



Survey of Medicinal Plants in Vellalar College for Women Campus, Erode, Tamil Nadu, India.

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ABSTRACT

A survey of medicinal plant diversity was carried out in Vellalar College for Women, Thindal, Erode District, Tamil Nadu, India. This survey was conducted based on the participatory observations and field visit to all places of our college campus. During survey visit a total of 89 medicinal plants species with 70 genus were identified. The main purpose of this survey is to collect data about medicinal plants available in our college campus in-order to preserve its valuable bioresources. All these plants having enormous medicinal properties including antibacterial, anticancer, antidiabetic, antiviral, antifungal, antidote, anthelmintic, anti-analgesic and they can cure cough, cold, ulcers, diarrhea, skin disorders, snake-bite etc. Due to these enormous medicinal properties of surveyed plants, some precious plants which are sensitive to these hazards are getting a place in the list of 'an endangered plants'. After few decades some valuable plants may be disappeared in our college campus because of those risks, so we hope that this survey will be helpful to the upcoming batches of Vellalar students, through this they can get some ideas and information about medicinal plants of Vellalar College campus.

Keywords: Diversity, Bioresources, Endangered, Anthelmintic.

INTRODUCTION

In traditional medicine, plant is required as a major component to cure many diseases caused by bacteria, fungi and virus in human. They are being used by nearly about 80 % of the world population, especially in developed and developing countries for primary health care. Herbs are mainly used for disease prevention and treatment¹. Young generations showing interest in traditional medicines but among the young population, the knowledge of using traditional plant is very low. The complete knowledge and usage about medicinal plants are well known by older people, but due to the death of an older people, procedures of herbals usage is under high risk. Many trees and medicinal plants were destroyed by very severe cyclonic storm called 'Vardah' on December 2016².

Biodiversity is a part of our daily lives and livelihoods and constitutes the resources upon which families, communities, nations and future generations depend. Human society from the very beginning of its appearance on this earth has been indispensably associated with the plant kingdom for its survival³. Plants provide our basic food crops, building materials and medicines as well as oils, lubricants, rubber and other latexes, revins, waxes, perfumes, dyes and fibres. So far only about ten per cent of plants have ever been evaluated for their medicinal or agricultural potential and so there are certainly many new drugs and new crops yet to be discovered⁴.

The World Health Organization (WHO) has estimated that 80 % of the populations of developing countries still rely on traditional medicines, mostly plant drugs, for their primary health care needs. Demand for medicinal plant is

increasingly felt, in both developing and developed countries due to growing needs of natural products being non-toxic and bereft of side-effects, apart from availability at affordable prices. The medicinal plant sector has traditionally occupied a pivotal position in the socio cultural, spiritual and medicinal area of rural and tribal families⁵. During the study, an extensive field survey of the medicinal plants was done and the species used as folklore medicines were enumerated⁶.

The present paper is an attempt to know the distribution of plant diversity on campus of Vellalar College for Women, Thindal, Erode District, covering approximately two acres of open area in addition to lawns, garden, teaching and administrative blocks. The present research has been carried out in Vellalar College for Women, Thindal, Erode District to explore the diversity of plants and for sustainable utilization of available plant resources. The Campus houses a good number of plants and the perusal of literature reveals that there is no published record on the flora of this campus which represents an interesting floristic composition. The findings of the study may be helpful for further research in Botany or allied disciplines.

MATERIALS AND METHODS

Study area

The study area of a botanical survey of medicinal plants was conducted in the Vellalar College campus and the information gathered was noted in a field note book (Map. 1). All buildings and blocks are surrounded by different types of vines, trees and ornamental plants. Field study was carried out over a period of two months from December-2017 to January - 2018. In the scope of



this study, medicinal plant species and other relevant information were collected.

Plant collection

The plant specimens were collected in polythene bags to prevent desiccation. The field data regarding their habit, habitat, phenology and flower colour etc. were noted down in field note book.

Plant identification

The collected plant specimens were dried and herbarium sheets were prepared and deposited in the Department of Botany, Vellalar College for Women, Erode, Tamil Nadu, India. The binomials of the specimens were identified with the help of the existing Floras The Flora of Presidency of Madras ⁷ and The Flora of Tamil Nadu Carnatic ⁸. The identity is authenticated by matched with type specimens available in the herbarium of Botanical Survey of India, Southern Circle, TNAU Campus, Coimbatore, Tamil Nadu.

