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## Floristic diversity in the Arthanareeshwarar hills, Tiruchengode, Namakkal, Tamil Nadu

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### Abstract

Enumeration of floral species study has been conducted in the Arthanareeshwarar hills, located at Tiruchengode. During this study, 319 species and 89 families of plant species were recorded. Among them most of the plant species were recorded for Poaceae (28 species) followed by Euphorbiaceae (12 species), Malvaceae (11 species), Apocynaceae (10 species) and Asteraceae (9 species). Very rich diversity of floral species were found in this hills and it is also a home for many life forms of plants such as epiphytic, herbaceous, shrubs, climbers and trees.

**Keywords:** plant families, rich floral diversity, wide vegetation

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### Introduction

Plants are the major and very important element of an ecosystem. They are the most important genetic resource of the world, which has a specific role in the ecosystem stability and functions in the human life (Sandhya *et al.* 2006) [8]. Forest plants are considered to be the lungs of the world and it has greater concern for the conservation due to the unpredicted loss of the biodiversity diversity (Anitha *et al.* 2007) [1]. Most of the forest plants are under threatened condition due to the uncontrolled increase in the human population and they largely depend on natural resource that leads to decrease in the present forest cover in an alarming rate for the purpose of agriculture and urbanization. Man depends directly or indirectly on plants for his existence. [8]. The worldwide destruction of the natural environment in the recent study has led to a tremendous loss of biological diversity (Sindhuja *et al.* 2012) [10]. Diversity in the biotic community is highly essential for the maintenance of balance in the environment. In a very fundamental basis this can be explained as the fact that the living organisms take up oxygen for their bodily activities and release carbon dioxide into the environment (Sindhul *et al.* 2012) [9]. The plants, on the other hand, take up this carbon dioxide and that leads to the photosynthesis activity which is responsible for the sustenance of the plants. The living organisms depend on the plants for their sources of nutrition and medicine. Therefore, maintaining a proper balanced biodiversity is highly essential for sustenance of every living organism (Kottaimuthu, 2008) [4]. Since, most of the forests remain unexplored and large numbers of the plant species are not documented. Proper conservation and management has to be established as well as the studies on the forest ecology and its importance, documentation of the flora and fauna are becoming necessary in the present situation (Vikneshwaran, 2008) [12].

### Materials and Methods

#### Study area

Arthanareeshwarar hills is located at Tiruchengode, Namakkal District. It is situated in the Southern part of Tamil Nadu, India. It is extended between the latitude 11° 15' N and longitude 77° 56' E. The temperature varies from 21 °C to 27 °C in winter and 23 °C to 39 °C in summer. The average rainfall is 950mm per year. The hill contains 350 acres of land, which lies 2000 ft. about sea level. The altitude is about 285 meters. Mostly scrub and dry deciduous forest patches has been occurred in the field area where rich diversity of different plants are present such as *Aristida setacea*, *Ageratum conyzoides*, *Albizia amara*, *Holoptelia integrifolia*, *Euphorbia hirta* and *Abutilon indicum* etc.,

#### Methodology

The present study was carried out during 2020-2021 in the Arthanareeshwarar hills at Tiruchengode. Extensive floristic survey was conducted in the study area. The plants were collected in both flowering and fruiting condition. Collection of plant specimens was carried out in both dry and wet season. The collected plant twigs were tagged properly with accurate accession numbers. For collection and preservation of specimens, the procedure given by Jain and Rao (1977) [3] were followed. Photos are also taken for the identification of plant species. Each specimen was carefully examined in fresh condition. Plant species were identified with the help of

regional floras which include Flora of presidency of Madras (Gamble, 1936) [2] and Flora of Tamil Nadu Carnatic (Matthew, 1983) [5].

### Study area in the bird view



Fig 1

### Results and Discussion

In this study a total of 319 plant species belonging to 89 families have been recorded (Table.1). Most dominant plant family was Poaceae which possess 28 species followed by Euphorbiaceae (12 species), Malvaceae (11 species), Apocynaceae (10 species), and Asteraceae (9 species) (Figure 2).

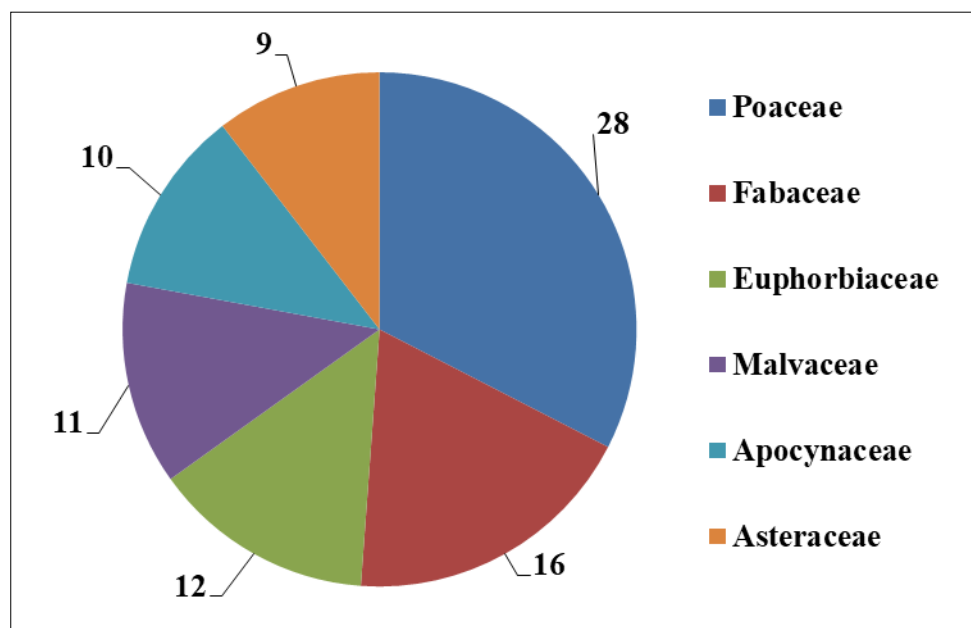


Fig 2: Dominant plant families in the Arthanareeshwarar hills.

