



ICFRE

NEWSLETTER

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Azadi Ka Amrit Mahotsav

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- ICFRE and its institutes participated in the Vigyan Sarvatra Pujyate Mega Expo at Pragati Maidan, New Delhi during 22 to 28 February 2022. Various technologies of ICFRE were exhibited in the Expo.
- FRI, Dehradun organized a Researchers–Students Interaction on 22 February 2022 which was designed to create scientific awareness about the modern research and developments in plant chemistry and to inculcate scientific temperament and aptitude among students.
- FRI, Dehradun organized awareness programme on “Identification of Tree Species of FRI Campus” for School Children on 9 February 2022.
- IWST, Bengaluru organized a webinar on "Wood and Bamboo Polymer Composite" on 4 February 2022 for Wood based industries, researchers, foresters, architects, wood users and students.
- IWST, Bengaluru organized a training for about 23 farmers of Attivatta, Hoskote, Bangalore Rural district on Creation of Awareness of Biofertilizers on 8 February 2022.
- IWST, Bengaluru organized webinar on "Problems and its solution strategies for wooden handicraft sector in India" on 11 February 2022 for artisans, students, handicrafts traders, Academicians and Researchers.
- HFRI, Shimla organized an awareness programme for the villagers on 15 February 2022 at Kot, Shilaru Panchayat, Tehsil Theog, District Shimla on topic "Eco-friendly Methods for the Management of Pests and Diseases in Coniferous Trees". The event was attended by 50 participants including Panchayat Pradhan, youth club, mahila mandal, etc.
- IFP, Ranchi organized training-cum-seminar on "The Role of Community in Water Resource Management in Turigarha on 4 February 2022. 48 villagers participated in the programme.
- IFP, Ranchi organized "Bamboo Growers and Entrepreneurs Mela" on 14 February 2022, About 48 participants including government officials, bamboo growers, entrepreneurs, NGOs, bamboo buyers, craftsmen participated in the Mela.
- IFP, Ranchi organized training on "Role of Farmers in Conservation, Cultivation, Harvesting and Marketing of Medicinal and Aromatic Plants" on 14 February 2022 at Khairini Village, Darjeeling, West Bengal.



ICFRE and its institutes participated in the Vigyan Sarvatra Pujyate Mega Expo

- IFP, Ranchi organized training on "Lac Cultivation on *Flamengia semialata*" was organized at Turigarha, Torpa, Khunti in which about 50 villagers participated, through Van Vigyan Kendra on 18 February 2022.



FRI, Dehradun organized awareness programme on Identification of Tree Species of FRI Campus

- IFP, Ranchi organized seminar-cum-training on "Bamboo Handicraft, Bamboo Production and Value Addition" on 24 February 2022 at Hansbera, Karra, Khunti by, in which 38 participants of the village participated.



HFRI, Shimla organized an awareness programme on Eco-friendly Methods for the Management of Pests and Diseases in Coniferous Trees



IFP, Ranchi organized training on "Lac Cultivation on *Flamengia semialata*"



IFP, Ranchi organized seminar-cum-training on Bamboo Handicraft, Bamboo Production and Value Addition

Significant Research Findings

Institute of Forest Genetic and Tree Breeding, Coimbatore

- Molecular docking studies of the phytochemicals identified in the bark samples of *Pterocarpus santalinus* Linn. through chromatographic analysis having anti-inflammatory activity against the targeted ligand protein were performed and found that Lup-20(29)-en-3-ol, (3.β.)-(CAS) (Lupeol) was the most potential compound having highest docking score of - 8.47 against the protein NR3C1(1NHZ) indicate that Lupeol constitute promising lead compound as chemotherapeutic agents for anti-inflammatory activity.
- Identified and documented a very large tree of *Terminalia arjuna* during population survey for FGRs at Jawathu Hills (Melpattu forest area; N12°25'46.89", E078°51'06", Altitude: 929 msl) in Tiruvannamalai forest division of Tamil Nadu in the month of February 2022. Its height was 18.5 m and Girth at breast height

was 1347 cm, with a clear bole height of 4m. This tree has been found to be the largest among the *T. arjuna* trees documented by IFGTB and therefore recommends the conservation of this particular tree as a valuable genetic resource for posterity, similar to that of Kannimara teak at Topslip.

