



ENVIS NEWSLETTER



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HERBAL GARDEN IN PUDUCHERRY REGION



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ENVIS CENTER

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HERBAL GARDEN IN PUDUCHERRY REGION

Medicinal plants

Medicinal plants have been identified and used throughout human history. Plants synthesize many chemical compounds that are for biological functions, including defence against insects, fungi and herbivorous mammals. At least 12,000 such compounds have been isolated so far; a number estimated to be less than 10% of the total. Chemical compounds in plants mediate their effect on the human body through processes identical to those already well understood for the chemical compounds in conventional drugs; thus herbal medicines do not differ greatly from conventional drugs in terms of how they work. This enables herbal medicines to have beneficial pharmacology, but also gives

them the same potential as conventional pharmaceutical drugs to cause harmful side effects. Moreover plant material comes with a variety of compounds which may have undesired effects, though these can be reduced by processing.

In India numerous plant species are used in traditional health care systems such as Ayurveda, Siddha, Unani and folk medicine practices. The booming of traditional medicine industry results in an increasing demand on medicinal plant products. 90% of the medicinal plants come from natural habitats. The declining availability of such plants and the fading of local traditional knowledge make the sustainable management of natural habitats a crucial environmental issue in South

India, concerning biodiversity conservation and welfare of local communities. For conservation of biodiversity resource, Government of India enacted the Biological Diversity Act, 2002.

The ground floor of PPCC Laboratory located at ground floor, Mettupalayam had a parking place. An NGO M/s Suttru Soozhal Kalvi Kazhagam Organization has been assigned to set up herbal garden on that vacant space. The site used to be occupied with debris & bushes. The NGO members had first cleared the ground. Then the land was made suitable for plantation and levelled. Fertile soil and cow dung were mixed in the land. Manures were put in, passages and partitions were made. Tree saplings were planted along the

compound wall and along the road sides. Catchy slogans were written in tamil. After seven months of hard work the land was well prepared for planting. During February 2014, indigenous herbs with medicinal value herbs were bought and collected from various places and planted. It had transformed itself into a herbal garden now. List of medicinal plant species present in the herbal garden is tabulated at Table-1. Regular awareness classes for students and public are conducted twice a week. It gives great pleasure among the students and



public while seeing the plenty of medicinal herbs at one place and rare collection of the herbs.




Hundreds of students of various govt. and private schools and the general public home visited the garden so far.

Retd. Teacher Mr. Ramanathan, organizer of M/s Suttru Soozhal Kalvi Kazhagam who conducts regular workshop, awareness camp to Public & School students in the herbal garden about the medicinal value of the plants, its

conservation and diversity of species. This department acknowledges the effort taken by Mr. Ramanathan who has taken great initiative in creating the herbal garden in the campus.

Several Workshops have been organized for the school students/Public issues on various fields such as seed collection, nursery raising, vermiculture, kitchen garden, Roof Top garden raising and so on. Every Friday, students and public visit to the herbal garden and learns about





the herbs and the usefulness of them in day to day life. Till date, innumerable insects, dragonflies, beetles, bees, butterflies and birds, have come back to the garden.

Creating Environment awareness for the young buds

Department of Science, Technology & Environment along with Suttru Soozhal Kalvi Kazhagam (NGO's) Puducherry, have



been regularly organising environment awareness programme through Puppet show in many of the schools. The school students actively participating and enjoying








the Puppet show. The show was very fruitful for the students in understanding the value

















of Environment; it imparts Environmental education, awareness among the young minds. This visual mode facilitates in spreading Environment issues upto grass root level.

















Table : 1. IMPORTANT OF INDIGENOUS MEDICINAL HERBS



S.NO.	BOTANICAL NAME	FAMILY NAME	MEDICINAL USES
1.	Cissus quadrangularis  பிரண்டை	Vitaceae	Curing Bone fractures. Curing Diabetes. Curing Scurvy. Treating Cancer.
2.	Ocimum tenuiflorum  துளசி	Lamiaceae	Common cold and fever Cough treatment Relieving headache Relieving stress
3.	Spilanthes paniculata  பல்வலிப்பூண்டு	Asteraceae	Curing Gums and mouth pain Treating painful cancer sores Curing disinfecting wounds
4.	Cymbopogon flexuosus  எலிமிச்சைபூல்	Poaceae	Inflammation Hair problems Infections Fever
5.	Ocimum basilicum  திருநீற்றுப்பச்சிலை	Lamiaceae	Loss of appetite. Intestinal gas relief. Stomach spasms. Curing kidney disorders.
6.	Coleus amboinicus  ஓமவல்வி	Lamiaceae	Relief cough Promotes the flow of urine. Promotes menstrual flow. For indigestion discomfort
7	Catharanthus roseus  நித்தியகல்யாணி	Apocynaceae	Curing high blood pressure Anticancer agent. Treatment of lung cancer. Curing Leukaemia.

