



Original Research Article

doi: <https://doi.org/10.20546/ijcrbp.2019.603.005>

## Supplement to the legumes of Tamil Nadu, India

R. Kottaimuthu<sup>1, 2\*</sup>

<sup>1</sup>Department of Botany, Saraswathi Narayanan College, Madurai-625 022, Tamil Nadu, India <sup>2</sup>Presently at: Department of Botany, Alagappa University, Karaikudi-630003, Tamil Nadu, India

\*Corresponding author

### Article Info

Date of Acceptance:  
10 February 2019

Date of Publication:  
06 March 2019

### Keywords

India  
Legumes  
Literature survey  
Supplement

### ABSTRACT

During the literature survey on Legumes of Tamil Nadu for the Ph. D. dissertation of the author, he has compiled the scattered information from various journals and books. In order to bring the Legumes of Tamil Nadu more complete, it has been considered meaningful to publish the taxonomic account of all additional taxa in the form of a supplement. This will be very useful to various researchers who were engaged on the study of legumes of India. A total number of 90 taxa of legumes belonging to 42 genera are enumerated in this paper. Two new combinations [*Senegalia tanjorensis* (Ragup., Thoth. & A. Mahad.) Kottaim. and *Vachellia pseudowightii* (Thoth.) Kottaim.] are also proposed in the paper.

### Introduction

Fabaceae (nom. alt. Leguminosae) is one of the most successful lineages of flowering plants. Next to Asteraceae and Orchidaceae, it is the third largest angiosperm family consisting of about 751 genera and 19,500 species (Lewis et al., 2005). Moreover, it harbours the largest genus of flowering plants, *Astragalus* L. (Sanderson and Wojciechowski, 1996). Legumes are important components of nearly all terrestrial biomes and forming ecologically important constituents of temperate, Mediterranean, tropical, arid, seasonally dry, rain forest, and savanna ecosystems (Yahara et al., 2013). The family presents amazing morphological and life history diversity, from giant rain forest trees and woody lianas, to desert shrubs, ephemeral herbs, herbaceous twining

climbers, aquatics and fire-adapted savanna species (Lewis et al., 2005).

Taxonomic treatment of legumes of India began with Henrich van Rheede (1678-1703), who described and enumerated 63 species belonging to 33 genera in *Hortus Indicus Malabaricus* (Manilal 2003; Nicolson et al., 1988). Based on this work and other collections from India Linnaeus (1753, 1754) described 72 species of legumes belonging to 20 genera in his species plantarum and Genera Plantarum (Sanjappa, 2001). Thereafter Burman (1768), Lamarck (1786), Willdenow (1802), De Candolle (1825), Taubert (1894) and Wallich (1820), Roxburgh (1795, 1832), Wight and Arnott (1834) and Bentham (1843) contributed significantly to Indian legumes. However, the most extensive study on legumes of India was done by

Baker (1876-1878), who documented 833 species belonging to 132 genera. Among them only 548 species in 120 genera were distributed within the present political boundary of India (Sanjappa, 1992). Sanjappa during 1992 published a checklist of all the known Indian legumes based on literature and specimens available in various herbaria. This checklist not only gives the magnitude of legume diversity in India but also provides baseline data for taxonomic revisions, floristic accounts and monographs (Sanjappa, 2001).

After the publication of "Flora of Tamil Nadu", many legumes are reported from Tamil Nadu either as new to science or as new reports to the state. But, Betty and Ramachandran (2014) have listed only 11 species as an addition to the legumes of Tamil Nadu. During the literature survey on Legumes of Tamil Nadu for the Ph. D. dissertation, the author has compiled the scattered information from various journals and books. Totally 90 taxa of legumes are enumerated with original citation. Moreover, earlier some of the taxa omitted by Vajravelu (1983) are also included in the present communication.

### Systematic Enumeration

Note: The botanical names marked with the following symbols denote: \*: New record for India; \*\*: New record for South India or Peninsular India; #: New record for Tamil Nadu.

\**Acacia coleii* Maslin & L. A. J. Thomson in Austral. Syst. Bot. 5: 737. 1992; Chakrab. & V. Maina in J. Econ. Taxon. Bot. 39(1): 194. 2015.

Distribution:—INDIA (Cultivated in Goa, Tamil Nadu & West Bengal)-A native of Australia.

\**Acacia decipiens* R. Br. in Ait. f., Hort. Kew. ed. 3, 5. 463. 1813; Sanjappa, Legumes Ind. 47. 1992.

Distribution:—INDIA (Cultivated in Nilgiri Hills of Tamil Nadu)-A native of Australia.

\**Acacia dodonaeifolia* (Pers.) Balb., Cat. Hort. Acad. Taur. 7. 1813; Chakrab. & M. Gangop. in J. Econ. Taxon. Bot. 20: 630. 1996.

Distribution:—INDIA (Cultivated in Tamil Nadu)-

A native of Australia.

#*Acacia holosericea* A. Cunn. ex G. Don, Gen. Syst. 2: 407. 1832; K. M. Matthew, Fl. Palni Hills 1: 405. 1999.

Distribution:—INDIA (Cultivated in Howrah & Tamil Nadu)-A native of Australia.

\**Acacia linifolia* (Vent) Willd., Sp. Pl. 4: 1051. 1806; Chakrab. & M. Gangop. in J. Econ. Taxon. Bot. 20: 630. 1996.

Distribution:—INDIA (Tamil Nadu)-A native of Australia.

\**Acacia longissima* H. L. Wendl., Comm. Acac. Aphyll.: 45. 1820. *Acacia linearis* Sim. in Bot. Mag. 47: t. 2156. 1820; B. D. Sharma & al. in Biol. Mem. 2: 51. 1977.

Distribution:—INDIA (Tamil Nadu)-A native of Australia.

\**Acacia longispicata* Benth. in Mitch., J. Trop. Austral. 298. 1848; Sanjappa, Legumes Ind. 49. 1992.

Distribution:—INDIA (Cultivated on hill stations of Tamil Nadu)-A native of Australia.

