

CALENDAR SHORT TERM TRAINING COURSES

2025



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FRI



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**ICFRE-FOREST RESEARCH INSTITUTE
DEHRADUN**

Short Term Training Courses at ICFRE-FRI, Dehradun

ICFRE-Forest Research Institute (FRI), Dehradun has its roots in the erstwhile Imperial Forest Research Institute and College established in 1906 to organize and lead forestry research in the country. Its history is synonymous with the evolution and development of scientific forestry not only in India but in the entire Indian subcontinent. The institute also imparted training to forest officers and forest rangers in the country and after independence it was renamed as Forest Research Institute. In 1988, FRI and its research centers were brought under the administrative umbrella of Indian Council of Forestry Research & Education (ICFRE) under the Ministry of Environment, Forests and Climate Change, Government of India.

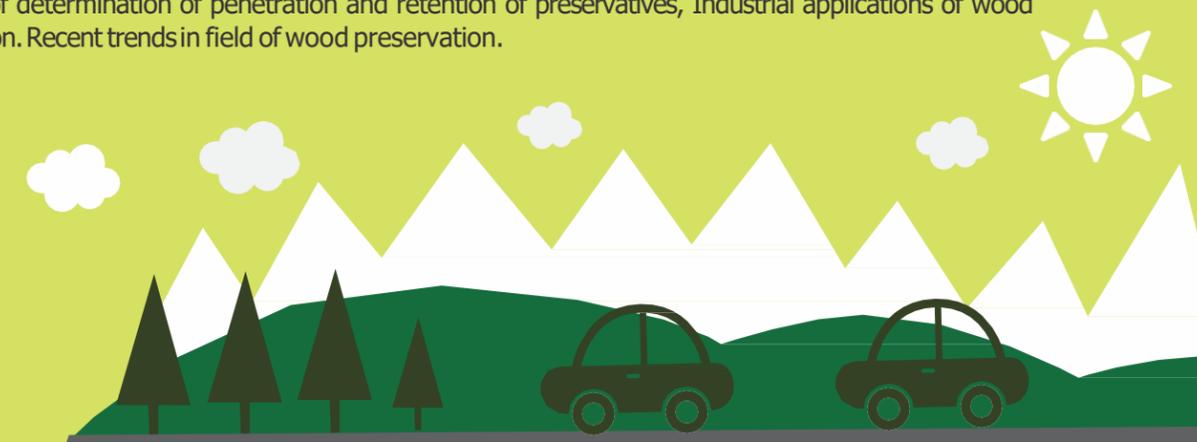
Training as a part of extension is an important activity of the institute and plays a major role towards capacity building of the stakeholders. The institute organizes Short Term Training Courses (STTC) in different disciplines as per the requirement of the stakeholders with the aim of sharing the research developments in forestry and transferring the latest technical knowhow. In addition to the Short Term Low-Cost Training Courses, the Institute also organizes low-cost training courses mentioned separately in this brochure.

These trainings are imparted by highly qualified, experienced and skilled professionals and researchers. The Institute has a well-developed infrastructure of laboratories, computer center, library, bambusetum, herbarium, arboreta, nurseries and experimental fields for these trainings. Excellent boarding & lodging facilities are available at the Institute.

The details of the training are given below:

- 1. Butterfly Monitoring & Butterfly Inclusive Tourism as a Source of Livelihood:** The course will impart training on Importance of butterflies, habits of butterflies, diversity of butterflies in India, Identification of butterflies-Taxonomy & literature, butterflies in National Forest Insect Collection, FRI, Dehradun, Monitoring & Sampling butterflies for research, Butterflies & Climate change, Butterflies, forest types, biodiversity conservation & land use planning, Butterfly inclusive ecotourism models worldwide with livelihood opportunities & Creating butterfly nature trails & gardens.
- 2. Identification of a forest tree pathogen by amplicon sequencing:** Exposure to isolation of pathogen (from soil or diseased specimen), multiplication of the pathogen, DNA isolation, PCR amplification of the desired gene of the pathogen, Sanger sequencing of the pathogen. Exposure to different bioinformatics tools used for handling and curating sequences, Procedure of the submission of gene sequences to Genbank.
- 3. Conservation and management of forest genetic resources (FGRs) :** Introduction to concepts of forest genetic resource, Why we conserve and manage FGRs., Strategies for prioritization of species for conservation, distribution mapping of FGRs species, diversity assessment and characterization of FGRs & conservation and management of FGRs.
- 4. Production of Quality Planting Stocks of Melia dubia:** Introduction to Melia dubia and its potential, Quality Planting stock production, Harvesting and handling of Melia dubiaseeds, Processing and treatment of seed, Seed germination / nursery raising, Post germination handling of seedlings & Management of Seedlings.

