



Indian Council of
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and Education

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Significant Research Findings

Forest Research Institute, Dehradun

- Tour was performed and 25 sweeping samples of insect fauna were collected. Twenty nine samples of lepidopterous larvae/cocoons: *Eutectona machaeralis* and some unidentified larvae from different forestry trees: *Tectona grandis*, *Dalbergia sissoo*, *Neolamarckia cadamba* and *Cassia fistula* were collected for their laboratory rearing which have been continued for the emergence of *Apanteles* spp. Five species of *Apanteles*: *A. ruidus*, *A. hyblaeae*, *A. calycinae*, *A. prodeniae* and *A. Phytometrae* identified up to species level. Photography and species identification of *Apanteles* spp. are in progress under the project "Studies on taxonomy and host range of larval parasitoids, *Apanteles* spp. (Hymenoptera: Braconidae) from Uttarakhand and Haryana".
- Collected sweeping samples were sorted out and twenty five egg parasitoids (Family: Encyrtidae, Mymaridae, Eulophidae and Trichogrammatidae) were screened out. Ten egg parasitoids from sweeping samples: *Aphelinoidea*

gwaliorensis, *Aphelinoidea rudrapurensis*, *Elasmus punensis*, *Lathromeromyia dimorpha*, *Mirufens afrangiata*, *Oligosita ferozepurensis*, *Oligosita gilvus*, *Paracentrobia magniclavata*, *Pseudoligosita singularis* and *Tumidiclava longiclavata* were identified up to species level. Photography and slide preparation are in progress under the project "Studies on diversity and host range of hymenopteran egg parasitoids from northern India (Haryana, Uttar Pradesh and Uttarakhand)".

- Database of butterflies associated with different forest sub-types was updated for 95 species sampled during last month, besides their identification. Segregation of past data on butterflies was done for generating GIS based mapping for each species of the family Papilionidae in Uttarakhand under the project "Butterflies associated with different forest types/sub-types in Uttarakhand".

- Database on insects infesting western Himalayan oaks was updated by adding, updating information and new photographs for all the 91 species of Coleoptera recorded so far. Experiments on biology of the 3rd and 4th instar larvae of cerambycid borer, *Xylotrechus basifuliginosus* was carried out on Kharsu oak, *Quercus semecarpifolia* logs brought from the Deoban RF, Chakrata earlier & Cerambycid borer, *Aphrodisium hardwickianum* on Ban oak, *Q. leucotrichophora* logs brought from Devli village in Thanu range, Dehradun district, were continued in the laboratory for life history studies under the project “Insect pests of western Himalayan oaks and their Control”.
- Digitized 112 types with about 631 photos. Edited about 600 photographs of 100 species and saved them in Tiff, JPEG and compressed forms. Verification of names in the cabinets was completed. Corrections in the database records based on the verification report has been started, and records of cabinet 1 has been updated in the database under the project “. Digitization and enrichment of National Forest Insect Collection (NFIC) of Forest Research Institute, Phase-II (minute insects)”.
- Leaf area feeding by insect was measured in 33 different clones of poplar by graph paper method is counting. Leaf sample extraction of 23 different poplar clones has been done. Estimation of total phenolic content in 15 different clones of poplar has been done under the project “Screening of poplar clones for tolerance against poplar leaf defoliator, *Clostera cupreata* But”.
- Field observation and collection of some unidentified pteromalid wasps were done in FRI Campus through Sweeping Net. Twenty samples of pteromalids were collected from Dehradun. Collection of galled leaves of oak and by their rearing in the laboratory pteromalid female wasp (unidentified) was obtained. A tour was done of Tehri district for the collection of parasitoid and insect infested samples. Rearing of infested leaf / shoot and lagged plant samples was done. Total twelve species samples were collected in the month under the project “Diversity study of pteromalid parasitoids (Hymenoptera: Pteromalidae) of northern India with special emphasis on bio-efficacy of some selected parasitoids”.
- Compilation of yield data of kharif crop from all the sites done. Tabulated & compiled data of second year soil analysis at Dhaluwala majbata (Haridwar), Fatehpur Pelio (Saharanpur) and Kodapur (Prayagraj). Available phosphorus was found in medium ranges at all sites. Available nitrogen and potassium were found in low ranges at Dhaluwala than the sites at Fatehpur Pelio and Kodapur. One more site planting of *G. arborea* and *E. officinalis* has also been completed in Prayagraj district. Maintenance and monitoring of plantation of *G. arborea* and *E. officinalis* at above sites is in progress under the project “Development of *Gmelina arborea* and *Embllica officinalis* based agroforestry models on degraded lands in Uttarakhand and Uttar Pradesh”.
- Analysis of soil samples has been completed. Kadam is performing better than Bhimal and Kachnar at both sites. Maintenance & monitoring of plantation of Kachnar, Bhimal and Kadam at both the above sites was also done under the project “Development of Kachnar (*Bauhinia variegata*), Bhimal (*Grewia optiva*) and Kadam (*Anthocephalus cadamba*) based agroforestry models on farmers land under rainfed conditions in Uttarakhand”.
- Samples of *Grewia optiva* collected from field are under process of determination of saponin. Multiplication of the fungus i.e. *Aspergillus niger* are under progress for development of eco-friendly method to extract the fibre from *Grewia Optiva*. Data collected about fodder quantity in various treatments are under process of analysis under the project “Livelihood improvement through sustainable utilization of *Grewia optiva* (Bhimal) in Uttarakhand”.
- Crosslinking of guar gum was carried out using gluteraldehyde.
- Fibre was isolated from Pine needles using facile and cheap methods.

