

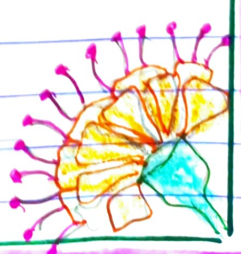


TTWRDC (G), MAHBUBABAD

BEST

PRACTICES

DEPARTMENT OF
BOTANY



AWARENESS OF

MEDICINAL

PLANTS

A Medicinal plant is any plant which in one or more of its organs, contains substances that can be used for therapeutic purposes and which are precursors for synthesis of useful drugs.

Medicinal plants have been discovered and used in traditional medicine practices since prehistoric times.

Medicinal plants are a potential source of biomolecules that play a major role in modern medicine in the treatment of diseases like cancer, diabetes and hypertension. They are also used as food, flavonoid, medicine, perfume and also in certain spiritual activities.

Main aim of this practice from department of Botany is that the students can learn about the safety and efficacy of a specific plant based medicine and present their findings to their peers.

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Tulasi/Tulsi

D

Common name :- Basil, Tulasi

Scientific name :- *Ocimum Sanctum*

Family :- Lamiaceae

Habitat :- Mesophytic, Herbaceous, Aromatic Perennial plant.

Importance :- It is a holy basil, which is used as medicinal plant. It shows many qualities such as "Antimicrobial, antifungal, antimalarial, mosquito repellent, anti-oxidant anti-inflammatory. It is used to treat common cold, cough etc. It promotes healthy heart.

Termeric

Common name :- Porsupu, Termeric, Haldi

Scientific name :- *Curcuma longa*

Family :- Zingiberaceae

Habitat :- Rhizome, underground. Producer of termeric.



Used as antibiotic, anti-inflammatory, reduces metabolic syndrome, arthritis, cholesterol in the blood, anxiety, muscle soreness after exercise, kidney health, improved brain health etc.

It is frequently used to flavor (or) colour curries, powders, mustards, butters, and cheese. It has the chemical called "CURCUMIN", which has the ability to reduce & relief from pain and inflammation.

2. Drumstick



Common name:- Drumstick, Munaga
 Scientific name:- *Moringa oleifera*
 Family :- Moringaceae
 Habitat :- Tree, semiarid, tropical & subtropical areas.

Importance & Medicinal use:-

Drumstick tree is a wonderful plant with edible leaves and fruits.

It is used for many medicinal purposes, such as *reducing swelling, preventing spasms, protecting the liver, boosting the immune system, lowering cholesterol etc.

Bramhi

Common name:- Bramhi, Saraswathi plant, Gota kola, Centella
 Scientific name:- *Centella asiatica*
 Family :- Apiaceae / Umbelliferae
 Habitat :- Herbaceous, frost tender flowering plant
 aquatic herb.

Medicinal uses & Importance:-

Uses It has lot of health benefits, used as brain tonic, it is said to aid intelligence, and memory. It is used to treat nervous disorders, epilepsy, senility and premature aging, used as blood purifier & treats mental illness, ulcers, etc. It has antimicrobial, anticancer, wound healing, neuroprotective, hepatoprotective, insecticidal and antioxidant qualities.



Aloe

Common name: Indian aloe, Aloevera, Grit Kamari etc.

Scientific name: Aloe barbadensis miller.

Family: Liliaceae

Habitat: Shrub, arborescent, perennial, xerophytic, succulent plant.

Importance &

Uses: - Aloe vera has many uses including natural moisturizer, relieve sunburns and house burns, reduces dandruff and promotes hair growth, used as natural mouthwash, helps to reduce acne & scars soothers from insect bites, wounds, cleanses colon improves skin and prevent wrinkles.

→ It helps to fight frost-bite

→ Reduce Psoriasis

~~Lemon grass~~

→ Reduce warts

→ Reduce aging

→ Reduce wrinkles

→ Reduce eczema

→ It improves joint flexibility helps in regeneration of



Flax plant

Common name: Flax, Avisalu
 Scientific name: *Linum usitatissimum*
 Family: Linaceae
 Habitat: Annual herbaceous plant

Importance & Uses

Decreases obesity, regulating blood pressure, preventing colon cancer, inflammation hot flashes. Flax seed can effect estrogen production in women, especially if they have a history of cancer. It is an alternative medicine to treat type 2 diabetes, high cholesterol, osteoporosis.

