



Indian Council of
Forestry Research
and Education

ICFRE

NEWSLETTER

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Azadi Ka Amrit Mahotsav

- FRI, Dehradun organized an International Conference on "Advances in chemistry and biology of carbohydrates" (CARBO XXXV) on 4 and 5 December 2021. More than 250 participants from India and overseas including scientists and academicians from CSIR, IITs, ICAR, IISER, FRI, and Universities and participants from USA, Germany, UK, The Netherlands, and Portugal participated in this conference.
- FRI, Dehradun organized a special lecture on "An inclusive hydrological study for preparation of rejuvenation plan For Rispana River System" under "Celebrating Rivers of India" online on 21 December 2021.
- ENVIS resource partner on forest genetic resources and tree improvement at the IFGTB, Coimbatore commemorated the World Soil Day 2021 digitally on the theme "Halt soil salinization, boost soil productivity" on 3 December 2021.
- ENVIS resource partner on forest genetic resources and tree improvement at the IFGTB, Coimbatore organized an awareness campaign on the occasion of International Mountain Day 2021 on 11 December 2021.
- IFGTB, Coimbatore organized a special lecture on "Ethics and Values at Workplace" on the occasion of Good Governance Week on 27 December 2021.
- IWST, Bengaluru organized webinar on "Nursery techniques, cultivation and management of sandalwood" on 10 December 2021. About 40 farmers from across the country participated in the webinar.
- IWST, Bengaluru organised 'Good Governance Week' from 21 to 24 December 2021 for administrative staff on various administrative topics.
- IWST, Bengaluru organised a webinar on "Sandalwood oil: Uses, adulteration and Detection Techniques" on 24 December 2021. About 40 participants including researchers, sandal growing farmers etc participated in the webinar.
- IWST, Bengaluru organised poster competition on "Rejuvenation of Rivers through Forestry Interventions" and Elocution Competition on "Importance of Rivers to Human Life and Current Scenario of Indian Rivers" on 10 December 2021.
- TFRI, Jabalpur celebrated "Rivers of India" on 29 December 2021. 160 Scientists, officers technical's, DPS & KV School children, teachers and ITBP officials attended the programme.

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FRI, Dehradun organized an International Conference on Advances in chemistry and biology of carbohydrates (CARBO XXXV)



IFGTB, Coimbatore conducted World Soil Day under the theme Halt soil salinization, boost soil productivity

- RFRI, Jorhat celebrated the “North East Festival” with various programmes among the RFRI employees on 27 November to 3 December 2021.
- RFRI, Jorhat celebrated the “Good Governance Day” to commemorate the birth anniversary of former Prime Minister, Late shri Atal Behari Vajpayee on 28 December 2021.
- AFRI, Jodhpur, celebrated “Rivers of India” on 17 December 2021. Scientist, officer, staff and research scholars of the institute attended the programme.
- AFRI, Jodhpur celebrated “Good Governance Week” on from 20 to 26 December 2021. Scientist, officer, staff and research scholars of the institute attended the programme.
- AFRI, Jodhpur organized a seminar on the topic “Potential of Sandalwood Cultivation in Arid and Semi arid region” on 27 December 2021. Scientist, Officer, staff and research scholars of the institute attended the programme.
- HFRI, Shimla organized Good Governance programme on 20 December 2021.
- HFRI, Shimla organized celebration of Rivers programme an initiative of Government of India, on 9 December 2021 under the theme 'Awareness for conservation and restoration of Rivers'.
- IFP, Ranchi organized training on "Cultivation and value addition of medicinal plants" on 3 December 2021 at Hasbeda, Vantoli village under Karra block of Khunti district. 65 participants attended the training programme.
- IFP, Ranchi organized seminar on “Medicinal plant as per demand” at Forest Research Station, Mandar on 9 December 2021. 52 farmers of Mandar and surroundings participated in the programme.
- IFP, Ranchi organized seminar on "Cleanliness: Community participation in cleaning of rivers of India” on 10 December 2021. 120 participants including Director, GCR, all scientists, officers, students and research scholars attended the programme.
- IFP, Ranchi organized seminar on "Disabled and rural women on the role of forest produce and lac for creation of livelihood" at Sirka Village on 15 December 2021.
- IFB, Hyderabad organized programme Essay Writing Competition on the "Indian Freedom Struggle" from 27 November to 03 December 2021.
- IFB, Hyderabad organized programme painting competition on the "India Freedom Fighter" from 4 to 10 December 2021.



RFRI, Jorhat celebrated the Good Governance Day



AFRI, Jodhpur organized a seminar on the topic Potential of Sandalwood Cultivation in Arid and Semi arid region



IFP, Ranchi conducted training programme on Cultivation and value addition of medicinal plants



IFP, Ranchi organized seminar on Medicinal plant as per demand at Forest Research Station, Mandar

- IFB, Hyderabad organized quiz competition on the Indian Freedom from 11 to 17 December 2021.
- IFB, Hyderabad organized "Fit India Freedom Run" from 18 to 24 December 2021.
- IFB, Hyderabad organized programme a "Short film competition on Biodiversity" from 25 to 31 December 2021.
- IFB, Hyderabad celebrated Good Governance Week on 23 December 2021. Officers and staff have participated in the programme.



