

ICFRE NEWSLETTER



Indian Council of
Forestry Research
and Education

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February to April 2021

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27th ANNUAL GENERAL MEETING OF ICFRE



27th Annual General Meeting of the Indian Council of Forestry Research and Education (ICFRE) Society was held under the Chairmanship of Shri Prakash Javadekar, Hon'ble Minister of Environment, Forest and Climate Change and President of ICFRE Society on 25 March 2021 at Ministry of Information & Broadcasting, Shashtri Bhawan, New Delhi.

This online programme had 156 registered participants from different states such as Karnataka, Tamil Nadu, Maharashtra, Chhattisgarh, Madhya Pradesh, Andhra Pradesh, Telangana, Bihar, Rajasthan, Gujarat, Himachal Pradesh, Uttarakhand, Punjab etc., comprising farmers, sandalwood growers, students, researchers, university professors and such others.

- RFRI, Jorhat to celebrate "Amrut Mahotsav" organised a seminar on the theme 'Conservation and sustainable use of Bamboo in North-Eastern Region' on 30 April 2021.
- IFP, Ranchi to celebrate "Amrut Mahotsav" on 22 April 2021 an online lecture was delivered

by Shri H.S.Gupta, PCCF (retd.), Government of Jharkhand on "Seven decades of independence-the Indian Forestry at new Crossroads".

BHARAT KA AMRUT MAHOTSAV

- FRI, Dehradun organized virtual technical talks under "Amrut Mahotsav" on the topic "Forest Genetics Conservation" & "Forest Productivity" on 19 March 2021
- IFGTB organized training on "Wealth out of waste-An IFGTB initiative for tribal development" as celebration of "Amrut Mahotsav" on 19 March 2021. 150 participants Irular tribes in Women Self Help Groups (WSGHs) attended the programme.
- IWST, Bengaluru to celebrate "Amrut Mahotsav", organised an online exclusive question and answer session on "Indian Sandalwood propagation and cultivation" on 16 April 2021.



RFRI, Jorhat conducted seminar on 'Conservation and sustainable use of Bamboo in North-Eastern Region'