Forest Research Institute, Dehradun

- Database was updated to 248 species of moths belonging to 10 families with information on date of record, GPS coordinates, altitude, number of individuals, classification, name and image of each of the species sampled for 2 year data.
- From Pathankot Reserve Forest Division, Punjab, 22 Forest Genetic Resource (FGR) species were documented and regeneration data were recorded.

- Extraction parameters for isolation of natural fibre from *Pueraria lobata* (an invasive weed) were optimised.
- Dyeing and mordanting trials on different fabrics were conducted with the natural dye derived from *Punica granatum* peels under pre-post and simultaneous mordanting condition.
- Synthesis of Titanium oxide NPs (TiO-NPs) was carried out by using 25% aqueous methanol extracts of sawdust of *Shorea Robusta*, *Dalbergia sissoo* and knotwoods of *Mangifera indica*, *Melia dubia*, *Toona ciliata*, *Acacia nilotica*, *Azadirachta indica*, *Eucalyptus tereticornis*, *E. citriodora* and *E. hybrid*.

Rain Forest Research Institute, Jorhat

Prepared a Digital Versatile Disc (DVD) on Artificial Pollination of Orchids. The DVD contains step-wise instructions for artificial pollination in rare and endangered orchids.

Institute of Forest Productivity, Ranchi

- 14 new Candidate Plus Trees (CPTs) of Mahua and 39 new CPTs of Neem have been selected from West Bengal.
- Demonstration plot cum field trials of *Poplar* and *Melia dubia* have been established in Araria, Begusarai and Gaya districts of Bihar.
- Poplar and Melia based Agroforestry models have been established to demonstrate the model to the farmers in Bihar.

Consultancy

Major achievements and works executed during the month:

1. Finalization of 'Carrying Capacity and Biodiversity study report of Daitari Iron Ore Mine of Odisha Mining Corporation, Odisha'.
2. Finalization of EA&EPIR report of Jaganath, Lingraj and Ananta OCPs of MCL as per assignment by the CIL.
3. Submission of Ninth Six Monthly Third Party Monitoring Report of CAT Plan of VPHEP for the period from April, 2020 to September 2020 to THDC India Ltd.
4. One new consultancy project on Eco-restoration studies of mined out and surroundings areas of Gouthamkhani OC project under sustainable development activities in SCCL, Kothagudem was awarded to the EM Division, ICFRE.

Transfer of Technology

The technology "A facile and eco-friendly technique to extract natural fiber from pine needles" was transferred to Himachal Pradesh Forest Department on 17 February 2022. The related agreement was signed by Sh Ajay Srivastava, Pr. Chief Conservator of Forest (HoFF), Himachal Pradesh and Sh. Arun Singh Rawat, Director, FRI and Director-General ICFRE, Dehradun.

Workshops/Webinars/Meetings

S.No.	Topic	Duration	Beneficiaries
Forest Research Institute, Dehradun			
1.	Workshop on Utilization of Pine Needles as a source of Natural Fibre	17 February 2022	-
2.	Seminar on Advances in Forest Hydrology: Challenges and Opportunities	18 February 2022	Himachal Pradesh Forest Department
Institute of Forest Genetic and Tree Breeding, Coimbatore			
3.	Webinar on Soil Health: Research and Development	3 February 2022	Scientists, Technical staff & scholars

4.	Webinar on Bio-fertilizers and Bio-control Agents – Success, Challenges and Future	15 February 2022	-
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Forest Research Centre for Eco-Rehabilitation, Prayagraj

5.	Workshop on Agroforestry of Gamhar and Aonla	7 February 2022	-
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6.	Workshop on Bamboo: Propagation, Management and marketing	15 February 2022	-
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7.	Seminar on Opportunities in Forestry and Environment Sector	2 February 2022	-
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IFGTB, Coimbatore conducted webinar on Soil Health: Research and Development



FR CER, Prayagraj conducted workshop on Agroforestry of Gamhar and Aonla

Training Programmes

S.No.	Topic	Duration	Beneficiaries
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Forest Research Institute, Dehradun

1.	Bamboo Tissue Culture	24 February 2022	Technical assistants, researchers and research students
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Institute of Forest Genetic and Tree Breeding, Coimbatore

