

# INSTITUTE OF FOREST GENETICS AND TREE BREEDING, COIMBATORE Calendar of Short Term Training Courses - 2020-21



Name of the Training Course	Course incharge & Division	SEP	ОСТ	NOV	DEC	JAN 2021	FEB 2021
Seed handling, Testing and Quality seedling production of Forestry species	<b>Dr. R. Anandalakshmi</b> Scientist & Head Forest Genetics Resource	10-11					
Application of biofertilizers and biocontrol agents	Dr. A. Karthikeyan Scientist Forest Protection		15-16				
Training on Research Methodology, Design and Analysis of field experiments	<b>Dr. A. Vijayaraghavan</b> Scientist Forest Genetics Resource		20-21				
Urban Forestry	Dr. C. Buvaneswaran Scientist Silviculture and Forest Management			26-27			
Tree Improvement	Dr. V. Sivakumar Scientist Genetics and Tree Improvement				03-04		
Propagation practices in Clonal forestry	Smt. K. Shanthi Chief Technical Officer Plant Biotechnology				10-11		
Junior Rangers – Nature Connect Programme	Shri. P. Chandrasekaran Asst. Chief Tech Officer Smt. R. G. Anithaa Sr. Technical Asst. Extension					06-07	
Characterization of Forest Genetic Resources and its Conservation	Dr. D. Thangamani Scientist Forest Genetics Resource					21-22	
Bioprospecting – Instrumentation methods and Phyto chemical analysis	Dr. N. Senthilkumar Scientist & Head Chemistry & Bioprospecting						04-05
Basic Molecular Biology Techniques	Dr. A. Shanthi Scientist Plant Biotechnology						10-12

## **COURSE FEES**

The course fee for 1 day, 2 days and 3 days programme per participant will be Rs. 1500, Rs. 3000 & Rs. 4500 respectively (excluding lodging). For School Students a 50% concessional rate will be given on course fees. Accommodation will be provided only on demand basis on prevailing charges as applicable, which may vary between Rs. 200 to Rs. 500 on twin sharing basis.

#### **HOW TO APPLY**

Applications for the courses to be conducted at IFGTB, Coimbatore may be sent to:

Head, Extension Division

Institute of Forest Genetics and Tree Breeding

P.B No: 1061, R.S.Puram, HPO, Coimbatore - 641002. Tamil Nadu.

Phone: 0422 2484100, 139, Fax: 0422 2430549

Email: hodextensionifgtb@gmail.com

The requisite course fee shall be paid either through demand draft (or) RIGS drawn in favour of the Director, Institute of Forest Genetics and Tree Breeding, Coimbatore and payable at Coimbatore. A/c No: 502602010107699, IFSC Code: UBIN0550264, R.S.Puram Branch, Coimbatore.

The payment should be made at least 30 days before the commencement of the respective courses. Participants shall kindly give their payment details along with their application for online payments through e-mail. Participants are advised to commence their travel for the training only after getting confirmation about the course programme.

#### **HOW TO REACH**

The institute is situated at Forest Campus, Cowley Brown Road, R.S. Puram, Coimbatore - 641 002, Tamil Nadu. Coimbatore is very well connected by road, rail and air network. Please visit us at http://ifgtb.icfre.gov.in/.







# **INSTITUTE OF FOREST GENETICS** AND TREE BREEDING

COIMBATORE



SHORT TERM **TRAINING COURSES** 2020 - 21

**UNLEASHING FORESTRY SKILLS** 

# **About IFGTB**

Institute of Forest Genetics & Tree Breeding (IFGTB) is a national research institute of Indian Council of Forestry Research & Education (ICFRE), an autonomous organization of Ministry of Environment & Forests & Climate Change, Government of India. IFGTB specializes on Tree improvement programmes of major tree species and Forest Genetic Resources Management, besides conducting forestry extension activities and training. The thrust areas of the institute include Genetics & Tree Breeding and biotechnology, Biodiversity & Climate Change, Silviculture and Forest Management, Forestry Extension, Forests Genetics Resource Management and Bioprospecting.

IFGTB has been successfully conducting training programmes for IFS officers on various subjects as approved by the Ministry of Environment, Forest and Climate Change and other stake holders from time to time. Thematic and customized training programmes for farmers, tribal communities, bamboo artisans, students, field functionaries of State Forest Departments and other departments have also been successfully conducted by this institution. IFGTB is well equipped with the required infrastructure for conducting trainings, workshops/seminars at national and regional level.