A study showed nearly 346 plant species (including a gymnosperm) belonged to 265 genera and 90 families of plants were recorded in the Udayagiri Hills, Kanyakumari District. Unique informations were also noted during the survey such as botanical name, family and habit from the study area (Sukumaran and Parthiban, 2014.).

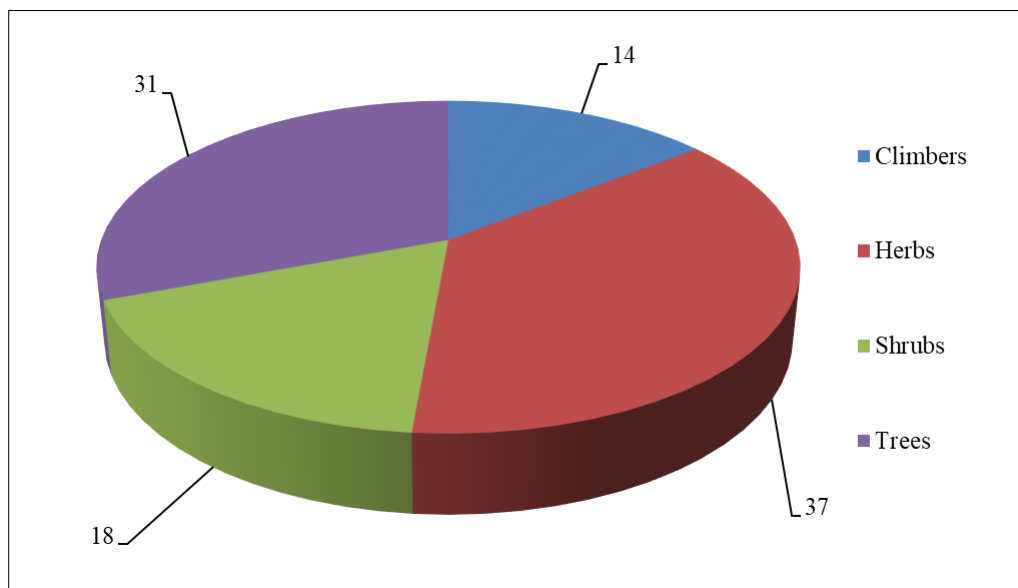
### Life form

In our study site 319 plant species belonging to 89 families were recorded. Herbaceous layer was the dominant life form in the study area (37%) followed by trees (31%) shrubs (18%) and Climbers (14%) (Figure 3). species. Similarly a result showed that the maximum diversity of plant species was recorded for herbaceous layer 133 species (38%) belonging to 108 genera and 42 family followed by trees – 93 species (27%) belonging to 77 genera and 38 families, shrubby plants – 84 species (24%) belonging to 70 genera and 38 families, climbers

including creeping plants – 23 species (7%) and the remaining species were lianas (12) and epiphytes (1 species) in the Kanyakumari district (Sukumaran and Parthiban, 2014.).

A total of 56 families belonging to 113 genera and 126 species were recorded in the Kumaran Kundru Hills, Coimbatore (Preethi and Jenifer, 2019). Leguminosae was the dominant plant family (15 genera, 17 species), followed by Euphorbiaceae (6 genera, 6 species), Acanthaceae (5 genera, 5 species) Malvaceae (5 genera, 5 species), Amaranthaceae (6 genera, 8 species), Poaceae (6 genera, 6 species), and Asteraceae (8 genera, 8 species) Solanaceae (2 genera, 4 species), Annonaceae (2 genera, 2 species), Labiatae (3 genera, 4 species), Liliaceae (3 species), Pedaliaceae (2 genera, 3 species), Moraceae (2 species), Rhamnaceae (1 genera, 2 species), Rubiaceae (3 species), Sapindaceae (3 species), Tiliaceae (3 species) and Verbinaceae (2 genera, 2 species).

Decline of the floral diversity, which is not only an ethical catastrophe but also a significant social, economic and cultural concern. We noted that 63 plant species belonging to 30 families were recorded in the Sambal District of Odissa. A total of 53 herbs; 4 shrubs, 3 grasses, 2 sedges and 1 climbing species are including in this study. Amaranthaceae (4 species); Capparaceae (1 species); Cannabaceae (1 species); Primulaceae (1 species); Papaveraceae (1 species); Typhaceae (1 species); Zygophyllaceae (1 species); Scrophulariaceae (1 species); Oxalidaceae (1 species); Nyctaginaceae (1 species); Mimosaceae (1 species); Fabaceae (1 species); Onagraceae (1 species); Lamiaceae (1 species) (Santosh Singh and Duresh Yadav, 2021).



