

The Sarasvatīnighaṇṭu – Review article

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Kamat, S.D. (2006) – Studies on medicinal plants and drugs in Sarasvatīnighaṇṭu, originally edited by Late Vd. J.P. Jayatilak in 1918, further edited with notes and discussions by Dr. S.D. Kamat, The Chaukhamba Ayurvijnan Studies 74, Chaukhamba Sanskrit Pratishthan, Delhi.

Contents: Preface by S.D. Kamat (III–VII), Abbreviations (VIII), prastāvanā (IX), bhūmikā (X), Contents (XI–XIX), text, transliteration, botanical identities, notes, etc. (1–129), Index of plants and drugs (131–137), Index of botanical names, synonyms, drugs etc. (138–158), Index of Sanskrit synonyms (159–202).

The Sarasvatīnighaṇṭu¹ figures in P.V. Sharma's 'Introduction to Dravyaguṇa', Appendix V: A list of Nighaṇṭus and texts of Dravyaguṇa in Sanskrit (1976: 208). He refers to two manuscript sources: an appendix to the Trikāṇḍaśeṣa (location not indicated) and a Poona manuscript. Both are absent from Aufrecht's Catalogus Catalogorum. The Poona manuscript is not described in Har Dutt Sharma's Descriptive Catalogue, vol. XVI, part 1 (Vaidyaka), nor in B. Rama Rao's Check-list. P.V. Sharma calls the author Śāśvata² and claims that this nighaṇṭu has been published in Colombo in 1885.³ Kamat speaks in his Preface of a Colombo MS (1885) at Ānandāśram Mudraṇālaya, Pune; he claims to possess a photocopy of this MS.⁴

Kamat informs us that J.P. Jayatilak, a Government officer and native doctor from Mudgavāstu and a resident of Kolambapurī (Colombo), critically

¹ Compare G. Jan Meulenbeld (2000a), 554–555. See also C. Vogel (1979), 377. The work was already known to Whitelaw Ainslie (1826, vol. II, 525) as Saswati Nighandoo.

² Aufrecht's Catalogus Catalogorum (I, 644) records a Śāśvata who was the author of an Anekārthasamuccaya, A. Rahman (1982, 699) a Śāśvata, author of a lexicon of homonyms called Śāśvatakoṣa.

³ See G. Jan Meulenbeld (2000b, 567, n.146) on editions of the Sarasvatīnighaṇṭu.

⁴ See on two manuscripts of the Sarasvatīnighaṇṭu: K.D. Somadasa (1996), 139–140 and 250.

edited and revised the *Sarasvatīnighaṇṭu*, inspired by his teachers and his father. He was assisted by Devarakṣita Svāmipāda and Bhiṣagācārya J.S. Rājasundar. The work was ready in manuscript form in 1914 but was not published.

The present editor, D.S. Kamat, discloses that he did not go again through Jayatilak's sources, which implies that the presented text is the one compiled by the latter. The common Sanskrit names in the headings were added by Kamat,⁵ as well as the transliterations, the botanical names and the notes on controversial plants.

Kamat's footnotes contain remarks by J.P. Jayatilak concerning the readings which were the correct ones in the latter's eyes. These emendations of Jayatilak are numerous. Examples are: (68) śvetajambū is said to be kaṇḍurā, which is not appropriate and should be changed into mādthurā; (69) kākajambū: the synonym śītapallavā should be replaced by śītavallabhā.⁶ One of Jayatilak's procedures in editing the text was to replace vernacular-looking names by Sanskrit ones.⁷ Evidence that Jayatilak had more than one manuscript at his disposal, unless he refers to other nighaṇṭus,⁸ is provided by Kamat in a number of footnotes where he gives variant readings recorded by Jayatilak; see, e.g., (9) kaṭvaṅga, (10) āragvadha, (16) varuṇa, (44) aṅkola.

Footnotes with remarks by Kamat himself also occur. Examples are: (38) tinduka: the synonym śitisāraka should be replaced by kṣitisāraka; (65) tilaka: Kamat has his doubts about the second half of the verse⁹ which may describe another tree.

The name of the author remains unknown.¹⁰ Kamat is of the opinion that the *Sarasvatīnighaṇṭu* has been compiled in Sri Lanka. Jayatilak remarked that it has been a textbook for Āyurveda students of Sri Lanka for many generations.¹¹ The date of composition is difficult to determine. A.K. Śāstrī assigns the work to the fifteenth century.¹² A *Sārasvata(nighaṇṭu)* is quoted in

⁵ Jayatilak's headings were different in some cases; see, e.g., (115). In other instances Kamat adheres to the name of a heading as found in Jayatilak's work: see (131).

⁶ Kamat agrees in the footnote.

⁷ See, e.g., (162) parpaṭaka; Jayatilak changed papṭaka of the manuscript into parpaṭaka, (177) bhūmitālikā, where he replaced hiraṇyapuphī by hiraṇyapuspī, and (193) ajaśṅgī, where śvetapuspī takes the place of śvetapupphī.

⁸ This is less probable: Jayatilak refers to anyatra nighaṇṭupāṭhaḥ in particular instances (see, e.g., (101) kāsamarda).

⁹ This second half runs: somavṛkṣaḥ somavalkaḥ kaṭphalo rajanadrumaḥ.

¹⁰ C. Vogel (1979), 377.

¹¹ See Kamat's Preface IV.

¹² A.K. Śāstrī (1981), 124–125: from the Koṭṭa (Jayavardhanapura) period.

Meghadeva's commentary¹³ on the Mādhavadravyagaṇa.¹⁴ The maṅgala of the Sarasvatīnighaṇṭu¹⁵ is identical with that of the Mādhavanidānasāra.¹⁶

The opinion that the Sarasvatīnighaṇṭu has been popular in Sri Lanka suggests that it is of southern origin. This makes it reasonable to assume that it mostly contains plants available there. The botanical identifications would be expected to reflect southern traditions. A check of this supposition for evidence gives negative results. Examples are: the identification of dāruharidrā as *Coscinium fenestratum* (Gaertn.) Colebr. is absent; the use of *Gmelina asiatica* Linn. as *kāśmarī* is not recorded; the use of *Asparagus sarmentosus* Linn. as *śatāvarī* is unknown to Kamat.¹⁷

The text of the Sarasvatīnighaṇṭu gives lists of synonyms only, not of properties and actions.

The text is divided into six vargas: (1) mahāvṛkṣādivarga (items 1–77), (2) kṣupādivarga (items 78–112), (3) ulapādivarga (items 113–186), (4) latādivarga (items 187–231), (5) candanādivarga (items 232–355), and (6) bhaktādivarga (items 356–404).

The numbering of the items¹⁸ does not completely correspond to the number of plants and other medicinal substances described: śālmālī (20) and its exudate mocarasa (21) form two items instead of one, kuṭaja (22) and its fruits, indrayava (23), form two items, śigru (27) and madhuśigru (28), identical in Kamat's opinion, form two items, triphalā (43) is dealt with separately, bṛhaṭī (134) and siṃhī (135), as well as vāstuka (144) and raktavāstuka (145), form two items though they are identical species according to Kamat, cillī (147) is the same as vāstuka, kamala (178), śvetakamala (179), raktotpala (180), nīlotpala (181), kākotpala (182), raktakumuda (183) and saugandhika (184) appear to be one and the same species, tumbī (217) and kaṭutumbī (218) are the same plant, candana (232) and haricandana (233) derive from the same species, agaru (235), kālāguru (236) and sugandhāguru (237) are botanically identical, trijāta (257) and caturjāta (258), trikaṭu (288), lavaṇāṣṭaka (303), the navaratnāni (344), and the pañcaloha (355), which are groups of substances, are separately numbered.

The number of botanical identifications is larger than that of the headings. One item may correspond to more than one plant in Kamat's notes. Ex-

¹³ P.V. Sharma (1973, (17)) assigns Meghadeva, since he quotes Aruṇadatta, to the fourteenth century.

¹⁴ See G. Jan Meulenbeld (2000a), 189–191.

¹⁵ The maṅgala runs: śrīnāradaṃuṇīśādi mukhapaṇkajavāsini / śāradā kila vāgdevī pātu vaḥ sarvamaṅgalā //.

¹⁶ See G. Jan Meulenbeld (2000a), 552.

¹⁷ See Y.K. Sarin (1996).

¹⁸ It is not indicated who devised this numbering, Jayatilaka or the second editor.

amples are: sarjaka (15), lodhra (34), tinduka (38), gojihvā (47), plakṣa (49), śleṣmātaka (54), kovidāra (56), priyaṅgu (61), badara (66), agnimantha (82), kāsamarda (101), nāgabālā (104), saḥacara (106), snuhī (108), hapuṣā (130), bṛhatī (134), barbarā (138), punarnavā (140), saptalā (148). The names found in the headings are not the first ones of the series of synonyms in many cases, but have been chosen by Kamat as he indicates himself in the Preface.

D.S. Kamat records in his notes which Sanskrit synonyms are not found in other nighaṇṭus. His remarks on this subject are not always accurate and he omits the names of the nighaṇṭus that were available to him. Obviously he did not consult the Aṣṭāṅganighaṇṭu, Śaḍrasanighaṇṭu and Soḍhalanighaṇṭu, and did not carefully check the Dhanvantarīyanighaṇṭu and Rājanighaṇṭu.

These new synonyms as indicated by Kamat are: ḍolāphala for madhūka (11),¹⁹ kaṭphalā for kāsmarī (17),²⁰ madhumakṣiphala and mañjarīpuṣpaka for karañja (18), vatsādanī for rājādāna (48), guḍavṛkṣa and mudgapatra for śleṣmātaka (54), gandharva and agnirandhra for tiniśa (55), svarbhū and pāra for kovidāra (56), nakṣamārohā for kharjūrī (76),²¹ jaghanephalā, bahuphalā²² and sarpamārī for kākamācī (118), ikṣugandhā for gokṣura (119),²³ viṣāṇikā and kanakā for cakramarda (128), kulāṅganā and varāhakarnī²⁴ for aśvagandhā (129), udakośmajit for pāṣāṇabheda (150), hetu and suniṣaṇṇakapatraka for cāṅgerī (151), bhṛṅgaparyāyavācaka and machālīla for bhṛṅgarāja (154), sūkṣmapatrā for guḍūcī (187),²⁵ hemaharītaka for dāruharidrā (206).

Verification of all Kamat's claims would be an extremely toilsome project, but some of them can be checked without much effort.

Kamat's assertion that ākulī (81) is not found in other nighaṇṭus needs verification, but the plant called thus is not absent from medical treatises. Its name occurs in Dāmodara's Ārogyacintāmaṇi, dating from the first half of the four-

¹⁹ Ḍolāphala as a synonym of madhūka is found at Aṣṭāṅganighaṇṭu 26 and Śaḍrasanighaṇṭu 1.23.