MAP – 1: Study Area – Aerial View of Vellalar College Campus



Figure 1: This Picture Shows the Main Entrance of Vellalar College



Figure 2: A Panoramic View of Trees and Shrubs Encircles in Vellalar College

RESULTS AND DISCUSSION

Plants have been a major source of medicine for human kind. The demand for traditional herbs is increasing very rapidly, mainly because of the harmful effects of synthetic chemical drugs. The global clamour for more herbal ingredients creates possibilities for the local cultivation of medicinal crops as well as for the regulated and sustainable harvest of wild plants. Such endeavours could help to raise rural employment in the development countries, boost commerce around the world and perhaps contribute to the health of millions ^[12]. The first-hand information on the medicinal plant diversity present in the Vellalar College campus were arranged alphabetically by genus and species name (Table 1; Plate 1). In the present study there are 89 medicinally important plant species belonging to 45 families were identified from the study area and their botanical name, family name, local name, parts used and their therapeutic uses were studied and given in Table 1. Among the surveyed list Euphorbiaceae floral biodiversity was represented by the highest number of species (8 species), followed by Fabaceae (7 species), Acanthaceae (6 species), Amarantaceae (5 species), Apocynaceae, Malvaceae and Nyctaginaceae (4 species each), Boraginaceae, Verbenaceae, Moraceae and Asteraceae (3 species each), 9 families were represented by 2 species and remaining 21 families were represented by a single species. The diverse parts of the medicinal plants were used based on their ability to cure diseases. The parts include leaves, root, stem, bark, flower, fruit, seed, etc., as shown in Fig. 3.

The surveyed medicinal plants are used to remediate variety of diseases and ailments like diarrhea, diabetes, asthma, fever, jaundice, rheumatism, wounds, cuts, stomach pain, cough, cold, body pain, bronchitis, dysentery, leprosy, piles, ulcer, tooth-ache, urinary troubles, vomit, skin diseases, nausea etc., Similar ethnobotanical studies have been reported in several parts of India to document the traditional knowledge that has been vanishing ². The plants or parts are being used for the treatment of diseases, from the ancient times ⁹. The collection, identification and documentation of ethnomedicinal data on biological resources were inevitable steps for bioprospecting ¹⁰. The native inhabitants were well-versed with the utilization of plants of their surrounding by their long trial and error method of using the herbal plants ¹¹.

Table 1: List of medicinal plants in Vellalar College campus, Erode, Tamil Nadu.

| S.No. | Scientific name of the plant | Family | Local name | Habit | Parts used | Therapeutic uses |
|-------|--------------------------------------|-----------------|-------------------------|-------------|---------------------------------------|--|
| 1. | <i>Abutilon indicum</i> G. Don. | Malvaceae | Thuthi | Shrub | Leaves, root, fruits, seeds and bark. | Demulcent, aphrodisiac, laxative, diuretic, sedative, astringent, expectorant, tonic, anti-inflammatory, anthelmintic, leprosy, ulcers, headaches, piles and bladder infection. |
| 2. | <i>Acalypha fruticosa</i> Forsk. | Euphorbiaceae | Athaa thazhai | Under Shrub | Whole plant | Dyspepsia, stomachache, skin diseases, wounds, liver disorders and poisonous bites. |
| 3. | <i>Acalypha indica</i> L. | Euphorbiaceae | Kuppaimeni | Herb | Leaves, root, stalks and flowers | Skin problems like pimples, psoriasis and eczema, cough and cold, piles, intestinal worms, gum problems, stomach aches, rheumatism, bronchitis, asthma, scabies and skin diseases. |
| 4. | <i>Adatoda vasica</i> Ness. | Acanthaceae | Adathodai | Shrub | Roots, leaves and flowers | Leprosy, blood disorders, heart troubles, fever, vomiting, loss of memory, leucoderma, jaundice, tumors, mouth troubles, sore-eye and gonorrhoea. |
| 5. | <i>Aerva lanata</i> Juss. | Amarantaceae | Poolaipoo | Herb | Root | Anemia, alzheimer, arthritis, cholesterol, lung problems, bone problems, blood circulation, cough, asthma and headache. |
| 6. | <i>Aerva tomentosa</i> Forsk. | Amarantaceae | Perumpoolai | Herb | Root or whole plant | Fever, rheumatism, gastric troubles, cough, sore throat, headaches and wounds. |
| 7. | <i>Allamanda cathartica</i> L. | Apocynaceae | Allamanda | Shrub | Leaves, roots, flowers and bark | Liver tumors, jaundice, headaches, coughs and malaria. |
| 8. | <i>Alysicarpus rugosus</i> Dc. | Fabaceae | Namappoondur | Herb | Whole plant | Naso-pharyngeal affections, pulmonary troubles, febrifuges, dropsy, swellings, oedema, tannins and astringents. |
| 9. | <i>Amarantus viridis</i> L. | Amarantaceae | Kuppaikeerai | Herb | Whole plant | Diuretic, purgative, poultices, dysentery, inflammations, boils and gonorrhoea, orchitis and haemorrhoids. |
| 10. | <i>Andrographis echioides</i> Nees. | Acanthaceae | Peetumbam/Gopuram tangi | Herb | Leaves and stems | Goiter, liver diseases, fertility problems, bacterial, malarial and fungal disorders. |
| 11. | <i>Andrographis paniculata</i> Nees. | Acanthaceae | Nilavembu | Herb | Whole plant | Cancer, diabetes, high blood pressure, ulcer, leprosy, bronchitis, skin diseases, flatulence, colic, influenza, dysentery, dyspepsia and malaria. |
| 12. | <i>Aralia digitata</i> Roxb. | Araliaceae | - | Tree | Root and fruit | Alterative, diaphoretic, diuretic, pectoral, stimulant, pulmonary diseases, asthma, rheumatism and eczema. |
| 13. | <i>Azadirachta indica</i> A. Juss. | Meliaceae | Vembu | Tree | Leaves, stem and bark | Skin diseases, healthy hair, improve liver function, detoxify the blood, pest and disease control, fever reduction, dental treatments, cough, asthma, ulcers, piles, intestinal worms, urinary diseases etc. |
| 14. | <i>Bauhinia purpurea</i> L. | Caesalpiniaceae | Nilattiruvatti | Tree | Flowers, bark, root, | Diarrhoea, griping pain, flatulence, expelling gases, respiratory |



