

Flora of Ponkunnu

- A lateritic hill with long term conservation potential in Kakkur panchayat of Kozhikode, Kerala
- A PRELIMINARY ACCOUNT



Hugonia mystax
(മോതിരക്കണ്ണി)

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Introduction

The general perception, including those of decision makers, is that there is no unique biodiversity of conservation significance in the lowlands and midlands of Kerala. It is generally believed and expressly declared that the ecologically sensitive or significant areas are confined to the forested areas of the Western Ghats. The lack of proper measures or policy guidelines for the long-term protection of lateritic hillocks, a habitat with many unique point endemics and one that plays a significant role in the local water cycle, confirm this negligence. It is evident from the case of Madayipara, a lateritic system in the midland of

Kannur district (Pramod & Pradeep 2021; Padmanabhan 2002; Muraleedharan 2011; Prasad & Parthasarathy 2018).

The lateritic midlands of Kerala hold rich biodiversity including plants and animals. These foothills of the Western Ghats are thickly populated and have been changed largely over the years. Still these regions are the home of many narrow endemic flora and fauna. These hills, usually with table top plateaus are considered as isles of biodiversity (Porembski 2007; Porembski & Barthlott 2012). The midlands act as distinct habitats, turning into ephemeral wetlands during the monsoon season and then into extremely hot rocky outcrops

» *The survey team consisting of the members of Malabar Natural History Society (MNHS) along with the Kakkur Grama Panchayat president Ms. Jameela P.K. and other Panchayat members*



during summer. A large number of plants and animals are adapted to this unique habitat (Pramod et al. 2014; Sreejith et al. 2020). Most of them are point endemics with curious biology. The laterite hills of Northern Kerala, once neglected as waste lands, when explored in detail, have proven to be the centre of endemism. In a short span of 10–20 years, more than 25 plant species were described from these hills (Pramod & Pradeep 2021).

To the layman, these hills may not look appealing or impressive, instead seeming a shabby landscape overgrown with some grasses and other plants of no apparent use. But, the most notable feature is that each hill or location is unique in its species assemblage (Sreejith et al. 2015, 2016). Most of the plants are point endemics, confined to just a few locations. This aspect makes these hills one of the most unique habitats in the world. This fact, however, has not been accepted by the administrators and general public in its spirit (Sreejith et al. 2015).

Ponkunnu of Kakkur Panchayat in Kozhikode district of Kerala is a laterite hillock popular for its scenic beauty and rich bird diversity. The area is notable for the high population of raptors (Mujeeb 2019). Ponkunnu is also the type locality of two recently described, point endemic plant species; *Ceropegia nampyana* Manudev et al. (2016) and *Sonerila lateritica* Resmi et al. (2018). However, detailed documentation of the plant diversity of the area has not been undertaken yet. Considering the conservation and nature education

potentials of Ponkunnu, the local legislative body, the Kakkur Panchayat, was immensely interested in preparing a document on its biodiversity. Accordingly, the Malabar Natural History Society (MNHS), Kozhikode was invited to conduct surveys and prepare a document on the biodiversity of the area.

Study area

Located in the Kakkur Panchayat of Kozhikode district, the Ponkunnu is with an area of 5 km², and lies between 11.40° N latitude and 75.81° E longitude. It is about 20 km away from Kozhikode city and lies in the east–west direction, with an altitude range of 80 to 280 m above MSL. It is composed of grasslands and patches of shrubs and trees with cultivated land and homesteads on the sides.

Methodology

The present study was conducted as part of a biodiversity documentation of the Ponkunnu of Kakkur Panchayat. The authors surveyed the area, along with other experts and volunteers of MNHS. They conducted field surveys in different parts of Ponkunnu on 05 January 2020. The observations made were compiled. The data from published reports also were incorporated. The survey was conducted during the dry phase of lateritic habitat. Detailed study during the wet phase (during the monsoon period) is yet to be conducted. The results are tabulated (Tables 1–5). The main table (Table 1) contains scientific name, Malayalam name, habit, family, and world distribution.

The species are arranged as per alphabetical order of families (angiosperms as per modified Bentham & Hooker classification scheme and pteridophytes as per PPG1 classification scheme). Nomenclature and distribution details of angiosperms are based on E-Flora-Kerala (<https://www.eflorakerala.com/>) and Plants of the World Online (POWO - <https://powo.science.kew.org/>). The other tables (Tables 2–6) are summary of analysis of the data.

Results

A total of 204 angiosperms (under 182 genera and 68 families) and 12 pteridophytes (under 11 genera and 9 families) were documented from the Ponkunnu. These include many unique elements, as tabulated (Tables 1–5). This included 69 herbs, 4 subshrubs, 38 shrubs, 23 climbers/twiners and 66 trees. There were 1 epiphytic and 3 parasitic species also (Table 2). When considering the dominant families, Fabaceae (including all the 3 subfamilies) stood at the top with 29 species (Faboideae – 17, Caesalpinioideae – 5 and Mimosoideae – 7 species). This was followed by Euphorbiaceae (22), Asteraceae (14) and Poaceae (13) (Table 3). There are several exotic and invasive species also, such as *Ageratum conyzoides*, *Chromolaena odorata*, *Eleutheranthera ruderalis*, *Synedrella nodiflora*, *Euphorbia hirta*, *Delonix regia*, *Peltophorum pterocarpum*, *Centrosema molle*, *Gliricidia sepium*, *Acacia auriculiformis*, *Acacia mangium*, *Mimosa pudica*, *Samanea saman*, *Passiflora foetida*, *Pilea microphylla*, *Lantana camara* etc.

The area is also notable for the presence of

many endemics. A total of 22 species out of 204 species (10.78%) of angiosperms are endemic to the Indian region (Tables 4 & 5). Out of these, 6 species are endemic to Southern Western Ghats (*Holigarna arnottiana*, *Ceropegia nampyana*, *Tabernaemontana alternifolia*, *Anaphyllum wightii*, *Tricholepis angustifolia* and *Sonerila lateritica*, 4 to Western Ghats (*Canscora pauciflora*, *C. perfoliata*, *Helicanthes elastica* and *Torenia bicolor*) and 6 to Peninsular India (*Terminalia paniculata*, *Eriocaulon eurypeplon*, *Litsea coriacea*, *Naregamia alata*, *Pandanus unipapillatus* and *Piper nigrum*. Among these, *Ceropegia nampyana* and *Sonerila lateritica* are point endemics described from Ponkunnu. Another 6 species extend to Sri Lanka.

The present report is mainly based on the field study conducted during the dry phase. A detailed survey during the wet phase (monsoon season), which is the most active phase of plant growth in lateritic habitats with many ephemerals, would result in recording of many more interesting plants.

Discussion

The laterite habitats, lying in the midst of thickly populated and largely modified human habitations are also equally rich in biodiversity, composed of many unique plant endemics. The present study on its floristic elements with more than 200 species supports this point. The occurrence of point endemics such as *Ceropegia nampyana* and *Sonerila lateritica* signifies the conservation potential of Ponkunnu. These are known only from Ponkunnu.

