaṇa at 1.1.1 (Su 1938: 1) . . . . .	165
■ See chapter 40 of Sūtrasthāna. . . . .	167
■ vasā / medas / majjan . . . . .	167
■ Does bhūtādi a compound or it means ahaṅkāra or ego? . . . . .	167

