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Anoop P. Balan & S.V. Predeep

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Legumes of Kerala, India: a checklist

Anoop P. Balan 1 & S.V. Predeep 2

1 KSCSTE-Malabar Botanical Garden and Institute For Plant Sciences, Kozhikode, Kerala 673014, India.
2 PG Department of Botany, Bishop Abraham Memorial College, Thuruthicad, Pathanamthitta, Kerala 689597, India.

Abstract: A checklist of the legumes of Kerala State is presented. This exhaustive checklist is an outcome of extensive field surveys, collection, identification and documentation of family Leguminosae carried out across Kerala State during the period 2006–2019. A total of 448 taxa were recorded under five subfamilies and 115 genera. The majority of the legumes are herbs and shrubs, the rest being trees and woody climbers. About 81 taxa are endemic to India, especially confined to the Western Ghats biodiversity hotspot, out of which 17 are endemic to Kerala. The state is home to two Critically Endangered and six Endangered legumes, facing severe threat of extinction. *Crotalaria* is the dominant legume genus in the state with 62 taxa followed by *Desmodium* and *Indigofera*. About 57 genera are represented by single species each. Legumes are treated according to the latest phylogenetic classification of the Legume Phylogeny Working Group (LPWG). Updated nomenclature, habit, native countries, voucher specimens, and images of endemic and lesser known legumes found in the state are provided. *Crotalaria multiflora* var. *kurisumalayana* (Sibichen & Nampy) Krishnaraj & N. Mohanan is reduced as a synonym to *C. multiflora* (Arn.) Benth.

Keywords: Checklist, *Crotalaria multiflora*, endemic, Kerala, Leguminosae, LPWG, Western Ghats.
INTRODUCTION

Leguminosae with 770 genera and over 19,500 species (Lewis et al. 2013), are the third largest family of flowering plants after Orchidaceae and Asteraceae. Legumes are a significant component of nearly all terrestrial biomes, distributed throughout the world in almost all habitats and are second only to the Poaceae in their importance to human beings. The family is morphologically, physiologically, and ecologically exceptionally diverse, representing one of the most spectacular examples of evolutionary diversification in plants (LPWG 2017). Legumes are grown agriculturally, primarily for their seeds called pulses, contributing 33% of the dietary protein nitrogen needs of humans (Vance et al. 2000). Many legumes are able to do nitrogen fixation, through symbiotic association with Rhizobium bacteria within root nodules and thereby play an important ecological role in the terrestrial nitrogen cycle. Considering the importance of legumes, the 68th session of the United Nations General Assembly declared the year 2016 as the International Year of Pulses for their popularisation internationally.

Leguminosae in India are represented by 1,297 taxa under 179 genera, of which about 23% are strictly confined to India (Sanjappa 1992). Kerala, one of the species-rich states in the country, is exceptional because of its richness in biodiversity and endemism. According to Nayar et al. (2006), Kerala represents about 4,694 species of flowering plants under 1,418 genera and 188 families. The state constitutes only 1.18% of the geographical area of India but it accommodates about 27.57% of the flowering plants occurring in the country (Nayar et al. 2008). Sasidharan (2004) and Nayar et al. (2006) published checklists of flowering plants of Kerala, primarily based on literature. According to Sasidharan (2004), there are 381 legume species in Kerala under 93 genera out of which 82 taxa are endemic to India. Nayar et al. (2006) enumerated 389 species of legumes in Kerala under 96 genera of which 85 taxa are restricted to India. The latest treatment of Leguminosae in Kerala is of Murthy & Nair (2016), in which they enumerated 382 species of legumes under three distinct families, viz., Caesalpiniaeae, Fabaceae, and Mimosaceae with 17, 60, & 18 genera and with 56, 281, & 45 species, respectively.

Though Leguminosae are one of the most dominant families in the state and also highly important in the economic point of view, an exclusive legume flora of the state is still wanting. To fill this lacuna, the authors have conducted extensive field surveys, collection, identification and documentation of all the legumes of the state during the last 14 years to produce a comprehensive account on the legume flora of Kerala. Regarding this, recently three new leguminous taxa and seven new records have been reported from Kerala (Predeep et al. 2008, 2009; Predeep & Balan 2010; Balan & Predeep 2016; Balan et al. 2014, 2017). The study was initially funded by the Kerala State Council for Science, Technology and Environment, Dept. of Science & Technology, Govt. of Kerala. The present checklist is the first step before the release of a legume flora of Kerala and the list is prepared based on the authors’ own collections, and specimens deposited in various Indian herbaria and relevant literature.

Systematic Treatment

Leguminosae (nom. alt. Fabaceae) received its scientific name from earlier taxonomists due to its characteristic fruit (legume). Since this name was long in usage even before the code was formulated, this name was conserved by the International Code of Nomenclature (ICN). Another name Fabaceae based on the type genus Faba Mill. was proposed as an alternate name according to this latter name. The name Leguminosae or Fabaceae encompasses all the known leguminous plants under it. Monocarpellary superior ovary with marginal placentaion and leguminous fruit are the key characters of Leguminosae.

Earlier (and worth mentioning) treatment of the family Leguminosae are that of de Candolle (1825), who subdivided the family into four suborders (= subfamilies), namely, Papilionoideae, Swartzieae (now included in Papilionoideae), Mimosoideae, and Caesalpinioideae. This system was elaborated by Bentham (1865), who recognised three major groups within Leguminosae and whose classification formed the basis for all subsequent classifications of the family for the next 150 years. Taubert (1894), Engler (1964), Thorne (1976, 2000), Polhill & Raven (1981), and many others also treated Leguminosae as one family with three subfamilies. Some other researchers treated Mimosoideae, Caesalpinioideae, and Papilionoideae as separate families (Takhtajan 1959, 1966, 1973, 1980; Hutchinson 1964, 1969, 1973; Cronquist 1968; Dahlgren 1983; Mabberley 1997). Systematic considerations based on molecular evidences also recognize Leguminosae as a monophyletic family, with three subfamilies (Doyle et al. 2000; Lewis & Schrire 2003; Wojciechowski 2003; Lewis et al. 2005; Shipunov 2009; APG IV 2016; Judd et
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al. 2016). Recent molecular-based phylogenetic studies (Bruneau et al. 2008; Bello et al. 2009, 2012; Sinou et al. 2009; Cardoso et al. 2012, 2013; Gagnon et al. 2013, 2016; Koenen et al. 2013; LPWG 2013a,b, 2017; Dugas et al. 2015), however, made sweeping changes in the systematics of Leguminosae. The Legume Phylogeny Working Group-LPWG (2017) proposed a new subfamilial classification of Leguminosae, which is perhaps the most comprehensively sampled phylogenetic analysis of legumes to date. All adequately sampled phylogenetic analyses of the family indicate that the monophyletic Mimosoideae and Papilionoideae are nested within a paraphyletic assemblage of caesalpinioide lineages. LPWG (2017) recognized six subfamilies in Leguminosae: a recircumscribed Caesalpinioideae DC. (148 genera & ca. 4400 species), Cercidioideae LPWG (12 genera & ca. 335 species), Detarioideae Burmeist. (84 genera & ca. 760 species), Dialioideae LPWG (17 genera & ca. 85 species), Duparquetioideae LPWG (one genus & one species), and Papilionoideae DC. (503 genera & ca. 14,000 species). The traditionally recognised subfamily Mimosoideae is a distinct clade nested within the recircumscribed Caesalpinioideae. All the subfamilies, except the African subfamily Duparquetioideae, are well represented in Kerala.

MATERIALS AND METHODS

This checklist is the result of extensive field studies and repeated seasonal collections of plant specimens from Kerala during the period 2006-2019. The plant samples belonging to Leguminosae were collected from all areas of Kerala including coastal, midland, and highlands, all types of forest and non-forest areas in all seasons of the year. Herbarium sheets were prepared following the method suggested by Bridson & Forman (1998) and are housed in the herbarium in the Malabar Botanical Garden & Institute for Plant Sciences, Kozhikode, Kerala (MBGH). Identification was done with the help of pertinent literature including national and local floras (Hooker 1876, 1878; Bourdillon 1908; Rao 1914; Gamble 1918; Manilal & Sivarajan 1982; Manilal 1988; Ramachandran & Nair 1988; Vajravelu 1990; Mohanan & Henry 1994; Sasidharan & Sivarajan 1996; Sivarajan & Mathew 1997; Mohanan & Sivadasan 2002; Kumar et al. 2005; Sunil & Sivadasan 2009; Sasidharan 2011) and revisionary studies (Sanjappa 1986, 1995; Thothathri 1982, 1987; Babu et al. 1987; Nair 1989; Chakrabarty & Gangopadhyay 1996a,b; Singh 2001; Bandyopadhyay et al. 2006; Ansari 2008) and consultation of authentic specimens housed at CAL, CALI, KFRI, MH, TBGT & University College Herbarium, Thiruvananthapuram. The species list is based primarily on author’s collections and specimens deposited in various Indian herbaria listed in Tables 1, 2, 3, with the exception of 39 reports from the literature. The checklist is arranged according to the latest phylogenetic system of classification of legumes proposed by LPWG (2017). Each species is arranged alphabetically under respective subfamilies. Habit, native countries, selected voucher specimens and literature references are provided for each species. Plant names are updated following International Plant Names Index (IPNI—www.ipni.org), The Plant List (www.thepartlist.org) and Tropicos (www.tropicos.org). The native range of each species is given on the basis of the International Legume Database and Information Service (ILDIS—www.ildis.org) and Plants of the World Online (www.plantsoftheworldonline.org).

RESULTS

Leguminosae (Fabaceae sensu lato) in Kerala are represented by 448 taxa including 423 species, four subspecies and 21 varieties under 128 subfamilies (Tables 1, 2, 3; Images 1–64). Out of 448 taxa, 87 are introduced plants, either naturalized or under cultivation for various purposes. Among the 361 indigenous legumes, Papilionoideae dominate with 269 species, one subspecies and 16 varieties under 64 genera. Caesalpinioideae is represented by 53 taxa in 22 genera followed by Detarioideae (13/5), Cercidioideae (8/3), and Dialioideae (1/1). Crotalaria is the dominant genus with 59 taxa, next comes Indigofera (26 taxa), Dalbergia (18 taxa), Tephrosia (13), and Vigna (13). About 47 genera are represented by a single species only. Top 10 dominant genera are given in Fig. 1.

Life form analysis (Fig. 2) revealed that, out of the 361 indigenous legumes identified from the state, the majority are herbs (124) and shrubs (95) followed by climbers (78) and trees (64).

The district-wise analysis (Fig. 3) shows that Idukki is the legume-rich district with 267 taxa followed by Palakkad (236), Kollam (178), Wayanad (174), and Thiruvananthapuram (169). The lowest number of legumes was found in Ernakulam District (69 taxa).