**Fig 3:** Habit wise distribution of plant species in the Arthanaareeshwarar hills (%)

**Table 1:** List of plant species recorded in the Arthanaareeshwarar Hills

S. No	Plant species Names	Family	Habit	Local Name
1	<i>Abrus precatorius L.</i>	Fabaceae	Climber	Kuntumani
2	<i>Abutilon hirtum (L.) Medicus</i>	Malvaceae	Shrub	Thutthi
3	<i>Abutilon indicum (L.) Sweet</i>	Malvaceae	Shrub	Thutthi
4	<i>Acacia leucophloea (Roxb.) Willd.</i>	Mimosaceae	Tree	Velvelan
5	<i>Acalypha fruticosa Forssk.</i>	Euphorbiaceae	Herb	Sinni
6	<i>Acalypha indica L.</i>	Euphorbiaceae	Herb	Kuppaimaeni
7	<i>Acanthospermum hispidum DC.</i>	Asteraceae	Herb	Kiliyaan
8	<i>Achyranthes aspera L.</i>	Amranthaceae	Herb	Naayuruvi
9	<i>Adenanthera pavonina L.</i>	.Mimosaceae	Tree	Aanai Kundumani
10	<i>Aegle marmelos (L.) Correa</i>	Rutaceae	Tree	Vilvam
11	<i>Aerva lanata (L.) Juss. ex Schult</i>	Amaranthaceae	Herb	Poolaipoo
12	<i>Aeschynomene indica L.</i>	Fabaceae	Herb	Thannapoondu
13	<i>Agave americana L.</i>	Agavaceae	Shrub	Kathaalai
14	<i>Ageratum conyzoides L.</i>	Asteraceae	Herb	Poompillu
15	<i>Ailanthus excelsa Roxb.</i>	Simaroubaceae	Tree	Theekuchimaram
16	<i>Alangium salvifolium (L.f.) Wang.</i>	Alangiaceae	Tree	Alingil
17	<i>Albizia amara (Roxb.) Boivin</i>	Mimosaceae	Tree	Arappu
18	<i>Albizia lebbek (L.) Willd.</i>	Mimosaceae	Tree	Vaagai
19	<i>Albizia saman (Jacq.) F.v. Muell.</i>	Mimosaceae	Tree	Thoongamoonchimaram
20	<i>Allamanda cathartica L. var. nobilis</i>	Apocynaceae	Shrub	Anthaaari
21	<i>Alloteropsis cimicina (L.) Stapf</i>	Poaceae	Herb	Pithrupillu
22	<i>Aloe vera (L.) Burm.f.</i>	Asphodelaceae	Herb	Chotthukatraalai

23	<i>Alstonia scholaris (L.) R.Br.</i>	Apocynaceae	Tree	Elizhaipaali
24	<i>Alternanthera pungens Kunth</i>	Amaranthaceae	Herb	Ponnanganni
25	<i>Alternanthera sessilis (L.) R.Br.</i>	Amaranthaceae	Herb	Ponnangani
26	<i>Alternanthera tenella Colla.</i>	Amaranthaceae	Herb	Siruponnaangani
27	<i>Alysicarpus vaginalis (L.) DC.</i>	Poaceae	Herb	Annaipillu
28	<i>Amaranthus spinosus L.</i>	Amaranthaceae	Herb	Mullukeerai
29	<i>Amaranthus tricolor L.</i>	Amaranthaceae	Herb	Thandukeerai
30	<i>Amaranthus viridis L.</i>	Amaranthaceae	Herb	Kuppaikerai
31	<i>Ammania baccifera</i>	Lythraceae	Herb	Nicheli
32	<i>Andrographis paniculata (Burm.f.) Wall. ex Nees</i>	Acanthaceae	Herb	Nelavaambu
33	<i>Anisomeles malabarica (L.) R. Br</i>	Lamiaceae	Herb	Peimiratti
34	<i>Annona squamosa L.</i>	Annonaceae	Tree	Seethapalam
35	<i>Apluda mutica.L</i>	Poaceae	Herb	Mandapul
36	<i>Argemone mexicana L.</i>	Papavaraceae	Herb	Brahmathandu
37	<i>Aristida adscensionis L.</i>	Poaceae	Herb	Kodaipillu
38	<i>Aristida setacea Retz.</i>	Poaceae	Herb	Arisipillu
39	<i>Aristolochia indica L.</i>	Aristolochiaceae	Climber	Garudakodi
