

A Translation of the New Edition of the *Suśrutasamhitā*

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Sūtrasthāna, adhyāya 13: On Leeches

Literature

Previous scholarship

Meulenbeld offered an annotated overview of this chapter and a bibliography of studies on Indian leeches and their application.⁴⁹

A Persian version of this chapter of the *Suśrutasamhitā* was included in *Sikandar Shāh's Mine of Medicine* (*Ma'dīn al-shifā' i Sikandar-Shāhī*) composed in 1512 by Miyān Bhūwah b. *Khawāṣṣ Khān*.⁵⁰

More recently, Brooks has explored the sense of touch in relation to leeching and patient-physician interactions.⁵¹

Translation

- 1 And now we shall explain **the chapter** about leeches.
- 3 The leech is for the benefit of kings, rich people, delicate people, children, the elderly, fearful people and women. It is said to be the most gentle means for letting blood.
- 4 In that context, one should let blood that is corrupted by wind, bile or phlegm with a horn, a leech, or a **gourd**, respectively. Or, each kind can be made to flow by any of them in their particular way.⁵²
- 5x And there are the following about this:

49 HIML: IA, 209; IB, 324, n. 131.

50 Siddiqi 1959: 96–109; Azeez Pasha 1971; Storey 1971: 231–232; HIML: IB, 324, n. 128; Speziale 2019: 8–9.

51 Brooks 2020a,b,c.

52 This sentence is hard to construe grammatically, although its meaning seems clear. In place of विशेषस्तु, Cakrapāṇidatta and Ḍalhaṇa both read विशेषतस्, which helps interpretation (Su 1939: 95, Su 1938: 55). It is noteworthy that the critical syllable स्तु is smudged or corrected in both MS Kathmandu NAK 1-1079 and in 1-1146, a much later Devanāgarī manuscript.

There is an insertion in the text, printed in parentheses in the vulgate at 1.13.4 (Su 1938: 55) as विशेषतस्तु विस्त्रव्यं शृङ्गजलौकालाबुभिर्गृहीयात्. This insertion is not included in the earlier edition of the vulgate, but is replaced by स्निग्धशीतरूक्षत्वात् (Su 1931: 54). Ḍalhaṇa noted that, “this reading is discussed to some extent by some compilers (निबन्धकार), but it is definitely rejected by most of them, including Jejjhaṭa.”

- 1.13.5 The horn of cows is praised for being unctuous, **smooth**, and very sweet. Therefore, when wind is troubled, that is good for bloodletting.⁵³
- 1.13.5a Having a length of seven fingers and a large body the shape of a half moon, should first be placed into a cut. A strong person should suck with the mouth.⁵⁴
- 6 A leech lives in the cold, is sweet and is born in the water. So when someone is afflicted by bile, they are suitable for bloodletting.⁵⁵
- 7 A **gourd** is well known for being pungent, dry and sharp. So when someone is afflicted by phlegm it is suitable for bloodletting.
- 8 In that context, at the scarified location one should let blood using a horn wrapped in a covering of a thin bladder, or with a **gourd** with a flame inside it because of the suction.⁵⁶
- 9 Leeches are called “*jala-ayu-ka*” because water (*jala*) is their life (*āyur*).⁵⁷ “Home” (*okas*) means “dwelling;” their home is water, so they are called “water-dwellers (*jalaaukas*).”
- 10 There are twelve of them: six are venomous and just the same number are non-venomous.
- 11 Here is an explanation of the poisonous ones, together with the therapy:
- Black (*kṛṣṇā*)
 - Mottled (*karburā*)
 - Sting-gush (*alagarddā*)⁵⁸

53 The vulgate replaced “smooth” with “hot.”

54 This passage is not found in the vulgate, but it is similar to the passage cited by Ḍalhaṇa at 1.13.8 (Su 1938: 56) and attributed to Bhāluki. Bhāluki was the author of a *Bhālukitantra* that may have predated Jeṇḍaṭa and might even have been one of the sources for the *Suśrutasaṃhitā* (HIML: v. IA, 689–690 *et passim*). The editor Ācārya was aware of this reading in the Nepalese manuscripts; see his note 4 on 1.13.5 (Su 1938: 55, note 4).

55 Note that the particular qualities (*guṇas*) of the leech in this and the following verses counteract the quality of the affliction. See Brooks 2018: 113, table 1.

56 There are questions about the wrapping or covering of the horn. Other versions of the text, and the commentator, propose that there may be two coverings, or that cloth may be a constituent. Comparison with contemporary horn-bloodletting practice by traditional Sudanese healers suggests that a covering over the top hole in the horn is desirable when sucking, to prevent the patient’s blood entering the mouth (PBS 2020). Our understanding of this verse is that the bladder material is used to cover the mouthpiece and then to block it, in order to preserve suction in the horn for a few minutes while the blood is let.

57 This is a folk etymology.

58 Treating गर्दा as गल्दा and translating as in RV 8.1.20, with Jamison and Brereton

- Rainbow (*indrāyudhā*)
- Oceanic (*sāmudrikā*)
- **Cow-praising** (*govandanā*)⁵⁹

Amongst these,

- The one called a Black is the colour of kohl and has a broad head;
- The one called Mottled is like the **Indian mottled eel**, long with a segmented (*chinna*), humped belly.
- The one called Sting-gush is hairy, has large sides and a black mouth.
- The one called Rainbow is coloured like a rainbow, with vertical stripes.
- The one called Oceanic is slightly blackish-yellow, and is covered with variegated flower patterns.
- The one called Govandana is like a cow's testicles, having a bifurcated form on the lower side, and a tiny mouth.

When someone is bitten by them, the symptoms are: a swelling at the site of the bite, excessive itching and fainting, fever, a temperature, and vomiting. In that context the Great Antidote (*mahāgada*) should be applied in drinks and liniments (*ālepana*), etc.⁶⁰ A bite by the Rainbow leech is not treatable. These venomous ones have been explained together with their remedies.

12 Now the ones without poison.⁶¹

- Tawny (*kapilā*)
- Ruddy (*piṅgalā*)
- Dart-mouth (*śaṅkumukhī*)
- Mouse (*mūṣikā*)
- Lotus-mouth (*puṇḍarīkamukhī*)
- Sāvarikā (*sāvarikā*)

Amongst these,

(2014: 1023, verse 20 and cf. commentary). But if गर्द is to be taken from $\sqrt{\text{गर्द}}$ then we might have “crying from the sting.”

59 The manuscripts all read गोवन्दना against the vulgate's गोचन्दना.

60 The “Great Antidote” is described in the Kalpasthāna, at 5.5.61–63ab (Su 1938: 578). Ḍalhaṇa and the vulgate included errhines in the list of therapies, and Ḍalhaṇa added that “etc.” indicated showers and baths too.

61 The translations of the names of these leeches are slightly whimsical, but give a sense of the original; *sāvarikā* remains etymologically puzzling.

- The one called Tawny has sides that look as if they are dyed with realgar and is the colour of glossy mung beans on the back.⁶²
- The one called Ruddy is a bit red, has a round body, is yellowish, and moves fast.
- The one called Dart-mouth is the colour of liver, drinks fast and has a long mouth.
- The one called Mouse is the colour and shape of a mouse and has an undesirable smell.
- The one called Lotus is the colour of mung beans and has a mouth that looks like a lotus.
- The one called Sāvarikā has the colour of a lotus leaf and is eighteen centimetres long. But that one is used when the purpose is an animal.

The non-venomous ones have been explained.

13 Their lands are Yavana, Pāṇḍya, Sahya, Potana and so on.⁶³ Those in

62 The compound *स्निग्धमुद्गवर्णा* is supported by all the manuscript witnesses and is translated here. Nevertheless, the reading of the vulgate, that separates *स्निग्धा*, f., “slimy” as an adjective for the leech, seems more plausible: “it is slimy and the colour of a mung bean.”

