# NEWSLETTER

# 31st Annual General Meeting

• The 31<sup>st</sup> Annual General Meeting of ICFRE was held on 6<sup>th</sup> October 2025 at ICFRE-FRI, Dehradun, under the chairmanship of Shri Bhupender Yadav, Hon'ble Minister for Environment, Forest and Climate Change. The meeting was attended by Mr. Sushil Kumar Awasthi, IFS, DGF&SS, MoEF&CC; Smt. Kanchan Devi, IFS, Director General, ICFRE; Principal



31st Annual General Meeting of ICFRE at ICFRE-FRI, Dehradun









Release of "Cashing on Casuarina", "Extension Strategy of ICFRE 2025–30", "Compendium of Lesser Known Forest Plants", and "Breeding Plants for Important Tree Species of India"

Chief Conservators of Forests (PCCFs); representatives from other ministries; and ICFRE officials. During the meeting, four publications: "Cashing on Casuarina", "Extension Strategy of ICFRE 2025–30", "Compendium of Lesser Known Forest Plants", and "Breeding Plants for Important Tree Species of India" were released. The Forest Soil Health Card web portal was also inaugurated.

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# **Significant Research Finding**

# ICFRE- Forest Research Institute, Dehradun

- The α amylase inhibitory activity of *Hyptis* suaveolens leaves essential oil (HSLEO) was evaluated using the starch–DNS colorimetric assay, where IC<sub>50</sub> values for the oil and the standard inhibitor acarbose were determined from percent inhibition of α amylase at 540 nm. HSLEO exhibited poor inhibition with an IC<sub>50</sub> of 1134±1.032 μg/mL, in comparison to the IC<sub>50</sub> of acarbose 254 ± 1.531 μg/mL under identical conditions.
- Medicinally important seeds of aromatic tree *Zanthoxylum armatum* were hydrodistilled and light yellow colored essential oil of characteristic aroma in 0.9% yield was isolated.
- The antimicrobial potential of Skimmia laureola leaf essential oil was systematically evaluated against Acinetobacter baumannii using both disk diffusion and broth microdilution assays. The essential oil exhibited pronounced, concentration -dependent antibacterial activity. In the disk diffusion assay, the largest inhibition zones were recorded at  $(21.61 \pm 0.56 \text{ mm})$  and 6.25% $(19.89 \pm 0.36 \text{ mm})$ , with a gradual reduction in activity observed at lower concentrations. The broth microdilution assay further validated these findings, demonstrating complete bacterial growth inhibition ( $\geq 95\%$ ) at 100% and 50% concentrations, moderate inhibition at 25% and 12.5%, and a marked decline below 6.25%. Meropenem, used as a positive

control, produced the maximum inhibition zone, confirming the reliability of the assay.

# ICFRE-Institute of Wood Science and Technologies, Bengaluru

- An amalgamation of lignocellulosic fibers, flax, hemp, and coir fibers for producing panels were carried out. The study findings reveal that all the amalgamated panels exhibited excellent mechanical properties. All board combinations, including flax-hemp, hemp-coir, and flax-coir and vice versa, satisfied the required properties of medium-density fiberboards (IS 12406), for panel densities ranging between 900 and 1200 kg/m<sup>3</sup>. All the panels emission level was in the E1 class when tested as per IS: 13745. Similarly the amalgamated panels properties (WA, TS, MOR, MOE) were compared with coir board standard (IS 15476) and high density particle board (IS 3478). It is only the Flax to hemp and flax to coir combination conformed to all the properties of Indian standard high density particle boards and medium density coir board respectively.
- The construction concept by using the species *Azadirachta indica*(Neem wood) for the manufacture of 60 minutes fire retardant door was optimized and demonstration on commercial scale was made. The shutter manufactured in the factory conforms to 60 minutes of rating as per IS:3614.

