

Indian Council of Forestry Research and Education

# Vol 22 No. 7 July 2022

# ICFRE NEWSLETTER



### Azadi ka Amrit Mahotsav

- IFB, Hyderabad organized a programme on World Zoonosis Day on 6 July 2022. All the scientists, officers, and staff of IFB participated in the programme.
- Van Mahotsav 2022 celebrated by FRI, Dehardun, IFGTB, Coimbatore, IFB, Hyderabad, AFRI, Jodhpur, IFP, Ranchi, TFRI, Jabalpur, RFRI, Jorhat and FRCER, Prayagraj on 7 July 2022.
- IWST, Bengaluru organized a webinar on Sandalwood Plantation and Management on 8 July 2022. Sandalwood growers, IWST employees and research staff attended the programme.
- TFRI, Jabalpur organized a field training cum demonstration on Lac cultivation for Barkoti Kalan & Jaitpur Kachiya Societies of IFFDC at Sagar on 11 July 2022.

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Van Mahotsav celebrated by FRI, Dehradun



Van Mahotsav celebrated by IFP, Ranchi

### VAN MAHOTSAV 2022



Van Mahotsav celebrated by IFGTB, Coimbatore



Van Mahotsav celebrated by AFRI, Jodhpur





Van Mahotsav celebrated by TFRI, Jabalpur

### Azadi ka Amrit Mahotsav

 HFRI, Shimla organized a one day training and awareness programme on "Hill Bamboo: A means of livelihood" on 13 July 2022. About 35 farmers from villages of Mashobra region participated in the programme.



HFRI, Shimla organized training and awareness programme on "Hill Bamboo: A means of livelihood"

- AFRI, Jodhpur organized "Nature Walk" on 19 July 2022. In this programme, 108 students of two different schools-Kendriya Vidyalaya No.1 Air Force, (72 students of 7<sup>th</sup>-8<sup>th</sup>) and Madhuban Public Sr. Secondary School, Jodhpur (36 students of class 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup>) visited AFRI campus.
- RFRI, Jorhat organised a Skill Development Training on "Bamboo Shoot Processing and Value Addition" from 20 to 22 July 2022 for unemployed youth of Nagaland and Assam at Jorhat.



AFRI, Jodhpur organized Nature Walk programme



IWST, Bengaluru organized a webinar on "Clonal Plantation of Teak'

 IFB, Hyderabad organized a Slogan Writing Competition on the occasion of World Population Day on 15 July 2022.
 Officers, Scientists and Technical staff participated in this programme.



Slogan Writing Competition on the occasion of World Population Day organized by IFB, Hyderabad

- IWST, Bengaluru organized a webinar on "Clonal Plantation of Teak" on 21 July 2022.
- HFRI Shimla organized Training-cum-Awareness programme on "Nursery and Plantation technology of *Juniperus polycarpos*" on 22 July 2022. About 50 frontline field staff of forest department from Kinnaur, Lahaul & Spiti and Ladakh, UT regions participated in the programme.



RFRI, Jorhat organized a Training on "Bamboo Shoot Processing and Value Addition"



HFRI, Shimla organized "Nursery and Plantation technology of Juniperus polycarpos"



- FRI, Dehradun organized a virtual seminar on "Bioassay guided probing of plants for therapeutic application" on 22 July 2022. Scientists, faculty, technical staff, and research scholars of the FRI and other organizations attended the programme.
- TFRI, Jabalpur conducted "Green trail visit for bird Watching" on 23 July 2022. Scientists, project fellows and dissertation candidates from the institute participated in the programme.
- TFRI, Jabalpur organized a programme on "Awareness among farmers on nature based solution to combat desertification and Drought" near Chambal ravines of Morena, M.P. from 24 to 25 July 2022.



TFRI, Jabalpur organized a programme on "Awareness among farmers on nature based solution to combat desertification and Drought"

- IWST, Bengaluru organized a webinar on "Extent and Scope for Cultivation of *Melia dubia* in South India" on 26 July 2022.
- IFB, Hyderabad organized a lecture program on the occasion of World Nature Conservation Day on 27 July 2022. Officers, Scientists and Technical staff participated in this programme.
- IFGTB, Coimbatore organized a hands on training on "HPLC & GCMS/MS: Instrumentation, principle and function" on 27 July 2022. Students, research scholars, academicians and industrial personnel participated in the programme.
- व.उ.सं., रांची ने दिनांक 27 जुलाई 2022 को औषधीय पौधों द्वारा आयवर्धन विषय पर प्रशिक्षण का आयोजन किया।



IFB, Hyderabad organized a lecture programme on the occasion of World Nature Conservation Day



IFGTB, Coimbatore organized a hands on training on "HPLC & GCMS/MS: Instrumentation, principle and function"

### **Significant Research Findings**

### Forest Research Institute, Dehradun

 Collected fruit samples of *Pyrus pashia* and *Ficus almate* from Tehri, Chakrata and Mussoorie Forest Division of Uttarakhand. Morphological data such as fruit weight and fruit dia, moisture %, and TSS (total soluble solid) values were determined. Two different value added products 'wild anjeer jam' and 'wild anjeer candy' from *Ficus palmate* fruits were prepared and stored.