#*Acacia mangium* Willd., Sp. Pl. 4:1053.1806.

Distribution:—INDIA (Cultivated in Delhi, Kerala & Tamil Nadu)-A native of Australia.

#*Acacia prominens* A.Cunn. ex G.Don, Gen. Hist. 2: 406. 1832; B.D. Sharma & al. in Biol. Mem. 2: 51. 1977.

Distribution:—INDIA (Karnataka & Tamil Nadu)-A native of Australia.

\**Acacia stricta* Willd., Sp. Pl. 4: 1052. 1806; B.D. Sharma & al. in Biol. Mem. 2: 51. 1977.

Distribution:—INDIA (Tamil Nadu)-A native of Australia.

*Aganope agastyamalayana* M. B. Viswan., Manik. & Tangav. in Adansonia 25(2): 206. 2003.

Distribution:—INDIA (Tamil Nadu).

**\*\**Albizia julibrissin*** Durazz in Mag. Tosc. 3: 11. 1772; B.D. Sharma & al. in Biol. Mem. 2: 52. 1977.

Distribution:—INDIA (Tamil Nadu, Himalaya, Meghalaya), AFRICA and RUSSIA.

**#*Alysicarpus hamosus*** Edgew., J. Asiat. Soc. Bengal 21: 171. 1853; Arisdason & P. Daniel in Eco-Chronicle 2(3): 168. 2007.

Distribution:—INDIA (Andhra Pradesh, Gujrata, Karnataka, Kerala & Tamil Nadu), Endemic.

**\*\**Alysicarpus naikianus*** Pokle in Reinwardtia 11(4): 285. 1999; Parthipan & A. Rajendran in Zoo's print 28(2): 28. 2013.

Distribution:—INDIA (Goa, Karnataka, Kerala, Maharashtra & Tamil Nadu), Endemic.

**#*Bauhinia × blakeana*** Dunn in J. Bot. 46: 325. 1908.

Distribution:—INDIA (Cultivated in Tamil Nadu), and CHINA.

**\**Butea acuminata*** Wall., Numer. List [Wallich] n. 5443. 1831; Murugan & Manickam in J. Econ. Taxon. Bot. 25(2): 346. 2001.

Distribution:—INDIA (Tamil Nadu) and SRI LANKA.

**\*\**Brownea grandiceps*** Jacq. in Collectanea 3: 287. 1791.

Distribution:—INDIA (Andaman Islands & Cultivated in Theosophical society, Chennai, Tamil Nadu)-A native of Brazil North, Colombia, Ecuador, Peru, Venezuela.

**\**Brownea macrophylla*** Linden ex Mast. in Gard. Chron. 1873: 777. 1873.

Distribution:—INDIA (Cultivated in Theosophical society, Chennai, Tamil Nadu)-A native of Panama & Peru.

**#*Cajanus cajanifolius*** (Haines) Maesen in Wageningen Agr. Univ. Pap. 85(4): 91. 1986; P. Satyanar. in R.R. Rao, Advan. Leg. Res. India 38. 2002.

Distribution:—INDIA (Andhra Pradesh, Madhya Pradesh, Meghalaya, Odisha & Tamil Nadu).

**\**Calliandra calothyrsus*** Meisn. Linnaea 21: 251. 1848; K. M. Matthew, Fl. Palni Hills 1: 413. 1999.

Distribution:—INDIA (Tamil Nadu)-A native of Central America and Mexico.

**#*Calliandra haematocephala*** Hassk., Retzia 1: 216. 1855.

Distribution:—INDIA (Tamil Nadu)-A native of Central America and Mexico.

***Chamaecrista nilgirica*** (V. Singh) V. Singh in J. Econ. Taxon. Bot. 16(3): 600. 1992. *Cassia nilgirica* V. Singh in J. Econ. Taxon. Bot. 10(2): 323. 1988.

Distribution:—INDIA (Andhra Pradesh, Kerala & Tamil Nadu), Endemic.

**#*Chamaecrista nomame*** (Sieb.) Ohashi in J. Jap. Bot. 64(7): 215. 1989; V. Singh, Monogr. Indian subtribe Cassiinae (Caesalpinia): 80. 2001.

Distribution:—INDIA (Andhra Pradesh, Assam, Gujarat, Himachal Pradesh, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Sikkim, Tamil Nadu, West Bengal & Uttar Pradesh), BHUTAN, CHINA, ETHIOPIA, JAPAN, KOREA, MADAGASCAR, PAKISTAN and TANZANIA.

**\**Chorizema cordatum*** Lindl. in Edwards's Bot. Reg. 24: t.10. 1838; B.D. Sharma & al. in Biol. Mem. 2: 37. 1977.

Distribution:—INDIA (Cultivated in Nilgiris, Tamil Nadu), a native of AUSTRALIA.

**#*Crotalaria ferruginea*** Graham ex Benth. in Hook.'s London J. Bot. 2: 476. 1843; Manickam & al., Fl. Tirunelveli Hills 1: 274. 2008.

Distribution:—INDIA (Andhra Pradesh & Tamil Nadu), BHUTAN, INDONESIA, MYANMAR, PHILIPPINES, SRI LANKA and TAIWAN.

**\**Crotalaria filipes*** Benth. in Hook. Lond. J.

Botany 2: 475. 1843; Kottaim. & Vasud. in J. Bio Sci. Res. 4(1): 1. 2013.

Distribution:—INDIA (Goa, Karnataka, Maharashtra & Tamil Nadu), Endemic.

**#Crotalaria incana** L., Sp. Pl. 716. 1753; Kottaim. in J. Biol. Rec. 1(3): 129. 2016.

Distribution: —INDIA (Karnataka, Kerala & Tamil Nadu), native to TROP. & SUBTROPICAL AFRICA.

**Crotalaria ramosissima** Roxb. var. **kanuvayensis** Binu Thomas, K. M. P. Kumar & A. Rajendran in Asian Pacific J. Trop. Biomed. 2(3; suppl.): \$1412. 2012.

Distribution:—INDIA (Tamil Nadu).