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| | | | | | leaves, and stems | ailments like asthma, cold and cough. |
| 15. | <i>Boerhaavia diffusa</i> L. | Nyctaginaceae | Mukkarattai | Herb | Whole plant | Anti-inflammatory, anti-diabetic, anti-oxidative, diuretic, anti-arthritis, spasmolytic, antibacterial, analgesic, immunity booster, anti-ageing, pain relief, anemia, asthma, leukorrhoea, rheumatism, encephalitis, urinary disorders and liver diseases. |
| 16. | <i>Boerhaavia verticillata</i> Poir. | Nyctaginaceae | Sharunnai | Herb | Whole plant | Oedema, inflammation, cough, anaemia, splenic disease, pain, snake poison, chest pain, wound, abscess, rat poisoning and fever due to pitta dosa. |
| 17. | <i>Bougainvillea spectabilis</i> Willd. | Nyctaginaceae | Kagitha poo | Climber | Leaves, stems and flowers | Inflammation, diabetes, cough, diarrhoea, hepatitis, leucorrhoea, low blood pressure, sore throat, acid reflux and ulcers. |
| 18. | <i>Calotropis procera</i> R. Br. | Apocynaceae | Errukku | Shrub | Roots, stem bark, latex, leaves and flowers | Diarrhoea, sinus fistula, jaundice, eczema, leprosy, elephantiasis, cough, asthma, rheumatism, fever, indigestion and cold. |
| 19. | <i>Cassia occidentalis</i> L. | Caesalpiniaceae | Paeyaavarai | Shrub | Whole plant | Diuretic, liver detoxifier, hepato-tonic, purgative, laxative, anti-inflammatory, analgesic, vermifuge, febrifuge, whooping cough and convulsion. |
| 20. | <i>Chloris barbata</i> Sw. | Poaceae | Mayil kondai pul/ Chevvarakupul/ Kuruthu pillu | Herb | Leaves | Rheumatism, skin disorders, fever, diarrhoea and diabetes. |
| 21. | <i>Citrus medica</i> L. | Rutaceae | Kadara-Narathai | Tree | Fruits, seeds and leaves | Abdominal diseases, cold, cough, diabetes, dysentery, indigestion, liver diseases, nausea, pain, swelling, vomiting, edema, constipation, cramps, inflammation, stress, wheezing, asthma, arthritis, stomach-ache, anthelmintic, tonic and abdominal colic. |
| 22. | <i>Cleome viscosa</i> L. | Capparidaceae | Naikkaduku | Herb | Leaves, seeds and roots | Rheumatism, fever, headache, rubefacient and vesicant. |
| 23. | <i>Coccinia indica</i> W. & A. | Cucurbitaceae | Kovai | Climber | Roots, fruit and leaves | Cough, respiratory illness, fever, burning sensation, swelling, anaemia, ring worms, scabies, sinuses, respiratory ailments, psoriasis, itch and diabetes. |
| 24. | <i>Commelina benghalensis</i> L. | Commelinaceae | Adutinnathalai | Herb | Leaves and whole plant | Antiseptic, epilepsy, eyelid infection and skin rash. |
| 25. | <i>Corchorus acutangulus</i> Lam. | Tiliaceae | Peratti | Herb | Whole plant | Gonorrhoea, headache, stomach – ache, tonic, carminative, febrifuge and pneumonia. |
| 26. | <i>Corchorus olitorius</i> L. | Tiliaceae | Sanal / Peratti / Perumpinnakku kirai | Shrub | Leaves and seed | Demulcent, diuretic, febrifuge, tonic, chronic cystitis, gonorrhoea, dysuria, purgative, pain, piles and tumors. |
| 27. | <i>Cordia sebestena</i> L. | Boraginaceae | Aechinaruvihli | Tree | Leaves, bark, seed and | Cough, bronchial ailments, respiratory disorders, stomach pain, |