63 This passage is discussed by Karttunen (2015: 109–110, 388–389). At the time of the composition of the *Suśrutasamhitā*, Yavana would most likely have referred the Hellenistic Greek diaspora communities in Bactria and India (Law 1984: 136–137; Mairs 2013; 2014). Unproblematically, the Pāṇḍya country is the extreme south-eastern tip of the Indian subcontinent (Schwartzberg, Bajpai, et al. 1978: E8, p. 20 *et passim*), and Sahya refers to the Western Ghats (Schwartzberg, Bajpai, et al. 1978: D5–7, p. 20 *et passim*). The vulgate reading “Pautana” is not a known toponym. Potana was the ancient capital of the Aśmaka Mahājanapada mentioned in Pali sources and in inscriptions at Ajāntā and elsewhere, and identified by Law (1984: 142, 179) and P. Gupta (1989: 18) with Pratiṣṭhāna, modern Paithan on the Godavari river. The recurring ancient epithet describing the Aśmaka kingdom is that it was on the Godāvarī, and Paithan is flanked to the south west and south east by this river.

Some scholars have identified the name with modern Bodhan in Telangana (Sircar 1971: 189; Schwartzberg, Bajpai, et al. 1978: E6, p. 14, 140 *et passim*; Sen 1988: 102), but this implausible identification is traceable to a speculative suggestion by Raychaudhuri (1953: 89, n. 5, 143) based on a variant form “Podana” found in some early manuscripts of the *Mahābhārata*: “This name reminds one of Bodhan in the Nizam’s dominions,” “possibly to be identified with Bodhan.”

Ḍalhaṇa on 1.13.13 (Su 1938: 57) anachronistically identified “Yavana” as the land of the Turks (तुरुष्क) and “Pautana” as the Mathurā region. He also noted, as did Cakra-pāṇidatta, that this passage was not included by some authorities on the grounds that the habitats of poisonous and non-poisonous creatures are defined by other criteria.

particular have large bodies and are strong, they drink rapidly, consume a lot, and are without venom.

Editions and Abbreviations

- Ah 1939 Kumṭe, Aṇṇā Moreśvara, Navare, Kṛṣṇaśāstrī, and Parādkar, Hariśāstrī (1939) (eds.), श्रीमद्वाग्भटविरचितम् अष्टाङ्गहृदयम्, श्रीमदरुणदत्तविरचितया सर्वाङ्गसुन्दराख्यया व्याख्यया, हेमाद्रिप्रणीतया आयुर्वेदरसायनाह्वया टीकया च समुल्लसितम् = *The As-tāṅgahṛidaya* (6th edn., Mumbayyām: Nirṇayasāgara Press), 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, Anaṃta Dāmodara (1980) (ed.), अष्टाङ्गसङ्ग्रहः श्रीमद्द्ववाग्भटविरचितः इन्दुव्याख्यासहितः [= *Vāgbhaṭa's Aṣṭāṅgasaṅgraha with Indu's Commentary*] (Pune: M. A. Āṭhavale, Śrīmad Ātreya Prakāśanam), ark:/13960/s25bwqsd0n7.
- Bhela 1921 Mookerjee, Ashutosh, and Ananta Krishna Shastri, Ved-antabisharad (1921) (eds.), *The Bhela Samhita. Sanskrit Text* (Calcutta: University of Calcutta), ark:/13960/t3sv3157j; Based on two copies made of the Thanjavur codex unicus (MS Thanjavur TMSSML 10773, Burnell 1880: 63–4, P. P. S. Sastri 1933: #11085).
- Bhela 2000 Krishnamurthy, K. H. (2000), *Bhela-saṃhitā. Text with English Translation, Commentary and Critical Notes* (Haridas Ayurveda Series, 8; Varanasi: Chaukhambha Visvabharati).
- BL *British Library.*
- Ca. 1941 Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसं-स्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलित्ता (3rd edn., Mumbayyām: Nirṇaya Sagara Press), ark:/13960/t48q2f20n.

HIML	Meulenbeld, Gerrit Jan (1999–2002), <i>A History of Indian Medical Literature</i> , 5 vols. (Groningen: E. Forsten), ISBN: 9069801248.
IOLR	Eggeling, Julius, et al. (1887–1935), <i>Catalogue of the Sanskrit Manuscripts in the Library of the India Office</i> (London: Secretary of State for India), ark:/13960/s2k5zcrg9 .
KL	<i>Kaiser Library</i> .
MN ₁	Ācārya, Yādavaśarma Trivikrama (1920) (ed.), महामतिश्री-माधवकरप्रणीतं माधवनिदानम् श्रीविजयरक्षित-श्रीकण्ठदत्ताभ्यां विरचितया मधुकोशाख्यव्याख्या, श्रीवाचस्पतिवैद्यविरचितया आतङ्कदर्पणव्याख्या विशिष्टांशेन च समुल्लसितम् = <i>Mādhavanidāna by Mādhavakara with the Two Commentaries, Madhukosha by Vijayarakshita & Shrikanthadatta and Ātānkadarpaṇa by Vāchaspati Vaidya</i> (1st edn., Bombay: Nirnaya Sagara Press), ark:/13960/t9z08jn5j .
MN ₃	Ācārya, Yādavaśarma Trivikrama (1932) (ed.), महामतिश्री-माधवकरप्रणीतं माधवनिदानम् श्रीविजयरक्षित-श्रीकण्ठदत्ताभ्यां विरचितया मधुकोशाख्यव्याख्या, श्रीवाचस्पतिवैद्यविरचितया आतङ्कदर्पणव्याख्या विशिष्टांशेन च समुल्लसितम् = <i>Mādhavanidāna by Mādhavakara with the Two Commentaries, Madhukosha by Vijayarakshita & Shrikanthadatta and Ātānkadarpaṇa by Vāchaspati Vaidya</i> (3rd edn., Bombay: Nirnaya Sagara Press), ark:/13960/t66452x0h ; Reprinted Varanasi: Chowkhambha, 1986.
MW	Monier-Williams, Monier, Leumann, E., Cappeller, C., et al. (1899), <i>A Sanskrit–English Dictionary Etymologically and Philologically Arranged, New Edition</i> (Oxford: Clarendon Press); 1970 reprint.
NAK	<i>National Archives of Kathmandu</i> .
NCC	Raghavan, V., et al. (1949–), <i>New Catalogus Catalogorum, an Alphabetical Register of Sanskrit and Allied Works and Authors</i> , 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](#).
- RORI *Rajasthan Oriental Research Institute*.
- Su 1889 Bhaṭṭācāryya, Jīvānanda Vidyāsāgara (1889) (ed.), सुश्रुतः सूत्र-निदान-शारीर-चिकित्सा-कल्पोत्तर-तन्त्र-कल्पित आयुर्वेद. भगवता धन्वन्तरिणोपदिष्टः सुश्रुतनामधेयेन तच्छिष्येण विरचितः (3rd edn., Calcutta: Saratī Press), [ark:/13960/t1nh6j09c](#); [HIML](#): IB, 311, edition b.
- Su 1915 Ācārya, Yādavaśarma Trivikrama (1915) (ed.), सुश्रुतसंहिता, सुश्रुतेन विरचिता, वैद्यवरश्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया समुल्लसिता, आचार्योपाह्वेन त्रिविक्रमात्मजेन यादवशर्मणा संशोधिता = *The Sushrutasamhita of Sushruta, the Nibandhasangraha Commentary of Shri Dalhaṇāchārya* (Mumbayyām: Nirṇaya-sāgaramudrāyantrālaye), [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](#), accessed 09/06/2020; [HIML](#): IB, 312 edition *v.
- Su 1938 Ācārya, Yādavaśarma Trivikrama, and Ācārya, Nārāyaṇa Rāma (1938) (eds.), श्रीडल्हणाचार्यविरचितया निबन्धसंग्रहाख्यव्याख्यया निदानस्थानस्य श्रीगयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिका-व्याख्यया 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 निबन्धसंग्रहाख्यव्याख्याया निदानस्थानस्य श्री-
गयदासाचार्यविरचितया न्यायचन्द्रिकाख्यपञ्जिकाव्याख्याया 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-saṁhitā (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, Nārāya-
ṇa Rāma (1945) (eds.), महर्षिणा सुश्रुतेन विरचिता सुश्रुतसंहिता (मू-
लमात्रा). पाठान्तर-परिशिष्टादिभिः संवलिता = *the Suśrutasaṁhitā of Su-
śruta 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 = [*Viṣṇudharmottarapurāṇa*]
(Mumbai: Khemarāja Śrīkrṣṇadāsa 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.