Ceropegia nampyana is a delicate herb, remains underground as tuber during most part of the year, and makes its appearance during the rainy season. *Sonerila lateritica* is also a monsoon herb, with curious biology. The authors (Manudev et al. 2016 and Resmi et al. 2018) had not assessed the IUCN red list status of these species. However, if assessed these may fall in the Critically Endangered (CR) or Endangered (EN) category due to the narrow distribution range.

A community oriented participatory approach is essential for the long-term protection of these habitats. Creating awareness among the general public about such kinds of habitats is the best approach in conserving them. The local bodies and other governmental agencies could play a major role in this line. The Ponkunnu, with its high aesthetic value and rich diversity of birds, has great potential to be developed as a community biodiversity reserve for long term conservation. Its unique location and undulating landscape also offer a lot of scope for transforming into an area for Nature education training for students and the general public.

The interest shown by the Kakkur Panchayat in organising a survey as a prelude to preparing a conservation plan for Ponkunnu is commendable. By implementing suitable protocols, the risks of habitat degradation, dumping of wastes, etc., could be controlled. Suitable methods may also be adopted for controlling the exotic and invasive plant species. The local legislative body could develop Ponkunnu as a flagship model for appreciating the virtues of Nature and biodiversity with community participation.

Acknowledgements

We are thankful to the members of Kakkur Panchayat, especially Mrs. Jameela, P. K. (President) and Mrs. Bindu (Member) for their whole hearted support extended during this study. Thanks are due to the team members of MNHS; especially Mr. Sathyan Meppayur (Secretary, MNHS), Dr. Muhamed Jafer Palot (Patron and Dr. Muhamed Rafeek A. P. M (Treasurer). Thanks are also due to Mr. C. Sashikumar and Ms. Poornima Viswanathan for helpful comments for the improvement of this paper.

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Table 1: Details of the plants (Angiosperms and Pteridophytes) of Ponkunnu

Sl No	Scientific name	Malayalam Name	Habit	Family	World Distribution
1	<i>Rostellularia procumbens</i> (L.) Nees		Diffuse herbs	Acanthaceae	Tropical & Subtropical Asia to Central China
2	<i>Ruellia prostrata</i> Poir.	തൃപ്പലം പൊട്ടി	Diffuse herbs	Acanthaceae	South Africa, Arabian Peninsula, India to South West Pacific
3	<i>Rungia pectinata</i> (L.) Nees	..	Diffuse or ascending herbs	Acanthaceae	South Arabian Peninsula to Tropical & Subtropical Asia
4	<i>Achyranthes aspera</i> L.	കടലാടി	Erect herb	Amaranthaceae	Tropical and Subtropical to Australia
5	<i>Cyathula prostrata</i> (L.) Blume	ചെറു കടലാടി	Diffuse herbs	Amaranthaceae	Tropics and subtropics
6	<i>Anacardium occidentale</i> L.	കശുമാവ്	Medium trees	Anacardiaceae	Native of South America; now widely cultivated in Asia and Africa
7	<i>Holigarna arnottiana</i> Hook. f.	കാട്ടുചേര്	Medium trees	Anacardiaceae	Endemic to Southern Western Ghats
8	<i>Mangifera indica</i> L.	മാവ്, മൂച്ചി	Large trees	Anacardiaceae	Indo-Malesia to South Central China
9	<i>Spondias pinnata</i> (L. f.) Kurz	അമ്പഴം	Medium trees	Anacardiaceae	Indo-Malesia to China
10	<i>Uvaria narum</i> (Dunal) Wall. ex Hook.f. & Thoms.	കൂരി വള്ളി	Scandent shrubs	Annonaceae	Endemic to South India and Sri Lanka
11	<i>Alstonia scholaris</i> (L.) R.Br.	ഏഴിലം പാല	Medium trees	Apocynaceae	South and South East Asia to Australia
12	<i>Ceropegia nampyana</i> Manudev et al.	-	Tuberous herb	Apocynaceae	Endemic to Kerala

Sl No	Scientific name	Malayalam Name	Habit	Family	World Distribution
13	<i>Holarrhena pubescens</i> (Buch.-Ham.) Wall. ex G. Don	കൂടകപ്പാല	Small deciduous trees	Apocynaceae	Kenya to S. Africa, Indian Subcontinent to Indo-China
14	<i>Ichnocarpus frutescens</i> (L.) R. Br.	പാൽവള്ളി	Climbers	Apocynaceae	Tropical & Subtropical Asia to N. Australia
15	<i>Parsonsia inodora</i> (Lour.) M. R. & S. M. Almeida	പീനാറി വള്ളി	Twining shrubs	Apocynaceae	Indo-Malesia and South China
16	<i>Tabernaemontana alternifolia</i> L.	കുണ്ടലപ്പാല	Small trees	Apocynaceae	Endemic to Southern Western Ghats
17	<i>Anaphyllum wightii</i> Schott	കീരിക്കിഴങ്ങ്	Rhizomatous herbs	Araceae	Endemic to Southern Western Ghats & Laccadives Isl.
18	<i>Pothos scandens</i> L.	ആനപ്പരുവ	Epiphytic shrub	Araceae	India to Malesia and Madagascar
19	<i>Areca catechu</i> L.	കവുങ്ങ്	Medium trees	Arecaceae	East Indies, Malaysian origin. Cultivated from India to the Solomon Islands and less commonly in Africa and Tropical America
20	<i>Caryota urens</i> L.	ആനപ്പന	Medium trees	Arecaceae	Endemic to India & Sri Lanka
21	<i>Cocos nucifera</i> L.	തെങ്ങ്	Medium trees	Arecaceae	Indo-Pacific origin. Cultivated throughout the tropics
22	<i>Corypha umbraculifera</i> L.	കൂടപ്പന	Large trees	Arecaceae	Widely cultivated in Peninsular India and Sri Lanka
23	<i>Aristolochia indica</i> L.	ഗരുഡക്കൊടി	Twining perennial herbs	Aristolochiaceae	Indo-Malesia
24	<i>Ceropegia</i> sp.	..	Twiner	Asclepiadaceae	
25	<i>Cosmostigma cordatum</i> (Poir.) M.R.Almeida	വട്ടു വള്ളി	Climbing herbs	Asclepiadaceae	India to Indo-China
26	<i>Gymnema sylvestre</i> (Retz.) R. Br. ex Schult.	ചക്കരക്കൊല്ലി	Twining subshrubs	Asclepiadaceae	Tropical and Subtropical Africa to Australia
27	<i>Hemidesmus indicus</i> (L.) R. Br.	നന്നാറി	Slender twining undershrubs	Asclepiadaceae	Indian Subcontinent to Indo-China and Peninsula Malaysia
28	<i>Vincetoxicum indicum</i> (Burm.f.) Mabb.	വള്ളിപ്പാല	Slender climbers	Asclepiadaceae	Indo-Malesia
29	<i>Wattakaka volubilis</i> (L. f.) Stapf	കാക്കാലൻ കൊടി	Climbing shrub	Asclepiadaceae	North East Pakistan to Indo-Malesia and China
30	<i>Ageratum conyzoides</i> L.	കാട്ടുപ്പ	Erect herbs	Asteraceae	Native of Mexico, now naturalised most of the tropical and subtropical parts of the world
31	<i>Blumea axillaris</i> (Lam.) DC.	..	Herbs	Asteraceae	Tropical & Subtropical Old World
32	<i>Blumea oxyodonta</i> DC.	..	Prostrate herbs	Asteraceae	Indo-Malesia and South China
33	<i>Chromolaena odorata</i> (L.) King & Robins.	കമ്മ്യൂണിസ്റ്റ് പച്ച	Shrubs	Asteraceae	Native of Tropical & Subtropical America; naturalised in Tropical and subtropical Africa, Asia to Australia
34	<i>Crassocephalum crepidioides</i> (Benth.) S. Moore	Red Flower Rag leaf	Tall herbs	Asteraceae	Tropical & S. Africa, Madagascar; naturalised in tropical Asia to Australia
35	<i>Eclipta prostrata</i> (L.) L.	കഞ്ഞുണ്ണി	Herbs	Asteraceae	Pantropical
36	<i>Elephantopus scaber</i> L.	ആനച്ചുവടി	Scapigerous herbs	Asteraceae	Pantropical
37	<i>Eleutheranthera ruderalis</i> (Sw.) Sch.-Bip.	..	Annual herbs	Asteraceae	Native of Tropical America; now naturalised in several Asian, African countries and parts of Australia

