

A Report on two weeks “Summer Internship Training”
1st – 12th August, 2022
at
Institute of Forest Genetics and Tree Breeding, Coimbatore.

Two weeks Internship training has been conducted in **Institute of Forest Genetics and Tree Breeding, Coimbatore** during **1st to 12th August, 2022**. Thirty one post graduate and B.Tech students of Biotechnology, Microbiology, Environmental Science and Pharmaceutical Technology from various colleges viz., PSG College of Arts & Science, Coimbatore; Dr. NGP Arts and Science College, Coimbatore; Sri Ramakrishna College of Arts and Science, Coimbatore; Shri Nehru Maha Vidyalaya College of Arts And Science, Coimbatore and Anna University, Trichy. The training aimed to update the knowledge of the students on various aspects of forestry which includes microbiology, GIS remote sensing, forest genetic resource management and bioprospecting. Hence, the training module has been framed in such a way to knowledge on the basics of Bioprospecting, Microbiology, GIS & Remote Sensing, Research Methods & Biostatistics and Scientific writing skills etc.

The training started with the inauguration on 1st August, 2022. The training coordinator Dr. N. Senthilkumar, Scientist F & Head Chemistry and Bioprospecting Division welcomed the participants and briefed the training module. Dr. R. Yasodha, Scientist G and Group Coordinator Research informed that the training aims to update the skill of the students in multidisciplinary approach. She stated that the students have chosen this institute for their internship that enable them to develop their hard and soft skills, technical knowledge which support while looking for job opportunities and higher studies. She also informed that ample opportunities are available for such skilled students in research projects as JRFs and may pursue Ph.D as well.

Students were given inputs on various aspects of **Bioprospecting** which include collection and processing of plant samples, extraction, fractionation using column chromatography and Thin Layer Chromatography (TLC), and characterization, identification of bioactive active compounds using UV Spectrophotometry, HPLC, and GC/MS/MS, evaluation of bioactive principles for biological properties; basics of remote sensing and GIS, practical applications of GPS under **GIS & Remote sensing module**; Mycorrhizal Fungi – Isolation, identification and mass production methods (Biofertilizer production), identification and multiplication techniques of beneficial bacteria/growth promoting microorganisms under **Microbiology module** followed by experimental design, data collection, analysis using appropriate statistical tools and scientific report/paper writing under **Research methods, biostatistics and Scientific writing module**. They were provided hands on training to handle advanced instruments and upgrade the technical skill on the subjects. The students were exposed to various laboratories, nurseries, fields and museum.

The Director, Dr. C. Kunhikannan, Scientist G had an interactive session with the students on **“Introduction to Environmental Conservation”** on 11th August, 2022. During the session, he explained about the nature and its involvement in the livelihood of human and other living organisms. The resource persons involved in this internship training include Dr. N. Senthilkumar, Scientist-F (**Bioprospecting**), Dr. A. Rajasekaran, Scientist-F (**GIS & Remote sensing**), Dr. A. Karthikeyan, Scientist-F (**Microbiology**), Dr. V. Sivakumar,

Scientist-G (**Research methods and biostatics**) and Dr. Rekha Warriier Scientist-F (**Scientific writing**), and the research officials Dr. A. Balasubramanian, Mrs. K. Sushamani, Mrs. M.V. Vinetha, Shri R. Velumani, Mrs. K.S. Rathinam and Mrs. R. Sumathi and research associate Dr. D. Suresh Babu.

The two weeks internship training ended with the valedictory session on 12th August, 2022. A brief presentation on the modules and various activities covered during two weeks internship training was made by the student trainees. The training coordinator Dr. N. Senthilkumar, Scientist F presented a short report on internship training. He added that the training provided platform to develop skilled personalities which the industries are looking for. Dr. C. Kunhikannan, Director IFGTB, motivated the students to learn research techniques for knowledge improvement and skill development for righteous life. Student participants opined that the training module was appropriate for their current academic and future research endeavour. The director distributed participation certificates to internship trainees followed by the formal vote of thanks by Smt. R. Sumathi, Students Coordinator.



Dr. C. Kunhikannan, Director addressing the participants



Dr. R. Yasodha, GCR addressing the participants



Dr. N. Senthilkumar, Scientist-F detailing Bioprospecting



Dr. A. Rajasekaran, Scientist-F detailing GIS & Remote Sensing



Dr. V. Sivakumar, Scientist-G detailing research methods & biostatistics



Dr. A. Karthikeyan, Scientist-F detailing microbiology



Dr. Rekha Warriar, Scientist F detailing report writing



Dr. C. Kunhikannan, Director detailing Environmental Conservation



Forest officers addressing the participants during field trip to Topslip



Students report presentation



The Director Dr. C. Kunhikannan distributed the certificates to student participants