²⁰ This is a synonym of kṛṣṇavṛntikā, identified as gāmbhārī, in its turn a synonym of kāsmarī, at Paryāyamuktāvalī 7.12. Kaṭphalā is a name of kāsmarī at Rājanighaṇṭu 9.146 and Soḍhalanighaṇṭu, guḍūcyādivarga 177cd–178.

²¹ The related names durārohā and durāruhā for kharjūrī occur in the Dhanvantarīyanighaṇṭu (5.53) and Rājanighaṇṭu (11.65).

²² Vanausadhicandrodaya 3, 56–57: *Celastrus senegalensis* Lam. (valid name: *Maytenus senegalensis* (Lam.) Exell = *Gymnosporia spinosa* (Forsk.) Fiori = *Gymnosporia montana* (Roth) Benth.). Dhanvantarīyanighaṇṭu 4.21. Rājanighaṇṭu 4.35. Soḍhalanighaṇṭu, karavīrādivarga 496.

²³ Rājanighaṇṭu 3.131–132: ikṣugandha = kṣudragokṣura.

²⁴ Dhanvantarīyanighaṇṭu 1.272. Rājanighaṇṭu 4.400. Kaiyadevanighaṇṭu, oṣadhivarga 1044cd–1045. Śaḍrasanighaṇṭu 6.36.

²⁵ Kamat adds that the appropriateness of this name is questionable.

teenth century,²⁶ Kālidāsa's Vaidyamanoramā, probably from about the same period,²⁷ Anantakumāra's Yogaratnasamuccaya, written after the fifteenth or sixteenth century,²⁸ and the Yogaratnākara.²⁹ It is also found in recipes of the Rasayogasāgara³⁰ and the Rasajalanidhi.³¹

The synonym śārādī is found at Yogaratnasamuccaya, cikitsā 15.292. It is a distinct plant in the Śaḍrasanighaṇṭu (6.65ab). A name related to one of the synonyms, mehāripu, namely mehāri, is met with in the Yogaratnasamuccaya.³² A name related to the synonym jalaghnadruma, namely jalaripu, occurs in the same treatise.³³

Another plant that is not identified by Kamat is (105) vartula, with dakṣiṇāvṛtta,³⁴ nandīvṛtta and caturdala as synonyms. A distinct plant called vartula is rare or even absent from other nighaṇṭus. The name is a synonym of kalāya and guṇṭha, both absent from the Sarasvatīnighaṇṭu.³⁵

The third unidentified plant is (127) mārjāramohinī, with rūpa, mandāri and harimañjarī as synonyms.³⁶ It is unknown which plant may be meant; its name suggests a kind of Indian catnip.

A plant rarely or not mentioned in another work is kṣudrapunarnavā (141). Kamat is doubtful about its identity.³⁷

The name talapoṭa occurs twice: as a synonym of ākulī (81) and as a distinct plant (157). Kamat is ignorant about its identity. Kirtikar and

²⁶ Ārogyacintāmaṇi, pratyauśadhapariśiṣṭa 7 and bheṣajakalpa 40.

²⁷ Vaidyamanoramā 7.15, 18–19 and 22. The Hindī translation renders ākulī as āvīram (in the language of Kerala), i.e., *Cassia auriculata* Linn. (see Malayalam Lexicon II).

²⁸ Yogaratnasamuccaya, cikitsā 14.152 and 155, 15.232, 235–236, 254–255, 254, 257, 258, 261, 263, 266, 270, 287cd, 298 and 304.

²⁹ Yogaratnākara, p.567, v.1.

³⁰ Rasayogasāgara, pakārādi 290 (pramehahararasa from the mehādhikāra of the Rasaratnasamuccaya) and 643 (mṛgāṅkarasa 37 from the Rasaratnasamuccaya).

³¹ Rasajalanidhi I, 181.

³² Yogaratnasamuccaya, cikitsā 14.157, 15.253, 260 and 273.

³³ Yogaratnasamuccaya, cikitsā 17.249.

³⁴ The Rājanighaṇṭu (9.7) mentions dakṣiṇāvartakī as one of the names of vṛścikālī, a plant absent from the Sarasvatīnighaṇṭu.

³⁵ Kalāya (*Lathyrus sativus* Linn.) is a plant often mentioned in the classical medical treatises. Guṇṭha occurs in the Aṣṭāṅgahrdayasaṃhitā and appears to be related to gundrā, known from the classical medical treatises. The Sarasvatīnighaṇṭu is acquainted with gundrā as another name of priyaṅgu (61) and nāgabālā (104). Dhanvantarīyanighaṇṭu 1.83: guṇṭha is a kind of katṭṛṇa.

³⁶ Kālidāsa's Vaidyamanoramā prescribes a haritamañjarī at 16.72. This plant is identified as *Acalypha indica* Linn. (see M. Abdul Kareem).

³⁷ Anantakumāra prescribes in one of the recipes of his Yogaratnasamuccaya two kinds of punarnavā (cikitsā 15.282).

Basu³⁸ regard it as *Cassia sophera* Linn. *Talapota* is absent from the classical medical treatises and many *nighaṇṭus*. It is found in the *Aṣṭāṅganighaṇṭu*,³⁹ *Ṣaḍraśanighaṇṭu*,⁴⁰ the *Bheṣajakalpa* ascribed to Bharadvāja,⁴¹ Kālidāsa's *Vaidyamanoramā*,⁴² the *Rasayogasāgara*⁴³ and Anantakumāra's *Yogarātnasamuccaya*.⁴⁴

Kamat remarks on *akṣība* (64) that this tree seems to be a popular and commonly identified plant in Shrilanka but not in northern and other parts of India. Nevertheless, he refrains from identifying it. Surprisingly, he does not pay attention to the fact that the *Sarasvatīnighaṇṭu* may be the only text of this type with a separate lemma on the tree and regarding it as a distinct species with a number of synonyms: *kuṇḍalaphala*, *pītasāra*, *rohiṣa*, *ārya*, *bahuvīrya*, *caturmūlī*, *varābhiṣaj*. Thakur Balwant Singh and K.C. Chuneekar neither give a botanical identity of the tree, which is mentioned twice as *akṣīva* in the *Carakasamhitā*. It is absent from the *Suśrutasamhitā* and *Aṣṭāṅgahrdayasamhitā*. The *Dhanvantarīyanighaṇṭu* and *Kaiyadevanighaṇṭu* are not acquainted with it. The *Rājanighaṇṭu* refers to it only in its section on *tryarthāni*: (nr. 66: *akṣīvaḥ* – *saubhāñjanam*, *mahānimbaḥ*, *samudralavaṇam* ca). The *Bhāvaprakāśanighaṇṭu* (*guḍūcyādivarga* 105) regards it as a synonym of *śobhāñjana* and of *sāmudralavaṇa* (*harītakyaḍivaraga* 244).

Kamat's notes contain some hazardous identifications. One of these is *pātālamūlikā* (159), regarded as the *yāsa* of the *Dhanvantarīyanighaṇṭu* (1.22), *Fagonia cretica* Linn., without giving arguments for this assertion, but obviously on account of the similarity of some of the synonyms. The *Sarasvatīnighaṇṭu* gives *dūramūlā* and *marudbhavā* as synonyms, while the *Dhanvantarīyanighaṇṭu* has *dūramūla* and *marudbhava*. The *Rājanighaṇṭu* (3.25–26), not referred to by Kamat, has *sudūramūla* and *marudbhava*. All the other synonyms are completely different. This evidence is too slight in my opinion to conclude that *pātālamūlikā* seems to be the same as *yāsa*. *Dūramūla* is also one

³⁸ See M. Abdul Kareem.

³⁹ *Aṣṭāṅganighaṇṭu* 244ab: *jālārīr mehaśatruś ca bakulī talapoṭakāḥ*.

⁴⁰ *Ṣaḍraśanighaṇṭu* 6.64cd: *gorekhā vṛṣabhaśreṇī gośreṇī talapoṭakāḥ*.

⁴¹ *Bheṣajakalpa* 55: one of the *patrasāra* plants. The editors regard it as identical with *svaṇapuṣpī*, which is *Acacia sinuata* (Lour.) Merr. according to Kirtikar and Basu (see M. Abdul Kareem).

⁴² *Vaidyamanoramā* 16.39: *lūtasya vṛttadhavalam gṛham āśu kiṃcid / bhr̥ṣṭam rasena talapoṭabhavena (?) piṣṭvā / kamsadvayena mahiṣīnavanīṭayuktam pillāpahaṃ bahalabāhyavilepanena //*

⁴³ *Rasayogasāgara*, *pakārādi* 17: *pañcaloharasāyana*.

⁴⁴ *Yogarātnasamuccaya*, *cikitsā* 15.267 (from a *tantrāntara*) and 294 (this verse forms part of an elaborate formulation borrowed from *Aurabhra*).

of the names of muñja,⁴⁵ marudbhava of padmaka,⁴⁶ marudbhavā of kārpaśī.⁴⁷

Some problems concerning the text of the *Sarasvatīnighaṇṭu* are not seriously tackled by Kamat. One of these consists of the presence of two plants with a string of largely identical synonyms: (119) gokṣura and (155) ikṣugandhā.⁴⁸ The editor restricts himself to the remarks (ad 119) that ikṣugandhā is not found in other nighaṇṭus as a synonym of gokṣura, that the proper gokṣura has already been mentioned and that ikṣugandhā and kokilākṣa are names applied to *Asteracantha longifolia* Nees (ad 155). He fails to comment on the confusion of the two plants.

The mahāvṛkṣavarga contains the names of: (1) aśvattha – *Ficus religiosa* Linn.; (2) bilva – *Aegle marmelos* (Linn.) Corr.;⁴⁹ (3) kapittha – *Feronia limonia* (Linn.) Swingle; (4) āmra – *Mangifera indica* Linn.; (5) vṛkṣāmla = tintiḍī = ciñcā – *Tamarindus indica* Linn.;⁵⁰ (6) nimba – *Azadirachta indica* A.Juss.; (7) kaiḍarya – *Murraya koenigii* (Linn.) Spreng.;⁵¹ (8) kaṭphala – *Myrica esculenta* Buch.-Ham.;⁵² (9) kaṭvaṅga = maṇḍūkapaṇṇa = ṭuṇṭuka = aralu = śyonāka = mahānimba – *Oroxylum indicum* Vent.;⁵³ (10) āragvadha – *Cassia fistula* Linn. et Willd.;⁵⁴ (11) madhūka – *Madhuca indica* J.F.Gmel.;⁵⁵ (12) khadira – *Acacia catechu* (Linn.f.) Willd., *A. catechu* var. *sundra* Prain, *Acacia ferruginea* DC., *Acacia leucophloea* Willd.;⁵⁶ (13) palāśa – *Butea monosperma*

⁴⁵ Rājanighaṇṭu 8.204–205.

