



## Medicinal plants of vayalada

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### Abstract

Medicinal plants have assumed huge parts in the existences of nearby groups of people living in these localities by giving restorative products. Medicinal plants are utilized for various purposes and in different employments of people. The utilization of therapeutic plants is found in practically all societies as a wellspring of medication. Therapeutic plants have been utilized for an enormous number of years to treat prosperity issue and to keep away from diseases. The present study was conducted in Vayalada, Calicut to identify the medicinal plants used by the local people to treat various ailments. During the study 41 medicinal plants were identified. From the collected 41 flowering plants 24 were herbs, 14 shrub, 2 climbers and 1 creeper.

**Keywords:** restorative products, disease, employments, therapeutic plants

### Introduction

Most of the major plants are originally plant based, medicinal plants have long being utilized in ancient drugs and worldwide Ethnomedicine. Uses of the rising high-end genomic technologies are often expanded from crop plants to ancient plants to expedite the medicative plant breeding and remodel them to the living works of medicative compounds. Medicinal plants have been the ideal treatment of assorted diseases in African ancient medication also as alternative styles of treatment from numerous cultures of the globe concerning eightieth of the world's population still depends alone on ancient or seasoning medication for treatment of diseases principally in Africa and alternative developing nations. Most of the potent healthful plants have comparatively no toxicant or adverse effects once employed by humans whereas some are unutterably toxicant to each humans and animals with the potential of damaging certain organs within the body. As indicated by WHO around 21,000 plant species can possibly be utilized as restorative plants. As per information accessible more than three quarters of the total populace depends fundamentally on plant and plant remove for their medical care needs. More than 30% of the entire plant species all at once is utilized for therapeutic purposes. It has been assessed that in created nations, for example, United states for example, India and china the commitment is just about as much as 80%. Thus the monetary significance of the restorative plants is substantially more to country, for example, India than to rest of the world. These nations give two third of the plants utilized in present day arrangement of medication and medical services arrangement of provincial populace rely upon native arrangement of medication.

### Materials and Methods

The current work was undertaken in Vayalada, which is located about 38kms away from Calicut city and 15kms

away from Balussery. The geographical location of Vayalada lies between 11.29415N latitude and 75.75733E longitude and the altitude range from 567m above the sea level. The Vayalada hills is known as Malabar's Gavi. A wide diversity of plants are found in this area. The field visit was conducted during January 2021 to April 2021. Various plants were identified on the basis of their floral characters. Photographs were captured to outline the nature of the study area. Corresponding data were collected from the resource persons. The collected information was verified by continuously referring various journals and the information was recorded on the field notebooks. Based on the medicinal properties the flowering plants were collected. The respective plants were collected from the highly populated area of plant species. The medicinal uses and other necessary information about the plants were collected from the villagers of the particular residence.

### Results and Discussions

The current study was undertaken in Vayalada, Calicut district, Kerala. Wide diversity of angiosperms were dominant in Vayalada. From the collected 41 flowering plants 24 were herbs, 14 shrubs, 2 climbers and 1 creeper. Majority of the plants in Vayalada are medicinal. 40 dicotyledons and 1 monocotyledonous plants were reported. floristic diversity of the plants were noted. Plants, were enumerated with Botanical name, family, habit and local names. Medicinal uses of the plants were documented. Various parts of the plants such as roots, bark, leaves, flowers, seed, fruits and, sometimes the whole plant is used for various medicinal uses. Leguminosae family with 3 sub families has more number of species. The number of herbs are more abundant in Vayalada followed by shrubs climbers and few creepers.