व.उ.सं., रांची ने औषधीय पौधों द्वारा आयवर्धन विषय पर प्रशिक्षण

का आयोजन किया

 A comparison of *in vitro* callogenesis in 11 different clones of *Populus deltoides* was done, variation in in-itro callus formation was observed in among clones, DNA extraction from leaves of *P. gamblei* was achieved and it was observed



that the extraction buffer having CTAB +  $\beta$ -mercaptoethanol (1 $\mu$ L) + PVP (2%) gave the best results in extraction of DNA in *P. gamblei* as it yielded pure and high quality DNA suitable for further molecular analysis.

 Marker compound Arjungenin assisted chemical screening of the extracts isolated from the bark of two populations of *Terminalia arjuna* located in Dehradun, Uttarakhand (02 accessions) and Farinda, U.P. (20 accessions) using HPLC was carried out. Arjungenin content in the population of Farinda was 1.06% while Dehradun population was not found to contain arjungenin.

#### Institute of Forest Genetics and Tree Breeding, Coimbatore

- Molecular docking studies of the phyto compounds identified in the heartwood samples of *Pterocarpus santalinus* Linn. against the targeted ligand protein indicated the isolated compound with highest docking score for anti -microbial activity is suitable for the development of skin care products.
- CRISPR/Cas9 edited Eucalyptus plantlet generated by Agrobacterium tumefaciens mediated transformation were analyzed by amplicon sequencing to show the desired deletion in the target gene sequence of EcHKT1;1. Gene editing constructs developed had been earlier tested for generating desired deletion using the composite transgenic approach.

#### Institute of Forest Productivity, Ranchi

Automatic weather station (AWS) has been installed in Bundu Range office Khunti Division Jharkhand to record day to day meteorological data.

### Workshops/Seminars/Meetings

#### Arid Forest Reserach Institute, Jodhpur

Established VMG of three clones of Shisham (*Dalbergia sissoo* Roxb. Ex DC) released by AFRI, namely AFRI DS-1, AFRI DS-2 & AFRI DS-4, in the AFRI main campus. This VMG will be further utilized for multiplication of these clones to supply clonal plants to user agencies.

### **Consultancies**

## Indian Council of Forestry Research and Education, Dehradun

Works on the fifteen different scientific consultancy projects were carried out during the period. Fields tours were conducted to collect data related to Biodiversity studies wrt Chakla coal mine in Latehar, Jharkhand, environmental audit of Dipka coal mines of SECL, Korba, Chattisgarh and environmental audit and environmental performance index rating of coal mines viz. Sharda Highwall and Dhanpuri of SECL, Madhya Pradesh respectively.

#### **Reports submitted:**

- Draft final reports of Ecological Studies related to Niljay OC Coal Mines and Umrer OC Coal Mines submitted to Western Coalfield Limited, Maharashtra.
- Draft report on Environmental Management, Reclamation & Rehabilitation Plan for Deposit-5 of BIOM, Bacheli Complex, Dantewada district, Chhattisgarh submitted to NMDC, Chhattisgarh.
- ICFRE Observation on Enhancement of Production Capacity of Karakurchi Iron Ore, Manganese Ore & Red Oxide Mine (ML No. 2028) of M/s. Karnataka Limpo Cement Industry (KLCI) [Ref.: CEC letter F.No.2-75/CEC/SC/2018-Pt.X dated 9 June 2022] submitted to CEC of Hon'able Supreme Court of India.

S.No.	Торіс	Duration	Beneficiaries
	Institute of Forest Genetics and Tre	e Breeding, Coimbato	ore
1.	An interactive meeting with the eminent prof. Dr. R.M. Pitchappan (Retd, Professor), Department of Immunology, Madurai Kamaraj University, Madurai	1 July 2022	Scientists, officers, Technical officers and Research scholars.