⁴⁶ Dhanvantarīyanighaṇṭu 3.88.

⁴⁷ Rājanighaṇṭu, pariśiṣṭa 4.45–46.

⁴⁸ (119): palaṅkaṣā tv ikṣugandhā śvadamṣṭrā svādukaṇṭakaḥ / gokaṇṭako gokṣurakaḥ sthalaśṛṅgā ity api //; (155): gokṣuro vanaśṛṅgā ity ikṣugandhā palaṅkaṣā / gokaṇṭako gokṣurakaḥ kokilākṣaḥ kṣuraḥ kṣurāḥ //.

⁴⁹ Jayatilak calls attention to the synonym nīlamallikā, which designates kapittha in other books. The name is found as a synonym of kapittha at Rājanighaṇṭu 11.155.

⁵⁰ Vṛkṣāmla is also a name of *Garcinia indica* (Thouars) Choisy.

⁵¹ The synonym kālāśāka is also given to *Corchorus capsularis* Linn. in other sources.

⁵² Kamat remarks that Jayatilak wrongly regarded kaṭphala and its synonyms as names of kaiḍarya. *Myrica nagi* Thunb., accepted as kaṭphala by many authorities, is not mentioned by Kamat. *Myrica esculenta* is a rather rare identification.

⁵³ The uncertainties concerning the series of synonyms are shortly referred to. The second editor remarks that śyonāka and ṭuṇṭuka are two different plants but are considered under one heading because their properties have much in common. Aralu and mahānimba are by him identified as *Ailanthus excelsa* Roxb.

⁵⁴ The correct name is *Cassia fistula* Linn. One of the synonyms, suvarṇaka, is usually a name of karnikāra. Kamat suggests that the author of the *Sarasvatīnighaṇṭu* did not want to differentiate between the two.

⁵⁵ This identification is accepted by a small number of authors. The majority mention *Madhuca longifolia* (Koenig) Macbride as madhūka; this species, erroneously called *M. longifolia* (Linn.) Macbride by D.S. Kamat, is in his opinion the *jalamadhūka*.

⁵⁶ This series of identifications is unusual; it is based on a distinction of raktasāra, śvetasāra,

(Lam.) Taub.;⁵⁷ (14) *pāribhadra* – *Erythrina indica* Lam.;⁵⁸ (15) *sarjaka* = *śāla* = *rājaniryāsa* = *sarjāhva*: *Vateria indica* Linn., *rājaniryāsa*: *Shorea robusta* Gaertn., *śāla*: *Dipterocarpus turbinatus* Gaertn.;⁵⁹ (16) *varuṇa* – *Crataeva nurvala* Buch.-Ham.;⁶⁰ (17) *kāśmarī* – *Gmelina arborea* Linn.;⁶¹ (18) *karañja* – *Derris indica* (Lam.) Bennet = *Pongamia pinnata* (Linn.) Merr.;⁶² (19) *pūtikarañja* – *Holoptelea integrifolia* (Roxb.) Planch.; (20) *śālmālī* – *Bombax ceiba* Linn.; (21) *mocarasa* – the exudate obtained from *śālmālī*; (22) *kuṭaja* – *Holarrhena antidysenterica* (Roth) DC. = *H. antidysenterica* (Linn.) Wall.;⁶³ (23) *indrayava* – the seeds of *kuṭaja*; (24) *arjuna* – *Terminalia arjuna* (Roxb.) Wight;⁶⁴ (25) *kadamba* = *nīpa* – *Mitragyna parvifolia* (Roxb.) Korth. (*kadamba*), *Anthocephalus chinensis* (Lam.) A.Rich. ex Walp. (*nīpa*); Kamat adds *Adina cordifolia* (Willd. ex Roxb.) Hook.f. ex Brandis (*haridru*) and *Sphaeranthus indicus* Linn. and allied species (*bhūmikadamba*);⁶⁵ (26) *pāṭalā* – *Stereospermum suaveolens* DC.;⁶⁶ (27) *śigru* – *Moringa oleifera* Lam.; (28) *madhuśigru* – *Moringa oleifera* Lam.;⁶⁷ (29) *agastya* – *Sesbania grandiflora* Linn.;⁶⁸ (30) *putrañjīva* – *Putranjiva roxburghii* Wall.;⁶⁹ (31) *kataka* – *Strychnos potatorum* Linn.; (32) *akṣoṭa* – *Juglans regia* Linn.; (33) *pīlu* – *Salvadora persica* Linn.; (34) *lodhra* – *Symplocos racemosa* Roxb. and

etc., types of *khadira*. Usually, *Acacia ferruginea* DC. and *Acacia leucophloea* Willd. are regarded as *arimeda*.

⁵⁷ S.D. Kamat remarks that the white-flowered type is identified by some authorities as *Butea parviflora* Roxb.

⁵⁸ This is an obsolete name for *Erythrina variegata* Linn. Kamat adds that *pāribhadra* is probably the same as *kaṇṭakipalāśa*.

⁵⁹ Kamat does not explain this series of identifications of one single item. The first and second (correct name is *Shorea robusta* Gaertn.f.) ones are generally accepted, the third one (correct name is *Dipterocarpus turbinatus* Gaertn.f.) is unusual. *D. turbinatus* is regarded as *ajakarṇa* or *aśvakarṇa* by others. The point that one string of synonyms refers to three trees awaits clarification.

⁶⁰ The valid name of this tree is *Crateva magna* (Lour.) DC. = *Crateva nurvala* Buch.-Ham.

⁶¹ This tree is also called *Gmelina arborea* Roxb.

⁶² Correct name: *Pongamia pinnata* (Linn.) Pierre.

⁶³ Valid name is *Holarrhena pubescens* (Buch.-Ham.) Wall ex G.Don (= *H. antidysenterica* (Linn.) Wall.). Kamat adds that *asitakuṭaja* is identified as *Wrightia tinctoria* R.Br.

⁶⁴ Correct name: *Terminalia arjuna* (Roxb. ex DC.) Wight et Arn.

⁶⁵ These identifications deviate partly from what is commonly found. The tree *kadamba* is identified as *Anthocephalus chinensis*, *nīpa* as *Anthocephalus chinensis*, *Barringtonia racemosa* (Linn.) Spreng. and *Haldina cordifolia* (Roxb.) Ridsdale = *Adina cordifolia* (Roxb.) Hook.f. ex Brandis, *haridru* as *Haldina cordifolia*, *bhūmikadamba* as *Mitragyna parvifolia* (Roxb.) Korth., *Mitragyna rotundifolia* (Roxb.) Kuntze, *Sphaeranthus indicus* Linn.

⁶⁶ Correct name: *Stereospermum chelonoides* (Linn.f.) DC. = *S. suaveolens* (Roxb.) DC.

⁶⁷ Kamat mentions that some accept *Moringa cancanensis* Nimmo as *madhuśigru*.

⁶⁸ Valid name: *Sesbania grandiflora* (Linn.) Poir.

⁶⁹ Valid name: *Drypetes roxburghii* (Wall.) Hurusawa.

Symplocos paniculata Miq.;⁷⁰ (35) *bhūrja* – *Betula utilis* D.Don; (36) *śīrīṣa* – *Albizia lebbbeck* (Linn.) Willd.;⁷¹ (37) *vellantara* – *Dichrostachys cinerea* (Linn.) Wight et Arn.; (38) *tinduka* = *kālaskandha* – *Diospyros melenoxylon* Roxb.;⁷² (39) *dhātakī* – *Woodfordia fruticosa* (Linn.) Kurz;⁷³ (40) *harītakī* – *Terminalia chebula* Retz.; (41) *vibhītaka* – *Terminalia bellerica* (Gaertn.) Roxb.;⁷⁴ (42) *āmalakī* – *Emblica officinalis* Gaertn.; (43) *triphalā*; (44) *aṅkola* – *Alangium salvifolium* (Linn.f.) Wang.; (45) *saptaparna* – *Alstonia scholaris* (Linn.) R.Br.;⁷⁵ (46) *śākhoṭa* – *Streblus asper* Lour.; (47) *gojihvā* – *Elephantopus scaber* Linn. and *Onosma bracteatum* Wall.; (48) *rājādana* – *Manilkara hexandra* (Roxb.) Dubard; (49) *plakṣa* – *Ficus virens* Ait. and *Ficus microcarpa* Linn.f.;⁷⁶ (50) *vaṭa* – *Ficus benghalensis* Linn.; (51) *udumbara* – *Ficus racemosa* Linn. and *Ficus heterophylla* Linn.f. var. *scabrella* Roxb.; (52) *bhallātaka* – *Semicarpus anacardium* Linn.f.;⁷⁷ (53) *śāmī* – *Prosopis cineraria* Druce;⁷⁸ (54) *śleṣmātaka* – *Cordia dichotoma* Forst. and *Cordia obliqua* Willd. var. *tomentosa* (Willd.) Kazmi;⁷⁹ (55) *tinīśa* – *Ougenia dalbergioides* Benth.;⁸⁰ (56) *kovidāra* – *Bauhinia purpurea* Willd. and *Bauhinia candida* Willd.;⁸¹ (57) *aśoka* – *Saraca asoca* (Roxb.) De Wilde; (58) *bakula* – *Mimu-*

⁷⁰ Correct name: *S. paniculata* (Thunb.) Miq.

⁷¹ Correct name: *A. lebbbeck* (Linn.) Benth. Kamat adds *A. odoratissima* (Linn.f.) Benth. as a second source of *śīrīṣa* and remarks that other species of *Albizia* are also used for medicinal purposes.

⁷² Correct name: *Diospyros melanoxylon*. Kamat adds *kākatinduka*, *Diospyros malabarica* (Desr.) Kostel = *Diospyros embryopteris* Pers., which tree he calls *Diospyros peregrina* (Gaertn.) Gurke, an incorrect name which should be *Diospyros peregrina* sensu Gurke, non *Embryopteris peregrina* Gaertn. (see S.S.R. Bennet). Kamat identifies *kālaskandha*, one of the synonyms of *tinduka*, as *Diospyros exsculpta* Buch.-Ham., which means that the *tinduka* lemma is not uniform.

⁷³ Kamat remarks that *dhātakī* does not properly belong to a *mahāvṛkṣavarga*. This plant is a shrub, not a tree.