2.	Plant Tissue Culture Techniques and its Applications	7 February to 18 March 2022	Students
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3.	Forest Entomology and Pest Control	14 February to 18 March 2022	-
4.	Value Addition and Marketing of NTFPs - Bamboo Crafts	31 January to 18 March 2022	-
5.	HPLC & GC-MS/MS: Instrumentation, Operation and Applications	28 February 2022	-

Institute of Wood Science and Technology, Bengaluru

6.	Sandalwood Cultivation and its Prospects	21 February 2022	Sandalwood growers and field staff of Karnataka Forest Department
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Himalayan Forest Research Institute, Shimla

7.	Sustainable Development and Livelihood through Forestry Interventions	17 February 2022	Scientists, academician, officers and villagers
8.	Cultivation of Important Temperate Medicinal Plants: An Alternative to Diversification and Income Enhancement	20 February 2022	Farmers, members of mahila mandals
9.	Productivity Enhancement and Sustainable Livelihood through Forest Technology Interventions	26 February 2022	Farmers, mahila mandals and youth clubs



IFGTB, Coimbatore organized training on HPLC & GC-MS/MS: Instrumentation, Operation and Applications



HFRI, Shimla organized training on Sustainable Development and Livelihood through Forestry Interventions

Rain Forest Research Institute, Jorhat

10.	Office Procedure	21 to 23 February 2022	Administrative staff of ICFRE
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11.	Bamboo Resource Development for Addressing Livelihood Concern of Communities of other stakeholders	24 and 25 February 2022	-
12.	Bamboo and Fruit Tree Species	26 February 2022	Community members of Balipara Foundation

Institute of Forest Productivity, Ranchi

13.	Improving Livelihood through NTFP	21 February 2022	-
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RFRI, Jorhat organized training on Office Procedure under HRD Plan



RFRI, Jorhat organized training on Bamboo and Fruit Tree Species

Patent

IWST, Bengaluru has filed a Indian Patent Application No. 202241004804, Titled “A Method for Deacidification of Oil”.

Memorandum of Understanding

- MoU between ICFRE, Dehradun and CSIR- Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow was signed on 22 February 2022 by Sh. A.S. Rawat, Director General, ICFRE and Dr. Prabodh Kumar Trivedi, Director, CSIR-CIMAP. The MoU will provide opportunities for sharing scientific and technical expertise in the field of medicinal and aromatic plants, help identify technological gaps, extension of forest based technologies, and exchange of resources for dissemination of information to stakeholders.
- A letter of Intent (LoI) between ICFRE, Dehradun and International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal was signed on 22 February,

2022 by Sh. A.S. Rawat, Director General, ICFRE and Dr. Pema Gyamtsho, Director General, ICIMOD.

- MoU was signed between RFRI, Jorhat and Manipur Forest Department on 19 February 2022 to collaborate in applied research programmes, capacity building and knowledge sharing on forest biodiversity conservation, ecosystem, climate change vulnerability, climate change mitigation & adaptation and livelihood of forest dependent communities.



MoU was signed between ICFRE, Dehradun and CSIR- Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow

Miscellaneous

- IFP, Ranchi participated in the Kisan Mela-cum Agriculture Exhibition-2022 organized by IINRG, Namkum on 26 February 2022 and displayed the activities of the Institute. The Chief Guest, Hon'ble Governor, Jharkhand Shri Ramesh Bais visited the stall and appreciated the activities of the Institute.
- IFGTB, Coimbatore commemorated World Wetlands Day 2022 on 2 February 2022 by organizing an awareness campaign.



IFGTB, Coimbatore commemorated World Wetlands Day 2022

HR News

Appointment (Regular)

Name of Officer	Date
Shri P.S. Srikanth, Scientist - 'B', RFRI, Jorhat	07.02.2022
Ms. Ilham Bano, Scientist - 'B', FRCCE, Visakhapatnam	22.02.2022

Appointment (Deputation)

Name of Officer	Date
Sh. S.K. Thomas, IFS (AGMUT; 2009), CF, FRI, Dehradun	08.02.2022
Sh. R. Arun Kumar, IFS (TR: 2009), CF, FRI, Dehradun	08.02.2022

Repatriation

Name of Officer	Date
Shri S.D. Sharma, IFS (HP:87)	07.02.2022

Retirements

Name of Officer	Date
Shri M.C. Jain, Section Officer, FRI, Dehradun	28.02.2022

Patron:

Shri A.S. Rawat, IFS, Director General, ICFRE, Dehradun

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