Sl No	Scientific name	Malayalam Name	Habit	Family	World Distribution
38	<i>Emilia sonchifolia</i> (L.) DC.	മുയൽ ചെവിയൻ	Erect or diffuse herbs	Asteraceae	Tropical and Subtropical Africa and Asia; naturalised in parts of Tropical America and Australia
39	<i>Synedrella nodiflora</i> (L.) Gaertn.	മുടിയിൻ പച്ച	Erect branched herbs	Asteraceae	Native of West Indies; naturalised in India, China, Malesia and Polynesia
40	<i>Tricholepis angustifolia</i> DC.	..	Erect herbs	Asteraceae	Endemic to Southern Western Ghats
41	<i>Tridax procumbens</i> L.	തേൾക്കുത്തി	Procumbent herbs	Asteraceae	Native of Mexico to Tropical America; now widespread throughout tropics and subtropics
42	<i>Vernonia cinerea</i> (L.) Less.	Poovan kurunal	Annuals or perennial herbs	Asteraceae	Pantropical
43	<i>Vicoa indica</i> (L.) DC.	കമ്മൽ ചെടി	Annual herbs	Asteraceae	Tropical & Subtropical Old World
44	<i>Spathodea campanulata</i> P. Beauv.	തണ്ണീർക്കാട് മരം	Medium trees	Bignoniaceae	Native in Tropical Africa
45	<i>Polycarpha corymbosa</i> (L.) Lam.	അച്ചാരം കൊല്ലി	Erect annual herbs	Caryophyllaceae	Pantropical
46	<i>Lophopetalum wightianum</i> Arn.	വെങ്കൊട്ട	Large trees	Celastraceae	Indo-Malesia
47	<i>Getonia floribunda</i> Roxb.	പുല്ലാനി	Scandent shrubs	Combretaceae	India to China (W. Yunnan) and Peninsular Malaysia
48	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	താനി	Medium trees	Combretaceae	India to China (S. Yunnan) and Malesia
49	<i>Terminalia catappa</i> L.	ബദാം	Medium trees	Combretaceae	Malaysia to North Australia & Polynesia, commonly planted in the tropics
50	<i>Terminalia paniculata</i> Roth	വെണ്ടരുത്	Large trees	Combretaceae	Endemic to Peninsular India
51	<i>Cyanotis burmanniana</i> Wight	-	Annual herbs	Commelinaceae	India, Sri Lanka and Myanmar
52	<i>Murdannia semiteres</i> (Dalzell) Santapau	-	Erect tufted slender herbs	Commelinaceae	Burundi, India, Iran, Kenya, Rwanda, Tanzania, Uganda, Vietnam, Yemen, Zambia, Zaïre
53	<i>Connarus moncarpus</i> L.	പുഴുക്കടി കായ	Scandent shrubs	Connaraceae	India to Malesia
54	<i>Camonea umbellata</i> (L.) A.R. Simões & Staples	കോര വളളി	Twining	Convolvulaceae	Tropical & Subtropical America, West & West Central Tropical Africa; naturalised in India, Myanmar, Jawa and parts of Australia
55	<i>Cuscuta reflexa</i> Roxb.	മുടില്ലാത്തളി	Parasitic twining	Convolvulaceae	Afghanistan to Indo-China, Jawa.
56	<i>Evolvulus alsinoides</i> (L.) L.	വിഷ്ണുക്രാന്തി	Small prostrate herbs	Convolvulaceae	Tropics & Subtropics
57	<i>Evolvulus nummularius</i> (L.) L.	..	Small prostrate herbs	Convolvulaceae	Native of Tropical America; naturalised in Africa, Indo-Malesia and Australia
58	<i>Merremia hederacea</i> (Burm. f.) Hall. f.	..	Twining herbs	Convolvulaceae	Tropical & Subtropical Old World to Pacific and Australia.
59	<i>Xenostegia tridentata</i> (L.) Austin & Staples	തള നീലി	Trailing herbs	Convolvulaceae	Paleotropics
60	<i>Cheilocostus speciosus</i> (Koenig) C.D. Specht	ചണ്ണക്കുവ	Rhizomatous herbs	Costaceae	Tropical & Subtropical Asia to NE. Queensland
61	<i>Eriocaulon eurypleon</i> Koernicke	-	Annual herbs	Eriocaulaceae	Endemic to Peninsular India
62	<i>Erythralium scandens</i> Blume	..	Tendrillate climbers	Erythraliaceae	Indo-Malesia to South West China and Celebes