40	<i>Artemisia pallens Ehrh. ex Willd.</i>	Asteraceae	Herb	Marikozhundhu
41	<i>Artocarpus heterophyllus Lam.</i>	Moraceae	Tree	Palaamaram
42	<i>Arundinella ciliata (Roxb.) Nees ex Miq.</i>	Poaceae	Herb	Maasipillu
43	<i>Asclepias curassavica L.</i>	Asclepiadaceae	Shrub	Kolichichedi
44	<i>Asparagus racemosus Willd.</i>	Asparagaceae	Climbing shrub	Thanneervittaankizhangu
45	<i>Asystasia gangetica (L.) T. And.</i>	Acanthaceae	Herb	Pooluvanchedi
46	<i>Atalantia monophylla L.</i>	Rutaceae	Tree	Karunaregam
47	<i>Atylosia scarabaeoides (L.) Benth.,</i>	Fabaceae	Climber	Kaattuthuvarai
48	<i>Azadirachta indica A. Juss.</i>	Meliaceae	Tree	Vaambu
49	<i>Bacopa monnieri (L.) Pennell</i>	Schrophulariaceae	Herb	Herb
50	<i>Bambusa bambos Voss</i>	Poaceae	Tree	Moongil
51	<i>Barleria acuminata Nees</i>	Acanthaceae	Shrub	Pooraambichedi
52	<i>Barleria prionitis L.</i>	Acanthaceae	Shrub	Pikkili
53	<i>Bauhinia purpurea L.</i>	Caesalpiniaceae	Tree	Manthaarai
54	<i>Bauhinia racemosa L.</i>	Caesalpiniaceae	Tree	Aatthi
55	<i>Bauhinia tomentosa L.</i>	Caesalpiniaceae	Shrub	Sirumanthaarai
56	<i>Blepharis maderaspatensis Heyne ex Nees.</i>	Acanthaceae	Herb	Pullandhi
57	<i>Boerhavia diffusa L.</i>	Nyctaginaceae	Herb	Kadaadai
58	<i>Boerhavia erecta L.</i>	Nyctaginaceae	Herb	Karukaadai
59	<i>Bombax ceiba Linn.</i>	Bombacaceae	Tree	Mulilavam
60	<i>Borassus flabellifer L.</i>	Arecaceae	Tree	Panai
61	<i>Brachiaria reptans (L.) Gard. &amp; Hubbard</i>	Poaceae	Herb	Malaithaalipillu
62	<i>Breynia vitis-idaea (Burm. f.) Fisch.</i>	Euphorbiaceae	Tree	Boonthilmaram
63	<i>Bulbostylis barbata (Rottb.) Clarke</i>	Cyperaceae	Herb	Karisipillu
64	<i>Butea monosperma (Lam.) Taub.</i>	Fabaceae	Tree	Kaattutthemaram
65	<i>Caesalpinia pulcherrima (L.) Sw.</i>	Caesalpiniaceae	Tree	Uralimaram
66	<i>Calophyllum inophyllum L.</i>	Clusiaceae	Tree	Punnaimaram
67	<i>Calotropis gigantea (L.) R.Br.</i>	Asclepiadaceae	Shrub	Erukku
68	<i>Calotropis procera (Ait.) R. Br.</i>	Asclepiadaceae	Shrub	Vellaierukku
69	<i>Canavalia mollis Wight &amp; Arn.</i>	Fabaceae	Climber	Viraalikodi
70	<i>Capparis grandis Linn. f.</i>	Capparidaceae	Tree	Kattukaralaimaram
71	<i>Capparis sepiaria L.</i>	Capparidaceae	Shrub	Sirukaarai
72	<i>Capparis zeylanica L.</i>	Capparidaceae	Shrub	Perukaarai
73	<i>Caralluma adscendens (Roxb.) Haw.</i>	Asclepiadaceae	Herb	Malaioonchi
74	<i>Cardiospermum canescens Wall.</i>	Sapindaceae	Climber	Mudakathan
75	<i>Cardiospermum halicacabum L.</i>	Sapindaceae	Climber	Seemaimudakathan
76	<i>Carica papaya L.</i>	Caricaceae	Tree	Pappaali
77	<i>Carissa carandas L.</i>	Apocynaceae	Shrub	Purukallai
78	<i>Cassia fistula L.</i>	Caesalpiniaceae	Tree	Konnai
79	<i>Cassine glauca (Rottb.) Kuntze</i>	Celastraceae	Tree	Virukaali
80	<i>Casuarina equisetifolia L.</i>	Casurinaceae	Tree	Savukku