Consultancies

- ICFRE presently works on eleven consultancy projects, which are awarded by Tehri Hydro Development Corporation India Ltd; Himachal Pradesh Power Corporation Limited; Karnataka State Official Authority; MoEF&CC Gol, New Delhi; Coal India Limited, Kolkata; NTPC Ltd Noida; NMDC Ltd, Hyderabad; Singreni Collieries Company Ltd., Kothagudem; Chhattisgarh Forest Department, Raipur; Deptt. of Forest and Environment, Bhubaneswar and Khairaha UG Coal Mine of SECL M.P.

Popularizing Forestry through All India Radio

Programme Topic	Channel	Date
Tropical Forest Research Institute, Jabalpur		
Interactive talk on various activities carried out by TFRI	AIR Jabalpur	13 January 2020

Tree Growers Mela/ Kisan Mela

Institute	Participated	Duration	Place
IWST, Bengaluru	107 th Indian Science Congress- Pride of India Expo	3 to 7 January 2020	GKVK Campus, University of Agricultural Sciences, Bengaluru
AFRI, Jodhpur	Rajasthan Udyog Hastasilp Mela	3 to 12 January 2020	Rawan ka Chabutra, Jodhpur
FRC-LE, Agartala	30 th Tripura Industries and Commerce Fair 2020	29 January 2020	Agartala



107th Indian Science Congress-Pride of India Expo

Workshops/ Seminars/ Meetings

S.No.	Topic	Duration	Beneficiaries
Forest Research Institute, Dehradun			
1.	Extension of Forestry Research to Stakeholders	29 January 2020	Scientists, Officers, Bankers, NGOs



Seminar on Extension of Forestry Research to Stakeholders

Arid Forest Research Institute, Jodhpur

2.	Prioritized area of Luni basin and incorporation of other proposals including those of agricultural lands	9 January 2020	Scientists and Forest Officials
3.	Macro propagation of tree species and its utilization in Arboriculture	29 January 2020	Scientists, Forest Officer, Technical Staff and Research Scholar/JPF

Himalayan Forest Research Institute, Shimla

4.	Artificial inoculation of ectomycorrhizal fungi in nursery to raise healthy and tall planting stock of conifers	31 January 2020	GCR, HoDs, Research Scholars and Staff
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Trainings

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

1.	Forest Certification in Indian Context	16 and 17 January 2020	IFS Officers
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Training Workshop on Forest Certification in India Context

Institute of Forest Genetics and Tree Breeding, Coimbatore

2.	Recent Advances in Forestry Research & Tree Improvement to the Forest Officials – Research wing of Uttar Pradesh Forest Department	2 to 24 January 2020	Range Officers, Deputy Range Officers & Foresters of UPFD
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3.	Access and benefit sharing (UNDP funded)	28 and 29 January 2020	ICFRE Scientist's
4.	Teak Cultivation practices in Tamil Nadu	30 and 31 January 2020	Forest Range Officers, Tamil Nadu State Forest Dept.
Institute of Wood Science and Technology, Bengaluru			
5.	Advances in Wood Production and Utilization	6 to 10 January 2020	IFS Officers
6.	Bamboo Nursery and Development	20 to 25 January 2020	Farmers from Karnataka, Telangana and Andhra Pradesh
7.	Value Addition - Bamboo Technologies	27 January to 1 February 2020	Bamboo Artisans and Master Craftsmen from Karnataka, Telangana and Andhra Pradesh