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| | | | | | fruit | wound, inflammation, dysentery and diarrhoea. |
| 28. | <i>Cycas circinalis</i> L. | Cycadaceae | Madana-kaman | Shrub | Bark and seeds | Flatulence, high blood pressure, headaches, congestion, rheumatism and bone pain and vomiting. |
| 29. | <i>Datura metal</i> L. | Solanaceae | Umathai poo | Herb | Leaves and fruits | Antiasthmatic, antispasmodic, stomach and intestinal pain, hallucinations, hypnotic, skin diseases, fever, worm infestation, tooth ache and narcotic. |
| 30. | <i>Delonix elata</i> Gamb. | Fabaceae | Vathanarayanan | Tree | Leaves | Joint swellings, body pains and gas problems. |
| 31. | <i>Delonix regia</i> Raf. | Fabaceae | Mayil kondrai | Tree | Leaves, flowers, stem and bark | Constipation, diabetes, ear ache, inflammations, arthritis and hemiplegia |
| 32. | <i>Digera arvensis</i> Forsk. | Amarantaceae | Toya keera | Herb | Whole plant | Constipation, urinary disorders, astringent, diuretic and diabetic. |
| 33. | <i>Duranta plumieri</i> Jacq. | Verbenaceae | Saamandi | Shrub | Leaves, flowers and fruits | Skin diseases, fever, vomiting, cough, malaria, menstrual disorders, asthma, headache, rheumatism, worm, piles, diuretic, eczema, bronchitis, stomachic, boils, burning sensation, jaundice, leprosy, anaemia and ulcer. |
| 34. | <i>Euphorbia geniculata</i> Ovt. | Euphorbiaceae | Palperukki | Herb | Roots, bark, leaves and stem | Purgative, laxative, stomach ache, constipation, intestinal worms, skin problems, skin tumours and body pain. |
| 35. | <i>Euphorbia hirta</i> L. | Euphorbiaceae | Ammanpacharisi | Herb | Whole plant | Cancer, diarrhoea, dysentery, intestinal, asthma, bronchitis, eyelid styes, cough, asthma, bronchial infections, bowel complaints, chest congestion, throat spasms, hay fever, tumors, helminthic infestations, wounds, kidney stones, abscesses and skin diseases. |
| 36. | <i>Euphorbia pulcherrima</i> Willd. | Euphorbiaceae | Ilai paddi / Mayil kalli | Shrub | Whole plant | Tuberculosis, skin infections, fractures, stomach irritation, discomfort, nausea, skin irritation and vomiting. |
| 37. | <i>Ficus benamina</i> L. | Moraceae | Putrajuvi | Tree | Fruit, bark, root and leaves | Skin disorders, inflammation, piles, vomiting, leprosy, malaria, nose-diseases, demulcent, digestive, pectoral, cancer and tonic. |
| 38. | <i>Ficus elastica</i> Roxb. | Moraceae | Semaai | Tree | Leaves, stem and bark | Skin infections, allergies, diuretic, cancer, cardiovascular diseases, diabetes, gastritis, hepatitis, skin disorders and urinary tract infections. |
| 39. | <i>Ficus religiosa</i> L. | Moraceae | Arasamaram | Tree | Bark, fruits, tender shoots, latex and seeds | Diarrhoea, diabetes, epilepsy, inflammatory disorders, gastric problems, dysentery, gonorrhoea, ulcers, scabies, skin diseases, asthma and sexual disorders. |
| 40. | <i>Gmelina arborea</i> Roxb. | Verbenaceae | Kumalaamaram / Kumil | Shrub | Root, leaves, flower, bark and fruit | Stomachic, laxative, anthelmintic, low appetite, hallucination, piles, abdominal pains, burning sensations, fevers, urinary discharge, diuretic, tonic, aphrodisiac, alternative and astringent to the bowels. |
| 41. | <i>Gomphrena decumbens</i> | Amarantaceae | - | Herb | Whole plant | Bronchial asthma, diarrhoea, pains, tonic, carminative, |