81	<i>Catharanthus roseus (L.) G.Don</i>	Apocynaceae	Herb	Nithyakalyaani
82	<i>Catunaregam spinosa (Thunb.) Triven.</i>	Rubiaceae	Shrub	Catunaregam
83	<i>Celastrus paniculatus Willd</i>	Celastraceae	Tree	Bindhimaram
84	<i>Celosia argentea L.</i>	Amaranthaceae	Shrub	Perukondai
85	<i>Cenchrus Ciliaris L.</i>	Poaceae	Herb	Paasipillu
86	<i>Centella asiatica (L.) Urban</i>	Apiaceae	Herb	Vallaarai
87	<i>Chenopodium album L.</i>	Chenopodiaceae	Herb	Ponnaikeerai
88	<i>Chloris barbata Sw.</i>	Poaceae	Herb	Visiripillu
89	<i>Chloris dolichostachya Lagasca</i>	Poaceae	Herb	Kondaipillu
90	<i>Chloroxylon swietenia DC.</i>	Rutaceae	Tree	Saravimaram
91	<i>Chromolaena odorata (L.) King &amp; Robinson</i>	Asteraceae	Shrub	Occhaalichedi
92	<i>Cissus quadrangularis L.</i>	Vitaceae	Climber	Pirandai
93	<i>Citrullus colocynthis (L.) Schrad.</i>	Cucurbitaceae	Climber	Paniyuruvikodi
94	<i>Citrus medica L.</i>	Rutaceae	Tree	Elumichai
95	<i>Cleome viscosa L.</i>	Capparidaceae	Herb	Naaikadugu
96	<i>Clerodendrum inerme (L.) Gaertn.</i>	Verbenaceae	Shrub	Hagari
97	<i>Clitoria ternatea L.</i>	Fabaceae	Climber	Sangupoo
98	<i>Coccinia grandis (L.) Voigt</i>	Cucurbitaceae	Climber	Kovai
99	<i>Cocculus hirsutus (L.) Diels</i>	Menispermaceae	Climber	Ruthali
100	<i>Cocos nucifera L.</i>	Arecaceae	Tree	Thennai
101	<i>Commelina benghalensis L.</i>	Commelinaceae	Herb	Naavichedi
102	<i>Corallocarpus epigaeus (Rottler) C.B.Clarke</i>	Cucurbitaceae	Climber	Kundalikodi
103	<i>Corchorus olitorius L.</i>	Tiliaceae	Herb	Pirungikodi
104	<i>Corchorus trilocularis L.</i>	Tiliaceae	Herb	Mutthaalikodi
105	<i>Crateva adansonii DC. subsp. odora (Buch. - Ham.) Jacobs</i>	Capparidaceae	Tree	Maavilangam
106	<i>Crotalaria juncea L.</i>	Fabaceae	shrub	Uppaani
107	<i>Croton bonplandianum Baill.</i>	Euphorbiaceae	Herb	Arivaalpoondu
108	<i>Cucurbita pepo L.</i>	Cucurbitaceae	Climber	Nelakodi
109	<i>Curculigo orchioides Gaertn</i>	Hyphoxidaceae	Herb	Nilapanai
110	<i>Cuscuta reflexa Roxb.</i>	Convolvulaceae	Climber	Ottukodi
111	<i>Cyclea peltata (Lam.) Hook. f. &amp; Thoms.</i>	Menispermaceae	Climber	Aalikodi
112	<i>Cynodon barberi Rang &amp; Tad.</i>	Poaceae	Herb	Arugampillu
113	<i>Cyperus compressus L</i>	Cyperaceae	Herb	Perukorai
114	<i>Cyperus iria L.</i>	Cyperaceae	Herb	Korai
115	<i>Cyperus rotundus L. subsp. rotundus</i>	Cyperaceae	Herb	Sirukorai
116	<i>Cyrtococcum trigonum (Retz.) A</i>	Poaceae	Herb	Muyalpillu
117	<i>Datura innoxia L.</i>	Solanaceae	Shrub	Peruoomatthai
118	<i>Datura metal L.</i>	Solanaceae	Shrub	Oomatthai
119	<i>Delonix elata (L.) Gamble</i>	Caesalpiniaceae	Tree	Perumpattaadi
120	<i>Delonix regia (Boj. ex Hook) Rafin.</i>	Caesalpiniaceae	Tree	Pattaadi
121	<i>Dendrophthoe falcata (L.f.) Etting</i>	Loranthaceae	Shrub	Ottu
122	<i>Desmodium triflorum (L.) DC.</i>	Fabaceae	Herb	Vitthili
123	<i>Dichanthium annulatum (Forssk.) Stapf.</i>	Poaceae	Herb	Olipillu
124	<i>Dichrostachys cinerea (L.) Wt. &amp; Arn.</i>	Mimosaceae	Tree	Vidatharai
125	<i>Digera muricata (L.) Mart.</i>	Amaranthaceae	Shrub	Murikeerai
126	<i>Dinebra retroflexa (Vahl) Panzer</i>	Poaceae	Herb	Santhichedi
127	<i>Dioscorea oppositifolia Linn.</i>	Discoreaceae	Climber	Kottukodi
128	<i>Diospyros montana Roxb.</i>	Ebenaceae	Tree	Murimaram
129	<i>Diplocyclos palmatus Jeffrey.</i>	Cucurbitaceae	Climber	Pitchilikodi
130	<i>Duranta repens (L.) Jacq.</i>	Verbenaceae	Shrub	Vimbichedi
131	<i>Eclipta prostrata (L.) L.</i>	Asteraceae	Herb	Vellaikarisalanganni
132	<i>Eleusine indica (L.) Gaertn</i>	Poaceae	Herb	Ellu
133	<i>Emilia sonchifolia (L.) DC.</i>	Asteraceae	Herb	Muyalkaathuchedi
134	<i>Enneapogon schimperanus (Hochst. Ex A. Rich)</i>	Poaceae	Herb	Macchipillu
135	<i>Eragrostis japonica (Thunb.) Trin.</i>	Poaceae	Herb	Aanipillu
136	<i>Eragrostis tenella (L.) P. Beauv</i>	Poaceae	Herb	Kucchipillu
137	<i>Erythroxylon monogynum L.</i>	Erythroxylaceae	Tree	Embilimaram
138	<i>Eucalyptus globulus. R. Br.</i>	Myrtaceae	Tree	Thailamaram
139	<i>Euphorbia antiquorum L.</i>	Euphorbiaceae	Tree	Mulvirukki
140	<i>Euphorbia hirta L.</i>	Euphorbiaceae	Herb	Ammaanpaccharisi