Significant Research Findings

Forest Research Institute, Dehradun

- Database was prepared for 371 species on their i) taxonomy ii) distribution range in different Indian sub-regions & (iii) their seasonality. Local and regional abundance status, forest type association were also determined for 91 species of butterflies, amongst these which are restricted to Western & Central Himalayas were studied for rarity analysis. One more species added to the database by its identification based on its male genitalia study. Labelling for over 723 butterfly specimens belonging 3 families (Papilionidae, Pieridae & Nymphalidae) collected from 2005-2020 completed.
- Database on insects infesting Western Himalayan oaks in Uttarakhand was prepared for 232 species of insects (i) 118 species of Lepidoptera ii) 98 species coleoptera iii) 16 species of Hemiptera, labeling of specimens initiated. Experiments were continued in the laboratory on life cycle of Kharsu oak borer, *Xylotrechus basifuliginosus* Heller, 1926 and one species of Lymantrid defoliator feeding on Ban oak, *Quercus leucotrichophora* foliage.
- Experiment for clonal resistance screening against leaf defoliator, *Clostera cupreata* has been conducted for ten poplar clones, in the laboratory. Experiment on choice of feeding was carried out and leaf consumption area was recorded.
- Trichosanthes dunniana* subsp. *clarkei* collected from Sikkim is newly incorporated in DD Herbarium as ISOTYPE (Accession No. 172768, incorporated on 09.02.2021).
- Developed seed storage protocol for medium term seed storage for 20 species from Uttarakhand under CoFGR project.
- 70 species prioritized under FGR project for long term conservation of seed germplasm stored at -20°C in the genebank of NBPGR, New Delhi.
- Five populations of *Valeriana jatamansi* grown in Arunachal Pradesh were characterized for composition of essential oils isolated from their rhizomes.
- Five populations of *Taxus baccata* grown in Uttarakhand were characterized for their 10-DAB-III content determined in their needles.
- Needles of three populations of *Cupressus torulosa* found in Gopeshwar, Ukhimath and Chirbatiya were hydrodistilled and their essential oil contents were determined.
- Zinc oxide nanoparticles using extracts isolated from knotwoods of *Mangifera indica*, *Azadirachta indica*, *Acacia nilotica*, and saw dust of *Shorea robusta* and *Dalbergia sissoo* to assess their biocidal potential against brown rot and white rot fungi were synthesized.
- Draft study report of the project 'Replenishment study of river bed material for Ganga river and its three tributaries' (Rawasan-1, Rawasan-2 and Kotawali) submitted to Uttarakhand Forest Development Corporation.
- GIS based maps were generated to identify gaps for species of conservation priority (rare species with narrow distribution range) in relation to (i) 21 forest types and (ii) protected area network of the state. Data on species abundance in respective forest types was compiled for 300 species of 4 families (*Papilionidae*, *Pieridae*, *Nymphalidae*, *Lycaenidae*).
- Database on insects infesting Western Himalayan oaks in Uttarakhand was updated to 235 species of insects (i) 118 species of Lepidoptera ii) 100 species Coleoptera iii) 16 species of Hemiptera iv) Diptera. It includes information on i) Classification & taxonomy ii) images on the life cycle larva, pupa, adults (male & female) and also eggs of some species iii) distribution range (iv) specimens records and details (v) species of oak infested and other hosts (vi) habits & habitat (vii) life cycle details of different stages and their morphological characters (viii) references and literature, etc. GIS based maps were generated for depicting sites infested with, defoliator, borer and sapsucker in Uttarakhand.
- Needles of *Cupressus torulosa* found in Bhatwari and Jhala of Uttarakhand were hydrodistilled and their essential oil contents were determined. Chemical composition of the fatty oil isolated from the seeds of *Prinsepia utilis* grown in Chakrata (Uttarakhand) was examined. Total phenolics contents (TPCs) and total flavonoid contents (TFCs) in the leaves of *Cupressus torulosa* collected from the trees grown in seven locations of Uttarakhand and Shimla (Himachal Pradesh) were determined and found to vary from 178.11-208.21mgGAE, and 75.23-85.19 mgQE, respectively. TPCs and TFCs in the peels of *Punica granatum* were determined and found to be 188.80 mgGAE and 0.27 mgQE.
- Populations of *Valeriana jatamansi* grown in Himachal Pradesh (07), Sikkim (01), Nagaland (01), and Meghalaya (03), were characterized for composition of essential oils isolated from their rhizomes.
- Zinc oxide nano particles using extracts isolated from knotwoods of *Mangifera indica*, *Azadirachta indica*, *Acacia nilotica*, and saw dust of *Shorea robusta* and *Dalbergia sissoo* were characterized by FT-IR spectroscopy.

- *Cupressus torulosa* leaves derived methanolic extract displayed potent antioxidant capacity determined in the DPPH free radical and H₂O₂ scavenging assays.
- Optimization of method for extraction of dye from *Punica granatum* peels with respect to material to liquor ratio, pH and duration using response surface methodology was carried out.
- GC-MS analysis of the essential oil from *Thymus serpyllum* was done. The oil was rich in thymol and carvacrol.
- Ensemble species distributions modeling was done to predict the habitat suitability of Himalayan cheer pheasant (*Catreus wallichii*) in response to future climate change. Study reported a decline of climatically suitable habitats and shifting elevation in the Himalayan region upwards in response to various climatic scenarios of 2050 and 2070.
- Observations on phenological phenomenon i.e. leaf initiation, leaf maturity, flower bud initiation, etc of *Lagerstroemia speciosa* L in response to rising atmospheric temperature, revealed that rising atmospheric temperature induced early leaf (25-35 days) initiation and flower bud formation compare to ambient temperature.
- Studies on average values of data recorded so far "Carbon Sequestration and Carbon dioxide Emission from the Soils under different Forest Covers in Uttarakhand", revealed higher CO₂ emissions in Sal vegetation 3.02 $\mu\text{mol CO}_2\text{m}^{-2}\text{sec}^{-1}$ as compared to Chirpine vegetation 2.71 $\mu\text{mol CO}_2\text{m}^{-2}\text{sec}^{-1}$. These average higher values of carbon dioxide emission in Sal vegetation correspond to the average higher soil temperature 19.50 °C and soil moisture 25.59 %.
- Dying – off of Trees in Raipur Forest Range under Mussoorie Forest Division was investigated and a research report has been prepared and submitted to DFO, Mussoorie for the control of disease.

