



ICFRE NEWSLETTER

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INTERNATIONAL DAY OF FORESTS 2019

CONTENT

	Pg. No.
International Day of Forests- 2019	01
Research Findings	01
Training Programmes	02
Memorandum of Understanding	04
Publications	05
Prakriti Programmes	05
Demonstration Programmes	05
Awards	05
Kisan Mela	06
Consultancy	06
HR News	06



Forest Research Institute, Dehradun celebrated International Day of Forests-2019 on 19 March 2019 with the theme “Forests and Education” to sensitize the public and to spread awareness towards the importance of forests in human life. Shri C.K.Mishra, Secretary to Government of India, Ministry of Environment, Forests & Climate Change was Chief Guest of the event.

RESEARCH FINDINGS

Arid Forest Research Institute, Jodhpur

- One species of Diptera collected from nurseries of Chittorgarh, Pratapgarh, Banswara and Dungarpur was identified on belonging to family Diopsidae and one species of Coleopteran defoliator collected from neem and sandal seedlings from Jodhpur identified as *Myloccerus* species.
- Five species of Lepidoptera, three species of hymenoptera, two species of predatory coleoptera and thirty-five species of aves were identified from Raj Bhawan, Jaipur. Besides nesting of Indian Grey Hornbill (*Ocyrceros birostris*) on neem tree (*Azadirachta indica*) was also recorded.
- About 600 plants of 19 tree species with varying morphological and phenological characters were planted along the boundary wall as well as roads sides of the newly constructed High Court Campus for intended ecosystem services. The species found least successful at the site are *Jacaranda mimosifolia*, *Plumeria alba* and *Curvibacter lanceolatus*, whereas *Santalum album* did not survive. Best performing species are *Adansonia digitata*,

Azadirachta indica, *Bauhinia purpurea*, *Cassia fistula*, *Dalbergia sissoo*, *Millingtonia hortensis*, *Mimusops elengi*, *Pongamia pinnata* and *Spathodia campanulata*.

- Morphological studies were done for 20 male and 20 female Ardu trees. Specific leaf area was higher in male ($0.072 \pm 0.024 \text{ cm}^2/\text{g}$) as compared to female ($0.070 \pm 0.021 \text{ cm}^2/\text{g}$) leaflet samples. Likewise clear bole height was higher in male ($108.95 \pm 47.72 \text{ cm}$) as compared with female trees ($79.27 \pm 36.72 \text{ cm}$).

Forest Research Institute, Dehradun

- Determined Ferric Ion Reducing Anti-oxidant Power Affray (FRAP) and Hydrogen Per-oxide Scavenging (HPS) activity of *Rubus ellipticus* fruits.
- Dyeing trials on different fabrics using natural dyes derived from *Mimosa himalayana* and *Prosopis juliflora* were conducted.
- The content of bioactive marker compound 'betulin' using High Performance Liquid Chromatography (HPLC) was determined in the bark of three populations of *Betula utilis* found in the forests of Uttarakhand.
- Out of the 250 bacterial isolates isolated from soil samples collected from Kaithal, Fatehabad, Muktsar and Punjab district,

150 isolates were tested for phosphorus solubilisation. However, none of the isolates solubilised phosphate in pikovaskya medium.

- The effect of elevated CO₂ concentration on carbon sequestration, biomass and nutrients accumulation in various parts of important forestry species viz *Gmelina arborea*, *Shorea robusta*, *Grevillea robusta* and *Acacia auriculiformis* was estimated. *Grevillea robusta* and *Gmelina arborea* showed better response to carbon sequestration and biomass accumulation under elevated CO₂ concentration.
- Identification of the collected tettigonids continued under the project "Taxonomic study of Tettigoniidae (Orthoptera) of India (AICOPTAX, MoEF&CC) was carried out.
- Twenty egg parasitoids were sorted out from collected samples and specimens were identified belonging to 5 species: *Paracentrobia magniclavata*, *Paracentrobia longipennis*, *Pseudoligosita nephoteticum*, *Oligosita meerutensis* and *Oligosita novisanguinea*. Ten samples of insect eggs were collected Haridwar and Dehra Dun in Uttarakhand from different forestry trees: *Tectona grandis*,

Mallotus philippensis, *Cassia fistula*, *Holoptelia integrifolia*. Slide preparation and photography are in progress under the project "Studies on diversity and host range of hymenopteran egg parasitoids from northern India (Haryana, Uttar Pradesh and Uttarakhand)".

