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FLORAL DIVERSITY IN VILLUMALA, KULATHUPUZHA, KERALA

Lekshmi, G.M.*, Anju Alex, Nimina, S., Aiswarya, K. R., Aswathy, V.S.,Gopika, G.S., Princy, L., ,Santhikrishna, G.S., Thara, A. T., Akhiljith, S., and AryaVijayan, U.

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Abstract
The present work deals with the floral studies of Villumala, Kulathupuzha, Kollam district. The work was carried out in 2019. It reports 34 species of plants .Out of 34 species *Cassia alata, Aporosa cardios perma* employed as an antimicrobial and *Connarus monocarpus* is used for eye diseases*, Centella asiatica* and *Ocimum sanctum* are employed for fever, cold, flue *etc.* Plant resources are renewable but depleating due to deforestation, overgrazing by domestic animals are some reasons. Habitat destruction or fragmentation, improper agricultural practices have endangered-many species of flowering plants instead of utilizing all the spaces for commercial purpose, steps should be taken for preserving biodiversity, through which we can conserve our planet. It should be protected for our future generation.

Key words: Villumala, Floristic diversity, Kulathupuzha, conservation

Introduction

Biodiversity documentation, analysis, conservation and finding Enhancement strategies is considered to be one of the important challenges in present day conservation biology research and policy making process. It has been carried out in different ecosystem from plains to mountains all over the world since knowledge of its structure and function is necessary for sustainable use and to maintain species richness for future generations.India is very rich in biodiversity with 7% of world's flora and has been included as one of the 12 mega diversity centers. The varied eco-climatic conditions coupled with unique geological and cultural features have contributed to an amazing diversity of habits. Which harbor and sustain immense biological diversity at all levels (Agrawal, 2000). There are 4.679 taxa of flowering plants in Kerala. They belongs to 1,360 genera in 212 families (Sasidharan, 2004). There are no previous studies conducted on floral diversity of Villumala,Kulathupuzha. Documentation of biodiversity is an urgent requirement as latest statistics and data on floral biodiversity of India has not been compiled and documented. The knowledge about the ecosystem structure, composition and diversity of species helps to improve the protection of endemic species (Balamuralikrishna *et. al.,* 2015).

Materials and Methods

The present floral study was conducted at Villumala, Kulathupuzha, The study was conducted for a period of 3 months from January 2019 to April 2019. Field trip was conducted to Villumala for the collection of plants with the help of people there. Herbarium specimens and raw materials were collected from Villumala. Identification of plants were done by using various floras including flora of Thiruvananthapuram, flora of Pathanamthitta etc. Few plants which were not mentioned in the floras were identified with the help of taxonomic experts.

Medicinal properties and other uses of plants were obtained from the people of Villumala and also from the ayurvedic texts. Photographs have been provided for all the species. About 34 species of plants collected for the project. The specimens collected were prepared as herbarium

Department of Botany, St. Gregorios College, Kottarakara, Kerala. India
*Corresponding author email:*gmlekshmi@gmail.com*

Table 1 Floristic composition of Villumala

Sl. No.	Family	Botanical Name	Local Name
1	Anacardiaceae	Gluta travancorica	Chenkurinji, Royal tree
2	Phyllanthaceae	Aporosa cardiosperma	Vetti / Ponvetti / Eachil
3	Combretaceae	Calycopteris floribunda	Pullanji / Ukshi
4	Fabaceae	Xylia xylocarpa	Irul
5	Connaraceae	Connarus monocarpus	Kurile / Puzhukkadikaya
6	Malvaceae	Hibiscus hispidissimus	Uppanachakam / Njaranpuli
7	Apiaceae	Centella asiatica	Kodangal
8	Santalaceae	Santalum paniculatum	Sandal wood
9	Plumbaginaceae	Plumbage auriculata	Koduveli
10	Lamiaceae	Ocimum sanctum	Thulasi/ Holy basil/Sacred basil
11	Lauraceae	Cinnamomum tamala	Vayana
12	Achariaccae	Hydnocarpus pentandra	Kodi, Maravatty, Niarotti
13	Simaroubaceae	Quassia indica	Karinjotta
14	Acanthaceae	Justica adhatoda	Malabar nut, versa or vasaka
15	Euphorbiaceae	Euphorbia hirta	Chithirapala
16	Sapindaceae	Cardiospermum helicacabum	Jyothishmati, Katabhi
17	Fabaceae	Cassia alata	Aanattakara
18	Cornaceae	Alangium salvifolium	Arinjil, Amkolam
19	Apocynaceae	Ichnocarpus frutescens	Black sreeper, paravalli
20	Fabaceae	Gliricidia sepium	Seema Konna
21	Fabaceae	Abrus precatorius	Kunnimani
22	Loganiaceae	Strychnosnux vomica	Kanjiram
23	Trichopodaceae	Trichopus zeylanicus	Arogyapacha
24	Convolvulaceae	Ipomea batatas	Sweet potato
25	Rhamnaceae	Ziziphus xylopyrus	Tutali, Cheriyalanta
26	Melastomataceae	Melastoma malabathricum	Kalampotti / Kadali
27	Euphorbiaceae	Bridelia stipularis	Cherukapanachi
28	Fabaceae	Butea monosperma	Chamatha / flame of the forest
29	Fabaceae	Cajanus cajan	Thuvara, Pigcon pea
30	Combretaceae	Terminalia chebula	chebulic myroban
31	Fabaceae	Pterocarpus marsupium	venga
32	Piperaceae	Piper longum	Tippali
33	Sapotaccae	Madhuca longifolia	Ilippi
34	Asclepiadaceae	Calotropis gigantean	Erukk

by using standard methods (Jain and Rao, 1978) and the herbarium specimens of the plants were deposited in the Department of Botany, St. Gregorios college, Kottarakkara

Results and Discussion

The study resulted in the documentation of 34 plants in different families.The district is blessed with wide variety of medicinal plants. Out of the 34 plants all have potential medicinal importance and a few are used as fodder, food and used for other purpose such as basket making ,spice production etc. In the present study importance of 34 plants were enlisted with their binomial, family, Local name, parts used and uses.

The medicinal plants, like other plant parts in commercial demand, premature exploitation is another factor, which is additionally responsible for rapid destruction of wild stock. Whenever a plant is in high demand, premature exploitation is expected to threaten next season's propagation and regeneration of the species (Chaudhuri,2007). Commercial enterprises and local dwellers are regularly exploiting natural heritage of these medicinal plants (Balamuralikrishna *et. al.,* 2015).

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