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| | Jacq. | | | | | diabetes, dermatitis and piles. |
| 42. | <i>Gynandropsis pentaphylla</i> Dc. | Capparidaceae | Velai / Naivela | Herb | Roots, seeds, leaves and seeds | Rheumatism, scorpion stings, snake bite, leprosy, abscess, blocked nose, constipation, pain, earache, headache, malaria, bronchitis, fever and asthma. |
| 43. | <i>Heliotropium subulatum</i> Hochst. | Boraginaceae | Tetkotukki | Herb | Leaves and stems | Gout, rheumatism and as antiseptic, febrifuge, cholagogue, skin wounds, anti-inflammatory and healing agents. |
| 44. | <i>Holoptelea integrifolia</i> Pl. | Ulmaceae | Avimaram | Tree | Bark | Inflammation, gastritis, dyspepsia, colic, intestinal worms, vomiting, wound healing, leprosy, diabetes, hemorrhoids, dysmenorrhea, rheumatism, obesity, edema and bronchitis. |
| 45. | <i>Indigofera enneaphylla</i> L. | Fabaceae | Sheppunerunji | Herb | Whole plant | Wound healer, antiscorbutic, diuretic, alterative, anti- diarrhoeal and analgesic. |
| 46. | <i>Ionidium suffruticosum</i> Ging. | Violaceae | Orilaitthamarai | Herb | Whole plant | Diuretic, demulcent, tonic and scorpion sting. |
| 47. | <i>Ixora coccinea</i> L. | Rubiaceae | Idly poo / Vetchi | Shrub | Leaves, roots and flowers | Astringent, antiseptic, blood-purifier, sedative, antileucorrhoeic, antidiarrhoeal, dysentery, tuberculosis, fever, headache, colic, anti-catarrhal, dysmenorrhoea, haemoptysis, bronchitis and dysmenorrhoea. |
| 48. | <i>Jasminum sambac</i> Ait. | Oleaceae | Gundu Malli | Shrub | Leaves, root, stem, bark and flowers | Anti-depressant, antiseptic, cicatrisant, aphrodisiac, expectorant, anti-spasmodic, galactagogue, <i>sedative</i> , parturient, uterine, tonic and thermogenic. |
| 49. | <i>Lochnera pusilla</i> K. Schum. | Apocynaceae | Nithya Kalyani / Sudukaatu Mallikai | Herb | Root and bark | Leukemias, lymphomas, malaria, childhood cancer, tonic, astringent and diabetes. |
| 50. | <i>Mangifera indica</i> L. | Anacardiaceae | Mamaram | Tree | Stem, bark and leaves | Asthma, astringent, heat stroke restorative tonic, invigorating and freshening. |
| 51. | <i>Melothria perpusilla</i> Cogn. | Cucurbitaceae | Pattiramatantai | Climber | Whole plant | Jaundice and kidney disorders |
| 52. | <i>Millingtonia hortensis</i> L.f. | Bignoniaceae | Kat-malli | Tree | Root, stem, bark, leaves and flower | Antipyretic, sinusitis, cholagogue, fever, tonic and asthma. |
| 53. | <i>Mollugo nudicaulis</i> Lam. | Aizoaceae | Parpadagam | Herb | Whole plant | Stomachic, emmenagogue, aperients, antiseptic, to promote the menstrual discharge and anti-periodic. |
| 54. | <i>Moringa oleifera</i> Lam. | Moringaceae | Murungai | Tree | Leaves, flowers, fruits, seeds and bark | Anemia, arthritis, asthma, cancer, constipation, diabetes, rheumatism, diarrhea, epilepsy, stomach pain and parasitic infections. |
| 55. | <i>Murraya koenigii</i> Spr. | Rutaceae | Kariveppilai | Shrub | Leaves, bark and root | Anti-diabetic, antioxidant, antimicrobial, anti-inflammatory, tonic, stomachic, pungent, stimulant, cure eruptions, anti- carcinogenic and hepatoprotective. |