### Workshops/Seminars/Meetings

### ICFRE- Forest Research Institute, Dehradun

01 Webinar on "Human-Elephant Conflict"

07<sup>th</sup> October 2025

100 participants including Officers & Scientists of ICFRE-FRI and other organizations under ICFRE and other institutes and students of FRI Deemed to be University, Dehradun and other universities

02 Research Advisory Group meeting

08<sup>th</sup> October 2025

25 participants including Scientists, Technical Officers of ICFRE-FRI, Dehradun



Webinar on "Human-Elephant Conflict" at ICFRE-FRI, **Dehradun** 



RAG meeting at ICFRE-FRI, Dehradun

### ICFRE-Institute of Forest Biodiversity, Hyderabad

03 Monitoring and Evaluation of Plantations 13th October and Soil and Water Conservation

2025

25 participants including Scientists, Technical Officers of ICFRE- IFB. Hyderbad

#### ICFRE-Himalayan Forest Research Institute, Shimla

04 Seminar on "Ecosystem- its components threats and conservation"

31<sup>st</sup> October 2025

20 participants including Scientists, Forest Officers and Researchers of ICFRE-HFRI

### ICFRE-Institute of Forest Genetics & Tree Breeding, Coimbatore

05 Seminar on "Safe science: Biosafety regulations and practices"

27<sup>th</sup> October 2025

35 participants including Scientists, Officers, Technical staffs and Research fellows of ICFRE-IFGTB. Coimbatore

# **Training Programmes**

### **Indian Council of Forestry Research and Education**

01 Environmental Impact Assessment – Evidence Based Decision Making

06<sup>th</sup> to 10<sup>th</sup> October 2025

25 participants including Scientists and Technologist from 11 state Government Departments





Training Programme on "Environmental Impact Assessment – Evidence Based Decision Making" at ICFRE(HQ)

### ICFRE- Forest Research Institute, Dehradun

02 Plywood Manufacture	13 <sup>th</sup> to 17 <sup>th</sup> October 2025	19 participants from different plywood industries
03 Wood and Bamboo Preservation	27 <sup>th</sup> to 31 <sup>st</sup> October 2025	15 participants from different academic institutions, government organizations and industries



Training Programme on "Plywood Manufacture" at ICFRE-FRI, Dehradun



Training Programme on "Wood and Bamboo Preservation" at ICFRE-FRI, Dehradun

### ICFRE- Arid Forest Research Institute, Jodhpur

04 Nursery Technologies for Arid and Semi-Arid Species

07<sup>th</sup> to 09<sup>th</sup> October 2025

20 participants including Students and NGO's members

#### ICFRE- Himalayan Forest Research Institute, Shimla

05 "Diversity, Identification, Conservation and Utilization of Medicinal Plants of North Western Himalayan Region

06<sup>th</sup> to 08<sup>th</sup> October 2025 30 participants including Ayurvedic Officer, Teachers, Students, Horticulture Field staff, Vaidya, Mahila Mandal, Yoga teacher and Eco Task personnel

06 Utilization of Mycorrhiza biotechnology for capacity building and production of planting material in the establishment of modern nurseries 15<sup>th</sup> to 16<sup>th</sup> October 2025 35 participants including Forest Officers and Field staff of Bilaspur Forest Department, H.P.



Training Programme on "Diversity, Identification, Conservation and Utilization of Medicinal Plants of North Western Himalayan Region" at ICFRE-HFRI, Shimla



Training Programme on "Utilization of Mycorrhiza biotechnology for capacity building and production of planting material in the establishment of modern nurseries" at ICFRE-HFRI, Shimla

O7 Seed, Nursery and Plantation Techniques of Oak Species

22<sup>th</sup> to 24<sup>th</sup> October 2025

50 participants including Students, Eco Task Force, Panchayat representative and NGO's working on medicinal plants



Training Programme on "Seed, Nursery and Plantation Techniques of Oak Species" at ICFRE-HFRI, Shimla

08 Rastriya Karmayogi Large Scale Jan Seva Programme 31<sup>st</sup> October 2025 19 participants including officers & Scientists of ICFRE HFRI Shimla

#### ICFRE- Rain Forest Research Institute, Jorhat

09 Capacity Building Programme for Biodiversity Survey

27<sup>th</sup> October 2025 10 participants from Imphal, Manipur

10 Bamboo for personnel of other services

28<sup>th</sup> to 30<sup>th</sup> October 2025 30 officers from different Departments of Mizoram, such as Agriculture, Horticulture, Soil Conservation, Veterinary, Education, Medicinal & Plant Board, State Bamboo Mission and Pollution Control Board