Endemic and threatened legumes

Among the 361 indigenous legumes found in Kerala, 81 are endemic to India and 33 are confined to the Western Ghats-Sri Lanka biodiversity hotspot. Out of
81 Indian endemic species legumes, 32 are restricted to the Western Ghats of Kerala, Karnataka, and Tamil Nadu states. About 17 taxa, namely Crotalaria assamica var. keralensis, Dalbergia beddomei, Dialium travancoricum, Humboldtia bourdillonii, H. brunonis var. raktapushpa, H. sanjanpae, H. unijuga var. trijuga, Kunstleria keralensis, Millettia pulchra var. munnaresensis, Phanera murthyi, Sanjappa cynametroides, Smithia venkobarowii var. venkobarowii, S. venkobarowii var. glabra, Tephrosia travancorica, T. wynaadensis, and Vigna satishiana are endemic to Kerala. The distribution range of 81 Indian endemic legumes found in Kerala is analysed and represented in Fig. 4. Among the threatened legumes found in Kerala, Dialium travancoricum and H. unijuga var. trijuga are Critically Endangered, Cynometra travancorica, Humboldtia bourdillonii, H. unijuga var. unijuga, H. vahliana, Kingiodendron pinnatum, and Sophora wightii are Endangered and Saraca asoca is Vulnerable (IUCN 2020). Cynometra beddomei, which is treated as Extinct in the Red List, has been re-collected recently (Sasidharan 1998), and hence it can be categorised as Critically Endangered. During our field studies Dialium travancoricum is found to be the most threatened tree species in Kerala and is on the brink of extinction due to poor regeneration. This species is survived with a few numbers of very old trees in Ponmudi forest ranges of Thiruvananthapuram District. Among Endangered tree legumes, Kingiodendron pinnatum is facing severe threats due to over-exploitation and habitat destruction. The oleo-gum-resin of this plant species is used in gonorrhoea, catarrhal conditions of genito-urinary and respiratory tract (Kumar et al. 2011), and also in the paint industry. The species has been severely exploited for its wood oil in the past and the stem bark is collected as a substitute for Saraca asoca. Dalbergia travancorica is another highly threatened legume restricted to a few lowland urban sacred groves in Thiruvananthapuram (Jagadeesan et al. 2015).

Economically important legumes

Arachis hypogea (Groundnut), Cajanus cajan (Red Gram), Canavalia gladiata (Sword Bean), Cicer arietinum (Bengal Gram), Cyamopsis tetragonoloba (Cluster Bean), Lablab purpureus (Lablab Bean), Phaseolus coccineus (Scarlet Runner), P. lunatus (Lima Bean), P. vulgaris (French Bean), Psophocarpus tetragonolobus (Winged Bean), Sesbania sesban (Swamp Pea), Vigna mungo (Black Gram), Vigna radiata (Green Gram), V. unguiculata ssp. cylindrica (Catjang), and V. unguiculata ssp. unguiculata (Cowpea) are commonly cultivated in the state for pulses/vegetables. Pisum sativum (Garden Pea) is cultivated in high ranges in Idukki District. Dalbergia latifolia (Malabar Rosewood), D. lanceolaria, D. sissoo, and Pterocarpus marsupium (Kino), and P. santalinus (Red Sandalwood) are known for their quality timber.
Table 1. List of indigenous legumes documented from Kerala.

