

A Translation of the Nepalese Text of the *Suśrutasamhitā*

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Sūtrasthāna

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 2.⁴⁰⁵

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.⁴⁰⁶ 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.⁴⁰⁷ Fayrer provided a biological taxonomy

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

406 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.

407 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.⁴⁰⁸ 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 420 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.⁴⁰⁹ 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.⁴¹⁰ 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.⁴¹¹

408 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).

409 Slouber 2016: 144–145.

410 Harimoto 2011: 101–104.

411 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.⁴¹²
- 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”.⁴¹³
- 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.⁴¹⁴
- 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.⁴¹⁵
- 11 “Of those, there are twenty and six hooded snakes, and the same number of Maṇḍalins are known. There are thirteen Rājīmats.⁴¹⁶

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

413 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).

414 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.

415 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*.

416 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?

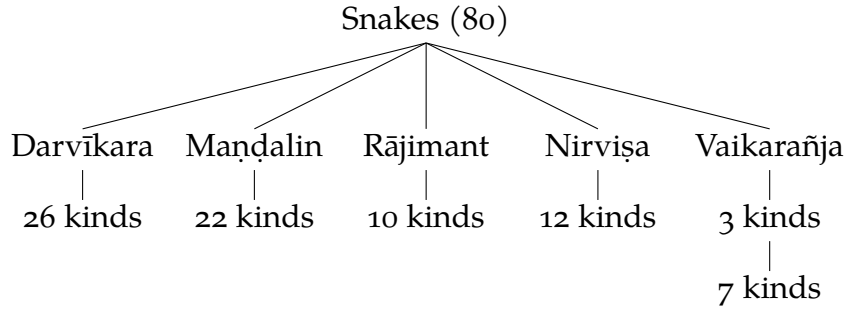


Figure 1: The taxonomy of snakes in the vulgate, 5.4.9–13ab (Su 1938: 571).

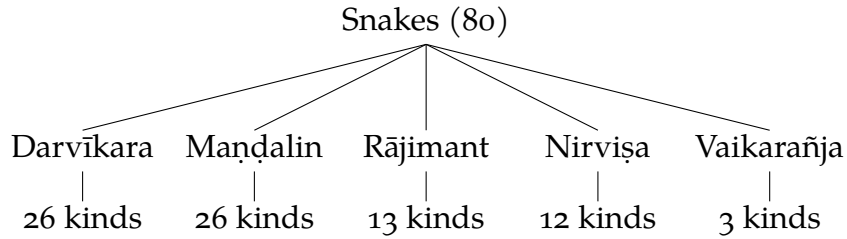


Figure 2: The taxonomy of snakes in the Nepalese version.

- 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”.⁴¹⁷
- 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,⁴¹⁸ accompanied

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

418 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” (DED₂: #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*),⁴¹⁹ 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.⁴²⁰ 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,⁴²¹ gods, holy sages, **spirits**, and saints, or in places full of herbs that destroy poison.⁴²²

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 48.

419 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.

420 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.

421 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*.

422 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.⁴²³
- 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.⁴²⁴
- 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.⁴²⁵

⁴²³ 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)).

⁴²⁴ 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.

⁴²⁵ 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>); ⁴²⁶ | (<i>dadhimukha</i>); |
| 5. The White Pigeon | 18. The Lotus Mouth |
| (<i>śvetakapota</i>); ⁴²⁷ | (<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>); |

⁴²⁶ Not in vulgate.

⁴²⁷ 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>); ⁴²⁸ |
| 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>). ⁴²⁹ |
| 21. The Pigeon (<i>pārāvata</i>); | |

34.3 Here are the Rājīmats.⁴³⁰

- | | |
|---|--|
| 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>); ⁴³¹ |
| (<i>dvyāṅgulirāji</i>); | 10. The Red Eye (<i>lohitākṣa</i>); ⁴³² |
| 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>); ⁴³³ | 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 Swallower | 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.⁴³⁴ Thus:

1. The Mākuli (*mākuli*);

varṇa
means "col-
our" else-
where?

⁴²⁸ This seems implausible, but otherwise the list of Maṇḍalins would be short.

⁴²⁹ 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.

⁴³⁰ 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*.

⁴³¹ Also in the Darvīkara list.

⁴³² Also in the Darvīkara list.

⁴³³ Also in the Darvīkara list.

⁴³⁴ 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.⁴³⁵ Females have small eyes, tongues and heads. Neuters have both characteristics, and are slow to exert themselves or be angry.⁴³⁶

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.⁴³⁷ And ignored for even a period of time, it can drag the patient away. There is not even an opportunity to follow the literature.⁴³⁸

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”.⁴³⁹

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

436 The reading मन्दचेष्टाक्रोधा is an awkward compound; possibly the original reading was मन्दचेष्टाः + अक्रोधा and sandhi was applied twice.

437 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.

438 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.

439 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 Darvikara causes the skin, nails, eyes, mouth, urine, feces, and the bite mark 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.

The poison of a Maṇḍalin causes the skin, nails, eyes, teeth, mouth, urine, feces, bite mark to be yellow; there is a desire for cold, a temperature, giving off fumes,⁴⁴⁰ 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.⁴⁴¹

The poison of a Rājimat causes the skin, nails, eyes, teeth, mouth, urine, feces, and bite mark 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 stifled 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 with blood. One bitten by a hungry snake craves food. Those bitten by an old snake have delayed and slow reactions. And those bitten by a young snake are fast and sharp. One bitten by a non-venomous snake

⁴⁴⁰ 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*.

⁴⁴¹ Ghosh et al. (2023) describes visual disturbances due to snake envenomation.

has the characteristic marks of non-poisoning. Some say that one bitten by a blind snake becomes blind. A constrictor (*ajagara*) is deadly because it swallows, not because of poison.

- 39 In that context, all snake toxins have seven toxic impulses (*viṣavega*). Thus, at the first pulse of the Darvīkaras the poison corrupts the blood. That corrupted blood turns black. Because of that, there is blackness and a feeling develops of ants crawling about on the body. In the second pulse, it corrupts the flesh. That causes lumps having extreme blackness. In the third, it corrupts the fat. That causes a discharge at the bite, heaviness of the head and a seizure of the eyes.⁴⁴² 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.⁴⁴³ 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*), breaking of the hips, back and shoulders, impediment to all movements and shortness of breath. 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.

442 Ḍalhana on 5.4.39 (Su 1938: 574) glossed the last expression as “blocking the vision (दृष्ट्यवरोध).”

443 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.

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

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

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Uttaratantra

Editions and Abbreviations

- Ah 1939 Kumṭe, Anṇā Moreśvara, Navare, Kṛṣṇaśāstrī, and Parādkar, Hariśāstrī (1939) (eds.), *श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्रीमदरुणदत्तविरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेदरसायनाह्वया टीकया च समुल्लसितम्* = *The Astāṅgahṛidaya* (6th edn., Mumbayyām: Nirṇayasāgara Press), [ark:/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.
- AS *Asiatic Society*.
- As 1980 Āṭhavale, Ananta Dāmodara (1980) (ed.), *अष्टाङ्गसङ्ग्रहः श्रीमद्वाग्भटविरचितः इन्दुव्याख्यासहितः* [= *Vāgbhaṭa's Aṣṭāṅgasaṅgraha with Indu's Commentary*] (Pune: M. A. Āṭhavale, Śrīmad Ātreya Prakāśanam), [ark:/13960/s25bwqsd0n7](https://nirṇayasāgara.org/ark:/13960/s25bwqsd0n7).
- AyMahā Jośī, Veṇīmādhavaśāstrī, and Jośī, Nārāyaṇa Harī (1968), *आयुर्वेदीय महाकोशः अर्थात् आयुर्वेदीय शब्दकोशः संस्कृत-संस्कृत* (Mumbai: Mahārāṣṭra Rājya Sāhitya āṇi Saṁskṛti Maṇḍala), [ark:/13960/t22c41g8t](https://nirṇayasāgara.org/ark:/13960/t22c41g8t).
- Bhela 1921 Mookerjee, Ashutosh, and Ananta Krishna Shastri, Ved-antabisharad (1921) (eds.), *The Bhela Samhita. Sanskrit Text* (Calcutta: University of Calcutta), [ark:/13960/t3sv3157j](https://nirṇayasāgara.org/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, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्या संवल्लिता* (3rd edn., Mumbayyāṃ: Nirnaya Sagara Press), [ark:/13960/t48q2f20n](https://nirnayasangara.com/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](https://www.oxfordjournals.org/lookup/doi/10.1093/acref/9780197135501); 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).
- DED₂ Burrow, Thomas, and Emeneau, Murray B. (1984), *A Dravidian Etymological Dictionary* (2nd edn., Oxford: Clarendon Press), [ark:/13960/t4wj06g26](https://www.oxfordjournals.org/lookup/doi/10.1093/acref/9780197135501), [URL](https://www.oxfordjournals.org/lookup/doi/10.1093/acref/9780197135501).
- 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 Prachyavidya Granthamala, 3; reprint, Caukhambā Vidyābhavana, Paṇḍita-Pustakālaya: Kāśī), [ark:/13960/t6pz7tg7j](https://nirnayasangara.com/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/s2kbbk5zcrg9](https://nirnayasangara.com/13960/s2kbbk5zcrg9).

- 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; v. 2: ark:/13960/t3gz41v8m.
- MN₁ Ācārya, Yādavaśarma Trivikrama (1920) (ed.), *महामति-श्रीमाधवकरप्रणीतं माधवनिदानम् श्रीविजयरक्षित-श्रीकण्ठदत्ताभ्यां विरचितया मधुकोशाख्यव्याख्यया, 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.
- MN₃ Ācārya, Yādavaśarma Trivikrama (1932) (ed.), *महामति-श्रीमाधवकरप्रणीतं माधवनिदानम् श्रीविजयरक्षित-श्रीकण्ठदत्ताभ्यां विरचितया मधुकोशाख्यव्याख्यया, श्रीवाचस्पतिवैद्यविरचितया आतङ्कदर्पणव्याख्याया विशिष्टांशेन च समुल्लसितम् = Mādhavanidāna by Mādhavakara with the Two Commentaries, Madhukosha by Vijayarakshita & Shrikanthadatta and Ātankadarpaṇa by Vāchaspati Vaidya* (3rd edn., Bombay: Nirnaya Sagara Press), 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](#).
- PW Böhrtlingk, Otto, and Roth, Rudolph (1855–75), *Sanskrit-Wörterbuch* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), [URL](#), accessed 18/05/2023.
- PWK Böhrtlingk, 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](https://ncc.iiit.ac.in/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 Sushrutasamhitā of Sushruta, the Nibandhasangraha Commentary of Shri Dalhaṇāchārya* (Mumbayyām: Nirṇayasāgaramudrāyantrālaye), [ark:/13960/t3sv0mt50](https://ncc.iiit.ac.in/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 Nirṇayasāgaramudrāyantrālaye), [ark:/13960/t9j41sg94](https://ncc.iiit.ac.in/ark:/13960/t9j41sg94), accessed 09/06/2020; [HIML](#): IB, 312 edition *v.

- Su 1938 Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (1938) (eds.), *श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता* (3rd edn., Bombay: Nirṇayasāgara Press), [ark : / 13960 / t09x0sk1h](#); HIML: IB, 313, edition cc ('the vulgate').
- Su 1938² Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (2004) (eds.), *महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता, श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्यया च समुल्लसिता* (Vārāṇasī: Caukhambhā Kṛṣṇadāsa Akādamī); Reprint of the third, 1938 edition (Su 1938).
- Su 1939 Ācārya, Yādavaśarma Trivikrama, and Śarman, Nandakiśora (1939) (eds.), *सुश्रुतसंहितायाः सूत्रस्थानम्. श्रीचक्रपाणिदत्तविरचितया भानुमतीव्याख्याया समेतम् = Sushrut-saṅhitā (sūtra Sthān) with Bhānumatī Commentary by Chakrapāṇi Datta with Introduction by Gaṇanāth Sen (Śrīsvāmi Lakṣmīrāma Nidhi Granthamālā = Shrī Swāmī Lakshmī Rām Trust Series, 1; [Jaipur]: Śyāmasundara Śarman), ark : / 13960 / t54g0d12m*; Printed at the Nirṇayasāgara Press, Bombay.
- Su 1945 Ācārya, Yādavaśarma Trivikramācārya, and Ācārya, Nārāyaṇa Rāma (1945) (eds.), *महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (मूलमात्रा). पाठान्तर-परिशिष्टादिभिः संबलिता = the Suśrutasaṅhitā of Suśruta with Various Readings, Notes and Appendix etc.* (Mumbāi: Nirṇayasāgarākhyamudraṇālaye), [ark : / 13960 / t8kd4jh7n](#).
- TMSSML Tanjore Maharaja Serfoji Saraswati Mahal Library.
- Viṣṇudh. Śarman, Madhusūdana, and Śarman, Mādhavaprasāda (1912) (eds.), *विष्णुधर्मोत्तरपुराणम् = [Viṣṇudharmot-tarapurāṇa]* (Mumbai: Khemarāja Śrīkṛṣṇadāsa at the Śrīveṅkaṭeśvara Steam Press), [ark : / 13960 / t6qz6fr23](#); Lithograph format. Edited on the basis of a manuscript belonging to the astrologer Śudhākaraśarman of the Varanasi Sanskrit Pāṭhaśālā.