Training Programme on "Bamboo for personnel of other services" at ICFRE-RFRI, Jorhat

#### ICFRE- Institute of Wood Science and Technology, Bengaluru

11 Wood as a Sustainable Material

06<sup>th</sup> to 10<sup>th</sup> October 2025 16 IFS officers from different State Forest Department



Training Programme on "Wood as a Sustainable Material" at ICFRE-IWST, Bengaluru

#### ICFRE- Tropical Forest Research Institute, Jabalpur

12 Conservation and Propagation Techniques 07<sup>th</sup> to 10<sup>th</sup> of RET and Economically important species October 2025

25 participants including Range Officers and Nursery In-charge

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# Awareness and Demonstration Programme

### ICFRE- Forest Research Institute, Dehradun

• Conducted training programme on "Cultivation and Utilization of Medicinal and Aromatic Plants" from 27<sup>th</sup> to 29<sup>th</sup> October 2025 at Krishi Vigyan Kendra, Dhakrani. Around 35 farmers from nearby area of Dhakrani participated in the programme.



Training Programme on "Cultivation and Utilization of Medicinal and Aromatic Plants" at Krishi Vigyan Kendra,
Dhakrani

# ICFRE-Institute of Wood Science and Technology, Bengaluru

 Establishment of Sandalwood based Agroforestry Demo Plot at Chattiyara Alappuzha, Kerala on 26<sup>th</sup> October 2025.

# ICFRE- Arid Forest Research Institute, <u>Jodhpur</u>

• 73 FRO trainees from Chandrapur Forest Academy, Maharashtra and Tamil Nadu Forest Academy, Coimbatore visited Interpretation Centre, VMGs of Shisham Clones and Thar Shobha Khejri trial of ICFRE-AFRI Jodhpur on 02<sup>nd</sup> & 09<sup>th</sup> October 2025. They were briefed about various research activities of the institute.



FRO trainees from Tamil Nadu Forest Academy, Coimbatore visited ICFRE-AFRI, Jodhpur

• 40 students along with faculty from College of Agriculture, Vellayani, KAU, Kerala visited VMGs of Shisham Clones, Neem Patti khad and Thar Shobha khejri trial on 14<sup>th</sup> October 2025. They were briefed about various research activities of the institute during the visit.



Students from College of Agriculture, Vallayani, KAU, Kerala visited ICFRE-AFRI, Jodhpur

# ICFRE-Tropical Forest Research Institute, Jabalpur

• 15 students from St. Aloysius College, Jabalpur visited ICFRE-TFRI, Jabalpur on 17<sup>th</sup> October 2025. They were briefed about Environmental and Forestry Research during the visit.



Students from St. Aloysius College, Jabalpur visited ICFRE-TFRI, Jabalpur

### ICFRE-Institute of Forest Productivity, Ranchi

Organized awareness programme on "Role of Millets in preventing Malnutrition's" on 08<sup>th</sup> October 2025 at Deepu Tola, Lalgutwa, Ranchi.
 25 participants from Deepu Tola, Lalgutwa, Ranchi participated in the programme.

### <u>ICFRE- Institute of Forest Genetics & Tree</u> Breeding, Coimbatore

106 students along with faculty from Karunya Institute of Technology, Coimbatore and FRI, DU, University, Dehradun and Yogi Vemana University, Kadapa visited Vegetative Multiplication Garden, Chemistry and Bioprospecting lab of ICFRE-IFGTB, Coimbatore on 10<sup>th</sup>, 23<sup>rd</sup> & 29<sup>th</sup> October 2025.



Students from FRI, DU University, Dehadun visited ICFRE-IFGTB, Coimbatore

# ICFRE- Institute of Wood Science and Technology, Bengaluru

• 80 students along with faculty members from Oxford College, Bengaluru visited ICFRE-IWST, Bengaluru on 28<sup>th</sup> October 2025. During the visit, they were apprised about the tissue culture technique and the step-wise hardening process of tissue culture-raised bamboo and sandalwood.