| Name of taxa | Habit | Native to | Vouchers/ Reference |
|--------------|-------|-----------|---------------------|
| **LEGUMINOSAE** | | | |
| Subfam. 1. CERCIDOIDEAE | | | |
| 1. Bauhinia L. | S | Indo-Malesia | APB 20690 (MBGH) |
| 2. Bauhinia purpurea L. | T | Indian subcontinent | KKN 3550 (KFRI); APB 2008B (MBGH) |
| 3. Bauhinia racemosa Lam. | T | India, China & Indo-China | NS 716 (KFRI); APB & APB 20238 (MBGH) |
| 4. Bauhinia variegata L. | T | Indian subcontinent to China | MCI 2233 (RHK); SVP 10039 (MBGH) |
| 2. Phanera Loureiro | | | |
| 5. Phanera murthyi Vadhyar & J.H.F.Benj. | CS | India (KL; E) | Vide Vadhyar & Benjamin (2019) |
| 6. Phanera phoenicea (Wight & Arn.) Benth. Bauhinia phoenicea Wight & Arn. | CS | India (MH, KA, TN, KL; E) | NS 5219 (KFRI); SVP & APB 20087 (MBGH) |
| 7. Phanera scandens (Lour). Lour. ex Raf. Bauhinia scandens L. anguina (Roxb.) H.Ohashi | CS | Indo-Malesia | CAB 11859 (MH); PM 34585 (CALI); NS 5137 (KFRI) |
| 3. Piliostigma Hochst. | | | |
| 8. Piliostigma malabaricum (Roxb.) Benth. Bauhinia malabarica Roxb. | T | Tropical Asia to northern Australia | SVP & APB 20084 & 20654 (MBGH) |
| Subfam. 2. DETARIOIDEAE | | | |
| 4. Cynometra L. | | | |
| 9. Cynometra beddomei Prain | T | India (KA, KL; E) | TFB 613 (TBGT); NS 5808 (CAL); APB 20607 (MBGH) |
| 10. Cynometra travancorica Bedd. | T | India (KA, TN, KL; E) | CAB 5668 (MH); EV 62880 (CAL); KAA 3514 (CMPR) |
| 5. Hardwickia Roxb. | | | |
| 11. Hardwickia binata Roxb. | T | India (DL to KL; E) | KAA 4058 (CMPR); SVP & APB 20255 (MBGH) |
| 6. Humboldtia Vahl | | | |
| 12. Humboldtia bourdilloni Prain | T | India (KL; E) | SVP & APB 20531; APB 15548 (MBGH) |
| 13. Humboldtia brunonis Wall. var. brunonis | T | India (KA, TN, KL; E) | VSR 59288 (MH); APB 20605 (MBGH) |
| 14. Humboldtia brunonis Wall. var. raktapushpa Udyan, Tushar & S.George | T | India (KL; E) | APB 20606 & 20821 (MBGH) |
| 15. Humboldtia decurrens Bedd. ex Oliver | T | India (TN, KL; E) | AGP 78079 (MH); SVP 20541 (MBGH) |
| 16. Humboldtia sanjappae Sasidh. & Sujanapal | T | India (KL; E) | SVP & APB 20826 (MBGH) |
| 17. Humboldtia unijuga Bedd. var. trijuga Joseph & V.Chandras. | T | India (KL; E) | MM 11273 & 11154 (TBGT) |
| 18. Humboldtia unijuga Bedd. var. unijuga | T | India (TN, KL; E) | NM 4244; RG 49676 (MH). |
| 19. Humboldtia vahliana Wight | T | India (TN, KL; E) | MM 54680 (CAL); APB 20520 (MBGH) |
| 7. Kingiodendron Harms | | | |
| 20. Kingiodendron pinnatum (Roxb. ex DC.) Harms | T | India (TN, KL; E) | JA 16227 (CAL); SVP 20914 (MBGH) |
| 8. Saraca L. | | | |
| 21. Saraca asoca (Roxb.) W.I.de Wilde | T | India, Myanmar & Sri Lanka | SVP 68482 (MBGH) |
| Subfam. 3. DIALIOIDEAE | | | |
| 9. Dialium L. | | | |
| 22. Dialium travancoricum Bourd. | T | India (KL; E) | TFB 1005 (CAL) |
| Subfam. 4. CAESALPINIOIDEAE | | | |
| 10. Acrocarpus Wight & Arn. | T | Indian subcontinent to China | VSR 64065 (MH); PM 33638 (CAL) |
| 23. Acrocarpus fraxinifolius Wight & Arn. | T | India, China & Indo-China | NS 716 (KFRI); APB & APB 20238 (MBGH) |
| 11. Adenanthera L. | | | |
| 24. Adenanthera pavonina L. | T | Tropical Asia & Madagascar | SVP 10078 (CAL); SVP 10078 (MBGH) |
| Name of taxa            | Habit | Native to                                      | Vouchers/ Reference                       |
|------------------------|-------|-----------------------------------------------|-------------------------------------------|
| 12. Albizia Durazz.    |       |                                               |                                           |
| 25 Albizia amara (Roxb.) Boivin | T     | India, Sri Lanka & eastern Africa             | SVP & APB 20253, 20254 & 20263 (MBGH)     |
| 26 Albizia chinensis (Osbeck) Merr. | T     | Tropical Asia & China                         | SVP 20019 & 10093 (MBGH)                 |
| 27 Albizia iathomii Hole | T     | India (MF, KA, TN, KL; E)                     | SVP & APB 20263 & 20920 (MBGH)           |
| 28 Albizia lebbeck (L.) Benth. | T     | Indian subcontinent to Myanmar                | NS 1139 (KFRI); SVP 202293 (MBGH)        |
| 29 Albizia odoratissimo (L.) F. Benth. | T     | Indo-Malesia                                  | APB 20044; SVP 10092 (MBGH)              |
| 30 Albizia procera (Roxb. Benth. | T     | Tropical Asia to Australia                    | JJ 17849 (CAL); NS 3859 (KFRI)           |
| 13. Archidendron F.Mull. |       |                                               |                                           |
| 31 Archidendron bigeminum (L.) I.C.Nielsen A. monadelphum (Roxb.) Nielsen, var. gracile (Bedd.) Sanjappa | T     | Indian subcontinent                           | SVP 10059; APB 20824 (MBGH)              |
| 32 Archidendron clypearia (Jack) I.C.Neilsen | T     | Southern & Southeastern Asia                  | NM 5142 (TBGT); SVP & APB 20666 (MBGH)   |
| 14. Biancaea Tod.      |       |                                               |                                           |
| 33 Biancaea decapetala (Roth) O.Deg. Caesalpinia decapetala (Roth) Alston | CS    | Tropical Asia                                 | SVP & APB 20618 (MBGH)                   |
| 34 Biancaea sappan (L.) Tod. Caesalpinia sappan L. | T     | Indo-Malesia                                  | NCN 50935 (MH); SVP 20003 (MBGH)         |
| 15. Caesalpinia L.     |       |                                               |                                           |
| 35 Caesalpinia crista L. | CS    | Indo-Malesia                                  | NS 3822 (KFRI); SCN 1471 (CAL)           |
| 16. Cassia L.          |       |                                               |                                           |
| 36 Cassia fistula L.   | T     | Indian subcontinent to Myanmar                | TS 10885 (CAL); SVP & APB20782 (MBGH)    |
| 37 Cassia javanica L. subsp. agnes (de Witt) K.Larsen Cassia javanica L. subsp. nodosa (Roxb.) K.Larsen & S.S.Larsen | T     | Indo-Malesia                                  | APB 20051; APB & APB 20630 (MBGH)        |
| 38 Cassia Roxburghii DC. | T     | India & Sri Lanka                             | SVP20783 (MBGH)                           |
| 17. Chamaecrista (L.) Moench |       |                                               |                                           |
| 39 Chamaecrista absus (L.) H.S.Irwin & Barneby | H     | Tropics & Subtropics                          | SVP & APB 20107 & 20987 (MBGH)           |
| 40 Chamaecrista auricoma (Benth.) V.Singh | H     | Indian subcontinent to Indo-China             | APB 20055; SVP & APB 20673 (MBGH)        |
| 41 Chamaecrista kleinii (Wight & Arn.) V.Singh | H     | India & Sri Lanka                             | SVP 20483; SVP & APB 20703 (MBGH)        |
| 42 Chamaecrista mimosoides (L.) Greene | H     | Paleotropics                                  | SVP 20486; APB 20758 & 20899 (MBGH)      |
| 43 Chamaecrista neglecta (Vahl) Greene | H     | Southern & southwestern Asia & Tropical Africa | SVP & APB 20702 (MBGH)                    |
| 44 Chamaecrista pumila (Lam.) V.Singh | H     | Paleotropics                                  | MRR 1606 (CAL); SVP & APB 20598 (MBGH)   |
| 45 Chamaecrista wallichiana (DC.) Singh | H     | Indian subcontinent                           | SR 4684 (RHK); NM 874 (KFRI)             |
| 18. Dichrostachys (DC.) Wight & Arn. |       |                                               |                                           |
| 46 Dichrostachys cinerea (L.) Wight & Arn. | T     | India & Sri Lanka                             | NS 1249 (KFRI); SVP & APB 20793 (MBGH)   |
| 19. Entada Adans.      |       |                                               |                                           |
| 47 Entada rheedei Spreng. | CS    | Indo-Malesia                                  | NS 5229 (KFRI); APB 20603 (MBGH)         |
| 20. Guailandina L.     |       |                                               |                                           |
| 48 Guailandina bonduc L. Caesalpinia bonduc (L.) Roxb. | CS    | Paleotropics                                  | SVP 20453 ; SVP & APB 2097 (MBGH)        |
| 49 Guailandina major (DC.) Small Caesalpinia globularum Bakh. F. & Royen | CS    | Indo-Malesia to Polynesia                     | Vide Subramanian (1995)                   |
| 21. Hultholia Gagnon & G.P.Lewis |       |                                               |                                           |
| 50 Hultholia mimosoides (Lam.) Gagnon & G.P.Lewis Caesalpinia mimosoides Lam. | CS    | Indo-Malesia                                  | EV 60457 (MH); NS 3748 (KFRI)            |
| 22. Mezoneuron Desf.   |       |                                               |                                           |
| 51 Mezoneuron cucullatum (Roxb.) Wight & Arn. | CS    | Indo-Malesia                                  | VSR 66814 (MH); APB 20608 & 20819 (MBGH) |
| 52 Mezoneuron hymenocarpum Wight & Arn. ex Prain | CS    | Tropical Asia to Australia                    | NS 5224 (KFRI)                           |
| Name of taxa | Habit | Native to | Vouchers/ Reference |
|-------------|-------|-----------|---------------------|
| Moullava spicata (Dalzell) Nicolson | CS | India (Peninsula; E) | NS 3762 (KFR); APB 20609 & 20823 (MBGH) |
| Neptunia prostrata (Lam.) Bail. | H | Pantropics | JI 17785 (MH); APB 16322 (MBGH) |
| Pterolobium hexapetalum (Roth) Santapau & Wagh | CS | Indian subcontinent | KAA 2083 (CMPR); SVP & APB 20248 (MBGH) |
| Sanjappa cynometroides (Bedd.) E.R.Souza & Krishnaraj | T | India (KL; E) | NS 10003 (CAL); SVP & APB 20763 (MBGH) |
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| Pterolobium hexapetalum (Roth) Santapau & Wagh | CS | Indian subcontinent | KAA 2083 (CMPR); SVP & APB 20248 (MBGH) |
| Sanjappa cynometroides (Bedd.) E.R.Souza & Krishnaraj | T | India (KL; E) | NS 10003 (CAL); SVP & APB 20763 (MBGH) |
| Moullava spicata (Dalzell) Nicolson | CS | India (Peninsula; E) | NS 3762 (KFR); APB 20609 & 20823 (MBGH) |
| Neptunia prostrata (Lam.) Bail. | H | Pantropics | JI 17785 (MH); APB 16322 (MBGH) |
| Pterolobium hexapetalum (Roth) Santapau & Wagh | CS | Indian subcontinent | KAA 2083 (CMPR); SVP & APB 20248 (MBGH) |
| Sanjappa cynometroides (Bedd.) E.R.Souza & Krishnaraj | T | India (KL; E) | NS 10003 (CAL); SVP & APB 20763 (MBGH) |
| Name of taxa | Habit | Native to | Vouchers/ Reference |
|-------------|-------|-----------|---------------------|
| Abur pulchellus Wall. ex Thwaites | TH | Tropical Asia, Tropical Africa to southwestern Pacific | APB 8634; SVP 20913 (MBGH) |
| Aeschynomene L. | | | |
| Aeschynomene aspera L. | S | Indo-Malesia | KR 74826 (MH); NR 33698 (TBGT); SCN 1512 (CALI) |
| Aeschynomene indica L. | S | Paleotropics | SCN 1174 (CALI); JA 16981 (CALI) |
| Aganope Miq. | | | |
| Aphyllodium (DC.) Gagnep. | | | |
| Aphyllodium biarticulatum (L.) Gagnep. | | Indo-Malesia to Polynesia | APB 20739; SVP 20290 & 20472 (MBGH) |
| Alysicarpus Neck. ex Desv. | | | |
| Alysicarpus bupleurifolius (L.) DC. var. bupleurifolius H | | Indo-Malesia to Polynesia | APB 20735 & 20795; SVP 20414 (MBGH) |
| Alysicarpus bupleurifolius var. hybridus DC. | | | |
| Alysicarpus glumaceus (Vahl) DC. | | Paleotropics | |
| Alysicarpus hamosus Edgew. | | Western Himalaya to India | TS 10821 (CALI) |