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

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Bibliography

- Ācārya, Yādavaśarma Trivikrama (1941) (ed.), *महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलिता* (3rd edn., Mumbayyām: Nirnaya Sagara Press), [ark:/13960/t48q2f20n](https://nirnayapress.org/ark:/13960/t48q2f20n).
- Ācārya, Yādavaśarma Trivikramācārya, and Ācārya, Nārāyaṇa Rāma (1945) (eds.), *महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (मूलमात्रा). पाठान्तर-परिशिष्टादिभिः संवलिता = the Suśrutasaṃhitā of Suśruta with Various Readings, Notes and Appendix etc.* (Mumbāi: Nirṇayasāgarākhyamudraṇālaye), [ark:/13960/t8kd4jh7n](https://nirnayapress.org/ark:/13960/t8kd4jh7n).
- Acharya, Diwakar (2012), “Description of Microfilm A 45/5,” NGMCP, [URL](https://ngmcp.org/URL), accessed 27/02/2023.
- Adriaensen, Rob, Barkhuis, Roelf, and Ruijters, Jean-Louis (1984), “An English Translation of Suśrutasaṃhitā, Nidānasthāna 1, 1–39, Together with Gayadāsa’s Nyāyacandrikā,” in Gerrit Jan Meulenbeld (ed.), *Proceedings of the International Workshop on Priorities in the Study of Indian Medicine* (Groningen: Forsten), 277–310. doi: [10.5281/zenodo.8201537](https://doi.org/10.5281/zenodo.8201537).
- Āgāśe, Ve. Śā. Rā. Rā. Kāśīnātha Śāstrī, and Āpāṭe, Hari Nārāyaṇa (1904) (eds.), *वाचस्पतिमिश्रविरचितटीकासंवलितव्यासभाष्यसमेतानि पातञ्जलयोगसूत्राणि तथा भोजदेवविरचिताजमार्तण्डाभिधवृत्तिसमेतानि पातञ्जलयोगसूत्राणि* (Ānandāśramasaṃskṛtagranthāvaliḥ, 47; Puṇyākhyā-pattana: Ānandāśramamudraṇālaya), [ark:/13960/t40s27g36](https://nirnayapress.org/ark:/13960/t40s27g36).
- Agrawal, V. S. (1963), *India As Known to Pāṇini: A Study of the Cultural Material in the Aṣṭādhyāyī* (2nd edn., Varanasi: Prthvi Prakashan); First published in 1953.

- Angermeier, Vitus (2020), *Regenzeiten, Feuchtgebiete, Körpersäfte. Das Wasser in der klassischen indischen Medizin* (Wien: Österreichische Akademie der Wissenschaften).
- (2021), “Agni and Soma Revisited: A Primordial Āyurvedic Concept?,” in Toke Lindegaard Knudsen, Jacob Schmidt-Madsen, and Sara Speyer (eds.), *Body and Cosmos* (Leiden: Brill), chap. 3, 15–32. doi: [10.1163/9789004438224_004](https://doi.org/10.1163/9789004438224_004).
- Azeez Pasha, M. (1971), “English Translation of Madan-ul-Shifa, Tibbe Sikandar Shahi (Sikandar Shah’s Mine of Medicine),” *Bulletin of the Department of History of Medicine (Osmania University, Hyderabad)*, 2/4: 227–2324; continued in BDHM 3(1) 29–38; BIHM 1(3/4) 127–134; & BIHM 2(1), 17–22.
- Baber, Zaheer (1996), *The Science of Empire: Scientific Knowledge, Civilization, and Colonial Rule in India* (Albany: State University of New York Press).
- Bakker, Hans T. (2019), “Some Methodological Considerations with Respect to the Critical Edition of Puranic Literature,” in *Holy Ground: Where Art and Text Meet* (Leiden: Brill), 175–84. doi: [10.1163/9789004412071_010](https://doi.org/10.1163/9789004412071_010).
- Barceloux, Donald G. (2008), *Medical Toxicology of Natural Substances. Foods, Fungi, Medicinal Herbs, Plants, and Venomous Animals* (Hoboken, NJ, etc.: John Wiley & Sons), ISBN: 047172761X.
- Bausi, Alessandro, et al. (2015), *Comparative Oriental Manuscript Studies. An Introduction* (Hamburg: Tredition). doi: [10.5281/ZENODO.46784](https://doi.org/10.5281/ZENODO.46784).
- Bedekar, V. M. (1967), “The Legend of the Churning of the Ocean in the Epics and the Purāṇas: A Comparative Study,” *Purāṇa*, 9/1: 7–61, [ark:/13960/t57d2r97r](https://doi.org/10.1163/13960/t57d2r97r).
- Bendall, Cecil (1883), *Catalogue of the Buddhist Sanskrit, Manuscripts in The, University Library, Cambridge: With Introductory Notices and Illustrations of the Palaeography and Chronology of Nepal and Bengal* (Cambridge: University Press), [ark:/13960/t03x8vz7b](https://doi.org/10.1163/13960/t03x8vz7b).
- Bhaṭṭācārya, Candrakānta (1910–17) (ed.), *सुश्रुतसंहिता प्रथमखण्डम् सूत्रस्थानात्मकम् हाराणचन्द्रचक्रवर्तिकविराजविरचितसुश्रुतार्थसन्दीपनभाष्य-समेतम्...चन्द्रकान्त भट्टाचार्य-प्रमुखैः संशोधितम्* = [The *Suśrutasaṃhitā* with the Commentary *Suśrutārthasandīpanabhāṣya* by Hārāṇacandra Cakravartī] (Kalikātā: Satya Press); Edition “t” in [HIML](https://www.himl.org/): IB, 312.

- Bhattacharai, Bidur (2020), *Dividing Texts. Conventions of Visual Text-Organisation in Nepalese and North Indian Manuscripts* (Studies in Manuscript Cultures; Berlin/Boston: de Gruyter), 388.
- Biardeau, Madeleine (1964), *Théorie de la connaissance et la philosophie de la parole dans la brahmanisme classique* (Paris & La Haye: Mouton & Co.), [ark:/13960/t42r7g950](https://nbn-resolving.org/urn:nbn:de:bsz:55-13960-t42r7g950).
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Parameswaran, Madhu K., et al. (2021), "Further Insight into the Role of Dhanvantari, the Physician to the Gods, in the *Suśrutasaṃhitā*," *Academia Letters*. doi: [10.20935/AL2992](https://doi.org/10.20935/AL2992).
- Birch, Jason, Wujastyk, Dominik, Klebanov, Andrey, Rimal, Madhusudan, et al. (2021), "Ḍalhaṇa and the Early 'Nepalese' Version of the *Suśrutasaṃhitā*." doi: [10.20935/al3733](https://doi.org/10.20935/al3733).
- Böhtlingk, Otto (1879), *Sanskrit-wörterbuch in kürzerer fassung* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), [URL](#), accessed 18/05/2023.
- Böhtlingk, Otto, and Roth, Rudolph (1855–75), *Sanskrit-Wörterbuch* (St. Petersburg: Kaiserlichen Akademie der Wissenschaften), [URL](#), accessed 18/05/2023.
- Bollée, Willem (2010), "Remarks on the Cultural History of the Ear in India," in Nalini Balbir (ed.), *Svasti: Essays in Honour of Professor Hampa Nagarajaiah for His 75th Birthday* (Bangalore: K. S. Mudappa Smaraka Trust), 141–67, [URL](#), accessed 23/01/2022.
- Breton, P. (1826), "On the Native Mode of Couching," *Transactions of the Medical and Physical Society of Calcutta*, 2: 341–82, [ark:/13960/t3dz8nn5t](https://nbn-resolving.org/urn:nbn:de:bsz:55-13960-t3dz8nn5t), [URL](#), accessed 02/06/2021.
- Bronkhorst, Johannes (2016), *How the Brahmins Won: From Alexander to the Guptas* (Leiden: Brill). doi: [10.1163/9789004315518](https://doi.org/10.1163/9789004315518).
- (2021), "Patañjali's Āryāvarta = Śuṅga realm?," *Academia Letters*. doi: [10.20935/al291](https://doi.org/10.20935/al291); Article 291.
- Bronner, Yigal (2021) (ed.), "The Pandit Project" (30 Sept.), [URL](#).
- Brooks, Lisa Allette (2018), "Epistemology and Embodiment: Diagnosis and the Senses in Classical Ayurvedic Medicine," *Asian Review of World Histories*, 6: 98–135. doi: [10.1163/22879811-12340027](https://doi.org/10.1163/22879811-12340027).

- Brooks, Lisa Allette (2020a), "A Surgeon's Hand: Reflections on Surgical Tactility in Early Ayurveda," *Asian Medicine*, 15/1: 30–62. DOI: [10.1163/15734218-12341460](https://doi.org/10.1163/15734218-12341460).
- (2020b), "Whose Life is Water, Whose Food is Blood: Fluid Bodies in Āyurvedic Leech Therapy," in Natalie Köhle and Shigehisa Kuriyama (eds.), *Fluid Matter(s): Flow and Transformation in the History of the Body* (Asian Studies Monograph Series, 14; Canberra: ANU Press). DOI: [10.22459/fm.2020](https://doi.org/10.22459/fm.2020).
- (2021a), "The Vascularity of Ayurvedic Leech Therapy: Sensory Translations and Emergent Agencies in Interspecies Medicine," *Medical Anthropology Quarterly*, 35/1: 82–101. DOI: [10.1111/maq.12595](https://doi.org/10.1111/maq.12595).
- (2021b), "Translating Touch in Āyurveda: Medicine, Sense, and Subjectivity in Early south Asia and Contemporary Kerala," PhD thesis (University of California, Berkeley).
- (forthcoming), "Leech Logic," in An Editor (ed.), *A Book*.
- Burghart, Marjorie (2016), "The TEI Critical Apparatus Toolbox: Empowering Textual Scholars through Display, Control, and Comparison Features," *Journal of the Text Encoding Initiative*, 10/Issue 10. DOI: [10.4000/jtei.1520](https://doi.org/10.4000/jtei.1520).
- (2017), "Textual Variants," in Marjorie Burghart, James Cummings, and Elena Pierazzo (eds.), *Digital Editing of Medieval Texts: A Textbook* (DEMM), URL, accessed 04/07/2021.
- Burnell, Arthur Coke (1880), *A Classified Index to the Sanskrit Mss. in the Palace at Tanjore* (London: Trübner), [ark:/13960/t4xh86j61](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-3960-t4xh86j61); Bhelas-amhitā described on pp. 67 ff.
- Carpue, J. C. (1816), *An Account of Two Successful Operations for Restoring a Lost Nose from the Integuments of the Forehead...Including Descriptions of the Indian and Italian Methods* (London: Longman et al.), [ark:/13960/t2q57fn42](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-3960-t2q57fn42), accessed 20/03/2019.
- Chadha, Gita, and Thomas, Renny (2022) (eds.), *Mapping Scientific Method: Disciplinary Narrations* (Science and Technology Studies; Abingdon and New York: Routledge). DOI: [10.4324/9781003298908](https://doi.org/10.4324/9781003298908).
- Cone, Margaret (2001), *A Dictionary of Pāli* (Oxford: The Pali Text Society), ISBN: 0 86013 394 x.

- Cordier, P. (1903), "Récentes découvertes de mss. médicaux sanscrits dans l'Inde (1898–1902)," *Muséon, Nouvelle Série*, 4: 321–52, [ark : / 13960 / t26b2j457](https://nbn-resolving.org/urn:nbn:fr:shs-00013960-t26b2j457), accessed 02/01/2020; Reprinted in Roşu 1989: 539–70.
- Coult, Ro. (1731), "An Account of the Diseases of Bengall," in *Indian Science and Technology in the Eighteenth Century* (Impex India), 141 f., 276.
- Crawford, D. G. (1930), *Roll of the Indian Medical Service, 1615–1930* (London, Calcutta, Simla: Thacker).
- Das, Rahul Peter (2003), *The Origin of the Life of a Human Being. Conception and the Female According to Ancient Indian Medical and Sexological Literature* (Indian Medical Tradition; Delhi: Motilal Banarsidas), ISBN: 81-208-1998-5.
- Dasgupta, S. N. (1952), "Speculations in the Medical Schools," in *A History of Indian Philosophy*, ii (Reprint of 1932 edition, Cambridge: Cambridge University Press), chap. 13, 273–436, [URL](https://nbn-resolving.org/urn:nbn:fr:shs-00013960-t2c94cv80), accessed 26/01/2018.
- Dave, K. N. (1985), *Birds in Sanskrit Literature* (Delhi: Motilal Banarsidass), ISBN: 0-89581-676-8, [ark: / 13960 / t2c94cv80](https://nbn-resolving.org/urn:nbn:fr:shs-00013960-t2c94cv80).
- Deshpande, Madhav (1988), "Pāṇini and the Northwestern Dialect: Some Suggestions on Sūtra 3.3.10," in Mohammad Ali Jazayery and Werner Winter (eds.), *Languages and Cultures: Studies in Honor of Edgar C. Polomé*, xxxvi (Trends in linguistics. Studies and monographs; Berlin, New York: Mouton de Gruyter), 111–23.
- Deshpande, Madhav M. (2010), "Pañca Gauḍa and Pañca Drāviḍa: Contested Borders of a Traditional Classification," in Klaus Karttunen (ed.), *Anantaṃ Śāstram. Indological and Linguistic Studies in Honour of Bertil Tikkannen* (Studia Orientalia, 108; Helsinki: Finnish Oriental Society), 29–58, ISBN: 9789519380742.
- Deshpande, Vijaya (1999), "Indian Influences on Early Chinese Ophthalmology: Glaucoma As a Case Study," *Bulletin of the School of Oriental and African Studies*, 62: 306–22. DOI: [10.1017/S0041977X00016724](https://doi.org/10.1017/S0041977X00016724).
- (2000), "Ophthalmic Surgery: A Chapter in the History of Sino-indian Medical Contacts," *Bulletin of the School of Oriental and African Studies*, 63/3: 370–88, ISSN: 0041-977X. DOI: [10.1017/s0041977x00008454](https://doi.org/10.1017/s0041977x00008454).
- Deshpande, Vijaya Jayant (2019), "An Investigation into Ancient Greco-Indian Medical Exchanges: Sostratus vs Suśruta," *Indian Journal of History of Science*, 54/2: 144–61. DOI: [10.16943/ijhs/2019/v54i2/49659](https://doi.org/10.16943/ijhs/2019/v54i2/49659).