Students from Oxford College, Bengaluru visited ICFRE-IWST, Bengaluru

### **Mission Life**

# ICFRE-Institute of Forest Biodiversity, Hyderabad

• ICFRE-CEC, Viskhapatnam organized awareness programme on "Energy Saved, Water Saved and Single Used Plastic" on 03<sup>rd</sup>, 09<sup>th</sup>, 13<sup>th</sup>, 15<sup>th</sup> & 17<sup>th</sup> October 2025 at ICFRE-CEC, Andhra University and Joseph College for Women, Viskhapatnam.



Awareness programme on "Healthy lifestyle and Single Used Plastic" at ICFRE-CEC, Visakhapatnam

• ICFRE-IFB, Hyderabad organized awareness programme on "Waste Reduced and Energy Saved" on 13<sup>th</sup> & 15<sup>th</sup> October 2025 at nearby area of Bahadurpally, Hyderabad.

# ICFRE-Institute of Forest Genetics & Tree Breeding, Coimbatore

A plantation programme of *Madhuca longifolia* was organized on 14<sup>th</sup> October 2025 at R.C.C. Middle School, Valipalayam.



Plantation programme on *Madhuca longifolia* at R.C.C. Middle School, Valipalayam, Coimbatore

# Prakriti Programme

### ICFRE-Forest Research Institute, Dehradun

• Organized awareness programme on "Sustainable Food System" on 14<sup>th</sup> October 2025 at Manava Bharti School, Dehradun. 200 students participated in the programme.

# ICFRE- Arid Forest Research Institute, Jodhpur

158 students along with teachers from PM SHRI Government Senior Secondary School, Chamu, Jodhpur visited the Interpretation Centre of ICFRE-AFRI, Jodhpur on 10<sup>th</sup> October 2025. During the visit, they were briefed on the VMG of Shisham clones, Thar Shobha Khejri, and Neem Patti Khad pits.



Students from PM Shree GSSS, Chamu, Jodhpur Visited ICFRE-AFRI, Jodhpur

# ICFRE- Institute of Wood Science and Technology, Bengaluru

• 86 students along with teachers from PM Shri Government High School, Morpila, Goa visited various Laboratories of ICFRE-IWST, Bengaluru on 24<sup>th</sup> October 2025. During the visit, they were shown the Plant tissue culture, Molecular Biology Lab & Nursery techniques.

# ICFRE-Tropical Forest Research Institute, Jabalpur

• 50 students from PM Shri Government High School, Gaur Saliwada, Jabalpur visited ICFRE-TFRI, Jabalpur on 13th October 2025. They were briefed about various research activities of the institute during the visit.



Students from PM Shri Government High School, Gaur Saliwada, Jabalpur visited ICFRE- TFRI, Jabalpur

# ICFRE-Institute of Forest Genetics & Tree Breeding, Coimbatore

• 467 students along with teachers from SNMVHS School, Sri Ramakrishna Mission Vidhyalaya Swami Sivanandha Higher Secondary School, Stanes Anglo Indian Higher Secondary school and Amrita Vidyalayam, Coimbatore visited Gass Forest Museum and Aviary Rescue Centre of ICFRE-IFGTB, Coimbatore on 08th, 09th, 13th & 30th October 2025.



Students from Amrita Vidyalayam, Coimbatore visited ICFRE- IFGTB, Coimbatore

## **Memorandum of Understanding**

• ICFRE-IWST, Bengaluru signed MoU with Federation of Indian Plywood and panel Industry, New Delhi on 17<sup>th</sup> October 2025 to execute projects on plywood preservation and bio-based adhesives.



MoU signed between ICFRE-IWST, Bengaluru and Federation of Indian Plywood and panel Industry, New Delhi

- ICFRE-IWST, Bengaluru signed MoU with M/s SpaCyPhy Tech Private Limited, Bengaluru on 17<sup>th</sup> October 2025 for development of prefabricated Timber/Bamboo based Building and Construction activities.
- ICFRE-IWST, Bengaluru signed MoU with National Institute of Advanced Studies (NIAS), Bengaluru on 21<sup>st</sup> October 2025 for collaborative research and development. activities between the two institutions.

• ICFRE-IFB, Hyderabad signed MoU with Living Water Aqua Solutions Private Organization, Hyderabad on 10<sup>th</sup> October 2025 for Faster collaborative engagement in Scientific, Academic and Extension activities.