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63	<i>Breynia retusa</i> (Dennst.) Alston	Aattacherukola	Shrubs	Euphorbiaceae	Sri Lanka to Indo-China
64	<i>Breynia vitis-idaea</i> (Burm. f.) C.E.C. Fisch.	ചുവന്ന നിരൂരി	Large shrubs	Euphorbiaceae	Pakistan to Indo-Malesia, South China to Sumatera
65	<i>Bridelia retusa</i> (L.) A. Juss.	മുള്ളൻ കൈനി	Medium trees	Euphorbiaceae	Indian Subcontinent to South China and Western Malesia
66	<i>Bridelia stipularis</i> (L.) Blume	ചെറു പനച്ചി	Scandent shrubs	Euphorbiaceae	Tropical & Subtropical Asia
67	<i>Euphorbia hirta</i> L.	കുഴിനഖപ്പാല	Annual herbs	Euphorbiaceae	Native of Tropical and subtropical America; naturalised in Pantropical region
68	<i>Falconeria insignis</i> Royle	കല്പരം	Medium trees	Euphorbiaceae	Southern India to China and Peninsula Malaysia, Hainan
69	<i>Glochidion ellipticum</i> Wight	ചതക്കടമ്പ്	Medium trees	Euphorbiaceae	Indian Subcontinent to Taiwan
70	<i>Macaranga peltata</i> (Roxb.) Muell. Arg.	പൊടൂവണ്ണി	Medium trees	Euphorbiaceae	Sri Lanka, India- Sikkim to West Indo-China
71	<i>Mallotus philippensis</i> (Lam.) Muell.-Arg.	കുരങ്ങു മഞ്ഞൾ	Small trees	Euphorbiaceae	Tropical & Subtropical Asia to North & Eastern Australia
72	<i>Manihot esculenta</i> Crantz.	കപ്പ	Shrubs	Euphorbiaceae	Native of Brazil; now cultivated throughout the tropics
73	<i>Microstachys chamaelea</i> (L.) Muell.-Arg.	കൊടിയാവണക്ക്	Erect or diffuse herbs	Euphorbiaceae	West Tropical Africa to South Chad, Tropical & Subtropical Asia to Australia
74	<i>Phyllanthus airy-shawii</i> Brunel & Roux	കീഴാർ നെല്ലി	Erect herbs	Euphorbiaceae	Indian Subcontinent to Northern Thailand
75	<i>Phyllanthus amarus</i> Schum. & Thonn.	കീഴാർ നെല്ലി	Erect herbs	Euphorbiaceae	Southern Mexico to Tropical America; naturalised in tropical subtropical regions
76	<i>Phyllanthus emblica</i> L.	നെല്ലിക്ക	Medium trees	Euphorbiaceae	Tropical & Subtropical Asia
77	<i>Phyllanthus myrtifolius</i> Moon	ബുഷ്	Shrubs	Euphorbiaceae	Native of Sri Lanka; widely cultivated in India, China Taiwan to Thailand
78	<i>Phyllanthus reticulatus</i> Poir.	നീറോലി	Scandent shrubs	Euphorbiaceae	Tropical & Subtropical Asia to N. Australia
79	<i>Phyllanthus virgatus</i> G. Forst.	..	Erect or diffuse herbs	Euphorbiaceae	Tropical & Subtropical Asia to Pacific
80	<i>Tragia involucrata</i> L.	കൊടിത്തൂവ	Slender, twining herbs	Euphorbiaceae	India, Laccadive Is., Bangladesh and Sri Lanka
81	<i>Chamaecrista kleinii</i> (Wight & Arn.) Matthew	..	Prostrate herbs	Fabaceae (Caesalpinioideae)	India, West Himalaya, Sri Lanka, and Jawa
82	<i>Delonix regia</i> (Boj.) Rafin.	മെയ് ഫ്ലവർ	Medium trees	Fabaceae (Caesalpinioideae)	Native of Madagascar; now cultivated throughout the tropics
83	<i>Hultholia mimosoides</i> (Lam.) Gagnon & G.P. Lewis	തീമുള്ള	Straggling shrubs	Fabaceae (Caesalpinioideae)	India to China (Yunnan) and Indo-China
84	<i>Peltophorum pterocarpum</i> (DC.) Baker ex Heyne	ചാരക്കൊന്ന	Medium trees	Fabaceae (Caesalpinioideae)	Native of North Australia to Philippines; cultivated in tropical and subtropical parts
85	<i>Tamarindus indica</i> L.	വാളൻ പുളി	Small trees	Fabaceae (Caesalpinioideae)	Native of Comoros and Madagascar; widely cultivated in tropics and subtropics
86	<i>Abrus precatorius</i> L.	കുനിക്കൂരു	Twining shrubs	Fabaceae (Faboideae)	Tropical & Subtropical Old World to N. & E. Australia; naturalised in tropical America
87	<i>Centrosema molle</i> Benth.	കാട്ടു ശംഖ്പുഷ്പം	Pubescent twiners	Fabaceae (Faboideae)	Southern Mexico to Tropical America; naturalised in India, Sri Lanka and parts of Australia

Sl No	Scientific name	Malayalam Name	Habit	Family	World Distribution
88	<i>Crotalaria nana</i> Burm.f.		Pubescent herbs	Fabaceae (Faboideae)	Indo-Malesia
89	<i>Crotalaria pallida</i> Dryand.	Kilukkachedi, Kilukilikki, Kilukkampettichedi	Erect undershrubs	Fabaceae (Faboideae)	Pantropical
90	<i>Dalbergia latifolia</i> Roxb.	ഈട്ടി	Large trees	Fabaceae (Faboideae)	Native of India, Bangladesh, Himalayas and Jawa; cultivated in Pakistan, Sri Lanka, parts of Tropical Africa and Australia
91	<i>Derris trifoliata</i> Lour.	കമ്മട്ടി വള്ളി	Stragging lianas	Fabaceae (Faboideae)	Native of Southern Somalia to South Africa and W. Pacific; naturalised in parts of Tropical America
92	<i>Erythrina variegata</i> L.	മുരിക്ക്	Medium trees	Fabaceae (Faboideae)	Native of Tanzania to Pacific; introduced to Nepal and parts of tropical Africa
93	<i>Flemingia macrophylla</i> (Willd.) Prain ex Merr.	കമാണ്ടരി	Erect shrubs	Fabaceae (Faboideae)	Tropical & Subtropical Asia to N. Queensland; naturalised in Madagascar, parts of Tropical Africa and Australia
94	<i>Gliricidia sepium</i> (Jacq.) Kunth ex Walp.	ശീമക്കൊന്ന	Small trees	Fabaceae (Faboideae)	Native of Mexico to Colombia; Introduced and widely grown in parts of Tropical America, Africa, Asia and Australia
95	<i>Grona heterophylla</i> (Willd.) H. Ohashi & K. Ohashi	..	Prostrate herbs	Fabaceae (Faboideae)	Madagascar, Tropical & Subtropical Asia; naturalised in parts of Australia
96	<i>Grona triflora</i> (L.) H. Ohashi & K. Ohashi	നിലം പരണ്ട	Prostrate herbs	Fabaceae (Faboideae)	Tropics & Subtropics; naturalised in parts of Australia
97	<i>Indigofera hirsuta</i> L.	Hairy Indigo	Annual erect herbs	Fabaceae (Faboideae)	Pantropical
98	<i>Pongamia pinnata</i> (L.) Pierre	ഉങ്ങ്	Medium trees	Fabaceae (Faboideae)	Tropical & Subtropical Asia to W. Pacific; introduced to parts of tropical and subtropical Africa
99	<i>Tadehagi triquetrum</i> (L.) H. Ohashi	അടയ്ക്കാ പാണൽ	Erect subshrubs	Fabaceae (Faboideae)	Tropical & Subtropical Asia
100	<i>Tephrosia villosa</i> (L.) Pres.	..	Perennial herbs	Fabaceae (Faboideae)	From Africa, Arabian Peninsula, Indian Subcontinent to Indo-China, Jawa to Lesser Sunda Islands
101	<i>Vigna radiata</i> (L.) Wilczek var. <i>sublobata</i> (Roxb.) Verdc.	കാട്ടുശുന്ന്	Annual twining herbs	Fabaceae (Faboideae)	Native of Arabian Peninsula, Taiwan to Tropical Asia and N. & E. Australia; introduced to parts of Tropical Africa, Asia, Pacific islands
102	<i>Zornia gibbosa</i> Span.	കൊഴുപ്പ	Prostrate annual herbs	Fabaceae (Faboideae)	Native of Tropical & Subtropical Asia to Pacific Islands; naturalised in Madagascar
103	<i>Acacia auriculiformis</i> A. Cunn. ex Benth.	അക്കേഷ്യ	Medium trees	Fabaceae (Mimosoideae)	Native of SE. Maluku to New Guinea and N. Australia; introduced and running wild in many parts of tropics and subtropics
104	<i>Acacia mangium</i> Willd.	മാഞ്ചിയം	Medium trees	Fabaceae (Mimosoideae)	Australia
105	<i>Adenanthera pavonina</i> L.	മഞ്ചാടി	Large trees	Fabaceae (Mimosoideae)	Tropical Asia to N. Australia; introduced to Pakistan, parts of Tropical America and Africa
106	<i>Albizia odoratissima</i> (L. f.) Benth.	കരി വാക	Large trees	Fabaceae (Mimosoideae)	Native of Indian Subcontinent to S. China and Indo-China; introduced to Jawa, Malaya and parts of Africa
107	<i>Mimosa pudica</i> L.	തൊട്ടാ വാടി	Straggling subshrubs	Fabaceae (Mimosoideae)	Native of Mexico to Tropical America; naturalised in Tropics and subtropics
108	<i>Samanea saman</i> (Jacq.) Merr.	മഴ മരം	Large trees	Fabaceae (Mimosoideae)	Native of Central America to Venezuela and Ecuador; introduced to parts of Tropical America, Africa, Madagascar, India, China to Australia