⁷⁴ Correct name: *T. bellirica*. Kamat remarks that *Terminalia moluccana* Willd. (see on this name: Hooker's *Flora* II, 445, sub *Terminalia belerica* Roxb.; Hooker calls the distinction between the two trivial) has been used in some parts of India.

⁷⁵ Correct name: *A. scholaris* R.Br.

⁷⁶ Other identifications are: *Ficus talboti* G.King and *Ficus tjakela* Burm.f. Identifications disregarded by Kamat are: *Ficus arnottiana* (Miq.) Miq., *Ficus lacor* Buch.-Ham., *Ficus rumphii* Blume and *Ficus tsiela* Roxb.

⁷⁷ Correct name: *Semecarpus*.

⁷⁸ Correct name: *P. cineraria* (Linn.) Druce. Kamat remarks that the synonym *bhasmagarbhā*, given in the *Sarasvatīnighaṇṭu*, is applied to *śiṃśapā* in other *nighaṇṭus*. The *Dhanvantarīyanighaṇṭu* (5.121) and the *Rājanighaṇṭu* (9.201) mention *bhasmagarbhā* as a name of a variety, called *kapilaśiṃśapā*.

⁷⁹ Correct name: *C. obliqua* Willd. var. *tomentosa* (Wall.) Kazmi.

⁸⁰ Valid name: *Ougeinia oojensis* (Roxb.) Hochr. = *Ougeinia dalbergioides* Benth.

⁸¹ *Bauhinia tomentosa* Linn. is also used as *kovidāra*.

sops elengi Linn.; (59) campaka – *Michelia champaca* Linn.; (60) nāgakesara – *Mesua ferrea* Linn.; (61) priyaṅgu – *Prunus mahaleb* Linn., *Callicarpa marophylla* Vahl, *Aglaia elaeagnoidea* (Juss.) Benth.;⁸² (62) punnāga – *Calophyllum inophyllum* Linn.;⁸³ (63) kaṇṇikāra – *Pterospermum suberifolium* Linn.;⁸⁴ (64) akṣība – Kamat remarks that it seems to be a popular and commonly identified plant in Sri Lanka but not in northern and other parts of India;⁸⁵ (65) tilaka – *Wendlandia exserta* DC., as established by Thakur Balwant Singh and K.C. Chuneekar;⁸⁶ (66) badara – *Zizyphus mauritiana* Lam., *Zizyphus nummularia* (Burm.f.) Wight et Arn., *Zizyphus jujuba* Mill.;⁸⁷ (67) jambū – *Syzygium cumini* (Linn.) Skeels, *Syzygium operculatum* (Roxb.) Gamble, *Syzygium zeylanicum* (Linn.) DC., *Syzygium heyneanum* Wall. ex Gamble (Roxb.);⁸⁸ (68) śvetajambū – this may be *Syzygium malaccense* (Linn.) Merr. et Perry; (69) kākajambū;⁸⁹ (70) panasa – *Artocarpus integrifolia* Linn.f.;⁹⁰ (71) nārikelī – *Cocos nucifera* Linn.; (72) tāla – *Borassus flabellifer* Linn.; (73) kramuka – *Areca catechu* Linn.; (74) vaṃśa – *Bambusa arundinacea* Willd.; (75) ketakī – *Pandanus tectorius* Soland. ex Park.;⁹¹ (76) kharjūra – *Phoenix sylvestris* (Linn.) Roxb.; (77) surapunnāga = cāmpeya – *Mammea suriga* (Ham. ex Roxb.) Kosterm.⁹²

The kṣupādivarga contains the names of: (78) eraṇḍa – *Ricinus communis* Linn.; (79) śephālīkā – *Nyctanthes arbor-tristis* Linn.; (80) nirguṇḍī – *Vitex negundo* Linn.; (81) ākulī = śārādī = hemadruma = tvacaphala = talapoṭa =

⁸² The last name is an error for *Aglaia elaeagnoidea*. A fourth identification is omitted because it is not a tree: *Setaria italica* (Linn.) P.Beauv.

⁸³ Left unmentioned are the identifications as the large trees *Dillenia pentagyna* Roxb. and *Mammea longifolia* Planch. et Triana.

⁸⁴ *Pterospermum suberifolium* (Linn.) Lam. is an invalid name for *Pterospermum canescens* Roxb., a very uncommon identification of kaṇṇikāra. Kamat remarks that some scholars have accepted *Erythrina indica* Linn. (correctly: *Erythrina variegata* Linn. = *E. indica* Lam.) and few others *Ambroma augusta* Linn. as kaṇṇikāra. Other trees regarded as kaṇṇikāra and omitted by Kamat are: *Cassia fistula* Linn., *Garuga pinnata* Roxb. and *Pterospermum acerifolium* (Linn.) Willd.

⁸⁵ The identity of akṣība is not known with any certainty.

⁸⁶ Kamat remarks that it may be a different plant in Laṅkā. Other identifications have been suggested: *Cinnamomum malabatum* (Burm.f.) Blume and *Symplocos racemosa* Roxb.

⁸⁷ The correct name of the genus is *Zizyphus*.

⁸⁸ The correct name of *Syzygium operculatum* is *Syzygium operculatum* (Roxb.) Niedenzu, that of *Syzygium heyneanum* is *Syzygium heyneanum* (Duthie) Wall. ex Gamble.

⁸⁹ Kamat refers to the list of *Syzygium* species but does not indicate which one he has in mind.

⁹⁰ Kamat may mean *Artocarpus heterophyllus* Lam. = *A. integrifolia* auct. mult. non Linn.f.

⁹¹ Kamat probably means *Pandanus fascicularis* Lam. = *P. tectorius* auct. non Soland. ex Parkinson.

⁹² Correct name: *Mammea suriga* (Buch.-Ham. ex Roxb.) Kosterm.

mehāripu = jalaghnadruma;⁹³ (82) agnimantha – *Clerodendrum multiflorum* (Burm.f.) O.Kuntze, *Premna corymbosa* Rottl.; *Premna latifolia* Roxb. is sometimes used as a substitute;⁹⁴ (83) karpāsa – *Gossypium herbaceum* Linn.;⁹⁵ (84) arka – *Calotropis procera* (Ait.) R.Br.; (85) śvetārka – *Calotropis gigantea* (Linn.) R.Br. ex Ait.; (86) nāraṅga – *Citrus reticulata* Blanco; (87) jambīra – *Citrus limon* Linn.;⁹⁶ (88) likuca – *Garcinia xanthochymus* Hook.f.;⁹⁷ (89) mātuluṅga – *Citrus medica* Linn.; (90) dāḍima – *Punica granatum* Linn.; (91) madana – *Xeromphis spinosa* (Thunb.) Keay;⁹⁸ (92) karamarda – *Carissa congesta* Wight;⁹⁹ (93) nīlī – *Indigofera tinctoria* Linn.;¹⁰⁰ (94) śarapuṅkha – *Tephrosia purpurea* Linn.; śvetaśarapuṅkha – *Tephrosia villosa* Pers.;¹⁰¹ (95) kaṇṭakapuṅkha – Kamat remarks that this may be a species of *Tephrosia*;¹⁰² (96) japā – *Hibiscus rosa-sinensis* Linn.; (97) bandhujīva – *Pentapetes phoenicea* Linn.; (98) karavīra – *Nerium indicum* Mill.; (99) bhaṅgā – *Cannabis sativa* Linn.; (100) vāsā – *Adhatoda zeylanica* Medik.;¹⁰³ (101) kāsamarda – *Cassia sophora* Linn., *Cassia occidentalis* Linn.; (102) kirātatikta – *Swertia chirata* Buch.-Ham.; bhūnimba, one of the synonyms of kirātatikta: *Andrographis paniculata* Wall. ex Nees;¹⁰⁴ (103) viṣamuṣṭi;¹⁰⁵ (104) nāgabālā – *Grewia populifolia* Vahl, *Grewia hirsuta* Vahl,

⁹³ Kamat remarks that this shrub is not found in other nighaṇṭus and seems to be popular in Sri Lanka and South India, especially in Kerala. Kirtikar and Basu identify talapoṭa as *Cassia sophora* Linn. and tvacaphala as *Myrica nagi* Thunb.

⁹⁴ The valid name of *Clerodendrum multiflorum* (Burm.f.) O.Kuntze is *Clerodendrum phlomidis* Linn.

⁹⁵ Several other species of *Gossypium* are used as karpāsa.

⁹⁶ Correct name: *Citrus limon* (Linn.) Burm.f.

⁹⁷ Correct name: *G. xanthochymus* Hook.f. et T.Anderson.

⁹⁸ Valid name: *Catunaregam spinosa* (Thunb.) Tirvengadam.

⁹⁹ More common identifications are: *Carissa carandas* Linn. and *Carissa spinarum* Linn.

¹⁰⁰ Other species of *Indigofera* are also used as nīlī, nīlikā or nīlinī.

¹⁰¹ Other species of *Tephrosia* are also employed as śarapuṅkha.

¹⁰² P.V. Sharma suggested two species of *Tephrosia* as kaṇṭapuṅkhā: *Tephrosia spinosa* (Linn.f.) Pers. and *Tephrosia uniflora* Pers. ssp. *petrosa* (Blatter et Hallberg) Gillet et Ali (see M. Abdul Kareem).

¹⁰³ Valid name: *Justicia adhatoda* Linn.

¹⁰⁴ Valid name: *Swertia chirayita* (Roxb. ex Fleming) Karsten. *Swertia chirata* Buch.-Ham. is probably an error for *Swertia chirata* (Wall.) C.B.Clarke. The correct name of bhūnimba is *Andrographis paniculata* (Burm.f.) Wall. ex Nees. Kamat also records nepālanimba, identified as *Schweinfurthia papilionacea* (Burm.f.) Boiss., correctly named *Schweinfurthia papilionacea* (Linn.) Boiss. = *Antirrhinum papilionaceum* Linn.

¹⁰⁵ Kamat remarks that it is usually equated with viṣatinduka, *Strychnos nux-vomica* Linn. He adds that the synonyms keśamuṣṭi, karkoṭi, etc., suggest that it is the kṣupadoḍī of the Rājanighaṇṭu, which is not yet correctly identified but is similar in its botanical characteristics to *Leptadenia reticulata* (Retz.) Wight et Arn., known as jīvanti.