# **Visit of Dignitaries to Institutes**

• Shri A. K. Bhattacharya, Joint Secretary, MoEF&CC visited ICFRE- IWST Field Station, Kolkata on 17<sup>th</sup> October 2025 as Nodal Officer for inspection on Swachhata Special Campaign 5.0.



Shri A. K. Bhattacharya, Joint Secretary, MoEF&CC visited the ICFRE-IWST, Bengaluru

### **Radio Talk**

• A radio talk on "Climate Change and its Impact" in Assamese was delivered at All India Radio, Jorhat, on 25th October 2025.



Radio Talk on "Climate Change and its Impact" at All India Radio, Jorhat

# **Miscellaneous**

# 156<sup>th</sup> Mahatma Gandhi Birth Anniversary

ICFRE Headquarter, Institutes and Centres celebrated 156<sup>th</sup> Mahatma Ghandhi Birth Anniversary on 02<sup>nd</sup> October 2025.







## Swachhata Campaign 5.0

• ICFRE, HQ, institutes and centres carried out cleanliness dive as a part of celebration of Swachhata Campaign 5.0 from 02<sup>nd</sup> to 31<sup>st</sup> October 2025









### Vigilance Awareness Week 2025

Vigilance Awareness Week was celebrated from 27<sup>th</sup> October to 03<sup>rd</sup> November 2025 by ICFRE Headquarter, Institute and Centres.

















# Wildlife Week

• Wild life Week was celebrated from 02<sup>nd</sup> to 08<sup>th</sup> October 2025 by ICFRE, Institute and Centres.









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### **HR NEWS**

### RETIREMENT

Name of Officer	Date
Dr. Rambir Singh, Scientist-E, ICFRE-FRI, Dehradun	31.10.2025
Smt. Shalini P. Rao, CTO, ICFRE-IWST, Bengaluru	31.10.2025
Sh. Navneet Kumar, Section Officer, ICFRE(HQ)	31.10.2025
Sh. Vijendra Kumar, Section Officer, FRI, Dehradun	31.10.2025

#### APPOINTMENTS ON DEPUTATION

Name of Officer	Date
Sh. T. Rabi Kumar IFS (AGMUT:1995) Director, IFGTB, Coimbatore	09.10.2025
Sh. Atanu Shah (TFS:2012) DCF, FRC-LEC, Agartala	10.10.2025

#### TRANSFER

THUM OF LIK	
Name of Officer	Date
Sh. Hemant Kumar Gagal, Under Secretary, TFRI, Jabalpur to AFRI, Jodhpur	28.10.2025
Sh. Neeraj Kumar, Gupta, Under Secretary, AFRI, Jodhpur to ICFRE(HQ)	28.10.2025

# **Publication**

# Research Papers

- Sahu, L., & Singh, A. P. (2025). Recent Range Extension of Moths (Lepidoptera: Heterocera) in Moist Temperate Ban Oak (*Quercus leucotrichophora* A. Camus) Forests of Uttarakhand, Western Himalaya, from Neighbouring Sub-regions of Central and Eastern Himalaya, India. *National Academy Science Letters*, 1-17.
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- Dewangan, A., Sil, A., Tiwari, A., Kumar, A., Krishnapriya, M. G., & Kolhe, M. R. (2025). Impact of climate change on urban infrastructure: Strategies for resilient civil engineering design. *International Journal of Environmental Sciences*, 11(22s), 3963–3970.
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- Behera, S., Chavan, S. B., & Deshmukh, P. P. (2024). Microclimate modification through agroforestry influences crop yield under extreme weather conditions. *Climate Change and Environmental Sustainability*, 12(1), 12–20.
- Deshmukh, P. P., Tiwari, P., Dobriyal, M. J., Yadav, R. P., Handa, A. K., Kumar, N., Ram, A., Dev, I., Yadav, A., Anuragi, H., Shukla, A. K., Shekhawat, V., Anuvarna, K., & Behera, S. (2025). Effects of tree planting geometry on lentil nutritional quality, tree biomass, and economic returns in Melia dubia-based agroforestry system in Bundelkhand region of India. *Frontiers in Agronomy*, 7, 1675259.
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