| Alysicarpus heterophyllus (Baker.) Jafri & Ali | H | Indian subcontinent & eastern Arabian Peninsula | SVP & APB 20676 (MBGH) |
| Alysicarpus manilfer (L.) DC. | H | Indian subcontinent to West Africa | KR 75538; CNM 63731; MM 63895 (MH) |
| Alysicarpus naikianus Pokle | H | India (MH, KL; E) | Vide Pokle (1999) |
| Alysicarpus parviflorus Dalzell | | | |
| Alysicarpus parviflorus Dalzell Desmodium alysicarpoides Meeuwen | | Indo-Malesia to Australia | SVP & APB 20710; APB 20749 (MBGH) |
| Alysicarpus racemosus Benth. Desmodium itchinbor Sanappa | | India (RI, GU, MP, MH, OD, KA, TN, KL; E) | KAA 4746 (CMPR); PB 90985 (MH) |
| Alysicarpus scarious Graham A. scarious Graham var. pilifer (Prain) Pramanik & Thoth. | H | Indian subcontinent to Myanmar | KMS 1643 (CALI) |
| Alysicarpus vaginalis (L.) DC. var. nummularifolius Miq. | H | Paleotropics | RA 74362 (CAL); SVP 20457; TAR 8131 (CALI) |
| Aphyllodium Desmodium alysicarpoides Meeuwen | | | |
| Butea Roxb. ex Willd. | | | |
| Butea monosperma (Lam.) Taub. | T | Indian subcontinent to China | SCN 1913 (CALI); APB 16123 (MBGH) |
| Cajanus DC. | | | |
| Cajanus abicans (Wight & Arn.) Maesen | CS | India & Sri Lanka | KAA 2338 (CMPR) |
| Cajanus cajan (L.) Huth | S | India | SVP 20510 (MBGH) |
| Cajanus goensis Dalz. | CS | Indo-Malesia and China | NS 3794; JA 17127 (CALI); SVP 30386 (MBGH) |
| Cajanus heyneyi (Wight & Arn.) Maesen | CS | India & Sri Lanka | SVP & APB 20614 & 20956; SVP 30386 (MBGH) |
| Cajanus lineatus (Wight & Arn) Maesen | S | India & Sri Lanka | SVP 20433; APB 20864 & 20880 (MBGH) |
| Cajanus rugosus (Wight & Arn) Maesen | CS | India & Sri Lanka | APB 20736; JA 12679 (CALI) |
| Cajanus scarabaeoides (L.) Thouars | H | Tropical Asia | APB 20050 & 20860 (MBGH) |
| Cajanus trinervius (DC) Maesen | S | India & Sri Lanka | SVP & APB 20201 (MBGH) |
| Canavalia DC. | | | |
| Canavalia africana Dunn | CS | India, Sri Lanka, Africa and Hawaiian Islands | SVP & APB 20226; SVP 32234 & 20402 (MBGH) |
| Canavalia cathartica Thouars | CS | Tropical Asia, Africa & Pacifics | SVP & APB 20175; SVP 20068 (MBGH) |
| Canavalia gladiata (Jacq.) DC. | CS | Tropical & Subtropical Asia | EV 44721 (MH); NS 5160 (KFR); SVP 20511 (MBGH) |
| Canavalia mollis Wall. ex Wight & Arn. | CS | India-Malesia | Vide Sasidharan (1998 & 1999) |
| Canavalia rosea (Sw.) DC. | H | Tropics & Subtropics | TAR 9925; VSR 64018 (CAL); APB 16201 (MBGH) |
| Name of taxa | Habit | Native to | Vouchers/ Reference |
|-------------|-------|-----------|---------------------|
| 38. Codariocalyx Hassk. | S | Tropical & Subtropical Asia | SVP 20929; APB 20762 (MBGH) |
| 39. Crotalaria L. | | | |
| 109 Crotalaria acicularis Buch.-Ham. ex Benth. | H | Indo-Malesia-Australia | Vide Ansari (2008) |
| 110 Crotalaria alata Buch.-Ham. ex D. Don | S | Himalaya to North Australia | MCL 2419 (RHK); VSR 66828 (MH) |
| 111 Crotalaria obilda B.Heyne ex Roth | H | Tropical Asia to northern Australia | KAA 4003 (CMPR); NM 10473 & 10743 (CALI) |
| 112 Crotalaria angulata Mill. | H | India & Sri Lanka | KMS 15320 (CAL) |
| 113 Crotalaria assimica Benth. var. keralensis Krishnaraj, N. Mohanan & V.T. Antony | S | India (KL; E) | SVP & APB 20301 (MBGH) |
| 114 Crotalaria barbata Graham ex Wight & Arn. | S | India (TN, KL; E) | PM 33861; TS 11311 (CALI) |
| 115 Crotalaria beddomeana Thoth. & A.A.Ansari | S | India, Indonesia & Sri Lanka | CEC 4504; AM 12967 (MH) |
| 116 Crotalaria bifaria L.f. | S | India (TN, KL; E) | PM 3387 (CALI) |
| 117 Crotalaria bifaria L.f. | H | India & Sri Lanka | Vide Ansari (2008) |
| 118 Crotalaria calcina Schrank | H | Paleotropics | CEC 2272 (MH); APB 20727 & 20896 (MBGH) |
| 119 Crotalaria candicans Wight & Arn. | S | India (AP, TN, KL; E) | EV 46190 (MH) |
| 120 Crotalaria clarkei Gamble | S | India (OD, AP, KA, TN, KL; E) | Vide Ansari (1999 & 2002) |
| 121 Crotalaria dubia Graham | H | Southern Asia & China | Vide Ansari (2008) |
| 122 Crotalaria evolvuloides Wight C. evolvuloides Wight var. acutifolia Gamble | H | India & Sri Lanka | Vide Ansari (1998) |
| 123 Crotalaria ferruginea Graham ex Benth. | H | Indo-Malaysia | Vide Ansari (2008) |
| 124 Crotalaria formosa Graham ex Wight & Arn. | S | India (TN, KL; E) | Vide Ansari (2008) |
| 125 Crotalaria fysoni Dunn var. glabra Gamble | H | India (TN, KL; E) | Vide Ansari (2008) |
| 126 Crotalaria fysoni Dunn var. fysoni | H | India (TN, KL; E) | Vide Ansari (2008) |
| 127 Crotalaria goreensis Guill. & Perr. | H | Tropical Africa & Australia | Vide Ansari (2008) |
| 128 Crotalaria graminiana Wight & Arn. | S | India (TN, KL; E) | Vide Ansari (2008) |
| 129 Crotalaria hebecarpa (DC.) Rudd | H | Southern Asia | Vide Ansari (2008) |
| 130 Crotalaria heynaeana Graham ex Wight & Arn. | S | India (KA, TN, KL; E) | Vide Ansari (2008) |
| 131 Crotalaria hirsuta Willd. | H | Indian subcontinent | Vide Ansari (2008) |
| 132 Crotalaria hirta Willd. | H | India & Indo-China | Vide Ansari (2008) |
| 133 Crotalaria humifusa Graham ex Benth. | H | Himalaya to northern Australia | Vide Ansari (2008) |
| 134 Crotalaria juncea L. | H | South and South East Asia & China | RA 74318 (CAL); APB 20406 & 20438 (MBGH) |
| 135 Crotalaria laburnifolia L. | S | Tropical Asia, South Africa & northern Australia | KMS 14740 (CAL); APB 20661 (MBGH) |
| 136 Crotalaria laevigata Lam. | S | India & Madagascar | Vide Ansari (2008) |
| 137 Crotalaria leptostachya Benth. | S | India (Peninsula,; E) | Vide Ansari (2008) |
| 138 Crotalaria linifolia L.f. | H | Trop. Asia | Vide Ansari (2008) |
| 139 Crotalaria longipes Wight & Arn. | H | India (AP, TN, KL; E) | Vide Ansari (2008) |
| 140 Crotalaria madurensis Wight | S | India (TN, KL; E) | Vide Ansari (2008) |
| 141 Crotalaria medicaginea Lam. | S | Southern Asia to Australia | Vide Ansari (2008) |
| 142 Crotalaria multiflora Benth. Crotalaria kurisumalayana Sibichen & Nampy Crotalaria subperfoliata Wight | H | India & Sri Lanka | Vide Ansari (2008) |
| 143 Crotalaria mysorensis Roth | H | India & Malesia | Vide Ansari (2008) |
| Name of taxa | Habit | Native to | Vouchers/ Reference |
|-------------|-------|-----------|---------------------|
| Crotalaria nana | H | Indo-Malesia | MM 63352 (CAL); SVP 20073; APB 20723 (MBGH) |
| Crotalaria notonii | H | India | TS 10003 (CAL); AAA 97189 (MH). |
| Crotalaria obtecta | S | India (AP, KA, TN, KL; E) | KAA 7727 (CMPR); BVS 26591 (CAL) |
| Crotalaria pallida | S | Tropical Africa to Taiwan | SVP 13279; APB 20052 (MBGH) |
| Crotalaria notonii | H | India | TS 10003 (CALI); AAA 97189 (MH). |
| Crotalaria obtecta var. glabrescens | S | India (AP, KA, TN, KL; E) | KAA 7727 (CMPR); BVS 26591 (CAL) |
| Crotalaria obtecta | S | India (TN, KL; E) | JA 14550 (CAL); RHB s.n. (MH-12675). |
| Crotalaria prostrata | H | Indo-Malesia | RA 74415 (CAL); MCL 49052 (CAL) |
| Crotalaria pusilla | H | India (BR to KL; E) | JJ 17882 (MH) |
| Crotalaria quinquefolia | H | Tropical Asia & Africa | PM 33476 (CAL); SVP & APB 20709 (MBGH) |
| Crotalaria retusa | S | Tropics | SVP & APB 20164; APB 2048 (MBGH) |
| Crotalaria salicifolia var. obovata | S | India (KA, TN, KL; E) | KAA 7727 (CMPR); BVS 26591 (CAL) |
| Crotalaria pallida var. pallida | S | Tropical Asia & Africa | KMS 25390 (CAL); SVP & APB 10085 (MBGH) |
| Crotalaria peduncularis | H | India (TN, KL; E) | SVP & APB 20164; APB 20961 (MBGH) |
| Crotalaria spectabilis | S | Paleotropics | MCL 1863 (RHK); APB 20830 (MBGH) |
| Crotalaria speciosa | H | India (AP, KA, TN, KL; E) | RA 2008 (CAL) |
| Crotalaria trichotoma | S | Tropical Africa | APB 10999 (MBGH) |
| Crotalaria trifoliastrium | S | India & Bhutan | SVP & APB 20250 (MBGH) |
| Crotalaria triquetoidea | H | India & Sri Lanka | SVP 20438; SVP & APB 20944 (MBGH) |
| Crotalaria verrucosa | S | India (TN, KL; E) | CA 2931 (CAL); MM 66092 (MH) |
| Crotalaria walkeri | S | India & Sri Lanka | SVP 20416; APB 20739 (MBGH) |
| Crotalaria wightiana | S | India & Sri Lanka | SVP 20011; SVP & APB 20672 (MBGH) |
| Crotalaria wilsoniana | S | India & Sri Lanka | Vide Nair et al. (1981) |
| Dalbergia beddomei | CS | India (KL; E) | KKN 3236 (KFRI) |
| Dalbergia benthamii | CS | India & China | KKN 3237 (KFRI) |
| Dalbergia candenatensis | CS | Indo-Malesia, China, and Australia | SCN 1637 (CAL); SVP & APB 20110 (MBGH) |
| Dalbergia congesto | CS | India (TN, KL; E) | Vide Sasidharan (1999) |
| Dalbergia horrida (Dennst.) Mabb.var. glabrescens (Prain) Thoth & Nair | CS | India to Indo-China | KKN 2880 (KFRI); MAL 218 (CAL) |
| Dalbergia horrida (Dennst.) Mabb. var. horrida | CS | India to Malayan Peninsula | NCA 81241 (MH); APB 20822; SVP 20966 (MBGH) |
| Dalbergia lanceolaria l. f. subsp. lanceolaria | T | Indian Subcontinent to Indo-China | SVP & APB 20225 & 20264 (MBGH) |
| Dalbergia lanceolaria l. f., subsp. paniculata (Roxb.) Thoth. | T | India to Indo-China | KKN 2837 (KFRI); SVP 20446 (MBGH) |
| Dalbergia latifolia | T | India-Malesia | SCN 1425 (CAL); SVP & APB 20722 (MBGH) |
| Dalbergia malabarica | CS | India (OD, MH, KA, TN, KL; E) | SVP & APB 20681; APB 20687 (MBGH) |
| Dalbergia pinnata | T | India (KA, TN, KL; E) | Vide Thothathri (1987) |
| Name of taxa                      | Habit | Native to                                                   | Vouchers/ Reference                      |
|----------------------------------|-------|-------------------------------------------------------------|------------------------------------------|
| Dalbergia pseudo-sissoo Miq.     | CS    | Indo-Malesia                                               | NA S44 (MH); NM 11091 (TBGT)            |
| Dalbergia rubiginosa Roxb.        | CS    | India (Peninsula; E)                                       | KKN 2821 (KFRI); NCN 81115 (CAL)        |
| Dalbergia sericea G.Don.         | T     | Indian subcontinent to Tibet                               | SVP & APB 20277 (MBGH)                  |
| Dalbergia sissoids Graham ex Wight & Arn. | T     | India & Indonesia                                          | VSR 62018; TFB 535 (MH); SVP & APB 20082 (MBGH) |
| Dalbergia sissoo Roxb.           | T     | Tropical Himalaya to northeastern India                    | KKN 3212 (KFRI); SCN 1980 (CAL); SVP & APB 20768 (MBGH) |
| Dalbergia travancorica Thoth.    | CS    | India (KL; E)                                              | Vide Jagadeesan et al. (2015)            |
| Dalbergia volubilo Roxb.         | CS    | Indian subcontinent to Indo-China                           | KKN 3218 (KFRI); KAA 3935(CMPR)         |
| Dendrolobium (Wight & Arn.) Benth. |      |                                                            |                                          |
| Dendrolobium triangulare (Retz.) Schindl. |      | S Indo-Malesia & China                                     | SVP & APB 20080; APB 20046 (MBGH)       |
| Derris benthamii (Thwaites) Thwaites |      | India & Sri Lanka                                          | VSR 68242; Ncn 64288 (CAL); KAA 4368 (CMPR) |
| Derris brevipes (Benth.) Baker var. brevipes |      | India (MH, KA, TN, KL; E)                                  | SVP & APB 20521 & 20616 (MBGH)          |
| Derris brevipes (Benth.) Baker var. coriacea Baker |      | India (KA, TN; E)                                         | SVP & APB 20534 & 20647 (MBGH)          |
| Derris canarensis (Dalzell) Baker | CS    | India & Sri Lanka                                          | NS 3924 (KFRI); AM 12621; MRR 902 (CAL) |
