

## Scientific Name:

*Azadirachta indica*

## Common Name:

- Neem Tree
- Indian Lilac

## Distinct Features:

- **Growth:** A large, fast-growing evergreen or semi-evergreen tree that typically grows to a height of 15-30 meters. It has a straight trunk, often with a diameter of up to 1.2 meters, and a spreading, dense crown that provides ample shade.
- **Leaves:** The leaves are pinnately compound, consisting of 20-30 leaflets, each about 3-8 cm long. The leaflets are lance-shaped, serrated, and bright green in color. The leaves are arranged alternately on the branches.
- **Flowers:** The flowers are small, white, and fragrant, borne in clusters called panicles. Each flower has five delicate petals and a sweet scent, blooming in the spring and attracting bees and other pollinators.
- **Fruits:** The fruit is a smooth, oval drupe, about 1-3 cm long, green when unripe and turning yellow as it matures. Each fruit contains one elongated seed, which is surrounded by a bitter pulp.
- **Bark:** The bark is rough and dark brown to gray, with vertical fissures and a somewhat flaky texture.

## Cultural Importance:

- The *Neem* tree holds immense cultural and religious significance, especially in India, where it is often considered sacred. It is associated with health and wellness due to its numerous medicinal properties and has been used for thousands of years in Ayurvedic medicine.
- In rural areas, neem trees are often planted around homes and farms for their pest-repelling properties, as well as for shade and wind protection.

## Uses:

- **Medicinal:**
  - Almost every part of the neem tree, including the leaves, bark, seeds, and oil, is used in traditional medicine. Neem is known for its antimicrobial, anti-inflammatory, antifungal, and insecticidal properties. Neem oil is used to treat skin diseases, while neem leaves are often used to boost immunity and treat fevers.

- **Agricultural:**
  - Neem is widely used as a natural pesticide and insect repellent. Neem oil and neem-based products are used in organic farming to control pests without harming the environment.
- **Cosmetic:**
  - Neem is commonly used in skincare and haircare products due to its antifungal and antibacterial properties. It helps in treating acne, dandruff, and other skin conditions.
- **Timber and Wood:**
  - Although not highly valued for commercial timber, neem wood is used for making furniture, tool handles, and small wooden items due to its durability and resistance to termites.
- **Environmental:**
  - Neem is often planted in reforestation projects and in degraded lands due to its ability to thrive in harsh conditions and improve soil fertility.

### Picture Description:

- **Whole Tree:** A large, evergreen tree with a spreading, dense crown, straight trunk, and clusters of white, fragrant flowers.
- **Leaves:** Pinnately compound leaves with 20-30 lance-shaped leaflets, bright green, and serrated edges.
- **Flowers:** Small, white, and fragrant flowers arranged in clusters called panicles, blooming in spring.
- **Fruit:** Oval-shaped drupes, about 1-3 cm long, green when unripe, turning yellow as they mature, each containing a single seed.
- **Bark:** Rough, dark brown to gray bark with vertical fissures and a flaky texture.

