Jacaranda tree

Indian Jacaranda (Jacaranda mimosifolia) is a beautiful tree known for its stunning purple flowers. It is native to South America but has been widely planted in India for its ornamental value. The tree is popularly known as 'Neeli Gulmohar' in India. Jacaranda tree has become an integral part of Indian streetscapes and landscapes, adding to the aesthetic beauty of the surroundings.

Tree Characteristics	Description
Common Name	Jacaranda Tree
Scientific name	Jacaranda mimosifolia
Maximum height	10-15 meters
Diameter of crown when mature	10-15 meters
Diameter of the tree trunk when mature	1-2 meters
Years it takes to grow	10-15 years
Economic benefit to the farmers	The Jacaranda tree is mostly grown for its ornamental value, so it has limited economic benefit to farmers. However, in some areas, the flowers are used in traditional medicine and the wood is used for fuel and timber.

Physical Characteristics

The Indian Jacaranda tree can grow up to a height of 12-15 meters with a spread of 10-12 meters. The tree has a wide, open canopy with a rounded crown. The bark of the tree is greyish-brown and smooth. The leaves are pinnate and can grow

up to 45 cm long, with 5-9 leaflets. The flowers of the Jacaranda tree are trumpet-shaped and have a beautiful violet-blue color. They bloom in the spring and summer seasons.



Flowers

The Jacaranda tree is famous for its attractive and vibrant flowers. The flowers are trumpet-shaped and have a diameter of about 5 centimeters. They grow in clusters and form a dense canopy of bluish-purple flowers, which contrasts beautifully with the green foliage.

Each flower has a five-lobed, fused calyx that forms a short tube at the base, and five petals that flare outwards. The petals are delicately fringed and have a velvety texture. Inside the flower, there are five stamens, which are fused to form a tube that surrounds the style. The stamens are usually white and have small, yellow anthers. The Jacaranda flowers usually bloom in the summer, from May to July, and last for about two months. The tree is pollinated by bees, butterflies, and other insects that are attracted to the flowers' sweet nectar and bright colors. The Jacaranda flowers are also used in traditional medicine to treat a variety of ailments, including fever, cough, and skin diseases.

Overall, the Jacaranda flowers are a beautiful and iconic feature of this tree, and they make it a popular ornamental tree in many parts of the world.



Ecological Role

The Indian Jacaranda tree plays an important role in the ecosystem. It provides shade and habitat for many birds, insects, and small animals. The tree also helps to improve the soil quality by fixing nitrogen, which is essential for plant

growth. The Jacaranda tree's flowers attract a variety of pollinators, including bees, butterflies, and hummingbirds, making it an important component of the local ecosystem.

Importance to Birds, Animals, and Insects

The Jacaranda tree provides food and shelter for a variety of birds and animals. The flowers of the tree attract pollinators like bees, butterflies, and hummingbirds, while the leaves provide food for many insects. The tree's canopy provides shelter and nesting opportunities for birds and small animals.

Soil, Temperature, and Climatic Requirements

The Jacaranda tree prefers well-drained soil and can tolerate a wide range of soil types, including sandy, loamy, and clay soils. The tree grows well in full sun to partial shade and requires a warm, tropical or subtropical climate. It can tolerate temperatures up to 45 degrees Celsius, but extreme cold can damage the tree.



States in India where the Tree is Found Naturally

Indian Jacaranda is not native to India but is commonly found in various states, including Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, and Telangana.

Different Stages of Tree Growth in Detail

The Jacaranda tree can be propagated by seed or cutting. The tree starts blooming after 7-8 years of planting, and it takes around 20 years to reach full maturity. During the initial years of growth, the tree requires regular watering and fertilization to establish a healthy root system. Once established, the tree requires minimal care.

Benefits to Farmers

Jacaranda trees have great ornamental value, making them a popular choice for landscape architects and urban planners. The tree's wood is strong and durable, making it suitable for making furniture, tool handles, and musical instruments. The tree's leaves and flowers have medicinal properties and are used in traditional medicine. Growing Jacaranda trees in agroforestry can help farmers generate additional income.

Conclusion

The Indian Jacaranda tree is an important component of the local ecosystem and a popular choice for landscaping and agroforestry. The tree's stunning flowers, shade-giving canopy, and medicinal properties make it an attractive and useful addition to any garden or farm. With its ornamental and economic value, the Indian Jacaranda tree is a true asset to the Indian landscape.