- Dimitrov, Dragomir, and Tamot, Kashinath (2007), "Kaiser Shamsher, His Library and His Manuscript Collection," *Kaiser Shamsher, His Library and His Manuscript Collection*, 3 (Jan.): 26–36, [URL](#).
- Dixit, U., and Deole, Y. S. (2020), "Tantrayukti," in Basisht G. (ed.), *Charak Samhita New Edition* (Charak Samhita Research, Training and Skill Development Centre (CSRTSDC)), 151–1. DOI: [10.47468/csne.2020.e01.s09.022](#).
- Doniger, Wendy (2015), "Introduction: Sympathy for the Devi: Snakes and Snake Goddesses in Hinduism," in Kaiser Haq, *The Triumph of the Snake Goddess* (Cambridge, MA: Harvard University Press), 1–28. DOI: [10.4159/9780674089136-intro](#).
- Eaton, Richard M. (1993), *The Rise of Islam and the Bengal Frontier, 1204–1760* (Berkeley: University of California Press), [ark:/13030/ft067n99v9/](#).
- Edgerton, Franklin (1939), "The Epic Triṣṭubh and Its Hypermetric Varieties," *Journal of the American Oriental Society*, 59/2: 159–74. DOI: [10.2307/594060](#).
- (1953), *Buddhist Hybrid Sanskrit Grammar and Dictionary*. Vol. 2: *Dictionary* (William Dwight Whitney Linguistic Series; New Haven: Yale University Press).
- 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](#).
- Elliot, Robert Henry (1918), *The Indian Operation of Couching for Cataract: Incorporating the Hunterian Lectures Delivered before the Royal College of Surgeons of England on February 19 and 21, 1917* (London: H. K. Lewis).
- Elshakry, Marwa S. (2008), "Knowledge in Motion: The Cultural Politics of Modern Science Translations in Arabic," *Isis*, 99/4: 701–30. DOI: [10.1086/595767](#), [URL](#), accessed 24/02/2019.
- Emeneau, M. B. (1969), "Sanskrit Syntactic Particles – "kila, khalu, nūnam"," *Indo-Iranian Journal*, 11/4: 241–68.
- Ewart, Joseph (1878), *The Poisonous Snakes of India: For the Use of the Officials and Others Residing in the Indian Empire* (London: J & A Churchill), ISBN: 81-7002-011-5, [ark:/13960/t9z07w72g](#); Reprinted Delhi: Himalayan Books, 1985.

- Falk, Harry (1991), "Silver, Lead and Zinc in Early Indian Literature," *South Asian Studies*, 7/1: 111–7. DOI: [10.1080/02666030.1991.9628430](https://doi.org/10.1080/02666030.1991.9628430).
- Fan, Ka Wai (2005), "Couching for Cataract and Sino-Indian Medical Exchange From the Sixth to the Twelfth Century AD," *Clinical and Experimental Ophthalmology*, 33/2: 188–90. DOI: [10.1111/j.1442-9071.2005.00978.x](https://doi.org/10.1111/j.1442-9071.2005.00978.x); unaware of V. Deshpande 1999; 2000.
- Fayrer, Joseph (1874), *The Thanatophidia of India, Being a Description of the Venomous Snakes of the Indian Peninsula with and Account of the Influence of their Poison on Life and a Series of Experiments* (2nd edn., London: Churchill), [ark:/13960/t9h49dg5c](https://nbn-resolving.org/urn:nbn:uk:2019-06-13960-t9h49dg5c); First edition 1872.
- Fitzgerald, James L. (2009), "A Preliminary Study of the 681 Triṣṭubh Passages of the Mahābhārata," in Robert P. Goldman and Muneo Tokunaga (eds.), *Epic Undertakings* (Papers of the 12th World Sanskrit Conference; Delhi: Motilal Banarsidass Publishe), 95–117.
- Flood, Gavin D. (2022) (ed.), *Wiley Blackwell Companion to Hinduism* (2nd edn., Hoboken, NJ: Wiley & Sons, Limited), ISBN: 9781119144861.
- Froese, R., and Pauly, D. (2022) (eds.), "Fishbase: The Global Encyclopedia about Fish," [URL](https://www.fishbase.org/).
- Gaṇapatiśāstrī, T. (1920–25), *Āryamañjuśrīmūlakalpaḥ* (Trivandrum Sanskrit Series, 70; Anantaśayane: Rājakīyamudraṇayanāntrālaye), [ark:/13960/t4pk5sj0j](https://nbn-resolving.org/urn:nbn:uk:2019-06-13960-t4pk5sj0j).
- Ghosh, Ritwik, et al. (2023), "Snakebite envenomation-induced posterior reversible encephalopathy syndrome presenting with Bálint syndrome," *Neurología (English Edition)*, 38/6 (July): 440–2, ISSN: 2173-5808. DOI: [10.1016/j.nrleng.2022.06.001](https://doi.org/10.1016/j.nrleng.2022.06.001).
- Giesche, Alena, et al. (2023), "Recurring Summer and Winter Droughts from 4.2–3.97 Thousand Years Ago in North India," *Nature: Communications Earth & Environment*, 4/1: 1–10. DOI: [10.1038/s43247-023-00763-z](https://doi.org/10.1038/s43247-023-00763-z).
- Gode, P. K., and Karve, C. G. (1957–59) (eds.), *Revised and Enlarged Edition of Prin. V. S. Apte's the Practical Sanskrit-English Dictionary* (Poona: Prasad Prakashan), [ark:/13960/t3gx47212](https://nbn-resolving.org/urn:nbn:uk:2019-06-13960-t3gx47212), accessed 20/10/2017.
- Gombrich, Richard (1979), "'He Cooks Softly': Adverbs in Sanskrit Grammar," *Bulletin of the School of Oriental and African Studies*, 42/2: 244–56. DOI: [10.1017/s0041977x0014580x](https://doi.org/10.1017/s0041977x0014580x).

- Goswami, Pradip Kumar (2011), "Comparative Studies of Bhanumati and Nibandha Samgraha with Special Reference to Arista Vijnana (prognostic Science)," *AYU (An International Quarterly Journal of Research in Ayurveda)*, 32/2: 147. DOI: [10.4103/0974-8520.92540](https://doi.org/10.4103/0974-8520.92540).
- Gupta, Parmanand (1973), *Geography In Ancient Indian Inscriptions (Up to 650 A.D.)* (Delhi: D. K. Publishing House), ark:/13960/t3907cf2d.
- (1989), *Geography from Ancient Indian Coins & Seals* (New Delhi: Concept Publishing Company), ISBN: 9788170222484.
- Gupta, Sri Madhusudana (1835–36) (ed.), *Āyur-veda-prakāśa [also Called Suśruta-saṃhitā] by Suśruta. the Suśruta, or System of Medicine, Taught by Dhanwantari, and Composed by His Disciple Suśruta*, 2 vols. (Calcutta: Education Press and Baptist Mission Press), ark:/13960/t6841qw6x.
- Haas, E. (1876), "Über die Ursprünge der Indischen Medizin, mit besonderem Bezug auf Suśruta," *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, 30/4: 617–70, [URL](#).
- Harimoto, Kengo (2010), "[Preliminary Edition of the Nepalese MSS of the Suśrutasaṃhitā, adhyāyas 1.1–3, 6.4]" (prepublished).
- (2011), "In Search of the Oldest Nepalese Manuscript," *Rivista degli Studi Orientali*, 84/1–4: 85–106, ISSN: 0392-4866, [URL](#), accessed 08/09/2019.
- (2013), "Description of microfilm C 80/7," NGMCP, [URL](#), accessed 27/02/2023.
- (2014), "Nepalese Manuscripts of the Suśrutasaṃhitā," *Journal of Indian and Buddhist Studies (Indogaku Bukkyogaku Kenkyū)*, 62/3: 23–29 (1087-1093). DOI: [10.4259/ibk.62.3_1087](https://doi.org/10.4259/ibk.62.3_1087), [URL](#), accessed 08/09/2019.
- Hayashi, Takao (2017), "The Units of Time in Ancient and Medieval India," *History of Science in South Asia*, 5/1: 1–116. DOI: [10.18732/h2ht0h](https://doi.org/10.18732/h2ht0h).
- Hemarāja Śarman (1938) (ed.), काश्यपसंहिता (वृद्धजीवकीयं तन्त्रं वा) महर्षिणा मारीचकश्यपेनोपदिष्टा ... हेमराजशर्मणा लिखितेन विस्तृतेन उपोद्घातेन सहिता ... सत्यपाल भिषगा कृतया विद्योतिनी हिन्दीव्याख्या ... समुल्लसिता (1st edn., Mumbai: Nirnayāsāgara Press), ark:/13960/t3mw5gb9p.

- Hendley, T. Holbein (1895), *A Medico-topographical Account of Jeypore, Based on the Experience of Twenty Years' Service As a Residency Surgeon and Thirteen As Superintendent of Dispensaries at Jeypore, Rajputana* (Calcutta: Calcutta Central Press Company).
- Hessler, Franciscus (1844–55), *Suśrutas Ayurvédas: id est Medicinae Systema a Venerabili D'hanvantare Demonstratum a Susruta Discipulo Compositum; Nunc Primum Ex Sanskrita in Latinum Sermonem Vertit, Introductionem, Annotationes Et Rerum Indice Franciscus Hessler* (Erlangen: Ferdinandum Enke), [ark:/13960/t17m45r97](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9).
- Hoernle, A. F. Rudolf (1893–1912) (ed.), *The Bower Manuscript: Facsimile Leaves, Nagari Transcript, Romanised Transliteration and English Translation with Notes* (New Imperial Series, 22; Calcutta: Government of India and under the patronage of the Bengali Government, Archaeological Survey of India), [ark:/13960/t05z1bg4q](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9).
- (1897), *सुश्रुतसंहिता = The Suśruta-Saṃhitā or the Hindū System of Medicine According to Suśruta Translated from the Original Sanskrit* (Bibliotheca Indica, 911; Calcutta: Asiatic Society), [ark:/13960/t8pd1kw9r](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9), accessed 03/01/2018; No more published; Hoernle does not state which edition he is translating, but it includes the "Dhanvantari phrase".
- (1906a), "Studies in Ancient Indian Medicine I: The Commentaries on Suśruta," *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 283–302, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9), accessed 26/06/2019.
- (1906b), "Studies in Ancient Indian Medicine II: On Some Obscure Anatomical Terms," *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 4: 915–41, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9), accessed 25/06/2019.
- (1907a), "Studies in Ancient Indian Medicine II: On Some Obscure Anatomical Terms (Continued from the the Journal, 1906, p. 941)," *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 1–18, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9), accessed 25/06/2019.
- (1907b), *Studies in the Medicine of Ancient India: Osteology or the Bones of the Human Body* (Oxford: Clarendon Press), [ark:/13960/t1pg9cq8b](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9).
- Hofer, Theresia (2007), "Swami Laxmi Ram's Ayurvedic Pharmacy in Jaipur, India," *Wellcome History*, 34: 2–3, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63888-p0111-9), accessed 16/03/2022.

- Holwell, J. Z. (1767), *An Account of the Manner of Inoculating for the Small Pox in the East Indies With...Observations on The...Mode of Treating That Disease in Those Parts* (London: T. Becket & P. A. de Hondt), [ark:/13960/t3ws9h63c](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3).
- Jack, David Morton (1884), "A Thesis on Cataract in India: Its Pathology and Treatment," Wellcome Library, London, MS 3007, [URL](https://wellcome.org/ark:/61906/3/00000003007), accessed 02/06/2021.
- Jamison, Stephanie W., and Brereton, Joel P. (2014), *The Rigveda* (South Asia Research; New York: Oxford University Press), ISBN: 9780199370184; With commentary at <http://rigvedacommentary.alc.ucla.edu/>.
- Jhalakīkar, Bhīmācārya (1978), *न्यायकोशः (सकलशास्त्रोपकारकन्यायादिशास्त्रीयपदार्थप्रकाशकः)* = *Nyāyakośa or Dictionary of Technical Terms of Indian Philosophy* (Poona: Bhandarkar Oriental Research Institute), [ark:/13960/t4cp7242f](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3).
- Kangle, R. P. (1969), *The Kauṭīliya Arthaśāstra* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 81-208-0042-7, [ark:/13960/t3gz6qh1s](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3), accessed 23/09/2021.
- Karttunen, Klaus (2015), *Yonas and Yavanas in Indian Literature* (Studia Orientalia, 116; Helsinki: Finnish Oriental Society), 454, ISBN: 978-951-9380-88-9, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3); Published electronically in 2016 as a back issue of *Studia Orientalia*.
- Keith, Arthur Berriedale (1908), review of A. F. Rudolf Hoernle (1907), "Studies in Ancient Indian Medicine II: On Some Obscure Anatomical Terms (Continued from the the Journal, 1906, p. 941)," *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 1–18, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3), accessed 25/06/2019, in *Zeitschrift Der Deutschen Morgenländischen Gesellschaft*, 1/62: 134–9, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3), accessed 17/04/2021.
- Kieffer-Pülz, Petra (1996), "The Meaning of Māla(ka)/māla(ka) in Pāli," in N. Balbir, G.-J. Pinault, and J. Fezas (eds.), *Langue, style et structure dans le monde indien, Centenaire de Louis Renou. Actes du Colloque international (Paris, 25–27 janvier 1996)* (Paris), 285–325, [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3), accessed 17/05/2023.
- Klebanov, Andrey (2010), "The *Nepalese Version of the Suśrutasaṃhitā and Its Interrelation with Buddhism and the Buddhists," MA thesis (Hamburg: Hamburg University, Sept.), [URL](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-33333-p0033-3), accessed 08/09/2019.