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109	<i>Xylia xylocarpa</i> (Roxb.) Taub.	ഇരുൾ	Medium trees	Fabaceae (Mimosoideae)	Native of Indo-Malesia; introduced to Philippines and parts of Africa
110	<i>Flacourtia indica</i> (Burm. f.) Merr.	കാട്ടു കാര	Small trees	Flacourtiaceae	Native of Ethiopia to S. Africa, SE. China to Tropical Asia; naturalised in parts of Africa.
111	<i>Canscora pauciflora</i> Dalz.	..	Erect herbs	Gentianaceae	Endemic to Western Ghats
112	<i>Canscora perfoliata</i> Lam.	കാഞ്ചൻ ചെടി	Dichotomously branched herbs	Gentianaceae	Endemic to Western Ghats
113	<i>Leucas aspera</i> (Willd.) Link	തുമ്പ	Erect hirsute herbs	Lamiaceae	Native of Mauritius, Tropical & Subtropical Asia; naturalised in Eritrea
114	<i>Mesosphaerum suaveolens</i> (L.) Kuntze	നാറ്റുപുച്ചെടി	Shrubs	Lamiaceae	Native of Mexico to Tropical America; now naturalised in tropics and subtropics
115	<i>Pogostemon quadrifolius</i> (Benth.) F.Muell.	നായ് തുമ്പ	Large erect herbs	Lamiaceae	W. & S. Central India, Assam to China (S.Yunnan) and Myanmar
116	<i>Cassytha filiformis</i> L.	ആകാശ വള്ളി	Parasitic twiners	Lauraceae	Tropics and subtropics
117	<i>Litsea coriacea</i> (Heyne ex Meisner) Hook. f.	മരവെട്ടിത്താളി	Small trees	Lauraceae	Endemic to Peninsular India
118	<i>Machilus glaucescens</i> (Nees) Wight	കുള മാവ്	Large trees	Lauraceae	Indian Subcontinent to China (W. Yunnan) and Myanmar
119	<i>Careya arborea</i> Roxb.	പേഴ്	Small trees	Lecythidaceae	Afghanistan to NW. Peninsula Malaysia
120	<i>Gloriosa superba</i> L.	മേന്തോന്നി	Herbaceous climbers	Liliaceae	Paleotropics
121	<i>Hugonia mystax</i> L.	മോതിരക്കണ്ണി	Climbing shrubs	Linaceae	Endemic to India and Sri Lanka
122	<i>Strychnos nux-vomica</i> L.	കാഞ്ഞിരം	Medium trees	Loganiaceae	India to N. Peninsula Malaysia; introduced to South Central & South East China, Taiwan, Cuba, Philippines, etc.
123	<i>Helicanthes elastica</i> (Desr.) Danser	ഇത്തിശ്ശക്കണ്ണി	Parasitic subshrubs	Loranthaceae	Endemic to Western Ghats
124	<i>Hibiscus hispidissimus</i> Griff.	പനിച്ചകം	Climbing shrubs	Malvaceae	Indian Subcontinent to China (Yunnan) and Indo-China; naturalised in Nepal and Sudan
125	<i>Sida acuta</i> Burm. f.	ആനക്കുറുന്തോട്ടി	Erect subshrubs	Malvaceae	Pantropical
126	<i>Sida cordata</i> (Burm. f.) Borss.	വള്ളിക്കുറുന്തോട്ടി	Prostrate herbs	Malvaceae	Tropical & Subtropical Asia
127	<i>Urena lobata</i> L.	ഉറുരകം	Subshrubs	Malvaceae	Pantropical
128	<i>Melastoma malabathricum</i> L.	അതിരാണി	Shrubs	Melastomataceae	native of Seychelles, Tropical & Subtropical Asia to N. & E. Australia; naturalised in Cuba, Florida, Hawaii, Jamaica, Madagascar, Mauritius, Trinidad-Tobago
129	<i>Memecylon umbellatum</i> Burm.f.	കായാമ്പു	Large shrubs	Melastomataceae	S. India to W. Malesia
130	<i>Sonerila lateritica</i> Resmi et al.	-	Rhizomatous herb	Melastomataceae	Endemic to Kerala
131	<i>Naregamia alata</i> Wight & Arn.	നില നാരകം	Prostrate woody herbs	Meliaceae	Endemic to Peninsular India
132	<i>Swietenia macrophylla</i> King	മഹാഗണി	Large trees	Meliaceae	Mexico to Bolivia and Brazil; introduced to parts of tropical America and Asia
133	<i>Cissampelos pareira</i> L.	മല താങ്ങി	Slender climbers	Menispermaceae	Tropics & Subtropics
134	<i>Cyclea peltata</i> (Lam.) Hook. f. & Thoms.	പാടത്താളി	Twiner	Menispermaceae	Indian Subcontinent to Indo-China