Sida humilis Cav., *Sida spinosa* Linn.;¹⁰⁶ (105) vartula;¹⁰⁷ (106) saḥacara – white-flowered type: *Barleria cristata* Linn., yellow-flowered type: *Barleria prionitis* Linn., red-flowered type: *Barleria cristata* Linn.; (107) bāṇā = dāsī = jhīṇṭikā – blue-flowered type: *Barleria strigosa* Willd.;¹⁰⁸ (108) snuhī – *Euphorbia neriifolia* Linn., *Euphorbia nivulia* Buch.-Ham., *Euphorbia tirucalli* Linn., *Euphorbia antiquorum* Linn.; (109) patrasnuhī;¹⁰⁹ (110) kadalī – *Musa paradisiaca* Linn. var. *sapientum* Kuntze;¹¹⁰ (111) vanakadalī – *Musa paradisiaca* Linn.; (112) iṣṣu – *Saccharum officinarum* Linn.; (113) tulasī – *Ocimum sanctum* Linn.; (114) kṣṇatulasī – *Ocimum sanctum* Linn.; (115) kuṭheraka = sitārjaka – *Orthosiphon spiralis* (Lour.) Merr.;¹¹¹ (116) pracībala;¹¹² (117) kṣṇārjaka – *Ocimum basilicum* Linn.; (118) kākamācī – *Solanum nigrum* Linn.; (119) gokṣura – *Tribulus terrestris* Linn.;¹¹³ (120) dhattūra – *Datura metel* Linn.;¹¹⁴ (121) apāmārga – *Achyranthus aspera* Linn.;¹¹⁵ (122) dantī – *Baliospermum montanum* (Willd.) Muell.-Arg.; (123) balā – *Sida cordifolia* Linn.;¹¹⁶ (124) mahābalā/atibalā – *Abutilon indicum* (Linn.) Sw.;¹¹⁷ (125)

¹⁰⁶ The valid name of *Grewia populifolia* Vahl is *Grewia tenax* (Forsk.) Fiori. The valid name of *Sida humilis* Cav. is *Sida cordata* (Burm.f.) Borssum, that of *Sida spinosa* Linn. is *Sida alba* Linn.

¹⁰⁷ Not identified according to Kamat.

¹⁰⁸ Kamat remarks that this identification is given by J.P. Jayatilak, who regards it as identical with ārtagala.

¹⁰⁹ Rarely mentioned in works on Indian medicinal plants. Occurring as patrasnuh in the Bheṣajakalpa ascribed to Bharadvāja (verse 70: one of the plants of the group called kṣīrasāra, possessing a milky juice). Kamat remarks that this may be *Euphorbia nivulia* Buch.-Ham., one of the species of *Euphorbia* he mentions as snuhī. The same identification is found in *The Wealth of India* III, 226. Koppula Hemadri (1990) regards both *Euphorbia nivulia* Buch.-Ham. and *Euphorbia neriifolia* Linn. as patrasnuhī.

¹¹⁰ Kamat may have *Musa balbisiana* Colla = *Musa sapientum* Kuntze in mind.

¹¹¹ This identification is uncommon. *Orthosiphon pallidus* Benth. and some species of *Ocimum* are often regarded as arjaka. A species of *Ocimum* is usually identified as kuṭheraka.

¹¹² Not identified. Kamat remarks that other nighaṇṭus regard pracībala as a synonym of kākajaṅghā. This tallies with regard to the Dhanvantarīyanighaṇṭu (4.23: kākajaṅghā = pracībālā). Thakur Balwant Singh and K.C. Chuneekar suggest *Vitex peduncularis* Wall. ex Schauer as its botanical equivalent.

¹¹³ Kamat mentions *Pedalium murex* Linn. as bṛhadgokṣura.

¹¹⁴ The correct name is *Datura metel* Linn.

¹¹⁵ Correct name: *Achyranthes*.

¹¹⁶ Other species of *Sida* are also accepted as balā.

¹¹⁷ *Abutilon hirtum* (Lam.) Sw. is sometimes also accepted as atibalā. Many authors mention *Sida rhombifolia* Linn. subsp. *rhombifolia* Borssum as mahābalā or atibalā.

bhūmibalā;¹¹⁸ (126) citraka – *Plumbago zeylanica* Linn.;¹¹⁹ (127) mārjāramo-
hinī;¹²⁰ (128) cakramarda – *Cassia tora* Linn. et Willd.;¹²¹ (129) aśvagandhā
– *Withania ashvagandha* Kaul = *Withania somnifera* (Linn.) Dunal;¹²² (130)
hapuṣā – *Juniperus communis* var. *saxatilis* Pallas or *Homonoia riparia*
Lour.;¹²³ (131) – mahāśrāvaṇī/mahāmuṇḍī – *Sphaeranthus indicus* Linn.; (132)
muṇḍī/śrāvaṇī – *Sphaeranthus africanus* Linn.; (133) sahadēvī;¹²⁴ (134) bṛhatī
– *Solanum surattense* Burm.f. and *Solanum indicum* Linn.; (135) siṃhī;¹²⁵
(136) mahāvārtakī;¹²⁶ (137) kṣudravārtakī;¹²⁷ (138) barbarā = ajagandhikā
= paśugandhā – *Cleome viscosa* Linn., *Cleome gynandra* Linn., *Ocimum*
basilicum Linn.; (139) barbarikā;¹²⁸ (140) punarnavā – *Boerhavia diffusa*
Linn., *Boerhavia repanda* Willd.; (141) kṣudrapunarnavā;¹²⁹ (142) brāhmī
= matsyākṣī – *Bacopa monnieri* (Linn.) Pennel;¹³⁰ (143) kapitthapatrā –
Glinus oppositifolius (Linn.) A.DC.; (144) vāstuka – *Chenopodium album*
Linn.; (145) raktavāstuka – *Chenopodium album* Linn.; (146) taṇḍulīya –
Amaranthus lividus Linn.;¹³¹ (147) cillī – *Chenopodium album* Linn.; (148)
saptalā – *Acacia concinna* DC., *Euphorbia tirucalli* Linn., *Origanum vulgare*
Linn.;¹³² (149) trāyamāṇā – *Gentiana dahurica* Fisch., *Gentiana kurroo* Royle,

¹¹⁸ Not identified according to Kamat. An identification found in the literature is: *Sida cordata* (Burm.f.) Borssum Waalkes (P.K. Warrier, V.P.K. Nambiar and C. Ramankutty, vol. 5, 1996, 129–131).

¹¹⁹ Another species, *Plumbago indica* Linn., is often also accepted as citraka.

¹²⁰ Unidentified according to Kamat. Mandāri, one of its synonyms, is identified as *Cassia auriculata* Linn., but this is a tree and not a herb (ulapa).

¹²¹ Correct name: *Cassia tora* Linn.

¹²² The valid name is *Withania somnifera* (Linn.) Dunal.

¹²³ Apart from *Juniperus communis* Linn., another species, *Juniperus macropoda* Boiss., is also accepted as hapuṣā. Other identifications are: *Sphaeranthus africanus* Linn., *Sphaeranthus indicus* Linn. *Homonoia riparia* is almost never mentioned as hapuṣā; it is commonly found as one of the identifications of pāṣāṇabheda.

¹²⁴ Not identified correctly according to Kamat. Identifications found in the literature are: *Conyza cinerea* Linn. and *Vernonia cinerea* Less.

¹²⁵ Identical with bṛhatī according to Kamat.

¹²⁶ Kamat: a type of bṛhatī; it may be *Solanum melongena* Linn. or some other species (of *Solanum*).

¹²⁷ Kamat: a type of bṛhatī.

¹²⁸ Kamat: this plant may be a species of *Cleome* or *Basilicum* or a member of the *Asclepiadaceae*. Kālidāsa's *Vaidyamanoramā* prescribes barbarī, regarded as vanatulasī by the editors, at 16.59.

¹²⁹ Kamat: *Boerhavia diffusa* Linn. (?). *Kṣudrapunarnavā* is rarely mentioned.

¹³⁰ The correct spelling is Pennell.

¹³¹ This is probably an error: *Amaranthus gangeticus* Linn. = *Amaranthus lividus* Roxb.

¹³² The correct name of the first of these is *Acacia sinuata* (Lour.) Merr. = *Acacia concinna* (Willd.) DC. *Origanum vulgare* Linn. is a very unusual identification of saptalā.

Delphinium zalil Ait. et Hemsl., *Thalictrum foliolosum* DC., *Ficus heterophylla* Linn.f.;¹³³ (150) *pāṣāṇabheda* – *Saxifraga ligulata* Wall., *Aerva lanata* Juss., *Kalanchoe pinnata* Pers., *Coleus aromaticus* Benth., *Homonoia riparia* Lour., *Rotula aquatica* Lour., *Ocimum basilicum* Linn.;¹³⁴ (151) *cāṅgerī* – *Oxalis corniculata* Linn.;¹³⁵ (152) *droṇapuṣpī* – *Leucas cephalotes* Spreng.; (153) *avākpuṣpī*;¹³⁶ (154) *bhr̥ṅgarāja* – *Eclipta alba* (Linn.) Hassk.;¹³⁷ (155) *ikṣugandhā* – *Asteracantha longifolia* Nees;¹³⁸ (156) *tāmalakī* – *Phyllanthus fraternus* Webster;¹³⁹ (157) *talapoṭa*;¹⁴⁰ (158) *kumārīkā* – *Aloe barbadensis* Mill.;¹⁴¹ (159) *pātālamūlikā* – *Fagonia cretica* Linn.; (160) *viṣṇukrāntā*;¹⁴² (161) *suvarcalā/kapotavaṅkā* – *Hydrocotyle sibthorpioides* Lam. = *Hydrocotyle rotundifolia* Roxb.;¹⁴³ (162) *parpāṭaka* – *Fumaria officinalis* Linn., *Fumaria indica* Pugsley, *Oldenlandia corymbosa* Linn., *Polycarpea corymbosa* Linn., *Justicia procumbens* Linn., *Rungia repens* Nees, *Rungia parviflora* Nees, *Peristrophe bicalyculata* Nees, *Glossocardia linearifolia* Cass., *Mollugo stricta* Linn.;¹⁴⁴ (163) *mudgaparṇī* – *Phaseolus trilobus* Ait.;¹⁴⁵ (164) *māṣaparṇī* – *Taramnus labialis* (Linn.f.) Spreng.;¹⁴⁶ (165) *śālaparṇī* – *Desmod-*

¹³³ *Gentiana dahurica* Fisch., imported from Persia, is an unusual identification. Other species of *Delphinium* and *Gentiana* are also used.

¹³⁴ Kamat remarks that a majority accept the first plant of this series as the correct botanical equivalent. The valid names are: *Bergenia ciliata* (Haw.) Sternb. forma *ligulata* Yeo = *Saxifraga ligulata* Wall., *Aerva lanata* (Linn.) Juss. ex Schult., *Kalanchoe pinnata* (Lam.) Pers., *Plectranthus amboinicus* (Lour.) Spreng. = *Coleus aromaticus* Benth.

