

ABOUT ICFRE - IFGTB

ABOUT EIACP

ICFRE - Institute of Forest Genetics and Tree Breeding (ICFRE - IFGTB), Coimbatore is a National Research Institute under the Indian Council of Forestry Research and Education. ICFRE - IFGTB envisions a wood secure society. The Institute primarily aims to carry out research to improve productivity of forest tree species through conventional breeding programmes and biotechnological interventions. The major areas of research include tree improvement, breeding, planting stock improvement, marker assisted selection, genomics, clonal propagation, agroforestry systems, climate change research, integrated disease and pest management, seed handling and testing, eco restoration and conservation.

EIACP (erstwhile ENVIS) established by the Government of India, in 1982 has been providing environmental information to decision makers, policy planners, scientists and engineers, research workers, etc. all over the country. It is a comprehensive decentralized information system on environment involving effective participation of institutions / organisations in the country actively engaged in work relating to different subject areas of environment. A large number of nodes, known as EIACP PC RP (erstwhile ENVIS Centres), have been established in the network to cover the broad subject areas of environment with a Focal Point in the Ministry of Environment, Forest and Climate Change.

INSTRUCTIONS TO CONTRIBUTORS

Dear Author/Subscriber/Contributor,

We invite contributions to the EIACP Newsletter issues! The EIACP Resource Partner at ICFRE-IFGTB focuses on Forest Genetic Resources and Tree Improvement. It aims to act as a window for quality scientific publications and a forum for presenting your thinking on the challenges in the fields of FGRs and tree improvement. The EIACP Newsletter, Van Vigyan, a quarterly publication, publishes original research articles, reviews, reports, research highlights, news-scan etc., related to the thematic area of the EIACP Resource Partner. Original research and review articles, notes, research and meeting reports are invited for the newsletter. Details of forthcoming conferences / seminars / symposia / trainings / workshops also will be considered for publication in the newsletter. Articles may be sent in Times New Roman (with font size 12) in double spacing with a maximum of 5-6 typed pages. Photographs/line drawings and graphs need to be of good quality with clarity for reproduction in the newsletter. Only electronic submission will be accepted.

Details may be sent to: ifgtb@envis.nic.in.

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EIACP Newsletter Forest Genetic Resources & Tree Improvement

VAN VIGYAN

ICFRE - INSTITUTE OF FOREST GENETICS AND TREE BREEDING

(Indian Council of Forestry Research and Education)

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January to March 2025

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I am pleased to connect with you through this edition of our newsletter, a platform for sharing knowledge, fostering awareness, and promoting participation in tree conservation and improvement efforts. As I superannuate, I reflect on our unwavering commitment to enhancing forest genetic resources (FGRs) through focused research and species-specific breeding programs. One such species of importance is Haldina cordifolia, a resilient deciduous tree valued for its ecological role and timber potential. Our research aims to improve its genetic diversity, productivity, and adaptability for sustainable forestry and landscape restoration. Equally vital is our engagement with young minds. Through the EIACP Resource Partner at the ICFRE-IFGTB, we continue to reach students via plantation drives Director's Desk and awareness campaigns, highlighting the critical role of trees in sustaining

I invite continued collaboration from research institutions, state forest departments, universities, and woodbased industries. Let us use the EIACP RP platform to share insights and strengthen our collective impact on conservation. With sincere gratitude for your support and partnership over the years, I extend my best wishes for your continued success for your future endeavours,

ecosystems and biodiversity.

Dr C. Kunhikannan Director, ICFRE - IFGTB

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From the



Know your trees Haldina cordifolia (Roxb.)

Introduction

Haldina cordifolia (Roxb.) Ridsdale, formerly known as Adina cordifolia Benth. & Hook. f., is a deciduous tree species belonging to the family Rubiaceae. The species has a chromosome number of 2n = 22 (Bedi et al., 1981) and plays a significant role in forest ecosystems. Commonly known as Haldu, this species is valued for its strong and durable wood, which is used in furniture-making, construction, and boat-building due to its resistance to termites and fine texture (Troup, 1921). Because of the distinct yellowish hue of its timber, it is also referred to as "Yellow Teak" (Luna, 1996).