**Crotalaria ramosissima** Roxb. var. **ramnadensis** A. A. Ansari, Crotalaria India 249. 2008. **Crotalaria pellita** Bert. ex DC. var. **ramnadensis** (A.Ansari) Subraman. & A.K. Pandey in Phytotaxa 183(1): 53. 2014.

Distribution:—INDIA (Tamil Nadu).

Note: Recently, Chauhan and Ansari (2018) submitted a proposal to conserve the name *C. ramosissima* against *C. pellita*.

**Crotalaria retusa** L. var. **indica** Nampy & Sibichen in Rheedeia 12(2): 143. 2002.

Distribution:—INDIA (Tamil Nadu).

**#Crotalaria trichotoma** Bojer in Ann. Sci. Nat. Bot. ser. 2, 4: 265. 1835; Kottaim. & al. in Indian J. Forest. 38(4): 363. 2015.

Distribution:—INDIA (Jammu-Kashmir, Kerala & Tamil Nadu), ASIA, AFRICA, AUSTRALIA, CENTRAL & SOUTH AMERICA.

**#Crotalaria vestita** Baker in Hook.f., Fl. Brit. India 2: 67. 1876; N. Balach. et al. in J. Econ. Taxon. Bot. 39(2): 339. 2015.

Distribution:—INDIA (Gujarat, Karnataka, Maharashtra & Tamil Nadu).

**#Derris heyneana** (Wight & Arn.) Benth. in F.A.W.Miquel, Pl. Jungh.: 252. 1852; K. M.

Matthew, Fl. Palni Hills 1: 315. 1999.

Distribution:—INDIA (Karnataka, Kerala, Maharashtra & Tamil Nadu) and LAOS.

**Dalbergia matthewii** Soosairaj, P.Raja & Britto in Phytotaxa 360(3): 283. 2018.

Distribution:—INDIA (Tamil Nadu).

**Derris gamblei** Soosairaj, P.Raja & Dhatchan. in Nordic J. Bot. 35(4): 423. 2017.

Distribution:—INDIA (Tamil Nadu).

**Derris matthewii** Kottaim. in Webbia 72(1): 97. 2016.

Distribution:—INDIA (Tamil Nadu).

**#Dunbaria glandulosa** (Dalz. & A. Gibson) Prain in J. Asiat. Soc. Bengal 66: 433. 1894; Maesen in Wageningen Agr. Univ. Pap. 98(1): 53. 1998.

Distribution:—INDIA (Andhra Pradesh, Karnataka, Maharashtra & Tamil Nadu), BANGLADESH, BURMA, NEPAL and THAILAND.

**#Dunbaria punctata** Benth., Pl. Jungh. [Miquel] 2: 242. 1852; Maesen in Wageningen Agr. Univ. Pap. 98(1): 76. 1998.

Distribution:—INDIA (Assam, Manipur, Meghalaya, Sikkim, West Bengal & Tamil Nadu), AUSTRALIA, BANGLADESH, BURMA, CHINA, NEPAL, THAILAND and VIETNAM.

**Enterolobium cyclocarpum** Griseb., Fl. Brit. W.I. [Grisebach] 226. 1860; B.D. Sharma & al. in Biol. Mem. 2: 52. 1977.

Distribution:— INDIA (Goa, Gujarat, Karnataka, Kerala, Maharashtra & Tamil Nadu-A native of MEXICO and TROP. AMERICA.

**#Erythrina fusca** Lour., Fl. Cochinch. 427. 1790; Murugan & al., Recent Advan. Biodiver. India: 41. 2012.

Distribution: —INDIA (Andhra Pradesh, Assam, Orissa, Tamil Nadu & West Bengal),

BANGLADESH, BURMA, MALESIA, POLYNESIA and SRI LANKA.

\****Genista aetnensis*** (Biv.) DC., Prodr. [A. P. de Candolle] 2: 150. 1825; B.D. Sharma & al. in Biol. Mem. 2: 43. 1977.

Distribution:—INDIA (Cultivated in Nilgiris, Tamil Nadu), a native of ITALY.

#***Guilandia major*** (Medik.) Small. in Fl. S.E. U.S.: 591. 1903. *Caesalpinia major* (Medik.) Dandy & Exell in J. Bot. 76: 180. 1938; Murugan & Manickam in J. Bombay Nat. Hist. Soc. 101: 194. 2004.

Distribution:—INDIA (Andhra Pradesh, Karnataka, Kerala, Maharashtra & Tamil Nadu), MADAGASCAR, TROPICAL & SUBTROPICAL ASIA to PACIFIC, CARIBBEAN, MEXICO to N. BRAZIL.

#***Indigofera constricta*** (Thwaites) Trimen, Cat. Ceylon Pl. 23. 1885; Arisdason & P. Daniel in Eco-Chronicle 2(3): 168. 2007.

Distribution:— INDIA (Goa, Gujrat, Karnataka, Kerala, Maharashtra & Tamil Nadu) and SRI LANKA.

Note: Arisdason and Daniel (2007) reported this rare species for the first time in Tamil Nadu from Indira Gandhi Wildlife Sanctaury. Later, Sankar et al. (2012) reported the species from a new locality in Tiruvannamalai District.

***Indigofera karaiyarensis*** Rajakumar, Selvak., S. Murug. & Chellap. in Indian J. Forestry 34(4): 485. 2011.

Distribution:—INDIA (Tamil Nadu).

Note: Krishnaraj & Mohanan (2012) have reduced this species as a synonym of *Indigofera astragalina* DC.

***Indigofera kudiraimozhiensis*** Selvak. & Rajakumar in India J. Forestry 37(3): 309. 2014.

Distribution:—INDIA (Tamil Nadu).

#***Indigofera zollingeriana*** Miq., Fl. Ind. Bat. 1:

310. 1855; Kottaim. *et al.* in J. Bio Sci. Res. 5(1): 128-129. 2015.

Distribution:—INDIA (Andhra Pradesh, Karnataka, Kerala, Tamil Nadu & West Bengal), CHINA, LAOS, MALESIA, THAILAND and VIETNAM.

