Arid Forest Research Institute, Jodhpur
The study conducted on biological diversity in Raj Bhavan Areas of Mt. Abu in Rajasthan indicates dominance (i.e., highest importance value index) of *Mangifera indica* followed by *Phoenix dactylifera*. The least dominant tree species are *Butea monosperma*, *Citharexylum substratum*, *Crateva religiosa*, *Eriobotrya japonica*, *Juniperus communis*, *Lannea coromandelica*, and *Michelia champaca*.

Forest Research Institute, Dehradun
- Six samples of lepidopterous larvae/cocoons were collected from Rohtak, Mahendragarh, Rewari and Jhajjar in Haryana from different forestry trees: *Cassia fistula*, *Tectona grandis* and *Acacia latifolia* for their laboratory rearing which was continued for emergence of *Apanteles* spp. and some unknown lepidopterous larvae were also reared. Eight specimens were sorted out from collected samples. Slide preparation, 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”.
- Eighty insect samples were collected from various localities of Rohtak, Mahendragarh, Rewari and Jhajjar in Haryana and districts Bahraich, Shravasti, Balrampur, Gonda and Basti from Uttar Pradesh for the screening of egg parasitoids. Fifty egg parasitoids were sorted out from collected samples. Nineteen samples of insect eggs were collected from different forestry trees: *Acacia latifolia*, *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)”.  
- Larvae of 4 species of lepidoptera collected from ban oak trees during the surveys were reared for life history studies in the laboratory. 18 of them are in pupa stages under hibernation and there was emergence of two species of lymantrid & geometrid moths. Life cycle of cerambycid stem borer. 650 species were digitized – 270 with DSLR (in cabinet nos. 35, 37, 38, 41, 47, 54, 65, 67, 99, 101, 102, 105, 106, 115, 122, 123, 124-26) and 380 with stereo zoom microscope (in cabinets no. 115, 122- 127) and about 1200 photographs of these species were edited and stored. Database was updated for editing species holding data in the database under the project “Digitization and enrichment of National Forest Insect Collection (NFIC) of Forest Research Institute, Phase-II (minute insects)”.
- Study of influence of Forest fires on nutrients in burnt and unburnt Chirpine forests during 2017-18 post fires period in upper Yamuna Forests suggests that the water holding capacity, electrical conductivity (EC) & soil organic carbon (SOC) increased in burnt site as compared to unburnt site. The available nutrients i.e. N, P, & K also followed similar trend.
- The study on soil nutrient pool in different forest types of Uttarakhand revealed that the pH of soil is more acidic in Kharsu Oak, Chirpine Forests compared to Banj Oak Forests. The SOC and available nutrients (N, P & K) decreased down with soil depth and was higher in Banj Oak followed by Kharsu Oak and Chirpine Forests.
- The chloroform extract Cassia tora endosperm was quantitatively analyzed by HPLC for presence of anthra quinones. It indicated the presence of emodin, chrosophenic acid and rhein.
- Two populations of *Quercus semicarpifolia* (QS-21and QS-23) grown in the forests of Nag Tibba, Tehri and Kunjakharak, Nainital, Uttarakhand were characterized for the first time for total phenolic contents determined in their leaves.
- Two populations (VAJ-10-PT and VAJ-10-BT) of *Valeriana jatamansi* collected from Arunachal Pradesh was
characterized for the first time for their volatile constituents determined in their rhizomes.

**Himalayan Forest Research Institute, Shimla**
- Identification of 24 specimen of insect species upto species level was authenticated at FRI, Dehradun. Out of them 15 belong to the order Coleoptera, 1 belongs to Lepidoptera and 8 belong to hymenoptera.
- Identification of 35 wild mushroom species collected from the different parts of Kinnaur district was also authenticated at FRI Dehradun. The identified species represent 19 families.

**Consultancy**

ICFRE, Dehradun presently works on nine consultancy projects, which were 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, Kolkotta; NTPC Ltd Noida and NMDC Ltd, Hyderabad.

**Tree Growers/ Kisan mela**

<table>
<thead>
<tr>
<th>Institute</th>
<th>Organized/Participated</th>
<th>Duration</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFP, Ranchi</td>
<td>Kissan Mela cum Exhibition</td>
<td>6 February 2019</td>
<td>CTRTI, Nagri Ranchi</td>
</tr>
<tr>
<td></td>
<td>Krishi Kumbh Mela</td>
<td>9-11 February 2019</td>
<td>Motihar, Bihar</td>
</tr>
<tr>
<td>IFGTB, Coimbaore</td>
<td>Tree Growers Mela</td>
<td>13 February 2019</td>
<td>A.S. Mahal, Tiruvannamalai</td>
</tr>
<tr>
<td>IWST, Bengaluru</td>
<td>2nd Udyamsamagam</td>
<td>14-16 February 2019</td>
<td>Police Maidan Kannur, Kerala</td>
</tr>
</tbody>
</table>