- (2012), “Description of microfilm B 29/19,” NGMCP, [URL](#), accessed 27/02/2023.
- (2021a), “On the Textual History of the Suśrutasamhitā (1): A Study of Three Nepalese Manuscripts,” *eJIM: Electronic Journal of Indian Medicine*, 12/1: 1–64. DOI: [10.21827/ejim.12.1.37385](#).
- (2021b), “On the Textual History of the Suśrutasamhitā, (2): An Anonymous Commentary and its Identified Citations,” in Toke Lindgaard Knudsen, Jacob Schmidt-Madsen, and Sara Speyer (eds.), *Body and Cosmos: Studies in Early Indian Medical and Astral Sciences in Honor of Kenneth G. Zysk* (Leiden, Boston: Brill), 110–39. DOI: [10.1163/9789004438224_008](#).
- Kuist, James M. (1982), *The Nichols File of The Gentleman's Magazine* (Madison: University of Wisconsin Press), ISBN: 0-299-08480-9, [ark:/13960/t53g2ct2z](#).
- Kulikov, Leonid (2006), “The Sanskrit -yet- Optative: A Formation Not Yet Recorded in Sanskrit Grammars,” *Wiener Zeitschrift für die Kunde Südasiens*, 50: 27–68. DOI: [10.1553/wzks1s27](#), [URL](#).
- Lariviere, Richard W. (2003), *The Nāradaśmr̥ti. Critically Edited with an Introduction, annotated Translation, and Appendices* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 8120818040; First edition: Philadelphia, 1989.
- Law, Bimala Churn (1984), *Historical Geography of Ancient India* (New Delhi: Orient Books Reprint), [ark:/13960/t3d01t737](#); Reprint of 1954 Paris edition.
- Leffler, Christopher T., et al. (2020), “The History of Cataract Surgery: From Couching to Phacoemulsification,” *Annals of Translational Medicine*, 8/22: 1551–97, ISSN: 2305-5847. DOI: [10.21037/atm-2019-rs-04](#), [URL](#), accessed 02/11/2020.
- Lele, W. K. (1981), *The Doctrine of the Tantrayukti-s: Methodology of Theoretico-scientific Treatises in Sanskrit* (Chaukhamba Surabharati Studies, 3; Varanasi: Chaukhamba Surabharati Prakashan), [ark:/13960/s28vqzhkdjq](#).

- Li, Charles (2017), "Critical Diplomatic Editing: Applying Text-critical Principles As Algorithms," in Peter Boot et al. (eds.), *Advances in Digital Scholarly Editing. Papers Presented at the Dixit Conferences in the Hague, Cologne, and Antwerp* (Leiden: Sidestone Press), 305–10, ISBN: 978-90-8890-485-1, [URL](#), accessed 10/11/2020.
- (2017–), "Saktumiva," [URL](#), accessed 21/01/2023.
- (2018), "Limits of the Real: A Hypertext Critical Edition of Bhartṛhari's Dravyasamuddeśa, with the Commentary of Helārāja," en, PhD thesis (Cambridge: University of Cambridge). DOI: [10.17863/CAM.31454](#).
- (2022a), "Helayo: Reconstructing Sanskrit Texts from Manuscript Witnesses," *Journal of Open Source Software*, 7/71: 4022. DOI: [10.21105/joss.04022](#).
- (2022b), "Reconstructing a Sanskrit Text" (19 Nov.), [URL](#), accessed 20/01/2023.
- Lienhard, Siegfried (1978), "On the Meaning and Use of the Word Indragopa," *Indologica taurinensia*, 6: 177–88, [URL](#), accessed 06/02/2021; The indragopa is a 'red velvet mite'.
- Longmate, Barak (1794), "A Curious Chirurgical Operation," *The Gentleman's Magazine and Historical Chronicle*, 64.4 (Oct.): 883, 891, 892; I am grateful to the late John Symons of the Wellcome Library who identified the author 'B. L.' as the journalist Barak Longmate. See also Kuist [1982](#): 87.
- Maas, Philipp André (2013), "A Concise Historiography of Classical Yoga Philosophy: leslie," in Eli Franco (ed.), *Historiography and Periodization of Indian Philosophy* (Vienna: Sammlung de Nobili), 53–90, [URL](#), accessed 27/05/2016.
- Mairs, Rachel (2013), "Greek Settler Communities in Central and South Asia, 323 BCE to 10 CE," in Ato Quayson (ed.), *A Companion To Diaspora And Transnationalism* (Oxford: John Wiley and Sons Ltd), 443–54, ISBN: 9781405188265.
- (2014), *The Hellenistic Far East: Archaeology, Language, and Identity in Greek Central Asia: Archaeology, Language, and Identity in Greek Central Asia* (Berkeley: University of California Press), 250, ISBN: 9780520292468. DOI: [10.1525/9780520959545](#).

- Majno, Guido (1975), *The Healing Hand. Man and Wound in the Ancient World* (Cambridge, MA: Harvard University Press), [ark:/13960/t4hm7xf2c](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-3960-t4hm7xf2c).
- Malamoud, Charles (1996), "Paths of the Knife: Carving up the Victim in Vedic Sacrifice," in *Cooking the World: Ritual and Thought in Ancient India. Translated from the French by David White* (Delhi, Bombay, etc.: Oxford University Press), 169–80.
- Mānasa-taraṅgiṇī (2019), "Kaiṭabha, Poison and Death: Meanderings through Tradition," mAnasa-taraMgiNI Blog (1 Sept.), [URL](https://manasa-tarangiini.blogspot.in/2019/09/kaitabha-poison-and-death-meanderings-through-tradition.html), accessed 31/01/2023.
- Manevskaia, Ilona (2008), "Preliminary Observations on Compositional Methods in Haribhadra's Ālokā," in Richard Gombrich and Cristina Scherrer-Schaub (eds.), *Buddhist Studies* (Papers of the 12th World Sanskrit Conference, 8; Delhi: Motilal Banarsidass), 97–117.
- Manucci, Niccolò (1907–08), *Storia Do Mogor or, Mogul India, 1653–1708 by Niccolao Manucci, Venetian; Translated with Introduction and Notes, by William Irvine* (The Indian Texts Series; London: J. Murray), [URL](https://www.indian-texts.com/manucci.htm), accessed 04/10/2021.
- Masai, François (1950), "Principes et conventions de l'édition diplomatique," *Scriptorium*, 4: 177–93. DOI: [10.3406/scrip.1950.2294](https://doi.org/10.3406/scrip.1950.2294).
- McHugh, James (2021), *An Unholy Brew: Alcohol in Indian History and Religions* (New York: Oxford University Press), 416 pp., ISBN: 9780199375936.
- Mehta, S. R., and Sashindran, V. K. (2002), "Clinical Features And Management Of Snake Bite," *Medical Journal Armed Forces India*, 58/3 (July): 247–9. DOI: [10.1016/s0377-1237\(02\)80140-x](https://doi.org/10.1016/s0377-1237(02)80140-x).
- Mejor, Marek (2000), "Some Observations on the Date of the *Yukti-dīpikā* (apropos of a New Edition)," in Piotr Błecrowicz and Marek Mejor (eds.), *On the Understanding of Other Cultures*, vii (Studia Indologiczne; Warszawa: Instytut Orientalistyczny, Uniwersytet Warszawski), 255–89.
- Meulenbeld, Gerrit Jan (1974b), *The Mādhavanidāna and Its Chief Commentary: Chapters 1–10. Introduction, Translation, and Notes* (Leiden: Brill), ISBN: 978-90-04-03892-9, [ark:/13960/t25b8q97g](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-3960-t25b8q97g).

- Meulenbeld, Gerrit Jan (1984), "The Surveying of Sanskrit Medical Literature," in id. (ed.), *Proceedings of the International Workshop on Priorities in the Study of Indian Medicine* (Groningen: Forsten), 37–56.
- (1989), "The Search for Clues to the Chronology of Sanskrit Medical Texts As Illustrated by the History of Bhaṅgā (cannabis Sativa Linn.)," *Studien zur Indologie und Iranistik*, 15: 59–70.
- (1990), "Conformities and Divergences of Basic Ayurvedic Concepts in Veterinary Texts," *Journal of the European Ayurvedic Society*, 1: 1–6, [URL](#), accessed 16/02/2022.
- (1991), "The Constraints of Theory in the Evolution of Nosological Classifications: A Study on the Position of Blood in Indian Medicine (Āyurveda)," in *Medical Literature from India, Sri Lanka, and Tibet*, 91–106, ISBN: 90-04-09522-5, [URL](#).
- (1992), "The Characteristics of a Doṣa," *Journal of the European Āyurvedic Society*, 2/1: 1–5, [ark:/13960/t8hf69z8j](#).
- (2008), *The Mādhavanidāna with "Madhukośa," the Commentary by Vijayarākṣita and Śrīkaṇṭhadatta (Ch. 1-10). Introduction, Translation, and Notes* (Delhi: Motilal Banarsidass).
- (2011), "The Relationships between Doṣas and Dūṣyas: A Study on the Meaning(s) of the Root Murch-/murch," *eJournal of Indian Medicine*, 4/2: 35–135, [URL](#), accessed 13/10/2017.
- Miles, M. (1999), "Personal Communication," Mar.; Letter of 4 March.
- Moureau, Sébastien. (2015), "The Apparatus Criticus," in Alessandro Bausi et al. (eds.), *Comparative Oriental Manuscript Studies: An Introduction* (Hamburg: Tredition), 348–52, ISBN: 978-3-7323-1768-4, [URL](#), accessed 04/07/2021.
- Mukhopādhyāya, Girindranāth (1913), *The Surgical Instruments of the Hindus, with a Comparative Study of the Surgical Instruments of the Greek, Roman, Arab, and the Modern European (sic) Surgeons* (Calcutta: Calcutta University), [ark:13960/t1zd2pq29](#), accessed 29/01/2018; Vol.2: [ark:/13960/t9r25qd8m](#). Reprinted as a single volume, New Delhi, 1987.

- Muthuswami, Nurani Easwara (1976) (ed.), *Tantrayuktivicāraḥ* [by *Nīlameghabhiṣaj*] (Kerala Praśāsanāyurveda Granthāvaliḥ, 1; 2nd edn., Trivandrum: Publications Division, Govt. Ayurveda College), [URL](#), accessed 09/03/2018; Etext transcribed from edition by Manoj Sankaranarayana and Pavana J.
- Narayana, Ala, and Thrigulla, Saketh Ram (2011), "Tangible Evidences of Surgical Practice in Ancient India," *Journal of Indian Medical Heritage*, 16: 1–18, [URL](#), accessed 02/06/2021.
- Nārāyaṇa, Śaṃkaraśarman (1949), *Tantrayuktiḥ*, ed. Vayaskara N. S. Mooss (Vaidyasārathigranthāvaliḥ, 6; Kottayanagaryāṃ: Vaidyasārathi Press), [URL](#), accessed 09/03/2018.
- NGMCP (2014), "Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue," Universität Hamburg and Deutsche Forschungsgemeinschaft, [URL](#).
- Oberhammer, Gerhard (1967–68), "Notes on the Tantrayukti-s," *The Adyar Library Bulletin*, 31–2: 600–16, [URL](#).
- Oberlies, Thomas (2003), *A Grammar of Epic Sanskrit* (Indian Philology and South Asian Studies, 5; Berlin: De Gruyter), ISBN: 9783110144482. DOI: [10.1515/9783110899344](#).
- Olivelle, Patrick (2001), *Food for Thought. Dietary Rules and Social Organization in Ancient India* (Gonda Lectures, 9; Amsterdam: Royal Netherlands Academy of Arts and Sciences), [URL](#), accessed 28/06/2023.
- (2005), *Manu's Code of Law: A Critical Edition and Translation of the Manava-dharmasastra*, With the editorial assistance of Suman Olivelle (South Asia research; New York: Oxford University Press), ISBN: 0195171462.
- (2013), *King, Governance, and Law in Ancient India: Kauṭilya's Arthaśāstra. a New Annotated Translation* (New York: Oxford University Press), ISBN: 9780199891825. DOI: [10.1093/acprof:osobl/9780199891825.003.0001](#).
- Osbaldeston, Tess Anne, and Wood, R. P. A. (2000), *Dioscorides. De Materia Medica. Being an Herbal with Many Other Medicinal Materials Written in Greek in the First Century of the Common Era. a New Indexed Version in Modern English* [Introductory Notes by R. P. Wood] (Johannesburg: IBIDIS Press), ISBN: 0-620-23435-0, [URL](#).