Haldina cordifolia is recognized by various vernacular names across different regions of India. In Malayalam, it is called Manjakadambu, while in Assamese, it is known as Lampatia and Tarak Chapa. The Bengali name for the tree is Keli-Kadam, and in Marathi, it is referred to as Heddi. The Gujarati names include Haladwan and Holdarvo, whereas in Sanskrit, it is called Girikadamba. In Kannada, it is known as Avanu or Kadambe, in Tamil as Manjakadambai or Poonteak, and in Telugu as Bandaru or Pasupu Kadamba. These regional names reflect the cultural and ecological significance of the tree in various parts of the country.

Ecologically, *H. cordifolia* contributes significantly to forest biodiversity, serving as a habitat for various insects, birds, and animals (Gamble, 1902). Its leaves provide fodder, while the bark and wood have traditional medicinal uses in treating fever, skin diseases, and inflammation (Deb & Dutta, 1987).

Distribution and habitat

H. cordifolia (Roxb.) Ridsdale is a deciduous tree species widely distributed across tropical and subtropical regions of South and Southeast Asia. In India, it is commonly found scattered in moist deciduous forests throughout the greater part of the country, Bellary district (Karnataka State); Javadhu Hills (Tiruvannamalai), Shevaroy Hills (Salem district), Alagar Hills (Madurai district), Dindigul district, Dharmapuri district (Tamil Nadu); Srikakulam district, Visakhapatnam district, East Godavari district, West Godavari district, Nellore district, Prakasham district, Kurnool district, Kadapa district, Chittoor district

(Andhra Pradesh); Similipal Hills (Mayurbhanj district), Koraput district (Odisha) except for the arid regions of Rajasthan. It typically occurs in the sub-Himalayan tracts, ascending to altitudes of up to 900 meters (Iqbal *et al.*, 2009). Beyond India, it is native to South Asia and extends to Sri Lanka, Bangladesh, Bhutan, Myanmar (Burma), Thailand, southern China, and Vietnam (Orwa *et al.*, 2009).

This species is light-demanding and thrives best on freely drained soils, often found on lower slopes of hills among boulders. It prefers regions with annual daytime temperatures ranging from 25–35°C but can tolerate extremes between 5–47°C (Choudhury *et al.*, 2011). The tree performs best in areas receiving 1,000–2,000 mm of annual rainfall, though it can tolerate a broader range of 800–4,500 mm (Luna, 1996). Younger trees prefer light to moderate shade, but as they mature, they require increased exposure to sunlight for optimal growth (Troup, 1921).

H. cordifolia is adaptable to a wide range of soils, though it grows best in deep, fairly fertile, and well-drained conditions. It prefers a moist but well-drained soil with a pH range of 5.5–6.5,

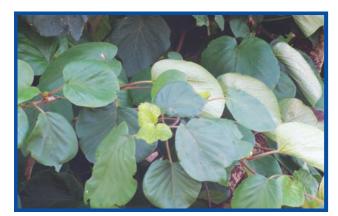


though it can tolerate a pH of 5.0–7.5 (Orwa *et al.*, 2009). One of the key characteristics of this tree is its massive root system, which provides exceptional resistance to drought and helps it survive in semi-arid conditions (Choudhury *et al.*, 2011).

