Poplar based Agroforestry

Scientist interact with farmers during training

Field visit during training

Interacting in Forestry Chaupal

Showcase FRI technologies on the day

FOREST RESEARCH INSTITUTE
(Indian Council of Forestry Research and Education) DEHRADUN
COURSE CONTENTS

1. Insect pest management in forest nurseries, plantations and natural forests: Introduction to Forest Entomology; Insect orders important in Forestry (Orders; Coleoptera, Lepidoptera, Hymenoptera, Hemiptera, Isopota, Orthoptera, Diptera etc.) & their identification. Habits & Role of insects in forest eco-system, population dynmics and Insect Pests of Nurseries- Symptoms, extent and nature of damage, preventive and control measures of important pests.

2. Nursery and Plantation Management: Establishing modern seedling and clonal nurseries, nursery operations, sources of superior germplasm and their management, seed handling and vegetative propagation techniques, planting and aftercare, cultivation technology of important forest trees, protection measures against insect pests and diseases in nurseries and plantations.


6. Wood seasoning: Importance of seasoning, Equilibrium moisture content; Moisture content values and tolerances for end products; Influence of climate zones on moisture content; seasoning schedules, seasoning kilns (solar, steam, vacuum press drying, dehumidification drying etc.); other seasoning methods like chemical seasoning of plantation species like eucalyptus and poplar.

7. Tree improvement for Sustainable Development: Introduction to the basics of genetics and tree improvement, Tree improvement methods for forestry tree species, Selection of the candidates and plus tree, Seed collection and its importance, progeny/ clonal trials, Seed orchards and hybridization, Field visit, Nursery of quality planting stock and their management, Tree improvement for industrial applications, Valedictory session..


10. Plywood manufacture: Plywood raw materials both wood and adhesive; Manufacture of veneer, plywood, black board and Flush doors, their properties and testing; preparation and testing of adhesives; Plywood, Laminated of adhesives, plywood, Laminated Veneer Lumber (L.V.L.); Impreg and propreg and other in panel products.

11. Forest Botany: Forest Biodiversity Overview, Dendrology, Plant classification and nomenclature, Use of forest flora for identification, Identification of species in field, collection of specimens, Herbarium’s role and its Methodology, Digitization of Forest Flora, Rare and threatened species, Field Visits including DD Herbarium, Botanical Garden, Arboretum, Bambusetum etc.

12. Classification and Grading of Timber: Testing of wood and classification of timbers for different end-uses, defects in wood, their measurement, and evaluation, visual grading of timber, machine grading of timber.


<table>
<thead>
<tr>
<th>Name of the Course</th>
<th>Name of course Director &amp; Division</th>
<th>JAN</th>
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<tbody>
<tr>
<td>Insect pest management in forest nurseries, plantations and natural forests</td>
<td>Dr. Arun Pratap Singh, Scientist-F, Forest Protection Division Ph.No. 01352224356</td>
<td>13-17</td>
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<tr>
<td>Nursery Disease and their Management</td>
<td>Dr. Amit Pandey, Head, Scientist-C, Forest Pathology Division, Ph. No. 0135-222-4226</td>
<td>10-14</td>
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<tr>
<td>Bamboo propagation and clonal nursery management</td>
<td>Dr. Meena Bakshi, Scientist-E, G.T.P. Division Ph. No.01352224410</td>
<td>08-12</td>
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<td>Wood and Bamboo Preservation and its Utilization Wood Seasoning</td>
<td>Dr. Sadhna Tripathi, Scientist-G, Forest Products Division Ph. No. 0135-22244445</td>
<td>26-30</td>
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<td>Reducing wastage in dimensioned lumber through Finger Joining</td>
<td>Dr. Sachin Gupta, ACTO Forest Products Division Ph. No. 0135-22244446</td>
<td>16-20</td>
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<td>Wood Seasoning</td>
<td>Dr. N.K. Uperti, Scientist-G, Forest Products Division Ph. No. 0135 222 4432</td>
<td>23-27</td>
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<td>Tree improvement for sustainable development</td>
<td>Dr. M.S. Bhandari, Scientist-C, G.T.P. Division Ph. No. 0135222-4383</td>
<td>09-13</td>
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<td>Application of remote sensing and GIS and GPS in forest resource assessment</td>
<td>Dr. Manoj Kumar, Scientist-E, Forest Informatics Division Ph. No. 0135-2224370</td>
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<td>Techniques of macro and micro propagation in forestry</td>
<td>Dr. Santan Barthwal, Scientist-E, G.T.P. Division Ph. No. 0135-2224381</td>
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<td>Butterfly Monitoring &amp; Butterfly Inclusive Ecotourism as a Source of Livelihood</td>
<td>Dr. Arun Pratap Singh, Scientist-F, Forest Protection Division Ph.No.01352224356</td>
<td>14-18</td>
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<td>Plywood Manufacture</td>
<td>Sh. D.P. Khali, Scientist-F, Forest Products Division Ph. No. 0135-2224451</td>
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<tr>
<td>Forest Botany</td>
<td>Dr. Anup Chandra, Scientist-E, Botany Division, Ph.N. 0135-2224490</td>
<td>11-15</td>
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<td>Classification &amp; Grading of Timber</td>
<td>Dr. S.D. Sharma, A.C.T.O., Forest Products Division Ph. No. 0135-2224345</td>
<td>18-22</td>
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<td>Bio-inoculants role and application in forestry:</td>
<td>Dr. Vipin Parkash, Scientist-F, Forest Protection Division Ph. No. 0135-222-4314</td>
<td>16-21</td>
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**Low-Cost Short Term Training Courses for Field Staff, Farmers, Artisans, Extraction, quality assessment, value addition and applications of essential oils from aromatic plants.**