- Pandey, Anshuman (2012), "Proposal to Encode the Newar Script in ISO/IEC 10646," [URL](#).
- Pāṇḍeya, Rāmateja (1963) (ed.), *श्रीकृष्णद्वैपायनव्यासप्रणीतं गरुडपुराणम्* (Vidyabhawan Prachyavidya Granthamala, 3; reprint, Caukhambā Vidyābhavana, Paṇḍita-Pustakālaya: Kāśī), [ark:/13960/t6pz7tg7j](#).
- Pass, Gregory (2003), *Descriptive Cataloging of Ancient, Medieval, Renaissance, and Early Modern Manuscripts* (Chicago: American Library Association), ISBN: 0-8389-8218-2, [URL](#).
- PBS (2020), "Modern Day Blood-letting in North Africa," PBS (11 Dec.), [URL](#); Filmed in Farchana, Chad, amongst Sudanese refugees from Darfur, for the series *Our Human Planet*.
- Pillay, V. V. (2013), *Modern Medical Toxicology* (New Delhi: Jaypee Brothers Pvt. Ltd), ISBN: 9789350259658.
- Pillay, Vijay V., and Sasidharan, Anu (2019), "Oleander and Datura Poisoning: An Update," *Indian Journal of Critical Care Medicine*, 23/Supplement 4: 5250–5. DOI: [10.5005/jp-journals-10071-23302](#).
- Preisendanz, Karin (2007), "The Initiation of the Medical Student in Early Classical Āyurveda: Caraka's Treatment in Context," in Birgit Kellner et al. (eds.), *Pramāṇakīrtiḥ. Papers Dedicated to Ernst Steinkellner on the Occasion of His 70th Birthday. Part 2*, ii, 2 vols. (Wiener Studien zur Tibetologie und Buddhismuskunde, 70.2; Wien: Arbeitskreis für Tibetische Und Buddhistische Studien Universität Wien), 629–68, ISBN: 9783902501097, [URL](#).
- (2013), "Logic, Debate and Epistemology in Ancient Indian Medical Science: An Investigation Into the History and Historiography of Indian Philosophy. Part I," in Dominik Wujastyk, Anthony Cerulli, and Karin Preisendanz (eds.), *Medical Texts and Manuscripts in Indian Cultural History* (Delhi: Manohar Publishers and Distributors), 63–139, ISBN: 978-9350980194.
- Prets, Ernst, and Prandstetter, Joachim (1991–2006), *Terminologie der frühen philosophischen Scholastik in Indien: Ein Begriffswörterbuch zur altindischen Dialektik, Erkenntnislehre und Methodologie*, ed. Gerhard Oberhammer (Österreichische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Denkschriften, 223, 248, 343; Wien: Verlag der

- Österreichischen Akademie der Wissenschaften); Beiträge zur Kultur- und Geistesgeschichte Asiens; Nr. 9, 17, 49.
- Price, Kenneth M. (2013), "Electronic Scholarly Editions," in Ray Siemens and Susan Schreibman (eds.), *A Companion to Digital Literary Studies* (Chichester, UK: John Wiley & Sons, Ltd), 434–50. doi: [10 . 1002 / 9781405177504 . ch24](https://doi.org/10.1002/9781405177504.ch24), URL, accessed 04/07/2021.
- Rādhākāntā Deva, Rājā (1876), *शब्दकल्पद्रुमः = Shabda Kalpadrumah, Or, the Tree Bearing All the Words That May Be Wished For* (Calcutta: Baradākānta Mitra & Co. at the New Bengal Press), [ark:/13960/t9x10x61b](https://nnp.scholarship.london.ac.uk/ark:/13960/t9x10x61b).
- Rai, Saurav Kumar (2019), "Invoking 'Hindu' Ayurveda: Communalisation of the Late Colonial Ayurvedic Discourse," *The Indian Economic & Social History Review*, 56/4: 411–26. doi: [10 . 1177 / 0019464619873820](https://doi.org/10.1177/0019464619873820); Online first.
- Rama Rao, B., et al. (2005), *Sanskrit Medical Manuscripts in India* (New Delhi: Central Council for Research in Ayurveda & Siddha), [ark:/13960/t88h7763b](https://nnp.scholarship.london.ac.uk/ark:/13960/t88h7763b).
- Rama Sastri and Krishnamurthi Sastri, S. R. (1952) (eds.), *पातञ्जलयोगसूत्रभाष्यविवरणम् । (शङ्करभगवत्पादप्रणीतम्) = Pātñjala[sic]-yogasūtra-bhāṣya Vivaraṇam of Śaṅkara-Bhagavatpāda. Critically Edited with Introduction* (Madras Government Oriental Series, 94; Madras: Government Oriental Manuscripts Library), [ark:/13960/t7jq3m14w](https://nnp.scholarship.london.ac.uk/ark:/13960/t7jq3m14w), accessed 20/10/2017.
- Rây, Priyadarajan, Gupta, Hirendra Nath, and Roy, Mira (1980), *Suśruta Saṃhita (a Scientific Synopsis)* (New Delhi: Indian National Science Academy), [ark:/13960/t64511t6v](https://nnp.scholarship.london.ac.uk/ark:/13960/t64511t6v), accessed 13/09/2019.
- Raychaudhuri, Hemachandra (1953), *Political History of Ancient India* (Calcutta: University of Calcutta), [ark:/13960/s25hz0hz29p](https://nnp.scholarship.london.ac.uk/ark:/13960/s25hz0hz29p).
- Renou, Louis (1940), "Sur certaines anomalies de l'optatif Sanskrit," *Bulletin de la Société de Linguistique de Paris*, 41: 5–17, [ark:/12148 / bpt6k121049](https://nnp.scholarship.london.ac.uk/ark:/12148/bpt6k121049).
- Rhys Davids, Thomas William, and Stede, William (1921–25), *The Pali Text Society's Pali-English Dictionary* (London: The Pali Text Society), [ark:/13960/t4nk3nc12](https://nnp.scholarship.london.ac.uk/ark:/13960/t4nk3nc12).
- Rimal, Madhusudana, and Wujastyk, Dominik (2022), "MS Kathmandu NAK 1/1146," Pandit Project (18 May), URL.

- Roelli, Philipp (2020) (ed.), *Handbook of Stemmatology* (Berlin: De Gruyter).
DOI: [10.1515/9783110684384](https://doi.org/10.1515/9783110684384).
- Roelli, Philipp, and Macé, Caroline (2015), "Parvum Lexicon Stemmatalogicum. A Brief Lexicon of Stemmatalogy." DOI: [10.5167/uzh-121539](https://doi.org/10.5167/uzh-121539).
- Roşu, Arion (1989), *Un demi-siècle de recherches āyurvédiques. Gustave Liétard et Palmyr Cordier: Travaux sur l'histoire de la médecine indienne* (Paris: Institut de Civilisation Indienne).
- Ruben, Walter (1926), "Zur Frühgcschichte der indischen Philosophie," in W. Kirfel (ed.), *Beiträge zur Literaturwissenschaft und Geistesgeschichte Indiens – Festgabe Hermann Jacobi zum 75. Geburtstag <11. Februar 1925> dargebracht von Freunden, Kollegen und Schülern* (Bonn: Kommissionsverlag Fritz Klopp), 346–57.
- (1954a), *Geschichte der indischen Philosophie [collected articles]* (Berlin: Deutscher Verlag), [ark:/13960/t9v18cc78](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-3960-t9v18cc78).
- (1954b), "Medizin (Caraka) und Logik (Nyāya) (um 100 u. Z.)," in id., *Geschichte der indischen Philosophie [collected articles]* (Berlin: Deutscher Verlag), chap. 21, 212–22, [ark:/13960/t9v18cc78](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-3960-t9v18cc78).
- Saha, Mridula (2015), *The History of Indian Medicine Based on the Vedic Literature Satapatha Brahmana* (Kolkata: The Asiatic Society), ISBN: 978-9381574294.
- Sarukkai, Sundar (2016), "Translation As Method: Implications for History of Science," in Bernard Lightman, Gordon McOuat, and Larry Stewart (eds.), *The Circulation of Knowledge Between Britain, India and China* (Leiden: BRILL), 309–29. DOI: [10.1163/9789004251410_014](https://doi.org/10.1163/9789004251410_014).
- Sastri, Hrishikesh, and Gui, Siva Chandra (1895–1917), *A Descriptive Catalogue of Sanskrit Manuscripts in the Library of Calcutta Sanskrit College* (Calcutta: Baptist Mission Press).
- Sastri, P. P. S. (1933), *A Descriptive Catalogue of the Sanskrit Manuscripts in the Tanjore Maharaja Serfoji's Sarasvati Mahal Library Tanjore: Natya, Sangita, Kamasastra, Vaidya & Jyotisa, nos. 10650–11737* (Srirangam: Sri Vani Vilas Press), [ark:/13960/t3nw8bc12](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-3960-t3nw8bc12).

- Śāstrī, Vardhamāna Pārśvanātha (1940) (ed.), *उग्रादित्याचार्यकृत कल्याणकारक (राष्ट्रभाषानुवादसहित)* = *The Kalyāṇa-kārikam of Ugrādityacharya, Edited with Introduction, Translation, Notes, Indexes and Dictionary* (Sakhārāma Nemacanda Gramthamālā, 129; Solāpura: Seṭha Govimḍajī Rāvajī Dośī), [ark:/13960/t2q617g4d](https://nopr.scribd.com/document/13960/t2q617g4d).
- Scharfe, Hartmut (1993), *Investigations in Kauṭalya's Manual of Political Science* (2nd edn., Oxford: Harrassowitz), ISBN: 3447033304, [URL](https://www.harrassowitz.de/9783447033304); 2nd. rev. ed. of Untersuchungen zur Staatsrechtslehre des Kauṭalya.
- Schwartzberg, Joseph E., Bajpai, Shiva G., et al. (1978) (eds.), *A Historical Atlas of South Asia* (Chicago: University of Chicago Press), [URL](https://www.uchicago.edu/press/).
- Scott, H. (1817), "Some Remarks on the Arts of India, with Miscellaneous Observations on Various Subjects," *Journal of Science and the Arts*, 2: 67–72, ill. after 133, [ark:/13960/t9870jt4g](https://nopr.scribd.com/document/13960/t9870jt4g); Breton 1826: 358–363 cites Scott's description of cataract couching.
- Selby, Martha Ann (2005a), "Narratives of Conception, Gestation, and Labour in Sanskrit Ayurvedic Texts," *Asian Medicine*, 1/2: 254–75, ISSN: 1573-420X. DOI: [10.1163/157342105777996638](https://doi.org/10.1163/157342105777996638).
- (2005b), "Sanskrit Gynecologies in Postmodernity: The Commoditization of Indian Medicine in Alternative Medical and New-age Discourses on Women's Health," in *Asian Medicine and Globalization*, chap. 8, 120–31, [URL](https://www.jstor.org/stable/485555), accessed 22/03/2018.
- Semeka-Pankratov, Elena (1979), "A Semiotic Approach to the Polysemy of the Symbol *nāga* in Indian Mythology," in Irene Portis Winner and Jean Umiker-Sebeok (eds.), *Semiotics of Culture* (Approaches to Semiotics, 53; The Hague, Paris, NY: Mouton), 237–90. DOI: [10.1515/9783110823134-009](https://doi.org/10.1515/9783110823134-009); The contents of this volume were published simultaneously in *Semiotica* (1/3) 1979.
- Sen, Sailendra Nath (1988), *Ancient Indian History and Civilization* (Delhi: New Age International), [ark:/13960/t8gf8pz34](https://nopr.scribd.com/document/13960/t8gf8pz34).
- Sena, Gaṅgāprasād, et al. (1886–93) (eds.), *सुश्रुतसंहिता...दल्लनाचार्य-कृत-निबन्ध-संग्रह, चक्रपाणिदत्त-कृत-भानुमती-टीका...वङ्गानुवाद...इरेजि प्रतिशब्द* (Calcutta: Maṇirāma Press); Edition "g" in [HIML](https://www.himl.org/): IB, 311.