Botanical description

Deciduous trees, to 30 m high, bark 1.3 cm, greybrown, exfoliating in small patches; blaze pinkred; bole buttressed; tree crown ovoid; bark 10-12 mm thick, grey-brown, often pitted; blaze reddish; branches horizontal; branching monopodial; young shoots pubescent. Leaves simple, opposite, decussate, stipulate; stipules 10-12 x 7 mm, intrapetiolar, obovate, foliaceous, cauducous; petiole 4-10 cm long, stout, pubescent; lamina 10-20 x 10-20, orbicular or ovate or boadly ovate, base cordate, apex acuminate, margin entire, glabrous above, pubescent beneath, chartaceous; nerves 5-7 from base, lateral nerves 3-5 pairs, pinnate, prominent, regular; intercostae scalariform, prominent; domatia present. Flowers bisexual, yellow, in axillary globose heads 3-4 mm long, mixed with many filiform bracteoles; hypanthium 1-2 mm long, densely hairy; calyx cupular, 1.5-2 mm long, tube short, lobes 5, 1.3-1.8 mm long; corolla 7-9 mm long, 5-riged, densely finely hairy outside, lobes 5, oblong, 1-2



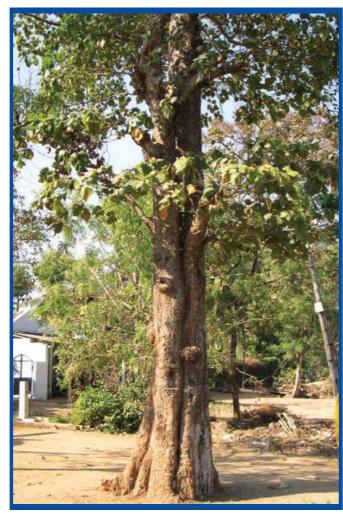


mm long, densely hairy; stamens 5, exserted; filaments 0.5 mm; anthers 1-2 mm long, oblong; ovary 2-celled, inferior; ovules many on a pendulous placenta; style filiform; stigma globose. Fruit a capsule, 2-3 mm long, of 2 dehiscent cocci, turbinate, brown; seeds many with tail at one end and a bifid wing other end.

Fruit collection and processing

The seeds of *H. cordifolia* are typically shed between April and June, marking the natural dispersal period of the species. The maturity indices of seeds can be determined through changes in fruit color and moisture content. As the fruit ripens, its color transitions from light green to light brown, indicating physiological maturity. At this stage, the moisture content of the fruit ranges between 38–46%, which is considered an optimal indicator of seed readiness for collection (Jeena *et al.*, 2012).

For effective seed collection, a tarpaulin or similar sheet can be spread under the tree canopy to catch falling fruits. Alternatively, mature fruits can be harvested by lopping branches or hand-plucking directly from the tree (Kundu, 2018). After collection, the seeds should be sun-dried for 7 to 10 days, reducing their moisture content to 5–6%. This drying process is crucial, as it enhances seed longevity and maximizes germination potential (Kundu, 2018).



Proper seed storage in dry conditions can further maintain viability, ensuring successful germination in nursery.

Germination

Nursery establishment *H. cordifolia* does not require any pre treatment for germination. Fresh and dried seeds may be used for germination. As the seeds are minute, instead of nursery beds, germination trays of the size 50 × 50cm can be used for sowing the seeds. Use either soil- vermiculite mixture (3 soil: 1 vermiculite) or wet polyurethane sheets as the medium to sow the seeds. About 18000 seeds which weigh around 10g can be sown in one tray. Almost 60 per cent of the sown seeds germinate in soil- vermiculite medium and on foam sheets;

Raised nursery beds can also be used for germination, with the seed mixed with sand in 1: 3 ratio before sowing. Prick the seedlings in the tray and poly- pot in containers of 23cm × 17cm size, filled with potting mixture (3 soil : 1sand). Potted seedlings can be kept in the shaded nursery for 2-3 months with watering once in a day and subsequently in the open for 15-30 days before planting. Data on optimum shade, watering and manure requirements in the nursery are not available (Nair *et al.* 2004). Growth in the first year is very slow, and the seedlings often reach only 2.5 cm in height during this time; in the second year growth is faster, and the seedlings develop thick taproots