Training on Advances in Wood Production and Utilization

Tropical Forest Research Institute, Jabalpur

8.	Carbon sequestration through Afforestation	20 to 24 January 2020	Officers of Steel Authority of India Limited (SAIL)
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Rain Forest Research Institute, Jorhat

9.	Bamboo Nursery and Management	20 to 25 January 2020	Farmers of different places of Assam
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Arid Forest Research Institute, Jodhpur

10.	Nursery Technique & plantation Techniques	23 January 2020	Forest Guards from Forest Training Center, Jodhpur, Rajasthan Forest Department
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Institute of Forest Productivity, Ranchi

11.	DPR preparation of Mahanadi river for village field data collection	5 to 31 January 2020	SFD, NGOs, agricultural officers, Stakeholders, & Panchayat
12.	Bamboo Resource Development and Value Addition	15 to 17 January 2020	NGO personnel, JFMC members, students in educational institutions, panchayat, media persons



Training on Bamboo Resource Development and Value Addition

Prakriti Programme

- A group of 60 students of KV, Roorkee (Uttarakhand) led by their teachers visited FRI, Dehradun on 23 January 2020 under "Prakriti" programme.
- Under "Prakriti" programme 158 students of Grade VI, VII from BGS World School, Bengaluru on 16 January 2020 and 127 students of Grade V from BGS World School, Bengaluru visited IWST, Bengaluru on 17 January 2020.
- Under "Prakriti" programme 52 students of Grade V – VIII belonging to the Eco club of St. Marys Public School, Bengaluru visited IWST, Bengaluru on 28 January 2020.
- TFRI, Jabalpur conducted awareness programme under "Prakriti" for 50 students of class XIth and 3 teachers of Kendriya Vidyalaya, Ambikapur, Chhattisgarh on 19 January 2020. Students were updated about the role of afforestation and importance of woods in climate change,.
- TFRI, Jabalpur organized programme under "Prakriti" at KV TFRI on 24 January 2020 whereas a "Pravaran Club" has been formed for students of class 8th and 9th. Students were briefed about Biodiversity conservation, sustainable harvesting of medicinal plant. During the programme students were shown various harvesting technique of medicinal plants.
- RFRI, Jorhat organized "Prakriti" programme on "Biodiversity Conservation through National Parks, Wildlife Sanctuaries and Biosphere Reserves in North East India" at KV, Nagaon on 29 January 2020.



Students of KV, TFRI, Jabalpur

Awareness and Demonstration Programme

- FRC-LE, Tripura organized awareness programme on “Orchids Cultivation and Conservation” from 24 and 25 January 2020.

Activities under VVKs

- TFRI, Jabalpur organized training programme at Ambikapur, Sarguja under VVK Chhattisgarh on उन्नत नर्सरी तकनीक, वृक्ष सुधार, कृषि वानिकी and वन रोपणियों एवं वृक्षारोपणों के कीटों तथा रोगों का समन्वित प्रबंधन from 16 and 17 January 2019. 180 Frontline staff of Maharashtra State Forest Department, Farmers and NGOs participated in the programme.
- IFP, Ranchi organized training programme on “Nursery technique, cultivation of medicinal plants and management” on 7 January 2020 at FREC Hajipur under VVK. 26 farmers and officials of SFD, Bihar participated in the programme.
- IFP, Ranchi organized training programme on “Bamboo cultivation value addition and management” on 8 January 2020 at FREC Hajipur under VVK. 18 farmers and officials of SFD, Bihar participated in the programme.
- IFP, Ranchi organized training programme on “Livelihood generation through agro forestry” on 9 January 2020 at FREC, Hajipur under VVK. 16 farmers and officials of SFD Bihar participated in the programme.



Training programme at Ambikapur, Sarguja under VVK Chhattisgarh



VVK training on “Bamboo Cultivation, Value Addition & Management” at FREC, Hajipur

Miscellaneous

Institute	Special Day	Duration
IFGTB, Coimbatore	Martyr's Day	30 January 2020

HR News

Appointment

Name of Officer	Date
Shri J. Sriram, IFS, Dy. Conservator of Forests IFGTB, Coimbatore	8.1.2020

Patron:

Dr. Suresh Gairola, Director General, ICFRE, Dehradun

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