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| 56. | <i>Ocimum sanctum</i> L. | Lamiaceae | Tulasi | Herb | Leaves | Digestive fire, manage skin diseases, blood impurities, chest pain and vata, kapha disorders, bronchitis, malaria, diarrhoea, dysentery, skin disease, arthritis, eye diseases, insect bites, cold and cough. |
| 57. | <i>Oldenlandia umbellata</i> L. | Rubiaceae | Saayavaer | Herb | Leaves and root | Bronchitis, asthma, consumption, cough, cold, fever and blood vomiting. |
| 58. | <i>Pachygone ovata</i> Miers. | Menispermaceae | Kaattukkodi | Climber | Folk | Diabetes, oedema, pain, rheumatoid arthritis, bone fracture, nephritis, pyrexia and hypertension. |
| 59. | <i>Passiflora foetida</i> L. | Passifloraceae | Siruppunaikkali | Climber | Whole plant | Diarrhoea, asthma, debility, epilepsy, headache, inflammation, liver diseases, skin disorder, wounds, biliousness, fever, insomnia, stomach ache, tumors, cold, dysphasia, indigestion, itching, pain, stress and whooping cough. |
| 60. | <i>Pedilanthus tithymaloides</i> Poit. | Euphorbiaceae | Kandai kalli | Shrub | Leaves | Emetic, anti-inflammatory, antibiotic, antiseptic, anti-hemorrhagic, antiviral, antitumoral and abortive. |
| 61. | <i>Peristrophe bicalyculata</i> Nees. | Acanthaceae | Nagananda | Herb | Root | Hysteria, lecoderma, anti-inflammatory, analgesic activity, psychomotor disorder, skin diseases, fever and cough. |
| 62. | <i>Phyllanthus maderaspatensis</i> L. | Euphorbiaceae | Nila-nelli | Herb | Leaves and seed | Laxative, carminative, diuretic, astringent, headache, bronchitis, earache, ophthalmia, ascites and jaundice. |
| 63. | <i>Phyllanthus niruri</i> L. | Euphorbiaceae | Kizhanelli | Herb | Whole plant | Kidney stones, gall stones, liver health, stomach, genitourinary system, liver, kidney, spleen and diabetes. |
| 64. | <i>Pisonia grandis</i> R. Br. | Nyctaginaceae | Illachaikkettayilai | Tree | Leaves | Anti-diabetic, anti-inflammatory wound healing, diuretic, analgesic, filariasis, dysentery and rheumatic disorders. |
| 65. | <i>Plumeria alba</i> L. | Apocynaceae | Perungalli | Shrub | Seed, latex, root and leaves | Ascites, itching, leprosy, piles, toothache, gonorrhoea, jaundice, malaria, scabies, herpes, joint pain and syphilis. |
| 66. | <i>Polyalthia longifolia</i> Hk.f. & T. | Annonaceae | Vansulam | Tree | Bark, leaves and seeds | Skin disease, fever, diabetes, hypertension, helminthiasis and febrifuge. |
| 67. | <i>Polygala persicariaefolia</i> Dc. | Polygalaceae | Milakunankai | Herb | Leaves, roots and bark | Diuretic, inflammation, common cold, convulsions and bleeding wounds. |
| 68. | <i>Polygala rosmarinifolia</i> W. & A. | Polygalaceae | - | Herb | Whole plant | Inflammation. |
| 69. | <i>Pongamia glabra</i> Vent. | Fabaceae | Pongum | Tree | Fruits, leaves, dried root, bark, seed, seed oil and flower | Tumors, piles, leprosy, diarrhoea, muscle cramp, whooping cough, arthritis, sinusitis, ringworm, baldness, ulcers, gonorrhoea, cleaning gums, teeth, vaginal and skin diseases. |
| 70. | <i>Portulaca oleracea</i> L. | Portulacaceae | Parup-pukirai | Herb | Leaves | Refrigerant, diuretic, mild spasmodic, stomatitis and dysentery. |
| 71. | <i>Priva leptostachya</i> Juss. | Verbenaceae | - | Herb | - | Healing wounds, anti-fertility, cure ulcers and diarrhoea, inflammatory diseases, allergic dermatitis, gout and itch, |



