East Indian Sandalwood

Santalum album

Code: XIM-T-055 **Location:** XIM University Campus **Local / Vernacular name:** ଚନ୍ଦନ

Description

XIM University campus biodiversity register (2026–27). Recorded individuals: 1; abundance rank: 47.

Botanical Details

Leaf habit: Deciduous Flowers / Fruits: Flowers are white initially and turn red or orange as they age. They grow in small clusters or panicles appearing mainly from March to April in India. The fruit is a globose, fleshy drupe about 1 cm in diameter, smooth, and single-seeded, ripening to red, purple, or black Native range: Native to the semi-arid regions of Southern India (particularly Karnataka and Tamil Nadu) and Southeast Asia; now cultivated under strict government regulations in various tropical regions due to its high value and vulnerable status.

Uses & Importance

Ecological: Santalum album is a unique hemi-parasitic tree that plays a sophisticated role in dry deciduous forest ecosystems. Unlike most trees, it does not survive in isolation; it forms specialized root connections called haustoria to draw water and inorganic nutrients from the roots of nearby "host" plants. This interdependency makes it an excellent candidate for complex agroforestry systems, where it is integrated with diverse crops. Beyond its parasitic nature, Sandalwood contributes significantly to soil stability in arid regions and serves as a vital component of the tropical forest structure. Its small, fleshy drupes are a primary food source for a variety of birds, which act as the tree's main seed dispersers. By fostering these intricate root networks, Sandalwood helps maintain a balanced nutrient exchange within the soil, supporting a resilient and biodiverse forest floor that can withstand the harsh conditions of the Indian dry season.

Medicinal: Sandalwood is globally renowned for its high-quality essential oil, which is concentrated in the heartwood and roots. This oil is exceptionally rich in alpha- and beta-santalol, compounds that provide powerful antimicrobial, sedative, and anti-inflammatory properties. In Ayurvedic and traditional medicine, Sandalwood paste and oil are standard treatments for chronic skin disorders such as psoriasis, dermatitis, and acne due to their cooling and cicatrizing effects. It is also used to manage internal issues, including urinary tract infections, respiratory congestion, and digestive distress. In aromatherapy and mental health practices, the scent of Sandalwood is clinically recognized for its ability to reduce anxiety, lower blood pressure, and improve sleep quality. Its ability to act as a natural antiseptic while providing a profound calming effect on the central nervous system makes it one of the most

expensive and therapeutically versatile botanical resources in the world.

Cultural: In India, Sandalwood is the ultimate symbol of purity, divinity, and spiritual transcendence. It has been used for over 2,000 years in religious rituals, where the handground paste is applied to the foreheads of devotees and deities alike to symbolize the "third eye" and mental clarity. It is central to the daily rituals of iconic religious sites, such as the Jagannath Temple in Odisha and the Chamundeshwari Temple in Mysore, where the fragrance is believed to invite divine presence. Culturally, the wood is so highly valued that it is often referred to as "Liquid Gold." It is used to craft sacred idols, prayer beads (malas), and funeral pyres for the elite to ensure the soul's peaceful transition. In the state of Karnataka, Sandalwood is a point of regional pride, often associated with the state's heritage and the historic "Sandalwood forests" of the Maharajas. Its cooling nature is culturally synonymous with the pacification of anger and the attainment of a meditative state, making it an indispensable part of the Indian spiritual and aesthetic identity.

Location

GPS: 20.15860192, 85.76535449

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