Vegetative propagation

H. cordifolia can be propagated through both vegetative and in vitro propagation methods. Among vegetative propagation techniques, softwood cuttings have been found to be the most suitable compared to hardwood and semihardwood cuttings, as they exhibit higher rooting success and faster growth rates (Kaushal et al., 2010). To enhance root formation, cuttings treated with Indole-3-Butyric Acid (IBA) at a concentration of 2000 mg L⁻¹ demonstrate significantly improved rooting and survival rates (Yadav et al., 2018). Under optimal conditions, seed germination occurs within 20–40 days,



making it a relatively efficient method of propagation (Singh & Negi, 2017). For in vitro propagation, apical buds or shoot tips serve as the ideal explants, as they have a high capacity for regeneration (Sultana et al., 2015). The Murashige and Skoog (MS) medium, supplemented with 1.0 mg L^{-1} 6 Benzylaminopurine (BAP) and 0.5 mg L⁻¹ Naphthalene Acetic Acid (NAA), has been identified as highly effective in promoting shoot proliferation and micropropagation (Sultana et al., 2015). This tissue culture technique offers an efficient method for mass propagation, ensuring the conservation and large-scale production of genetically superior planting material (Kumar et al., 2019).

In vitro propagation

Insect pests and diseases

H. cordifolia is susceptible to several insect pests and fungal diseases, which can significantly impact its growth and survival. Among the major insect pests, Parotis vertumnalis is one of the most destructive, causing over 50% foliage damage by folding leaves and feeding from within (Nair et al., 1991). Another significant pest, Epiplema quadricaudata, contributes to defoliation in young trees, which can be controlled effectively with the application of





0.1% solution of Ekalux 25EC (Quinalphos) (Nair et al., 1991). Additionally, Dirades adjutaria is responsible for defoliation, particularly from July to August. Other insect pests affecting the species include Aristobia approximator, which feeds on the bark of living shoots, and the larvae of Dihamnus cervinus, which bore into the stems of young saplings, causing structural damage and growth retardation (Kundu, 2018).

In terms of diseases, fungal infections are a major concern. Phytophthora spp. is known to cause crown rot, particularly when trees are planted too deep in the soil, leading to root decay and eventual tree death (Intreepedia, 2018). Podosphaera leucotricha is responsible for powdery mildew, which affects leaves, reducing photosynthesis and overall tree vigor. Another serious disease affecting *H. cordifolia* is fire blight, which spreads rapidly in humid conditions. It can be managed by applying antibiotic sprays such as Streptomycin or Terramycin during the bloom period (Tntreepedia, 2018). In nursery settings, leaf spot and damping-off diseases are common threats, often leading to high seedling mortality rates if not properly managed. Preventive measures, such as proper spacing, fungicide application, and maintaining optimal soil drainage, are crucial for disease control at the early growth stages.

Planting techniques and post planting operation

Field planting of poly-potted seedlings of *Haldina cordifolia* should be done after maintaining them in a nursery for 5–6 months to ensure better survival rates. Before planting, the polythene covers must be carefully removed to

prevent damage to the root system. Seedlings should be transplanted into pits of $30 \times 30 \times 30$ cm, ensuring that the soil level around the seedling is slightly elevated to prevent water stagnation, which can be detrimental to root development (Nair *et al.*, 2004).

During the first three months, approximately 70% of the field-planted seedlings survive under favorable conditions. However, protection from drought is crucial for their long-term survival, as moisture stress can lead to significant mortality. Proper irrigation, mulching, and shading techniques should be implemented, particularly in dry seasons, to enhance establishment success. Seedlings exhibit a growth rate of approximately 16.7 cm in height within eight months in the field (Nair et al., 2004).