- Sharma, Har Dutt (1939), *Descriptive Catalogue of the Government Collections of Manuscripts Deposited at the Bhandarkar Oriental Research Institute, Vol. XVI, Part I, Vaidyaka* (Descriptive Catalogue of Manuscripts in the Government Manuscripts Library, XVI.I; Pune: Bhandarkar Oriental Research Institute), [ark:/13960/t0ms6rc70](https://nopr.ernet.in/handle/2015/27000/13960/t0ms6rc70), accessed 23/10/2019.
- Sharma, Priya Vrat (1972), *Indian Medicine in the Classical Age* (Varanasi: Chowkhamba Sanskrit Series Office).
- (1975), *Āyurved Kā Vaijñānik Itihās* (Jayakṛṣṇadāsa Āyurveda Granthamālā; Vārāṇasī: Caukhambā Orientalia).
- (1982), *Ḍalhaṇa and his Comments on Drugs* (Delhi: Munshiram Manoharlal).
- (1999–2001), *Suśruta-Saṃhitā, with English Translation of Text and Ḍalhaṇa's Commentary Alongwith (sic) Critical Notes*, 3 vols. (Haridas Ayurveda Series, 9; Varanasi: Chaukhambha Visvabharati).
- Shastri, R. Shama (1920) (ed.), *बोधायनगृह्यसूत्रम् The Bodhāyana Grihyasutra* (Mysore: University of Mysore), [ark:/13960/t2t492622](https://nopr.ernet.in/handle/2015/27000/13960/t2t492622).
- Shiffman, Melvin A. (2013), "History of Otoplasty: Review of Literature," in id. (ed.), *Advanced Cosmetic Otoplasty: Art, Science, and New Clinical Techniques* (Berlin, Heidelberg: Springer), chap. 5, 43–64. DOI: [10.1007/978-3-642-35431-1_5](https://doi.org/10.1007/978-3-642-35431-1_5).
- Siddiqi, Muhammad Zubayr (1959), *Studies in Arabic and Persian Medical Literature*, [ark:/13960/s25bxqt84xm](https://nopr.ernet.in/handle/2015/27000/13960/s25bxqt84xm).
- Sieler, Roman (2015), *Lethal Spots, Vital Secrets. Medicine and Martial Arts in South India* (New York: Oxford University Press), ISBN: 9780190243869.
- Singh, A. (2003), "Tantra Yukti: Method of Theorization in Ayurveda," *Ancient Science Of Life*, 22/3: 64–74.
- Singhal, G. D., et al. (1972–82), *Diagnostic [and Other] Considerations in Ancient Indian Surgery* (Varanasi: Singhal Publications); A translation of the *Suśrutasaṃhitā* in 10v.
- Sircar, Dinesh Chandra (1971), *Studies in the Geography of Ancient and Medieval India* (2nd edn., Delhi: Motilal Banarsidass), [ark:/13960/t72w2zd8w](https://nopr.ernet.in/handle/2015/27000/13960/t72w2zd8w).
- (1987), "6. Rākshashkhāli (Sundarban) Plate; Śaka 1118," *Epigraphia Indica* (1953–54), 30: 42–3, [ark:/13960/t80m25q3w](https://nopr.ernet.in/handle/2015/27000/13960/t80m25q3w).

- Śiromaṇi, Bharatacandra (1873) (ed.), *चतुर्वर्गचिन्तामणि-दानखण्डम्* (Calcutta: Asiatic Society of Bengal), [ark:/13960/t1rf9jd94](https://n2t.net/ark:/13960/t1rf9jd94).
- Sleeman, W. H. (1893), *Rambles and Recollections of an Indian Official* (London: Constable), [ark:/13960/t22c4bx7w](https://n2t.net/ark:/13960/t22c4bx7w); v. 2 at <http://n2t.net/ark:/13960/t2s52bq7w>.
- Slouber, Michael (2016), *Early Tantric Medicine: Snakebite, Mantras, and Healing in the Garuda Tantras* (New York: OUP), 392 pp., ISBN: 9780190461812.
- Smith, Brian K. (1994), *Classifying the Universe: The Ancient Indian Varna System and the Origins of Caste* (New York, Oxford: Oxford University Press), ISBN: 0-19-508498-5.
- Spencer, Walter George (1935–38), *Celsus: De Medicina. with an English Translation by W. G. Spencer*, 3 vols. (Loeb Classical Library, 292, 304, 336; Cambridge, MA; London: Harvard University Press; William Heinemann), [URL](https://n2t.net/URL), accessed 02/06/2021.
- Speziale, Fabrizio (2019), “Rasāyana and Rasaśāstra in the Persian Medical Culture of South Asia,” *History of Science in South Asia*, 7: 1–41. DOI: [10.18732/hssa.v7i0.40](https://doi.org/10.18732/hssa.v7i0.40).
- Spink, M. S., and Lewis, G. L. (1973) (eds.), *Albucasis on Surgery and Instruments: A Definitive Edition of the Arabic Text with English Translation and Commentary* (London: Wellcome Institute of the History of Medicine), [ark:/13960/t95823n1k](https://n2t.net/ark:/13960/t95823n1k).
- Srikantha Murthy, K. R. (2000–02), *Illustrated Suśruta Saṃhitā: Text, English Translation, Notes, Appendices and Index* (Jaikrishnadas Ayurveda Series, 102; 1st edn., Varanasi: Chaukhambha Orientalia).
- Steingass, F. (1930), *A Comprehensive Persian-English Dictionary Including the Arabic Words and Phrases to Be Met with in Persian Literature* (London: Kegan Paul, Trench, Trubner), [ark:/13960/s25bwz0337d](https://n2t.net/ark:/13960/s25bwz0337d); Reprint, Delhi: Oriental Reprint, 1973.
- Storey, C. A. (1971), *Persian Literature, a Bio-bibliographical Survey*. Vol. II.2: Medicine (London: Royal Asiatic Society of Great Britain and Ireland), [ark:/13960/t9v18bf68](https://n2t.net/ark:/13960/t9v18bf68).

- Strauss, Bettina (1934), "Das Giftbuch des Śānāq: eine Literaturgeschichtliche Untersuchung," *Quellen und Studien zur Geschichte der Naturwissenschaften und der Medizin*, 4/2: [89]–[152] followed by Arabic text, [ark:/13960/s2hb5j66s95](https://nbn-resolving.org/urn:nbn:de:bsz:55-13960-s2hb5j66s95).
- Suvedī, K. S., and Tivārī, N. (2000) (eds.), *सौश्रुतनिघण्टुः ग्रन्थादौ विस्तृतेन ग्रन्थ-वैशिष्ट्यप्रकाशकेनोपोद्धातेन अवसाने च द्रव्याणामनेकभाषानामावली-पर्यायसङ्ग्रहाभ्यां समलङ्कृतः सुश्रुतसंहितायां प्रयुक्तानामौषधद्रव्याणां पर्याय-गुणकर्मवर्णात्मकोऽपूर्वग्रन्थः* (Belajhuṇḍī, Dān: Mahendrasaṃskṛtaviśvavidyālayaḥ).
- Talwar, P. K., and Kacker, R. K. (1984), *Commercial Sea Fishes of India* (Calcutt: Zoological Survey of India), [ark:/13960/t5s841v5m](https://nbn-resolving.org/urn:nbn:de:bsz:55-13960-t5s841v5m).
- Tavernier, Jean-Baptiste (1684), *Collections of Travels through Turkey (sic), into Persia, and the East-Indies* (London: M. Pitt), [ark:/13960/t9g45vn74](https://nbn-resolving.org/urn:nbn:de:bsz:55-13960-t9g45vn74).
- TEI Consortium (2010), *TEI P5: Guidelines for Electronic Text Encoding and Interchange*, ed. C. M. Sperberg-McQueen et al. (Oxford, Providence, Charlottesville, Nancy: TEI Consortium), [URL](https://www.tei-c.org/).
- Thorburn, S. S. (1876), *Bannu; or Our Afghan Frontier* (London: Trübner & Co.), [ark:/13960/t39z96g7m](https://nbn-resolving.org/urn:nbn:de:bsz:55-13960-t39z96g7m); Reprinted Lahore: Niaz Ahmad, 1978.
- Tivārī, Premvatī (1990), *Āyurvedīya prasūti-tantra evaṃ strī-roga; pratham bhāga: Prasūti-tantra, dvitīya bhāga: Strī-roga* (Jayakṛṣṇadāsa Āyurvedīya Granthamālā, 41; Varanas: Caukhamba Orientalia).
- UNESCO (2013), "International Memory of the World Register Susruta Samhita (Nepal)," UNESCO, [URL](https://www.unesco.org/), accessed 11/09/2019.
- Unicode Consortium (1991), "The Unicode Standard 15.0, Newa Range," [url: https://unicode.org/charts/PDF/U11400.pdf](https://unicode.org/charts/PDF/U11400.pdf).
- Unschuld, Paul Ulrich (1984), *Medicine in China: A History of Ideas* (Berkeley: University of California Press), ISBN: 0520050231.
- Valiathan, M. S. (2007), *The Legacy of Suśruta* (Hyderabad, Chennai, etc.: Orient Longman).
- Velankar, H. D (1925–30), *Descriptive Catalogue of the Sanskr̥ta and Prākṛta Manuscripts in the Library of the Bombay Branch of the Royal Asiatic Society* (Bombay: Royal Asiatic Society, Bombay), [ark:/13960/t53g00h0n](https://nbn-resolving.org/urn:nbn:de:bsz:55-13960-t53g00h0n); Biswas #0115.

- Wall, Frank (1913), *The Poisonous Terrestrial Snakes of Our British Indian Dominions (Including Ceylon) and How to Recognize Them; With Symptoms of Snake Poisoning and Treatment* (3rd edn., Bombay: Bombay Natural History Society), [ark:/13960/t1zc8g94b](https://nbn-resolving.org/urn:nbn:in:bnhs:1913-p1).
- (1921), *Ophidia Taprobanica or the Snakes of Ceylon* (Colombo: Cottle, Government Printer), [ark:/13960/t39z9q93n](https://nbn-resolving.org/urn:nbn:in:bnhs:1921-p1).
- Whitney, William Dwight (1885), *The Roots, Verb-forms, and Primary Derivatives of the Sanskrit Language. A Supplement to his Sanskrit Grammar* (Leipzig: Breitkopf and Härtel), [ark:/13960/t3qv3p906](https://nbn-resolving.org/urn:nbn:in:bnhs:1885-p1).
- Wilson, H. H. (1823), "On the Medical and Surgical Sciences of the Hindus," *The Oriental Magazine and Calcutta Review*, 1: 207–12, 349–56, [URL](https://www.jstor.org/stable/2340000).
- Woodcock, Martin W. (1980), *Collins Handguide to the Birds of the Indian Sub-continent, Including India, Pakistan, Bangladesh, Sri Lanka and Nepal* (Collins), ISBN: 0-00-219712-X; Reprinted 1990.
- Wujastyk, Dagmar (2012), *Well-mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda* (New York: Oxford University Press). DOI: [10.1093/acprof:oso/9780199856268.001.0001](https://doi.org/10.1093/acprof:oso/9780199856268.001.0001).
- (2013a), "Perfect Medicine. Mercury in Sanskrit Medical Literature," *Asian Medicine: Tradition & Modernity*, 8/1 (Sept.): 15–40, ISSN: 1573-4218. DOI: [10.1163/15734218-12341278](https://doi.org/10.1163/15734218-12341278).
- (2019), "Iron Tonics: Tracing the Development from Classical to Iatrochemical Formulations in Ayurveda," *HIMALAYA: The Journal of the Association for Nepal and Himalayan Studies*, 39/1. DOI: [10.5281/zenodo.7746874](https://doi.org/10.5281/zenodo.7746874).
- Wujastyk, Dominik (1993), "Indian Medicine," in W. F. Bynum and Roy Porter (eds.), *Companion Encyclopedia of the History of Medicine*, i (London: Routledge), chap. 33, 755–78, ISBN: 0-415-04771-4, [URL](https://www.jstor.org/stable/2340000).
- (2000), "The Combinatorics of Tastes and Humours in Classical Indian Medicine and Mathematics," *Journal of Indian Philosophy*, 28: 479–95. DOI: [10.1023/a:1017514013759](https://doi.org/10.1023/a:1017514013759).

- Wujastyk, Dominik (2002), "Cannabis in Traditional Indian Herbal Medicine," in Ana Salema (ed.), *Āyurveda at the Crossroads of Care and Cure. Proceedings of the Indo-European Seminar on Ayurveda held at Arrábida, Portugal, in November 2001* (Lisbon: Centro de História de Além-Mar, Universidade Nova de Lisboa), 45–73, ISBN: 972-98672-5-9, [URL](#), accessed 27/05/2019.
- (2003a), "Black Plum Island," in *2nd International Conference on Indian Studies. Proceedings* (Kraków: Jagiellonian University, Institute of Oriental Philology and Księgarnia Akademicka), 637–49.
- (2003b), *The Roots of Ayurveda: Selections from Sanskrit Medical Writings* (Penguin Classics; 3rd edn., London, New York, etc.: Penguin Group), ISBN: 0-140-44824-1.
- (2004), "Agni and Soma: A Universal Classification," *Studia Asiatica: International Journal for Asian Studies*, IV–V, ed. Eugen Ciurtin: 347–70. DOI: [10.5281/zenodo.7742068](#).
- (2013b), "New Manuscript Evidence for the Textual and Cultural History of Early Classical Indian Medicine," in *Medical Texts and Manuscripts in Indian Cultural History*, ed. Dominik Wujastyk, Anthony Cerulli, and Karin Preisendanz (New Delhi: Manohar), 141–57, [URL](#).
- Wujastyk, Dominik, et al. (2020), "Suśrutasaṃhitā," PanditProject (6 Oct.), [URL](#), accessed 14/09/2022.
- Wujastyk, Dominik (2021a), "A New Translation of Carakasamhitā, Vimānasthāna, Chapter 1, Based on the Vienna Critical Edition," in Toke Lindegaard Knudsen, Jacob Schmidt-Madsen, and Sara Speyer (eds.), *Body and Cosmos. Studies in Early Indian Medical and Astral Sciences in Honor of Kenneth G. Zysk* (Leiden, Boston: Brill), chap. 6, 77–109. DOI: [10.1163/9789004438224_007](#).
- (2021b), "MS London BL H. T. Colebrooke 908," [URL](#), accessed 03/07/2021.
- (2021–), "Sushrutaproject: Version Control for Suśruta Text TEI Transcriptions: Suśruta Project Manuscript Transcriptions," University of Alberta, [URL](#), accessed 21/01/2023; archived at DOI: [10.5281/zenodo.6471655](#).