| Derris elliptica (Wall.) Benth.  | CS    | Indo-Malesia                                               | Vide Sasidharan (2011)                   |
| Derris scandens (Robx.) Benth.    | CS    | Indo-Malesia                                               | SVP & APB 10096 & 20077 (MBGH)          |
| Derris thathathrii Bennet         | CS    | India (MH, KA, TN, KL; E)                                  | EV 46241; BZS 43811; KJ 65128 (MH)      |
| Derris trifoliata Lour.           | CS    | Paleotropics                                               | SVP & APB 20103; SVP 20772 (MBGH)       |
| Dolichos trilobus L.              | CS    | India, Sri Lanka, Southeastern Asia & Africa               | SVP & APB 20525; APB 20752 (MBGH)       |
| Dumasia DC.                      |       |                                                            |                                          |
| Dumasia villosa DC.              | TH    | Paleotropics                                               | SVP & APB 20948; APB 20883 (MBGH)       |
| Dunbaria punctata (Wight & Arn.) Benth. | TH    | Tropical Asia to Australia                                 | SVP & APB 20584; APB 20998 (MH)         |
| Dysolobium (Benth.) Prain         | CS    | Indo-Malesia                                               | SVP & APB 20013 & 20564 (MBGH)          |
| Erythrina fusca Lour.            | T     | Indo-Malesia, Tropical Africa & Tropical America           | SVP 20514                                |
| Erythrina stricta Roxb.          | T     | Indian subcontinent & southern China                        | SVP 10056                                |
| Erythrina suberosa Roxb.         | T     | Indo-Malesia                                               | SVP 33372                                |
| Erythrina subumbrans (Hassk.) Merr. | T     | Tropical Asia to China                                     | VSR 53979 (CAL); SVP 20434 & 132474 (MBGH) |
| Erythrina variegata L.           | T     | Indo-Malesia, China & Africa                               | EV 60409 (CAL); SCN 2162 (CAL)          |
| Flemingia Roxb. ex W.T.Aiton      | S     | India, Indo-China, Tropical Africa                         | SVP & APB 20013 & 20564 (MBGH)          |
| Flemingia macrophylla (Wild.) Kurtze ex Merr. | S     | Tropical Asia to Australia                                 | SVP 20434; APB 20816 & 20822 (MBGH)    |
| Flemingia nilgeriensis (Baker) Wight ex T.Cooke | TH     | India (OD, MH, GA, KA, TN; KL; E)                         | EV 48862 (MH); TS 10844 (CAL); KAA 4773 (CMPR) |
| Flemingia semiflora Roxb.        | S     | Indian subcontinent & Indo-China                            | SVP & APB 20646; APB 20879 (MBGH)       |
| Flemingia stricta Roxb.          | S     | South Asia & China                                         | NM 11202 (TBGT)                         |
| Flemingia strabili/era (L.) W.T.Aiton | S     | Indo-Malesia                                               | SVP & APB 20705; APB 20766 & 20859 (MBGH) |
| Flemingia tuberosa Dalzell       | S     | India (GU, MH, GA, KA, TN, KL; E)                          | Vide Prasad et al. (2011)                |
| Name of taxa                        | Habit | Native to                          | Vouchers/ Reference          |
|-----------------------------------|-------|------------------------------------|------------------------------|
| **214** Flemingia wallichii Wight & Arn. | S     | India & Myanmar                    | VSR 61361; RHB 16943; KMS 15667 (MH) |
| **215** Flemingia wightiana Graham ex Wight & Arn. | S     | India, Sri Lanka & Bhutan          | EV 49751 (CAL)               |
| **216** Galactia striata (Jacq.) Urb. var. villosa Wight & Arn.  | CS    | Paleotropics                       | Vide Sasidharan (1999)       |
| **217** Galactia tenuiflora (Willd.) Wight & Arn. | CS    | Indo-Malesia, Australia and Africa | SVP & APB 20592; APB 20049 (MBGH) |
| **218** Geissaspsis Wight & Arn. |       |                                    |                              |
| **219** Geissaspsis tenella Benth.  | H     | Indian subcontinent,               | SVP 20418; SVP & APB 20682; APB 20876 (MBGH) |
| **220** Grona Lour.                |       |                                    |                              |
| **221** Grona heterocarpa (L.)H.Ohashi & K.Ohashi Desmodium heterocarpum (L.) DC. | H     | Tropical Asia to southwestern Pacific | JA 14210 (CAL); SVP & APB 20773 (MBGH) |
| **222** Grona heterocarpa (L.)H.Ohashi & K.Ohashi var. heterocarpa Desmodium heterocarpum (L.) DC. var. heterocarp} | H     | Indo-Malesia                        | KAA 3640 (CMPR); APB 20813 (MBGH) |
| **223** Grona heterophylla (Willd.) H.Ohashi & K.Ohashi Desmodium heterophyllum (Willd.) DC. | H     | Tropical Asia                     | SVP 10053; APB 20165 (MBGH) |
| **224** Grona styracifolia (Osbeck) H.Ohashi & K.Ohashi Desmodium styracifolium (Osbeck) Merr. | H     | Tropical & subtropical Asia to northwestern Pacific | SVP 20436; APB 20749 (MBGH) |
| **225** Grona triflora (L.)H.Ohashi & K.Ohashi Desmodium triflorum (L.) DC. | H     | Paleotropics                      | SCN 1987 (CAL); SVP & APB 20197 (MBGH) |
| **226** Grona wynaadensis (Bedd. ex Gamble) H.Ohashi & K.Ohashi Desmodium wynaadense Bedd. ex Gamble | S     | India (TN, KL; E)                | SVP 20435; APB 20890 (MBGH) |
| **227** Indigofera (Willd.)H.Ohashi & R.R.Mill Desmodium laxum (DC.) H.Ohashi & R.R.Mill Desmodium laxum (DC.) | S     | Southern and Southeastern Asia & China | PB 81118 (CAL) |
| **228** Indigofera constricta (Thwaites) Trimen | S     | India, Nepal, Sri Lanka & Tropical Africa | SVP & APB 20566, 20623 & 20707 (MBGH) |
| **229** Indigofera glandulosum L. | H     | Paleotropics                      | APK 56363; SVP & APB 00120 & 20952 (MBGH) |
| **230** Indigofera hirsuta L. | H     | Pantropical                        | NS 765 (KFRI); SVP 20770 (MBGH) |
| **231** Indigofera aspalathoides Vahl ex DC. | S     | India & Sri Lanka                  | AB 38172 (CAL)               |
| **232** Indigofera cassinoides Rottler ex. DC. | S     | Indian subcontinent & Indo-China | SVP & APB 20566, 20623 & 20707 (MBGH) |
| **233** Indigofera caerulea Roxb. | S     | India, Iran, Pakistan, Sri Lanka & Tropical Africa | VTA 4667A (RHK) |
| **234** Indigofera colutea (Burm. f.) Merr. | S     | Paleotropics                      | NS 3739 (KFRI); SVP & APB 20584 (MBGH) |
| **235** Indigofera constricta (Thwaites) Trimen | S     | India, Nepal, Sri Lanka           | SVP 20484; SVP & APB 20959 (MBGH) |
| **236** Indigofera decaplyptus Jacq. | H     | India, Sri Lanka & Africa         | SVP 20421; APB 20979 (MBGH) |
| **237** Indigofera galegoiodes DC. | S     | Indo-Malesia & China              | CAB 1785; NA 1248 (MH)       |
| **238** Indigofera globra L | H     | India to Indo-China               | MRR 2157 (CAL); SVP 20064 & 20476 (MBGH) |
| **239** Indigofera glandulosum J.C.Wendl. | S     | Indo-Malesia to Australia         | Vide Sasidharan (1999)       |
| **240** Indigofera glandulosum J.C.Wendl. | S     | Indo-Malesia to Australia         | Vide Sasidharan (1999)       |
| Name of taxa                      | Habit | Native to                                      | Vouchers/ Reference                      |
|----------------------------------|-------|------------------------------------------------|------------------------------------------|
| Indigofera karuppiana Pallithanam| H     | India (MH, KA, TN, KL; E)                      | CEC 2342 (CAL); KAA 4214 (CMPR)         |
| Indigofera linnaei Ali           | H     | Indo-Malesia to Australia and West Africa      | SVP 20407; SVP & APB 20243 (MBGH)        |
| Indigofera longiracemosa Boivin ex Baill. | S      | India, Tropical Africa & Madagascar          | CAB 6674 & 6745; MM 54878 (MH)          |
| Indigofera nummularifolia (L.) Livera ex Alston | H     | India, Indo-China, Tropical Africa & Madagascar | SCN 2230 (CAL); MM 63840 (CAL).         |
| Indigofera pedicellata Wight & Arn. | H     | India & Taiwan                                | BVS 28327; PB 80988 (MH)                |
| Indigofera prostrato Willd.      | H     | Indian subcontinent                           | EV 26291 (CAL); APB 20834 & 20873 (MBGH) |
| Indigofera tinctorio L.          | H     | Paleotropics                                  | EV 62885; SVP 20509 (MBGH)              |
| Indigofera trifoliata L.         | H     | Tropical Asia to Australia                    | SVP & APB 20295 & 20573 (MBGH)          |
| Kunstleria keralensis            |       |                                              |                                          |
| Kunstleria keralensis            |       |                                              |                                          |
| Kunstleria keralensis            |       |                                              |                                          |
| Kunstleria keralensis            |       |                                              |                                          |
| Lablab purpureus (L.) Sweet      | CS    | India, Africa & Madagascar                    | SVP & APB 20613 (MBGH)                  |
| Leptodesmia microphylla (Thunb.) H. Ohashi & K. Ohashi Desmodium microphyllum (Thunb.) DC. | H     | Tropical Asia to North Australia             | JA 14255 (CAL); APB 20731 & 20853 (MBGH) |
| Leptospron adenanthum (G.Mey.) A.Delgado. Vigna adenantha (G.Mey.) Marechal, Mascherpa & Stanier | TH    | Tropics & Subtropics                          | SVP & APB 20101; APB 20982 (MBGH)       |
| Macrotyloma (Wight & Arn.) Verdc. |       |                                              |                                          |
| Macrotyloma uniflorum (Lam.) Verdc. | CS    | Indian subcontinent & Tropical Africa         | SVP 10047; SVP & APB 20271 & 20565 (MBGH) |
| Millettia peguensis Ali          | T     | Southern & Southeastern Asia                  | SVP 20908 (MBGH)                        |
| Millettia pulchra (Benth.) Kurz. var. munnarensis Balan & Predeep | T      | India (KL; E)                                 | SVP & APB 20983 & 20986 (MH, MBGH)      |
| Millettia rubiginosa Wight & Arn. | CS    | India (TN, KL; E)                             | SVP & APB 20527 & 20613 (MBGH)          |
| Millettia splendens Wight & Arn. | CS    | India (TN, KL; E)                             | TS 10943 (CAL); NCN 56870 (MH)          |
| Monarthrocarpus Mert.            |       |                                              |                                          |
| Monarthrocarpus dolabriformis (Benth.) H. Ohashi & K. Ohashi Desmodium dolabriforme Benth. | H     | India & Madagascar                            | AN 27473 (TBGT)                         |
| Mucuna atropurpurea (Rosb.) DC. ex Wight & Arn. | CS    | India & Sri Lanka                             | AM s.n. (CAL); SVP & APB 20589 (MBGH)   |
| Mucuna bracteata DC. ex Kurz     | CS    | Eastern Himalaya to China & Sumatra           | APB 20991 (MBGH)                        |
| Mucuna gigantea (Wild.) DC.      | CS    | Indo-Malesia, South Africa to the Pacific     | SVP & APB 10094; SVP 20781 (MBGH)       |
| Mucuna monosperma DC. ex Wight   | CS    | Indian subcontinent to Indo-China             | VSR 62026; PB 65758 (MH)                |