**Course Director:** Dr. Vineet Kumar, Head, Chemistry Division  
**Ph. No:** 0135-2224210  
**Dates:** 14th to 16th October, 2019

**COURSE CONTENTS**
Overview of essential oils, Techniques for extraction of essential oils, physicochemical assessment of essential oils for quality control, GC-MS assisted analysis of chemical constituents, Value addition of essential oils & Industrial application of essential oils.

**Low-Cost Short Term Training Courses for Field Staff, Farmers, Artisans, Classification & Grading of Timber**

**Course Director:** Dr. Charan Singh, Scientist-E, Extension Division  
**Ph. No:** 0135-222 4355  
**Dates:** 09th to 11th October, 2019

**COURSE CONTENTS**
कृषिविज्ञान के आधारित ग्रामीण सुबिधाएँ ।
NOMINATIONS
Nomination letters for the courses to be conducted at F.R.I., Dehra Dun may be addressed to the Course Director of the concerned training and a copy may be sent to:
Head, Extension Division
Forest Research Institute
P.O. New Forest
Dehradun – 248 006 (Uttarakhand)
Phone: 0135 – 2758606
Fax: 0135 – 2756865
E-mail: headext@icfre.org Website : www.fri.icfre.gov.in

The requisite course fees (through demand draft drawn in favour of the Director, Forest Research Institute, Dehradun, and payable at Dehradun) should reach on the above address at least 30 days before the commencement of the respective courses. Participants are advised to commence their journey for the training only after getting confirmation about the course programme from the concerned Course Director at the telephone numbers.

COURSE FEES
The course fees for STTC (including boarding & lodging charges) per participant is as follows:

- Rs.11,000 for Indian nationals
- Rs. 22, 000 for SAARC countries
- Rs.40,000 for other foreign nationals

Course fee for “Low-Cost Short Term training courses only for farmers, artisans, etc. is Rs. 5,500 course.

Institutional charges @20% on course fees will be charged extra for each course.

The minimum number of participants for each course must be 10 (ten).

Low-Cost Short Term Training Courses for Field Staff, Farmers, Artisan
Low Cost Short Term Trainings to be conducted at Centre for Social Forestry and Eco-Rehabilitation (CSFER), Prayagraj (UP)

1 Improved Nursery Techniques
Course Director : Dr. Anita Tomar
Ph. No : 6386193844
Dates : 19th to 21st November, 2019
COURSE CONTENTS
Designing of nursery, types of containers in nursery, raising of plants of important species in nurseries, collection, processing and storage of seed, macropropogation, maintenance of plantation, pre-sowing treatments for enhancing seed germination, significance of potting mixture in nurseries.

2 Reclamation of Degraded Lands
Course Director : Sh. Alok Yadav
Ph. No : 9411166881
Dates : 26th to 28th November, 2019
COURSE CONTENTS
Categories of wastelands, causes and effects of land degradation, methods of waste land reclamations, potential of tree species in reclamation of wasteland.

3 Marketing of Important Timber Species
Course Director : Dr. Anubha Srivastav
Ph. No : 9451180868
Dates : 3rd to 5th December, 2019
COURSE CONTENTS
Utilization and marketing of important timber species

Nomination letters for the above courses to be conducted at CSFER, Prayagraj may be addressed to the Director, Centre for Social Forestry and Eco-Rehabilitation, Prayagraj (Indian Council of Forestry Research & Education), 3/1 Lajpat Rai Road, New Katra, Prayagraj – 21 1002 INDIA.
Phone : 91 – 0532 -2440795 (O), FAX: 0532-2440795