Index of Manuscripts

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Thanjavur TMSSML 10773: 76

References

- Ācārya, Yādavaśarma Trivikrama (1941) (ed.), महर्षिणा पुनर्वसुनोपदिष्टा, तच्छिष्येणाग्निवेशेन प्रणीता, चरकदृढबलाभ्यां प्रतिसंस्कृता चरकसंहिता, श्रीचक्रपाणिदत्तविरचितया आयुर्वेददीपिकाव्याख्यया संवलिता (3rd edn., Mumbayyām: Nirṇaya Sagara Press), [ark:/13960/t48q2f20n](https://nirṇaya.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://nirṇaya.org/ark:/13960/t8kd4jh7n).
- Acharya, Diwakar (2012), “Description of Microfilm A 45/5,” NGMCP, [URL](https://ngmcp.org/), 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.
- Adriaensen, Rob C. R., 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.
- Āgāṣe, Ve. Śā. Rā. Rā. Kāśīnātha Śāstrī, and Āpaṭe, Hari Nārāyaṇa (1904) (eds.), वाचस्पतिमिश्रविरचितटीकासंवलितव्यासभाष्यसमेतानि पातञ्जलयोगसूत्राणि तथा भोजदेवविरचितराजमार्तण्डाभिधवृत्तिसमेतानि पातञ्जलयोगसूत्राणि (Ānandāśramasaṃskṛtagranthāvaliḥ, 47; Puṇyākhyā-pattana: Ānandāśramamudraṇālaya), [ark:/13960/t40s27g36](https://nirṇaya.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).

- 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/10.13960/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/10.13960/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.
- Bhattarai, Bidur (2020), *Dividing Texts. Conventions of Visual Text-Organisation in Nepalese and North Indian Manuscripts* (Studies in Manuscript Cultures; Berlin/Boston: de Gruyter), 388.
- 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/a13733](https://doi.org/10.20935/a13733).
- 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://doi.org/10.13960/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/a1291](https://doi.org/10.20935/a1291); 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).
- (2020a), "A Surgeon's Hand: Reflections on Surgical Tactility in Early Ayurveda," *Asian Medicine*, 15/1: 30–62. doi: <https://doi.org/10.1163/15734218-12341460>, [URL](#).
- (2020b), "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).
- (2020c), "Whose Life is Water, Whose Food is Blood: Fluid Bodies in Ayurvedic 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).
- 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).

- Burghart, Marjorie (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](#); Bheḷas-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](#), 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](#).
- 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](#), accessed 02/01/2020; Reprinted in Roṣu 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).
- Dave, K. N. (1985), *Birds in Sanskrit Literature* (Delhi: Motilal Banarsidass), ISBN: 0-89581-676-8, [ark:/13960/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 Tikkani* (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](#).
- Eaton, Richard M. (1993), *The Rise of Islam and the Bengal Frontier, 1204–1760* (Berkeley: University of California Press), [ark:/13030/ft067n99v9/](https://nbn-resolving.org/urn:nbn:uk:2019-06-13030-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](https://doi.org/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/s2kbbk5zcrg9](https://nbn-resolving.org/urn:nbn:uk:2019-06-13960-s2kbbk5zcrg9/).
- 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).
- Emeneau, M. B. (1969), "Sanskrit Syntactic Particles – "kila, khalu, nūnam"," *Indo-Iranian Journal*, 11/4: 241–68.
- 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*: 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.

- 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.
- Froese, R., and Pauly, D. (2022) (eds.), "Fishbase: The Global Encyclopedia about Fish," [URL](#).
- Gaṇapatiśāstrī, T. (1920–25), *Āryamañjuśrīmūlakalpāḥ* (Trivandrum Sanskrit Series, 70; Anantaśayane: Rājakīyamudraṇayantrālaye), [ark:/13960/t4pk5sj0j](#).
- 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](#), 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](#).
- 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.

- Harimoto, Kengo (2014), "Nepalese Manuscripts of the Suśrutasaṃhitā," *Journal of Indian and Buddhist Studies (Indogaku Bukkyogaku Kenkyu)*, 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 मारीच-कश्यपेनोपदिष्टा ... हेमराजशर्मणा लिखितेन विस्तृतेन उपोद्धातेन सहिता ... सत्यपाल भिषगा कृतया विद्योतिनी हिन्दीव्याख्यया ... समुल्लसिता (1st edn., Mumba: Nirṇayasāgara Press), [ark:/13960/t3mw5gb9p](https://niray.org/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 Ayurvēdas: 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://niray.org/ark:/13960/t17m45r97).
- 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://niray.org/ark:/13960/t05z1bg4q).
- (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://niray.org/ark:/13960/t8pd1kw9r), 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, 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, accessed 25/06/2019.

- Hoernle, A. F. Rudolf (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](#), 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](#).
- Hofer, Theresia (2007), "Swami Laxmi Ram's Ayurvedic Pharmacy in Jaipur, India," *Wellcome History*, 34: 2–3, [URL](#), 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](#).
- Jack, David Morton (1884), "A Thesis on Cataract in India: Its Pathology and Treatment," Wellcome Library, London, MS 3007, [URL](#), 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/>.
- Jośī, Veṇīmādhavaśāstrī, and Jośī, Nārāyaṇa Harī (1968), आयुर्वेदीय महा-कोशः अर्थात् आयुर्वेदीय शब्दकोशः संस्कृत-संस्कृत (Mumbai: Mahārāṣṭra Rājya Sāhitya āṇi Saṃskṛti Maṇḍala), [ark:/13960/t22c41g8t](#).
- Kangle, R. P. (1969), *The Kauṭīliya Arthaśāstra* (2nd edn., Delhi: Motilal Banarsidass), ISBN: 81-208-0042-7, [ark:/13960/t3gz6qh1s](#), 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](#); 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](#), accessed 25/06/2019, in *Zeitschrift Der Deutschen Morgenländischen Gesellschaft*, 1/62: 134–9, [URL](#), accessed 17/04/2021.

- Klebanov, Andrey (2010), "The *Nepalese Version of the Suśrutasaṃhitā and Its Interrelation with Buddhism and the Buddhists," MA thesis (Hamburg: Hamburg University, Sept.), [URL](#), accessed 08/09/2019.
- (2012), "Description of microfilm B 29/19," NGMCP, [URL](#), accessed 27/02/2023.
- (2021a), "On the Textual History of the Suśrutasaṃhitā (1): A Study of Three Nepalese Manuscripts," *eJIM: Electronic Journal of Indian Medicine*, 12/1: 1–64. doi: [10.21827/ejim.12.1.37385](#).
- (2021b), "On the Textual History of the Suśrutasaṃhitā, (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/wzksls27](#), [URL](#).
- Lariviere, Richard W. (2003), *The Nāradaśmṛti. 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.
- 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.

- Li, Charles (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: Archæology, Language, and Identity in Greek Central Asia: Archæology, 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](#).