2.	Research Advisory Committee Meeting	26 July 2022	Scientists and officers
3.	Meeting with Shri. P.K.Murugan, CEO, JSW steels, Karnataka	30 July 2022	Scientists and officers
	Himalayan Forest Research	Institute, Shimla	
4.	Annual Review Meeting	7 to 9 July 2022	Scientists and researchers
5.	Seminar on "Cultivation of Important High Altitude Medicinal and Aromatic Plants: An option for diversification and augmentation of rural income"	22 July 2022	Scientists, Technical staff and Research staff
	Tropical Forest Research In	stitute, Jabalpur	
6.	Seminar on "Application of Seed Science and Technology in Forest Restoration: A Way Forward"	4 July 2022	Scientists and Research schola
7.	Seminar on "Natural and Anthropogenic Impact on cytology of plants: A cytogenetical approach"	27 July 2022	Researcher and students
	Rain Forest Research Ins	stitute, Jorhat	
8.	Seminar on "Nanotechnology an Application for Crop Protection"	29 July 2022	All the employees and project staffs





RFRI, Jorhat conducted Seminar on "Nanotechnology an Application for Crop Protection"



### **Training Programmes**

S.No.	Торіс	Duration	Beneficiaries
Forest Research Institute, Dehradun			
1.	Wood Science & Technology	11 to 22 July 2022	Participants from Allahabad Agricultural Institute, Prayagraj
Institute of Forest Genetics and Tree Breeding, Coimbatore			
2.	Forest Genetic Resource Management	4 to 8 July 2022	IFS officers
3.	Remote Sensing and GIS	5 to 22 July 2022	Students from Nirmala College for Women, Coimbatore; Hindusthan College of Arts &





Science, Coimbatore & Dr. N.G.P.Arts & Science College,

Coimbatore

IFGTB, Coimbatore conducted training on Forest Genetic Resource Management

### Institute of Wood Science and Technology, Bengaluru

4.	One year Diploma Course on Advanced Woodworking	16 Aug 2021 to 29 July 2022	Students from various backgrounds
5.	Certificate Course in Conventional Woodworking and finishing	20 June to 15 July 2022	Students from various backgrounds
6.	Certificate Course in Product Designing and Development on CNC Router	20 June to 15 July 2022	Students from various backgrounds



Arid Forest Research Institute, Jodhpur			
7.	Training cum installation of Sap flow meter monitoring systems.	19 to 21 July 2022	Scientist and Technical Staff
	Himalayan Forest Resear	ch Institute, Shimla	
8.	Cultivation of Mahameda and other Important Temperate Medicinal Plants	9 July 2022	Farmers of Kullu region
	Rain Forest Research	Institute, Jorhat	
9.	Bamboo Propagation and Cultivation	8 July 2022	Unemployed youth of Jorhat distric of Assam
10.	Bamboo Shoot Processing and Value Addition	20 to 22 July 2022	Unemployed youth and women fron Nagaland and Assam
	entre re are areaqué sensitives de la consumer de l	PRO	NCC A LOF FORESTRY EARCH & EDUCATION)
HFRI, Shimla con	nducted training on Cultivation of Mahameda and other Important Temperate Medicinal Plants	RFRI, Jorhat conducted S	Skill Development training on "Bamboo Propagation and Cultivation"
Forest Research Centre for Livelihood Extension, Agartala			
11.	Vermicomposting	26 July 2022	Village women
Tropical Forest Research Institute, Jabalpur			
12.	Lac cultivation for Barkoti Kalan & Jaitpur Kachiya Societies of IFFDC at Sagar	11 July 2022	Farmers

FRCLE, Agartala conducted a Skill Development Training on Vermicomposting

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TFRI, Jabalpur conducted a cum demonstration on Lac cultivation

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### **Prakriti Programme**

#### Institute of Forest Genetics and Tree Breeding,Coimbatore

- Programme on "Plastic bag free day" on 3 July 2022 was conducted for 102 students of PSG School Vedapatti of Grade 9 and Vikas Vidhyalaya Junior Matriculation School of Grade 1 and 2 Coimbatore.
- Programme on "Effect of plastic" on 12 July 2022 was conducted for 145 students of Kovai Vidhyasharam, Kovilpalayam Coimbatore of Grade 4 and 5.
- Programme on "Our Living Animal in the Planet" on 14 July 2022 was conducted for 50 students from Geedee Public School, Eachanari of Grade 4 and 5.
- IFGTB, Coimbatore conducted "World nature Conservation day" for 76 School Students of NISE ICSE School, Peelamedu, Coimbatore & AVD Trust Public School, Tirupur from Grade 1 to 7 on 28 July 2022.
- Programme on "International Tiger Day" on 29 July 2022 was conducted for 395 students of NISE ISCE School, from Coimbatore, Anan International School, Kalapatti Road from Coimbatore, RakhsPallikoodam, from Coimbatore and Home School from Tirupur.
- A lecture on "Cadamba Cultivation under Agroforestry" was delivered to 45 College students of Vetenerary College and Research Institute Udumalpet for I<sup>st</sup> B.V.sc and Animal Husbandry.