Agroforestry practices

H. cordifolia holds immense potential in agroforestry systems due to its adaptability, economic value, and ecological benefits. It is widely incorporated into silvopastoral systems, boundary plantations, and intercropping models to enhance soil fertility, provide fodder, and support sustainable timber production. The tree's leaves and young twigs are used as nutritious fodder for livestock, especially during dry seasons when other green fodder is scarce. Its deep-root system allows it to survive in semiarid conditions, making it a valuable species in silvopastoral systems, where it improves soil structure and moisture retention while reducing erosion (Mehta et al., 2013). Furthermore, H. cordifolia is often planted as a windbreak and boundary tree due to its straight trunk, dense foliage, and moderate height, which helps protect crops from strong winds and soil

degradation while simultaneously providing timber and fodder (Narayan & Singh, 2017).

In agroforestry-based intercropping, H. cordifolia has been successfully cultivated alongside commercial crops such as turmeric (Curcuma longa), ginger (Zingiber officinale), pulses, and medicinal plants, offering economic and ecological benefits. The tree provides moderate shade, making it suitable for shadeloving crops, while its leaf litter improves soil fertility through organic matter decomposition (Jain et al., 2005). Additionally, its potential for carbon sequestration contributes to climate change mitigation, as its broad leaves and rapid growth rate enhance carbon storage and soil nutrient cycling (Rokade & Pawar, 2013). H. cordifolia is also an excellent choice for shortrotation timber production in agroforestry systems, as it provides high-quality wood for various industries, including construction, furniture, and paper manufacturing (Chandel et al., 2018).

Tree improvement

Research on *H. cordifolia* has highlighted significant variations in leaf morphology across different geographical locations. *Nair et al.* (1991) recorded 24 leaf variation traits from 22 different location samples in Kerala, indicating the presence of substantial genetic and environmental influences on leaf characteristics. Such studies are crucial for understanding adaptive traits and selecting superior genotypes for afforestation and commercial plantation programs.

In an effort to enhance the productivity and adaptability of *H. cordifolia*, the Tamil Nadu Forest Department established an introduction

trial at the Arimalam Research Center, Pudukkottai, during 2014–2015. This initiative aimed to evaluate the species' growth performance under local environmental conditions and to identify promising genotypes suitable for large-scale plantation efforts.

Further advancing research on genetic improvement, the ICFRE- Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore, in collaboration with the Tropical Forest Research Institute (TFRI), Jabalpur, launched a five-year project in September 2018 titled 'Selection and Evaluation of *Haldina cordifolia* for Higher Wood Productivity'. This project, under the Indian Council of Forestry Research and Education (ICFRE), focuses on identifying and propagating superior genotypes to improve wood yield, disease resistance, and overall growth performance.

Utilization

H. cordifolia is highly valued for its versatile applications in structural work, timber, and traditional medicine. The wood is considered one of the finest Indian timbers, suitable for flooring, paneling, and railway carriage construction (CSIR, 1948). It is also widely utilized in the pulp and paper industry and for making window frames, furniture, bobbins, rulers, and piano keys (Chandel et al., 2018). Additionally, the wood is a preferred material for pencil manufacturing (Trotter, 1959). Other applications include canoes, dugouts, planking for river boats, packing cases, cigar boxes, grain measures, sieve frames, snuff boxes, gunstocks, toys, yokes, combs, carving, turnery work, brush-backs, and drums.



Beyond its industrial applications, H. cordifolia has significant medicinal properties. Various parts of the tree, including the leaves, seeds, bark, and roots, are used in traditional Indian medicine for treating a wide range of ailments. The leaves and bark are commonly used for cholera, cold, cough, fever, headache, scars, skin blemishes, and urinary disorders (Jain et al., 2005). The paste of stem bark and leaves is applied externally to heal deep wounds, jaundice, stomachache, and swelling (Jain et al., 2005). Additionally, the stem bark is widely recognized for its role in treating malarial fever, abdominal disorders, inflammation, wounds, and ulcers (Narayan & Singh, 2017). The tree exhibits potent antibacterial, antiseptic, antibilious, antidiabetic, and febrifuge properties (Rokade & Pawar, 2013).