- 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](#), accessed 31/01/2023.
- 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](#), accessed 04/10/2021.
- Masai, François (1950), "Principes et conventions de l'édition diplomatique," *Scriptorium*, 4: 177–93. doi: [10.3406/scrip.1950.2294](#).
- Mayrhofer, Manfred (1953–72), *Kurzgefaßtes etymologisches Wörterbuch des Altindoarischen; a Concise Etymological Sanskrit Dictionary* (Heidelberg: Carl Winter, Universitätsverlag).
- (1986–2001), *Etymologisches Wörterbuch des Altindoarischen* (Heidelberg: Carl Winter, Universitätsverlag), ISBN: 3-533-03826-2.
- McHugh, James (2021), *An Unholy Brew: Alcohol in Indian History and Religions* (New York: Oxford University Press), 416 pp., ISBN: 9780199375936.
- 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](#).
- (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.
- (1992), "The Characteristics of a Doṣa," *Journal of the European Āyurvedic Society*, 2/1: 1–5, [ark:/13960/t8hf69z8j](#).

- Meulenbeld, Gerrit Jan (2008), *The Mādhavanidāna with "Madhukośa," the Commentary by Vijayarakṣita 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-/mūr̥ch," *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.
- 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.
- NGMCP (2014), "Nepal-german Manuscript Cataloguing Project. Online Title List and Descriptive Catalogue," Universität Hamburg and Deutsche Forschungsgemeinschaft, [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 (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](#).
- 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](#).
- 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](#), [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](#).

- 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://nopr.scribd.org/handle/123456789/13960/t88h7763b).
- Rama Sastri and Krishnamurthi Sastri, S. R. (1952) (eds.), *पातञ्जलयोग-सूत्रभाष्यविवरणम्। (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://nopr.scribd.org/handle/123456789/13960/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://nopr.scribd.org/handle/123456789/13960/t64511t6v), accessed 13/09/2019.
- Raychaudhuri, Hemachandra (1953), *Political History of Ancient India* (Calcutta: University of Calcutta), [ark:/13960/s25hz0hz29p](https://nopr.scribd.org/handle/123456789/13960/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://nopr.scribd.org/handle/123456789/12148/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://nopr.scribd.org/handle/123456789/13960/t4nk3nc12).
- Rimal, Madhusudana, and Wujastyk, Dominik (2022), “MS Kathmandu NAK 1/1146,” Pandit Project (18 May), [URL](https://panditproject.org/).
- Roelli, Philipp (2020) (ed.), *Handbook of Stemmataology* (Berlin: De Gruyter). doi: [10.1515/9783110684384](https://doi.org/10.1515/9783110684384).
- Roelli, Philipp, and Macé, Caroline (2015), “Parvum Lexicon Stemmataologicum. A Brief Lexicon of Stemmataology.” 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).

- 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, Kamasutra, Vaidya & Jyotisa, nos. 10650–11737* (Srirangam: Sri Vani Vilas Press), [ark:/13960/t3nw8bc12](https://nbn-resolving.org/urn:nbn:in:nlm-full-text-pro-13960-t3nw8bc12).
- Śāstrī, Vardhamāna Pārśvanātha (1940) (ed.), *उग्रादित्याचार्यकृत कल्याणकारक (राष्ट्रभाषानुवादसहित) = The Kalyāṇa-kāraṇam of Ugrādityacharya, Edited with Introduction, Translation, Notes, Indexes and Dictionary* (Sakhārāma Nemacanda Gramthamālā, 129; Solāpura: Seṭha Goviṃdajī Rāvajī Doṣī), [ark:/13960/t2q617g4d](https://nbn-resolving.org/urn:nbn:in:nlm-full-text-pro-13960-t2q617g4d).
- Schwartzberg, Joseph E., Bajpai, Shiva G., et al. (1978) (eds.), *A Historical Atlas of South Asia* (Chicago: University of Chicago Press), [URL](https://www.oxfordreference.com/view/10.1093/acref/9780195067455.001.0001/acref-9780195067455).
- 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://nbn-resolving.org/urn:nbn:in:nlm-full-text-pro-13960-t9870jt4g); Breton 1826: 358–363 cites Scott's description of cataract couching.
- 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://nbn-resolving.org/urn:nbn:in:nlm-full-text-pro-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](#): 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](#), 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](#).
- 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](#).
- Siddiqi, Muhammad Zubayr (1959), *Studies in Arabic and Persian Medical Literature*, [ark:/13960/s25bxqt84xm](#).
- 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](#).
- (1987), "6. Rākshashkhālī (Sundarban) Plate; Śaka 1118," *Epigraphia Indica* (1953–54), 30: 42–3, [ark:/13960/t80m25q3w](#).

- 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](http://n2t.net/ark:/13960/t2s52bq7w).
- Smith, Brian K. (1994), *Classifying the Universe: The Ancient Indian Varṇa 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/ark:/13960/t22c4bx7w), 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 Šānāq: 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://n2t.net/ark:/13960/s2hb5j66s95).
- Suvedī, K. S., and Tivārī, N. (2000) (eds.), सौश्रुतनिघण्टुः ग्रन्थादौ विस्तृतेन ग्रन्थवैशिष्ट्यप्रकाशकेनोपोद्धातेन अवसाने च द्रव्याणामनेकभाषानामावली-पर्यायसङ्ग्रहाभ्यां समलङ्कृतः सुश्रुतसंहितायां प्रयुक्तानामौषधद्रव्याणां पर्याय-गुणकर्मवर्णात्मकोऽपूर्वग्रन्थः (Belajhundi, Dān: Mahendrasaṃskṛtaviśvavidyālayaḥ).

- Talwar, P. K., and Kacker, R. K. (1984), *Commercial Sea Fishes of India* (Calcutt: Zoological Survey of India), [ark:/13960/t5s841v5m](https://nbn-resolving.org/urn:nbn:in:zsi: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:in:zsi: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:in:zsi:13960-t39z96g7m); Reprinted Lahore: Niaz Ahmad, 1978.
- 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:in:zsi:13960-t53g00h0n); Biswas #0115.
- Watt, George (1889–96), *A Dictionary of the Economic Products of India* (Calcutta: Dept. Revenue and Agriculture, Government of India), [URL](https://nbn-resolving.org/urn:nbn:in:zsi:13960-t8cg7dm79), accessed 28/04/2021.
- (1908), *The Commercial Products of India, Being an Abridgement of "the Dictionary of the Economic Products of India"* (London: John Murray), [ark:/13960/t8cg7dm79](https://nbn-resolving.org/urn:nbn:in:zsi:13960-t8cg7dm79).
- 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:zsi:13960-t3qv3p906).
- 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://nbn-resolving.org/urn:nbn:in:zsi:13960-t3qv3p906).

- 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://doi.org/10.1017/9780511521497.033).
- (2002), “Cannabis in Traditional Indian Herbal Medicine,” in Ana Salema (ed.), *Āyurveda at the Crossroads of Care and Cure. Proceedings of the Indo-European Seminar on Ayurveda held at Arrábida, Portugal, in November 2001* (Lisbon: Centro de História de Além-Mar, Universidade Nova de Lisboa), 45–73, ISBN: 972-98672-5-9, [URL](https://doi.org/10.1017/9780511521497.033), 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](https://doi.org/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](https://doi.org/10.1017/9780511521497.033).
- Wujastyk, Dominik, et al. (2020), “Suśrutasaṃhitā,” PanditProject (6 Oct.), [URL](https://doi.org/10.1017/9780511521497.033), 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](https://doi.org/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](https://doi.org/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, 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, 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 Vāgbhata," 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](https://doi.org/10.1163/9789004438224_007), [URL](#).

- Zimmermann, Francis (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.
- (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.