Tree Growers Mela at Tiruvannamalai, Coimbatore

**Workshops/ Seminars/ Meetings**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Topic</th>
<th>Duration</th>
<th>Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ecology and Climate Change: Perspectives, Prospects and Insights</td>
<td>28 February 2019</td>
<td>Officers, Scientists, Technical staff &amp; Research Scholars of IFGTB</td>
</tr>
</tbody>
</table>
Forest Research Institute, Dehradun


Arid Forest Research Institute, Jodhpur

3. Intellectual Property Awareness in Forestry Research 20 February 2019 Scientists/Officers/Technical Staff/Research Scholar

Himalayan Forest Research Institute, Shimla

4. Eco-restoration of degraded areas of Cold Deserts in Himachal Pradesh and Jammu & Kashmir 22 February 2019 Scientists, officers, research and technical support staff

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Topic</th>
<th>Duration</th>
<th>Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Forest Entomology &amp; Pest Control</td>
<td>14 February – 20 March 2019</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Value addition and marketing on NTFPs and Medicinal Plants</td>
<td>4 - 19 February 2019</td>
<td>13 participants from different states of India</td>
</tr>
</tbody>
</table>

Institute of Wood Science and Technology, Bengaluru

3. Wood Protection 4-8 February 2019 Naval Dockyard, Mumbai & Visakhapatnam and War Overseeing Team (WOT), Mumbai

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 January to 8 February 2019</td>
<td>Small Botanical Garden under GSDP training programme</td>
</tr>
<tr>
<td>19,20 and 21 February 2019</td>
<td>Agroforestry and its management</td>
</tr>
<tr>
<td>29 January to 28 February 2019</td>
<td>Forest Entomology and Pest Control under GSDP training programme</td>
</tr>
<tr>
<td>4 February 2019</td>
<td>Waste Management of Green skill development Programme</td>
</tr>
<tr>
<td>12 to 14 February 2019</td>
<td>New Technology in Forestry</td>
</tr>
<tr>
<td>15 January to 13 February 2019</td>
<td>Management of Small Botanical Gardens</td>
</tr>
<tr>
<td>11 February to 23 March, 2019</td>
<td>Bamboo Craft™ under Green Skill Development Programme (GSDP)</td>
</tr>
<tr>
<td>25 February to 23 March, 2019</td>
<td>Propagation and Management of Bamboo under Green Skill Development Programme (GSDP)</td>
</tr>
<tr>
<td>26 and 27 February 2019</td>
<td>Bamboo propagation and Nursey Management under VVK</td>
</tr>
</tbody>
</table>
14. **Development and Management of Bamboo Kisan Nurseries**  
   27 and 28 February 2019  

15. **Skill Development on Bamboo Handicrafts for Promotion of Community Enterprises**  
   27 and 28 February 2019

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development and Management of Bamboo Kisan Nurseries</td>
<td>27 and 28 February 2019</td>
<td>Himalayan Forest Research Institute, Shimla</td>
</tr>
<tr>
<td>Skill Development on Bamboo Handicrafts for Promotion of Community Enterprises</td>
<td>27 and 28 February 2019</td>
<td>Himalayan Forest Research Institute, Shimla</td>
</tr>
<tr>
<td>Cultivation of important high value temperate medicinal plants</td>
<td>19 February 2019</td>
<td>Stakeholders</td>
</tr>
<tr>
<td>Bamboo Nursery and Management</td>
<td>4-8 February 2019</td>
<td>Forest Guards of SFD, Jharkhand &amp; Odisha</td>
</tr>
<tr>
<td>Bamboo Propagation and Management</td>
<td>12 February – 29 March 2019</td>
<td>Students, Farmers</td>
</tr>
<tr>
<td>Preparation of Andhra Pradesh Working plan</td>
<td>5 – 8 February 2019</td>
<td>DFOs &amp; FROs of Paderu &amp; Visakhapatnam Divisions</td>
</tr>
<tr>
<td>Preparation of Andhra Pradesh Working plan and data collection on carbon</td>
<td>11 – 15 February 2019</td>
<td>DFOs &amp; FROs of Guntur &amp; Krishna Divisions</td>
</tr>
</tbody>
</table>
IWST, Bengaluru organized the following programs in February 2019 under PRAKRITI program.