#***Kunstleria keralensis*** C.N. Mohanan & N.C. Nair, Proc. Indian Acad. Sci. (Pl. Sci.) 90: 207. 1981; Kottaim. & Vasud. in Elixir Biodiver. 50: 10459. 2012.

Distribution:—INDIA (Karnataka, Kerala & Tamil Nadu), Endemic.

\****Kennedia procurrens*** Benth. in J. Exped. Trop. Australia [Mitchell] 365. 1848; B.D. Sharma & al. in Biol. Mem. 2: 44. 1977.

Distribution:—INDIA (Cultivated in Nilgiris, Tamil Nadu), a native of Australia.

#***Kennedia rubicunda*** Vent., Jard. Malmaison 104. 1805; B.D. Sharma & al. in Biol. Mem. 2: 44. 1977.

Distribution:—INDIA (Cultivated in Nilgiris, Tamil Nadu & Karnataka), a native of Australia.

\****Lamprolobium fruticosum*** Benth., Fl. Austral. 2: 202. 1864; B.D. Sharma & al. in Biol. Mem. 2: 44. 1977.

Distribution:—INDIA (Cultivated in Coonoor, Tamil Nadu), a native of Australia.

\****Lupinus albus*** L., Sp. Pl. 2: 721. 1753. *Lupinus termis* Forssk., Fl. Aegypt.-Arab.: 131. 1775; B.D. Sharma & al. in Biol. Mem. 2: 44. 1977.

Distribution:—INDIA (Tamil Nadu), a native of Mediterranean region.

\****Lupinus pilosus*** Murray in L. Syst. Veg. 645. 1774; B.D. Sharma & al. in Biol. Mem. 2: 44. 1977.

Distribution:—INDIA (Tamil Nadu), a native of Mediterranean region.

***Millettia pseudoracemosa*** Thoth. & S. Ravik. in J. Econ. Taxon. Bot. 21(1): 239. 1997.

Distribution:—INDIA (Tamil Nadu).

**#*Millettia peguensis*** Ali in Kew Bull. 21(3): 489. 1968.

Distribution:—INDIA (Andhra Pradesh, Karnataka & Tamil Nadu), BANGLADESH and MYANMAR.

**#*Mimosa diplotricha*** C. Wright ex Sauvalle, Anal. Real. Acad. Ci. Habana 5: 405. 1865; Manickam *et al.*, Fl. Tirunelveli Hills 1: 362. 2008.

Distribution:—INDIA (Naturalized in Kerala & Tamil Nadu)-Native of TROPICAL AMERICA.

**#*Ornithopus perpusillus*** L., Sp. Pl. 743. 1753; B.D. Sharma & al. in Biol. Mem. 2: 44. 1977.

Distribution: —INDIA (cultivated in Nilgiris, Tamil Nadu) - Native of Europe.

**#*Oxylobium virgatum*** Benth., Fl. Austral. 2: 22. 1864; B.D. Sharma & al. in Biol. Mem. 2: 44. 1977.

Distribution: —INDIA (cultivated in Nilgiris, Tamil Nadu) - Native of Australia.

**#*Peltophorum africanum*** Sond. in Linnaea 23(1): 35. 1850. Distribution: —INDIA (West Bengal & cultivated in Theosophical society, Chennai, Tamil Nadu) - Native to AFRICA.

**\**Philenoptera violacea*** (Klotzsch) Schrire in Kew Bull. 55(1): 89. 2000.

Distribution: —INDIA (cultivated in Theosophical society, Chennai, Tamil Nadu) - Native to AFRICA.

**#*Psoralea aphylla*** L., Pl. Afr. Rar. 15.; B.D. Sharma & al. in Biol. Mem. 2: 45. 1977.

Distribution: —INDIA (cultivated in Nilgiris, Tamil Nadu) - Native of SOUTH AFRICA.

**#*Psoralea fascicularis*** DC., Prod. 2: 217. 1825; B.D. Sharma & al. in Biol. Mem. 2: 45. 1977.

Distribution: —INDIA (cultivated in Nilgiris, Tamil Nadu) - Native of SOUTH AFRICA.

***Rhynchosia courtallensis*** van der Maesen in Rheede 5: 56. 1995.

Distribution: —INDIA (Andhra Pradesh, Karnataka, Kerala & Tamil Nadu), Endemic.

***Rhynchosia beddomei*** Baker in Hook.f., Fl. Brit. India 2: 222. 1876; P. Satyanar. in R.R. Rao, Advan. Leg. Res. India 42. 2002.

Distribution: INDIA (Andhra Pradesh, Karnataka & Tamil Nadu), Endemic.

***Rhynchosia ganesanii*** Kottaim. & Vasud. in Phytotaxa 201(1): 109. 2015. *Rhynchosia fischeri* P.Satyanar. & Thoth. in Bull. Bot. Surv. India 28(1-4): 241. 1988, nom. illeg., non Harms 1899.

Distribution:—INDIA (Tamil Nadu: Anaimalai).

**#*Saraca thaipingensis*** Cantley ex Prain in J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 66(1): 211. 1897.

Distribution: —INDIA (cultivated in Theosophical society, Chennai, Tamil Nadu) - Indo-China to Peninsula Malaysia, Jawa, New Guinea.

**\**Senegalia lankaensis*** (Kosterm.) Ragup., Seigler, Ebinger & Maslin in Phytotaxa 162(3): 175. 2014. *Acacia lankaensis* Kosterm. in Ceylon J. Sci. (Biol. Sci.) 13(1): 253. 1979; Manickam & al., Fl. Tirunelveli Hills 1: 354. 2008.

Distribution:—INDIA (Tamil Nadu) and SRI LANKA.

**\**Senegalia mellifera*** (Benth.) Seigler & Ebinger in Phytologia 92(1): 94. 2010. *Acacia mellifera* Benth. in London J. Bot. 1: 507. 1842; Chakrab. & M. Gangop. in J. Econ. Taxon. Bot. 20: 631. 1996.

Distribution:—INDIA (Introduced in Tamil Nadu)-A Native of Sudan.