8.	Hemidesmus indicus  நன்னாரி	Periplocaceae	Treating skin diseases Curing fever Useful in diabetes, urinary tract disorders Improves respiratory conditions
9.	Marsilea quadrifolia  நீர் ஆரை	Marsileaceae	To treat ulcers, fever, loss of appetite, To treat Diarrhea It purifies blood, Curing diuretic and emetic
10.	Stachytarpheta urticaefolia  எழுத்தாணிப்பூண்டு	Verbenaceae	Fevers (including yellow fever) and allergies Relieving stomach problems Suppress coughs, increase perspiration and promote menstruation.
11.	Solanum Xanthocarpum  கண்டங்கத்தரி	Solanaceae	Cough Epilepsy Liver Swelling and infection Vomiting and nausea during pregnancy
12.	Eclipta prostrata  மஞ்சள் கரிசலாங்கண்ணி	Asteraceae	To promote growth of hair. useful in coughs, cephalalgia, skin diseases, and alopecia. Treat cephalalgia.
13.	Euphorbia geniculata  பால்பெருக்கி	Euphorbiaceae	To keep the body cool. It cures the thirsty feeling Increases body resistance.
14.	Acalypha indica  குப்பைமேனி	Euphorbiaceae	Promotes the flow of urine. Bronchitis, asthma, pneumonia and rheumatism. Treat Scabies and other skin diseases.

15.	Centella asiatica  வல்லாரை	Hydrocotylaceae	Curing Wound healing. Common cold and flu. Treat Urinary tract infection (UTI). Treat Hepatitis and
16.	Cassia alata  சீமை அகத்தி	Caesalpiniaceae	Skin problems To cure stomach pain Cure dysmenorrhoea, abdominal pain, and uterine spasms.
17.	Erythrina indica  கல்யாண முருங்கை	Fabaceae	Pain reliever. It helps nervous system. Stimulates liver Dilates the blood vessels.
18.	Andrographis paniculata  நிலவேம்பு	Acanthaceae	Arthritis, muscle aches and back ache Relief Joint pains Cure Insomnia Urinary tract infections
19	Ricinus communis  ஆமணக்கு	Euphorbiaceae	Treat dyspepsia and fever Treat rheumatism Curing gastric problem
20.	Anisomeles malabarica  பேய்மிரட்டி	Lamiaceae	Curing Asthma, cold, cough and Flu Prevent throat infection Increase blood circulation Reduce heat and gas disorder in human body
21.	Solanum trilobatum  தூது வளை	Solanaceae	Treat diuretic, laxative, antipyretic, chewed to disinfect mouth and throat. Relief headache Curing chicken pox Cure fever and pain

22.	Sesbania grandiflora  அகத்தி	Fabaceae	To possess diuretic and demulcent properties To improve memory, vitality, asthma, fever and leprosy. To remove dandruff
23.	Hybanthus enneaspermus  ஓரிதழ்த் தாமரை	Violaceae	Reducing the over weight or obesity. Cure bloody diarrhoea. Treat urinary infections
24.	Spermacoce hispida  நத்தைச் சூரி	Rubiaceae	To treat leprosy, fever, asthma, bronchitis, and jaundice. Treat skin diseases Curing Rabies.
25.	Coccinia grandis  கோவை	Cucurbitaceae	To cure wounds Relief Headache Treat piles and skin rashes
26.	Cynodon dactylon  அறுகம்புல்	Poaceae	Treat leprosy Treat liver problems. Control abortions. Treat itching and skin ulcers
27.	Azadirachta indica  வேம்பு	Meliaceae	Treat Asthma Relief Cough Stomachache Tuberculosis Malaria
28.	Adhatoda vasica  ஆடாதொடை	Acanthaceae	To treat leprosy Cure ulcers and headaches Quick pregnancy Cure pile complaints.

29	Abutilon indicum  துத்தி	Malvaceae	To cure dysentery Treat Liver disorders To relieve baldness Cure Headache
30	Lawsonia inermis  மறுதோன்றி	Lythraceae	To cure malaria, ulcer, fever, abortion and breast cancer Relief from anxiety. To reduce body weight.
31	Sida acuta  அரிவாள்மணைப் பூண்டு	Malvaceae	To treat sick animals To treat nausea, vomiting and diarrhea Treat skin disease Cure snake-bites
32	Jatropha curcas  காட்டாமணக்கு	Euphorbiaceae	Used as pet food. To treat skin disease Treat leprosy, ringworm, itching Cure snakebites.
33	Cassia tora  ஊசித்தகரை	Caesalpinaceae	Treat fevers, diarrhoea, scabies, piles, ulcers, colds, asthma, Cure Cardiac disorders, Curing Baldness and skin diseases.
34	Datura innoxia  ஊமத்தை	Solanaceae	Mouth freshener. Treatment of respiratory catarrhs To suppress the secretion of milk in mammary abscesses.
35	Piper betel  வெற்றிலை	Piperaceae	Mouth freshener. Treatment of respiratory catarrhs To suppress the secretion of milk in mammary abscesses.

36	Moringa Pterygosperma  முருங்கை	Moringaceae	Cure digestive disorder Reduce Blood pressure Treat kidney stone
37	Alpinia calcata  சிற்றத்தை	Zingiberaceae	Treat reproductive competence. Relief pain from rat bit.

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