PROJECT PROFILE

Title: **Assessment of adaptive genetic diversity in teak and sandalwood to guide conservation and genetic improvement efforts**

Principle Investigators: Dr. R. Yasodha, Scientist G
Dr. Modhumita Dasgupta, Scientist G
Institute of Forest Genetics and Tree Breeding
Dr. Suma Dev, Senior Scientist, Kerala Forest Research Institute, Peechi
Prof. Kandasamy Ulaganathan, Centre for Plant Molecular Biology, Osmania University, Hyderabad

Co Investigators: Dr. A Balasubramanian
Dr. Shijo Joseph
Dr. R Jayaraj

Duration: 2019 -2022

Subprojects:

Subproject 1 Development of molecular signatures of local adaptation to enhance the climate change resilience of teak

- Delineation of environmentally distinct populations, identify candidate genes
- Characterization of candidate SNPs in selected teak populations
- Development of molecular signatures of teak populations from different environmental gradients

Subproject 2 Documentation and management of adaptive genetic diversity in *Santalum album* (Indian sandalwood) for conservation and improvement programs

- Documentation of phenological changes in sandalwood populations
- Documentation of adaptive alleles related to different climatic variables.

Funding Agency: DBT, GoI
Total Budget: Rs. 152.9 lakhs