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| | | | | | | larvicide, insecticide, parasiticide and detoxifying agent. |
| 72. | <i>Psidium guajava</i> L. | Myrtaceae | Koiya | Tree | Leaves and Fruit | Diarrhoea, diabetes, dysmenorrhea, hyperlipidemia and hypertension. |
| 73. | <i>Quisqualis indica</i> L. | Compretaceae | Irangun malli | Shrub | Fruit, leaves and seeds | Insecticide, improves spleen function, digestion, treats diarrhoea, cough, rheumatism, fever, combat nephritis, astringent and anthelmintic. |
| 74. | <i>Rhynchosia minima</i> Dc. | Fabaceae | Kaliyanatuvarai | Herb | Root | Abortifacients, ecbolics, general healing, sickness such as haemorrhoids, heart, diarrhoea, dysentery and miscellaneous poison. |
| 75. | <i>Ruellia prostrata</i> Poir. | Acanthaceae | Pottakanchi | Herb | Aerial parts | Anthelmintic, whooping cough, stomach ache, emesis, analgesia, nociceptive pain, inflammation, renopathy and syphilis, headache and dizziness. |
| 76. | <i>Ruellia tuberosa</i> L. | Acanthaceae | Pattaskai | Herb | Roots and leaves | Bladder stones, heart disease, infections, kidney failure, syphilis, cancer, high blood pressure, joint pain, muscle cramp, gonorrhoea, high cholesterol, kidney diseases, stomach ache and whooping cough. |
| 77. | <i>Sida acuta</i> Burm. | Malvaceae | Vathathiruppi | Shrub | Roots and leaves | Diuretic, demulcent, anthelmintic, wound healing, astringent, cooling, stomachic, febrifuge, diuretic, sexual debility, haemorrhoids, demulcent and elephantiasis. |
| 78. | <i>Sida cordifolia</i> L. | Malvaceae | Nilatutti | Herb | Roots, leaves, seeds and stems | High blood pressure, heart attacks, muscle disorders, strokes, irregular heartbeat, loss of consciousness, <i>astringent</i> , emollient and aphrodisiac. |
| 79. | <i>Talinum cuneifolium</i> Willd. | Caryophyllaceae | Pasalai | Herb | Leaves | Cough gastritis, pulmonary tuberculosis, diarrhoea, gonorrhoea and constipation. |
| 80. | <i>Tectona grandis</i> L. f. | Lamiaceae | Tekku | Tree | Whole plant | Cooling, laxative, sedative, piles, leucoderma, dysentery, bronchitis, biliousness, urinary discharges, scabies, headache, burning sensation and anthelmintic. |
| 81. | <i>Tephrosia purpurea</i> Pers. | Fabaceae | Kolingi | Tree | Whole plant, seeds, root-bark and root | Leprosy, ulcers, asthma, tumors, anthelmintic, alexiteric, restorative, antipyretic, digestible, tonic and laxative. |
| 82. | <i>Thespesia populnea</i> Cav. | Malvaceae | Poovarsu | Tree | Stem, bark, root and oil | Ulcers, abscess, burns, haemophilia, inflammation, nose bleed, skin diseases, wounds, diarrhoea, infections, leucoderma, scabies, diabetes, itching, ringworm and throat disorder. |
| 83. | <i>Tinospora cordifolia</i> Miers. | Menispermaceae | Seenthil | Climber | Stem | Dyspepsia, helminthiasis, burning sensation, hyperdipsia, stomachalgia, intermittent fevers, chronic fevers, inflammations, gout, vomiting, cardiac debility, skin diseases, leprosy, anaemia, cough, asthma, jaundice, seminal weakness and splenopathy. |

| | | | | | | |
|-----|-----------------------------------|----------------|--------------------|------|------------------------|--|
| 84. | <i>Tribulus terrestris</i> L. | Zygophyllaceae | Nerinji | Herb | Fruit | Asthma, cough, cold, urinary stone, incontinence of urine, headaches, eye problems such as itching, conjunctivitis, weak vision and nervousness. |
| 85. | <i>Trichodesma indicum</i> R. Br. | Boraginaceae | Kallutaitumpai | Herb | Leaves and roots | Arthritis, anorexia, dysentery, skin diseases, poisoning and wound healing. |
| 86. | <i>Tridax procumbens</i> L. | Asteraceae | Vettukkaaya-thalai | Herb | Whole plant | Wound healing, anticoagulant, antifungal, insect repellent, skin diseases, diarrhoea and dysentery. |
| 87. | <i>Vernonia cinerea</i> Less. | Asteraceae | Neichati | Herb | Leaves, seed and roots | Roundworms, threadworms, coughs, flatulence, intestinal colic, dysuria, leucoderma, psoriasis and other chronic skin diseases. |
| 88. | <i>Wedelia biflora</i> Dc. | Asteraceae | Manjalkarilamkanni | Herb | Roots and leaves | Acne, cystinosis, nausea, stomach ache, appendicitis, dysentery, ulcers, orchitis, muscle sprains and ringworm. |
| 89. | <i>Wrightia tinctoria</i> R.Br. | Apocynaceae | Veppalai | Tree | Leaves, bark and seeds | Used in the treatment of piles and skin diseases like ringworm, leprosy and kidney stones. |

