Mahogany sp

Swietenia macrophylla

Code: XIM-T-018 **Location:** XIM University Campus **Local / Vernacular name:** ମଦହାଗନି

Description

XIM University campus biodiversity register (2026–27). Recorded individuals: 37; abundance rank: 10.

Botanical Details

Leaf habit: Evergreen Flowers / Fruits: Flowers are small, greenish-white, and fragrant. Fruits are large, woody, brown capsules commonly called as "skyfruits". Native range: Central and South America.

Uses & Importance

Ecological: Mahogany is widely recognized as an important **pioneer species** due to its ability to establish and grow successfully on **degraded agricultural lands**, particularly across tropical America. Its rapid early growth and adaptability allow it to colonize poor, compacted, or nutrientdepleted soils where many other tree species struggle to survive. Through leaf litter accumulation and root activity, mahogany gradually **improves soil structure, organic matter content, and nutrient cycling**, thereby restoring soil fertility and creating favorable conditions for the establishment of other plant species. For this reason, it is extensively used in **reforestation and afforestation programmes** aimed at ecological restoration, carbon sequestration, and landscape rehabilitation. Mahogany is often recommended for the **revegetation of scrublands and denuded areas**, where it helps stabilize soil, reduce erosion, and moderate microclimatic extremes. Additionally, the species exhibits strong **resistance to wind and cyclones**, owing to its deep root system and sturdy stem architecture, making it particularly valuable in tropical regions prone to storms. This resilience enhances the long-term stability of restored forests, ensuring both ecological recovery and sustainable land use benefits.

Medicinal: Mahogany has long been valued in traditional medicine for the therapeutic properties of its seeds, bark, and extracts. The **seeds** are commonly used in folk remedies to help **manage diabetes and hypertension**, as they are believed to regulate blood sugar levels and support cardiovascular health. They are also used as ** analgesics**, providing relief from body aches and inflammatory pain. The **bark** of mahogany is rich in tannins, which gives it a characteristic **reddish color** and makes it useful as a natural **astringent** for treating wounds by promoting tissue contraction and reducing infection. Owing to the same tannin content, the bark is also used in ** tanning processes**. Medicinally, bark preparations are traditionally employed to treat **diarrhea, fever, and tuberculosis**, as well as other gastrointestinal and infectious conditions. In addition, various **extracts of mahogany

** have shown significant **anti-inflammatory and antioxidant activities**, helping to combat oxidative stress and chronic inflammation. Experimental and pharmacological studies further suggest that these bioactive compounds possess **antitumor, antimutagenic, and anticancer potential**, highlighting mahogany as an important medicinal plant with promising applications in modern drug development alongside its traditional uses.

Cultural: In India and neighboring cultural regions, mahogany trees are commonly associated with **strength, endurance, and prosperity**, values that arise from the tree’s robust growth, longevity, and durable wood. The deep reddish-brown timber, which matures with age, is often symbolically linked to stability, wealth, and refinement. Because of its exceptional **strength, resistance to decay, and fine grain**, mahogany wood is highly prized for ** high-quality craftsmanship**, including premium furniture, doors, musical instruments, decorative panels, and artistic carvings. Traditionally, owning mahogany furniture has been regarded as a **status symbol**, reflecting affluence, taste, and permanence, especially in elite households, palaces, and heritage buildings. Artisans favor the wood for its ease of carving and polishing, which allows intricate designs and longlasting finishes. Thus, beyond its economic value , mahogany holds cultural significance as a material that embodies resilience, prestige, and enduring prosperity across generations.

Location

GPS: 20.15860192, 85.76535449

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