141	<i>Euphorbia pulcherrima</i> Willd.ex Klotzsch	Euphorbiaceae	Tree	Urandhi
142	<i>Euphorbia thymifolia</i> L.	Euphorbiaceae	Herb	Rinthi
143	<i>Euphorbia tirucalli</i> L.	Euphorbiaceae	Tree	Mulilakki
144	<i>Evolvulus alsinoides</i> (L.) L.	Convolvulaceae	Herb	Kannichedi
145	<i>Ficus benghalensis</i> L. var. <i>krishnae</i> C.DC.	Moraceae	Tree	Aalamaram
146	<i>Ficus elastica</i> Roxb. ex Hornem.	Moraceae	Tree	Iaguaalam
147	<i>Ficus racemosa</i> L.	Moraceae	Tree	Atthi
148	<i>Ficus religiosa</i> L.	Moraceae	Tree	Arasu
149	<i>Fimbristylis dichotoma</i> (L.) Vahl	Cyperaceae	Herb	Korai
150	<i>Glinus oppositifolius</i> (L.) A. DC.	Molluginaceae	Herb	Paraathi chedi
151	<i>Gloriosa superba</i> L.	Liliaceae	Climber	Sengaanthal
152	<i>Gmelina arborea</i> Roxb.	Verbenaceae	Tree	Kumizhamaram
153	<i>Gmelina asiatica</i> L.	Verbenaceae	Tree	Kumizhi
154	<i>Gomphrena globosa</i> L.	Amaranthaceae	Herb	Vaadaamalli
155	<i>Gomphrena serrata</i> L.	Amaranthaceae	Herb	Velivaadamalli
156	<i>Grangea maderaspatana</i> (L.) Poir.	Asteraceae	Herb	Maasipathiri
157	<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Tree	Thadasi
158	<i>Gymnema sylvestre</i> (Retz.) R.Br. ex Schultes	Asclepiadaceae	Climber	Shirukurinjaan
159	<i>Gynandropsis gynandra</i> (L.) Briq	Capparidaceae	Herb	Naalvaelai
160	<i>Gyrocarpus asiaticus</i> Willd.	Hernandiaceae	Tree	Thanikku
161	<i>Hedyotis aspera</i> Heyne ex Roth	Rubiaceae	Shrub	Pirukkichedi
162	<i>Heliotropium indicum</i> L.	Boraginaceae	Herb	Thaelkodukku
163	<i>Hemidesmus indicus</i> (L.) R.Br.	Periplocaceae	Climber	Nannaari
164	<i>Heteropogon contortus</i> (L.) P Beauv	Poaceae	Herb	Oosipillu
165	<i>Hibiscus ovalifolius</i> (Forsk.) Vahl.	Malvaceae	Shrub	Kirunichedi
166	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Shrub	Sembarutthi
167	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Shrub	Chemparuththi
168	<i>Hibiscus sabdariffa</i> L.	Malvaceae	Shrub	Pulichakeerai
169	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Ulmaceae	Tree	Aayamaram
170	<i>Hybanthus enneaspermus</i> (L.f.) F.v. Muell	Violaceae	Herb	Orithalthamarai
171	<i>Hyptis suaveolens</i> (L.) Poit.	Lamiaceae	Herb	Maagini
172	<i>Icnocarpus frutescens</i> (L.) R. Br.	Apocynaceae	Climber	Maarikodi
173	<i>Indigofera linifolia</i> (L.f.) Retz.	Fabaceae	Herb	Nilanichedi
174	<i>Indigofera linnaei</i> Ali	Fabaceae	Herb	Neerangi
175	<i>Ipomea pes-tigridis</i> L.	Convolvulaceae	Climber	Kiraanikodi
176	<i>Ipomoea cairica</i> (L.) Sweet	Convolvulaceae	Climber	Moorkankodi
177	<i>Ipomoea hederifolia</i> L.	Convolvulaceae	Climber	Orengikodi
178	<i>Ipomoea obscura</i> (L.) Ker-Gawl.	Convolvulaceae	Climber	aarthaalikodi
179	<i>Ipomoea quamoclit</i> Linn.	Convolvulaceae	Climber	Mayilmanickam
180	<i>Ipomoea staphylina</i> Roem. & Schultes	Convolvulaceae	Climber	Onaan kodi
181	<i>Isachne globosa</i> (Thunb.) Kuntze	Poaceae	Herb	Kirunipillu
182	<i>Ischaemum indicum</i> (Houtt.) Merr.	Poaceae	Herb	Oonambu
183	<i>Ixora coccinea</i> L.	Rubiaceae	Shrub	Itlipoo
184	<i>Jasminum auriculatum</i> Vahl.	Oleaceae	Climber	Kattumullai
185	<i>Jasminum cuspidatum</i> Rottl.	Oleaceae	Shrub	Oosimalli
186	<i>Jatropha curcas</i> L.	Euphorbiaceae	Shrub	Amanakku
187	<i>Jatropha gossypifolia</i> L.	Euphorbiaceae	Shrub	Kaattuamanakku
188	<i>Justicia adhatoda</i> L.	Acanthaceae	Shrub	Adathodai
189	<i>Justicia tranquebariensis</i> L.f.	Acanthaceae	Shrub	Thavasi murungai
190	<i>Kalanchoe pinnata</i> (Lam.) Pers.	Crassulaceae	Herb	Ranakalli
191	<i>Kigelia africana</i> (Lam.) Benth.	Bignoniaceae	Tree	Peryiapidukki
192	<i>Kylinga bulbosa</i> P. Beauv.	Cyperaceae	Herb	Mookutthipillu
193	<i>Lagerstroemia reginae</i> Roxb.	Lythraceae	Tree	Kadaipoomaruthu
194	<i>Lantana camara</i> L.	Verbenaceae	Shrub	Unni
195	<i>Lawsonia inermis</i> L.	Lythraceae	Shrub	Maruthaani
196	<i>Leonotis nepetifolia</i> (L.) R.Br.	Lamiaceae	Shrub	Chennakki
197	<i>Leucaena leucocephala</i> (L.) Gills	Mimosaceae	Tree	Soundal
198	<i>Leucas aspera</i> (Willd.) Link	Lamiaceae	Herb	Thumbai
199	<i>Leucas indica</i> (L.) R.Br. ex Vatke	Lamiaceae	Herb	Siru Thumbai
200	<i>Limonia acidissima</i> Linn.	Rutaceae	Tree	Vilamaram
201	<i>Madhuca longifolia</i> (Koen.) Macbr.	Sapotaceae	Tree	Eluppai

