

**Report on Short-term training on**  
**“Characterization of Forest Genetic Resources and its Conservation”**  
**on 18 and 19 December, 2018**  
**at**  
**Institute of Forest Genetics and Tree breeding, Coimbatore**

Institute of Forest Genetics and Tree breeding organized two days training programme on “Characterization of Forest Genetic Resources and its Conservation” on 18 and 19 December, 2018. The theme of the training is to provide Hands on Training on Morphological, Biochemical and Molecular characterization of Forest Genetic Resources aspect with instrument handling viz. DNA Engine, Electrophoresis, Spectrophotometer, Chromatography, Gel Documentation and usage of software for analysis. A total of 23 participants from different colleges of Coimbatore and 4 forest officials from Jharkand, Forest Department, Ranchi attended the training. The participants were welcomed by the Dr. K. Palanisamy, Scientist – G and Head of FGRM division. In his opening remarks he emphasized upon the importance of Forest Genetic resources and its conservation. The Training coordinator, Dr. D. Thangamani, Scientist made an overview of the training and presented a lecture on characterization of FGR.

On the first day the hands on training started with the extraction of DNA from fresh and dried leaves of Teak collected from 21 different Teak Seed Production Areas. Quantification of the extracted DNA was done through spectrophotometric and gel electrophoresis. The wet lab researches were supported by Smt. S. Lalitha, ACTO and research scholars of FGRM Division. Lecture on Germplasm assemblage and conservation was delivered by Dr. D. Thangamani. Participants were taken to FGRM nursery where grafting technology was demonstrated. The forest officials from Ranchi were taken to Panampalli Research Station accompanied by Shri. K. Gireesan, ACTO and Seed handling techniques were demonstrated by Dr. R. Anandhalakshmi, Scientist.

On the second day of the training lecture on Biomolecule isolation and its importance was given by Dr. D. Thangamani followed by wetlab research, on isolation and quantification of primary metabolites, secondary metabolites and its absorption spectra. Demonstration and hands on training on DNA engine and Documentation of DNA bands for its variation using softwares was taught.

Lecture on Morphological variation was presented and the participants were taken to nursery for showing the morphological variation. The participants were also visited Bioprospecting lab of the institute. The valedictory session was chaired by Dr. Mohit Gera, Director, IFGTB, who shared his views on importance of FGR and need for their characterization, conservation and sustainable utilization, and given away the certificates of participation. The training ended with the vote of thanks by Dr. D. Thangamani, Training Coordinator, FGRM Division.



