

**A Report on two weeks “Summer Internship Training”
(Skill India Development Programme)**

on

**“Microbiology, GIS & Remote Sensing, Forest Genetics Resource Management and
Bioprospecting modules”**

14th – 30st May, 2018

Two weeks Summer Internship training on **“Microbiology, GIS & Remote Sensing, Forest Genetics Resource Management and Bioprospecting modules”** has been conducted in **Institute of Forest Genetics and Tree Breeding, Coimbatore** during 14th – 30th May, 2018. About 13 students from Bharathiar University, PSG College of Arts & Science and Sri Krishna College of Arts and Science, Coimbatore were participated the training. The training module included Microbiology, GIS & Remote sensing, Forest Genetics Resource Management and Bioprospecting relates to forestry. Students were trained in various techniques like Techniques in Mycorrhizal Fungi - Isolation, Identification and Mass Production Methods (Biofertilizer production), Identification and Multiplication techniques of beneficial bacteria/growth promoting microorganisms under Microbiology module; basics of remote sensing and GIS; Practical application of GPS and Demonstration of application of QGIS under GIS & Remote sensing module; characterization of FGR (morphological, molecular and biochemical characterization) Conservation strategies (Ex-situ & In-situ) under Forest Genetics Resource Management module followed by Microbiology module with isolation, identification and mass production of beneficial bacteria/growth promoting bacteria and biofertilizer production; and 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 biological properties of active compounds for antioxidant, antimicrobial and biopesticidal properties under Bioprospecting module. The resource persons involved in this internship training include Dr. V. Mohan, Dr. A. Karthikeyan, Dr. A. Rajasekaran, Dr. D. Thangamani, Mrs. S. Lalitha, Dr. S.P. Subramani, Mrs. K. Sushamani, Mrs. R. Sumathi, Mrs. R. Lakshmidevi, and Dr. N. Senthilkumar.

The training aimed to provide hands on training to handle advanced instruments and upgrade the technical skill in their core subjects. The training students were exposed to various laboratories and research activities. Dr.N.Senthilkumar, explained briefly about “Safety Measures” to be followed in the Laboratory while handling chemicals and biological organisms and “Biosafety precautions” to the students on 18th May, 2018. The Director Dr. Mohit Gera, IFS interacted with the students on time, energy and money management especially physical and mental fitness, time management, short term and long term financial management for daily as well as long term needs on 28th May, 2018. Dr. S. Murugesan, GCR informed the student participants during his concluding remarks that IFGTB will also provide opportunities to carryout short term project work, hence this internship may provide platform to understand various research activities being undertaken in IFGTB and in turn identify students/aspirants for JRF and other research positions.

He also emphasized that this internship may be an eye opener for students talents to get into forestry research. He distributed participation certificate to internship trainees. Presentation on the training was made by the students. Student participants opined that the training module was appropriate for their current academic and future research endeavour. The training programme ended with formal vote of thanks by Dr. N. Senthilkumar, Students Coordinator.



Director Dr. Mohit Gera, IFS addressing the student participants



Coirpith disc making demo



Dr. A. Rajasekaran detailing GIS & Remote Sensing



Dr. D. Thangamani demo on biochemical characterization



Dr.N. Senthilkumar demo on Bioprospecting





Director Dr. Mohit Gera, IFS interaction with the students



Student training presentation



Concluding session with distribution of certificates