Institute of Forest Genetics and Tree Breeding, Coimbatore

- *Saraca asoca* is a red-listed taxon with declining status demanding conservation. Due to scattered occurrence and low number of individuals, over harvesting of the species to meet specific end uses has resulted in dwindling of its number in natural habitats. Chemoprofiling of *Saraca asoca* is aimed at identifying divergent material. Tannin was profiled in 150 samples collected from South India (Tamil Nadu, Karnataka, Kerala). Each sample containing weighed quantities were spotted on the TLC plate in 5 mm bands using an automated TLC applicator (CAMAG Linomat 5, Switzerland). Each plate had five calibration bands of the marker compound and six extracts spotted in duplicate. The plates were recorded using a digital camera under UV-254 nm light and processed using QuantiScan v3.0 software (Biosoft, UK). The correlation coefficient, R², for the marker compound in all TLC plates was > 0.99. Epicatechin,

Catechol, gallic acid, Tannic acid, Pyrogallol and Catechin Epicatechin as the standards. Clear distinction could be observed in profiles of samples of varying ages.

- Methanol extracts of heartwood and bark samples of Red sanders (*Pterocarpus santalinus*) were attempted for textile dyeing and use in lipstick preparations and was found to be potential natural colorant for said purpose.
 - Chitosan encapsulated endophytes of entomopathogenic significance were subjected to nano characterization such as SEM and Particle Size Analysis (PSA) with Zeta potential. It is confirmed from the study that out of eight endophytes encapsulated with chitosan, six follow nano particle as per reference.
 - A study was conducted to assess Intra-Specific Variations among Windbreak clones of IFGTB for response to elevated CO₂ and elevated temperature in the Open Top Chamber Facility. The Windbreak clones of IFGTB used for the study are IFGTB-WBC-1 (CJ-8), IFGTB-WBC-2 (CJ-6), IFGTB-WBC-3 (CJ-18), and IFGTB-WBC-4 (CJ-17). Also, two check clones were used for comparison which were i) *Casuarina- equisetifolia* X *C. junguhuniana* hybrid clone (CJ-12) and MTP-27. These clones were exposed to various treatments such as i) Elevated CO₂ - @ 800 ppm along with Elevated temperature (ECET), ii) Elevated CO₂ alone with temperature reduced using humidifier (EC), iii) Elevated Temperature alone as Chamber Control (ET) and iv) Ambient condition (AMP). Salient observation on total dry matter production of various clones under different treatments showed that one windbreak clone of IFGTB viz. IFGTB-WBC-3 (CJ-18) recorded 38% more dry matter accumulation under elevated CO₂ environment. The present study evidently confirms that there exists greater intra-specific variation (within species variation) for response to elevated CO₂ or elevated temperature. The study also brings the scope for selection of tree varieties adapted to future climatic condition.
 - IFGTB has initiated programmes for CRISPR/Cas mediated gene editing for enhancing salt tolerance in trees. Three transformation constructs for generating EchKT1;1 knock outs in Eucalyptus were developed viz.,
 - (i) pHKN29:Cas9_1,
 - (ii) pHKN29:Cas9_1:CaMV-sgRNA-HSP
 - (iii) pAtCas9_1: CaMV-sgRNA-HSP.
 - Additionally, transformation constructs for root specific and salt inducible RNAi mediated downregulation of EchKT1;1 were also generated viz.,
 - (i) pCambia1305.1MsPRP2-EchKT1;1 hpRNAi-HSP
 - (ii) pCambia1305.1MsPRP2-GUSplus-HSP
 - (iii) pHKN29 MsPRP2-EchKT1;1 hpRNAi-HSP.
- These constructs would be evaluated for enhancing salt tolerance in Eucalyptus.

