Bael

Aegle marmelos

Code: XIM-T-044 **Location:** XIM University Campus **Local / Vernacular name:** ବଏଲ

Description

XIM University campus biodiversity register (2026–27). Recorded individuals: 2; abundance rank: 38.

Botanical Details

Leaf habit: The bael tree is deciduous, shedding most of its leaves during the dry or cold season to conserve water and energy. New foliage typically emerges with the onset of the monsoon or growing season, followed by flowering and fruiting. This seasonal leaf drop is an adaptation to the tree’s preference for dry and semi-arid climates. Flowers / Fruits: The bael tree produces fragrant greenish-white or yellowish flowers, which are typically unisexual (male and female flowers occur on the same tree) and bloom in the spring. These flowers emit a strong scent that attracts pollinators. The fruit of the bael is a large, round to ovoid berry with a hard, woody shell and aromatic, orange-colored pulp inside. The pulp is rich in nutrients, fiber, vitamins, and bioactive compounds, and its taste ranges from sweet to slightly astringent depending on ripeness. The seeds are embedded in the soft pulp and aid in natural regeneration when dispersed. Native range: Bael is native to the Indian subcontinent, including India, Bangladesh, Nepal, Pakistan, and Sri Lanka. It naturally occurs in dry, rocky, and thorny forest zones but has also been widely cultivated beyond its native range—into Southeast Asia, the Middle East, and parts of Africa—because of its cultural importance, medicinal value, and edible fruit.

Uses & Importance

Ecological: Bael plays a valuable ecological role, particularly in dry deciduous and thorny forest ecosystems where it commonly grows. Its hardy nature allows it to thrive in poor, rocky, and droughtprone soils, helping to stabilize soil and prevent erosion in degraded landscapes. The fragrant flowers attract a variety of pollinators, including bees and butterflies, which supports local pollination networks. Its fruits are eaten by birds, bats, and some mammals, which aids seed dispersal and enhances biodiversity. Additionally, bael trees provide shade and shelter for smaller plants and wildlife in hot, arid regions.

Medicinal: Bael is highly valued in traditional medicine systems such as Ayurveda, Siddha, and Unani. Nearly every part of the tree—especially the fruit, leaves, roots, and bark—is used for therapeutic purposes. The ripe fruit is commonly used to treat digestive disorders including diarrhea, dysentery, and constipation due to its astringent and mild laxative effects. Bael leaves are used in remedies for diabetes, inflammation, and fever, while bark and roots may

be used for skin diseases and respiratory complaints. Bael’s rich array of phytochemicals, such as tannins, alkaloids, and flavonoids, underpins many of its traditional uses.

Cultural: The bael tree holds immense cultural and religious significance in South Asian traditions, especially in India, Nepal, and Sri Lanka. It is considered sacred to Lord Shiva in Hinduism, and its leaves are widely used in worship ceremonies, especially on Mondays and during the festival of Maha Shivaratri. Bael wood and leaves are offered to deities, and the fruit is part of ritual offerings in temples. Beyond spirituality, bael fruits and products such as sherbet, jams, and preserves are cherished in regional cuisines, especially during summer months for their cooling effect.

Location

GPS: 20.15860192, 85.76535449

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