**\**Senegalia modesta*** (Wall.) P.J.H.Hurter in D.J.Mabberley, Pl.-Book, ed.3: 1021. 2008. *Acacia modesta* Wall. Pl. Asiat. Rar. 2: 27. 1831.

Distribution:—INDIA (Cultivated in Alagappa University, Tamil Nadu) and SRI LANKA.

**\*\**Senegalia pruinescens*** (Kurz) Maslin, Seigler & Ebinger Blumea 58(1): 41. 2013. *Acacia pruinescens* Kurz in J. Asiat. Soc. Beng. 45: 298.

1876; Murugan *et al.* in Rheedea 13: 71. 2003.

Distribution:—INDIA (Arunachal Pradesh, Assam, Meghalaya, Mizoram & Tamil Nadu) and BURMA.

***Senegalia tanjorensis*** (Ragup., Thoth. & A. Mahad.) Kottaim., **comb. nov.**  
Basionym: *Acacia tanjorensis* Ragup., Thoth. & A. Mahad. in J. Econ. Taxon. Bot. 14(3): 751. 1990.

Distribution:—INDIA (Tamil Nadu).

Note: *Acacia tanjorensis* was treated as a distinct species by Kumar and Sane (2003), Roskov *et al.* (2005) and Ragupathy *et al.* (2014) but Chakrabarty and Gangopadhyay (1996) have reduced this species under *Acacia modesta* Wall. without any ample reasons. The present scrutiny of the species in the field and also comparing with the protologue and type specimen of *A. modesta* revealed that the character states of *A. tanjorensis* are diagnostic and warrants unique status. It is not clear why Ragupathy *et al.* (2014) have combined *A. tanjorensis* under *Vachellia* but the character states fall under *Senegalia*. Hence a new combination is proposed above.

**#*Senna italica*** Mill. subsp. ***micrantha*** (Brenan) Lock in Kew Bull. 43(2): 339. 1988; V. Singh, Monogr. Indian subtribe Cassiinae (Caesalpiniaec.): 151. 2001.

Distribution:—INDIA (Andhra Pradesh, Karnataka, Kerala, Maharashtra & Tamil Nadu), ANGOLA, ETHIOPIA, KENYA, TANZANIA and UGANDA.

**#*Senna obtusifolia*** (L.) H. S. Irwin & Barneby in Mem. New York Bot. Gard. 35(1): 252. 1982; V. Singh, Monogr. Indian subtribe Cassiinae (Caesalpiniaec.): 164. 2001.

Distribution:—INDIA (Andhra Pradesh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Rajasthan, Tamil Nadu & Uttar Pradesh)-Native of TROPICAL AMERICA, naturalized in tropical regions of the world.

**#*Senna pallida*** (Vahl) H. S. Irwin & Barneby in Mem. New York Bot. Gard. 35(2): 531. 1982; V. Singh, Monogr. Indian subtribe Cassiinae (Caesalpiniaec.): 178. 2001.

Distribution:—INDIA (Cultivated in Andhra Pradesh, Tamil Nadu & Uttar Pradesh)-A native of SOUTH AMERICA.

***Senna septemtrionalis*** (Viv.) H. S. Irwin & Barneby var. ***pubescens*** (V. Singh) V. Singh, Monogr. Indian subtribe Cassiinae (Caesalpiniaec.) 190. 2001. *Cassia floribunda* Cav. var. *pubescens* V. Singh in J. Econ. Taxon. Bot. 10(2): 326. 1988.

Distribution:—INDIA (Kerala & Tamil Nadu).

**#*Senna sophora*** (L.) Roxb. var. ***purpurea*** (Roxb. ex Lindl.) V. Singh in J. Econ. Taxon. Bot. 16(3): 600. 1992; V. Singh, Monogr. Indian subtribe Cassiinae (Caesalpiniaec.): 203. 2001.

Distribution:—INDIA (Gujarat, Haryana, Kerala, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh & West Bengal) and PAKISTAN.

**#*Senna spectabilis*** (DC.) H. S. Irwin & Barneby in Mem. New York Bot. Gard. 35(2): 603. 1982; P. Satyanar. & Gnanasek. in Indian J. Forest. 36(2): 243. 2013.

Distribution:—INDIA (Naturalized in Kerala & Tamil Nadu)-Native of CENTRAL AMERICA.

**#*Senna spectabilis*** (DC.) Irwin & Barneby var. ***excelsa*** (Scharad.) Irwing & Barneby in Mem. Newyork Bot. Gard. 35(2): 604. 1982; Kottaim. & al. in Plant Arhives 11(1): 447. 2011.

Distribution:—INDIA (Tamil Nadu).

**#*Senna sulfurea*** (DC. ex Collad.) H. S. Irwin & Barneby in Mem. New York Bot. Gard. 35(1): 78. 1982; V. Singh, Monogr. Indian subtribe Cassiinae (Caesalpiniaec.): 210. 2001.

Distribution:—INDIA (Bihar, Jammu-Kashmir, Himachal Pradesh, Karnataka, Maharashtra, Tamil Nadu & West Bengal) AUSTRALIA, INDONESIA, MALESIA, MAURITIUS, MYANMAR and WEST INDIES.

***Senna uniflora*** (Mill.) H.S.Irwin & Barneby in Mem. New York Bot. Gard. 35(1): 258. 1982; Britto in J. Econ. Taxon. Bot. 26(1): 133. 2002. *Cassia sericea* Sw., Fl. Ind. Occid. 2(1): 724. 1798;

Murugan & Manickam in J. Bombay Nat. Hist. Soc. 101: 194. 2004.

Distribution:—INDIA (Andhra Pradesh, Karnataka & Tamil Nadu), a native to MEXICO and TROP. AMERICA.

**#*Sophora tomentosa*** L., Sp. Pl. 1: 373. 1753.

Distribution:—INDIA (Karnataka & Tamil Nadu) and CHINA, often cultivated in gardens.

**#*Stylosanthes guianensis*** (Aubl.) Swartz, Svenska, Vetensk. Acad. Handb. 11: 296. 1789; Manickam & al., Fl. Tirunelveli Hill 1: 321. 2008.