IFB, Hyderabad organized painting competition on the India Freedom Fighter



IFB, Hyderabad organized Fit India Freedom Run

Significant Research Findings

Forest Research Institute, Dehradun

- Nomenclature updates and description of 20 plant species collected from Tons Forest Division and 25 plant species collected from Bageshwar Forest Division were completed under the project on Revision of Kanjilal's and Osmaston's Forest Flora respectively.
- Essential oil isolated from *Cupressus torulosa* needles was examined for its *in vitro* antioxidant activity using ABTS, DPPH, Reducing power assays and found to be comparable with the positive control, ascorbic acid.
- Essential oil isolated from *Neolitsea pallens* leaves was examined for its *in vitro* antifungal activity against *Candida albicans* using poison food technique was found to be comparable with the positive control, fuconazole.
- Acute toxicity of the seed oil of *Princepia utilis* was examined on Swiss albino mice using OECD 423 guidelines and the oil was found to be non toxic at 2000 mg /Kg of body weight of the animal and suitable for conducting *in vivo* biological studies.
- Sampling of moths were carried out in the post-monsoon season in 4 states i.e. Uttarakhand, Uttar Pradesh, Haryana and Himachal Pradesh. Moths were sampled using lights and moth screens from 7-10 pm daily. A total of 12 samplings were carried, 108 species of 6 families (Crambidae, Erebidae, Geometridae, Limacodidae, Noctuidae, Nolidae) were

sampled and identified and 25 specimens collected and preserved. Database of moths was updated with information for more than 248 species of moths from Shiwaliks of Uttarakhand.

Institute of Forest Genetic and Tree Breeding, Coimbatore

- Seven fungal endophytes were identified through molecular taxonomy and their sequences were deposited in NCBI Genbank (accession nos from OL801347 to OI801353).
- For disease management through optimum spacing in clonal plantations of *Casuarina*, a spacing trial was established with *Casuarina* hybrid clones (CH1, CH2 and CH5) released by IFGTB under a collaborative project with Andhra Papers Ltd. Observations made at the age of two years revealed that greater pulpwood yield of 33.35 tonnes per acre was recorded under wider spacing of 2 m x 1 m, when compared to that under the most commonly used narrow spacing of 1m x 1 m (32.76 tonnes per acre). Most importantly, there was no incidence of collar rot (caused by *Diplodia* sp.) or bacterial wilt (caused by *Ralstonia solanacearum*) and lodging of trees of clone CH 2 (relatively susceptible clone) under the spacing of 2 m x 1 m. On the contrary, prevalence of disease incidences and lodging was observed in the same trial plot under narrow spacing of 1 x 1 m. The absence of disease and lodging in the wider spacing may be attributed to i) greater

space for root spread and development, ii) receiving of more sunlight over the root zone and iii) free air flow with lesser blocking to wind force.

- Field survey were conducted in surrounding areas of Kalasamalai forest area, Vattaparudhi forest area, Chimmony wildlife area, Vellanipacha forest area, Malakkapara and Sholayar forest area at Thrissur district, Kerala for population studies and selected seed sources for FGR species like *Syzygium travancorium*, *Xylia xylocarpa*, *Lagerstroemia microcarpa*, *Terminalia paniculata*, *T. bellerica*, *Macaranga peltata*, *Albizia odoratissima*, *Cassia fistula*, *Wrightia tinctoria*, *Baucaerea courtalensis*, *Myristica malabarica*, *Dysoxylum malabaricum*, *Hopea parviflora*, *Bauhinia racemosa*, *B. malabarica*, *Erythrina variegata*, *Terminalia elliptica*, *Garuga pinnata*, *Culleniae xarillata*, *Canarium strictum*, *Elaeocarpus tuberculatus* and *Vateria indica*.
- Biofertilizers (AM fungi, Azospirillum, Phosphobacterium) developed by IFGTB were inoculated to *Gmelina arborea*

seedlings and compared the growth and biomass with commercial biofertilizers inoculated seedlings. The seedlings were assessed in nursery and planted in the field. It was observed that the growth was significantly more in the IFGTB biofertilizers inoculated seedlings than commercial biofertilizers inoculated seedlings.

Consultancy

Two new consultancy projects were awarded to ICFRE:

- Environmental Audit of Dipka Expansion Project Dipka Area, South Eastern Coalfields Ltd. (SECL), Korba, Chhattisgarh by Dipka Area, SECL, Korba, Chhattisgarh.
- Study on 'Improvement of water quality in immediate catchment of proposed Navnera Reservoir on Kalishindh River through requisite measures and rehabilitation of lost habitat of scheduled wildlife (reptiles) in remaining forest area near Abra Village, tehsil Digod, district Kota, (Rajasthan).

