# Mimosa pudica



Clade: Tracheophytes

Order: Fabales
Family: Fabaceae

**Subfamily: Mimosoideae** 

Genus: Mimosa

Species: Mimosa pudica

#### **Common Names**

Hindi: Lajwanti, Chhuimui

Marathi: Lajalu

Tamil: Thottalsinungi

Telugu: Attipatti

Malayalam: Thottavanji Kannada: Muttithakannu

# General Features of Mimosa pudica

# 1. Sensitivity and Movement:

Thigmotactic Movements: Mimosa pudica is renowned for its rapid response to touch. When touched, the leaves fold inward and droop, a movement thought to protect the plant from harm and reduce water loss.

Nyctinasty Movements: The plant also exhibits sleep movements, where the leaves close during darkness and reopen in light.

### 2. Morphology:

Leaves: The leaves are compound, with small leaflets arranged in pairs along the central stem. Each leaflet is oblong and delicate.

Stems: The stems are slender and may have small, prickly thorns. They are usually green or reddish in color.

Flowers: Mimosa pudica produces small, pink, or lavender flower heads. These globular inflorescences are made up of many tiny individual flowers.

Seeds: The plant produces small seed pods that contain several seeds. When mature, the pods break open, dispersing the seeds.

#### 3. Habitat:

Mimosa pudica is native to South and Central America but has become a pantropical weed. It thrives in warm, tropical climates and is often found in disturbed areas such as roadsides, gardens, and fields.

#### 4. Growth:

It is a creeping annual or perennial herb. The plant can spread rapidly in suitable conditions, often forming dense mats.

### 5. Reproduction:

Sexual Reproduction: Mimosa pudica reproduces through seeds.

Asexual Reproduction: The plant can also propagate vegetative through root fragments, allowing it to spread efficiently.

# 6. Chemical Compounds:

The plant contains several bioactive compounds, including alkaloids, flavonoids, tannins, and saponins. These compounds contribute to its medicinal properties.

## 7. Ecological Role:

Soil Health: As a member of the legume family, Mimosa pudica can fix nitrogen in the soil, enhancing soil fertility.

Invasive Potential: In some regions, it is considered invasive due to its rapid growth and ability to outcompete native vegetation.

#### **Medicinal Uses**

Mimosa pudica, commonly known as the "sensitive plant" or "touchmenot," has various medicinal uses in traditional medicine:

- 1. Wound Healing: The plant's leaves and roots are used to promote wound healing.
- 2. Antiinflammatory: It has antiinflammatory properties and is used to treat inflammations.
- 3. Antimicrobial: Extracts from the plant have antimicrobial properties that help fight infections.
- 4. Pain Relief: It is used to relieve pain and treat conditions like arthritis.
- 5. Antidiarrheal: The plant is used to treat diarrhoea.
- 6. Detoxification: It is believed to help in detoxifying the body.
- 7. Haemorrhoids: Mimosa pudica is used in the treatment of haemorrhoids.
- 8. Anticonvulsant: It is used in traditional medicine to treat epilepsy and convulsions.
- 9. Skin Conditions: The plant is applied to the skin to treat eczema and other skin disorders.
- 10. Aphrodisiac: Some cultures use Mimosa pudica as an aphrodisiac.