Arid Forest Research Institute, Jodhpur

- During a survey in Barmer district for 27 species of trees and climbers, phenology and density of population was recorded. *Tecomella undulata*, *Moringa concanensis*, *Sterculia urens*, *Salvadora persica*, *Acacia jacquemontii* and *Ephedra foliata* were in flowering, while *Maerua oblongifolia* and *Acacia leucophloea* were in fruiting stage. Population density of *Tecomella undulata* was 40 -100, *Prosopis cineraria* 20-50, *Moringa concanensis* 20-50, *Acacia senegal* 30-100, *Sterculia urens* 10-20 and *Commiphora wightii* 20-70.
- Inflorescence and pod samples of *Prosopis juliflora* were collected from in and around Jodhpur and various parameters recorded and insects collected. Two species of seed bruchids *Algarobius prosopis* and *Caryedon serratus* from the pods of *Prosopis juliflora* collected from Nagaur, Barmer, Pali and Jodhpur areas.
- In other experiments two species of seed bruchids *Caredon serratus* was found infesting seeds of *Prosopis cineraria*, *Acacia tortilis*, *Tamarandus indica* and *Cassia fistula* whereas *Algarobius prosopis* was recorded only from the two *Prosopis* species.

Himalayan Forest Research Institute, Shimla

- Pinus gerardiana* 40 populations were surveyed in four provinces of Himachal Pradesh. Population in Jangi in Kinnaur district was found as best seed source with 83% germination and 14.8% protein in nuts.
- 101 wild mushrooms species representing 60 genera were collected and identified from Kinnaur and Bharmour regions of Chamba district of which 17 were edible and 20 species possessed medicinal value.
- Developed the vegetative propagation methods of *Trillium govanianum*. Indole Acetic Acid (IAA) – 2000 ppm was found to be best for the same.
- After extensive field surveys, identified 27 sources from different geographical locations of Himachal Pradesh for collection and establishment of Field Gene Bank (FGB).



Consultancies

Presently works under 09 consultancy projects are underway. The works carried out during the month of February, March and April 2021 are as follows:

- A new consultancy project entitled 'Ecological Studies related to Umrer OC Coal Mine and Niljay OC Coal Mine of Western Coalfield Limited in Maharashtra' was awarded to ICFRE.
- Field data collection was done for S.A. Thwab Iron Ore Mine (ML No. 2488) of M/s. S. A. Thwab & Company and Raja Krishna Deva Raya (RKDR) Iron Ore Mine, (ML No. 2584) of M/s. Auro Minerals under R & R Plan, BCT, Karnataka project and Daitari OMC Odisha project.
- A meeting was held under the chairmanship of DG, ICFRE with DGH, Noida Head (IDT), ONGC & Head (KDMIPE), ONGC and their respective teams with respect to assessment of impact of ERD on forest biodiversity on 9 February 2021 at ICFRE, Dehradun.
- 8th Half Yearly Third Party Monitoring Report of CAT Plan of VPHEP for the period of Oct., 2019 to March 2020 submitted to THDC India Ltd.
- ICFRE Observations on enhancement of production capacity of Raja Krishna Deva Raya (RKDR) Iron Ore Mine, (ML No. 2584) of M/s. Auro Minerals [Ref.: CEC letter F.No.2-75/CEC/SC/2018-Pt.X dated 16.06.2020] submitted to CEC of Hon'able Supreme Court of India.
- Final report on 'Independent Environmental Audit Based on Environmental and Forest Clearance Compliance for Koyagudem Opencast-II Coal Mine Project' was submitted to SCCL, Kothagudem, Telangana.
- Finalization works of draft report on Biodiversity Assessment Study of whole of Hsdeso Arand coal field including, Taa, Parsa, Parsa East and Kanta Basan, and Kente Extension coal blocks in Surguja district Chhattisgarh state were carried out.
- Finalization works of draft report on Annual (year 2020-21) Monitoring of NTPC Plantations under Accelerated Afforestation Programme of NTPC Ltd in different states were carried out.
- Conducted field visit for collection of field data carried out under 3rd party monitoring of implementation of CAT Plan of Vishnughat Pipalkoti Hydro Electric Project.