IFGTB, Coimbatore conducted Prakriti Programme in order to create environmental awareness and conservation

### Himalayan Forest Research Institute, Shimla

 An interactive and awareness programme on Right to Clean Environment & Social Responsibility on 21 July 2022. 75 school students of Kendriya Vidyalaya, Choglamsar, Leh participated in the programme.

An Interactive session on "Students Role towards Environment Protection" on 25 July 2022. 71 school students of Jawahar Navodaya Vidyalaya, Saboo in Leh, Ladakh UT participated in the programme.



HFRI, Shimla organized an interactive and awareness programme at Government Senior Secondary School, Beolia, Shimla on 25 July 2022. A total of 35 students including faculty members attended the programme.



Programme on Environment Degradation, Climate Change and mitigation through sustainable development on 28 July 2022. Students of Serkong Public School, Tabo, District Lahul&Spiti, Himachal Pradesh participated in the programme.

### Institute of Wood Science and Technology, Bengaluru

- 95 students of Grade X from Presidency School, visited Plant Tissue Culture lab, Xylarium, Nursery, wood workshop, wood museum, AWTC and other facilities at IWST, Bengaluru on 11 July 2022.
- 12 Tiny tots (LKG & UKG) and 3 teachers from Euro Kids, Malleshwaram, Bangalore visited IWST, Bengaluru on 12 July 2022 to learn about trees and nature.

- 78 students of Grade IX from Presidency School, visited Plant Tissue Culture lab, Xylarium, Nursery, wood workshop, wood museum, AWTC and other facilities at IWST, Bengaluru on 14 July 2022.
- 49 students of Grade X fromPresidency School, visited Plant Tissue Culture lab, Xylarium, Nursery, wood workshop, wood museum, AWTC and other facilities at IWST, Bengaluru on 15 July 2022.

### Awareness and Demonstration Programme

- About 37 Range Forest Officer trainees (7<sup>th</sup> Batch) from Karnataka Forest Academy, Dharwad visited the laboratories, plant nursery, wood workshops, Xylarium, AWTC and Museum of IWST, Bengaluru on 12 July 2022.
- IFGTB, Coimbatore celebrated International Mangrove Conservation Day (IMCD-2022) in the Research Field Station at Pitchavaram on 26 July 2022. Govt. Residential School, field staff of Tamil Nadu Forest Department and others participated in the programme.
- IFB, Hyderabad celebrated International Mangrove Conservation Day on 26 July 2022. 90 students from Sun Institute of Agricultural Science and 10 professionals altogether participated in a seminar held at Zoo Bioscope.



### **Memorandum of Understanding**

 MoU between AFRI, Jodhpur and Gujarat SFD was signed on 12 July 2022 at Aranya Bhawan, Gandhinagar, Gujarat in presence of the PCCF & HoFF, Sh. M. M. Sharma, IFS.  An MoU was signed between AFRI, Jodhpur and HPCL Rajasthan Refineries Ltd. on July 27 2022 under project entitld "Scientific study on Green Belt Development work for HRRL at Pachpadra, Rajasthan".



 MoU agreement was signed by between IFP, Ranchi and Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur, for cooperation in the fields of academic and research of both the institutes on 28 July 2022.



An MoU was signed between IFP, Ranchi and Dr. Rajendra Prasad Central Agricultura University, Pusa, Samastipur,

### **Miscellaneous**

 Technology Demonstration Centre (TDC) was inagurated at FRI, Dehradun on 15 July 2022.



FRI, Dehradun organized Inauguration of Technology Demonstration Centre (TDC)

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- हिमालयन वन अनुसंधान संस्थान, शिमला ने दिनांक 15 जुलाई 2022 को छमाही बैठक का आयोजन किया जिसमें अन्य सरकारी कार्यालयों उपकर्मियों तथा बैंकों से वरिष्ठ अधिकारियों ने भाग लिया।
- Members of National Youth Environment Parliament Team from Ministry of Environment & Climate Change, New Delhi visited HFRI, Shimla on 23 July 2022 to 25 July 2022.
- हिमालयन वन अनुसंधान संस्थान, शिमला ने दिनांक
  27 जुलाई 2022 को स्वच्छता अभियान कार्यक्रम का
  आयोजन किया।



### **HR News**

#### Promotion Name of Officer Date Smt. Geeta Vohra, Sr. Private Secretary, ICFRE, Dehradun 01.07.2022 Shri Vipin Kumar Singhal, Section Officer, ICFRE, Dehradun 06.07.2022 **Retirements** Name of Officer Date Shri Tarun Kumar Dilraj, ACTO (VRS), TFRI, Jabalpur 31.07.2022 Shri N.R. Raveendra Prasad, ACTO, IWST, Bengaluru 31.07.2022 31.07.2022 Shri A.K. Sharma, ACTO, RFRI, Jorhat

#### Patron:

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

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