202	<i>Malvastrum coromandelianum</i> (L.) Garcke	Malvaceae	Shrub	Aripoodu
203	<i>Mangifera indica</i> L.	Anacardiaceae	Tree	Maamaram
204	<i>Martynia annua</i> L.	Pedaliaceae	Shrub	Sembuchedi
205	<i>Maytenus ovatus</i> (Wall ex Wight & Arn.) Loes.	Celastraceae	Shrub	Santhagichedi
206	<i>Melia dubia</i> L.	Meliaceae	Tree	Malaivaambu
207	<i>Merremia quinquefolia</i> (L.) Hall.f.	Convolvulaceae	Climber	Perunkoondal
208	<i>Michelia champaca</i> L.	Magnoliaceae	Tree	Shenbgagam
209	<i>Millingtonia hortensis</i> L.f.	Bignoniaceae	Tree	Maramalli
210	<i>Mimosa pudica</i> L.	Mimosaceae	Herb	Thottaansinungi
211	<i>Mirabilis jalapa</i> L.	Nyctaginaceae	Herb	Naalu mani chedi
212	<i>Mollugo nudicaulis</i> Lam.	Molluginaceae	Herb	Manthagi chedi
213	<i>Mollugo pentaphylla</i> L.	Molluginaceae	Herb	Parpaathagam
214	<i>Momordica charantia</i> L. var. <i>charantia</i>	Cucurbitaceae	Twiner	Paagarkai
215	<i>Morinda pubescens</i> J.E. Smith	Rubiaceae	Tree	Nuna
216	<i>Moringa concanensis</i> Nimmo	Rubiaceae	Tree	Kaattumurungai
217	<i>Moringa oleifera</i> Lam.	Rubiaceae	Tree	Murungai
218	<i>Mucuna atropurpurea</i> DC.	Fabaceae	Climber	Thellukka
219	<i>Mukia maderaspatana</i> (L.) M. Roemer	Cucurbitaceae	Climber	Musumosakkai
220	<i>Mundulea sericea</i> (Willd.) A. Cheval	Fabaceae	Tree	Enbanimaram
221	<i>Muntingia calabura</i> L.	Tiliaceae	Small tree	Sarkaraipala maram
222	<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	Small Tree	Karivaepilai
223	<i>Musa parasidiaca</i> L.	Musaceae	Tree	Vaazahi
224	<i>Neonotonia wightii</i> (W.A.) Lackey	Fabaceae	Climber	Kattumochai
225	<i>Nerium oleander</i> L.	Apocynaceae	Shrub	Sewwarali
226	<i>Ocimum basilicum</i> L. var. <i>basilicum</i>	Lamiaceae	Herb	Karpura thulasi
227	<i>Ocimum gratissimum</i> L.	Lamiaceae	Herb	Perunthulasi
228	<i>Opuntia stricta</i> (Haw.) Haw	Cactaceae	Shrub	Chapaathikalli
229	<i>Orthosiphon thymiflorus</i> (Roth) Sleen.	Lamiaceae	Herb	Malaithulasi
230	<i>Oxalis corniculata</i> L.	Oxalidaceae	Herb	Puliyarai
231	<i>Panicum maximum</i> Jacq.	Poaceae	Herb	Puliyapillu
232	<i>Parthenium hysterophorus</i> L.	Asteraceae	Shrub	Visapoodu
233	<i>Paspalidium flavidum</i> (Retz.) A. Camus	Poaceae	Herb	Pettipullu
234	<i>Passiflora edulis</i> L.	Passifloraceae	Climber	Peerangikodi
235	<i>Passiflora foetida</i> L.	Passifloraceae	Climber	Thuvalikodi
236	<i>Pavetta indica</i> L. var. <i>indica</i>	Rubiaceae	Tree	Pavettai
237	<i>Pavonia zeylanica</i> (L.) Cav.	Malvaceae	Shrub	Mamatti
238	<i>Pedaliium murex</i> L.	Pedaliaceae	Herb	Perunerunji
239	<i>Peltophorum pterocarpum</i> (DC.)	Caesalpiniaceae	Tree	Manjaalimaram
240	<i>Pennisetum purpureum</i> Schum	Poaceae	Herb	Paasipillu
241	<i>Pergularia daemia</i> (Forssk.) Chiov.	Asclepiadaceae	Climber	Veliparutthy
242	<i>Perotis indica</i> (L.) Kuntze var. <i>indica</i>	Poaceae	Herb	Iragupillu
243	<i>Phyla nodiflora</i> (L.) Greene.	Verbenaceae	Herb	Poaduthalai
244	<i>Phyllanthus acidus</i> (L.) Skeels	Euphorbiaceae	Tree	Aranelli
245	<i>Phyllanthus amarus</i> Schum. & Thonn.	Euphorbiaceae	Herb	Keelanelli
246	<i>Phyllanthus emblica</i> L.	Euphorbiaceae	Tree	Perunelli
247	<i>Physalis minima</i> L.	Solanaceae	Herb	Kikkizhi chedi
248	<i>Piper betel</i> Linn	Piperaceae	Climber	Climber
249	<i>Pisonia alba</i> Span.	Nyctaginaceae	Tree	Murukaali
250	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae	Tree	Kodukaapuli
251	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Herb	Nilavichedi
252	<i>Plumeria obtusa</i> L.	Apocynaceae	Tree	Sambangi
253	<i>Plumeria rubra</i> L.	Apocynaceae	Tree	Nelsambangi
254	<i>Polycarpaea corymbosa</i> (L.) Lam. var. <i>corymbosa</i>	Caryophyllaceae	Herb	Oruthuvaari
255	<i>Polygala arvensis</i> Willd.	Polygalaceae	Herb	Pothichedi
256	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	Tree	Pungamaram
257	<i>Portulaca oleracea</i> L. var. <i>oleracea</i>	Portulacaceae	Herb	Pulichakeerai
258	<i>Portulaca quadrifida</i> Linn.	Portulacaceae	Herb	Pasalaikeerai
259	<i>Premna tomentosa</i> Willd.	Verbenaceae	Tree	Kozhukkattaihaekku
260	<i>Prosopis juliflora</i> (Sw.) Dc.	Mimosaceae	Tree	Velikaathan
261	<i>Psidium guajava</i> L.	Myrtaceae	Tree	Koyya