- 5. Urban tree stresses and their management :** Urban trees ecosystem and their services, Stresses on urban trees, Management of various stresses on urban trees, Production of quality planting material for urban green spaces , Recent trends in urban forestry, Linking urban forestry with sustainable development goals(SDGs)& Fields visits.
- 6. Plus Tree Selection and development of SPA's and Seed orchards of Trees of economic Importance:** Selection of Plus Trees; species, distributed and strategies, Genetics gain under the selection, Development of seed production area (SP's), Development of seed orchards & Management of SPA's and seed orchards.
- 7. Skilled development in parataxonomy:** The proposed training programme of Forest Botany will broadly cover collection and identification of different plant group, Use of forest flora in plant identification, Botanical Nomenclature and its significance in forestry, Herbarium and Herbarium Techniques, Herbarium and its function; Methodologies for plant herbarium collection, preservation, identification and incorporation of specimens to the herbarium, Plant conservatories (Herbarium, Botanical Garden, Pathological and Entomological problems, Physiological stress and soil condition, Health categorization of trees, Risk assessment, Preventive and remedial measures & Field visit.
- 8. Plywood Manufacture :** Plywood raw materials both wood and adhesive; Analysis of Phenol and Formalin; Preparation and testing of PF and UF adhesives; Manufacture method of veneer, plywood, block board, flush door, their properties and testing; Plywood Laminate; Laminated Veneer Lumber; Compreg Impreg and other recent panel products.
- 9. Classified and grading of timer:** The course aims at providing complete insight on classification of timber, strength properties determination, measurement and evaluation of defects, defect detection through ultrasonic and grading of timber. In addition to these, lectures will also be delivered on wood seasoning, wood preservation and identification of wood species.
- 10. Wood Coatings :** Introduction to Wood Coating, Types of Wood Coating, Properties of Wood Coating, Wood Preparation Techniques, Application Methods, Testing Methods on Wood Coating, Environmental Considerations, Advanced Coating Techniques, Troubling Coating Issues, Health and Safety, Case Studies and Industry Applications, Role of Moisture, softwood – hardwood, panel products, seasoning and preservation in wood coating hands-on practice, Conclusion and Future Trends in Wood Coating (Environment friendly and nano coatings)
- 11. Seasoning and Preservation of Wood and Bamboo:** Different types of Seasoning and Preservation of wood and Bamboo. Advanced Seasoning Kilns (Solar, Microwave Drying kin and Vacuum Kiln Drying, etc.)
- 12. Wood and Bamboo Preservation :** Durability and treatability of wood and bamboo. Different types of preservatives used for Bamboo and Wood. Preservation methods (pressure and non pressure methods), Methods of determination of penetration and retention of preservatives, Industrial applications of wood preservation. Recent trends in field of wood preservation.