Workshop/Seminars/Meetings

S.No.	Topic	Duration	Beneficiaries
Forest Research Institute, Dehradun			
1.	Webinar on Climate Change Monitoring in Indian Forest, Way Forward	12 February 2021	State Forest Departments, universities and partner institutes of All India Coordinated Research Projects of ICFRE apart from FRI and other institutes of ICFRE and research scholars
2.	Webinar on Soil health Card	18 March 2021	Researches
3.	Webinar on Timber Cooling Towers: Research, Constraints and Opportunities”	15 April 2021	Researchers and stake holder from Cooling Towers
Institute of Forest Genetics and Tree Breeding, Coimbatore			
4.	Developing and Popularizing Digital Interactive Platform for Tree Growers & other Stakeholders of Tamil Nadu	26 March 2021	Tree Growers and other Stakeholders of Tamil Nadu

Workshop on Developing & Popularizing Digital Interactive Platform for Tree Growers & other Stakeholders of Tamil Nadu

Institute of Wood Science and Technology, Bengaluru			
5.	Meeting on Challenges in the Management of Phytoplasma Diseases	5 February 2021	Industrialists, academicians, in-service IFS officers and ICFRE officers & scientists
6.	Meeting on plan for introducing B.Tech (Wood Science) course in association with M S Ramaiah Institute of Technology	22 February 2021	-

7.	Meeting on Developing Industry Institute Partnership and Working towards Emerging Issues in the Wood-Based Sector	22 March 2021	Wood based Industries and associates, research organizations, forest departments
8.	Webinar on Weeds to Wealth	23 April 2021	Senior Forest Officials from KFD, Director IPIRTI, Scientists and Forest officials from IFB, ICFRE Dehradun, Forestry colleges and other sister organizations

Tropical Forest Research Institute, Jabalpur

9.	Seminar on Propagation, Management and Development of Value Chain in Bamboos	10 February 2021	Researcher, Academicians, Farmers, Students and NGOs
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Seminar on Propagation, Management and Development of Value Chain in Bamboos

Arid Forest Research Institute, Jodhpur

10.	Webinar on Biodiversity conservation and Forest Genetic Resource Management	5 February 2021	-
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Himalayan Forest Research Institute, Shimla

11.	Seminar on Biodiversity Conservation and Ecological Security	26 February 2021	Scientists, Technical officers, Research staff and students
12.	Workshop on Forestry Research, Sustainable Forest Management and Livelihood	17 March 2021	Forest Officers, Scientists, Professors, Assistant Professors, Technical Officers, Researchers, Students

13.	Seminar on Managing Forests and Forests Products for Livelihood Support and Economic Growth	30 March 2021	Scientists, Technical officers, Research staff and students
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Institute of Forest Productivity, Ranchi

14.	Seminar on Genetic Evaluation and Improvement Techniques of Flemingia used for Lac Cultivation	12 March 2021	Officials from IFP, Ranchi
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Institute of Forest Biodiversity, Hyderabad

15.	Biodiversity Conservation and Forest Resource Management	5 February 2021	-
16.	Seminar on National Program for conservation and development of Forest Genetic Resources (FGR) status in India	2 March 2021	Officials from IFB, Hyderabad

Forest Research Centre for Eco-Rehabilitation, Prayagraj

17.	Conference on "Conservation, Management & Sustainable Utilization of Lesser Known Plants (LKPs)	19 March 2021	-
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Training Programmes

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

1.	Extraction of Essential Oil from Essential Oil-bearing Plants	2 March 2021	Progressive farmers of Bungalow ki Kaandi, Sainj, Kempty area and local villages of Mussoorie
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2.	Demonstration of Herbarium, Xylarium and Botanical Garden	8 April 2021	Technician
3.	Extraction of Essential Oil from Aromatic Plants	26 April 2021	Farmer of Village Saras, Uttarkashi

Institute of Forest Genetics and Tree Breeding, Coimbatore

4.	Plant Taxonomy and Economic Botany	8 to 10 February 2021	Technical service employees of IFGTB
5.	Statistical Methods in Forestry Research	15 to 18 February 2021	Scientist and Technical staff
6.	GSDP on Quality Planting Material Producer, Forest Entomology & Pest Control, Plant Tissue Culture and its Applications	22 February to 26 March 2021	Entrepreneurs from different states
7.	Capacity Building on the Development of Tree Rich Biobooster	26 March 2021	Irular tribes of Maruthanilam Women Self Help Group