Glossary

cow-praising	- water-dwellers:	<i>piṅgalā</i>
- <i>govandanā</i> : 23	22	- ruddy: 23
<i>alagarddā</i>	<i>kapilā</i>	<i>puṇḍarikamukhī</i>
- sting-gush: 22	- tawny: 23	- lotus-mouth: 23
<i>ālepana</i>	<i>karburā</i>	rainbow
- liniments: 23	- mottled: 22	- <i>indrāyudhā</i> : 23
<i>āyur</i>	<i>kṛṣṇā</i>	ruddy
- life: 22	- black: 22	- <i>piṅgalā</i> : 23
black	life	<i>sāmudrikā</i>
- <i>kṛṣṇā</i> : 22	- <i>āyur</i> : 22	- oceanic: 23
<i>chinna</i>	liniments	<i>śaṅkumukhī</i>
- segmented: 23	- <i>ālepana</i> : 23	- dart-mouth: 23
dart-mouth	lotus-mouth	<i>sāvarikā</i>
- <i>śaṅkumukhī</i> : 23	- <i>puṇḍarikamukhī</i> :	- <i>sāvarikā</i> : 23
	23	<i>sāvarikā</i>
<i>govandanā</i>	<i>mahāgada</i>	- <i>sāvarikā</i> : 23
- cow-praising : 23	- great antidote: 23	segmented
great antidote	mottled	- <i>chinna</i> : 23
- <i>mahāgada</i> : 23	- <i>karburā</i> : 22	sting-gush
<i>indrāyudhā</i>	mouse	- <i>alagarddā</i> : 22
- rainbow: 23	- <i>mūṣikā</i> : 23	
<i>jala</i>	<i>mūṣikā</i>	tawny
- water: 22	- mouse: 23	- <i>kapilā</i> : 23
<i>jalaukas</i>	oceanic	water
	- <i>sāmudrikā</i> : 23	- <i>jala</i> : 22
		water-dwellers
		- <i>jalaukas</i> : 22

Materia Medica Reference Works

ADPS	Sivarajan, V. V., and Balachandran, Indira (1994), <i>Ayurvedic Drugs and Their Plant Sources</i> (New Delhi, Bombay, Calcutta: Oxford & IBH Publishing).
AVS	Warrier, P. K., Nambiar, V. P. K., and Ramankutty, C. (1994–96) (eds.), <i>Indian Medicinal Plants: A Compendium of 500 Species</i> . Vaidyaratnam P. S. Varier's Arya Vaidya Sala, Kottakal (Madras: Orient Longman).

- BIA Prater, S. H. (1993), *The Book of Indian Animals* (3rd edn., Bombay, Delhi, etc.: Oxford University Press); 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](#); Reprinted Varanasi: Chowkhamba Saraswatibhavan, 1980.
- Dymock Dymock, William, Warden, C. J. H., and Hooper, David (1890), *Pharmacographia Indica: A History of the Principal Drugs of Vegetable Origin Met with in British India* (London, Bombay, Calcutta: Kegan Paul), [URL](#), accessed 16/03/2023.
- GJM₁ Meulenbeld, Gerrit Jan (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](#).

- GJM2 Meulenbeld, Gerrit Jan (1988), "G. J. Meulenbeld's Additions to his "Sanskrit Names of Plants and their Botanical Equivalents"," in Rahul Peter Das, *Das Wissen von der Lebensspanne der Bäume: Surapālas Vṛkṣāyurveda* (Stuttgart: Franz Steiner Verlag), chap. Appendix 1, 425–65, ISBN: 9783515046633; Supplement to [GJM1](#).
- GVDB Singh, Thakur Balwant, and Chuneekar, K. C. (1972), *Glossary of Vegetable Drugs in Brhatṭrayī* (Varanasi: Chowkhamba Sanskrit Series Office), [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.
- 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.

Glossary and Index of Medical Substances

- amaranth (*taṇḍulīyaka*) *Amaranthus hypochondriacus*, L. See King 321, NK: v. 1, #144, [Potter_{rev}](#): 15. Cf. [AVS](#): v. 1, 121, 32
- axlewood (*dhava*) *Anogeissus latifolia* (Roxb. ex DC.) Wall. ex Guill & Perr. See [AVS](#): v. 1, 163 f, [Chopra](#): 20, 52
- bamboo leaves (*veṇupatrikā*) *Bambusa bambos*, Druce. See NK: v. 1, #307, 32
- beautyberry (*priyaṅgu*) ← *śyāmā*. *Callicarpa macrophylla*, Vahl. See [AVS](#): v. 1, 334, NK: v. 1, #420. Some say also *Setaria italica* Beauv. [GVDB](#): 263–264. See also [GVDB](#): 413, 49, 53
- beautyberry (*śyāmā*) *Callicarpa macrophylla*, Vahl. See [AVS](#): v. 1, 334, NK: v. 1, #420, 30, 32
- beggarweed (*aṃśumatī*) *Desmodium gangeticum* (L.) DC ([Dymock](#): v. 1, 428, [GJM1](#): 602, NK: v. 1, #1192; [ADPS](#): 382, 414 and [AVS](#): v. 2, 319, 4.366 are confusing), 49
- beggarweed (*vidārigandhā*) → *śālapanī*. *Desmodium gangeticum* (L.) DC. See [Dymock](#): v. 1, 428, [GJM1](#): 602, cf. NK: v. 1, #1192; [ADPS](#): 382, 414 and [AVS](#): v. 2, 319, 4.366 are confusing, 29
- black creeper (*pāṇḍī*) *Ichnocarpus frutescens*, (L.) R.Br. or *Cryptolepis buehneri*, Roemer & Schultes. See [AVS](#): v. 3, 141, 3.145, 3.203, NK: v. 1, #1283, 1210, [ADPS](#): 434, 32, 35, 48, 49
- blackboard tree (*saptachada*) *Alstonia scholaris* R. Br. [GVDB](#): 420, 31
- blackbuck (*hariṇa*) *Antelope cervicapra*, L. See [BIA](#): 270 [IW](#): 95, 165, *et passim*, 35
- cardamom (*elā*) *Elettaria cardamomum*, Maton. See [AVS](#): v. 2, 360, NK: v. 1, #924, [Potter_{rev}](#): 66, 49, 53
- cassia cinnamon (*patra*) *Cinnamomum tamala*, (Buch.-Ham.) Nees. See [AVS](#): v. 2, 84, NK: v. 1, #589, 32, 49
- castor oil tree (*gandharvahaṣṭa*) → *eraṇḍa*. [GVDB](#): 135, [K&B](#): v. 3, 2277, 26
- castor-oil (*eraṇḍa*) *Ricinus communis*, L. See NK: v. 1, #2145, [Chopra](#): 214, 31
- certain minerals (*tārāvītāra*) 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 pāraḍaḥ*, “tāra means silver; sutāra means mercury.”, 53
- chebulic myrobalan (*harītakī*) *Terminalia chebula* Retz. [GVDB](#): 466, 31
- cherry (*elavālu*) *Prunus cerasus*, L.?. See [BVDB](#) 58, NK: v. 1, #2037, [GVDB](#): 58, 49
- chital deer (*pr̥ṣata*) *Axis axis*, Erxleben. See [BIA](#): 292, [IW](#): 93, 35
- cobra’s saffron (*nāgapuṣpa*) → *nāgakeśara*. *Mesua ferrea*, L. See NK: v. 1, #1595, [GVDB](#): 220, 49
- corky coral tree (*pāribhadra*) *Erythrina suberosa* Roxb. See [GVDB](#) 245, 52
- costus (*kuṣṭha*) *Saussurea costus*, Clarke. See NK: v. 1, #2239, 32, 49, 53
- country mallow (*atibalā*) *Abutilon indicum*, (L.) Sweet, but may be other