**Table 1:** Medicinal Value of Plants Collected from Vayalada

SL no	Plant Name	Family	Medicinal Uses
1	<i>Cleome viscosa</i> L.	Capparidaceae	Diaphoretic, rubefacient & vesicant.
2	<i>Portulaca grandiflora</i> Hook	Portulacaceae	Anti-inflammatory & antifungal.
3	<i>Hibiscus vitifolius</i> L.	Malvaceae	Stomachic, anti-inflammatory & Diuretic.
4	<i>Ablitilon hirtus</i> (Lam)	Malvaceae	Aphrodisiac, demulcent, diuretic, laxative, pulmonary and sedative & expectorant.
5	<i>Tristellateia australasiae</i> A.Rich	Malpighiaceae	Diuretic
6	<i>Tribulus terrestris</i> Linn	Zygophyllaceae	Anti-inflammatory, stomachic & diuretic.
7	<i>Biophytum sensitivum</i> (L.)	Oxalidaceae	Anti-inflammatory, antibacterial & diuretic.
8	<i>Clitoria ternatea</i> L.	Fabaceae	Antistress, anxiolytic, antidepressant, anticonvulsant, tranquilizing and sedative agent.
9	<i>Indigofera linnei</i> Ali	Fabaceae	Antiscorbutic and diuretic.
10	<i>Bauhinia accuminata</i> L.	Fabaceae	Antistress, anxiolytic, antidepressant & anticonvulsant.
11	<i>Tephrosia purpurea</i> (L.) Pers	Fabaceae	Anthelmintic, alexiteric, restorative, & antipyretic.
12	<i>Centerosema pubescens</i> L.	Fabaceae	Antimicrobial, Anti-Proliferative, Antibacterial & Antioxidant.
13	<i>Adenocarpus complicatus</i> Benth.	Fabaceae	Anti-inflammatory, proliferative & antibacterial.
14	<i>Luffa actangula</i> L.	Cucurbitaceae	Emetic & purgative.
15	<i>Oldenlandia umbellata</i> L.	Rubiaceae	Expectorant, antimicrobial & antibacterial.
16	<i>Mirtacarpus hirtus</i> (L) DC.	Rubiaceae	Antimicrobial, antifungal & sedative.
17	<i>Sphagneticola trilobata</i> (L) Pruski	Asteraceae	Antimicrobial, expectorant & antipyretic
18	<i>Cyanthillium cinereum</i> (L.) Rob.	Asteraceae	Anti-inflammatory & antibacterial.
19	<i>Tridax procumbens</i> L.	Asteraceae	Anticoagulant, antifungal, & insect repellent.
20	<i>Catharanthus roseus</i> (L) G.Don. □	Apocynaceae	Anti-inflammatory, antidepressant, antimicrobial, antioxidant anti-cancerous & antifungal.
21	<i>Tabernaemontana divericata</i> (L.) R.Br.ex Roe	Apocynaceae	Anthelmintic, anticoagulant, & antioxidant.
22	<i>Allamanda cathartica</i> L.	Apocynaceae	Purgative, anti-inflammatory & antioxidant.
23	<i>Heliotropium indicum</i> L.	Boraginaceae	Anti-inflammatory, anticoagulant & antimicrobial.
24	<i>Myosotis arvensis</i> (L.) Hill	Boraginaceae	Antimicrobial & anti-inflammatory.
25	<i>Trichodesma indicum</i> (L.) Lehm	Boraginaceae	Antimicrobial, anti-inflammatory, purgative.
26	<i>Ipomoea triloba</i> L.	Convolvulaceae	Antimicrobial, anticoagulant & analgesic.
27	<i>Solanum torvum</i> Sw.	Solanaceae	Sedative, diuretic, hemostatic, haemopoietic, & anti-microbial.
28	<i>Tecoma stans</i> (L.) Juss. ex Kunth	Bignoniaceae	Antidiabetic & diuretic
29	<i>Andrographis paniculata</i> (Burm.f.) Nees	Acanthaceae	Anti-inflammatory, emetic, antimicrobial & antifungal.
30	<i>Asystasia gigantea</i> (L.) T. Anderson	Acanthaceae	Anthelmintic, anti-inflammatory, antimicrobial & antifungal.
31	<i>Ruellia tuberosa</i> L.	Acanthaceae	Antiseptic, depurative, diaphoretic, diuretic, emetic and purgative.
32	<i>Lantana camara</i> L.	Verbinaceae	Anthelmintic, anti-inflammatory, antioxidant & antimicrobial.
33	<i>Bougainvillea glabra</i> Choisy	Nyctaginaceae	Anti-inflammatory & antimicrobial.
34	<i>Gomphrena globosa</i> L.	Amaranthaceae	Antidiabetic, antioxidant & antimicrobial.
35	<i>Aerva lanata</i> (L.) Juss.	Amaranthaceae	Anti-inflammatory, anthelmintic, anti-bacterial and mild analgesic.
36	<i>Cyathula prostrata</i> (L) Blume	Amaranthaceae	Antiseptic, antimicrobial, & antibacterial.
37	<i>Alternanthera ficoidea</i> (L.) Sm	Amaranthaceae	Antifungal & antimicrobial.
38	<i>Peperomia pellucida</i> (L.) Kunth	Piperaceae	Anti-inflammatory, antifungal & antimicrobial
39	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Anti-cancerous, anti-inflammatory, antimicrobial, antibacterial.
40	<i>Ocimum gratissimum</i> Lam.	Lamiaceae	Anti-diarrhea agent, anti-inflammatory, expectorant, antifungal, antibacterial & antimicrobial.
41	<i>Kyllinga bulbosa</i> P. Beauv.	Cyperaceae	Anti-inflammatory, antifungal & antimicrobial.

