PROJECT PROFILE

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

Name of the Sub-Projects : Sub Project 1: Development of molecular signatures of local adaptation to enhance the climate change resilience of teak

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

Project partners : Kerala Forest Research Institute, Peechi, Thrissur
Centre for Plant Molecular Biology, Osmania University, Hyderabad

Project Co-ordinator : Dr. R. Yasodha, Scientist G

Principle Investigators : Dr. R. Yasodha, Scientist G
Dr. Modhumita Dasgupta, Scientist G

Co Investigators : Dr. A. Balasubramanian, Research Officer

Duration : 2019-2022

Objectives

Subproject 1

1. Identification local adaptations in teak populations using molecular signatures across different forest types/ environmental gradients
2. Devise methodologies for assisted gene flow in teak with the information on local adaptations

Subproject 2

1. Documentation of adaptive variation in phenological traits across the natural distribution zones of sandalwood
2. Identification of spatial genetic structure and molecular signatures of adaptation in sandalwood
3. Outreach to state forest departments for conservation, restoration and breeding programs

Funding Agency : Department of Biotechnology, GoI

Total Budget: : Rs. 152.9 lakhs