- kinds of mallow, e.g., *Sida rhombifolia*, L.. See [NK](#): v. 1, #11, [IGP](#): 1080, [NK](#): v. 1, #2300, [ADPS](#): 71, 77, 29
- country sarsaparilla (*anantā*)
Hemidesmus indicus, (L.) R. Br. See [ADPS](#): 434, [AVS](#): v. 3, 141–5, [NK](#): v. 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), 29, 37, 48, 49, 52
- crape jasmine (*tagara*) *Tabernaemontana divaricata* (L.) R.Br. ex Roem. & Schultes. See [GJM1](#): 557, [AVS](#): v. 5, 232. Synonym of ?? . 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](#): v. 5, 334, 32, 49, 106
- crimson trumpet-flower tree (*pāṭalā*)
Stereospermum chelonides, (L. f.) A. DC. See [GJM1](#): 573, [AVS](#): v. 5, 192 ff, [ADPS](#): 362 f, [AVS](#): v. 3, 1848 f, [IGP](#) 1120, [Dymock](#): v. 3, 20 ff, 52
- cuscut grass (*uśīra*) *Andropogon murcatus*, Retz. Also “vetiver grass.” See [NK](#): v. 1, #180, 32
- datura* (*dhattūra*) *Datura metel*, L. See [AVS](#): v. 2, 305 (cf. *Abhidhānamāñjarī*), [NK](#): v. 1, #796 ff. [Potter_{rev}](#): 292 f, [ADPS](#): 132, 26
- decanted liquor (*surāmaṇḍa*)
[K&B](#): v. 2, 502, [NK](#): v. 2, appendix VI, #49, 28
- deodar (*bhadradāru*) *Cedrus deodara*, (Roxb.ex D.Don) G. Don. See [AVS](#) 41, [NK](#): v. 1, #516, 49
- elixir salve (*rasāñjana*) → *añjana*. See [Indian barberry](#), 31
- embelia (*viḍaṅga*) *Embelia ribes*, Burm. f. See [ADPS](#): 507, [AVS](#): v. 2, 368, [NK](#): v. 1, #929, [Potter_{rev}](#): 113, 49
- emetic nut (*madana*) *Randia dumetorum*, Lamk. See [NK](#): v. 1, #2091, 30
- false daisy (*subhaṅgurā*) (su)bhaṅgura = *bhṛṅga*? *Eclipta prostrata* (L.) L. See [GVDB](#): 288, 37
- fermented rice-water (*dhānyāmla*) → *kāñjī*, *kāñjikā*, *sauvīra*. [GVDB](#): 458, [NK](#): v. 2, appendix VI, #18, 28
- 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, 34
- fire-flame bush (*dhātakī*) *Woodfordia fruticosa* (L.) Kurz. See [AVS](#): v. 5, 412, [NK](#): v. 1, #2626, 31
- garjan oil tree (*aśvakarṇa*) *Dipterocarpus turbinatus* Gaertn. f. See [GVDB](#): 28, [Chopra](#): 100, 52
- giant potato (*kṣīravidārī*) possibly → *kṣīraśukla*. *Ipomoea mauritiana*, Jacq. See [ADPS](#): 510, [AVS](#): v. 3, 222, [AVS](#): v. 3, 1717 ff, 106–108
- ginger (*mahaṣadha*) *Zingiber officinale*, Roscoe. See [ADPS](#): 50, [NK](#): v. 1, #2658, [IGP](#): 1232, 35
- gold (*hema*) gold, 49
- 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”, 53
- golden shower tree (*rājadruma*) *rājadruma* = *āragvadha*. *Cassia fistula* L. See [GVDB](#) 37, 52
- gourd (*alābu*) *Lagenaria siceraria* Standl. [GVDB](#): 25. Some say *Lagenaria vulgaris*, *Seringe* ([NK](#): v. 1, #1419) but this is not appropriate for blood-letting, 21, 22, 30

- heart-leaf sida (*balā*) *Sida cordifolia*, Linn.
See [ADPS](#): 71, [NK](#): v. 1, #2297, 29, 49
- heart-leaved moonseed (*amṛtā*) → *guḍūcī*.
Tinospora cordifolia, (Willd.) Hook.f.
& Thoms.?. See [ADPS](#): 38, [NK](#): v. 1,
#2472, 624, [Dastur](#) #229, 32, 47
- heart-leaved moonseed (*somavallī*)
Tinospora cordifolia (Thunb.) Miers.
[GVDB](#): 456. Likely, but uncertain, 32
- henna (*madayantikā*) *Lawsonia inermis*, L.
See [AVS](#): v. 3, 303, [NK](#): v. 1, #1448,
[Potter_{rev}](#): 151, 33
- Himalayan mayapple (*vakra*)
Podophyllum emodi, Wall.
([NK](#): #1971). But perhaps a synonym of
[crape jasmine](#) and ?? ([GVDB](#): 354), 53
- Himalayan monkshood (*ativiṣā*)
Aconitum heterophyllum Wall.
[GVDB](#): 12, [NK](#): v. 1, #39. Also “atis
roots”, 33, 35, 53
- hogweed (*punarnavā*) *Boerhaavia diffusa*,
L. See [ADPS](#): 387, [AVS](#): v. 1, 281,
[NK](#): v. 1, #363, 33, 47
- Holostemma creeper (*jīvantī*) →
sūryavallī? *Holostemma ada-kodien*,
Schultes. See [ADPS](#): 195, [AVS](#): v. 3, 167,
[NK](#): v. 1, #1242, [AVS](#): v. 3, 1619, 108
- hornwort (*jalaśūka*) ← *jalanīlikā*.
Ceratophyllum demersum, L. See
[AVS](#): v. 2, 56, [IGP](#): 232. Singh and
Chunekar ([GVDB](#): 166) suggest
[pondweed](#). [Ḍalhaṇa](#) noted on 1.16.19
([Su](#) 1938: 79) that some people
interpret it as a poisonous, hairy,
air-breathing, underwater creature, 29
- Indian barberry (*añjana*) → *rasañjana*,
dāruharidrā. *Berberis aristata*, DC.
[Dymock](#): v. 1, 65, [NK](#): v. 1, #335,
[GJM1](#): 562, [IGP](#): 141, 31, 34, 105
- Indian barberry (*dāruharidrā*) *Berberis*
aristata, DC. See [Dymock](#): v. 1, 65,
[NK](#): v. 1, #685, [GJM1](#): 562, [IGP](#) 141,
47, 49
- Indian barberry (*kālīyaka*) → *dāruharidrā*,
añjana. *Berberis aristata*, DC. See
[Dymock](#): v. 1, 65, [NK](#): v. 1, #685,
[GJM1](#): 562, [IGP](#): 141, 32
- 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, 29, 108
- Indian kudzu (*vidārī*) → *payasyā*. *Pueraria*
tuberosa (Willd.) DC. See [ADPS](#): 510,
[AVS](#): v. 1, 792 f, [AVS](#): v. 4, 391; not
[Dymock](#): v. 1, 424 f. See [GJM2](#): 444, 451,
[AVS](#): v. 1, 187, but [AVS](#): v. 3, 1719 =
Ipomoea mauritiana, Jacq, 29
- Indian madder (*mañjiṣṭhā*) *Rubia*
cordifolia, L. See [IGP](#), [Chopra](#): 215,
[GVDB](#): 289, 26, 49
- Indian mottled eel (*varmimatsya*) Almost
certainly the mottled eel. [MW](#): 962c
noted that the *varmi* fish “is commonly
called *vāmi*.” The “vam fish,” or
“*vānimatsya*” 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 sarsaparilla (*sārivā*) → *anantā*.
Hemidesmus indicus, (L.) R. Br.
[ADPS](#): 434, [AVS](#): v. 3, 141–5, [NK](#): v. 1,
#1210; and black creeper, *pāṇḍī*.
Ichnocarpus frutescens, (L.) R.Br. or
Cryptolepis buehneri, Roemer &
Schultes [AVS](#): v. 3, 141, 3.145, 3.203,
[NK](#): v. 1, #1283, 1210, [ADPS](#): 434, 47,
49, 105
- jambul (*jambū*) *Syzygium cumini*, (L.)
Skeels. See [ADPS](#): 188, [NK](#): v. 1, #967,
[Potter_{rev}](#): 168, [Wujastyk](#) 2003a, 31
- jasmine (*mālatī*) *Jasminum grandiflorum*,
L. See [NK](#): v. 1, #1364, 32

