




## **BEST PRACTICE - GROWING MEDICINAL PLANTS**

### **DEPARTMENT OF BOTANY**

#### **Objectives**

- 1. To provide awareness to students and staff about the importance of medicinal plants**
  - 2. Growing medicinal plants help in protecting the heritage and traditional knowledge systems of the country.**
  - 3. medicinal plants and saplings to local population and student community**
  - 4. Propagate the medicinal value of the plants of the region among the local population so that they protect it without any further persuasion**
  - 5. To provide study material for education and research purpose.**
  - 6. Medicinal plant garden provides option for temporary remedy to small health problems.**
  - 7. Medicinal plants can be used for Ayurvedic herbal preparations.**
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## **Practice**

**Haritha Krishna Eco-club, the vital wing of Department of Botany takes initiative of growing medicinal plants in the botanical garden. Medicinal plants play a key role in the treatment of a number of diseases and provide the great source for temporary or alternative medicine for majority of people in the country. They serve as ready reference for study purpose. These medicinal plants are grown in a separate bed and the saplings are distributed to the local public. These medicinal plants are labelled to display their local and scientific names, family and medicinal value for easy identification. A record of plants in the garden is maintained and the track of growth patterns of the plants and the effectiveness of treating various health issues also recorded.**

## **Outcomes:**


- **Faculty and students using these medicinal plants for treating many small health issues and getting relief.**
- **Faculty and students extracted active chemicals and published articles on medicinal properties.**









developing world. Institution maintains as many as about 120 medicinal plants are being planted and documented in the department. The most common plants like the *Mimosa pudica*, *Piper nigrum*, *Andrographis paniculate* and *Calotropis gigantea* and *Tridax procumbens*, are some of the important plants of the medicinal plant garden.

**List of medicinal plants**

- 1. *Achyranth aspera***
  - 2. *Acalypha indica***
  - 3. *Aclipta prostrata***
  - 4. *Adhatoda vasica***
  - 5. *Aegle lantana***
  - 6. *Alangium salvifolium***
  - 7. *Aloevera***
  - 8. *Alpinia calcarata***
  - 9. *Alstonia scholaris***
  - 10. *Alternanthera paronychiodes***
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10. *Amaranthus spinosus*
  11. *Amorphallus campanulatus*
  12. *Andrographis paniculata*
  13. *Argemone mexicana*
  14. *Argyreia nervosa*
  15. *Aristolochia tagala*
  16. *Asparagus racemosus*
  17. *Bacopa horibunda*
  18. *Bixa orellana*
  19. *Boerhaavia diffusa*
  20. *Calophyllum inophyllum*
  21. *Calatropis procera*
  22. *Canna indica*
  23. *Catharanthus roseus*
  24. *Cinnamomum zeylanicum*
  25. *Cissus quadrangularis*
  26. *Cleoma gynandra*
  27. *Cleoma viscosa*
  28. *Clitoris ternatea*
  29. *Coffee arabica*
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30. *Colevs amboiuicus*
  31. *Coriandum sativum*
  32. *Curcuma amade*
  33. *Curcuma longa*
  34. *Cuscuta reflexa*
  35. *Emblica officinalis*
  36. *Eucalyptus globulus*
  37. *Euphorbia hirta*
  38. *Ficus benghalensis*
  39. *Azadirachta indica*
  40. *Hibiscus rosa-sinensis*
  41. *Hybanthus enneaspe*
  42. *Jasminum sambac*
  43. *Jatropha curcas*
  44. *Lasania inernis*
  45. *Twnofora cardifolia*
  46. *Ocinum sanctum*
  47. *Plambago zeylanica*
  48. *Phyllanthus niruri*

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- 49. *Piper attenuatum***
  - 50. *Piper longum***
  - 51. *Hemidesmus indicus***
  - 52. *Ravuolfia tetraphylla***
  - 53. *Ricinus communis***
  - 54. *Uitex negundo***
  - 55. *Pistia stratiotes***
  - 56. *Murraya koenigii***
  - 57. *Portulaca oleracea***
  - 58. *Piper nigrum***
  - 59. *Nerium odonum***
  - 60. *Punic granatum***
  - 61. *Ficus religiosa***



## MEDICINAL PLANTS



Tulasi	Leaves
Botanical name :- <i>Ocimum sanctum</i>	
Family: - Lamiaceae	
Drugs:- Oleanolic Acid, Ursolic Acid	
Medicinal Use: cold, teeth ache, eczema, earache. Anti kapha	



Machi papatram    Leaves  
Botanical name :- *Artemisia indica*  
Family: - *Astraceae*  
Drugs:- Sabionen, Cymene  
Medicinal Use: Aromatic, tonic, anti malarial  
, digestive & anti insecticidal properties