Webinars/Seminars/Meetings

S.No.	Topic	Duration	Beneficiaries
Forest Research Institute, Dehradun			
1.	Webinar on Climate smart forestry: an instrument for mitigating climate change	8 December 2021	Scientists, forest officers, academicians and research scholars
Arid Forest Research Institute, Jodhpur			
2.	Seminar on Need of forestry research in present scenario	7 December 2021	Scientists, officers, technical staff of AFRI
Himalayan Forest Research Institute, Shimla			
3.	Meeting on DPR presentation of Chenab, Ravi and Jhelum Rivers	22 December 2021	Hon'ble Commissioner Secretary (Forest), Jammu & Kashmir UT, PCCF (HoFF) (J&K), Forest Officers J&K UT, different stakeholders of J&K UT
Institute of Forest Productivity, Ranchi			
4.	Meeting on Sustainability Life on Earth 2021	17 to 18 December 2021	Scientists and other participants

Training Programmes

S.No.	Topic	Duration	Beneficiaries
Indian Council of Forestry Research and Education, Dehradun			
1.	Measurement of forest carbon stock	1,4 and 7 December 2021	Pandariya West Forest Range, Marwahi Forest range and Raghunathanagar Forest Range of Chhatisgarh
Forest Research Insitute, Dehradun			
2.	Making Mycorrhizae based bio-fertilizer	9 December 2021	Farmers
3.	Forest policy, law and environmental laws	13 to 17 December 2021	Scientists of ICFRE
Rain Forest Research Institute, Jorhat			
4.	Office procedure	1 to 3 December 2021	Administrative staff of ICFRE
5.	Bamboo resource development for addressing livelihood concerns of communities	13 to 17 December 2021	-
6.	Bamboo, agarwood, mushroom and vermicompost	22 and 23 December 2021	Rural Self Employment Institute, Agia, Goalpara



RFRI, Jorhat conducted training on Office procedure



RFRI, Jorhat conducted training on Bamboo, agarwood, mushroom and vermicompost

Tropical Forest Research Institute, Jabalpur

7.	Climate change, carbon sequestration	15 to 16 December 2021	Officers and staff of Adani Power Maharashtra Ltd., Scientists and technical officers
8.	Propagation of forestry species	21 December 2021	Scientists, Foresters, Academicians and Students
9.	Management of Sal heart wood borer <i>Hoplocerambyx spinicornis</i>	23, 25 and 26 December 2021	Front line staff of various Forest Division

Himalayan Forest Research Institute, Shimla

10.	चिलगोजा के संरक्षण और स्थायी प्रबंधन की आवश्यकता	1 December 2021	SFD of HP, Farmers and Panchayat Pradhan
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TFRI, Jabalpur conducted training on Climate change, carbon sequestration



HFR, Shimla conducted training on चिलगोजा के संरक्षण और स्थायी प्रबंधन की आवश्यकता

Institute of Forest Genetics and Tree Breeding, Coimbatore

11.	Quality Planting Material producer and plant tissue culture techniques and its applications	December 2021	Un-employed youth
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Institute of Wood Science and Technology, Bengaluru

12.	Integrated pest and disease management in nurseries, plantations and forests	16 and 17 December 2021	IFS Officers
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Institute of Forest Productivity, Ranchi

13.	Bamboos, soil, medicinal plants, silviculture	14 to 24 December 2021	Forestry students
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Awareness Programme

- FRI, Dehradun organized awareness and demonstration programmes on “Gamhar and Aonla based agroforestry on degraded lands” to the farmers at Kudarikheda, Fatehpur Pello (Saharanpur), Uttar Pradesh on 23 December 2021 and to the farmers at Dhaluwala majbata (Haridwar), Uttarakhand on 24 December 2021. About 75 farmers participated in the programme.
- FRI, Dehradun organized awareness and demonstration programmes on “Kadam, Kachnar and Bhimal based agroforestry” to the farmers at Dhaluwala Kalan (Haridwar), Uttarakhand on 24 December 2021. About 35 farmers participated in the programme.



FRI, Dehradun organized awareness and demonstration programmes on Gamhar and Aonla based agroforestry on degraded lands

Release of Short Film

Release of Short Film - Recycling waste and supporting livelihoods: A tribal development initiative of IFGTB under NRDMS-DST, Gol, New Delhi sponsored projecton “Development of compost out of waste involving tribal for their livelihood support: a part of Swachh Bharat Mission” on 2 December 2021 at IFGTB, Coimbatore.

Miscellaneous

Institute	Special Day/theme	Date
HFRI, Shimla	International Mountain Day	12 December 2021

HR News

Repartriation

Name of Officer	Date
Shri P. Arulrajan, IFS (AGMUT:2009) DCF, IFGTB, Coimbatore	29.12.2021

Retirement

Name of Officer	Date
Shri A. Durai, CTO, AFRI, Jodhpur	31.12.2021
Dr. G. Singh, Scientist- 'G', AFRI, Jodhpur	31.12.2021

Patron:

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

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