- jequirity (*guñjā*) *Abrus precatorius*, L. See [AVS](#): v. 1, 10, [NK](#): v. 1, #6, [Potter_{rev}](#): 168, 37
- lac (*lākṣā*) *Kerria lacca* (Kerr.). See [GJM1](#): 445, [NK](#): v. 2, #32. Watt (1908: 1053–1066) is characteristically informative, and is definite about the antiquity of lac in India, 53
- liquorice (?) (*klītaka*) *Glycyrrhiza glabra*, L.? [GVDB](#): 123–124 discuss the many difficulties in identifying this plant, 37
- liquorice (*madhuka*) see *yaṣṭīmadhuka*, 29, 35, 46, 49
- liquorice (*yaṣṭīmadhuka*) *Glycyrrhiza glabra*, L. [AVS](#): v. 3, 84, [NK](#): v. 1, #1136, [GVDB](#): 329 f., 31
- lodh tree (*lodhra*) *Symplocos racemosa*, Roxb. See [GJM1](#): 597, [ADPS](#): 279 f, [NK](#): v. 1, #2420. Singh and Chuneekar ([GVDB](#): 351–352) notes that there are two varieties, *S. racemosa*, qualified as *śāvāra*, and *S. crataegoides* Buch.-Ham. for *paṭṭikā lodhra*, 49
- long pepper (*māgadha*) *Piper longum*, L. See [NK](#): v. 1, #1928; but cf. [AVS](#): v. 3, 245, 34
- long pepper (*pippalī*) *Piper longum*, L. See [ADPS](#): 374, [NK](#): v. 1, #1928, 35, 49
- luffa (*koṣṭakī*) = *kośātakī*. *Luffa cylindrica*, (L.) M. J. Roem. or *L. acutangula*, (L.) Roxb. [ADPS](#): 252–253, [NK](#): v. 1, #1514 etc. [GVDB](#): 121, 30, 47, 107
- luffa gourd (*kośavatī*) = *koṣṭakī*, luffa, 47
- mango (*āmra*) *Mangifera indica* Linn. [GVDB](#): 37, 31
- marking-nut tree (*bhallātaka*) *Semecarpus anacarium*, L. See [NK](#): v. 1, #2269, [AVS](#): v. 5, 98, 34
- medhshingi (*vijayā2*) *Dolichandrone falcata* (DC.) The *Sauśrutaniḥaṇṭu* gives a number of synonyms for *vijayā* (Suvedī and Tivārī 2000: 5.77, 10.143). But one of them, *viṣāṇī* (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), 38
- migraine tree (*agnimantha*) *Premna corymbosa*, Rottl. See [AVS](#) 1927, [ADPS](#): 21, [NK](#): v. 1, #2025, [AVS](#): v. 4, 348; [GJM1](#): 523: = *P. integrifolia/serratifolia*, L, 47
- milk-white (*kṣīraśuklā*) An unidentified plant. [GVDB](#): 126: see [purple roscoe](#) and [giant potato](#), 29, 108
- monitor lizard (*godhā*) *Varanus bengalensis*, Schneider. See [Reptiles](#): 58, 29, 35
- mung beans (*māṣaka*) *Phaseolus mungo* Linn. [GVDB](#): 308, 32
- myrobalan (*abhayā*) *Terminalia chebula*, Retz. See [ADPS](#): 172, [NK](#): v. 1, #2451, [Potter_{rev}](#): 214, 47, 53
- natron (*suvarcikā*) Sodium carbonate. [NK](#): v. 2, #45. Ḍalhaṇa identifies *suvarcikā* with svarjikṣāra 4.8.50 ([Su 1938](#): 441), 49
- neem tree (*nimba*) *Azadirachta indica* A. Juss. [GVDB](#): 226, 26
- nutgrass (*kuruvinda*) Unknown. Ḍalhaṇa on 5.3.15 ([Su 1938](#): 568) glossed the term as *nutgrass*, but noted other opinions that it was a whetstone or a very special metallic gem. Singh and Chuneekar ([GVDB](#): 108) added that it could be a variety of rice, *ṣaṣṭika dhānya*, 53
- nutgrass (*mustā*) *Cyperus rotundus*, L. See [ADPS](#): 316, [AVS](#): v. 2, 296, [NK](#): v. 1, #782, 107
- panacea twiner (*arkapuṣpī*) → *arkaparnī*, *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](#): v. 3, 171. The etymology of

- the name suggests *Helianthus annuus* Linn., but this plant is native to the Americas, [47](#), [106](#)
- peas (*hareṇu*) *hareṇu* = *satīna*. *Pisum sativum*, L. 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, [47](#), [49](#), [53](#)
- peepul tree (*aśvattha*) *Ficus religiosa*, L. See [ADPS](#): 63, [56](#)
- periploca of the woods (*meṣaśrīga*) *Gymnema sylvestre* (Retz.) R. Br. See [AVS](#): v. 3, 107, [NK](#): v. 1, #1173, [34](#)
- plants like asthma plant and Gulf sandmat (*kṣīrīṇī*) various milky plants, perhaps including *Euphorbia hirta* Linn. (asthma plant) and *E. microphylla* Heyne (Gulf sandmat) ([GVDB](#): 127), [106](#)
- pointed gourd (*paṭola*) *Trichosanthes dioica*, Roxb. [GVDB](#): 232–233, [47](#)
- poison berry (*br̥hatī*) *Solanum violaceum*, Ortega. See [ADPS](#): 100, [NK](#): v. 1, #2329, [AVS](#): v. 5, 151, [47](#), [49](#)
- pondweed (*paripelavā*) Normally a neuter noun. Singh and Chuneekar ([GVDB](#): 238, 264–265, 409) argued that *plava* and *śaivāla* are the same thing, and may be either *Zannichellia palustris*, L., or *Potamogeton pectinatus*, L., [49](#)
- pondweed (*śaivāla*) *Zannichellia palustris* L. Sometimes identified with ?? (*dūrvā*). [GVDB](#): 409, [106](#)
- prickly chaff-flower (*apāmārga*) *Achyranthes aspera*, L. See [GJM1](#): 524 f, [AVS](#): v. 1, 39, [ADPS](#): 44 f, [AVS](#): v. 3, 2066 f, [Dymock](#): v. 3, 135, [26](#), [29](#)
- purging nut (*mūṣikā*) *Jatropha curcas*, L. See [AVS](#): v. 3, 261, [NK](#): v. 1, #1374, [34](#)
- purple calotropis (*arka*) *Calotropis gigantea*, (L.) R. Br. See [ADPS](#): 52, [AVS](#): v. 1, 341, [NK](#): v. 1, #427, [Potter^{rev}](#): 57, [Chopra IDG](#): 305–308, [29](#)
- purple roscoea (*kṣīrakākoli*) [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., [106](#), [107](#)
- rajmahal hemp (*moraṭa*) → *mūrvī*, *Marsdenia tenacissima* (Roxb.) Wight et Arn. Good discussion at [GVDB](#): 314–316, [324](#), [47](#)
- red chalk (*gairika*) *gairika*, [49](#)
- red gourd (*bimbī*) *Coccinia indica*, W. & A. See [PVS](#) 1994.4.715; [NK](#): v. 1, #534, [30](#)
- rosha grass (*dhyāmaka*) *Cymbopogon martinii* (Roxb.) Wats. See [AVS](#): v. 2, 285, [NK](#): v. 1, #177, [49](#)
- sacred lotus (*padma*) *Nelumbo nucifera*, Gaertn. See [NK](#): v. 1, #1698, [32](#)
- sage-leaved alangium (*aṅkolla*) *Alangium salvifolium* (Linn. f.) Wang. [GVDB](#): 5–6, [31](#)
- sandalwood (*candana*) *Santalum album*, L. See [ADPS](#): 111, [NK](#): v. 1, #2217, [49](#)
- sappanwood (*pattāṅga*) Also *pattāṅga*. *Caesalpinia sappan*, L. [AVS](#): v. 1, 323, [K&B](#): v. 2, 847 f, [GVDB](#): 234, [31](#)
- scarlet mallow (*bandhujīva*) *Pentapetes phoenicea*, L. [NK](#): #1836, [GVDB](#): 268, [33](#)
- scented pavonia (*bālaka*) *Pavonia odorata*, Willd. See [ADPS](#): 498, [NK](#): v. 1, #1822, [49](#)
- selu plum (*śelu*) *Cordia myxa*, L. non Forssk. See [GJM1](#): 529 (2), [IGP](#): 291b, cf. [AVS](#): v. 3, 1677 f; cf. [AVS](#): v. 2, 180 (C. *dichotoma*, Forst.f.), [NK](#): v. 1, #672 (C. *latifolia*, Roxb.), [47](#)
- sesame oil (*taila*) *Sesamum indicum* L. [GVDB](#): 183, [30](#)
- siris (*śirīṣa*) *Albizia lebbeck*, Benth. See [AVS](#): v. 1, 81, [NK](#): v. 1, #91, [47](#)
- siris seeds (*śirīṣamāṣaka*) *Albizia lebbeck*, Benth. See [AVS](#): v. 1, 81, [NK](#): v. 1, #91, [31](#)
- small-flowered crape myrtle (*sidhraka*) *Lagerstroemia parviflora* Roxb. See [GVDB](#): 432, [52](#)