Training on Plant Taxonomy and Economic Botany



Institute of Wood Science and Technology, Bengaluru

8.	Capacity building of State Forest Departments for Developing State REDD+ Action Plans	15 and 16 March 2021	Forest officers of Karnataka, Andhra Pradesh, Goa, Scientist of IISc, GKVK, ATREE, CSTEP
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Tropical Forest Research Institute, Jabalpur

9.	Environment, Biodiversity and Disaster Risk Reduction	24 to 26 February 2021	Scientist, Students, Research Scholar and other concern Stakeholders
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10.	Plant Biotechnology	15 to 19 and 22 to 26 February 2021	Under graduate students
11.	Bamboo Based Agroforestry System : Conservation and Management	12 March 2021	Farmers
12.	Lac Cultivation, Processing and its Management'	18 and 19 March 2021	Woman Self Help Group
13.	Capacity Building of Nursery Staff on Preparation of Organic Fertilizer & its Application	13 to 21 March 2021	Front line staff from eight different Forest Divisions of Chhattisgarh



Training on Lac Cultivation, Processing and its Management



Training on Environment, Biodiversity and Disaster Risk Reduction

Rain Forest Research Institute, Jorhat

14.	Role of Forestry in Sustainable Development of People	4 and 5 February 2021	IFS officers
15.	Bamboo Charcoal Production and Briquetting	9 to 11 February 2021	Villagers of Karbi Anglong
16.	Bamboo Shoot Processing	15 to 17 February 2021	-
17.	Bamboo Nursery Practices, Cultivation and Management	12 April 2021	Field functionaries



Training on Bamboo Shoots Processing and value Addition of different Seasonal NTFPs



Training on Bamboo Nursery Practices, Cultivation and Management

Arid Forest Research Institute, Jodhpur

18.	Eco-restoration of Deserts and Degraded Areas	27 January to 29 February 2021	Scientists and Technical staffs
19.	Capacity Building of VFPCs/SHGs through value addition of selected underutilized NTFPs for enhanced livelihood opportunities in arid and semiarid Rajasthan	1 to 5 February 2021	SHG members of Bhurki Devi Mahila SHG, Jamboori & Mahadev SHG (Sirohi district), RFO, Forester and Forest Guard
20.	Value Addition of <i>Diopyros melanoxylon</i> Fruits (Jam preparation)	23 to 26 March 2021	Mahadev swayam Sahayata Samoooh, Surpagla Bhurki Devi Mahila SHG, Jamburi
21.	बांस में वभिनि प्रकार के जैव उर्वरकों की उपयोगिता	15 March 2021	Farmers and Forest Department

Himalayan Forest Research Institute, Shimla

22.	Nursery and Propagation Techniques of Nagchhatri (<i>Trillium govanianum</i>)	14 March 2021	Farmers and representative of Mahila Mandal
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Institute of Forest Productivity, Ranchi

23.	Assessment of Carbon Sequestration of different Ecosystem/Forest	3 to 5 February 2021	Scientists and Officers of different ICFRE institutes
24.	Processing and Analysis of Honey, Gum and Resin	9 to 11 February 2021	Technical staff of different ICFRE institutes
25.	Molecular Biology Techniques	24 and 25 February 2021	Scientist and Scientific staffs of different ICFRE institutes

Institute of Forest Biodiversity, Hyderabad

26.	Biodiversity Conservation and Forest Resource Management	5 February 2021	-
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Transfer of Technology

FRI, Dehradun transferred the technology of Extraction of Natural fiber from Pine needles (Chirbandh) to Uttarakhand Bamboo and Fiber Development Board (UBFDB), Dehradun on 30 March 2021.

Memorandum of Understanding

- A Memorandum of Understanding (MoU) has been signed by Institute of Wood Science and Technology, Bengaluru with M.G.R. Educational and Research Institute, Chennai to contribute to academic development and promote research related activities. The MoU is effective for 5 years from March 2021.
- Renewal of MoU for a period of five years between IFP, Ranchi and West Bengal Forest Department through Conservator of Forests, Development Circle, West Bengal for carrying out VVK activities at Hizli, Kharagpur, West Bengal.