- 200 students of 6th, 7th and 8th grade from Kendriya Vidyalaya, Malleswaram, Bengaluru visited the institute on 4 February 2019.
- 200 students of 7th, 8th, 9th and 11th grade from Kendriya Vidyalaya, Malleswaram, Bengaluru visited the institute on 5 and 6 February 2019.
- TFRI, Jabalpur conducted a programme for students of Kendriya Vidyalaya, Barkuhi, Chhindwara District under “PRAKRITI” on 7 February 2019.
- AFRI, Jodhpur delivered a lecture on the topic, “Forest and Environment Conservation” was to 985 students of class 1 to 11 (35 teachers also participated in the program) of Kendriya Vidyalaya on 27 February 2019. Research activities of AFRI, Jodhpur displayed through posters, forest products, seedlings raised in AFRI nursery.
- Research and development activities of RFRI, Jorhat in the field of Bamboo Cultivation, Propagation, Nursery Management, Value addition & bamboo preservation techniques, Biotechnology and Tissue Culture, Lac Cultivation, Botanical Garden, Orchidariam, Vermi composting etc. were explained to the students of KV, ONGC, Jorhat under ’PRAKRITI” programme on 26 February 2019.
- IFP, Ranchi organized one day training and demonstration programme on “Nursery Maintenance” at Jawahar Navodaya Vidyalaya, Bonga, Hazaribagh under ‘Prakriti programme’ on 18 February 2019.
- Ms. Rekha Devrani awarded ‘Young Scientist Award’ for the paper titled “Enzyme assisted extraction of phenolics antioxidants from biomass residues of poplar and lemongrass” authored by Devrani, Rekha; Singh, Rakesh; Varshney, V.K. and Negi, Vipul presented in 13th Uttarakhand State Science & Technology Congress 2018-19 (USSTC) held on 26-28 February 2019, at Vigyan Dham, UCOST, Dehradun.
- Dy. Chief Minister of Karnataka G. Parameshwara awarded the ‘Outreach Award’ for generating awareness about Sandalwood in rural community of Karnataka and other parts to Dr. Pankaj K. Aggarwal, Scientist-G and Head, WP Division in the National Conference on Sandalwood organized by Sandal Society of Karnataka at J.N. Tata Auditorium, Bengaluru on 25th February 2019.
- Dr. Shiny. K.S, Postdoctoral Fellow was selected for Augmenting Writing Skills for Articulating Research Award 2018 (AWSAR) on “Coconut shell oil to protect wood” under Postdoctoral Fellow (PDF) Category. The award carries a cash prize of Rs. 10,000/- and Certificate of Appreciation.
Awareness and Demonstration Programmes

• HFRI, Shimla organized awareness programme to reduce incidences of fire in chirpine forests under the ICFRE funded project titled “Analyzing impact of control burning on plant diversity and soil properties in chir pine forests" on 28 February 2019. The programme was attended by 28 local villagers and representative of Panchayat of Kasauli Gadkhal, Teh. Kasauli, Distt. Solan.

• IFP, Ranchi organized training and demonstration programme on the "NTFPs cultivation technique" to the Gram Van Samiti of Hazaribagh district and medicinal plants and "Forestry Research Activities" to the student of Biotechnology Department, Ranchi Women's College, Ranchi on 13 February 2019.

Popularizing Forestry through All India Radio / Doordarshan

<table>
<thead>
<tr>
<th>Programme Topic</th>
<th>Channel</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of Jigat in Agarbatti making-Contributions of FRI</td>
<td>All India Radio</td>
<td>27 Feb. 2019</td>
</tr>
<tr>
<td>Role for Forestry research and constraints</td>
<td>Doordarshan, Ranchi</td>
<td>16 Feb. 2019</td>
</tr>
</tbody>
</table>

Miscellaneous

<table>
<thead>
<tr>
<th>Institute</th>
<th>Special day/theme</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFB, Hyderabad</td>
<td>World Wetland Day</td>
<td>2 February 2019</td>
</tr>
<tr>
<td>RFRI, Jorhat</td>
<td>National Science Day 2019</td>
<td>28 February 2019</td>
</tr>
</tbody>
</table>

Memorandum of Understanding

• HFRI, Shimla signed a Memorandum of Understanding (MoU) on 12 February 2019 with Himachal Pradesh Forest Department for maintenance of Van Vigyan Kendra Jagatsukh, Manali, Distt. Kullu (HP).

HR News

<table>
<thead>
<tr>
<th>Promotions</th>
<th>Date of appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Shri Prem Lal, Under Secretary, ICFRE</td>
<td>21 Feb 2019</td>
</tr>
<tr>
<td>Shri Sardar Singh Chauhan, Under Secretary, ICFRE</td>
<td>21 Feb 2019</td>
</tr>
<tr>
<td>Shri Jagdish Saran Saxena, Under Secretary, FRI</td>
<td>21 Feb 2019</td>
</tr>
<tr>
<td>(on ad-hoc basis)</td>
<td></td>
</tr>
<tr>
<td>Smt. Rekha Rani, Under Secretary, FRI</td>
<td>21 Feb 2019</td>
</tr>
<tr>
<td>Smt. Suman Kaushal, Under Secretary, HFRI</td>
<td>21 Feb 2019</td>
</tr>
<tr>
<td>Shri Rakesh Kumar Bhandari, Under Secretary, FRI</td>
<td>21 Feb 2019</td>
</tr>
<tr>
<td>Shri Hemant Gagal, Under Secretary, AFRI</td>
<td>21 Feb 2019</td>
</tr>
</tbody>
</table>

Patron:
Dr. Suresh Gairola, Director General, ICFRE, Dehradun

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