It improves digestive health

- > Relieving Constipation
- > Reduces the risk of Cardiovascular disease.
- > Improving blood sugar level.
- > Boosting the immune system
- > Promoting weight loss
- > Reduces risk of stroke.
- > Easing hot flashes.



Lemon grass

Common name - Lemon grass, Cymbopogon, Malabar grass.

Scientific name - Cymbopogon citratus, Stapf.

Family - Poaceae.

Habitat - Grass, native to tropical and warm temperate regions.

Importance &

Uses - It is a fragrance producing plant, the leaves and oil are used to make medicines. It is used for treating digestive tract spasms, stomachache, high blood pressure, convulsions, pain, vomiting, cough, achy joints, fever, common cold etc.

It shows.

- > Anti obesity
- > Anti bacterial
- > Anti fungal properties.



Karakkaya / Myrobalan



Common name! - Karakkaya, Indian hog plum,

Scientific name - Chebulic myrobalan

family → Terminalia chebula

→ Combretaceae

Habitat :- Tree, grow on dry slopes upto 3000 ft.
large deciduous trees

Importance &

Uses :- It promotes the peristalsis process helping to eat and digest better. Its super astringency quality maintains the integrity of tissues and digestive tract. It helps in the healthy secretion of mucosal membranes in the respiratory, digestive, urinary and reproductive systems. It is also used as laxative.

- It is an ingredient of ayurvedic preparation "Triphala".
- It is commercially used for dyeing and tanning industry, in treatment of water used for locomotion.
- Improves digestion
- Improves circulation
- Good for skin & reduces pimples
- Irritable bowel syndrome
- It is an expectorant.



Amla

Common name:- Amla, Indian gooseberry, Usiri

Scientific name:- *Phyllanthus emblica* (syn: *Embilica officinalis*)

Family :- Euphorbiaceae.

Habitat :- Small tree grows upto a height of 8 mts.

Importance

Uses :- Fruits of amla tree are used for ayurvedic preparations.

Amla fruit is praised as "DHATRI" (Goodness of health) in Ayurveda.

- Rich source of vit - c
- Reduces arthritis
- Anti-inflammatory, reducing swelling
- Causes sleeping disorder
- Treats liver damages due to drugs
- Improves insulin secretion
- Treats fatty liver disease
- Treats diabetes mellitus, Hypertension
- Boosts immunity
- Treats peptic ulcers
- Treats Anemia
- Treats skin disease.
- Prevents constipation
- Improves hair health
- Prevents anaemia.



Neem

Common name:- Neem, vepa, Margosa

Scientific name:- *Azadirachta indica*

Family :- Meliaceae.

Habitat :- It is a evergreen tree grows in tropical, & semi tropical regions, Native to India, Burma & Pakistan.

Importance:- All parts of Neem tree used as anthelmintic, antifungal, anti diabetic, antibacterial, antiviral, contraceptive and sedative.

- 1 In traditional Indian medicine. neem leaves are used to treat chicken pox.
- 1 And the decoction prepared from neem roots is ingested to relieve fever in traditional Indian medicine.
- Neem leaf is used for leprosy
 - 1 eye disorders
 - 1 bloody nose
 - 1 Intestinal Worms
 - 1 Stomach upset
 - 1 Skin ulcers
 - 1 Gum diseases (Gingivitis)
 - 1 Liver problems.



Ashwaganda

Common name:- Ashwaganda, Indian ginseng, winter cherry
 Scientific name:- Withania somnifera.
 Family :- Solanaceae.
 Habitat :- Evergreen shrub

Importance:- Commonly used for stress, (Artists)
 It is very effective for the treatment of diabetes.
 It helps in reducing hyperglycemia
 It is helpful in balancing and normalizing the hormonal secretions in the body leading to stress.
 It revitalizes body and decreases body fatigue caused due to accumulation of toxins in the body.