Prakriti Programme

- FRI, Dehradun organized online painting competition on the occasion of International Day for Forests (IDF) -2021 under prakriti programme for students of Kendriya Vidyalaya and Navodaya Vidyalayas. Painting competition in two groups (Junior group 6th to 8th class and Senior group 9th to 12th class) were organized at respective schools with theme "Healthy Forests for Healthy Humanity" on 20 March 2021.
- Representative of AFRI, Jodhpur delivered lecture to 88 students of class 6th and 7th standard on "Forest and Environment, Global Warming and Greenhouse Effect". An exhibition was also organized at Kendriya Vidhyalya, Tivari by AFRI Jodhpur under the "Prakriti program".

Awariness and Demonstration Programmes

- IFGTB, Coimbatore demonstrated "Tree rich Booster" an organic growth promoter during the month of March 2021 to the forest officials of Virudhunagar Social Forest Division towards implementation of avenue planting under green highway mission at K. Usilampatti to Nalli High ways, Virudhunagar district.

- IWST, Bengaluru in association with Laghu Udyog Bharathi, Karnataka, IISc and MSME organized a demonstration programme to accelerate the growth of toys clusters at Kinnal, Karnataka on 17 March 2021. The focus was on demonstration of preservative treatment of wood for handicraft articles. About 150 artisans participated in the program.
- RFRI, Jorhat organized an awareness programme for Conservation of Sacred Khecheopalari Lake (KPL) in Sikkim on 8 March 2021 at Khecheopalari, West Sikkim. Officials from State Forest Department, Land use and Planning, Horticulture, fringe villagers, members of JFMCs and KPL management committee attended the programme.

Activities under Van Vigyan Kendras

- FR CER, Prayagraj organized training on "Agroforestry" from 15 to 19 March 2021 at VVK, Gorakhpur.
- FR CER, Prayagraj organized training for Quality Council of India (QCI), New Delhi at KVK Pratapgarh on "Good Agriculture Practices" (GAP) on 16 March 2021.

Miscellaneous

Institute	Special day/theme	Duration
FRI, Dehradun, IFGTB Coimbatore, TFRI, Jabalpur, HFRI, Shimla	International Day of Forests- 2021	March 2021
IWST, Bengaluru	World Wood Day	19 March 2021
IFGTB Coimbatore, IWST, Bengaluru	Earth Day 2021	22 April 2021
IFGTB, Coimbatore, IWST, Bengaluru	Birth Anniversary of Dr. B. R. Ambedkar	15 April 2021

HR News

Appointment

Name of Officer	Date
Sh. Muthuprasad. T., Scientist 'B', ICFRE	05.02.2021
Shri Sachin Sharma, Scientist 'B', AFRI	08.02.2021
Ms. Archana R, Scientist 'B', IFGTB	08.02.2021
Shri Tajum Doni, Scientist 'B', RFRI	08.02.2021
Shri Veer Singh Gautam, Scientist 'B', IWS	15.02.2021
Ms. Anita, IFS, (Raj:2010), DCF, AFRI	06.04.2021
Shri Prem Chand Gyani, Scientist 'B', RFRI	28.04.2021

Reparation

Name of Officer	Date
Ms. Arti Chaudhari, IFS (AGMUT:2002), FRI, Dehradun	15.03.2021
Ms. Neelima Shah, IFS (J&K:2014), FRI, Dehradun	26.04.2020

Retirement

Name of Officer	Date
Shri Sushial Kumar Kamboj, STO, FRI, Dehradun	28.02.2021
Shri Nitya Nand Mahanta, STO, RFRI, Jorhat	28.02.2021
Shri Sadhan Chandra Mondal, STO, FRI, Dehradun	31.03.2021
Smt. Gayatri Chaudhari, STA, AFRI, Jodhpur	31.03.2021
Shri. Mahesh Kumar Sharma, Section Officer, ICFRE	31.03.2021
Shri Sudarshan Singh, CTO, ICFRE	30.04.2021
Dr. V. Mohan, Scientist 'G', IFGTB, Coimbatore	30.04.2021
Dr. Indra Dev Arya, Scientist 'G', AFRI, Jodhpur	30.04.2021
Dr. Sarita Arya, Scientist 'G' AFRI, Jodhpur	30.04.2021

Patron:

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

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