**Bilvapatram (Maredu) Plant**  
**Botanical name :- *Aegle marmelos***  
**Family: - Rutaceae**  
**Drugs:- Furocoumarins, Rutin**  
**Medicinal Use: asthma, anemia, fractures,**  
**high blood pressure, jaundice, diarrhea,**  
**typhoid & diabetes**



Uttareni                      Botanical name :- *Achyranthes aspera*  
Family: - Amaranthaceae                      Leaves  
Drugs:- Oleanolic Acid, Aglycone  
Medicinal Use: eye and liver complaints, rheumatism, scabies and other skin diseases.  
diuretic





Pasupu                      Root  
 Botanical name :- *Curcuma longa*  
 Family: - Zingiberaceae  
 Drugs:- Curcumin, Tumerone  
 Medicinal Uses:- Stimulant , Antibiotic, and Jaundice



Allam                      Rhizome  
 Botanical name :- *Zinzibar officinalis*  
 Family: - Zingiberaceae  
 Drugs:- Gingerols, Zingerone.  
 Medicinal Uses:- Digestive, cough, cold, impotency, ache and pain



Saraswati Aaku              Leaves  
 Botanical name :- *Centella asiatica*  
 Family: - Apiaceae  
 Drugs:- Asiatic Acid , Brahmic Acid.  
 Medicinal Uses:- Varicosa veins, Psoriasis



Kaccuralu                      Rhizome  
 Botanical name :- *Curcuma zedoaria*  
 Family: - Zingiberaceae  
 Drugs:- Zedoary  
 Medicinal Uses:- Inflammation Pain , Ulcers





Aticamamidi      Whole Plant  
 Botanical name :- *Boerhavia diffusa*  
 Family: - Nyctoginaceae  
 Drugs: Punarnavine  
 Medicinal Uses:- Diuritic, AntiDropsy, and AntiAsthma.



Reddivarinanubalu      Whole Plant  
 Botanical name :- *Euphorbia hirta*  
 Family: - Euphorbiaceae  
 Drugs: Afzelin, Quercitrin & Myricitrin  
 Medicinal Uses:- Bronchitis, Heart, milk production, gonorrhea



Nimmagaddi      Leaves  
 Botanical name :- *Cymbopogon citratus*  
 Family: - Poaceae  
 Drugs :- Geranial , Neral and Myrcene  
 Medicinal Uses:- pain relief, soaps cosmetics



Nalleru      Whole Plant  
 Botanical name :- *Cissus Quadraangularis*  
 Family: - Vitaceae  
 Drugs :- Iridoids, Catalpol, Stilbenes, and Palloidal.  
 Medicinal Uses:- Joining Bones, Asthma, Bowel Complaints, Scurvy





Gorintaku                      Leaves and seeds  
 Botanical name :- *Lawsonia inermis*  
 Family: - Lythraceae  
 Drugs:- Lawsone  
 Medicinal Uses :- Red dye for skin , Hair, wounds , Ulcers , coughs



Tippateega                      Stem  
 Botanical name :- *Tenospora cordifolia*  
 Family: -Menispermaceae  
 Drugs:- Bebbarin and Gilain  
 Medicinal use:- Antiallergic, antidiabetic, Antipyretic



Tummi                      Leaves and Flowers  
 Botanical name :- *Leucas aspera*  
 Family: - Lamiaceae  
 Drugs:- Phytol and methyle easter  
 Medicinal Uses:- Cough and antibacterial , Vatha and Coupba.



Anthara tamara                      Leaves  
 Botanical name :- *Pistia stratiotes*  
 Family: - Araceae  
 Drugs:- Stigmasterol.  
 Medicinal Uses;- Rich in vitamins- AB&C, Diuretic, Skin diseases





Gadida gadapa                      Root  
 Botanical name :- *Aristolochia bracteolata*  
 Family: - Aristolochiaceae  
 Drugs:- Aristolactams, Aporphines  
 Medicinal use:- Gastric stimulant, snake Bites  
 and Tooth Ache.



Sankupushpi                      Root and Seeds  
 Botanical name :- *Clitoria ternatea*  
 Family: - Fabaceae  
 Drugs:- Clotides  
 Medicinal uses :- Insecticide, Nervine tonic ,  
 rheumatism swollen joints.



Attipatti                      Plant & Root  
 Botanical name :- *Mimosa pudica*  
 Family: - Mimosaceae  
 Drugs:- Mimosin  
 Medicinal uses:- Piles, skin wounds, fistula  
 Diabetes and Whooping cough



Chitramulam                      Roots  
 Botanical name :- *Plumbago zylonica*  
 Family: - Plumbaginaceae  
 Drugs:- Plumbagin  
 Medicinal Uses:- Anti cancer





**Vepa** **Plant**  
 Botanical name :- *Azadirachta indica*  
 Family: - *Maliaceae*  
 Drugs:- Azadirachtin, Nimbin  
 Medicinal use:- Anti helminthic, antifungal , anti diabetic, antibacterial, antiviral, contraceptive, sedative. It is for skin diseases liverdiseases, detoxify the blood, fever reduction dental treatment and cough etc.