Ashwagandha is very beneficial in arthritis and joint pain treatment.

It works as an anti-inflammatory agent and reduces pain

Root extract support sexual health. It can be used both men & women to enhance sexual energy.



Senna

Common name:- Indian Senna / Thangedu.

Scientific name:- *Senna alexandrina*

Family :- Fabaceae

Habitat :- Shrubs, small trees

Importance &

Uses :- Senna is used on a short term basis to treat constipation.

It is also used to empty the bowels before surgery and certain medical procedures.

Boiled senna leaves decoction reduces bad breaths

Reduces stomach pain, when take along with fennel, ginger.

- Boosts immunity
- weight loss
- Treating skin infections
- Strong hair.
- Best laxative.



Tippateega

Common name: - Tippateega, Guduchi

Scientific name: - *Tinospora cordifolia*

Family: - Menispermaceae

Habitat: - Herbaceous liane/vine

Importance

Uses:- *Tinospora* has best medicinal use in the ayurvedic field. It boosts immunity, treats chronic fever, improves digestion, treats diabetes. Reduces stress and anxiety, fights respiratory problems, treats arthritis, reduces arthematic symptoms, improves vision, and reduces signs of aging.

It shows properties such as

- > Anti-allergy
- > Anti-diabetic
- > Anti-Hiv
- > Anti-cancer
- > Antimicrobial
- > Anti stress
- > Neuro protective
- > Anti diarrheal
- > Antipyretic
- > Analgesic
- > Antidepressant



PIPPALU

Common name :- Pippalu / Pippali, Long pepper
 Scientific name :- Piper longum
 Family :- Piperaceae
 Habitat :- Flowering vine.

Importance &

Uses :- Pippalu is an effective herb in managing cough and cold. It controls cough, releases mucus, clears air passages, thus allowing the patient to breathe freely.

It also help in treating asthma, diarrhoea, ear pain, toothache, haematuria, migraine, scabies, eye troubles and gastric problems.

- > Antifungal
- > Anti microbial
- > Anti amoebic
- > Anti diabetic
- > Antioxidant
- > Anti depressant



SARPAGANDHA

Common name:- Sarpagandha, Indian snake root.

Scientific name:- Rauvolfia serpentina

Family:- Apocyanaceae.

Habitat:- Perennial under shrub.

Importance

Uses:- Sarpagandha is used as best home remedial in treating

→ Hypertension

→ Diarrhea

→ Fever

→ Poisonous insect's sting

→ Skin disease

→ Constipation

→ Insomnia

→ Goiter



Rosemary

Common name - Rosemary

Sci. Name - Rosmarinus officinalis

Family - Lamiaceae

Habitat - Perennial herb, evergreen
needle like leaves.



Importance &

Uses :-

- It is used in cooking, especially in mediterranean dishes.
- It is also used in soaps and cosmetics.
- Medicinal uses.
 - It is rich source of antioxidants & anti-inflammatory compounds.
 - Relieves from headaches, stress, Asthma, bronchitis, Chronic pain.
 - Rosemary extract is used to treat indigestion.
 - Rosemary oil has anti-inflammatory, pain-relieving properties.
 - 4 It also relieves from rheumatic pain, spasms, nervous agitation, improvement of memory, hysteria, depression as well as physical & mental fatigue.

Periwinkle

(Sadabahar)

C.N:- Periwinkle, Mandivardhanam

Sci.N:- *Cathartus roseus*

Family:- Apocynaceae

Habitat:- Terrestrial evergreen herb



Importance &

Uses:-

Scientifically proven properties of sadabahar include.

- + It has the property to reduce bacterial and viral infections.
- + Property to reduce inflammation.
- > Antitumor properties.
- > Ability to lower blood glucose levels.
- + Hypocholesterolemic effect.
- + Periwinkle alkaloids have been used in the treatment of Leukemia.
- + Plant is used in cancer and diabetes.
 - > Root decoction is used in fever, leaf juice is blood dysentery.
 - The decoction of leaf is used for babies in gripping pain while the latex is useful for scabies.
 - > Plant contains hypotensive, sedative & antiviral activities.