ICFRE- Forest Research Institute, Dehradun
Calendar of Short Term Training Courses - 2025

Name of the Course	Name of course Director & Division	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.Butterfly Monitoring & Butterfly Inclusive Tourism as a Source of Livelihood	Dr. Arun Pratap Singh, Scientist-G & Head Forest Protection Division Ph.No. 9068049888 E-mail: singhap@icfre.org									08-12			
2.Identification of a forest tree pathogen by amplicon sequencing	Dr. Charisma K., Scientist-B, Forest Pathology Discipline, Forest Protection Division Ph. No.0135-222-4226 E-mail fpd_fri@icfre.org									15-19			
3.Conservation and management of forest genetic resources (FGRs)	Dr. R.K. Meena & Dr. M.S. Bhandari, Genetics & Tree Improvement Division, Ph.No.: 0135-222-4378 E-mail : head_gtp@icfre.org										10-14		
4.Production of Quality Planting stocks of Melia dubia	Dr. Rama Kant & Dr. Ashok Kumar, Genetics and Tree Improvement Division. Ph.No.: 0135-222-4380 E-mail : head_gtp@icfre.org		17-21										
5.Urban tree stresses and their management	Dr. Hukum Singh & Dr. Santan Barthwal, Genetics and Tree Improvement Division Ph.No.: 0135-222-4480 E-mail : head_gtp@icfre.org											15-19	
6.Plus Tree Selection and development of SPAs and Seed orchards of Trees of economic Importance	Dr. M.S. Bhandari & Dr. Rama Kant, Genetics and Tree Improvement Division Ph.No.: 0135-222-4383 E-mail : head_gtp@icfre.org												08-12
7.Skilled development in parataxonomy	Dr. Ranjina Negi, Scientist-E & Head, Forest Botany Division Ph.No.: 0135-222-4385 E-mail : negirk@icfre.org											17-21	
8.Plywood Manufacture	Dr. D.P. Khali, Scientist-G & Smt. Ranjana Yadav, Scientist-E Composite Wood Discipline, Forest Products Division Ph.No.: 0135-222-4451 E-mail : head_fp@icfre.org										13-17		
9.Classified and grading of timer	Sh. Ashwath Hegde, Scientist-B and Sh. Rajesh Bhandari, Scientist-G, Timber Mechanics and Engineering Discipline Forest Products Division Ph.No.: 0135-222-4395 E-mail : head_fp@icfre.org											24-27	
10.Wood Coatings	Sh. Sachin Gupta, Chief Technical Officer & Sh. Shahid A.M. Scientist-B, Wood Working & Finishing Discipline, Forest Products Division Ph.No.: 0135-222-4443 E-mail : head_fp@icfre.org											03-07	
11.Seasoning and Preservation of Wood and Bamboo	Dr. Shalendra Kumar, Scientist-D, Wood Seasoning Discipline & Sh. Ajmal Samani, Scientist-G, Wood Preservation Discipline, Forest Products Division Ph.No.: 0135-222-4423 E-mail : head_fp@icfre.org									22-26			
12.Wood and Bamboo Preservation	Sh. Nang Mewada Thamoung, Scientist-B and Sh. Ajmal Samani, Scientist-G, Wood Preservation Discipline, Forest Products Division Ph.No.: 0135-222-4613 E-mail : head_fp@icfre.org										23-27		

Short Term Trainings to be conducted at ICFRE-Eco-Rehabilitation Centre Prayagraj (UP) Contact No. 0532-2440796

- Essentials of clonal forestry:**
Course Content: Concept of cloning, Conventional and Modern methods of Clonal Propagation Procedures, Clone development, deployment and testing.
- Lac cultivation for improving livelihood:**
Course Content: Overview of technologies for Lac cultivation, relevance in agroforestry plantations, harvesting and processing techniques of lac, value addition & marketing of end products and general management for improvement of livelihood.
- Techniques for nursery and plantation management:**
Course Content: Designing of nursery; Types of containers in nursery; Raising of plants of important species in nurseries; Collection, processing and storage of seed; Macro propagation; Maintenance of plantation; Pre-sowing treatments for enhancing seed germination; Significance of Potting mixture in nurseries.
- Cultivation, processing, value addition, marketing & certification of medicinal plants :**
Course Content: Nursery and plantation techniques of medicinal plants; introduction of good agriculture practices, collection, processing and storage of medicinal Plants. Value addition of different plant parts, marketing & certification of medicinal plants.
- Bioremediation of industrial waste and problematic soil sites:**
Course Content: Selection of Species; Sustainable reclamation including field study of affected sites; Plantation techniques with Microbial and Bio-solid treatments; moisture conservation techniques.
- Bamboo Propagation, Management and Utilization:**
Course Content : Botany and taxonomy of Bamboo, its utilization and resource distribution; Propagation and silvicultural management of bamboos, Bamboo cultivation and Conservation of bamboo genetic resources; Techniques in bamboo management; Techniques in bamboo management; Marketing and Trade of bamboo; Bamboo based entrepreneurship.
- Agroforestry for sustainable land use and livelihood improvement:**
Course Content: Tree crop combinations; site suitability of trees; procurement of quality planting material and other technical knowhow and marketing of end (timber & non timber) forest produces.
- Bio-diversity and its conservation:**
Course Content: Biodiversity, types of biodiversity, threats to biodiversity, microbial biodiversity, invasive species and its threat, biodiversity conservation

