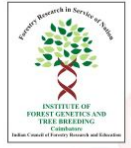




INSTITUTE OF FOREST GENETICS AND TREE BREEDING

Coimbatore



**SHORT
TERM
TRAINING
COURSES
2018-19**

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 12 customised short term training courses for different stake holders for setting up a platform to fine tune forestry skills.



Courses and the Contents

Hands on Training on “**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, followed by biological properties of active compounds will be imparted.

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

Training on “**Culture and multiplication of *Trichoderma viride* from organic wastes**” (2 days)

Introduction of *Trichoderma viride* and its uses. Practicals on culture and identification of *Trichoderma viride* in laboratory. Multiplication of *Trichoderma viride* in saw dust, rice straw, dried leaves, and dried cow dung. Application of *Trichoderma viride* in diseased plants. Product development of *Trichoderma viride*.

Eligibility: Post Graduate students of Agriculture, Botany and MicroBiology, Farmers and Tree Growers

“**Introductory Training Course on Applied Forest Entomology**” (2 days)

About Forest entomology - past, present & future. Systematics of insects. Diagnosis of Insect Diversity and assessment of Insect Damage in Forest Tree Species. Insects & Ecosystems. Insect- Plant Interactions. Assessment of Insect Damage in Forest nurseries, Field Collection of insects, rearing, Processing, Preservation of Insects and Documentation for Identification. Insect Pests Management. Biochemicals associated with insect-plant interactions and statistical analysis. Lab / field demonstration/ Assignments. Collection, preservation and maintenance of entomopathogens in lab.

Eligibility: Post Graduate students of Agriculture, Zoology, Forestry and Entomology

“**Biotechnology and its Applications**” (2 days)

Plant tissue culture; Structure of DNA, and RNA, DNA Packaging, DNA replication, Central dogma- Transcription and Translation, Gene expression and regulation- Lac operon; Genome projects- Human; DNA fingerprinting; Recombinant DNA technology/ Genetic engineering, Application of Biotechnology in health and agriculture- Human insulin and vaccine production, gene therapy, Genetically modified organisms- Bt crops, transgenic animals, biosafety; biopiracy and patents.

Eligibility: Students / Teachers of 10th, 11th & 12th Standard.

ABC of DNA (2 days)

ABC of DNA Interfaces students with recent advances in molecular and DNA Sciences. It is a gateway to know how applies science and conservation gel with each other. Most importantly it allows students to learn along with Scientists. In a day it would align them as skilled technicians to extract DNA, run PCR facilities and analyze models.

Eligibility: School Students from 10th, 11th & 12th Standard.

Urban Forestry (1 day)

Urban environment and role of trees in abatement of pollution. Species selection for urban forestry. Upkeep and Management in urban forestry. Establishment and management of Botanical gardens and Parks in urban areas. Regulations in planting, felling and translocation of trees in Urban areas. Role of NGOs in greening urban areas.

Eligibility: Foresters, Officials of Highways Authorities/Department, field personnel of corporations and other organizations, teachers associated with greening programmes.

Plant Taxonomy (3 days)

Plant Diversity in India at a glance, Fundamentals of Plant Classification, Glimpses of Plant Morphology, International Code of Nomenclature for Algae, Fungi and Plants (ICN), Grass taxonomy and Diversity, DNA Markers and their Application in Molecular Taxonomy, Bryophyte Taxonomy and Methodology, Pteridophyte Taxonomy

Eligibility: College and University teachers and Research Scholar / PG Students

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). Training will be conducted in an interactive format where in the participants can get solution to the practical problems faced in the real situation. The course offers a rich learning experience and is in application oriented.

Eligibility: Front line forest staff, Farmers, Nursery entrepreneurs, College Students, NGOs

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: Forest officers, Undergraduates and Post Graduates students of Biotechnology, Botany, Microbiology and Biochemistry.

Junior Rangers – Nature Connect Programme (2 days)

Nature Connect Programme offers outdoor learning activities that stimulate the diversity of children's play experience and contribute to their 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 activities also include visit to Gass Forest Museum and nature wilderness area outskirts of Coimbatore.

Eligibility: School Students from 6th, 7th, 8th & 9th Standard.

VAM Bio-Fertilizer Techniques for Quality Seedling Production (2 days)

Mycorrhizal Bio-fertilizers – Types of Mycorrhizal Fungi and their Importance. Techniques in isolation and characterization of VAM fungi. Techniques in mass production and maintenance of VAM bio-fertilizers. Different methods of application of VAM bio-fertilizers. Cost effective VAM bio-fertilizers production methods.

Eligibility: College Students, Teachers, Farmers, Tree Growers, SFD Officials, Wood based industry officials, Women SHGs, NGOs, Urban Terrace Cultivators, Corporation Officials, Agriculture and Horticulture Officials.

Agro forestry (2 days)

Establishment and Management of tree-crop, Agroforestry systems, Industrial based Agroforestry systems, and Tree-Borne oilseeds (TBOs) based Agroforestry systems. Importance of soil management and Pest & Disease management in Agroforestry models. Economics of different agro forestry models and enhancement of productivity of tree components.

Eligibility: Farmers, Tree Growers and Foresters.



INSTITUTE OF FOREST GENETICS AND TREE BREEDING, COIMBATORE

Calendar of Short Term Training Courses – 2018-19

Name of the Course	Name of course Director & Division	SEP 2018	OCT	NOV	DEC	JAN 2019	FEB
Hands on Training “Bioprospecting – Instrumentation methods and Phyto chemical analysis”	Dr. N.Senthilkumar, Scientist E & Head Chemistry & Bioprospecting	19 -20					
Training on “Culture and multiplication of <i>Trichoderma viride</i> from organic wastes”	Dr. A. Karthikeyan Scientist-F Forest Protection Division	27-28					
Introductory Training Course on Applied Forest Entomology	Dr John Prasanth Jacob Scientist- F Forest Protection Division		4-5				
Biotechnology and its Applications	Dr. Mathish Nambiar-Veetil Scientist F Plant Biotechnology Division		25-26				
ABC of DNA	Dr. B. Nagarajan Scientist-G Plant Biotechnology Division			1-2			
Urban Forestry	Dr. C. Buvaneswaran Scientist - F Silviculture & Forest Management			19			
Plant Taxonomy	Dr. C. Kunhikannan Scientist - F & Head Forest Ecology & Climate Change			14-16 Course I		22-24 Course II	
Seed handling, Testing and Quality seedling production of Forestry species	Dr. R. Anandalakshmi Scientist - F Forest Genetics Resource				11-12		
Characterization of Forest Genetic Resources and its Conservation	Dr. D. Thangamani Scientist - C Forest Genetics Resource				18-19		
Junior Rangers – Nature Connect Programme	Shri.P.Chandrasekaran Sr.Tech.Officer & Smt.R.G.Anithaa Sr.Technical Asst.Extension Division				26-27		
VAM Bio-Fertilizer Techniques for Quality Seedling Production	Dr. V. Mohan Scientist-G, Forest Protection Division					8-9	
Agro Forestry	Dr. C. Buvaneswaran Scientist-F Silviculture and Forest Management						14-15

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** alone 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) RTGS 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 may kindly give their payment details along with their application for online payments. 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/>.

