

Training on Agroforestry models



Training on NTFPs and Medicinal plants



Training on Development of Agroforestry models



Museums visit under Bamboo Training



Field visit under Agroforestry training

PUBLISHED BY DIRECTOR, FOREST RESEARCH INSTITUTE P.O. New Forest, Dehradun – 248 006 (Uttarakhand) **Phone:** 0135 – 2755277 **Fax:** 0135 – 2756865 Website: http://fri.icfre.gov.in E-mail: dir_fri@icfre.org

CALENDER SHORT TERM TRAINING 2018



COURSES

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

Short Term Training Courses at FRI, Dehradun

Set in the sylvan surroundings of Doon Valley and having a history of about a century of forestry research is an ideal seat for learning in forestry. FRI contributes the research perspectives focusing on different aspects of forestry research to different stake holders. The manifold research programmes related to enhancement of forest productivity through quality seed and planting material, agroforestry, medicinal & aromatics plants, eco-rehabilitation, forestation techniques for stress sites, bamboo & bio fertilizers, evaluation & utilization of plantation timber to name a few.

Training as a part of extension is an important function of the institute towards capacity building. The institute organizes Short Term Training Courses (STTC) in twelve disciplines to keep managerial level officers, supervisory staff and field officers abreast with recent research developments in forestry and to transfer the latest technologies. In addition to this Short Term Low-Cost Training Courses will also be organized as provided separately in this brochure.

The faculty to impart these trainings consist highly gualified, experienced and skilled professionals and researchers. The Institute has a well-developed infrastructure of laboratories, computer center, library, herbarium, arboreta, nurseries and experimental field for conducting research and training programmes. Excellent boarding & lodging facilities are available at the Scientists Hostel and Officers Rest House of the Institute, with adequate means of recreation

Course Contents

1. 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.

2. 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 compreg and other in panel products.

3. Wood and bamboo preservative and its utilization: Importance of preservation, Seasoning, products, Composites, Finishing, Working properties and appropriate utilization of wood and bamboo.

4. Reducing wastage in dimensioned lumber through finger jointing: The finger jointing technique – uses, design aspects, adhesive aspect, machinery, structural and non-structural usages, glulams, strength aspects, role of moisture and seasoning, finishing aspects, hands-on practice.

5. 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.

6. Application of remote sensing, GIS and GPS in forest resource assessment: Remote Sensing (RS): Principles of remote sensing; Indian Remote Sensing Satellite and sensors, Recent RS-GIS technological trends, Licensed and open source software for RS-GIS, installation of open sources software on individual laptops, Demonstration of essential tools of licensed and open source software, Source for free satellite data downloading, Hands on exercise for downloading of satellite data and its handing, Basic image handling procedures like layer stacking and mosaic king.

7. Bamboo propagation and clonal nursery management: Introduction to Bamboo and their utilization in rural and urban society: Germplasm collection, Establishment and maintenance of genetic resources of bamboos. Infrastructure development for bamboo propagation, Mass multiplication of important bamboos through low cost clonal technologies, Farmers friendly technologies for bamboo multiplication, management of bamboo clonal nursery etc.

8. Tree seed technology: Seed technology, Nursery technology, Plantation technology, Bamboos propagation, Soil fertility management in plantation, Vermi-compost, Management of plant insect pests in nursery and plantations, Fungal disease of nursery and management, visit to seed lab, botanical garden, medicinal plant nursery etc.

9. Improved seed & nursery technology: Seed technology of forestry species, Raising quality seedling in nursery, Nursery management, Agroforestry models, Soil fertility management in nurseries, Management of plant insect pest attacks, Fungal diseases of nursery and plantation and their management, Visit to FRI museums, nurseries and plantations. Botanical Garden and Bambusetum etc.

10. Nursery and plantation management: Establishing modern seedling and clonal nurseries, nursery operations, sources of superior germplasm and their managemen, 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.

11. Vegetative propagation technologies for genetic improvement: Conventional and tissue culture techniques for multiplication of important forest tree species, infrastructure development, maintenance of clonal nursery and propagation complex through insect/disease management, technology/transfer in field.

12. Nursery diseases and their management: Ideal nursery practices; Soil health and its importance; Improved planting material; important nursery diseases and their identification; disease management methods including cultural, chemical and biological.

13. Biofertilizer role and application in forestry: Isolation of biogents from soil. Isolation of Rhizobirum sp. from module, Inoculation production and mass multiplication trials, Application of biofertilizers, Future Prospectus etc.

14. Biological control: Isolation of bio control agent from soil. Identification of Trichoderma, Introduction to DNA bar coding for fungal identification Laboratory assays. Mass multiplication of trichoderma green house experiment.