Short Term Training Courses-2025 at ICFRE-CSFER, Prayagraj

Name of the Course	Name of course Director & Division	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.Essentials of clonal forestry	Dr. Sanjay Singh, Scientist-G Ph. No. 9430366286 E-mail: sanjay.drsingh@gmail.com (FRC-ER)Prayagraj (UP)												
2.Lac cultivation for improving livelihood	Dr. Sanjay Singh Scientist-G Ph. No. 9430366286 E-mail: sanjay.drsingh@gmail.com (FRC-ER)Prayagraj (UP)				22-24								
3.Techniques for nursery and plantation management	Dr. Anita Tomar, Scientist-F Ph. No.: 6386193844 E-mail: anitatomar@icfre.org . (FRC-ER)Prayagraj (UP)									16-18			
4.Cultivation, processing, value addition, marketing & certification of medicinal plants	Dr. Anita Tomar, Scientist-F Ph. No.: 6386193844 E-mail: anitatomar@icfre.org . (FRC-ER)Prayagraj (UP)										14-16		
5.Bioremediation of industrial waste and problematic soil sites	Dr. Kumud Dubey, Scientist-E Ph. No.:9415214010 E-mail : dkumud@yahoo.com (FRC-ER)Prayagraj (UP)					13-15							
6.Bamboo Propagation, Management and Utilization:	Sh. Alok Yadav, Scientist-E Ph. No :9411166881 E-mail : yadava@icfre.org (FRC-ER)Prayagraj (UP)											11-13	
7.Agroforestry for sustainable land use and livelihood improvement:	Dr. Anubha Srivastav, Scientist-D Ph. no Ph. No.: 8299103348 E-mail : anubhasri_csfer@icfre.org (FRC-ER)Prayagraj (UP)												02-04
8.Bio-diversity and its conservation	Dr. Kumud Dubey, Scientist-E Ph. No :Ph. No. 9415214010 E-mail: dkumud@yahoo.com (FRC-ER)Prayagraj (UP)							15-17					

NOMINATIONS

Nomination letters for the courses to be conducted at F.R.I., Dehradun may be addressed to the Course Director of the concerned training and a copy may be sent to :

Head, Extension Division
ICFRE-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.res.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

Offline Mode

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, and
- ▶ 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 per 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).

Online Mode

The course fees for STTC per participants is as follows :

- ▶ Rs. 6,000/- for Indian nationals
- ▶ Rs. 12,000/- for SAARC countries and
- ▶ Rs. 20,000/- for other foreign nationals.

Course fee for "Low-Cost Short Term training only for farmers, artisans etc.

- ▶ Rs. 5,000/- per participant

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

Low-Cost Short Term Training Courses for Field Staff, Farmers, Artisans

The following Low-Cost Short Term training courses for non-gazetted staff, farmers, artisans, craftsman, gardeners etc, shall be conducted at ICFRE-FRI, Dehradun during 2025. These courses are designed as per the requirements of the sponsoring agencies.

1. Urban Tree Risk Management/Hazardous Avenue Trees

Course content: Pathological and Entomological problems, Physiological stress and soil condition, Health categorization of trees, Risk assessment, Preventive and remedial measures, Field visit.