Distribution:—INDIA (Naturalized in Assam, Kerala & Tamil Nadu), SRI LANKA, TROPICAL AMERICA, ZAMBIA, ZIMBABWE and WEST AFRICA.

**\*\**Stylosanthes scabra*** Vogel in Linnaea 12: 69. 1838; Arul & al. in J. Basic Appl. Biol. 6(1): 20. 2013.

Distribution: —INDIA (Tamil Nadu) and TROPICAL AMERICA.

**\**Teline monspessulana*** (L.) K.H.E. Koch, Dendrologie 1: 30. 1869; Sanjappa, Legumes Ind. 255. 1992.

Distribution:—INDIA (Naturalized in Nilgiri and Palni hills)- Native of Europe.

***Tephrosia wynaadensis*** J.R.Drumm. in Gamble, Fl. Madras 318. 1918; Sanjappa, Legumes Ind. 261. 1992.

Distribution: —INDIA (Kerala & Tamil Nadu), Endemic.

***Vachellia pseudowightii*** (Thoth.) Kottaim., comb. nov. Basionym: *Acacia pseudowightii* Thoth. in Rheedeia 2(1): 73. 1992. *Acacia minutifolia* Ragup., A. Mahad. & Thoth. in Indian J. Forest. 14(1): 65. 1991.

Distribution:—INDIA (Tamil Nadu).

Note: Kumar and Sane (2003) and Chakrabarty and Gangopadhyay (1996) have reduced this

species as a synonym of *Acacia eburnea* (L.f.) Willd. without stating any solid reasons. The present scrutiny of the species in the field and also comparing with the protologue and fresh collections from the type locality of *Acacia minutifolia* (=A. *pseudowightii*) revealed that the character states are diagnostic and warrants unique status.

**\* *Vachellia robusta*** (Burch.) Kyal. & Boatwr. in Bot. J. Linn. Soc. 172(4): 516. 2013 *Acacia robusta* Burch., Trav. 2: 442. 1824; B.D. Sharma & al. in Biol. Mem. 2: 51. 1977.

Distribution:—INDIA (Tamil Nadu)-Native of Africa.

Note: The species is not surviving at present (Chakrabarty & Gangopadhyay, 1996).

**#*Vigna pilosa*** (Roxb.) Baker in Hook.f., Fl. Brit. India 2: 207. 1876; Betty & V.S.Ramach. in Photon 113: 357. 2014.

Distribution:—INDIA (Andhra Pradesh, Karnataka, Odisha & Uttar Pradesh), Endemic.

**\*\**Vigna subramanianus*** (Babu ex Raizada) Raizada in Indian J. Forest. 3(2): 133. 1980; K. M. Matthew, Fl. Palni Hills 1: 376. 1999.

Distribution:—INDIA (Madhya Pradesh, Punjab, Tamil Nadu, Uttar Pradesh), Endemic.

***Xylia xylocarpa*** (Roxb.) Taub., Bot. Centralbl. 47: 395. 1891; B.D. Sharma & al. in Biol. Mem. 2: 52. 1977.

Distribution:—INDIA (Andhra Pradesh, Karnataka, Kerala, Odisha & Tamil Nadu) and Malesia.

**#*Zornia quilonensis*** Ravi in J. Bombay Nat. Hist. Soc. 66:489.1969; Sanjappa, Legumes Ind. 280. 1992.

Distribution:—INDIA (Kerala, Tamil Nadu & West Bengal), Endemic.

Note: Krishnaraj & Mohanan (2012) have reduced this species as a variety under *Zornia diphylla* (L.) Pers.



## Conflict of interest statement

Author declares that there is no conflict of interest.

## Acknowledgements

I am grateful to Dr. N. Vasudevan for constant encouragement and critical suggestions throughout the doctoral course. I wish to thank retd. Dr. G.V.S. Murthy, Scientist 'G', Botanical Survey of India, Southern Regional Centre for granting permission to consult the herbarium and library. I also extend my sincere thanks to Dr. A. K. Pandey (Delhi University), Dr. W. Arisdason (CNH, Kolkatta) and Dr. M. V. Krishnaraj (Kerala) for providing literature.