Black pepper

C.N: - Black pepper, Miriyalu.

Sci.N: - Piper nigrum

Family: - Piperaceae

Habit: - Perennial climbing plant
Flowering vine



Importance &

Uses :-

Black pepper is said to have many health benefits, including

- 1 Helping with weight loss
- > Detoxifying the body
- > Preventing cancer
- 1 Cleansing the stomach and intestine.
- > Regulating heart^{rate} and high blood pressure
- > Producing red blood cells
- > Being rich in vit-B, producing calcium.
- 1 Preventing constipation.
- 1 Applying black pepper to the skin for measles, nerve pain, itchy skin caused by mites and to treat pain.

chia / sabja Plant

C.N :- chia, Sabja, Basil seeds.
Sci.N :- Salvia hispanica
Family :- Lamiaceae
Habit :- Annual herbaceous plant



Importance &

Uses :-

- chia seeds are high in protein and fibres which helps in weight loss.
- Helps to reduce the risk of heart disease by lowering high blood pressure and high LDL cholesterol
- Improves gut health and digestion.
- Lower the blood sugar levels. & improve insulin sensitivity.
- chia seeds reduce inflammation and free radicals
- Also support bone health

LAVENDER

Common name: - Lavender, English lavender, French lavender

Scientific name: - *Lavendula angustifolia*

Family: - Lamiaceae

Habit: - Perennial plant with grey green foliage



Importance &

uses:-

- 1 The essential oil of 'Lavender' is beneficial in variety of conditions, including insomnia, alopecia (hair loss), anxiety, stress, and post-operative pain.
- 1 It has antibacterial & antifungal effects.
- 1 It increases sleep quality.
- 1 It reduces symptoms of premenstrual tension.
- 1 Assists in wound healing.
- 1 Treatment of head lice.
- 1 It minimizes wrinkles & age spots.
- 1 It has wound healing properties.

Peppermint

C.N: - Peppermint, Pudina

Sci.N: - Mentha piperita

Family: - Lamiaceae

Habit: - Upright Perennial herb.



Importance & Uses -

- > Used as a breath freshener in toothpaste & mouth wash.
- > It controls irritable bowel syndrome
- > Nausea and vomiting are reduced caused by cancer drug treatment.
- > Improves the symptoms of indigestion
- > Applying peppermint oil in gel, cream, or water to the skin reduces cracked skin and pain in the nipple area when breast feeding.
- > Peppermint oil seems to help relieve tension headaches.
- > Reduce muscle spasms, flatulence and promote sweating.

Ajwain / Caraway

Common Name: Ajwain, Yamaku

Sci. Name: - *Trachyspermum ammi*

Family: Apiaceae

Habit: - Small erect annual
shrub.



Importance &

Uses: -

- + It shows Antihypersensitive, antispasmodic and broncho dilating activity
- + Hepatoprotective activity (Liver protection)
- It is an important remedial agent for flatulence, atonic dyspepsia, diarrhoea, abdominal tumours, abdominal pains, piles, & bronchial problems.
- + Medicinally, it has been proven to possess various pharmacological activities like
 - + Antifungal, * Antioxidant, * Antimicrobial,
 - * Antihypersensitive * Antispasmodic * Antiflatulant

Giant chickweed

C.N.: Chickweed

Sci.N.: *Stellaria aquatica*

Family: Caryophyllaceae

Habit: Prostrate (or) erect, somewhat succulent annual herbaceous plant



Importance &

uses:-

- 1 *Stellaria aquatica* is cultivated in South Korea as a medicinal herb.
- 2 Its root and leaves are used to treat a variety of ailments including
 - * Gastrointestinal disorders
 - * Asthma
 - * Measles
 - * Inflammation of renal, digestive, reproductive and respiratory tracts.