- Sampling was carried out on transects in 5B/C2 Northern Dry Mixed Deciduous Forest at Jilmil Jheel in Haridwar. Database on species of butterflies under different forest types was updated sampled, collected & preserved under the project "Butterflies associated with different forest types/sub-types in Uttarakhand".
- Rearing experiments continued on larvae of 2 species of lepidoptera, collected from ban oak trees during the field surveys for life history studies in the laboratory, while 20 numbers were kept in pupal stages under hibernation. Life cycle of one cerambycid stem borer, *Xylotrechus basifuliginosus* was studied within the logs kept in the laboratory with emergence of this borer in rearing cages "Insect pests of Western Himalayan Oaks and their Control".

TRAINING PROGRAMMES

S.No.	Topic	Duration	Beneficiaries
Forest Research Institute, Dehradun			
1.	Forest Fire Disaster Risk Mitigation & Management	4 - 8 March 2019	25 officers of different departments including two Army officers of Nepal army
2.	Advances in Agroforestry	7 - 9 March 2019	farmers, frontline staff and other stakeholders
3.	Forest Entomology & Pest Control	14 February – 20 March 2019	-
4.	Trichoderma	28 March 2019	-
Institute of Forest Genetics and Tree Breeding, Coimbatore			
5.	Bamboo Value Addition – Bamboo Technologies	4 - 8 March 2019	-
6.	Advances in Plantation Technology for Productivity Enhancement	14 March 2019	Regional Mangers, Range Officers and Foresters



Training on Bamboo Value Addition- Bamboo Technologies

Institute of Wood Science and Technology, Bengaluru

7.	Micro Propagation of Bamboo species	5-8 March 2019	-
8.	Value-Addition - Bamboo Technologies	11 – 15 March 2019	25 Artisans (Karnataka, Andhra Pradesh and Telengana)
9.	Good laboratory practices under NABL	26 March 2019	Scientists and Technical staff
10.	Forest Utilization	26 – 28 March 2019	29 RFO Trainees Tamilnadu Forest Academy
11.	Forestry and Wood Science	27 March 2019	39 Farmers, NGOs and entrepreneurs

Tropical Forest Research Institute, Jabalpur

12.	Small Botanical Garden under GSDP training programme	7 February to 8 March 2019	Unemployed youth and students
13.	Propagation and Management of Bamboo under GSDP training programme	18 February to 15 March 2019	Unemployed youth and students
14.	Environmental Awareness and Biodiversity Conservation	18-19 March 2019	School students of Bharat BhartiVidyalaya, Chhindwara



Training on Small Botanical Garden under GSDP programme



Training on Propagation and Management of Bamboo under GSDP

Rain Forest Research Institute, Jorhat

15.	Value Addition – Bamboo Technologies “Skill Development on Bamboo Handicrafts for Promotion of Community Enterprise”	1-4 March 2019	25 Community people
16.	Nursery Management, Cultivation and Inoculation for Agarwood Production	15 March 2019	35 Farmers and Foresters of SFD, Tripura
17.	Bamboo Craft	11 February to 23 March 2019	25 Youth and Artisan from NE States
18.	Propagation and Management of Bamboo	25 February to 23 March 2019	25 Educated Youth from NE States

Arid Forest Research Institute, Jodhpur

19.	New Technology in Forestry	6-8 March 2019	41 Farmers and Field Functionaries of State Forest Department
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Himalayan Forest Research Institute, Shimla

20.	Application of Mycorrhizae in Forest Nurseries and Management of Insect-pests and Diseases	8 March 2019	24 trainees of Forest Training Institute, Chail, District Solan
21.	Cultivation practices of medicinal and aromatic plants	12 March 2019	50 farmers of the Jammu region
22.	Insect-pest and Diseases on Forest Tree Species and Their Management	18 March 2019	25 trainees of Forest Training Institute, Chail, Solan (HP)



Training on Cultivation practices of medicinal and aromatic plants



Training on Insect-pest and Diseases on Forest Tree Species and Their Management

Institute of Forest Productivity, Ranchi

23.	Principal, Practices and Importance of Agroforestry in special reference to poplar based System	5 March 2019	70 farmers
24.	Bamboo Propagation and Management	12 February to 29 March 2019	45 Students & Farmers

Institute of Forest Biodiversity, Hyderabad

25.	Cultivation of medicinal plants and techniques on <i>Pterocarpus santalinus</i> , <i>Santalum album</i> and <i>Melia dubia</i>	6 March 2019	-
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MEMORANDUM OF UNDERSTANDING

हिमालयन वन अनुसंधान संस्थान, शिमला तथा महाराजा अग्रसेन विश्वविद्यालय, बदरदी सोलन के मध्य दिनांक 8 मार्च 2019 को एक समझौता ज्ञापन हस्ताक्षरित किया गया, जिसके अनुसार दोनो पक्ष चिन्हित क्षेत्रों में आपसी सहयोग से वैज्ञानिकी, शिक्षा एवं विस्तार गतिविधियों का संचालन करने के लिए सहमत हुए।