15. Cultivation of edible mushroom: Awareness about mushroom their nutritional value, selection of substrate, technique of cultivation, precautions value addition and marketing, Various steps of production of Ganoderma and Oyster mushrooms for the small growers and SHGs.

Forest Research Institute, Dehradun Calendar of Short Term Training Courses - 2018

Name of the Course	Name of course Director & Division	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	0CT	NOV	DEC
1.Wood Seasoning	Dr. N.K. Upreti, Scientist-G Forest Products Division Ph. No. 0135-2224394									24-28			
2.Plywood Manufacture	Sh. D.P. Khali, Scientist-F, Forest Products Division Ph. No. 0135-2224451								20-24				
3.Wood and Bamboo Preservative and its Utilization	Dr. Sadhna Tripathi, Scientist-G Forest Products Division Ph. No. 0135-2224445								26-31				
4.Reducing wastage in dimensioned lumber through Finger Jointing	Dr. Sachin Gupta, ACTO Forest Products Division Ph. No. 0135-2224443										22-26		
5.Classification & Grading of Timber	Dr. S.D. Sharma, A.C.T.O., Forest Products Division Ph. No. 0135-2224345											26-30	
6. Application of remote sensing and GIS and GPS in forest resource assessment	Sh. Manoj Kumar, Scientist-B Forest Informatics Division. Ph. No. 0135-2224370									17-21			
7.Bamboo propagation and clonal nursery management	Dr. Meena Bakshi Scientist-E Botany Division Ph. No. 0135-2224410					14-18							
8.Tree seed technology :	Dr. Ombir Singh, Scientist-E, Silvi. & Forest Mgnt. Div. Ph.No. 0135-2224469						04-08						
9.Improved seed & nursery technology :	Dr. Manisha Thapliyal Scientist-F, Silvi. & Forest Mgnt. Div. Ph.No. 0135-2224467										08-12		
10.Nursery and plantation management:	Dr. Dinesh Kumar, Scientist-G, Silviculture and Forest Management Division									10-14			
11.Vegetative propagation technologies for genetic improvement	Dr. Meena Bakshi Scientist-E Botany Division Ph. No. 0135-2224410							09-13					
12.Nursery diseases and their management:	Dr. Amit Pandey, Head/Scientist-G, Forest Pathology Division. Ph. No. 0135-222-4226								06-10				
13.Biofertilizer role and application in forestry	Dr. Vipin Parkash, Scientist-E, Pathology Division. Ph. No. 0135-222-4314											12-16	
14.Biological control:	Dr. Shailesh Pandey Scientist-C, Pathology Division. Ph. No. 0135-222-4314												11-15
15.Cultivation of edible mushroom:	Ms. Ranjana Juwantha Scientist-B, Pathology Division. Ph. No. 0135-222-4258										15-19		

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

The following Low-Cost Short Term Training Courses for State Government and NGOs sponsored field staff, farmers, artisans, JFM/VFP committees, SHG members, etc. shall be conducted at FRI during 2018. These courses are designed as per the requirements of the sponsoring agencies.

1. 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	:	3rd to 5th October, 2018
Course contents	:	Overview of essenti Techniques for extrac essential oils
		Physicochemical assessn essential oils for quality co
		GC-MS assisted anal chemical constituents
		Value addition of essentia
		Industrial application essential oils

2. Low-cost clonal propagation

Course Director	:	Dr. Meena Bakshi, Scientist-E, Botany Division
Ph. No	:	0135-2224410
Dates	:	13th to 17th August, 2018
Course contents	:	Infrastructure, developme clonal propagation of imp forest tree species; multiplication for product superior planting sto Shisham, Eucalyptus, Cas Grewia, Teak, Terminali Medicinal plants; Maintena clonal material in nursery;

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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.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

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 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 and Artisans

Low Cost Short Term Trainings to be conducted at Centre for Social Forestry and Eco-Rehabilitatin (CSFER), Allahabad(UP)

1. Nursery and Planting Techniques

Course Director	:	Dr. Anita Tomar
Ph. No.	:	8052298888
Dates	:	08 to 09 November, 2018

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, Agro forestrv

2. Waste lands reclamation

Course Director	:	Shri Alok Yadav
Ph. No.	:	9411166881
Dates	:	12 -13 September, 2018

Course contents : Categories of wastelands, Caused and effects of land degradation, Methods of waste land reclamations, Potential of tree species in reclamation of wasteland.

3. Cultivation and Marketing of important timber species

Course Director	:	Dr. Anubha Srivastav
Ph. No.	:	9451180868
Dates	:	30 - 31 October, 2018

Course contents : Nursery and multiplication techniques, Cultivation techniques of important timber species, Utilization and marketing.

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

