# Jackfruit

*Artocarpus heterophyllus*

**Code:** XIM-T-011 **Location:** XIM University Campus **Local / Vernacular name:** ଜାଏପ

## Description

XIM University campus biodiversity register (2026–27). Recorded individuals: 6; abundance rank: 23.

## Botanical Details

Leaf habit: The jackfruit tree is evergreen, meaning it retains its leaves throughout the year. Flowers / Fruits: It is monoecious, with both male and female flowers on the same tree, and the fruits grow directly from the trunk and thick branches. Native range: Jackfruit is native to the Western Ghats of India and is widely cultivated across South and Southeast Asia. Today, it is also grown in tropical regions of Africa, South America, and the Caribbean.

## Uses & Importance

**Ecological:** Artocarpus heterophyllus is a vital component of tropical ecosystems, acting as a multi-layered support system for local biodiversity. Its most striking feature is its dense, spreading evergreen canopy, which provides year-round shelter for birds and small mammals while facilitating significant carbon sequestration. Beneath the surface, the tree possesses a powerful, deep-reaching taproot system that anchors the earth, making it exceptionally effective at preventing soil erosion and landslides in the hilly regions where it natively thrives. As the tree sheds its large, leathery leaves, it contributes to soil enrichment by creating a thick layer of organic mulch that improves soil structure and moisture retention. Furthermore, the jackfruit is a "life-support" tree; its massive, nutrient-dense fruits provide a critical food source for a wide range of wildlife, including wild boars, civets, and elephants. Its unique flowering habit—where flowers emerge directly from the trunk and thick branches—supports specialized pollinators and insects that thrive in the shaded microclimate of the tree's interior. In agroforestry, it is often used as a windbreak and a nurse tree, providing the necessary shade and humidity for smaller crops to flourish in the harsh tropical sun.

**Medicinal:** In the traditional healing systems of South and Southeast Asia, the jackfruit tree is regarded as a comprehensive natural pharmacy. The fruit itself is celebrated for its ability to improve digestion and boost immunity due to its high dietary fiber and vitamin content. The seeds are a concentrated source of high-quality protein and are traditionally consumed to treat gastrointestinal disorders. Beyond the food value, the bark and roots are frequently used in Ayurvedic medicine to manage metabolic issues like diabetes; decoctions made from the bark are believed to help regulate blood sugar levels. For dermatological health, the leaves are crushed into poultices to treat stubborn skin problems and reduce external inflammation. The tree's roots are also utilized in traditional preparations to treat

respiratory ailments and fever. Modern pharmacological research has highlighted the presence of phytonutrients, such as isoflavones and saponins, which exhibit potent anti-cancer and anti-aging properties. Additionally, the wood and bark contain Artocarpin, a compound known for its skin-lightening and antimicrobial activities. Whether used to soothe an upset stomach or to manage chronic inflammatory conditions, every part of the jackfruit tree offers a chemical profile that balances and supports human health.

**Cultural:** The jackfruit is deeply woven into the spiritual and social fabric of South Asia, where it is revered as a symbol of prosperity, abundance, and fertility. In the Indian states of Kerala and Tamil Nadu, as well as in Sri Lanka and Bangladesh, it is often referred to as the "King of Fruits" alongside the mango. Culturally, the tree is considered highly auspicious; its leaves are frequently used in Hindu temple offerings and religious ceremonies to represent divine blessings. During traditional festivals and weddings, jackfruit dishes are a centerpiece of the feast, symbolizing a "heavy" and prosperous harvest that can feed a whole community. The tree's wood is culturally significant as well; due to its durability and beautiful golden-yellow hue, it is the preferred material for crafting sacred musical instruments like the Mridangam and Veena, as well as statues of deities in Buddhist and Hindu temples. In Southeast Asia, particularly in Vietnam and Thailand, the jackfruit symbolizes resilience and a sturdy foundation for the family. It is often the tree under which community elders gather to share folklore, passing down the "legend of the jack" to younger generations. From its role in the sacred "Muppalam" (the three royal fruits) to its status as the national fruit of Bangladesh, the jackfruit remains a guardian of cultural heritage and a testament to the generosity of the tropical landscape.

## Location

GPS: 20.15860192, 85.76535449

Directions: https://www.google.com/maps/dir/?api=1&travelmode=walking&destination=20.15860192%2C85.76535449