- spikenard (*māṃsī*) Nardostachys grandiflora, DC. See [NK](#): v. 1, #1691, [49](#)
- spikenard (*nalada*) → *māṃsī*. Nardostachys grandiflora, DC. See [NK](#): v. 1, #1691, [29](#)
- sugar (*sitā*) Ḍalhaṇa makes this equation at 1.37.25 ([Su 1938](#): 162), [49](#)
- sunflower (*sūryavallī*) → *ādityavallī*, *sūryamukhī*, Helianthus annuus Linn. [GVDB](#): 35, 443, [47](#)
- sweet plants (*madhuravarga*) The sweet plants are enumerated at *Suśrutasaṃhitā* 1.42.11. See also [GVDB](#): 127, [29](#)
- sweet-scented oleander (*aśvamāraka*) Nerium oleander, L. See [ADPS](#): 223, [NK](#): v. 1, #1709, [37](#)
- Tellicherry bark (*kuṭāja*) Holarrhena pubescens Wall. ex G.Don, with Wrightia tinctoria and W. arborea considered [GVDB](#): 101–102, [ADPS](#): 267–270, [105](#)
- thorn apple (*karambha*) Datura metel, L. See [AVS](#): v. 2, 305 (cf. Abhidhānamañjarī), [NK](#): v. 1, #796 ff. [Potter_{rev}](#): 292 f, [ADPS](#): 132, [38](#)
- three heating spices (*tryūṣaṇa*) śuṇṭhī (Dried ginger) Zingiber officinale, Roscoe. [ADPS](#): 50, [NK](#): v. 1, #2658, [AVS](#): v. 5, 435, [IGP](#) 1232, pippalī (long pepper) Piper longum, L. [ADPS](#): 374, [NK](#): v. 1, #1928, and marica (black pepper) Piper nigrum, L. [ADPS](#): 294, [NK](#): v. 1, #1929, [47](#)
- three-leaved caper (*varuṇa*) Crataeva magna (Lour.) DC. See [AVS](#): v. 2, 202; cf. [NK](#): v. 1, #696, [34](#)
- tree cotton (*kārpāsa*) G. arboreum L. [ADPS](#): 231. Pace the identifications of Singh and Chuneekar ([GVDB](#): 92, 247), since G. barbadense L. is native to South America and G. herbaceum L. which is native to Africa, [26](#)
- tree cotton (*picu*) See *kārpāsa*, [28](#), [31](#)
- turmeric (*haridrā*) Curcuma longa Linn. [GVDB](#): 465, 47, [53](#)
- turmeric (*rajanī*) Curcuma longa, L. [ADPS](#): 169, [AVS](#): v. 2, 259, [NK](#): v. 1, #750, [49](#)
- velvet-leaf (*pāṭhā*) Cissampelos pariera, L. See [ADPS](#): 366, [NK](#): v. 1, #592, [GJM1](#): 573, [AVS](#): v. 1, 95; cf. [AVS](#): v. 2, 277, [47](#)
- velvet-mite (*indragopa*) Kerria lacca (Kerr.). Lienhard [1978](#), [30](#)
- verbena (*phañjī*) Clerodendrum serratum, L. See [AVS](#): v. 2, 121, [ADPS](#): 87, [33](#)
- watered buttermilk (*udaśvit*) [MW](#): 183, [30](#)
- water-lily (*utpala*) Nymphaea stellata, Willd. See [GJM1](#): 528, [IGP](#) 790; [dutt](#), [NK](#): v. 1, #1726, [30](#), [48](#), [49](#)
- weaver's beam tree (*muṣkaka*) Schrebera swietenoides, Roxb. See [AVS](#): v. 5, 88, Lord, [NK](#): v. 1, #2246, [52](#)
- white calotropis (*alarka*) Calotropis procera, (Ait.) R. Br. See [NK](#): v. 1, #428, [Chopra](#): 46b, [Chopra IDG](#): 305–308, [29](#)
- white clitoria (*śvetā*) → *giryāhvā*. Clitoria ternatea, L. See [AVS](#): v. 2, 129, [NK](#): v. 1, #621, [32](#)
- white cutch tree (*somavalka*) Acacia polyacantha, Willd. See [AVS](#): v. 1, 30, [IGP](#) 7, [GJM1](#): 602, [AVS](#): v. 2, 935; *pace* [NK](#): v. 1, #1038, [33](#), [52](#)
- white siris (*kiñihī*) Albizia procera, (Roxb.) Benth. See [GVDB](#) 98, [NK](#): v. 1, #93, [47](#)
- wild asparagus (*bahuputrā*) → *nandana*? Asparagus racemosus, Willd. See [ADPS](#): 441, [AVS](#): v. 1, 218, [NK](#): v. 1, #264, [IGP](#): 103, [AVS](#): v. 4, 2499 ff, [Dymock](#): v. 3, 482 ff, [33](#)
- wild celery (*agnika*) → may be *bhalātaka*, *lāṅgalī*, *ajamodā*, *moṛaṭa*, or *agnimantha*, [GVDB](#): 4. Uncertain, [47](#)
- wild celery (*ajamodā*) Apium graveolens, L., [47](#)
- Withania (*aśvagandhā*) Withania somnifera (L.) Dunal. See [AVS](#): v. 5, 409 f, [Dymock](#): v. 2, 566 f., Chevallier

150, 29
 wood apple (*kapittha*) *Limonia acidissima*,
 L. See [AVS](#): v. 3, 327, [NK](#): v. 1, #1021,
 32, 34
 woodrose (*mūṣikakarṇī*) *Jatopha curcas*, L.
[AVS](#): v. 3, 261, 1[#1374][NK](#). [GVDB](#): 317;
[ADPS](#): 23–25 discuss this issue well, 32
 yellow-berried nightshade (*kṣudrā*)
Solanum virginianum, L. See
[ADPS](#): 100, [NK](#): v. 1, #2329,
[AVS](#): v. 5, 164, 47, 49

Todo list

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■ write footnote: don't repeat ativiṣā; vulgate similar to H.	53
■ material corresponds to SS.1.45.205ab, where it describes how alcohol affects the body.	56
■ where is cutting with a knife related to removing bile or phlegm.	58
■ maṣī burned charcoal. Find refs.	58
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