## References

- Ansari, A. A., 2008. *Crotalaria* L. in India. Bishen Singh Mahendra Pal Singh, Dehra Dun.
- Arisdason, W., Daniel, P., 2007. Additions to the flora of Tamil Nadu. *Eco-Chronicle* 2(3), 159–161.
- Arul, A.A.A., Karuppusamy, S., Jeeva, S. 2013. *Stylosanthes scabra* Vogel (Fabaceae) – an addition to the flora of Southern peninsular India. *J. Basic Appl. Biol.* 6(1), 19–21.
- Baker, J. G., 1876. Leguminosae. In: Hooker, J. D. (ed.) *The Flora of British India Vol: 2*. L. Reeve & Co., Henrietta Street, London.
- Balachandran, N., Ravikumar, K., Datchanamoorthy, N., Gokul, S., Tiwari, U., Begum, S. N. 2015. Some interesting additions to the flora of Tamil Nadu. *J. Econ. Taxon. Bot.* 39(2), 338–341.
- Benthams, G., 1843. Enumeration of Leguminosae, indigenous to Southern Asia and Central and Southern Africa. *London J. Bot.* 2, 423–483.
- Betty, T., Ramachandran, V. S., 2014. Additions to the Flora of Tamil Nadu, Southern India. *Photon.* 113, 355–359.
- Britto, S. J., 2002. *Senna uniflora* (Mill.) H.S. Irwin & R.C. Barneby – A new plant record for Tamil Nadu. *J. Econ. Taxon. Bot.* 26(1), 133–135.
- Burman, N. L., 1786. *Flora Indica: Cui Accedit Series Zoophytorum Indicorum nec non Prodromus Florae Capensis*. Cornelius Haak, Leiden & Johannes Schreuder, Amsterdam.
- Chakrabarty, T., Gangopaghyay, M. 1996. The genus *Acacia* P. Miller (Leguminosae: Mimosoideae) in Indian subcontinent. *J. Econ. Taxon. Bot.* 20(3), 599–633.
- Chakrabarty, T., Maina, V., 2015. A note on the occurrence of *Acacia colei* (Leguminosae: Mimosoideae) in India. *J. Econ. Taxon. Bot.* 39(1), 194–196.
- Chauhan, V., Ansari, A. A., 2018. Proposal to conserve the name *Crotalaria ramosissima* against *C. pellita* (Fabaceae). *Taxon* 67(4): 818–819.
- De Candolle, A. P., 1825. *Leguminosae. Prodromous systematis naturalis. Regni Vegetabilis.* 2, 93–524.
- Kottaimuthu, R., 2016. First record of *Crotalaria incana* L. (Fabaceae) in Tamil Nadu. *J. Biol. Rec.* 1(3), 128–130.
- Kottaimuthu, R., Suresh, K., Kumuthakalavalli, R., 2011. Additions to the Legumes of Eastern Ghats, India. *Plant Arch.* 11(1), 447–448.
- Kottaimuthu, R., Vasudevan, N., 2012. New plant records for Tamil Nadu State, India. *Elixir Bio Diver.* 50, 10459–10461.
- Kottaimuthu, R., Vasudevan, N., 2013. Occurrence of *Crotalaria filipes* Benth. (Fabaceae) in Tamil Nadu. *J. Bio Sci. Res.* 4(1), 1–3.
- Kottaimuthu, R., Vasudevan, N., 2015. *Rhynchosia ganesanii*, a new name for *Rhynchosia fischeri* P. Satyanar. & Thoth. (Leguminosae: Papilionoideae), from India. *Phytotaxa.* 201(1), 109–110.
- Kottaimuthu, R., Vasudevan, N., 2017. A new species of *Derris* Lour. (Fabaceae: Papilionoideae) from Tamil Nadu, India. *Webbia.* 72(1), 97–100.
- Kottaimuthu, R., Vasudevan, N., Saravanan, A., 2015. *Crotalaria trichotoma* Bojer (Fabaceae): A new record for Tamil Nadu, India. *Indian J. Forest.* 38(4), 363–364.
- Kottaimuthu, R., Vasudevan, N., Saravanan, A., 2015. *Indigofera zollingeriana* Miq. (Fabaceae: Indigoferae), a new record for Tamil Nadu, India. *J. Bio Sci. Res.* 5(1), 128–131.
- Krishnaraj, M. V., Mohanan, N., 2012. Notes on the identity and status of two legumes (Fabaceae: Papilionoideae) from India. *Phytotaxa.* 66, 13–20.
- Kumar, S., Sane, P. V., 2003. *Legumes of South Asia: A Checklist*. Royal Botanic Gardens, Kew, Lamareck, J.B.A.P., 1785 & 1786. *Encyclopédie Méthodique, Botanique.* 1 & 2. Paris.
- Lewis, G., Schrire, B., Mackinder, B., Lock, M.,

2005. Legumes of the World. The Royal Botanic Gardens, Kew.
- Linnaeus, C., 1753. Species Plantarum. L. Salvii, Stockholm.
- Linnaeus, C., 1754. Genera Plantarum. L. Salvii, Stockholm.
- Manickam, V. S., Murugan, C., Jothi, G. J., Sundaresan, V., 2008. Flora of Tirunelveli Hills: Southern Western Ghats. Vol. I. Polypetalae. Bishen Singh Mahendra Pal Singh, Dehra Dun.
- Manilal, K. S., 2003. Van Rheedee's Hortus Malabaricus. Annotated English Edition. (12 Vols.) University of Kerala. Thiruvananthapuram.
- Matthew, K. M., 1999. Flora of the Palni hills, South India. Part: I-III. St. Joseph College, The Rapinat Herbarium, Tiruchirapalli.
- Murugan, C., Manickam, V. S., 2001. Two distributional records for India. J. Econ. Taxon. Bot. 25(2), 346-349.
- Murugan, C., Manickam, V. S., 2004. Two distributional records of Caesalpiniaceae for Tamil Nadu. J. Bombay Nat. Hist. Soc. 101, 194.
- Murugan, C., Murthy, G. V. S., Sudhakar, J. V., 2012. Seven interesting plants from South India. In: Raghunathan, C., Sivaperuman, C., Venkataraman, S., (Eds.), Recent Advances in Biodiversity of India. Zoological Survey of India, Kolkatta.
- Nicolson, D. H., Suresh, C. R., Manilal, K. S., 1988. An Interpretation of Van Rheedee's Hortus Malabaricus. Regnum Vegetabile Vol. 119. Germany.
- Parthipan, M., Rajendran, A., 2013. Occurrence of an endemic taxon *Alysicarpus naikianus* Porkle in the Eastern Ghats, India. Zoo's Print. 28(2), 28-29.
- Ragupathy, S., Mahadevan, A., Thothathri, K. 1991. *Acacia minutifolia* Ragu. et al. (Leguminosae : Mimosoideae): a new species from the Coromandel coast of Thanjavur district, Tamil Nadu. Indian J. Forest. 14(1), 65-66.
- Ragupathy, S., Seigler, D., Ebinger, J.E., Maslin, B.R., 2014. New combinations in *Vachellia* and *Senegalia* (Leguminosae: Mimosoideae) for south and west Asia. Phytotaxa. 162(3), 174-180.
- Ragupathy, S., Thothathri, K., Mahadevan, A., 1990. A new species of *Acacia* (Mimosaceae) from Thanjavur district, Tamil Nadu, India. J. Econ. Taxon. Bot. 14(3), 751-752.
- Raja, P., Soosairaj, S., Datchanamoorthy, N., Tagore, T. K., 2017. *Derris gamblei* sp. nov. (Fabaceae) from Tamil Nadu, India. Nordic J. Bot. 35(4), 423-425.
- Rajakumar, T. J. S., Selvakumari, R., Murugesan, S., Chellaperumal, N., 2011. *Indigofera karaiyarensis*, a new species of Fabaceae from Thirunelveli district, Tamil Nadu, India. Indian J. Forest. 34, 485-486.
- Roxburg, W., 1820-1832. Flora Indica. Vol. I-III. Serampore.
- Sanderson, M.J., Wojciechowski, M.F., 1996. Diversification rates in a temperate legume clade: Are there "so many species" of *Astragalus* (Fabaceae)? Amer. J. Bot. 83, 1488-1502.
- Sanjappa, M., 1992. Legumes of India. Mahendra Pal Singh, Dehra Dun.
- Sanjappa, M., 2001. Leguminosae. In: Singh, N. P., Singh, D. K., (Ed.), Floristic Diversity and Conservation Strategies. Botanical Survey of India.
- Sankar, R. V., Ravikumar, K., Ravichandran, P., 2012. Plant Resources of Tiruvannamalai District, Tamil Nadu, India. Bishen Singh Mahendra Pal Singh, Dehra Dun.
- Satyanarayana, P., Gnanasekaran, G., 2013. An exotic tree species *Senna spectabilis* (DC.) Irwin & Barneby (Caesalpiniaceae): Naturalized in Tamil Nadu and Kerala. Indian J. Forest. 36(2), 243-246.
- Satyanarayana, P., Thothathri, K., 1988. Three new species of *Rhynchosia* Lour. (Fabaceae) from India. Bull. Bot. Surv. India 28(1-4), 241-245.
- Schrire, B. D., Lavin, M., Lewis, G. P., 2005. Global distribution patterns of the Leguminosae: Insights from recent phylogenies. Biol. Skr. 55, 375-422.
- Selvakumari, R., Rajakumar, T.J.S., 2014. *Indigofera kudiraimozhiensis*-A new species of Fabaceae from Kudiraimozhi Their, Thoothukudi District, Tamil Nadu, India. Indian J. Forest. 37(3), 309-310.
- Sharma, B. D., Shetty, B. V., Vajravelu, E., Kumari, G. R., Vivekananthan, K., Chandrabose, M., Swaminathan, M. S., Chandrasekaran, R., Subba Rao, G. V., Ellis, J. L., Rathakrishnan, N. C., Karthikeyan, S., Chandrasekaran, V., Srinivasan, S. R., 1977. Flora of Nilgiris, Tamil Nadu. Biol. Mem. 2(1&2), 1-186.
- Sibichen, M. T., Nampy, S., Nisha, P., 2002. *Crotalaria retusa* L. var. *indica* Nampy &