**Kalabanda** **Leaves**  
 Botanical name :- *Aloe vera*  
 Family: - *Liliaceae*  
 Drugs:- Acemannan, Alonin.  
 Medicinal use:- Leaf extract used as purgative and in cosmetics.



**Guntagalagara** **Leaves**  
 Botanical name :- *Eclipta alba*  
 Family: - *Asteraceae*  
 Drugs:- Ecliptasaphonin, Wedilolactin.  
 Medicinal use:- The herb tonic used in de obstruent in hepatic and spleen enlargements and in skin diseases, blackening and strengthening of the hair.



**Jammi** **Bark and fruit**  
 Botanical name :- *Prosopis cineraria*  
 Family: - *Fabaceae*  
 Drugs:- Glycosides , Steroles  
 Medicinal use:- Balancing kapha and Pitta. Antitumors , Antypyretic





Ravi                      Leaves and Bark  
 Botanical name :- *Ficus religiosa*  
 Family: - Moraceae  
 Drugs:- Lanosterol, Bergapten,  
 Medicinal Use: Digestive enhances,  
 reproductivity, & pacifying



Tella maddi.              Bark  
 Botanical name :- *Terminalia arjuna*  
 Family: - Combretaceae  
 Drugs:- Arjunic Acid, Arjunlic Acid  
 Medicinal Use: The decoction of bark is a  
 tonic in heart diseases

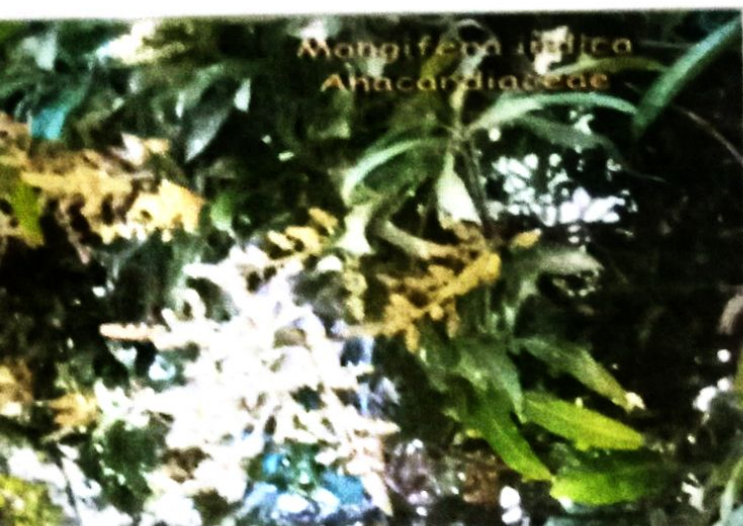


Nabhi                      Tuber and seed  
 Botanical name :- *Gloriosa superba*  
 Family: - Liliaceae  
 Drugs:- Colbicin and Gloriogin.  
 Medicinal Use: In treatment of piles swollen  
 joints, parasitical affections of skin, and for  
 stimulating labor pains.



Vasa                      Leaves  
 Botanical name :- *Adhatoda vasica*  
 Family: - Acanthaceae  
 Drugs:- Vasicine, Adhatodin.  
 Medicinal use:- Anti tuberculosis, Anti  
 diabetic, Anti cough.





Mamidi Plant  
Botanical name :- *Mangifera indica*  
Family: - Anacardiaceae  
Drugs:-Mangiferin, urushiols  
Medicinal Use: Fruits are edible; flowers are used in diarrhea, chronic dysentery and chronic urethritis. Extracts of bark, leaves, stem and unripe fruits are used as antibiotics for many ills; tender leaves are considered anti diabetic.



Genneru Fruit , leaves  
Botanical name :- *Nerium indicum*  
Family: - Apocyanaceae  
Drugs:- Oleandrin, Oleandrigienin  
Diuretic, for heart diseases, poisonous in high doses .



Danimma Leaves , Seeds and fruit pulp  
Botanical name :- *Punica granatum*  
Family: - Punicaceae  
Drugs:- Punicalagin, Punicalin  
Medicinal Use: To control motions, controls bleeding, anti pitta



Vavili- Leaves  
Botanical name :- *Vitex nigundo*  
Family: - Verbinaceae  
Drugs:- Casticin, Isoorientin.  
Medicinal Use: Anti vata, relieve pains in muscles and joints.