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135	<i>Tiliacora acuminata</i> (Poir.) Miers ex Hook.f. & Thoms.	വള്ളിക്കാഞ്ഞിരം	Climbing shrubs	Menispermaceae	Indian Subcontinent to Indo-China
136	<i>Tinospora cordifolia</i> (Willd.) Miers.	ചിറ്റാമൃത്	Climbing shrub	Menispermaceae	Indian Subcontinent to Indo-China
137	<i>Artocarpus altilis</i> (Parkinson ex F.A. Zorn) Fosberg	കടച്ചക്ക	Medium trees	Moraceae	Native of Pacific Islands
138	<i>Artocarpus heterophyllus</i> Lamk.	പ്ലാവ്	Large trees	Moraceae	Native of South India; widely cultivated in tropics and subtropics
139	<i>Artocarpus hirsutus</i> Lam.	ആഞ്ഞിലി	Large trees	Moraceae	Endemic to Southern Western Ghats and Sri Lanka
140	<i>Ficus arnottiana</i> (Miq.) Miq.	കല്ലരയാൽ	Small trees	Moraceae	Indian Subcontinent, Andaman Islands to Thailand
141	<i>Ficus exasperata</i> Vahl	പാറകം	Medium trees	Moraceae	Tropical Africa, SW. Arabian Peninsula, India to Sri Lanka
142	<i>Ficus hispida</i> L. f.	എരുമ നാക്ക്	Small trees	Moraceae	S. China to Tropical Asia and N. Australia
143	<i>Ficus racemosa</i> L.	അത്തി	Medium trees	Moraceae	Pakistan, Indian subcontinent, China to Australia
144	<i>Moringa pterygosperma</i> Gaertn.	മുരിങ്ങ	Small trees	Moringaceae	Cultivated throughout India and many tropical countries
145	<i>Musa x paradisiaca</i> L.	വാഴ	Herb	Musaceae	Cultivated throughout the tropics
146	<i>Embelia ribes</i> Burm. f.	വിഴാലരി	Climbers	Myrsinaceae	Indo-Malesia and South China
147	<i>Psidium guajava</i> L.	പേര മരം	Small trees	Myrtaceae	Originally from Tropical America; now naturalised in the tropics and subtropics
148	<i>Syzygium caryophyllatum</i> (L.) Alston	ഞാറ	Small trees	Myrtaceae	Endemic to Western Ghats and Sri Lanka
149	<i>Syzygium cumini</i> (L.) Skeels	ഞാവൽ	Large trees	Myrtaceae	Tropical & Subtropical Asia to N. Queensland
150	<i>Jasminum angustifolium</i> (L.) Willd.	കാട്ടു മുല്ല	Woody twiner	Oleaceae	Endemic to Peninsular India and Sri Lanka
151	<i>Myxopyrum smilacifolium</i> (Wall.) Blume	ചതുര മുല്ല	Twining shrubs	Oleaceae	India to Hainan and Indo-China
152	<i>Tetrapilus dioicus</i> (Roxb.) L.A.S. Johnson	എടല	Medium trees	Oleaceae	India to Myanmar
153	<i>Cansjera rheedei</i> Gmel.	..	Climbing shrubs	Opiliaceae	S. China to Tropical Asia
154	<i>Zeuxine longilabris</i> (Lindl.) Benth. ex Hook. f.	..	Slender herbs	Orchidaceae	Indian Subcontinent to Indo-China
155	<i>Biophytum reinwardtii</i> (Zucc.) Klotzsch.	മുക്കുറ്റി	Annual herbs	Oxalidaceae	S. China to Tropical Asia
156	<i>Pandanus unipapillatus</i> Dennst.	തഴക്കൈത	Small trees	Pandanaceae	Endemic to Peninsular India
157	<i>Passiflora foetida</i> L.	പൂച്ചപ്പഴം	Herbaceous vines	Passifloraceae	Native of Tropical & Subtropical America; tropics and subtropics
158	<i>Piper nigrum</i> L.	കുരുമുളക്	Climbing shrub	Piperaceae	Endemic to Peninsular India; cultivated in Sri Lanka and parts of tropical America, Africa and Asia
159	<i>Piper trioicum</i> Roxb.	കാട്ടു മുളക്	Climbing shrub	Piperaceae	Indo-Malesia
160	<i>Arundinella</i> sp.	-	Annual herbs	Poaceae	
161	<i>Axonopus compressus</i> (Sw.) P. Beauv.	കാളപ്പുല്ലി	Perennial herbs	Poaceae	Native of Tropical & Subtropical America; naturalised in Tropics and subtropics