262	<i>Psyrax dicoccos</i> Gaertn. var. <i>dicoccos</i>	Rubiaceae	Tree	Nakkini
263	<i>Pterolobium hexapetalum</i> (Roth.) Sant. & Wagh	Caesalpiniaceae	Shrub	Kariendu
264	<i>Pterospermum canescens</i> Roxb.	Steruliaceae	Tree	Vennagu
265	<i>Pulicaria wightiana</i> (DC.) Clarke	Compositae	Herb	Paalaticheddi
266	<i>Punica granatum</i> L.	Punicaceae	Shrub	Maadhulai
267	<i>Quisqualis indica</i> L.	Combretaceae	Creeper	Rangumalli
268	<i>Rivea hypocrateriformis</i> Choisy.	Convolvulaceae	Climber	Sooraanikodi
269	<i>Ruellia tuberosa</i> L.	Acanthaceae	Herb	Pittarasanchedi
270	<i>Sansevieria roxburghiana</i> Schult.	Agavaceae	Shrub	Oosimullu
271	<i>Santalum album</i> L.	Santalaceae	Tree	Santhanam
272	<i>Sarcostemma brunonianum</i> Wight & Arn.	Asclepidaceae	Climbing Shrub	Munjinikodi
273	<i>Senna auriculata</i>	Caesalpiniaceae	Shrub	Avaram, Avaarai
274	<i>Sesbania grandiflora</i> (L.) Poir.	Fabaceae	Tree	Agatthi
275	<i>Setaria pumila</i>	Poaceae	Herb	Ottupillu
276	<i>Sida acuta</i> Burm.f.	Malvaceae	Herb	Arivaalmanipoon du
277	<i>Sida cordata</i> (Burm. f.) Borssum	Malvaceae	Shrub	Rathangichedi
278	<i>Sida rhombifolia</i> L. var. <i>retusa</i> (L.)	Malvaceae	Shrub	AAnaikurunthotti
279	<i>Simarouba glauca</i> DC.	Simaroubaceae	Tree	Konthaali
280	<i>Solanum americanum</i> Mill	Solanaceae	Herb	Manathakkaali
281	<i>Solanum torvum</i> Sw.	Solanaceae	Herb	Chundai
282	<i>Solanum trilobatum</i> L.	Solanaceae	Climber	Thoothuvaalai
283	<i>Solanum virginianum</i> L.	Solanaceae	Shrub	Mulchundai
284	<i>Spermocoe hispida</i> L.	Rubiaceae	Herb	Naaihuruvi
285	<i>Sporobolus indicus</i> (L.) R. Br.	Poaceae	Herb	Poaceae
286	<i>Stachytarpheta jamaicensis</i> (L.) Vahl	Verbenaceae	Herb	Seemainaayuruvi
287	<i>Sterculia foetida</i> L.	Steruliaceae	Tree	Malaithaengi
288	<i>Stereospermum colais</i> Buch.-Ham.	Bignoniaceae	Tree	Poombaathiri
289	<i>Strychnos nux-vomica</i> L.	Loganiaceae	Tree	Yetti
290	<i>Swietenia mahagoni</i> (L.) Jacq.	Meliaceae	Tree	Mahagoni
291	<i>Synedrella nodiflora</i> (L.) Gaertn	Asteraceae	Herb	Nandhichedi
292	<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Tree	Naaval
293	<i>Tabebuia rosea</i> (Bertol.) DC.	Bignoniaceae	Tree	Seenthil
294	<i>Tabernaemontana divaricata</i> (L.) R.Br.	Apocynaceae	Shrub	Nandiyavattai
295	<i>Talinum triangulare</i> Willd.	Portulacaceae	Herb	Pasalaikeerai
296	<i>Tamarindus indica</i> L.	Caesalpiniaceae	Tree	Puliyamaram
297	<i>Tarenna asiatica</i> (L.) Kuntze	Rubiaceae	Shrub	Thaeranai
298	<i>Tecoma stans</i> (L.) Kunth	Bignoniaceae	Shrub	Manjalshenbagam
299	<i>Tectona grandis</i> L.f.	Verbenaceae	Tree	Thekku
300	<i>Tephrosia purpurea</i> (L.) Pers.	Fabaceae	Shrub	Kozhingi
301	<i>Terminalia catappa</i> L.	Combretaceae	Tree	Baadaambi
302	<i>Themeda triandra</i> Forssk.	Poaceae	Herb	Mukkannapillu
303	<i>Thespesia populnea</i> (L.) Soland ex Correa	Malvaceae	Tree	Poovarasu
304	<i>Thevetia peruviana</i> K.Schum	Apocynaceae	Tree	Ponnarali
305	<i>Thunbergia fragrans</i> Roxb.	Acanthaceae	Climber	Venjikodi
306	<i>Tragus roxburghii</i> Panigrahi	Poaceae	Herb	Purai pillu
307	<i>Trianthema portulacastrum</i> L.	Aizoaceae	Herb	Mulachichedi
308	<i>Tribulus lanuginosis</i> L.	Zygothylaceae	Herb	Nerunji
309	<i>Trichodesma indicum</i> (L.) R. Br.	Boraginaceae	Herb	Venni
310	<i>Tylophora indica</i> (Burm.f.) Merr.	Aclepiadaceae	Climber	Nanjaruppankodi
311	<i>Vernonia cinerea</i> (L.) Less.	Asteraceae	Herb	Mookutthichedi
312	<i>Vigna radiata</i> (L.) Wilez	Fabaceae	Climber	Kattupasipayaru
313	<i>Vitex negundo</i> L. var. <i>negundo</i>	Verbenaceae	Tree	Nocchi
314	<i>Wattakaka volubilis</i> (Linn. f.) Benth ex. Hook f.	Asclepiadaceae	Climber	Wattakaakka
315	<i>Withania somnifera</i> (L.) Dunal	Solanaceae	Shrub	Amukkiraan
316	<i>Wrightia tinctoria</i> (Roxb.) R.Br.	Apocynaceae	Tree	Veppalai
317	<i>Xanthium indicum</i> Koen.	Asteraceae	Shrub	Oomattam
318	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Tree	Ilandai
319	<i>Ziziphus oenoplia</i> (L.) Mill.	Rhamnaceae	Tree	Sooraipalam



**Fig 1:** Some important plant species in the study site

### Conclusion

This study reveals that the huge diversity of plant species are occurred in the study site. This is the only hilly temple in Tiruchengode area where you could see many varieties of trees, shrubs, climbers and forbs at huge diversity. Many anthropogenic activities are occurred in this study site. A special care should be taken in this Study site to protect the plant species.

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