56. Kunstleria Prain

57. Lablab Adans.

58. Leptodesmia (Benth.) Benth. & Hook. f.

59. Leptospron (Benth. & Hook f.) A.Delgado.

60. Macrotyloma (Wight & Arn.) Verdc.

61. Millettia Wight & Arn.

62. Monarthrocarpus Mert.

63. Mucuna Adans.

64. Mucuna atropurpurea (Rosb.) DC. ex Wight & Arn.

65. Mucuna bracteata DC. ex Kurz

66. Mucuna gigantea (Wild.) DC.

67. Mucuna monosperma DC. ex Wight
| Name of taxa                  | Habit   | Native to                                      | Vouchers/ Reference                  |
|------------------------------|---------|------------------------------------------------|--------------------------------------|
| **Mucuna pruriens** (L.) DC var. hirsuta (Wight & Arn.) Wilnot-Dear Mucuna pruriens (L.) DC var. thekkadiensis Thoth. & S.Ravik. | CS      | India, Thailand & Vietnam                      | VSR 61964; KR 755922 (MH); JA 12579 (CALI) |
| 271                          | CS      | Paleotropics                                   | NS 3882 (KFR1); SVP & APB 20962 (MBGH) |
| 64. Mundulea (DC.) Bentham.   |         |                                                |                                      |
| 272  Mundulea sericea  (Willd.) A.Chev. | S      | India, Sri Lanka, Africa & Madagascar           | PB 56915 (CAL); SVP 20919 (MBGH)     |
| 65. Neonotonia J.A.Lackey     | CS      | India, Sri Lanka, Arabian Peninsula & Tropical Africa | SVP & APB 20953; APB 20720 (MBGH) |
| 66. Ophrestia H.M.L. Forbes   |         |                                                |                                      |
| 274  Ophrestia pentaphylla  (Dalezi) Verdc. | TH     | India (ML, MH, AP, KA, TN, KL; E)               | RHB s.n.; VN 1085 (MH); PM 33201(CALI) |
| 67. Ormocarpum P.Beauv.       |         |                                                |                                      |
| 275  Ormocarpum cochinchnense (Lour.) Merr. | S      | Tropical Asia to southwestern Pacific          | NS 4610 (KFR); SVP 20915 (MBGH)     |
| 68. Ormosia Jacks.            |         |                                                |                                      |
| 276  Ormosia travancorica Bedd. | T      | India (AN, KA, TN, KL; E)                       | NS 3764 (KFR1); JA 14438 (CALI); KV 66124 (MH). |
| 69. Ougenia Bentham.          |         |                                                |                                      |
| 277  Ougenia ooejenensis (Roxb.) Hoch. Desmodium ooejenense (Roxb.) H.Ohashi | T      | India & Nepal                                 | MRR 83642 (MH)                          |
| 70. Paracalyx Ali             |         |                                                |                                      |
| 278  Paracalyx scariosus (Roxb.) Ali | S      | Tropical Asia                                 | JLE 18555; SVP 52378; KV 23011 (MH)  |
| 71. Parochetus Buch.-Ham. ex D.Don |         |                                                |                                      |
| 279  Parochetus communis Buch.-Ham. ex D. Don | TH     | Indo-Malesia                                   | SVP 20040; SVP & APB 20285 (MBGH)    |
| 72. Phyllodium Desv.          |         |                                                |                                      |
| 280  Phyllodium pulchellum (L.) Desv. Desmodium pulchellum (L.) Benth. | S      | Tropical & subtropical Asia to North Australia | SVP 20776; SVP & APB 20536 (MBGH)    |
| 73. Pleurolobus J.St.-Hil.    |         |                                                |                                      |
| 281  Pleurolobus gangerticus (L.) J.St.-Hil. ex H.Ohashi & K.Ohashi Desmodium gangerticum (L.) DC. | H      | Paleotropics                                   | KKN 6880 (KFR1); SVP 20001 (MBGH)      |
| 282  Pleurolobus pyronii (DC) H.Ohashi & K.Ohashi Desmodium pyronii DC. | S      | India & Sri Lanka                              | JA 17191 (CALI); APB 20900 (MBGH)    |
| 74. Pothilidies H.Ohashi & K.Ohashi |         |                                                |                                      |
| 283  Pothilidies velutina (Willd.) H.Ohashi & K.Ohashi Desmodium velutinum (Willd.) DC. | S      | Paleotropics                                   | KKN 6896 (KFR1); SVP 20497 (MBGH)      |
| 75. Pongamia Vent.            |         |                                                |                                      |
| 284  Pongamia pinnata (L.) Pierre | T      | Tropical Asia to southwestern Pacific          | SCN 2568; SVP & APB 20784 (MBGH)      |
| 76. Pseudarthria Wight & Arn. |         |                                                |                                      |
| 285  Pseudarthria viscida (L.) Wight & Arn. | S      | Tropical Asia                                 | NS 376 (CALI); SVP 20492 & 20785 (MBGH) |
| 77. Pterocarpus Jacq.         |         |                                                |                                      |
| 286  Pterocarpus dalbergioides Roxb. | T      | Andaman Islands                               | Vide Sasidharan (2011)               |
| 287  Pterocarpus indicus Wild.   | T      | Tropical Asia to western Pacific               | SVP & APB 20704; SVP 20937 (MBGH)    |
| 288  Pterocarpus morsupium Roxb. | T      | India, Nepal, Sri Lanka & Madagascar          | RA 74351 (MH); SVP & APB 20239 (MBGH) |
| 289  Pterocarpus santalinus L.f. | T      | India (Peninsula)                             | MD 14548 (TBGT)                      |
| 78. Pueraria DC.              |         |                                                |                                      |
| 290  Pueraria phasesoides(Roxb.) Bentham. | CS     | Tropical Asia                                 | SCN 1495 (CALI); SVP 20507 & 20786 (MBGH) |
| 291  Pueraria tuberosa (Roxb. ex Wild.) DC. | CS     | India, Nepal & Pakistan                       | SVP & APB 20706; SVP 20927 (MBGH)     |
| Name of taxa | Habit | Native to | Vouchers/ Reference |
|-------------|-------|-----------|---------------------|
| 79. Pycnospora R.Br. ex Wight & Arn. | TH | Tropical Asia, Africa & Australia | SVP 20007; APB 20976 (MBGH) |
| 80. Rhynchosia Lour. | | | |
| 293. Rhynchosia acutissima Thwaites | TH | India & Sri Lanka | MRR 696 (TGBT); KAA 2580 (CMPR) |
| 294. Rhynchosia cana (Willd.) DC. | CS | India, Myanmar & Sri Lanka | KAA 2820 (CMPR); APB 20754 (MBGH) |
| 295. Rhynchosia capitata (Heyne ex Roth) DC. | CS | India, Pakistan & Sri Lanka | JJ 17859 (MH) |
| 296. Rhynchosia courtallensis Maesen | CS | India (AP, TN, KL; E) | PM 33797 (CALI); VDM 3467 (K) |
| 297. Rhynchosia densiflora (Roth) DC. | CS | India, Myanmar, Sri Lanka & Tropical Africa | KAA 2582 (CMPR); SVP & APB 20965 (MBGH) |
| 298. Rhynchosia filipes Benth. | TH | India (TN, KL; E) | Vide Sasidharan (2011) |
| 299. Rhynchosia hirta (Andrews) Meikle & Verdc. | CS | India, Sri Lanka & Tropical Africa | SVP & APB 20615; APB 20825 (MBGH) |
| 300. Rhynchosia rufescens (Willd.) DC. | CS | S Indo-Malesia | SVP & APB 20976 (MBGH) |
| 301. Rhynchosia viscosa (Roth) DC. | CS | Indian subcontinent, Africa & Madagascar | EV 27852; JJ 17867 (MH); APB 20831 (MBGH) |
| 302. Rothia Pers. | | | |
| 303. Rothia indica (L.) Druce | H | Indo-Malesia and Australia | KR 74944 (CAL); SVP & APB 20586 (MBGH) |
| 304. Sesbania Scop. | S | Paleotropics | SCN 1985 (CAL); SVP & APB 20576 (MBGH) |
| 305. Sesbania javanica Miq. | S | Tropical Asia | SVP 20653 & 10280 (MBGH) |
| 306. Sesbania sesban | S | Tropical Asia & Africa | SVP & APB 20182 & 20577 (MBGH) |
| 307. Shuteria Wight & Arn. | | | |
| 308. Smithia Alton | | | |
| 309. Smithia bigemina Dalz. | H | India & Pakistan | NCN 69105 (MH); APB 20747 & 20872 (MBGH) |
| 310. Smithia conferta Sm. var. conferta | H | Tropical Asia to Australia | RA 74417 (MH); APB 20935 (MBGH) |
| 311. Smithia gracilis Benth. | H | India (KA, TN, KL; E) | AKP 56166(CALI); SVP & APB 20235 (MBGH) |
| 312. Smithia hirsuta Dalzell | H | India (ML, MN, MH, AP, KA, TN, KL; E) | PB 80990 (MH); NM 10358 (TGBT); APB 20732 (MBGH) |
| 313. Smithia setulosus Dalzell | H | India (HU, MH, KA, TN, KL; E) | Stocks & Laws.n. (MH); RA 1337 (MH) |
| 314. Smithia venkobarowii Gamble var. glabra Balan & Predeep | S | India (KL; E) | SVP 20448 (MBGH) |
| 315. Smithia venkobarowii Gamble var. venkobarowii | S | India (KL; E) | SVP & APB 20555; APB 20717 (MBGH) |
| 320. Sohmaea laxiflora (DC.) H.Ohashi & K.Ohashi | H | Tropical & subtropical Asia | PM 33038 (CALI); SVP 20912 (MBGH) |
| 321. Sohmaea zonata (Miq.) H.Ohashi & K.Ohashi | H | Tropical & subtropical Asia | AES 12893 (TGBT) |
| Name of taxa | Habit | Native to | Vouchers/ Reference |
|-------------|-------|-----------|---------------------|
| **86. Sophora L.** | | | |
| 322. Sophora velutina Lindl. | S | Indian subcontinent, China & Philippines | JLE 19959 (MH); NS 5780 (CAL) |
| 323. Sophora wightii Baker | S | Indian subcontinent, China to Java | Vide Sasaki & Han (2011) |
| 324. Spatholobus parviflorus (DC.) Kuntze | CS | Indo-Malesia | SVP & APB 20654; APB 20045 & 20840 (MBGH) |
| 325. Spatholobus purpureus Benth. ex Baker | CS | India (MH, KA, TN, KL; E) | SVP & APB 20767; APB 20818 (MBGH) |
| **88. Stylosanthes Sw.** | | | |
| 326. Stylosanthes fruticosa (Retz.) Alston | S | India, Sri Lanka, Africa & Madagascar | SVP 20640; SVP & APB 20571 (MBGH) |
| **89. Tadehagi H.ohashi** | | | |
| 327. Tadehagi triquetra (L.) H.Ohashi | S | Tropical & subtropical Asia | APB 20844; SVP & APB 20777 (MBGH) |
| **90. Tephrosia Pers.** | | | |
| 328. Tephrosia canarensis J.R.Drum. | S | India (MH, KA, TN, KL; E) | KR 74792 (CAL) |
| 329. Tephrosia candia DC. | S | Indian subcontinent | APB 16212 (MBGH) |
| 330. Tephrosia fusca Wight & Arn. | S | India (TN, KL; E) | APB 16248 (MBGH) |
| 331. Tephrosia hookeriana Wight & Arn. | S | India & Sri Lanka | SVP & APB 20240 & 20578 (MBGH) |
| 332. Tephrosia purpurea (L.) Pers. | S | India & Sri Lanka | SVP & APB 20242 & 20828 (MBGH) |
| 333. Tephrosia maxima (L.) Pers. | S | India & Sri Lanka | SVP & APB 20246; APB 16212 (MBGH) |
| 334. Tephrosia pumila (Lam.) Pers. | H | Paleotropics | SVP & APB 20583; APB 16212 (MBGH) |
| 335. Tephrosia purpurea (L.) Pers. | S | India, Myanmar & Sri Lanka | PM 34340 (CAL) |
| 336. Tephrosia tinctoria (L.) Pres. | S | Indo-Malesia, Africa to Southwest Pacific | SVP & APB 20242; APB 20633 & 20828 (MBGH) |
| 337. Tephrosia tinctoria Pers. | S | India & Sri Lanka | SVP & APB 20246; APB 16212 (MBGH) |
| 338. Tephrosia travancorica Thoth. & D.N.Das | S | India (KL; E) | Vide Thothathri & Das (1991) |
| 339. Tephrosia villosa (L.) Pers. | S | Southern Asia & Africa | SVP & APB 20242; APB 16212 (MBGH) |
| 340. Tephrosia yanoensis J.R.Drumm. | S | India (KL; E) | CAB 5684 (K); NCN 64486 (MH) |
| **91. Teramnus P. Browne** | | | |
| 341. Teramnus labialis (L.f.) Spreng. | CS | Tropics & Subtropics | SVP 20069; APB 20748 & 20875 (MBGH) |
| 342. Teramnus mollis Benth. | CS | Indian subcontinent & Indonesia | RA 69941 (MH); SVP 20918 (MBGH) |
| **92. Uraria Desv.** | | | |
| 343. Uraria lagopodioides (L.) DC. | H | Tropical Asia to Pacific | JA 12159 (CAL); SVP 20473 (MBGH) |
| 344. Uraria rufescens (DC.) Schindl. | S | Indo-Malesia | SVP & APB 20706; APB 20845 (MBGH) |
| **93. Vigna Savi** | | | |
| 345. Vigna aconitifolia (Jacq.) Marechal | CS | Indo-Malesia to Australia | Vide Sasidharan (2011) |
| 346. Vigna dalzelliana (Kuntze) Verdc. | TH | India, Pakistan & Indo-China | APB 20787, 20847 & 20848 (MBGH) |
| 347. Vigna mungo (L.) Hepper | H | India | KR 48461 (CAL); MCL 78 (RHK) |
| 348. Vigna pilosa (Roeb.) Baker | TH | Southern & Southeastern Asia | SVP 88260 (MH); APB 16266 (MBGH) |
| 349. Vigna radiata (L.) R.Wilczek | TH | Tropical Asia to Australia | SVP 20097 (MBGH) |
| 350. Vigna sativahana Balan & Predeep | TH | India (KL; E) | APB 21004 (MH) |
| 351. Vigna sublobata (Roeb.)AB & S.K.Sharma | TH | Tropical Asia to Australia | SVP & APB 20888 & 20960 (MBGH) |
| 352. Vigna trilobata (L.) Verdc. | TH | Indo-Malesia | TAR 8145 (CAL); SVP 20443 (MBGH) |
| 353. Vigna umbellata (Thunb.) Ohwi & H.Ohashi | TH | Tropical & subtropical Asia | SVP & APB 20946; APB 20718 (MBGH) |
| 354. Vigna unguiculata (L.) Walp. subsp. cylindrica (L.) Verdc. | TH | Paleotropics | SVP & APB 20446 (MBGH) |
| Name of taxa                  | Habit | Native to          | Vouchers/ Reference                          |
|------------------------------|-------|--------------------|----------------------------------------------|
| Vigna vexillata var. angustifolia (Schumach. & Thonn.) Baker | TH    | Paleotropics       | NCN 64437 (MH); APK 56098; JA 17916 (CALI)   |
| Vigna vexillata var. vexillata | TH    | Paleotropics       | Vide Sasidharan (2011)                        |
| Vigna vexillata var. wightii (Benth. ex Bedd.) Babu & S.K.Sharma | TH    | India, TN, KL; E   | SVP & APB 20946; APB 20751 (MBGH)            |
| Wajira grahamiana (Wight & Arn.) Thulin & Lavin                | TH    | India, Sri Lanka & Thailand | JLE 25773 (MH)                              |
| Zornia diphylloides (L.) Pers. var. diphylloides                 | S     | Tropics & subtropals | VSR 66998 (MH); SVP 20075 (MBGH)             |