The leaves and young twigs of *H. cordifolia* also serve as fodder for livestock, making it an important resource in agroforestry systems (Mehta *et al.*, 2013). Furthermore, scientific studies have demonstrated that the methanol extract from the leaves exhibits strong antibacterial activity against multiple pathogens, including *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Escherichia coli*, *Streptococcus pneumoniae*, *Clostridium difficile*, *Klebsiella pneumoniae*, *Mycobacterium tuberculosis*, and *Bacillus subtilis* (Dash *et al.*, 2014).

Another significant application of *H. cordifolia* is its bio-herbicidal potential. Isoscopoletin and umbelliferone, compounds isolated from the bark and wood, have shown effectiveness as natural herbicides against the invasive giant mimosa (*Mimosa pigra*) weed (Suksungworn *et al.*, 2017).

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Kannan C.S. Warrier., C. Kunhikannan and Rekha R. Warrier ICFRE - Institute of Forest Genetics and Tree Breeding, Coimbatore

Visit of Honorable Ministers

The Parliamentary Consultative Committee visited the ICFRE-Institute of Forest Genetics and Tree Breeding, Coimbatore on 23.01.2025. During the visit Shri Bhupender Yadav, Honourable Minister, MoEFCC inaugurated the exhibition showcased at ICFRE-IFGTB, Coimbatore.

As part of the exhibition, EIACP (Environmental Information, Awareness, Capacity Building and Livelihood Programme) Programme Centre (erstwhile IFGTB ENVIS) Resource Partner on Forest Genetic Resources and Tree Improvement, ICFRE-IFGTB showcased the GSDP products, eco-friendly products, LiFE Products, LiFE Mission awareness posters, and other farmer-friendly products made by the GSDP trainees. Shri Bhupendra Yadav, Hon'ble Minister, MoEFCC, Shri Kirtivardhan Singh, Hon'ble Minister of State, MoEFCC, Members of Parliamentary Consultative Committee, Smt. Kanchan Devi, Director General, ICFRE, Forest Officials, and higher officials of MoEFCC visited the stall.

DrRekha R Warrier, Scientist G, and EIACP Coordinator explained about the GSDP programme and gave an insight to the activities carried out by ICFRE-IFGTB EIACP PC RP. She emphasized that through the ministry's GSDP programme

EIACP ACTIVITIES



ICFRE-IFGTB EIACP imparted training for 212 participants from various parts of the country. She also highlighted how ICFRE-IFGTB EIACP helps people understand the initiatives of MoEFCC by organizing awareness programs, exhibitions, and training sessions.

Awareness Campaign and In-House Quiz

An In-house awareness quiz was conducted. Dr. S. Vigneswaran, Senior Programme Officer, explaining the rules and format at the outset. Ten groups, each comprising four enthusiastic











participants, competed in a thrilling three-round contest, which included: Objective Questions with Multiple Choices; Rapid-Fire Round and Visual Round. The teams displayed remarkable knowledge and quick thinking, making the competition both challenging and exciting. Awareness posters and handouts were disseminated widely.

Mass Plantation Drive at Ramasar Site

Aspart of Mission LiFE, World Wetlands Day 2025 and inconnection with EK Ped Maa Ke Naam-A Tree in the Name of Mother, EIACP (Environmental Information, Awareness, Capacity Building and Livelihood Programme) Programme Centre (erstwhile IFGTB ENVIS) RP at the ICFRE - Institute of Forest Genetics and Tree Breeding, Coimbatore in collaboration with CASMB EIACP PC RP, Annamalai University and Tamil Nadu Forest Department, Cuddalore Division organized a Mass Tree Plantation Drive at Pichavaram Ramsar Site and Vandalmunai Reserved Forest. This collaborative Mass Tree Plantation Drive on 2nd February 2025 was the first of its kind, uniting efforts from diverse stakeholders, including ICFRE-IFGTB EIACP PC RP, CASMB EIACP PC RP, Tamil Nadu Forest Department, Nambikkai Trust, tribal communities, and school & college students.



