### Rai Amla

Rai Amla, also known as Indian Gooseberry, is a deciduous tree that is native to India. It is a part of the Phyllanthaceae family and is known for its medicinal properties. Rai Amla is widely grown in India and is an important crop for farmers.

Tree Characteristics	Description
Common Name	Rai Amla
Scientific name	Phyllanthus acidus
Maximum height	12-18 meters
Diameter when mature	15-20 cm
Years it takes to grow	3-4 years
Economic benefit to the farmers	Rai Amla trees provide fruits, leaves, and bark that are used for various medicinal purposes. The fruits are used to make pickles and chutneys, while the leaves are used as a natural pesticide. The bark is used to treat skin diseases, fever, and diarrhea. Additionally, Rai Amla trees are planted as ornamentals and provide shade in gardens and parks.

## **Physical Characteristics**



The Rai Amla tree has a maximum height of 8-18 meters and a trunk diameter of 60-80 cm. The tree has a spreading canopy, with branches that are slender and drooping. The bark of the tree is brown, and the leaves are small, light green in color and oblong in shape. The tree produces fragrant flowers, which are yellowish-green and have a diameter of 2-3 mm. The fruit of the tree is a small, greenish-yellow berry that is about 1-2 cm in diameter.

### **Ecological Role**

Rai Amla is a valuable species for its ecological role as it has the ability to fix atmospheric nitrogen in the soil, which helps in improving the soil fertility. The tree also helps in controlling soil erosion and is used for reforestation in some areas.



# Importance to Birds, Animals, and Insects

The tree is an important source of food for birds, such as the Indian Myna and Common Crow, which eat the fruit. The leaves of the tree are also consumed by caterpillars of some species of moths.

# States in India Where the Tree is Found Naturally

The tree is found naturally in various parts of India, including Andhra Pradesh, Maharashtra, Karnataka, Madhya Pradesh, and Gujarat.

# States Where it is Commercially Grown

Rai Amla is commercially grown in various parts of India, including Rajasthan, Madhya Pradesh, Uttar Pradesh, Gujarat, and Maharashtra.

#### Commercial Growing of Tree

Rai Amla is generally grown in sandy or loamy soils that have good drainage. The tree requires full sunlight and moderate watering. The tree can be propagated through seeds or cuttings. The best time for planting is during the monsoon season. The tree requires regular pruning to maintain its shape and to promote healthy growth.

# Different Stages of Tree Growth in Details

The tree takes about 5-6 years to start bearing fruit. The fruit starts to ripen in November and is harvested by hand. The fruit is then sorted, cleaned, and dried in the sun. The dried fruit is then used in various medicinal preparations.

# How Farmers are Benefited by Growing

Farmers who grow Rai Amla can benefit from agroforestry, which involves growing crops under the canopy of the trees. Agroforestry helps in conserving soil moisture and improving soil fertility, which in turn increases crop yields. Rai Amla is also a source of income for farmers, as the fruit is in high demand for its medicinal properties.

### **Harvesting**

The fruit of the Rai Amla tree is harvested by hand when it starts to ripen in November. The fruit is then sorted, cleaned, and dried in the sun. The dried fruit is then used in various medicinal preparations.

### Difference Between Amla and Rai Amla

Amla and Rai Amla are two different fruits that are commonly used in Ayurvedic medicine. The list of differences is as follows.

Botanical Name: Amla, also known as Indian Gooseberry, is scientifically known as Emblica Officinalis, while Rai Amla is scientifically known as Phyllanthus Niruri.

Appearance: Amla is a small, round, greenish-yellow fruit with a smooth texture, while Rai Amla is a tiny fruit that grows on a small shrub and has a slightly rough texture.

Taste: Amla has a sour and astringent taste, while Rai Amla has a slightly bitter taste.

Nutritional Value: Amla is a rich source of vitamin C, antioxidants, and minerals such as calcium and phosphorus, while Rai Amla is also rich in antioxidants and has been traditionally used for its liver-protective properties.

Medicinal Properties: Both Amla and Rai Amla are known for their medicinal properties in Ayurveda. Amla is considered to be a rejuvenating herb that supports digestion, strengthens the immune system, and helps to lower cholesterol. Rai Amla is traditionally used for its liver-protective properties, to support the urinary system and to help improve digestion.

#### Conclusion

Rai Amla is an important tree in India for its medicinal properties and ecological role. It is widely grown in various parts of India and is an important source of income for farmers. The tree requires full sunlight and moderate watering, and can be propagated through seeds or cuttings. With its numerous benefits, Rai Amla is a valuable asset to Indian agriculture.