Table 2. List of introduced and naturalized legumes documented from Kerala.

| Name of taxa                  | Habit | Native to                | Vouchers/ Reference                         |
|------------------------------|-------|--------------------------|---------------------------------------------|
| Calapagonium mucunoides Desv. | H     | Tropical America         | APB 16277 (MBGH); KAA 3678 (CMPR)           |
| Centrosema molle Mart. ex Benth. | CS    | America                  | JA 12401 (CALI); SVP & APB 20189 (MBGH)    |
| Clioria ternatea L. var. ternatea | TH    | Tropical Africa & Arabian Peninsula | AA 64770; MM 52776 (MH); SVP 10043 (MBGH) |
| Crotalaria incana L. subsp. incana (Lam.) Milne-Redh. | S     | America                  | SVP 20413; APB 20897; SVP & APB 20769 (MBGH) |
| Crotalaria micans Link        | S     | Ethiopia & Senegal       | Vide Jabbar et al. (2010)                   |
| Desmodium intortum (Mill.) Urb. | H     | America                  | APB 20642 & 20682; APB & HS 20690 (MH)      |
| Desmodium scorpiurus (Sw.) Desv. | H     | America                  | SVP 20540; APB 20685 (MBGH)                |
| Desmodium tortuosum (Sw.) DC | H     | Tropical America         | SVP 20504 (MBGH)                           |
| Indigofera arrecta Hochst. ex A.Rich. | S     | Tropical Africa          | Vide Sasidharan (2011)                      |
| Macroptilium lathyroides (L.) Urb. | TH    | Tropical America         | vide Prabhukumar et al. (2016)              |
| Mimosa diplotrichio C.Wright M. diplotricha var. inermis (Adel.) Veldkamp | CS    | Tropical America         | SVP 20508; APB 20794 (MBGH)                |
| Mimosa pudica L.              | H     | South America            | SVP 10040 (MBGH)                            |
| Senna alata (L.) Roxb.        | S     | Tropical America         | SCN 1275 (CALI); SVP 20999 (MBGH)           |
| Senna didymobotrya (Fresen.) H.S.Irwin & Barneby                | S     | Tropical East Africa     | SVP 10045 & 20030 (MBGH)                    |
| Senna hirsuta (L.) H.S.Irwin & Barneby                           | S     | Tropical America         | SVP 10044; SVP & APB 20249 (MBGH)           |
| Senna occidentalis (L.) Link | S     | Tropical America         | PM 28727 (CALI); SVP 13279 (MBGH)          |
| Senna septemtrionalis (Viv.) H.S.Irwin & Barneby var. septemtrionalis | S     | Tropical Africa & Central America | SVP 20025; APB 20827 (MBGH)         |
| Senna sophore (L.) Roxb.     | S     | Tropical America         | VSR 58695 (CALI); APB 20887 (MBGH)          |
| Senna tore (L.) Roxb.        | H     | South & Central America  | APB 20759; SVP 20786                        |
| Senna unijflora (Mill.) H.S.Irwin & Barneby                      | H     | Tropical America         | SVP 20804 (MBGH)                           |
| Sesbania cernicea (Willd.) Link                                    | S     | Arabia & Tropical Africa | MM 120188 (MH)                             |
| Sesbania speciosa Taub. ex Engl.                                  | S     | Africa                   | Vide Krishnaraj et al. (2012)               |
| Stylosanthes guianensis (Aubl.) Sw.                               | H     | Tropical America         | APB 20976 (MBGH)                           |
| Stylosanthes hamota (L.) Taub.                                    | H     | Tropical America         | APB 20877 (MBGH)                           |
| Trifolium repens L.                                                | TH    | Europe                   | SVP 20026 & 20981 (MBGH)                    |
| Vigna hosei (Craib.) Backer                                       | TH    | Southeastern Asia & East Africa | Vide Krishnaraj et al. (2012)           |
### Table 3. List of introduced legumes under cultivation in Kerala.