Awareness Lectures and Competitions

ICFRE-IFGTB EIACP CP RP conducted a series of awareness programs and competitions for undergraduate students of the Faculty of Marine Sciences in collaboration with CASMB EIACP PC RP, Annamalai University and Tamil Nadu Forest Department, Cuddalore Division. The event focused to enhance students' understanding of wetland ecosystems, their significance, and conservation measures while encouraging active participation in environmental initiatives. All the events have been registered with worldwide events of the https://www.worldwetlandsday.org/.

World Cancer Day 2025 Awareness Campaign by ICFRE-IFGTB EIACP PC RP

As part of Mission LiFE, the EIACP (Environmental Information, Awareness, Capacity Building, and Livelihood Programme) Programme Centre at the ICFRE - Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore, commemorated World Cancer Day 2025 with an awareness campaign and Awareness Lecture on the Importance of Health Insurance on February 04, 2025. The event emphasized the LiFE Mission theme "Adopt Healthy LiFE", aligning with the broader goals of promoting healthy lifestyles and sustainable living practices.











Ripples of Responsibility lecture series

As part of the Ripples of Responsibility lecture series, an online lecture on nature conservation was delivered to the students of Good Shepherd School, Ooty. The session emphasized the importance of preserving biodiversity and adopting sustainable practices. Students actively participated in discussions and shared their ideas on protecting the environment.



Capacity Building Programmes organized by ICFRE-IFGTB EIACP PC RP

As part of Mission LiFE, the EIACP (Environmental Information, Awareness, Capacity Building, and Livelihood Programme) Programme Centre at the ICFRE - Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore organized two batches of Capacity Building Programmes to empower college students with practical skills for environmental sustainability. The first batch of Quality Planting Material Producer (QPMP) and Waste to Wealth was held on March 3, 2025, followed by the second batch on March 5, 2025. These programs aimed to equip students with essential knowledge, enabling them to contribute effectively to environmental conservation and sustainable development. The inauguration of the first batch of Quality Planting Material Producer (QPMP) and Waste to Wealth was held on March 3, 2025 and the 2nd batch was inaugurated on 05.03.2025. The Valedictory function of the first batch of the Quality Planting Material Producer (QPMP) and Waste to Wealth training program was held on March 3, 2025, followed by the valedictory of the second batch on March 5, 2025. The Director distributed certificates to all participants and emphasized the importance of sustainability, urging them to become ambassadors of environmental stewardship.





LiFE Mission Activities

ICFRE-IFGTB EIACP PC RP successfully conducted 39 LiFE Mission campaigns, engaging students and individuals from diverse backgrounds through comprehensive awareness initiatives. These campaigns employed a multifaceted approach, combining informative lectures, interactive activities, and engaging games to effectively connect with participants. Through these dynamic sessions, attendees developed a deeper understanding of the LiFE Mission's objectives and were motivated to actively contribute to its implementation. As a key highlight, each participant took the LiFE Mission pledge, committing to sustainable practices and integrating LiFE action points into their daily lives.

FOREST FEST 2025 Celebrations by ICFRE-IFGTB EIACP PC RP

FOREST FEST 2025, in connection with LiFE Mission was organized by EIACP (Environmental Information, Awareness, Capacity Building and Livelihood Programme) Programme Centre (erstwhile IFGTB ENVIS) RP at the ICFRE - Institute of Forest Genetics and Tree Breeding, Coimbatoreto commemorated the International Day of Forests 2025. As a Part of this FOREST FEST 2025, a Mega Walkathon—An Awareness Walk Rally and an Exhibition were organized. The primary objective of this rally was to raise awareness about the importance of forests and inspire individuals to actively participate in LiFE Mission initiatives. It also focus to foster a sense of responsibility toward environmental conservation and empower people to contribute to a sustainable future through ecofriendly actions and sustainable practices.