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162	<i>Bambusa bambos</i> (L.) Voss	കല്ലൻ മുള	Tall perennial herbs	Poaceae	Indian Subcontinent to Indo-China
163	<i>Cyrtococcum trigonum</i> (Retz.) A. Camus	..	Annual herbs	Poaceae	E. Tropical Africa, Madagascar, W. Indian Ocean, Tropical Asia to S. Pacific
164	<i>Digitaria ciliaris</i> (Retz.) Koeler		Annual herbs	Poaceae	Paleotropics
165	<i>Dimeria</i> sp.		Annual herb	Poaceae	
166	<i>Eragrostis tenella</i> (L.) P. Beauv. ex Roem. & Schult.	..	Annual herbs	Poaceae	Tropical & Subtropical Old World. Naturalised in Tropical America and Australia
167	<i>Eragrostis unioides</i> (Retz.) Nees ex Steud.	കരയാം പുല്ല്	Annual herb	Poaceae	Tropical & Subtropical Asia to N. & E. Queensland; naturalised in parts of tropical and subtropical Africa and America
168	<i>Heteropogon contortus</i> (L.) P. Beauv. ex Roem. & Schult.	ശുലം പുല്ല്	Perennial herbs	Poaceae	Tropics & Subtropics to S. Central Europe
169	<i>Isachne globosa</i> (Thunb.) Kuntze	..	Annual herb	Poaceae	Oman, Tropical & Subtropical Asia to Australia and W. Pacific
170	<i>Pennisetum polystachion</i> (L.) Schult.	..	Annual herbs	Poaceae	Paleotropics
171	<i>Polytrias indica</i> (Houtt.) Veldkamp	ചെങ്കൊടി പുല്ല്	Annual herbs	Poaceae	W. Tropical Africa to Cameroon, Seychelles, Tropical & Subtropical Asia to W. Pacific; naturalised in parts of tropical America
172	<i>Themeda triandra</i> Forssk.	ചെക്കണാം പുല്ല്	Perennial herbs	Poaceae	Africa, Tropical & Subtropical Asia to Australia
173	<i>Clematis zeylanica</i> (L.) Poir.	വാതക്കൊടി വള്ളി	Climbing shrubs	Ranunculaceae	Indian Subcontinent to China (S. Yunnan) and Indo-China
174	<i>Æziphus oenopolia</i> (L.) Mill.	ചെറു തുടലി	Scandent thorny shrubs	Rhamnaceae	China (S. Yunnan, Guangxi) to Tropical Asia and N. Australia
175	<i>Æziphus xylopyrus</i> (Retz.) Willd.	കൊട്ട	Small trees	Rhamnaceae	India, Nepal and Sri Lanka
176	<i>Carallia brachiata</i> (Lour.) Merr.	വങ്കണ	Medium trees	Rhizophoraceae	Madagascar, India to Central China and Solomon Islands to Australia
177	<i>Canthium coromandelicum</i> (Burm.f.) Alston	കണ്ടകാര	Shrubs	Rubiaceae	Southern India, Sri Lanka and Bangladesh
178	<i>Catunaregam spinosa</i> (Thunb.) Tirveng.	കാര	Shrubs	Rubiaceae	Pakistan to S. China and W. Malesia
179	<i>Ixora coccinea</i> L.	കാട്ടു തെച്ചി	Bushy shrub	Rubiaceae	Bangladesh, Cambodia, India, Sri Lanka, Thailand, Vietnam
180	<i>Mitracarpus hirtus</i> (L.) DC.	തവൽ	Erect pubescent herbs	Rubiaceae	Tropical Africa and America; now common in South India
181	<i>Mussaenda frondosa</i> L.	വെള്ളില	Straggling shrubs	Rubiaceae	Indian Subcontinent to Caroline Islands
182	<i>Spermocoe latifolia</i> Aubl.	വെള്ളത്തറാവ്	Diffuse herbs	Rubiaceae	Native of Tropical and subtropical America; naturalised parts of Tropical Africa, Asia and Australia
183	<i>Zanthoxylum rhetsa</i> (Roxb.) DC.	മുള്ളിലവ്	Medium trees	Rutaceae	Tropical Asia to N. Australia
184	<i>Santalum album</i> L.	ചന്ദനം	Small trees	Santalaceae	Native of Jawa, Lesser Sunda Is., Northern Territory, Philippines and Western Australia; introduced to India, Sri Lanka, Nepal, Southeast China to Thailand and Vietnam
185	<i>Allophylus cobbe</i> (L.) Raeusch.	മുകുണ്ണൻ പേഴ്	Small trees	Sapindaceae	South India, Sri Lanka to South East Asia

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186	<i>Chrysophyllum cainito</i> L.	സ്റ്റാർ ആപ്പിൾ	Medium trees	Sapotaceae	Native of Carribean, widely cultivated throughout the tropics
187	<i>Mimusops elengi</i> L.	ഇലഞ്ഞി	Large trees	Sapotaceae	S. India, Sri Lanka, Malesia to Australia
188	<i>Buchnera hispida</i> Buch.-Ham. ex D. Don	..	Erect herbs	Scrophulariaceae	India, Madagascar, Tropical Africa
189	<i>Scoparia dulcis</i> L.	കല്ലുരുക്കി	Annual or perennial herbs	Scrophulariaceae	Native of Tropical America; now naturalised in tropics and subtropics
190	<i>Torenia bicolor</i> Dalz.	കാക്കപ്പൂവ്	Decumbent annual herbs	Scrophulariaceae	Endemic to Western Ghats
191	<i>Ailanthus triphysa</i> (Dennst.) Alston	മട്ടി	Medium tree	Simaroubaceae	Indo-Malesia and Australia
192	<i>Smilax zeylanica</i> L.	വലിയ കണ്ണി	Climbing shrubs	Smilacaceae	Indo-Malesia
193	<i>Helicteres isora</i> L.	ഇടംപിരി വലംപിരി	Shrub	Sterculiaceae	Indo-Malesia, China and Australia
194	<i>Grewia tiliifolia</i> Vahl	ചടച്ചി	Large trees	Tiliaceae	Indian Subcontinent to China (SW. Yunnan, Guangxi) and Peninsula Malaysia
195	<i>Microcos paniculata</i> L.	കൊട്ട	Erect bushy shrubs	Tiliaceae	NE. Pakistan to S. China and Malesia
196	<i>Trema orientalis</i> (L.) Blume	ആമത്താളി	Small Tree	Ulmaceae	Tropical Africa, Asia and Australia
197	<i>Pilea microphylla</i> (L.) Liebm.	Rock weed	Slender succulent herbs	Urticaceae	Native of Tropical America; now naturalised in tropics and subtropics
198	<i>Clerodendrum infortunatum</i> L.	പെരിയിലം	Shrubs	Verbenaceae	Indo-Malesia
199	<i>Gmelina arborea</i> Roxb.	കുമിഴ്	Medium trees	Verbenaceae	Native of Pakistan to China (S. Yunnan) and N. Indo-China; introduced in parts of Tropical and Subtropical America, Africa Southeast Asia
200	<i>Lantana camara</i> L.	അരിപ്പൂ ചെടി	Straggling shrubs	Verbenaceae	Native of Tropical America, widely naturalised in the tropics and subtropics
201	<i>Premna serratifolia</i> L.	മുഞ്ഞ	Small trees	Verbenaceae	E. Africa, Madagascar, W. Indian Ocean, Tropical & Subtropical Asia to Pacific
202	<i>Stachytarpheta jamaicensis</i> (L.) Vahl	ശീമ കൊങ്ങിണി	Erect subshrubs	Verbenaceae	Native of Southeast U.S.A. to Tropical America; naturalised in parts of Tropical America, Africa to Asia and Australia
203	<i>Vitex altissima</i> L. f.	മയിലേളള്	Large trees	Verbenaceae	India, Indo-China, Malesia and Sri Lanka
204	<i>Vitex negundo</i> L.	നൊച്ചി	Shrubs	Verbenaceae	Indo-Malesia and China, cultivated throughout the tropics

PTERIDOPHYTES

Sl No	Scientific name	Malayalam Name	Habit	Family	World Distribution
1	<i>Blechnum orientale</i> L.	..	Herb	Blechnaceae	India, Sri Lanka, China, Malay Peninsula, Malaysian Islands, Polynesia and Australia
2	<i>Dicranopteris linearis</i> (Burm.f.) Underwood	..	Dichotomously branched scandent shrubs	Gleicheniaceae	Widely distributed in the tropics and sub tropics of the world