¹³⁵ Other species of *Oxalis* are also used as *cāṅgerī*.

¹³⁶ Kamat: not identified correctly. Kirtikar and Basu regard it as *Anethum graveolens* Linn. and/or *Trichodesma indicum* (Linn.) R.Br. (see M.Abdul Kareem).

¹³⁷ Valid name: *Eclipta prostrata* (Linn.) Linn.

¹³⁸ Valid name: *Hygrophila auriculata* (Schumach.) Heine = *Asteracantha longifolia* (Linn.) Nees.

¹³⁹ Correct name: *Phyllanthus amarus* K.Schum. et Thonn. = *Phyllanthus fraternus* Webster.

¹⁴⁰ Not identified botanically according to Kamat. By some regarded as *Cassia sophora* Linn. *Talapota* is also a synonym of *ākulī* (81) in the *Sarasvatīnighaṇṭu*.

¹⁴¹ Other species of *Aloe* are also regarded as *kumārī*.

¹⁴² Many plants are regarded as *viṣṇukrāntā*; here it is probably applied to the blue-flowered variety of *girikarṇikā* which is *Clitoria ternatea* Linn.

¹⁴³ *Suvarcalā* and *kapotavaṅkā* are variously identified.

¹⁴⁴ Valid names are: *Fumaria indica* (Hassk.) Pugsley, *Hedyotis corymbosa* (Linn.) Lam. = *Oldenlandia corymbosa* Linn., *Polycarpea corymbosa* Lam., *Rostellularia procumbens* (Linn.) Nees = *Justicia procumbens* Linn., *Rungia repens* (Linn.) Nees, *Rungia parviflora* (Linn.) Nees, *Peristrophe paniculata* (Forsk.) Brummitt = *Peristrophe bicalyculata* (Retz.) Nees, *Glossocardia bosvallea* (Linn.f.) DC. = *Glossocardia linearifolia* Cass., *Mollugo pentaphylla* Linn. = *Mollugo stricta* Linn.

¹⁴⁵ Valid name: *Pueraria lobata* (Willd.) Ohwi = *Phaseolus trilobus* Ait.

¹⁴⁶ Correct name: *Teramnus labialis* (Linn.f.) Spreng.

ium gangeticum (Linn.) DC.;¹⁴⁷ (166) pṛśniparṇī – *Desmodium triquetrum* (Linn.) DC., *Uraria picta* (Jacq.) Desv. ex DC.;¹⁴⁸ (167) haṃsapādī;¹⁴⁹ (168) maṇḍūkapaṇṇī – *Centella asiatica* (Linn.) Urban; (169) suniṣaṇṇa – *Celosia argentea* Linn., *Marsilia minuta* Linn.;¹⁵⁰ (170) yavāsa – *Alhagi pseudalhagi* (Bieb.) Desv.; (171) kusumbha – *Carthamus tinctorius* Linn.; (172) dūrvā – *Cynodon dactylon* (Linn.) Pers.;¹⁵¹ (173) kuśa = darbha – *Desmostachya bipinnata* (Linn.) Stapf (kuśa) and *Imperata cylindrica* Beauv. (darbha);¹⁵² (174) śūraṇa – *Amorphophallus campanulatus* Blume ex Decne.;¹⁵³ (175) hastikarṇa;¹⁵⁴ (176) vārāhī – *Tacca integrifolia* Ker-Gawl. = *Tacca aspera* Roxb., *Tacca leontopetaloides* (Linn.) O.Kuntze, *Dioscorea pentaphylla* Linn.;¹⁵⁵ (177) bhūmitālikā – *Curculigo orchiodes* Gaertn.; (178) kamala – *Nymphaea nauchali* Burm.f.;¹⁵⁶ (179) śvetakamala, (180) raktotpala, (181) nīlotpala, (182) kākotpala, (183) raktakumuda, (184) saugandhika – idem; (185) śaivāla – *Ceratophyllum demersum* Linn., *Vallisneria spiralis* Linn.; (186) vāriparṇī – *Pistia stratiotes* Linn., *Eichhornia crassipes* Solms.

The latādivarga contains the names of: (187) guḍūcī – *Tinospora cordifolia* (Willd.) Hook.f. et Thoms.; (188) drākṣā – *Vitis vinifera* Linn.; (189) trivṛt(ā) – *Merremia turpethum* (Linn.) Shah et Bhatt;¹⁵⁷ (190) śyāmā;¹⁵⁸ (191) bimbī – *Coccinia grandis* (Linn.) Voigt; (192) vidārī – *Pueraria tuberosa* Roxb. ex Willd. (vidārī) and *Ipomoea digitata* (Linn.) R.Br. (kṣīravīdārī);¹⁵⁹ (193)

¹⁴⁷ Kamat adds that *Desmodium laxiflorum* DC. is also to be examined.

¹⁴⁸ Kamat omits *Uraria lagopodioides* (Linn.) Desv., often regarded as pṛśniparṇī.

¹⁴⁹ Kamat remarks: here it seems to be a type of lajjālu and as such *Biophytum sensitivum* (Linn.) DC. should be accepted; there is another haṃsapādī, identified as *Adiantum lunulatum* Burm. = *Adiantum philippense* Linn. and other species of *Adiantum*.

¹⁵⁰ Correct name: *Marsilea minuta* Linn.

¹⁵¹ *Clerodendrum serratum* (Linn.) Moon and *Hedychium spicatum* Buch.-Ham. are accepted as dūrvā by others.

¹⁵² Some mention *Imperata cylindrica* (Linn.) Raeusch. as darbha.

¹⁵³ Valid name: *Amorphophallus paeoniifolius* (Dennst.) Nicolson = *Amorphophallus campanulatus* (Roxb.) Bl. ex Decne.

¹⁵⁴ Kamat suggests that it is either *Plesmonium margaritifera* (Roxb.) Schott or *Amorphophallus sylvaticus* (Roxb.) Kunth; the first one is also called vajravallī, the second one vajrakanda.

¹⁵⁵ *Dioscorea pentaphylla* Linn. is an unusual identification of vārāhī.

¹⁵⁶ Correct name: *Nymphaea nouchali* Burm.f.

¹⁵⁷ Valid name: *Operculina turpethum* (Linn.) Silva Manso = *Convolvulus turpethum* Linn. = *Ipomoea turpethum* (Linn.) R.Br. Kamat remarks that many other species of *Ipomoea* may have been used in various regions.

¹⁵⁸ Not identified by Kamat. Many identifications are recorded in the secondary literature.

¹⁵⁹ Correct names: *Pueraria tuberosa* (Roxb. ex Willd.) DC. and *Ipomoea mauritiana* Jacq. = *Ipomoea digitata* auct. plur. non Linn. Kamat adds in a footnote that many manufacturers use *Adenia hondala* (Gaertn.) de Wilde as vidārī.

ajaśrṅgī – *Gymnema sylvestre* R.Br.;¹⁶⁰ (194) mūrvā – *Maerua oblongifolia* (Forsk.) A.Rich., *Sansevieria roxburghiana* Schult., *Bauhinia vahilli* W. et A., *Marsdenia tenacissima* W. et A., *Clematis gauriana* Roxb., *Helicteres isora* Linn., *Chenomorpha macrophylla* (Roxb.) D.Don;¹⁶¹ (195) śatamūlī = śatāvārī – *Asparagus racemosus* Willd.;¹⁶² (196) nyagrodhī = dravantī – *Jatropha glandulifera* Roxb.; (197) tāmbūlī – *Piper betle* Linn.; (198) vajravallī – *Plesmonium margaritifera* Schott; (199) lakṣmaṇā – *Ipomoea sepiaria* Koen., *Aralia quinquefolia*;¹⁶³ (200) śārṅgeṣṭā;¹⁶⁴ (201) paṭola – *Trichosanthes dioica* Roxb., *Trichosanthes cucumerina* Linn.; (202) somavallī – *Ephedra gerardiana* Wall., *Ephedra major* Host.; (203) devadālī – *Luffa echinata* Roxb.; (204) prasāriṇī – *Paederia foetida* Linn. (most accepted source), *Leptadenia spartium* Wight (accepted in Rajasthan), *Merremia tridentata* Hall. (accepted in Kerala), *Convolvulus arvensis* Linn. (accepted in some other places);¹⁶⁵ (205) girikarnī – *Clitoria ternatea* Linn.; (206) dāruharidrā – *Berberis aristata* DC.;¹⁶⁶ (207) haridrā – *Curcuma longa* Linn.; (208) sārīvā – *Ichnocarpus frutescens* R.Br. (śvetasārīvā) and *Hemidesmus indicus* (Linn.) R.Br. (kṛṣṇasārīvā);¹⁶⁷ (209) guṇjā – *Abrus precatorius* Linn.; (210) kuberākṣī – *Caesalpinia bonducella* Fleming;¹⁶⁸ (211) jyotiṣmatī – *Celastrus paniculatus* Willd.; (212) kapikacchu – *Mucuna pruriens* (Linn.) DC.; (213) pāṭhā – *Cissampelos pareira* Linn., *Cissampelos hexandra* Roxb.;¹⁶⁹ (214) lāṅgalī – *Gloriosa superba* Linn.;¹⁷⁰

¹⁶⁰ Kamat adds that *Pergularia daemia* (Forsk.) and *Helicteres isora* Linn. are also accepted as ajaśrṅgī. Correct name: *Pergularia daemia* (Forsk.) Choiv.

¹⁶¹ Correct names: *Sansevieria roxburghiana* Schult.f., *Bauhinia vahlii* Wight et Arn., *Clematis gauriana* Roxb. ex DC., *Chenomorpha fragrans* (Moon) Alston = *Chenomorpha macrophylla* (Roxb.) G.Don.

¹⁶² Kamat remarks that *Asparagus officinalis* Linn. is also used.

¹⁶³ Kamat says: not identified correctly; the names mentioned are suggestions. Correct names: *Ipomoea sepiaria* Koen. ex Roxb., *Panax burkillianus* Bennet et Viswa. = *Aralia quinquefolia* Linn. (the American ginseng).

¹⁶⁴ Not identified correctly according to Kamat. Identifications found in the literature: *Physalis minima* Linn. and *Cardiospermum halicababum* Linn.

¹⁶⁵ Correct names: *Leptadenia pyrotechnica* (Forsk.) Decne. = *Leptadenia spartium* Wight et Arn., *Merremia tridentata* (Linn.) Hallier f.

¹⁶⁶ Kamat remarks that *Berberis asiatica* Roxb. and *Berberis lycium* Royle are also used.

¹⁶⁷ Kamat remarks that in North Indian markets stem pieces of *Cryptolepis buchanani* Roem. et Schult. are sold.