Tentative date : 6-8th August, 2025
Course Director : Dr. Shailesh Pandey, Scientist- E, Forest Pathology Discipline, Forest Protection Division, ICFRE-FRI
Ph.No. : 0135-222-4226
E-mail : fpd_fri@icfre.org

3. Vesicular Arbuscular Mycorrhiza (VAM) mass production

Course content: Growth promoting microorganisms, Vesicular Arbuscular Mycorrhiza (VAM), Soil mixture preparation, Mycorrhizal culture inoculation, age selection of planting material, Ideal application of mycorrhizal inoculums, ex vitro mycorrhizal inoculation, Mycorrhiza and microbial products – an overview on market, products and legislation, Innovative mycorrhiza production/products, Field visit.

Tentative date : 10-12th December, 2025
Course Director : Dr. Vipin Prakash, Scientist- F, Forest Pathology Discipline, Forest Protection Division, ICFRE-FRI
Ph.No. : 0135-222-4314
E-mail : fpd_fri@icfre.org

4. Edible/Medicinal Mushroom Cultivation

Course content: Benefits of mushroom consumption, Wild edible and poisonous mushrooms, Important commercially cultivated mushrooms in India and world, Different substrates for spawn (Edible/Medicinal), Media preparation, Sterilization, isolation, culture maintenance and preservation, sub-culturing, Mushroom cultivation : an agribusiness activity, status: world, national and state scenario, opportunities and constraints, Oyster and Ganoderma cultivation and medicinal uses, Hands on Spawn preparation, substrate treatment, bag preparation, spawn mixing, harvesting, utilization, Ophicordyceps sinensis, its medicinal uses and importance, Mushroom spawn: quality attributes, storage and transport, Mushroom processing and preservation (drying/ dehydration, pickling and canning), Acquaintance with mushroom contaminants, Field/Museum visit.

Tentative date : 15-17th October, 2025
Course Director : Dr. Vipin Prakash, Scientist-F, Dr. Shailesh Pandey, Scientist- E, Dr. Manoj Kumar, STO , Forest Protection Division, ICFRE-FRI
Ph.No. : 0135-222-4313
E-mail : fpd_fri@icfre.org

2. Mass multiplication of Biocontrol agent Trichoderma

Course Content: Benefits of using Trichoderma, Mechanism of action, Media preparation, isolation, culture maintenance and preservation, Spawn preparation, Different agroforestry substrates for mass production, Hands-on guidance on implementing Trichoderma, effective application methods, Field visit.

Tentative date : 23-25 July, 2025
Course coordinator : Dr. Shailesh Pandey, Scientist- E, Forest Pathology Discipline, Forest Protection Division, ICFRE-FRI
Contact : 0135-222-4313
E-mail : fpd_fri@icfre.org

5. Harnessing Nature's Bounty, Essential Oils and Natural Dyes for Livelihood Generation

Course Content: Overview of essential oils and natural dyes, National and international market potential of essential oils and natural dyes, Techniques for extraction of essential oils from aromatic plants, physicochemical assessment of essential oils for quality control,

Value addition of essential oils, Industrial application of essential oils, Techniques for extraction of natural dyes from plant biomass. Techniques for dyeing of silk, wool and cotton fabrics with natural with natural dyes & Testing methods to assess color fastness and durability of natural dyes.

Tentative date : 21-25 July, 2025
Course Director : Dr. V.K. Varshney, Head, Chemistry & Bioprospecting Division, ICFRE-FRI
Ph.No. : 0135-222-4313
E-mail : head_chemistry@icfre.org

6. Agroforestry and Marketing

Course contents : Introduction to agroforestry and prevalent agroforestry practices, suitable tree species and land management through different agroforestry models with their economics marketing of agroforestry products diseases, insect pest management of agroforestry species.

Tentative Dates : 17 to 19 September, 2025
Course Director : Dr. Charan Singh, Scientist-E, Extension Division, ICFRE-FRI
Ph. No : 0135-222-4355
E-mail : headext@icfre.org