Mega Walkathon – An Awareness Walk Rally was officially flagged off by the Director, with an enthusiastic participation of 650 students from PSGR Krishnammal College for Women, Government Arts College, Coimbatore, Avinashilingam Institute for Home Science & Higher Education for Women, and PSG Arts and Science College, along with 150 IFGTB staff. Participants carried awareness placards highlightingLiFE Mission themes and impactful slogans on nature conservation, which were displayed along the designated route. The walkathon commenced from the IFGTB campus, covering significant parts of the city to ensure wider outreach and public engagement. To enrich awareness, informative handouts were distributed to school children and the general public, encouraging them to adopt sustainable practices in their daily lives. The rally also included eco-awareness interactions, where participants engaged with general public, explaining the importance of environmental conservation and individual responsibility in protecting nature. Necessary permissions were obtained from government authorities and police, ensuring smooth conduct of the rally.



ICFRE - IFGTB PRODUCTS



ICFRE - INSTITUTE OF FOREST GENETICS AND TREE BREEDING

(Indian Council of Forestry Research and Education)



(An autonomous body of Ministry of Environment Forest & Climate Change, Govt. of India P.B. No. 1061, R.S. Puram, Coimbatore - 641 002. Tamil Nadu, India

The following Services are provided at ICFRE - IFGTB for various stakeholders. Please contact us for details as below

	Services	Cost per unit		Contact Number with Email ID
Clo	nal Seedling: For Sale & Booking			
1.	Clones of Casuarina Hybrids (CH-1, CH-2 & CH-5)	Rs. 4.50 per plant		Smt. K. Shanthi, CTO, Division of Plant Biotechnology, Phone: 0422 2484122 E-mail: shanthik@icfre.org
	Eucalyptus clones (EC-4, EC-6, EC-9 & EC-11)	Rs. 4.00 per plant		
2.	Tissue Culture Teak and Bamboo Plants	Rs. 55.00 per plant Rs. 25.00 per plant		Dr Rekha R. Warrier, Scientist - G & Head, Division of Chemistry & Bioprospecting Phone: 0422 2484167 E-mail: rekha@icfre.org
3.	Windbreak Clones (WBC-1, WBC-2, WBC-3 & WBC-4)	Rs. 4 per plant		Dr. C. Buvaneswaran, Scientist - G, Sliviculture & Forest Management Division Phone: 0422 2484198, 94422 45047 E-mail: buvanesc@icfre.org
4.	ArborEasy® DNA Isolation Kit Pack Size	Price Rs.	Packaging & Transportation Rs.	Dr. Modhumita Dasgupta, Scientist - G, Division of Plant Biotechnology
	10 Reactions	950.00	150.00	Phone : 0422 2484115
	20 Reactions	1900.00	200.00	E-mail: ghoshm@icfre.org
	50 Reactions	4750.00	300.00	gmodhumita@gmail.com
5.	Soil Testing (pH, EC, OC, Micro and Macro Nutrients)	Rs. 4750.00		Dr. A.C. Surya Prabha, Scientist - D, Sliviculture & Forest Management Division, Phone: 0422 2484150 E-mail: acsuryaprabha@icfre.org
Pro	ducts of IFGTB: For Sale & Book	ing		
7.	Hy-Act (Natural and Seed Oil Based Biopesticide)	Rs. 80.00 per bottle		Dr. N. Senthilkumar, Scientist - F Phone : 0422 2484193 Mobile : 9629160703 E-mail : senthilnk@icfre.org
	Tree PALH (Natural and Seed Oil Based Biopesticide)	Rs. 80.00 per bottle		
	Crawl clean (Plant Based Green Insecticide)	Rs. 25.00 per packet		(or)
	Tree Rich Biobooster (Instant Organic potting mixture for home garden, terrace and kitchen garden)	Rs. 50.00 per packet		Smt. R. Sumathi, CTO Division of Chemistry & Bioprospecting, Phone : 0422 2484144 Mobile : 9942245542 E-mail : sumathir@icfre.org
	Tara Red Jam (with natural fruit colorant)	Rs. 60.00 per bottle		