- Sibichen (Papilionaceae) – a new variety from India. *Rheedea*. 12, 143–146.
- Singh, V., 1988. The genus *Cassia* L. (Caesalpinaceae): Some new taxa and combinations from J. Econ. Taxon. Bot. 10(2), 321–327.
- Singh, V., 2001. Monograph on Indian subtribe Cassiinae (Caesalpinaceae). Scientific Publishers, Jodhpur, India.
- Subramaniam, S., Pandey, A. K., 2014. Reinstatement of *Crotalaria pellita* (Leguminosae, Papilionoideae) and a new combination for its variety. *Phytotaxa*. 183(1), 51–55.
- Taubert, P., 1894. Leguminosae. In: Engler, A. & K. Prantl (Eds.), *Die Natürlichen Pflanzenfamilien*. Berlin.
- Thomas, B., Kumar, K. M. P., George, S., Rajendran, A., Balachandran, I., 2012. A new variety of *Crotalaria ramosissima* (Fabaceae) from Tamil Nadu. *Asian Pac. J. Trop. Biomed.* 2012, 1–3.
- Thothathri, K., 1992. Nomenclatural note on *Acacia minutifolia* Raghu *et al.* from India. *Rheedea*. 2(1), 73.
- Thothathri, K., Das, D. N., 1991. A new species of *Tephrosia* Pers. From Kerala. *Rheedea* 1(1-2): 57–58.
- Thothathri, K., Ravikumar, S., 1997. A new species of *Millettia* (Leguminosae) from the Annamalai Hills, Tamilnadu. *J. Econ. Taxon. Bot.* 21(1), 239–242.
- van der Maesen, L. J. G., 1998. Revision of the genus *Dunbaria* Wight et Arn. (Leguminosae-Papilionoideae). Wageningen Agric. Univ. Pap. 98(1), 1–109.
- van der Maesen, L. J. G., 1995. *Rhynchosia courtallensis* van der Maesen, a new name for the South Indian *Dunbaria latifolia* Wt. & Arn. (Leguminosae – Papilionoideae). *Rheedea*. 5(1), 54–59.
- Viswanathan, M. B., Manikandan, U., Tangavelou, A. C., 2003. A new species of *Aganope* (Fabaceae) from the Southern Western Ghats, Peninsular India. *Adansonia*. 25(2), 205–210.
- Wallich, N., 1820. Description of some rare Indian plants. *Asiat. Res.* 13, 369–415.
- Wight, R., Arnott, G. A., 1834. *Prodromus florae Peninsulae Indiae Orientalis*. Parbury, Allen & Co., London.
- Willdenow, C. L., 1802. *Species Plantarum*, ed., 3(2). Impensis G.C. Nauk, Berolini [Berlin].
- Yahara, T., Javadi, F., Onoda, Y., Queiroz, L. P. de, Faith, D., Prado, D. E., Akasaka, M., Kadoya, T., Ishihama, F., Davies, S., Slik, J. W. F., Yi, T., Ma, K., Bin, C., Darnaedi, D., Pennington, R. T., Tuda, M., Shimada, M., Ito, M., Egan, A. N., Buerki, S., Raes, N., Kajita, T., Vatanparast, M., Mimura, M., Tachida, H., Iwasa, Y., Smith, G. F., Victor, J. E., Nkonki, T., 2013. Global legume diversity assessment: Concepts, key indicators, and strategies. *Taxon*. 62, 249–266.

**How to cite this article:**

Kottaimuthu, R., 2019. Supplement to the legumes of Tamil Nadu, India. *Int. J. Curr. Res. Biosci. Plant Biol.* 6(3), 31-41. doi: <https://doi.org/10.20546/ijcrbp.2019.603.005>