3	<i>Lindsaea ensifolia</i> Sw.	..	Herbs	Lindsaeaceae	India, Bangladesh, Myanmar, Sri Lanka, China, Malay Peninsula, Malaysian Islands, New Guinea, Australia, Africa, New Caledonia and Hawaii
4	<i>Lygodium flexuosum</i> (L.) Sw.	..	Climbing shrubs	Lygodiaceae	Tropics and sub tropics of the world
5	<i>Nephrolepis multiflora</i> (Rozb.) Jarret	..	Herb	Nephrolepidaceae	Old & New World tropics
6	<i>Drynaria quercifolia</i> (L.) J. Smith	..	Epiphytic shrub	Polypodiaceae	Asia, Paupua New Guinea, Fiji, Polynesia and tropical Australia
7	<i>Cheilanthes tenuifolia</i> (Burm.f.) Sw.	മുറികൂട്ടി	Small herbs	Pteridaceae	Australia, Bangladesh, China, Malaysia, Nepal, New Zealand, Philippines, Polynesia, Sri Lanka, Taiwan, Tasmania and Uruguay
8	<i>Mickelopteris cordata</i> (Hook. & Grev.) Fraser-Jenk.	പട്ടിച്ചെവി	Small herbs	Pteridaceae	India, China, Sri Lanka, Malaysia
9	<i>Pteris quadriaurita</i> Retz.	..	Rhizomatous herbs	Pteridaceae	Tropics and sub tropics of the world
10	<i>Selaginella delicatula</i> (Desv. ex Poir) Alston	..	Small herbs	Selaginellaceae	Indo-Malesia and China,
11	<i>Selaginella</i> sp.	..	Small herbs	Selaginellaceae	
12	<i>Christella parasitica</i> (L.) H. Lev.	..	Herb	Thelypteridaceae	Tropical Asia and some of the Polynesian islands

Table 2: Status of habits of the species in Ponkunnu

Habit types	No. of species	%
Herbs	69	33.82
Subshrubs	4	1.96
Shrubs	38	18.63
Climbers	8	3.92
Twining	15	7.35
Trees - Small	18	8.82
Trees - Medium	32	15.69
Trees - Large	16	7.84
Epiphytes	1	0.49
Parasites	3	1.47
Total	204	

Table 3: Ten most dominant plant families in Ponkunnu

Sl. No	Family	No of species	%
1	Fabaceae	29	14.22
2	Euphorbiaceae	22	10.78
3	Asteraceae	14	6.86
4	Poaceae	13	6.37
5	Moraceae	7	3.43
6	Verbenaceae	7	3.43
9	Rubiaceae	7	3.43
7	Asclepiadaceae	6	2.94
8	Convolvulaceae	6	2.94
10	Apocynaceae	6	2.94

Table 4: Indian endemic species present in Ponkunnu

Sl No	Scientific name	Malayalam Name	Habit	Family	World Distribution
1	<i>Anaphyllum wightii</i> Schott	കീരിക്കിഴങ്ങ്	Rhizomatous herbs	Araceae	Endemic to Southern Western Ghats & Laccadives Isl.
2	<i>Artocarpus hirsutus</i> Lam.	ആഞ്ഞിലി	Large trees	Moraceae	Endemic to Southern Western Ghats and Sri Lanka
3	<i>Canscora pauciflora</i> Dalz.	..	Erect herbs	Gentianaceae	Endemic to Western Ghats
4	<i>Canscora perfoliata</i> Lam.	കാഞ്ചൻ ചെടി	Dichotomously branched herbs	Gentianaceae	Endemic to Western Ghats

5	<i>Caryota urens</i> L.	ആനപ്പന	Medium trees	Arecaceae	Endemic to India & Sri Lanka
6	<i>Ceropegia namphyana</i> Manudev et al.	-	Tuberous herb	Apocynaceae	Endemic to Kerala
7	<i>Eriocaulon eurypeplon</i> Koernicke	-	Annual herbs	Eriocaulaceae	Endemic to Peninsular India
8	<i>Helicanthes elastica</i> (Desr.) Danser	ഇത്തിശ്ശക്കണ്ണി	Parasitic shrubs	Loranthaceae	Endemic to Western Ghats
9	<i>Holigarna arnottiana</i> Hook. f.	കാട്ടുചേര്	Medium trees	Anacardiaceae	Endemic to Southern Western Ghats
10	<i>Hugonia mystax</i> L.	മോതിരക്കണ്ണി	Climbing shrubs	Linaceae	Endemic to India and Sri Lanka
11	<i>Jasminum angustifolium</i> (L.) Willd.	കാട്ടു മുല്ല	Woody twiner	Oleaceae	Endemic to Peninsular India and Sri Lanka
12	<i>Litsea coriacea</i> (Heyne ex Meisner) Hook. f.	മരവെട്ടിത്താളി	Small trees	Lauraceae	Endemic to Peninsular India
13	<i>Naregamia alata</i> Wight & Arn.	നീല നാരകം	Prostrate woody herbs	Meliaceae	Endemic to Peninsular India
14	<i>Pandanus unipapillatus</i> Dennst.	തഴക്കൈത	Small trees	Pandanaceae	Endemic to Peninsular India
15	<i>Piper nigrum</i> L.	കുരുമുളക്	Climbing shrub	Piperaceae	Endemic to Peninsular India; cultivated in Sri Lanka and parts of tropical America, Africa and Asia
16	<i>Sonerila lateritica</i> Resmi et al.	-	Rhizomatous herb	Melastomataceae	Endemic to Kerala
17	<i>Syzygium caryophyllatum</i> (L.) Alston	ഞാറ	Small trees	Myrtaceae	Endemic to Western Ghats and Sri Lanka
18	<i>Tabernaemontana alternifolia</i> L.	കുണ്ടലപ്പാല	Small trees	Apocynaceae	Endemic to Southern Western Ghats
19	<i>Terminalia paniculata</i> Roth	വെണ്ടരുത്	Large trees	Combretaceae	Endemic to Peninsular India
20	<i>Torenia bicolor</i> Dalz.	കാക്കപ്പൂവ്	Decumbent annual herbs	Scrophulariaceae	Endemic to Western Ghats
21	<i>Tricholepis angustifolia</i> DC.	..	Erect herbs	Asteraceae	Endemic to Southern Western Ghats
22	<i>Uvaria narum</i> (Dunal) Wall. ex Hook.f. & Thoms.	കൂരി വള്ളി	Scandent shrubs	Annonaceae	Endemic to South India and Sri Lanka

Table 5: Summary of area of distribution of the Indian endemic species present in Ponkunnu

Endemic bio-geographic region	No. of species	%
Endemic to Peninsular India	6	27.3
Endemic to Peninsular India and Sri Lanka	6	27.3
Endemic to Southern Western Ghats	6	27.3
Endemic to Western Ghats	4	18.2
Total	22	



01 - *Ixora coccinea* (കാട്ടു തെച്ചി)
 02 - *Melastoma malabathricum* (അതിരാണി)
 03 - *Ichnocarpus frutescens* (പാൽവള്ളി)
 04 - *Syzygium caryophyllatum* (ഞാറ)

05 - *Terminalia paniculata* (വെണ്ണരുത്)
 06 - *Pentanema indicum* (കമ്മൽ ചെടി)
 07 - *Buchnera hispida*