¹⁶⁸ Valid name: *Caesalpinia bonduc* (Linn.) Roxb. = *Caesalpinia bonducella* (Linn.) Fleming.

¹⁶⁹ Correct name: *Cissampelos pareira* Linn. var. *hirsuta* (Buch.-Ham. ex DC.) Forman. *Cissampelos hexandra* is not a valid name. Kamat adds *Cyclea peltata* Hook. (valid name: *Cyclea peltata* (Lam.) Hook.f. et Thoms.) as rājapāṭhā; this plant is the source of pāṭhā in southern India.

¹⁷⁰ Kamat remarks that in some places *Costus speciosus* (Koen.) Sm. is used as the kemuka of the nighaṇṭus.

(215) upodikā – *Basella alba* Linn.; (216) kūṣmāṇḍakī – *Benincasa cerifera* Savi;¹⁷¹ (217) tumbī – *Lagenaria siceraria* (Molina) Standley; (218) kaṭutumbī – the same as tumbī; (219) koṣātakī – *Luffa acutangula* Roxb.;¹⁷² (220) kaṭukoṣātakī – *Luffa acutangula* (Linn.) Roxb. var. *amara* Clarke;¹⁷³ karkaṭī – *Cucumis momordica* Roxb.;¹⁷⁴ (222) indravāruṇikā – *Citrullus colocynthis* Schrad.;¹⁷⁵ (223) trapaṣa;¹⁷⁶ (224) karkoṭī – *Momordica dioica* Roxb. ex Willd.; (225) kāravallī – *Momordica charantia* Linn.; (226) sprṅkā – *Melilotus officinalis* (Linn.) Medik. and other species such as *Melilotus indica* (Linn.) All., *Trigonella corniculata* Linn. and other species of *Trigonella*, *Anisomeles malabarica* R.Br.;¹⁷⁷ (227) mallikā – *Jasminum sambac* Linn.;¹⁷⁸ (228) mālatī = jātī – *Jasminum grandiflorum* Linn.;¹⁷⁹ (229) mādhavīlatā – *Hiptage benghalensis* (Linn.) Kurz; (230) yūthikā – *Jasminum auriculatum* Vahl; (231) tilaka – *Wendlandia exserta* DC.¹⁸⁰

The candanādivarga contains the names of: (232) śvetacandana – *Santalum album* Linn.; (233) haricandana – idem; (234) raktacandana = patrāṅga – *Pterocarpus santalinus* Linn. (raktacandana), *Caesalpinia sappan* Linn. (patrāṅga); (235) agarū – *Aquilaria agallocha* Roxb.; (236) kālāguru – idem; (237) sugandhāguru – idem; (238) devadāru – *Cedrus deodara* Roxb. ex D.Don;¹⁸¹ (239) karpūra – *Dryobalanops aromatica* Gaertn., *Cinnamomum camphora* (Linn.) Sieb., various species of *Blumea*, e.g., *Blumea balsamifera* (Linn.) DC.;¹⁸² (240) kastūrī – musk from the musk deer; (241) kuṅkuma – *Crocus sativus* Linn.; (242) śrīvāsa – oleoresin from *Pinus longifolia* and other

¹⁷¹ Valid name: *Benincasa hispida* (Thunb.) Cogn.

¹⁷² Correct name: *Luffa acutangula* (Linn.) Roxb.

¹⁷³ Correct name: *L. acutangula* var. *amara* (Roxb.) C.B. Clarke.

¹⁷⁴ Valid name: *Cucumis melo* Linn. var. *momordica* Duthie et Fuller.

¹⁷⁵ Valid name: *Citrullus colocynthis* (Linn.) Schrad. Kamat adds, as identified by others, *indravāruṇibheda*: *Cucumis trigonus* Roxb. (valid name: *Cucumis pseudo-colocynthis* Royle), and *viśālā* (a synonym of *indravāruṇikā* in the *Sarasvatīnighaṇṭu*): *Trichosanthes palmata* Roxb. (valid name: *Trichosanthes tricuspidata* Lour.)

¹⁷⁶ The same as *indravāruṇikā* according to Kamat.

¹⁷⁷ The author's name of *Melilotus officinalis* varies in the secondary literature.

¹⁷⁸ Valid name: *Jasminum sambac* (Linn.) Ait. Some authorities take *Jasminum angustifolium* Vahl according to Kamat.

¹⁷⁹ Kamat adds that *svarṇajātī* seems to be *Jasminum humile* (valid name: *Jasminum bignoniaceum* Wall. ex G.Don = *Jasminum humile* sensu Clarke) and that another *mālatī* is identified as *Aganosma caryophyllata* G.Don. (valid name: *Aganosma dichotoma* (Roth) K.Schum.)

¹⁸⁰ Valid name: *Wendlandia heynei* (Roem. et Schult.) Santapau et Merchant = *Wendlandia exserta* (Roxb.) DC. Another species, *Wendlandia tinctoria* DC. (valid name: *W. tinctoria* (Roxb.) DC.), is also suggested according to Kamat.

¹⁸¹ Valid name: *Cedrus deodara* (Roxb.) Loud.

¹⁸² Valid names: *Dryobalanops* Gaertn.f., *Cinnamomum camphora* (Linn.) Presl.

trees such as *Vateria indica* Linn.;¹⁸³ (243) *sarjarasa* – the resin from *Shorea robusta* Gaertn.f.; (244) *guggulu* – *Commiphora wightii* (Arn.) Bhandari; (245) *rocanā* – a bovine gall stone; (246) *kuṣṭha* – *Saussurea lappa* (Decne.) Sch.Bip. = *Saussurea lappa* C.B.Clarke;¹⁸⁴ (247) *tagara* – *Valeriana jatamansi* Jones = *Valeriana wallichii* DC.; (248) *madhuka* – *Glycyrrhiza glabra* Linn.; (249) *uśīra* – *Andropogon muricatus* Retz.;¹⁸⁵ (250) *hrīvera* = *vālaka* – *Vetiveria zizanioides* (Linn.) Nash;¹⁸⁶ (251) *kaṅkola* – *Piper cubeba* Linn.f.; (252) *nāgakesara* – *Mesua ferrea* Linn.; (253) *elā* – *Amomum subulatum* Roxb., *Amomum aromaticum* Roxb.; (254) *sūkṣmailā* – *Elettaria cardamomum* (Linn.) Maton; (255) *tvac* – *Cinnamomum verum* J.S.Presl; (256) *tamālapatra* – *Cinnamomum tamala* (Ham.) Nees et Eburn.;¹⁸⁷ (257) *trijāta* – a mixture of *elā*, *tvac* and *patra*; (258) *caturjāta* – *trijāta* with the addition of *nāgakesara*; (259) *jātīphala* – *Myristica fragrans* Houtt.; (260) *lavaṅga* – *Syzygium aromaticum* (Linn.) Merr. et L.M.Perry; (261) *jātīpatrī* – mace; (262) *coraka* – not satisfactorily identified; suggested are: *Angelica glauca* Edg., *Coleus amboinicus* Lour.;¹⁸⁸ (263) – *dviṭīyacoraka* – this may be the *kṛṣṇakarcūra* of the *Abhidhānamañjarī*, for which *Curcuma zedoaria* (Christm.) Roscoe is suggested; (264) *nakha* – the shells of *Helix aspera* and *Achatina fulica*;¹⁸⁹ (265) *mañjiṣṭhā* – *Rubia cordifolia* Linn.; (266) *bākucī* – *Psoralea corylifolia* Linn.;¹⁹⁰ (267) *jaṭāmāṃsī* – *Nardostachys grandiflora* DC.; (268) *musta* – *Cyperus rotundus* Linn. and perhaps other species of the *Cyperaceae*; (269) *rāsnā* – some plants used as *rāsnā* are: *Pluchea lanceolata* Oliver, *Vanda roxburghii* and *Inula helenium* Linn.; the synonyms *nākulī* and *gandhanākulī* are separate plants;¹⁹¹ (270) *śatapuṣpā* – *Peucedanum graveolens* (Linn.) = *Peucedanum graveolens* Benth. et Hook.f. = *Anethum sowa* Kurz;¹⁹² (271) *viḍaṅga* – *Embelia ribes* Burm.f.;¹⁹³ (272) *ativiṣā* – *Aconitum heterophyllum*

¹⁸³ Valid name: *Pinus roxburghii* Sarg. = *Pinus longifolia* Roxb.

¹⁸⁴ Valid name: *Saussurea lappa* C.B. Clarke.

¹⁸⁵ Valid name: *Andropogon squarrosus* Linn.f. = *Andropogon muricatus* Retz.

¹⁸⁶ This grass is often thought to be *uśīra*. Kamat adds that some authorities identify *vālaka* as *Pavonia odorata* Linn. (valid name: *Pavonia odorata* Willd.)

¹⁸⁷ Valid name: *Cinnamomum tamala* Nees et Eberm.

¹⁸⁸ Valid name: *Plectranthus amboinicus* (Lour.) Spreng. = *Coleus amboinicus* Lour.

¹⁸⁹ Correct name: *Achatina fulica* Ferussac.

¹⁹⁰ Correct name: *Psoralea corylifolia* Linn. Kamat adds that *Psoralea plicata* Del. (Cooke) (correct name: *Psoralea plicata* Delile) is suggested as the *śveta* variety.

¹⁹¹ Correct names: *Pluchea lanceolata* Oliver et Hiern., *Vanda tessellata* (Roxb.) Hook. ex G.Don = *Vanda roxburghii* R.Br. Identifications proposed for *nākulī* and *gandhanākulī*: *Rauvolfia serpentina* (Linn.) Benth. ex Kurz and *Aristolochia indica* Linn.

¹⁹² Correct names: *Anethum graveolens* Linn. = *Peucedanum graveolens* (Linn.) Benth. et Hook.f. = *Anethum sowa* Kurz.

¹⁹³ Kamat adds that in some places *Embelia tsjeriam-cottam* A.DC. is used.