Capacity building in Forestry and Environment for the officials in this field is of paramount importance to address the challenges being faced by the sector. Short term trainings help in understanding the issues in right perspective and sharpen skill of the practitioners and facilitate grooming of skilled force in consonance with scientific principles. IFGTB has designed 10 customised short term training courses for different stake holders for setting up a platform to fine tune forestry skills.



# **Training Courses & Contents**

## Seed handling, Testing and Quality Seedling Production of Forestry Species (2 days)

Applied training on important aspects of seed handling, processing and testing along with package of practices for important forestry species that comprise paper & pulpwood, plywood and timber species, Rare Endangered and Threatened (RET) species, medicinal plants, Non Timber Forest Products (NTFPs) and Tree Borne Oilseeds (TBOs).

**Eligibility:** Front line forest staff, Farmers, Foresters, Nursery entrepreneurs, College Students and NGOs.

#### Application of Biofertilizers and Biocontrol Agents (2 days)

Two days training will focus on - types of biofertilizers and biocontrol agents, mass production and application of biofertilizers (Arbuscular mycorrhizal fungi, Rhizobium, Azospirillum, Azotobacter, Phosphobacterium, and Potassium solubilizing bacterium) in forestry tree crops under nursery conditions. It also covers mass production of Trichoderma viride from organic wastes. Developing products of biofertilizers and biocontrol agents with suitable carrier materials and Field visit to explore the market potential of biofertilizers and biocontrol agents.

**Eligibility**: PG Students, Teachers and Research Scholars.

## Research Methodology, Design and Analysis of Field Experiments (2 days)

A basic course for field officials of research wing of SFDs to sensitize them on Research Methodology, selection of Candidate Plus Trees, Establishments of Progeny trails and Clonal trails, design of field experiments and recording growth data.

**Eligibility :** Foresters/Deputy Range Officers/ Range Officers and other research personnel of State Forest Departments.

# Urban forestry (2 days)

This course deals on urban environment and role of trees in abatement of pollution, species selection for urban forestry, upkeep and management, establishment and management of botanical gardens and Parks in urban areas, regulations in planting and felling of trees in urban areas and role of NGOs in greening urban areas.

**Eligibility :** Foresters, officials of Highways Department & PWD, Field personnel of local bodies and other organizations, teachers associated with greening programmes.

# Tree improvement (2 days)

Applied training on Tree Improvement and Plus Tree Selection, Genetic improvement of Eucalyptus, Genetic improvement of Casuarina, Genetic improvement of Indigenous tree species, Establishment and management of Seed orchards, Establishment and analysis of Clonal and progeny trials and Clonal propagation of tree species.

**Eligibility**: PG Students/ Plantation Managers/ Forest officials.



## Propagation practices in Clonal forestry (2 days)

Hands on training on vegetative propagation in forest tree species, practical session on collection, preparation, rooting of cuttings; preparation of rooting media and rooting hormone, Maintenances of cuttings in polytunnels and Hardening of cuttings.

**Eligibility**: Farmers, Researcher and NGOs.

#### **Junior Rangers - Nature Connect Programme (2 days)**

Nature Connect Programme offers outdoor learning activities that contribute to understanding of environment and nature. This course incorporates learning on trees, flowers, grasses, birds and butterflies-to connect children with nature and diversify their outdoor experience. The training also include visit to Museums and nature wilderness area outskirts of Coimbatore.

**Eligibility**: School Students of 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> & 9<sup>th</sup> Standard.

#### Characterization of Forest Genetic Resources and its Conservation (2 days)

Hands on Training on Morphological, Biochemical and Molecular characterization of Forest Genetic Resources viz.- PCR, Electrophoresis, Chromatography, Spectrophotometer, Gel Documentation and using softwares.

**Eligibility :** Students of Class 11 & 12, Undergraduates and Post Graduates students of Biotechnology, Botany, Microbiology and Biochemistry.

#### Bioprospecting - Instrumentation Methods and Phytochemical Analysis (2 days)

Hands on training on selection, collection, processing and extraction of plant samples. Fractionation and characterization of active compounds using various chromatographic methods viz., TLC, UV, HPLC and GC.MS/MS.

**Eligibility :** Undergraduate students of Engineering, B.Sc., M.Sc., M. Phil., Research Scholars, Academicians and other stake holders.

#### Basic Molecular Biology Techniques (3 days)

Applied training on Molecular markers, Genomics, Transgenics & Genome Engineering in forestry, Scientific writing skills, Practical session including plant/plasmid DNA isolation, PCR and Data Analysis.

Eligibility: Life science students (B.Sc. / M.Sc.)









