

Office of Dean of Sustainability
Thapar Institute of Engineering & Technology
(Deemed to be University)
Patiala – 147004 INDIA

Activity: Tree Plantation

Location: Hostel-N to Hostel-H Road and Hostel Signboards

Date: 09 August 2024

On August 9, 2024, a ceremonial planting event was held to introduce two significant plant species, Sita Ashoka and Machira, into the landscape. The event was attended by prominent scholars and experts, including Dr. Rafat Siddique, Dr. Kulbir Singh, Dr. Nitu Singh, and several other distinguished colleagues. Their presence underscored the importance of this initiative, which represents a collective commitment to advancing environmental sustainability and preserving biodiversity.

This planting event highlights the integration of traditional knowledge with modern environmental practices, demonstrating how collaboration among experts can lead to meaningful contributions to ecological conservation.

Details of Plants

Name of Plant	Botanical Name	No of Plants	CO ₂ Absorption (Pounds/year)
Sita Ashoka	Saraca asoca	40	48-52 (mature plant)
Machira	Radermachera sinica	30	42-54 (mature plant)



Tree planted by Dr. Rafat Siddique, DoS

Watering and planting Dr. Rafat Siddique, DoS and Dr. Nitu Singh, CHED



Watering and planting Dr. Rafat Siddique, DoS and Dr. Nitu Singh, CHED



Tree planted by Dr. Nitu Singh,



Watering by TIET Student



Tree planted by Dr. Rudra Rameshwar, LMtSoM



Tree planted by Dr. Kulbir Singh, ADoS, HDECE



Tree planted by Deans, Warden, and Invitee

Significance of the Planting

Sita Ashoka: The *Sita Ashoka* (*Saraca asoca*) is a revered tree in Indian culture and traditional medicine. It is known for its beautiful foliage and fragrant flowers, which have significant ornamental value. The *Sita Ashoka* is also recognized for its medicinal properties, particularly in Ayurveda, where it is used to treat various ailments. Planting 40 *Sita Ashoka* trees not only enhances the aesthetic appeal of the area but also contributes to the conservation of a species that plays a vital role in cultural heritage and biodiversity.

Machira: The *Machira* (commonly referred to as *Maclura cochinchinensis*) is a resilient and fast-growing species. It is valued for its ability to thrive in various soil conditions, making it

an ideal choice for areas needing reforestation or rehabilitation. Planting 38 *Machira* plants supports ecological balance by preventing soil erosion and providing habitat for local wildlife. This species also has economic value due to its timber, which can be used in construction and handicrafts, thereby offering a sustainable source of income for local communities.

Sustainability and Environmental Impact: The planting of *Sita Ashoka* and *Machira* trees aligns with broader sustainability goals aimed at enhancing biodiversity, improving soil health, and mitigating the effects of climate change. By introducing these species into the environment, the event promotes the regeneration of green cover, supports local ecosystems, and reinforces the commitment to environmental stewardship.

Biodiversity Enhancement: Both *Sita Ashoka* and *Machira* play critical roles in supporting biodiversity. The *Sita Ashoka* tree attracts pollinators like bees and butterflies, while *Machira* provides shelter and food for various bird species. By planting these trees, the event contributes to creating a thriving ecosystem that sustains a wide range of flora and fauna.

Soil and Water Conservation: The deep-rooted systems of these plants help stabilize the soil, reduce erosion, and improve water retention. This is particularly important in areas prone to soil degradation and water scarcity. The introduction of *Machira* is especially beneficial in rehabilitating degraded lands, while *Sita Ashoka* enhances soil fertility through its leaf litter

(Kulbir Singh)
Associate Dean Sustainability

(Rafat Siddique)
Dean Sustainability