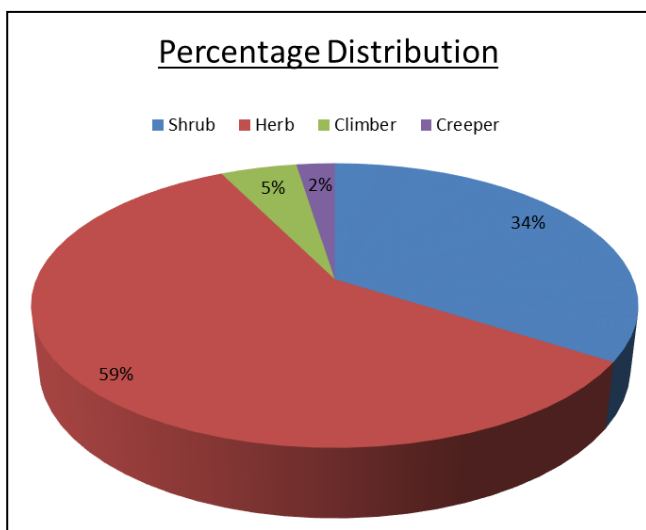
**Table 2:** Families having maximum number of species present in the study area

SL. No	Family	No. of species
1	Capparidaceae	1
2	Malvaceae	2
3	Malpighiaceae	1
4	Zygophyllaceae	1
5	Oxalidaceae	1
6	Fabaceae	6
7	Cucurbitaceae	1
8	Rubiaceae	2
9	Asteraceae	3
10	Apocynaceae	3
11	Boraginaceae	3

12	Convolvulaceae	1
13	Solanaceae	1
14	Bignonaceae	1
15	Acanthaceae	3
16	Verbinaceae	1
17	Nyctanginaceae	1
18	Amaranthaceae	4
19	Piperaceae	1
20	Euphorbiaceae	1
21	Lamiaceae	1
22	Cyperaceae	1

**Table 3**

Sl. No	Habit	No. of Plants	Distribution
1	Shrub	14	34.1 %
2	Herb	24	58.5 %
3	Climber	2	4.9 %
4	Creeper	1	2.4 %



**Fig 1:** Percentage Distribution of plant species in the study area

**Summary and Conclusion**

During the study, 41 plants belonging to 22 families were recorded. Most of the plants in Vayaladabelongs to Leguminosae (Fabaceae) family with 3 Subfamilies (Papilionoideae, caosalpinoideae, Mimosoideae) is followed by Amaranthaceae with 4 species. Acanthaceae, Asteraceae, Boraginaceae with 3 species. Malvaceae, Rubiaceae, Solanaceae, Bignonaceae, Verbinaceae, Nyctanginaceae, Piperaceae, Euphorbiaceae, Lamiaceae, Cyperaceae with 1 species each. The plants collected from Vayalada were distributed as 24 herbs, 14 shrubs 2 climbers and 1 creepers. Extended Field survey were carried out and information regarding Vayalada were collected. Local people depend on plant in this area for various medicinal purposes.

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