Plate 1: Some Snapshots of Medicinal Plants in Study Area

***Adatoda vasica* Ness.**



***Euphorbia hirta* L.**



***Digera arvensis* Forsk.**



***Tribulus terrestris* L.**



***Commelina benghalensis* L.**



***Talinum cuneifolium* Willd.**



***Trichodesma indicum* R. Br.**

***Passiflora foetida* L.**

***Boerhaavia diffusa* L.**

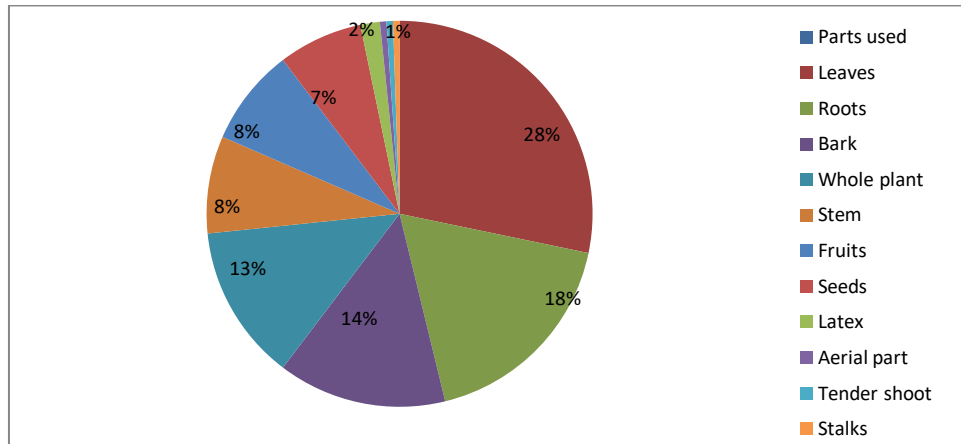


Figure 3: Pie diagram showing the percentage of parts used as medicinal curatives

CONCLUSION

This study shows that processing and consuming medicinal plants are still practiced in all states of India. Due to an increasing health service facility, herbal medicines are mostly used to prevent diseases than cure. From this survey we concluded that Vellalar college campus is enriched with very precious and medicinally useful herbals. An additional research analysis is required to preserve the bioresources that is slowly declining in this area of campus. This study will promote a practical use of botanicals and must be continued focusing on its pharmacological validation. Further detailed exploration and collection of ethnobotanical information, chemical studies and screening for medicinal properties will provide cost effective and reliable source of medicine for the welfare of humanity.

REFERENCES

1. Grundy C, et al., WHO global atlas of traditional, complementary and alternative medicine. 2005.
2. Vijayaraj R, Manikandan M and Jaqueline Chinna Rani I. An Ethnobotanical Survey of Herbals in Loyola College Campus, Nungambakkam, Chennai, Tamil Nadu, India. *Int. J. Curr. Res.*, 9(3), 2017, 48313-48317.
3. Elizabeth M and D. Dowdeswell, In global biodiversity assessment. UNEP, CUP, UK, pp: 80-89. 1995.
4. Prance GT, Plant diversity and conservation. 9th Biennial Botanical Conference, 25, 1997, 29-37.
5. Sharmila S, Kalaichelvi K and Rajeswari M. Certain Endemic and Ethnobotanically Important Plants of Thiashola, Manjoor, Nilgiris South Division, Western Ghats. *Int. J. Pharm. Sci. Rev. Res.*, 27(2), 2014, 314-318.
6. Dhivya SM and kalaichelvi K, A study on traditional medicinal plants of Pillur beat (Pillur slope RF and Nellithurai RF), Karamadai range, Coimbatore district, Tamil Nadu. *J. Pharm. Bio. Res.* 4(2), 2016, 39-51.
7. Gamble JS and Fischer CEC. Flora of the Presidency of Madras. 1-3, Calcutta, 1967.
8. Matthew KM. The Flora of the Tamil Nadu Carnatic. The Rapinet Herbarium, St. Joseph's College, Tiruchirappalli. 3, 1983, 278-279.
9. Sujatha G and Mariya S. Ethnomedicinal survey of flora used by Chettaipatti inhabitants, Manapparai. *Asi. J. Bioche. Pharm. Res.* 4(5), 2015, 16-31.
10. Sharmila S, Kalaichelvi K and Abirami P. Ethnopharmacobotanical Informations of some herbaceous medicinal plants used by Toda tribes of Thiashola, Manjoor, Nilgiris, Western Ghats, Tamil Nadu, India. *Int. J. Pharm. Sci. Res.*, 6(1), 2015, 315-320.
11. Balakrishnan V, Prema P, Ravindran KC and Philip Robinson J. Ethnobotanical Studies among Villagers from Dharapuram Taluk, Tamil Nadu, India. *G. J. Pharm.* 3 (1), 2009, 08-14.
12. Anita M. Medicinal and Aromatic Plants: Monitoring the Effectiveness of Biological Conservation. 2004.

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