PUBLICATIONS

- Following two books have been published during the month by HFRI, Shimla:
 - Vaneet Jishtu and V.P. Tewari, 2019. Rhododendrons of Himachal Pradesh. HFRI, Shimla, 42 p.
 - V.P. Tewari, 2019. *Betula utilis* D. Don: a tree of the Himalayan tree line. HFRI, Shimla, 36 p.
- Five pamphlets were also published by HFRI, Shimla:
 - एक्टोमाइकोराइजल कवक का महत्व एव चिलगोजा वनों में इनकी विविधता
 - मेहरू ओक (*Quercus floribunda* Lindl. Ex. A. Campus)
 - कुटकी की खेती (*Picrorhiza kurroa*)
 - मुश्कबाला की खेती (*Valeriana jatamansi*)
 - वनककड़ी की खेती (*Podophyllum hexandrum*)
- FRC-SD, Chhindwara published following 4 Brochures in Hindi and Marathi languages for dissemination of research based information to tribals:
 - BirBahuti – *Bahuupyogi* Kit in hindi,
 - Mushroom avmposhktatv in Hindi
 - Madhmashi – *Labhdayak* kit in Marathi
 - Javurvark – *KechuaKhad* in Hindi

PRAKRITI PROGRAMMES

- AFRI Jodhpur organized, programme under PRAKRITI at Kendriya Vidhyalaya no. 3, Gandhi Nagar Cantt, Gandhinagar, Gujarat on 8 March 2019. 45 students of class IV, V and VI attended the programme.
- IFP Ranchi organized awareness programme to the students and teachers of Navodaya Vidyalaya, Latehar under “PRAKRITI” programme on 1 March 2019.



AFRI Jodhpur organized, programme under PRAKRITI at KV, Gujarat

DEMONSTRATION PROGRAMMES

S.No.	Topic	Duration	Beneficiaries
Rain Forest Research Institute, Jorhat			
1.	Bamboo Cultivation, Propagation, Nursery	20 March 2019	52 Students of Deoraja Janata High School, Sivasagar
2.	Management, Value addition & bamboo preservation techniques, Biotechnology and Tissue Culture, Lac Cultivation, Botanical Garden, Orchidarium, Vermicomposting etc.	26 to 29 March 2019	1100 Students of different 24 nos. of Schools from Jorhat district under Gyanjatra programme of Assam Government.

AWARDS

- Dr. Shakti Singh Chauhan and Dr. Pankaj K. Aggarwal, IWST, Bengaluru were awarded under the category “ICFRE Technology Innovation Award” in the ICFRE Awards for Excellence in Forestry- 2018 function held at ICFRE, Dehra Dun on 19 March 2019.
- Dr. Girish Chandra, Scientist – C, Forestry Statistics, ICFRE were awarded the ICFRE Outstanding Research Award on 19 March 2019.
- Dr. Madhumita Dasgupta, Scientist – F, IFGTB, Coimbatore were awarded the ICFRE women Professional Award on 19 March 2019.
- Dr. Vineet Kumar, Scientist – G, FRI, Dehradun were awarded the “ICFRE Best Research paper Award” on 19 March 2019.
- Dr. (Ms.) K. N. Barua, ACTO of RFRI, Jorhat was awarded "ICFRE outstanding employee award-2018" on the International Day of Forest, 2019.

- Dr. Rajesh Mishra, ACTO and Shri Naval Kumar Gupta, Assistant, TFRI, Jabalpur were awarded Best Employee award.
- HFRI, Shimla participated in the mega event 'Women Empowerment-2019' organized by M/s Prayas Exhibition, New Delhi from 12 to 14 March 2019. The stall of HFRI, Shimla was adjudged as Best Stall in the field of Research in forestry sector in the mega event.



Dr. Girish Chandra, Scientist – C, Forestry Statistics, ICFRE were awarded the ICFRE Outstanding Research Award

KISAN MELA

Institute	Participated/organized	Duration	Place
FRC-LE, Agartala	Kisan Mela	1 March 2019	Barkathal, West Tripura District



FRC-LE, Agartala participated Kisan Mela

CONSULTANCY

- ICFRE Presently works on nine consultancy projects, which are awarded by Tehri Hydro Development Corporation India Ltd; Himachal Pradesh Power Corporation Limited; Karnataka State Official Authority; Uttarakhand Jal Vidyut Nigam Limited (UJVNL); MoEF&CC, GoI, New Delhi; Coal India Limited, Kolkata; NTPC Ltd Noida and NMDC Ltd. Hyderabad.

HR NEWS**Retirement****Name of Officer****Date**

Shri Narendra Kumar, Section Officer, ICFRE

31.03.2019

Patron:

Dr. Suresh Gairola, Director General, ICFRE, Dehradun

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