Wall. ex Royle; (273) kaṭurohiṇī – *Picrorhiza kurroa* Royle ex Benth.; (274) pītarohiṇī – not correctly identified;¹⁹⁴ (275) prapaṇḍarīka – not identified correctly;¹⁹⁵ (276) śaṅkhanakha – not identified by Kamat; (277) vaṃśarocanā – concretions occurring at the joints of *Bambusa arundinacea* Willd. and allied species of *Bambusa*;¹⁹⁶ (278) dhānyaka – *Coriandrum sativum* Linn.; (279) jīraka – *Cuminum cyminum* Linn.; (280) kṛṣṇajīraka – *Carum carvi* Linn.; (281) ajamodā – *Trachyspermum roxburghianum* (DC.) Craib; (282) sarṣapa – *Brassica juncea* (Linn.) Czern. et Coss., *Brassica campestris* Linn. var. *dichotoma* Roxb.;¹⁹⁷ (283) śvetasarṣapa – *Brassica campestris* Linn. var. *glauca* Roxb. and var. *toria* Duthie et Fuller; (284) śuṇṭhī – *Zingiber officinale* Rosc.; (285) marica – *Piper nigrum* Linn.; (286) pippalī – *Piper longum* Linn.; (287) gajapippalī – *Piper retrofractum* Vahl;¹⁹⁸ (288) trikaṭu – a mixture of śuṇṭhī, marica and pippalī; (289) pippalīmūla – the roots of *Piper longum* Linn. or of *Piper retrofractum* Vahl; (290) hiṅgu – a gum resin obtained from *Ferula* species; (291) methī – *Trigonella foenum-graecum* Linn.; (292) rasona = laṣuna – *Allium sativum* Linn.; (293) gṛñjana – *Allium ascalonicum* Linn., *Allium leptophyllum* Wall.;¹⁹⁹ (294) saindhava – rock salt; (295) sauvarcala – black salt, sochal salt; (296) sarjikākṣāra – barilla, impure carbonate of soda; (297) viḍlavaṇa – not identified; (298) kālalavaṇa – not identified; (299) sāmudraka – salt; (300) pāṃśulavaṇa – not identified; (301) romalavaṇa – a type of salt obtained in Rajputana; (302) audbhida – salt obtained from salty places in Uttar Pradesh, Bihar, Bengal, etc.; (303) lavaṇāṣṭaka – the group of eight types of salt; (304) yavakṣāra – impure carbonate of potash; (305) śarkarā – sugar; (306) khaṇḍaśarkarā – a form of sugar; (307) phāṇita – not identified; (308) kṣaudra – honey; (309) siktha – bees wax; (310) lākṣā – lac; (311) gairika – ochre; (312) pārada – mercury; (313) hiṅgula – cinnabar; (314) haritāla – orpiment; (315) manaḥśilā – realgar; (316) gandhaka – sulphur;

¹⁹⁴ Kamat remarks that some suggest *Gentiana kurroa* Royle (correct name: *Gentiana kurroo* Royle) and that the synonym *netraṣadha* is suggestive of *Coptis teeta* Wall. Kirtikar and Basu, as well as P.V. Sharma, mention *Gmelina arborea* Roxb. as its botanical equivalent (see M. Abdul Kareem). The plant is found in Ṭoḍara's *Āyurvedasaukhya* (Materia Medica, 2.339ab, unidentified: cakṣuṣyaṃ śvetamaricaṃ cakṣuṣyā pītarohiṇī), Bhiṣagārya's *Abhidhānamañjarī* (195: kaṭurohiṇī dvitīyā, not identified botanically) and the *Mādhavadravayaguṇa* (1.153cd: cakṣuṣyaṃ śvetamaricaṃ cakṣuṣyā pītarohiṇī).

¹⁹⁵ This drug has indeed not been identified with any certainty.

¹⁹⁶ Other sources are species of the genera *Hedychium*, *Curcuma* and *Maranta*.

¹⁹⁷ Correct names: *Brassica juncea* (Linn.) Czern., *Brassica napus* Linn. var. *dichotoma* (Roxb.) Prain.

¹⁹⁸ Kamat remarks that some accept *Scindapsus officinalis* Schott.

¹⁹⁹ *Allium leptophyllum* Wall is an invalid old name for *Allium griffithianum* Boiss. = *Allium rubellum* M.Bieb.

(317) karparītuttha – blue vitriol; (318) mayūratuttha – copper sulphate; (319) añjana – galena; (320) kapotāñjana – a type of añjana; (321) dārvañjana – not identified; (322) rasāñjana – not identified; (323) sindūra – red lead; (324) mākṣika – chalcopryrite; (325) śvetapāṣāṇa – a kind of stone; (326) śilājatu – black bitumen; (327) vatsanābha – a species of Aconite;²⁰⁰ (328) ayaskānta – magnet; (329) abhraka – mica; (330) samudraphena – os sepiae; (331) – ṭaṅkaṇa – borax; (332) varāṭa – cowrie; (333) mauktika – pearl; (334) pravāla – coral; (335) padmarāga – ruby; (336) gomeda – hessonite; (337) hīraka = vajra – diamond; (338) vaidūrya – cat's eye; (339) indranīla – blue sapphire; (340) puṣparāga – yellow sapphire; (341) marakata – emerald; (342) sūryakāntamaṇi – spinel; (343) candrakāntamaṇi – moonstone; (344) navaratnāni – the group of nine gems; (345) suvarṇa – gold; (346) rūpyaka – silver; (347) tāmra – copper; (348) rīti – brass; (349) kāmṣya – bronze; (350) sīsa – lead; (351) vaṅga – not identified;²⁰¹ (352) tīkṣṇaloha – a type of iron; (353) loha – iron; (354) maṇḍūra – iron rust; (355) pañcaloha – the group of five metals.

The bhaktādivarga deals with: (356) bhakta – cooked rice; (357) dagdhabhakta – not identified; (358) māṣarā – not identified; (359) ghanā and vilepī – types of boiled liquid rice; (360) taṇḍula – not identified; (361) taṇḍulakaṇa – not identified; (362) lājā – not identified; (363) bhr̥ṣṭataṇḍula – not identified; (364) kāñjika – not identified; (365) taṇḍulodaka – the water collected after washing of rice grains; (366) vāri – water; (367) godhūma – *Triticum sativum* Linn.; (368) kodrava – *Paspalum scrobiculatum* Linn.; (369) kaṅgu – *Setaria italica* Beauv.;²⁰² (370) mudga – *Vigna radiata* (Linn.) Wilczek var. *radiata* Verdcourt;²⁰³ (371) kulattha – *Dolichos uniflorus* Lam.;²⁰⁴ (372) rājamāṣa – *Vigna unguiculata* (Linn.) Walp. ssp. *cylindrica* (Linn.) Van Eseltine;²⁰⁵ (373) māṣa – *Vigna mungo* (Linn.) Hepper;²⁰⁶ (374) caṇaka – *Cicer arietinum* Linn.; (375) tila – *Sesamum indicum* Linn.;²⁰⁷ (376) tilataila – sesame oil; (377) kṣīra – milk; (378) dadhi/mastu – the fluid of curds; (379) takra – butter milk; (380) navaṇīta – butter; (381) ghṛta – ghee (clarified butter); (382) gomūtra – cow's urine; (383) gośakṛt – cow's faeces; (384) dadhi – curds; (385) sudhā – divine nectar (?); (386) rudhira – blood; (387) vṛkṣa – tree; (388) latā – twin-

²⁰⁰ *Aconitum ferox* Wall. ex Ser. is usually accepted for vatsanābha according to Kamat.

²⁰¹ Usually regarded as tin.

²⁰² Valid name: *Setaria italica* (Linn.) P.Beauv.

²⁰³ This plant is often considered to be māṣa, not mudga.

²⁰⁴ Valid name: *Macrotyloma uniflorum* (Lam.) Verdc.

²⁰⁵ Correct name: *Vigna unguiculata* (Linn.) Walp. ssp. *cylindrica* (Linn.) van Eseltine.

²⁰⁶ This plant is usually considered to be mudga.

²⁰⁷ Valid name: *Sesamum orientale* Linn. = *Sesamum indicum* Linn.

ner;²⁰⁸ (389) mūla – root; (390) kanda – tuber, tuberous root, etc.; (391) patra – leaf; (392) valkala/samidh – bark/smaller branch; (393) puṣpa – flower; (394) kalikā – bud; (395) bālaphala – immature or young fruit; (396) phala – fruit; (397) niryāsa – exudate; (398) nāla/vṛnta – kāṇḍa of a kṣupa (shrub) is called nāla, prasavabandhana (stalk of a flower) is called vṛnta; (399) bīja/majjā – seed/pulp of a fruit; (400) pañcāṅga – mūla, patra, phala, puṣpa, and tvac, all these together is called pañcāṅga; (401) roga – disease; (402) ātura – patient; (403) bhiṣaj – physician; (404) ārogya – health.

The botanical names employed show a number of peculiarities. Some are the valid names, some are older forms. A system cannot be detected. Kamat does not disclose which sources he made use of in his botanical identifications and which were his criteria of choice. In a considerable number of instances he does not decide and gives a number of suggested identities. Examples are: (47) gojihvā, (40) plakṣa (54) śleṣmātaka, (56) kovidāra, (61) priyaṅgu. The mention of only one identification where several ones are known from the literature is a common feature of his approach.

The synonyms of botanical names mentioned are occasionally pointless and superfluous; examples are: (2) *Aegle marmelos* (Linn.) Correa = *Aegle marmelos* Correa; (18) *Derris indica* (Lam.) Bennet = *Pongamia pinnata* Merr. = *Pongamia pinnata* (Linn.) Merr. Some synonyms are enigmatic; examples are: (13) *Butea monosperma* (Lam.) Taub. = *Butea monosperma* (Lam.) Kuntz.; the second name is absent from the botanical literature consulted; (24) *Terminalia arjuna* (Roxb.) Wight = *Terminalia arjuna* Bedd.; the last name is absent from the botanical literature consulted.

Examples of identifications that deserve to be noticed are: *Pterospermum suberifolium* as karṇikāra (63), whereas almost all other authorities regard this tree as mucukunda; the identification of kuṭheraka (115) is unusual; the identifications of hastikarṇa (175) as suggested by Kamat are not found elsewhere; the identification of gr̥ṇjana (293) as species of *Allium* is uncommon; most authors regard *Daucus carota* Linn. as the proper identity; the botanical identities of mudga (370) and māṣa (373) have been shifted compared with what is usually found.

Plants absent from the *Sarasvatīnighaṇṭu* are those belonging to the aṣṭavarga and a considerable number of other ones, for example: amlavetasa, asana, aśmantaka, ataśī, bījaka, kāravī, tālīśa, tumburu, tuvaraka, vacā, vandā, vetasa, vṛśīkālī. The reason of part of these omissions may be their absence in southern India. This tallies in the cases of amlavetasa, tālīśa, tumburu and vetasa.

²⁰⁸ Error for twiner.

SUMMARY

This new edition of the *Sarasvatīnighaṇṭu* by Dr.S.D. Kamat is a welcome addition to the corpus of Sanskrit medical texts available to scholars interested in this field of research. His efforts in editing and annotating it are appreciated. However, the text he established cannot be regarded as a critical one. The manuscripts on which it is based are not described and their variants are not recorded in a critical apparatus.

The annotation is useful in places but in general unsatisfactory, as pointed out in my critical remarks.

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