- Wujastyk, Dominik, et al. (2021–), “The Suśruta Project: The Textual and Cultural History of Medicine in South Asia Based on Newly-Discovered Manuscript Evidenc,” ed. Dominik Wujastyk, Jason Birch, Andrey Klebanov, et al., [URL](#), accessed 21/01/2023.
- Wujastyk, Dominik (2022), “The Science of Medicine,” in Gavin D. Flood (ed.), *The Wiley Blackwell Companion to Hinduism* (2nd edn., Hoboken, NJ: Wiley and Sons, Ltd.), chap. 23, 399–413, ISBN: 9781119144861. DOI: [10.1002/9781119144892.ch23](#).
- Wujastyk, Dominik, Birch, Jason, Klebanov, Andrey, et al. (2021–) (eds.), “New Digital Edition of the Suśrutasamhitā: The Suśruta Project at Sak-tumiva,” University of Alberta, [URL](#).
- Wujastyk, Dominik, Birch, Jason, Klebanov, Andrey, et al. (2023), *On the Plastic Surgery of the Ears and Nose. The Nepalese Version of the Suśrutasamhitā* (Heidelberg: Heidelberg Asian Studies Publishing), ISBN: 978-3-948791-63-6. DOI: [10.11588/hasp.1203](#).
- Wujastyk, Dominik, Pollock, Sheldon, et al. (2008–), “SARIT: Search and Retrieval of Indic Texts,” [URL](#), accessed 21/01/2023.
- Yagi, Toru (1994), “A Note on bhojya- and bhakṣya-,” in Yasuke Ikari (ed.), *A Study of the Nīlamata. Aspects of Hinduism in Ancient Kashmir* (Kyoto: Kyoto Institute for Research in Humanities, Kyoto University).
- Yano, Michio (1986), “A Comparative Study of *Sūtrasthānas*: Caraka, Suśruta, and Vāgbhaṭa,” in Teizo Ogawa (ed.), *History of Traditional Medicine: Proceedings of the 1st and 2nd International Symposia on the Comparative History of Medicine—East and West* (Osaka: Division of Medical History, the Taniguchi Foundation), 325–44.
- Zimmermann, Francis (1983), “Suśrutasamhita,” review of G. D. Singhal et al. (1972–82), *Diagnostic [and Other] Considerations in Ancient Indian Surgery* (Varanasi: Singhal Publications); A translation of the *Suśrutasamhitā* in 10v. In *Bulletin of the History of Medicine*, 57/2: 291–3, ISSN: 00075140, eprint: [44441590](#), [URL](#).
- (1999), *The Jungle and the Aroma of Meats* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 8120816188.
- Zysk, Kenneth G. (1984), “An Annotated Bibliography of Translations into Western Languages of Principle Sanskrit Medical Treatises,” *Clio Medica*, 19/3–4: 281–91.

- Zysk, Kenneth G. (1985), *Religious Healing in the Veda: With Translations and Annotations of Medical Hymns from the Rgveda and the Atharvaveda and Renderings from the Corresponding Ritual Texts* (Transactions of the American Philosophical Society; Philadelphia: American Philosophical Society), ISBN: 0871697572.
- (1986), “The Evolution of Anatomical Knowledge in Ancient India with Special Reference to Cross-cultural Influences,” *Journal of the American Oriental Society*, 106: 687–705. doi: [10.2307/603532](https://doi.org/10.2307/603532).
- (2000), *Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery* (Indian Medical Tradition; 2nd edn., Delhi: Motilal Banarsidass); First published 1991. Reprint of 1998 edition.

Materia Medica Reference Works

- ADPS Sivarajan, V. V., and Balachandran, Indira (1994), *Ayurvedic Drugs and Their Plant Sources* (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).
- AVS Warriar, P. K., Nambiar, V. P. K., and Ramankutty, C. (1994–96) (eds.), *Indian Medicinal Plants: A Compendium of 500 Species. Vaidyaratnam P. S. Varier's Arya Vaidya Sala, Kottakal* (Madras: Orient Longman).
- BIA Prater, S. H. (1993), *The Book of Indian Animals* (3rd edn., Bombay, Delhi, etc.: Oxford University Press), [ark : / 13960 / t6356w32f](#); 4th impression of 3rd corrected 1980 edition.
- Chopra Chopra, R. N., Nayar, S. L., and Chopra, I. C. (1956), *Glossary of Indian Medicinal Plants* (3rd reprint, 1992, New Delhi: Council of Scientific and Industrial Research); vol. 2: R. N. Chopra, I. C. Chopra, and Varma ([Chopra_{sup}](#)).
- Chopra IDG Chopra, R. N., Chopra, I. C., Handa, K. L., et al. (1958), *Chopra's Indigenous Drugs of India* (2nd edn., Calcutta: Dhur & Sons), [ark : / 13960 / t9673t140](#).
- Chopra_{sup} Chopra, R. N., Chopra, I. C., and Varma, B. S. (1969), *Supplement to Glossary of Indian Medicinal Plants* (Reprint 1986, New Delhi: National Institute of Science Communication), ISBN: 8185038872.
- CIPP Pillay, V. V. (2010), "Common Indian Poisonous Plants," in D. A. Warrell, T. M. Cox, and J. D. Firth (eds.), *Oxford Textbook of Medicine* (5th edn., Oxford University Press), 1371–5. DOI: [10.1093/med/9780199204854.003.090302](#).

- Dutt Dutt, Uday Chand (1922), *The Materia Medica of the Hindus...with a Glossary of Indian Plants by George King. Revised Edition...by Binod Lall Sen and Ashutosh Sen and Pulin Krishna Sen* (Krishnadas Sanskrit Studies; 3rd edn., Calcutta: Madan Gopal Dass for the Adi-Ayurveda Machine Press), [ark:/13960/t59c7tg9z](https://nopr.sri-gurukul.com/ark:/13960/t59c7tg9z); Reprinted Varanasi: Chowkhamba Saraswatibhavan, 1980.
- Dymock Dymock, William, Warden, C. J. H., and Hooper, David (1890), *Pharmacographia Indica: A History of the Principal Drugs of Vegetable Origin Met with in British India* (London, Bombay, Calcutta: Kegan Paul), [URL](https://nopr.sri-gurukul.com/URL), accessed 16/03/2023.
- GJM₁ Meulenbeld, Gerrit Jan (1974a), "Sanskrit Names of Plants and their Botanical Equivalents," in id., *The Mādhavanidāna and Its Chief Commentary: Chapters 1–10. Introduction, Translation, and Notes* (Leiden: Brill), chap. Appendix Four, 520–611, [ark:/13960/t25b8q97g](https://nopr.sri-gurukul.com/ark:/13960/t25b8q97g).
- GJM₂ Meulenbeld, Gerrit Jan (1988), "G. J. Meulenbeld's Additions to his "Sanskrit Names of Plants and their Botanical Equivalents"," in Rahul Peter Das, *Das Wissen von der Lebensspanne der Bäume: Surapālas Vṛkṣāyurveda* (Stuttgart: Franz Steiner Verlag), chap. Appendix 1, 425–65, ISBN: 9783515046633; Supplement to [GJM₁](https://nopr.sri-gurukul.com/ark:/13960/t25b8q97g).
- GVDB Singh, Thakur Balwant, and Chuneekar, K. C. (1972), *Glossary of Vegetable Drugs in Brhatrayi* (Varanasi: Chowkhamba Sanskrit Series Office), [ark:/13960/s2cvp72x58j](https://nopr.sri-gurukul.com/ark:/13960/s2cvp72x58j).
- IGP Griffiths, Mark (1994), *The New Horticultural Society Index of Garden Plants* (London: Macmillan).
- Issar Issar, T. P. (1994), *Blossoms of Bangalore* (Bangalore: T. P. Issar).
- IW Israel, Samuel, et al. (1988), *Indian Wildlife: Sri Lanka Nepal* (Insight Guides; Singapore etc.: APA Publications), ISBN: 9780245545238, [ark:/13960/s2p9d5pqd1w](https://nopr.sri-gurukul.com/ark:/13960/s2p9d5pqd1w).

- K&B Kirtikar, K. R., Basu, B. D., and an I.C.S (1987), *Indian Medicinal Plants*, ed. E. Blatter, J. F. Caius, and K. S. Mhaskar, 8 vols. (2nd edn., Dehradun: International Book Distributors); First published in Allahabad, 1918.
- NK Nadkarni, K. M. (1982), *Dr. K. M. Nadkarni's Indian Materia Medica, with Ayurvedic, Unani-tibbi, Siddha, Allopathic, Homeopathic, Naturopathic & Home Remedies, Appendices & Indexes ... in Two Volumes*, ed. A. K. Nadkarni, 2 vols. (3 ed., revised and enlarged by A. K. Nadkarni, Bombay: Popular Prakashan), ISBN: 8171541429, [URL](#); First published in 1954.
- Potter Wren, R. C. (1956), *Potter's New Cyclopaedia of Botanical Drugs and Preparations*, ed. R. W. Wren (7th edn., Rustington, Sussex: Health Science Press), [ark : / 13960 / t14n65c9g](#).
- Potter_{rev} Wren, R. C., Williamson, Elizabeth M., and Evans, Fred J. (1994), *Potter's New Cyclopaedia of Botanical Drugs and Preparations* (Saffron Walden: C. W. Daniel Company Ltd.); Reprint of revised 1988 edition.
- Reptiles Daniel, J. C. (1983), *The Book of Indian Reptiles* (Bombay: Oxford University Press).
- Trees Bole, P. V., and Vaghani, Yogini (1986), *Field Guide to the Common Trees of India* (Bombay, Delhi, Oxford, etc.: World Wildlife Fund – India and Oxford University Press), ISBN: 0-19-561595-6; 4th reprint.
- Watt_{Comm} Watt, George (1908), *The Commercial Products of India, Being an Abridgement of "the Dictionary of the Economic Products of India"* (London: John Murray), [ark : / 13960 / t8cg7dm79](#).
- Watt_{Dict} Watt, George (1889–96), *A Dictionary of the Economic Products of India* (Calcutta: Dept. Revenue and Agriculture, Government of India), [URL](#), accessed 28/04/2021.

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

- aconite leaf (?) (*viṣapatrikā*) Unknown. Cf. perhaps, *vatsanābha* (wolfsbane). Cf. [GVDB](#): 373 : 105
- amaranth (*taṇḍulīyaka*) *Amaranthus hypochondriacus*, L. See King 321, [NK](#): 1, #144, [Potter](#)_{rev}: 15. Cf. [AVS](#): 1, 121 : 98
- arjun (*arjuna*) *Terminalia arjuna*, Bedd. See [HK](#): 34
- 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
- barley (*yava*) *Hordeum vulgare*, L. See [HK](#): 79
- beautyberry (*priyaṅgu*) → *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 (*aṇśumatī*) *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*) → *śālāparṇī*. *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
- Bengal quince (*bilva*) *Aegle marmelos* (L.) Corr. See [AVS](#): 1, 62, Chevallier 159, [NK](#): 1, #62, ([MW](#): 732a) : 63, 70, 72, 76
- bitumen (*adrija*) → *śilājī*. A tar-like, black, resinous rock exudate. See [AyMahā](#): 1, 21 : 130
- black creeper (*pālindī*) *Ichnocarpus frutescens*, (L.) R.Br. or *Cryptolepis buchanani*, Roemer & Schultes. See [AVS](#): 3, 141, 145, 203, [NK](#): 1, #1283, 1210, [ADPS](#): 434. Ḍalhaṇa on SS 5.1.82 identified *pālindī* with *trivṛt* (turpeth) and T. B. Singh and 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
- blackboard tree (*saptachada*) *Alstonia scholaris* R. Br. [GVDB](#): 420 : 97
- blackbuck (*hariṇa*) *Antelope cervicapra*, L. See [BIA](#): 270 [IW](#): 95, 165, *et passim* : 101
- blue water-lily (*utpala*) *Nymphaea stellata*, Willd. See [GJM1](#): 528, [IGP](#) 790; [Dutt](#): 110, [NK](#): 1, #1726 : 25, 96, 115, 116
- bulrush (*kaśeru*) "Two species, *Scirpus kysoor* Roxb., and *S. grossus* Linn. f. are used" [GVDB](#): 85. Also *kaśeruka* and *kaseru* : 74, 75, 78
- cardamom (*elā*) *Elettaria cardamomum*, Maton. See [AVS](#): 2, 360, [NK](#): 1, #924,

