## **Orange**

The orange tree, also known as Citrus sinensis, is a citrus fruit tree that is widely cultivated in India. Oranges are popular fruits that are enjoyed worldwide for their sweet and tangy taste, as well as their numerous health benefits. Orange trees are easy to grow and require little maintenance, making them a popular choice for both commercial and home gardens.

Tree Characteristics	Description
Common Name	0 range
Scientific Name	Citrus × sinensis
Maximum Height	20-30 feet
Diameter when Mature	15-20 feet
Years it takes to Grow	6-10 years
Economic Benefit to the Farmers	High economic value as a commercial crop, source of income for farmers, high demand for oranges and orange products in the market, oranges can be used in various industries such as food, cosmetics, and pharmaceuticals.

### Physical characteristics



The orange tree can grow up to 10 meters in height, with a rounded crown and a dense foliage. Its leaves are glossy and green, with an oval shape and a pointed tip. The tree produces fragrant white flowers that bloom in clusters, which later give way to the fruit. The fruit is spherical or oblong in shape, with a smooth, thin skin that can be yellow, orange, or reddish-orange in color. The flesh of the fruit is divided into segments, and it is juicy, sweet, and pulpy.

#### Ecological role

Orange trees have several ecological benefits. They are excellent carbon sinks, absorbing carbon dioxide from the atmosphere and converting it into oxygen through the process of photosynthesis. Additionally, orange trees can help prevent soil erosion, as their root systems hold the soil in place. The tree's flowers provide food for bees and other pollinators, and its fruit is a source of food for birds and

animals.



## Importance to birds, animals, and insects

The orange tree is an important source of food for birds and animals. Birds, such as thrushes, woodpeckers, and parrots, are known to feed on the fruit and seeds of the orange tree. Squirrels, rats, and other small mammals also feed on the fruit. The tree's flowers attract bees and other pollinators, which are essential for fruit production.

# States in India where the tree is found naturally

The orange tree is not native to India, but it has been widely cultivated throughout the country. It is grown in several states, including Maharashtra, Andhra Pradesh, Telangana,

Tamil Nadu, and Karnataka.



# States where it is commercially grown

Oranges are commercially grown in several states in India, including Maharashtra, Tamil Nadu, Andhra Pradesh, Telangana, Karnataka, and Punjab. The Nagpur orange, which is grown in Maharashtra, is a popular variety that is known for its sweet and juicy flavor.

#### Commercial growing of the tree

Orange trees are typically grown in commercial orchards, where they are irrigated and fertilized to maximize fruit production. The trees are propagated through budding or grafting, and they require well-drained soil and full sunlight to thrive. Pests and diseases, such as citrus greening and fruit flies, can be a challenge for commercial growers, and they often use pesticides and other chemical treatments to protect their crops.



## Different stages of tree growth in detail

Orange trees go through several stages of growth, including germination, seedling, juvenile, and mature stages. Germination occurs when the seed begins to sprout, and the seedling stage begins when the seedling develops leaves and begins to photosynthesize. The juvenile stage lasts for several years, during which the tree grows rapidly but does not produce fruit. The mature stage is when the tree reaches full size and begins to produce fruit.



#### How farmers are benefited

Growing orange trees under agroforestry can provide several benefits to farmers. The trees can be intercropped with other crops, providing shade and improving soil health. Additionally, orange trees can help prevent soil erosion and increase soil fertility, making them a valuable component of agroforestry systems. The fruit can be sold for a profit, providing an additional source of income for farmers.



#### Harvesting

Oranges are typically harvested when they are fully ripe, which is indicated by their color and texture. The fruit is picked by hand or with special harvesting tools, and it is usually sold fresh or processed into juice or other products. The harvesting season for oranges in India typically lasts from December to April.

#### Conclusion

The orange tree is a valuable fruit tree that is widely cultivated in India for its delicious and nutritious fruit. It is easy to grow and requires little maintenance, making it a popular choice for both commercial and home gardens. Orange trees have several ecological benefits, including carbon sequestration and soil conservation, and they provide food for

birds, animals, and insects. Farmers can benefit from growing orange trees under agroforestry systems, which can improve soil health and provide an additional source of income. With its many benefits and delicious fruit, the orange tree is sure to remain an important crop in India for years to come.