| Name of taxa                  | Habit | Native                  | Vouchers/ Reference                  |
|------------------------------|-------|-------------------------|--------------------------------------|
| 1. Acacia auriculiformis A.Cunn. ex Benth. | T     | Tropical Australia      | SVP 20033 & 20506 (MBGH)             |
| 2. Acacia dealbata Link       | T     | Tropical Australia      | Vide Sasidharan (2011)               |
| 3. Acacia decurrens Wild.     | T     | Australia               | Vide Sasidharan (2011)               |
| 4. Acacia mangium Wild.       | T     | Australia               | SVP & APB 20789 (MBGH)               |
| 5. Acacia mearnsii De Wild.   | T     | Southeastern Australia  | SVP & APB 00201 & 20790 (MBGH)       |
| 6. Albizia saman (Jacq.) F.Muell. Samanea saman [Jacq.] Merr. | T     | Central & South America | NS 5448 (KFRI); APB 30320 (MBGH)    |
| 7. Amherstia nobilis Wall.    | T     | Myanmar to Thailand     | APB 16399 (MBGH)                     |
| 8. Arachis glabrata Benth.    | H     | South America           | APB 16203 (MBGH)                     |
| 9. Arachis hypogea L.         | H     | South America           | APB 20465 (MBGH)                     |
| 10. Arachis pintoi Krapov. & W.C. Greg. | H   | South America           | APB 16218 (MBGH)                     |
| 11. Bauhinia galpinii N.E.Br. | S     | Africa                  | SVP 20693 (MBGH)                     |
| 12. Bauhinia tomentosa L.     | S     | Africa to Arabian       | SCN 2057 (CALI); SVP & APB 30022 (MBGH) |
| 13. Brownea coccinea Jacq.    | T     | South America           | MCL 2233 (RHK); APB 16333 (MBGH)     |
| 14. Brownea grandiceps Jacq.  | T     | South America           | APB 16301 (MBGH)                     |
| 15. Cassia grandis L. f.      | T     | South America           | APB 20690 (MBGH)                     |
| 16. Calliandra brevipes Benth.| S     | South America           | APB 16277 (MBGH)                     |
| 17. Calliandra calothyrsus Meisn. | S   | Central America         | SVP & APB 20090 (MBGH)               |
| 18. Calliandra haematocephala Hassk. | S   | Bolivia                 | APB 16301 (MBGH)                     |
| 19. Castanospermum australe A.Cunn. & C.Fraser | S   | Australia               | vide Sasidharan (2002)               |
| 20. Christia vespertilionis (L.f.) Bakh. F | CS   | Southeastern Asia       | MD 3393 (TBGT);                      |
| 21. Cicer arietinum L.         | H     | Southeastern Asia       | Vide Sasidharan (2011)               |
| 22. Chamaecrista tomentosa (Jacq.) Benth. | S   | Taiwan                  | SVP & APB 20669 (MBGH)               |
| 23. Chamaecrista tropica Benth. | T     | Australia               | vide Sasidharan (2011)               |
| 24. Delonix regia (Bojer ex Hook.) Raf. | T   | Madagascar              | SCN 1784 (CALI); SVP 10277 (MBGH)    |
| 25. Enterolobium cyclocarpum (Jacq.) Griseb | T   | South America           | NS 5587 (KFRI); SVP & APB 20669 (MBGH) |
| 26. Erythrina x sykesii Barneby & Krukoff | T   | South America           | Vide Sasidharan (2011)               |
| 27. Gliciridia sepium (Jacq.) Kunk. ex Walp. | T   | America                 | SVP & APB 201254 (MBGH)              |
| 28. Hymenaea verrucosa Gaertn. | T     | South Africa            | SVP 20930 (MBGH)                     |
| 29. Leucaena leucocephala (Lam.) de Wit | T     | Tropical America        | MCL 421 (RHK); SVP 10278 (MBGH)      |
| 30. Libidibia coriaria (Jacq.) Schidl. | T     | Central America         | SVP & APB 200720 (MBGH)              |
| 31. Mucuna prurens (L.) DC var. utilis (Wall. ex Wight) L.H.Bailey | CS   | Southeastern Asia       | Vide Sasidharan (2011)               |
| 32. Paraserianthes falcataria (L.) I.C.Nielsen | T   | New Guinea              | SVP & APB20079 (MBGH)                |
| 33. Parkia biglandulosa Wight & Arn. | T   | Bangladesh & Myanmar   | VTA 1089 (RHK)                       |
| 34. Peltophorum pterocarpum(DC.) Backer ex K.Heyne | T   | Indo-China to Australia | APB 20187; SVP 68482 (MBGH)          |
| 35. Pericopsis mooniana Thwaites | T     | Sri Lanka, Indonesia, Malesia to New Guinea | PM 32349 (CALI)                     |
| Name of taxa | Habit | Native | Vouchers/ Reference |
|-------------|-------|--------|---------------------|
| 43 Phaseolus coccineus L. | CS | Central America | Vide Sasidharan (2011) |
| 44 Phaseolus lunatus L. | CS | South America | SVP & APB 20233 (MBGH) |
| 45 Phaseolus vulgaris L. | TH | Central America | SVP & APB 20225 (MBGH) |
| 46 Phyllodium longipes (Crabt) Schindl. Desmodium longipes Crab | S | China to Indo-China | APB 15518 (MBGH) |
| 47 Pisum sativum L. | CH | Central Asia & Europe | Vide Sasidharan (2011) |
| 48 Psophocarpus tetragonolobus (L.) DC. | CS | New Guinea | SVP & APB 20688 (MBGH) |
| 49 Pithecellobium dulce (Roxb.) Benth. | T | Tropical America | SCN 2215 (CALI); SVP & APB 20260 (MBGH) |
| 50 Prosopis julfora (Sw.) DC. | T | America | VTA 69 (RH); SVP & APB 2059 (MBGH) |
| 51 Senegalia mellifera (Benth.) Seigler & Ebinger | T | Africa | NS 5586 (KRF); SVP & APB 20587 (MBGH) |
| 52 Senna fruticosa (Mill.) H.S.Irwin & Barneby | S | Tropical America | APB 16266 (MBGH) |
| 53 Senna polyphylla (Jacq.) H.S.Irwin & Barneby | S | Caribbean Islands | Sasidharan (2011) |
| 54 Senna siamea (Lam.) H.S.Irwin & Barneby | T | Southeastern Asia | PM 33213 (CALI); SVP 13287 (MBGH) |
| 55 Senna spectabilis (DC.) H.S.Irwin & Barneby | T | Trop. America | SVP & APB 20564; SVP 20689 |
| 56 Sesanba grandiflora Poir. | T | Malesia to New Guinea | SVP 20812 (MBGH) |
| 57 Tamarindus indica L. | T | Tropical Africa | SVP 13286 (MBGH) |
| 58 Vachellia farnesiana (L.) Wight & Arn. | T | Tropical America | Sasidharan (2011) |
| 59 Vigna unguiculata (L.) Walp. subspp. unguiculata | TH | Africa | SVP & APB 20916 (MBGH) |

**Habit** [H—Herb | TH—Trailing/Twining Herb | S—Shrub | CS—Climbing Shrub | T—Tree] | **Native** [AP—Andhra Pradesh | AN—Andaman & Nicobar Islands | DL—Delhi | GA—Goa | GI—Gujarat | KA—Karnataka | KL—Kerala | MH—Maharashtra | ML—Meghalaya | MN—Manipur | MP—Madhya Pradesh | OD—Odisha | RJ—Rajasthan | TN—Tamil Nadu; E—Endemic] | **Voucher specimens** [AAA—A.A. Ansari | AGP—A.G. Pandurangan | AKP—A.K. Pradeep | AM—A. Meebold | AN—A. Nazarudeen | APB—Anoop P. Balan | BOS—B.D. Sharma | CAB—C.A. Babu | CEC—C.E.C. Fischer | EV—E. Vajravelu | JF—J. Joseph | JLE—J.L. Ellis | JSG—J.S. Gamble | KAA—K.A. Anilkumar | KKN—K.K.N. Nair | KS—K. Subramanian | KR—K. Ramamurthy | MAL—M.A. Lawton | MCL—M.C. Luckose | MB—Mathew Dan | MRR—M. Rama Rao | NA—N. Anilkumar | NCN—N.C. Nair | N.M. Mohanan | NS—N. Ravi | SF—S. Vaidyanathan | SVP—to S. Vaidyanathan | VTA—to V.T. Antony].

About one-third of the legumes in Kerala have known medicinal properties (Kirtikar & Basu 1918; Ambasta 1986; Parrota 2001). These include Abrus precatorius, Butea monosperma, Clitoria ternatea, Codariocalyx motorius, Cullen corylifolia, Indigofera tinctoria, Kingiodendron pinnatum, Mucuna prurients, Pongamia pinnata, Pseudarthria viscida, and Saraca asoca. *Centrosema molle*, *Desmodium intortum*, *Leucaena leucocephala*, *Macrotyloma uniforum*, *Sesbania sesban*, *Stylosanthes guianensis*, and *S. hamata* are the forage legumes found in the state. *Calopogonium mucunoides*, *Mucuna bracteata*, and *Pueraria phaseoloides* are grown as cover crops in rubber plantations.

**Ornamental legumes**

*Amaranthus nobilis*, *Arachis glabrata*, *A. pintoi*, *Brownea coccinea*, *B. grandiceps*, *Bauhinia spp.*, *Caesalpinia pulcherrima*, *Cassia spp.*, *Clitoria ternatea*, and *Senna spp.* are widely grown in Kerala for ornamental purposes. *Albizia saman*, *Castanospermum australe*, *Cassia javanica*, *Delonix elata*, *D. regia*, *Libidibia coriaria*, *Millettia pinnata*, *Parkia biglandulosa*, and *Peltophorum pterocarpum* are the common avenue trees in the state.

**Invasive legumes**

Exotic legumes like *Centrosema molle*, *Mimosa diplostichra*, *Senna hirsuta*, *S. occidentalis*, *S. sophora*, *S. tora*, among others have extensively invaded the degraded forest areas and open wastelands throughout the state and are causing severe threat to the native flora. Several forage legumes introduced have escaped from farms and have become invasive in the plains especially by the road-sides during the last two decades. *Desmodium scorpiurus*, *D. tortuosum*, *Stylosanthes guianensis*, and *S. hamata* have become a serious threat to indigenous plants in the plains.

**Excluded legumes**

Five legumes previously reported from the state of Kerala include:

- *Amherstia nobilis*
- *Arachis glabrata*
- *A. pintoi*
- *Brownea coccinea*
- *B. grandiceps*
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Kerala (Saidharan 2004; Nayar et al. 2006) have been excluded in this checklist due to the various reasons given below:

1. Desmodium caudatum (Thunb.) DC.: reported from Malappuram District (Sivarajan & Mathew 1997) based on Philip Mathew 33038 (CALI) was a misidentification of Sohmaea laxiflora (DC.) H. Ohashi & K. Ohashi

2. Humboldtia launfolia Vahl: Robert Wight’s collection of ‘H. launfolia’ from ‘Malabar’ region of India 180 years ago was found to be a misidentification of H. vahliana Wight (Balan et al. 2016).

3. Indigofera barberi Gamble: No specimens or record of collection from Kerala found.

4. Rhynchosia rothii Benth. ex Aitch.: Reported from Silent valley National Park in Palakkad District (Manilal 1988) based on T. Sabu 10897 (CALI) was a misidentification of Neonotonia wightii (Arn.) J.A. Lackey.

5. Vigna bourneae Gamble: No specimens or record of collection from Kerala found.

Notes

Sibichen & Nampy (2007) described Crotalaria kurisumalayana, a taxon closely allied to C. multiflora Benth. from the Vagamon Hills of central Kerala. C. multiflora is an Indo-Sri Lankan species distributed in the grasslands and open hill slopes of higher elevations. The authors distinguished C. kurisumalayana from C. multiflora, mainly based on the shape of leaves, lax racemes, and sericeous ferruginous pods. Since these characters are highly overlapping, Krishnaraj & Mohanan (2012) reduced C. kurisumalayana to a variety of C. multiflora and identified the presence or absence of purple striations as the main distinguishing characters. Field studies, however, revealed that this purple striation is also not consistent and therefore the trinomial is reduced to a synonym of C. multiflora.

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Images 1–16. Endemic or lesser known legumes of India, found in Kerala. © Authors, otherwise it is mentioned in the images.
Endemic or lesser known legumes of India, found in Kerala. © Authors, otherwise it is mentioned in the images.

Images 17–32.
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Endemic or lesser known legumes of India, found in Kerala. © Authors, otherwise it is mentioned in the images.
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Images 49–64. Endemic or lesser known legumes of India, found in Kerala. © Authors, otherwise it is mentioned in the images.
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