- Potter**_{rev}: 66 : 70, 116, 121
- cassia cinnamon (*patra*) *Cinnamomum tamala*, (Buch.-Ham.) Nees. See **AVS**: 2, 84, **NK**: 1, #589 : 70, 76, 98, 116
- castor oil tree (*gandharvahasta*) → *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
- 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, 211
- 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
- citron (*mātuluṅga*) *Citrus medica*, Linn. **GVDB**: 276, 306. Also spelled *mātuliṅga*, *mātulaṅga*, *mātulāṅga* : 63, 76, 81, 82
- cobra’s saffron (*nāgapuṣpa*) → *nāgakeśara*. *Mesua ferrea*, L. See **NK**: 1, #1595, **GVDB**: 220 : 116
- 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, 162
- 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 : 206, 208
- 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, 206, 208
- 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
- cuscut grass (*uśīra*) *Andropogon murcatus*, Retz. Also “vetiver grass.” See **NK**: 1, #180 : 98
- datura (*dhattūra*) *Datura metel*, L. See **AVS**: 2, 305 (cf. *Abhidhānamañjarī*), **NK**: 1, #796 ff. **Potter**_{rev}: 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, 162
- 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_{rev}](#): 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 : 207
- 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. : 207, 209
- emetic nut (*madana*) *Randia dumetorum*, Lamk. See [NK](#): 1, #2091 : 96, 164
- 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
- flax (*atasī*) *Linum usitatissimum*, L. See [NK](#)#1495 : 75
- fragrant lotus (*saugandhika*) A type of *kumuda* or *utpala* ([GVDB](#): 457) : 25
- garjan oil tree (*aśvakarṇa*) *Dipterocarpus turbinatus* Gaertn. f. See [GVDB](#): 28, [Chopra](#): 100 : 120
- giant potato (*kṣīravidārī*) possibly → *kṣīraśukla*. *Ipomoea mauritiana*, Jacq. See [ADPS](#): 510, [AVS](#): 3, 222, [AVS](#): 3, 1717 ff : 75, 208, 210, 211
- ginger (*mahaṣadha*) *Zingiber officinale*, Roscoe. See [ADPS](#): 50, [NK](#): 1, #2658, [IGP](#): 1232 : 101
- 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
- hare foot uraria (*prśniparṇī*) → *sahā*? *Uraria 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, 162
- heart-leaved moonseed (*amṛtavalli*) 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, 207
- 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
- henna (*madayantikā*) *Lawsonia inermis*, L.
 See **AVS**: 3, 303, **NK**: 1, #1448,
Potter_{rev}: 151: 99
- 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: 210
- 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, 210
- 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 Chunekar
 (**GVDB**: 409). Sometimes identified
 with scutch grass (*dūrvā*) (**GVDB**: 409).
 Identified as *Ceratophyllum demersum*
 Linn. (“hornwort”) by **AVS**: 2, 56–57x:
 76, 208, 211
- hornwort (*jalaśūka*) → *jalanīlikā*.
Ceratophyllum demersum, L. See
AVS: 2, 56, **IGP**: 232. T. B. Singh and
 Chunekar (**GVDB**: 166) suggest horned
 pondweed. *Ḍalhaṇa* noted on 1.16.19
 (**Su** 1938: 79) that some people
 interpret it as a poisonous, hairy,
 air-breathing, underwater creature: 43
- horseradish tree (*śigru*) *Moringa oleifera*
 Lam. See **IGP** 759, **GJM1**: 603,
Dymock: 1, 396: 76, 77
- Indian barberry (*añjana*) → *rasāñjana*,
dāruharidrā. *Berberis aristata*, DC.
Dymock: 1, 65, **NK**: 1, #335, **GJM1**: 562,
IGP: 141: 44, 100, 207
- 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 roscoe, and
 plants like asthma plant and Gulf
 sandmat (**GVDB**: 237–238). Also
 “curds” when not a plant: 43, 76, 210
- 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*
mauritanica, Jacq: 43, 63
- 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 sarsaparilla (*sārivā*) → *anantā*. *Hemidesmus indicus*, (L.) R. Br. ADPS: 434, AVS: 3, 141–5, NK: 1, #1210; and black creeper, *pāṇḍī*. *Ichnocarpus frutescens*, (L.) R.Br. or *Cryptolepis buehneri*, Roemer & Schultes AVS: 3, 141, 3.145, 3.203, NK: 1, #1283, 1210, ADPS: 434: 115, 116, 207
- Indian snakeroot (*sarpagandhā*) *Rauvolfia serpentina*, (L.) Benth. ex Kurz. See NK: 1, #2099, ADPS: 439, GVDB: 425; cf. SS 5.5.76–78: 211
- Indrajao (*vrkṣaka*) → *indrayava*, *indrabīja*, *kaliṅga*, and *kuṭaja*. *Holarthra antidysenterica* Wall. GVDB: 376, 45 and 84: 162
- jambul (*jambū*) *Syzygium cumini*, (L.) Skeels. See ADPS: 188, NK: 1, #967, Potter_{rev}: 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_{rev}: 168: 104, 105
- (?) (*karaṭā*) Not in GVDB. Cf. perhaps *karaḥāṭa* (emetic nut) : 105
- lac (*lākṣā*) *Kerria lacca* (Kerr.). See GJM1: 445, NK: 2, #32. Watt (Watt_{Comm}: 1053–1066) is characteristically informative, and is definite about the antiquity of lac in India : 121
- leadwort (*citraka*) *Plumbago zeylanica* (or *indica*?), L. See RĀ. 6.124, ADPS: 119, NK: 1, #1966, 1967: 34, 67, 72, 82
- 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
- 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 *śāvāra*, and *S. crataegoides* Buch.-Ham. for *paṭṭikā lodhra* : 34, 116
- 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 (*mṛṇāla*) “Leaf stalk of sacred lotus” GVDB: 318: 76
- luffa (*koṣṭakī*) = *koṣṭakī*. *Luffa cylindrica*, (L.) M. J. Roem. or *L. acutangula*, (L.) Roxb. ADPS: 252–253, NK: 1, #1514 etc. GVDB: 121: 97, 114, 209
- luffa gourd (*koṣavatī*) = *koṣṭakī*, luffa : 114
- 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, 209
- medhshingi (*vijayā*2) *Dolichandrone falcata* (DC.) The *Sauśrutaniḥaṇṭu* gives a number of synonyms for *vijayā* (Suvedī and Tivārī 2000: 5.77, 10.143). But one of them, *viśāṇī* (also *meṣāśṛṅgī*), 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
- 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, 211
- mongoose (*nakula*) *U. 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
- mung beans (*mudga*) *Phaseolus radiatus* L. GVDB: 310–311: 75, 78, 146
- mung beans (*māṣaka*) *Phaseolus mungo* Linn. GVDB: 308: 98
- myrobalan (*abhayā*) *Terminalia chebula*, Retz. See ADPS: 172, NK: 1, #2451, Potter_{rev}: 214: 67, 114, 121
- 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 Chuneekar (GVDB: 108) added that it could be a variety of rice, *ṣaṣṭika dhānya* : 120
- nutgrass (*mustā*) *Cyperus rotundus*, L. See ADPS: 316, AVS: 2, 296, NK: 1, #782:
- 210
- 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, 208
- peas (*hareṇu*) *hareṇu* = *satina*. *Pisum sativum*, L. T. B. Singh and Chuneekar (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 (*meṣaśṛṅga*) *Gymnema sylvestre* (Retz.) R. Br. See AVS: 3, 107, NK: 1, #1173: 100
- 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) : 208
- 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.: 212
- 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 (*dāḍīma*) *Punica granatum*

- Linn. [GVDB](#): 201–202 : 63, 81, 82
 pondweed (*paripelavā*) Normally a neuter noun. T. B. Singh and Chuneekar ([GVDB](#): 238, 264–265, 409) argued that *plava* and *śaivāla* are the same thing, and may be either *Zannichellia palustris*, L., or *Potamogeton pectinatus*, L.: 116
 pondweed (*śevāla*) *Zannichellia palustris* L. See horned pondweed : 25
 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
 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^{rev}](#): 57, [Chopra IDG](#): 305–308 : 34, 43, 72
 purple roscoea (*kṣīrakākolī*) [GVDB](#): 89 notes that many physicians use *Roscoea procera* Wall. in this context. But the identification is uncertain. Possibly connected to milk-white or giant potato : 75, 208, 210
 radish (*mūlaka*) *Raphanus sativus*, L. See [NK](#): 1, #2098 : 79, 80
 rajmahal hemp (*moraṭa*) → *mūrōi*, *Marsdenia tenacissima* (Roxb.) Wight et Arn. Good discussion at [GVDB](#): 314–316, 324 : 114
 red chalk (*gairika*) *gairika* : 116
 red gourd (*bimbī*) *Coccinia indica*, W. & A. See [PVS](#) 1994.4.715; [NK](#): 1, #534 : 97
 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, [Watt^{Comm}](#): 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 : 209
 sacred lotus (*padma*) *Nelumbo nucifera*, Gaertn. See [NK](#): 1, #1698 : 25, 76, 98
 sage-leaved alangium (*aṅkolla*) *Alangium salvifolium* (Linn. f.) Wang. [GVDB](#): 5–6 : 97
 sandalwood (*candana*) *Santalum album*, L. See [ADPS](#): 111, [NK](#): 1, #2217 : 76, 78, 116
 sappanwood (*pattāṅga*) Also *pattāṅga*. *Caesalpinia sappan*, L. [AVS](#): 1, 323, [K&B](#): 2, 847 f, [GVDB](#): 234 : 44
 scarlet mallow (*bandhujīva*) *Pentapetes phoenicea*, L. [NK](#): #1836, [GVDB](#): 268 : 99
 scented pavonia (*bālaka*) *Pavonia odorata*, Willd. See [ADPS](#): 498, [NK](#): 1, #1822 : 116
 scutch grass (*dūrvā*) *Cynodon dactylon* (Linn.) Pers. ([GVDB](#): 205) : 208
 selu plum (*selu*) *Cordia myxa*, L. non Forssk. See [GJM1](#): 529 (2), [IGP](#): 291b, cf. [AVS](#): 3, 1677 f; cf. [AVS](#): 2, 180 (C. *dichotoma*, Forst.f.), [NK](#): 1, #672 (C. *latifolia*, Roxb.) : 77, 114
 sesame oil (*taila*) *Sesamum indicum* L. [GVDB](#): 183 : 43
 siris (*śirīṣa*) *Albizia lebbbeck*, Benth. See [AVS](#): 1, 81, [NK](#): 1, #91 : 114
 siris seeds (*śirīṣamāṣaka*) *Albizia lebbbeck*, Benth. See [AVS](#): 1, 81, [NK](#): 1, #91 : 97
 small-flowered crape myrtle (*sidhraka*) *Lagerstroemia parviflora* Roxb. See [GVDB](#): 432 : 120
 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
 spikenard (*māṃsī*) *Nardostachys grandiflora*, DC. See [NK](#): 1, #1691 : 116
 spikenard (*nalada*) → *māṃsī*. *Nardostachys grandiflora*, DC. See

- NK: 1, #1691: 95
strychnine tree (*viṣamuṣṭika*) *Strychnos nux vomica* Linn. **GVDB**: 373: 210
sugar (*sitā*) *Dalhana* 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
sweet flag (*vacā*) *Acorus calamus* Linn. See **GVDB**: 352–355: 75, 82
sweet plants (*madhuravarga*) The sweet plants are enumerated at *Suśrutasaṃhitā* 1.42.11. See also **GVDB**: 127: 43
sweet-scented oleander (*aśvamāraka*) *Nerium oleander*, L. See **ADPS**: 223, **NK**: 1, #1709: 104
Tellicherry bark (*kuṭaja*) *Holarrhena pubescens* Wall. ex G. Don, with *Wrightia tinctoria* and *W. arborea* considered **GVDB**: 101–102, **ADPS**: 267–270: 72, 207
thorn apple (*karambha*) *Datura metel*, L. See **GVDB**: 76 for useful discussion. Also, **AVS**: 2, 305 (cf. *Abhidhānamāñjarī*), **NK**: 1, #796 ff. **Potter**_{rev}: 292 f, **ADPS**: 132. Possibly the same plant as plumed cockscomb (*indīvara*) (**GVDB**: 76, 44–45): 105, 210
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, 212
tree cotton (*picu*) See tree cotton (*kārpāsa*): 42, 44
turmeric (*gaūrī*) *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, 164, 205
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, 211
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 (*phañjī*) *Clerodendrum serratum*, L. See **AVS**: 2, 121, **ADPS**: 87: 99
watered buttermilk (*udaśvit*) **MW**: 183: 97
weaver's beam tree (*muṣkaka*) *Schrebera swietenoides*, Roxb. See **AVS**: 5, 88, Lord, **NK**: 1, #2246: 72, 120
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 (*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 (*kiṇihī*) 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, 213
- wild celery (*agnika*) → may be *bhalātaka*, *lāṅgalī*, *ajamodā*, *moraṭa*, or *agnimanthā*, [GVDB](#): 4. Uncertain: 114
- wild celery (*ajamodā*) Apium graveolens, L.: 114
- Withania (*aśvagandhā*) 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_{rev}](#): 4 f. Or Aconitum chasmanthum Stapf ex Holmes, [GVDB](#): 357: 205
- 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
- yellow-berried nightshade (*kṣudrā*) Solanum virginianum, L. See [ADPS](#): 100, [NK](#): 1, #2329, [AVS](#): 5, 164: 115, 116

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ajagara (the goat swallower): 132

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apuṣpa (the grass flower): 131

babhru (the brown): 132

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giving off fumes (*paridhūpana*): 134

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kaśāya (the ochre): 132

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khaṇḍaphaṇa (the break hood): 131

kikkisāda (the worm eater): 132

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kṛṣṇasarpa (the black snake): 131

kṛṣṇodara (the black belly): 131

kṣīrikāpuṣpa (the milk flower): 132

kūkuṭa (the kūkuṭa): 131

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mahāpanasaka (the big jackfruit): 131

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mākuli (*mākuli*): 133

mākuli (*mākuli*): 133

mākuli (*mākuli*): 132

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 the straight snake (*rjusarpa*): 131
 the stretch (*tantuka*): 131
 the stripe speckle (*rājicitra*): 132
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veṇupatraka (the bamboo leaf): 131
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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 https://hindi.shabd.in/vairagya-shatakam-bhagacharya-arjun-tiwari/post/117629 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. . . .	140
■ maṣi burned charcoal. Find refs.	140
■ find ref.	145
■ Check out these refs.	146
■ meaning of kalpa	146
■ or a dual?	151
■ 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...dvādaśādhikāḥ)? not clear to me, is it dvādaśādhikāḥ?	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)	163
■ See chapter 40 of Sūtrasthāna.	164
■ vasā / medas / majjan	164
■ Does bhūtādi a compound or it means ahaṅkāra or ego?	165

