Project Profile

Project Code:	IFGTB / RP139 / 2013-2018
Project Title:	Germplasm assemblage and Improvement of Leucaena leucocephala (Lam) de Wit for Industrial biomass productivity
Principal investigators	Dr. A. Nicodemus, Scientist G
CO-PI:	Shri A. Durai, CTO, Dr. A. Balu, Scientist G
Associates:	Shri P. Vipin, T.A. I
Funding Agency	ICFRE
Project approval date & by	RAG: 2012 RPC: 2013 ICFRE: 2013
Date of commencement of the project:	01.04.2013
Date of completion of the project:	31.03.2018
Total Budget of the project:	Rs.9.50 lakhs

Objectives:

1. To assemble all know seed sources / varieties of Leucaena in the country and also attempt to import germplasm from natural distribution range.
2. To assess and quantify variation in adaptability, early growth and wood properties and make early selections for initiating systematic breeding programmes.

Summary:

Highly significant variation exists for growth, stem form and wood properties among 29 seedlots of Leucaena collected from both within and outside India. Varieties K636 and KX36 from India and Hawaii showed the fastest growth and desirable stem form like straight stem without forking or bends. These varieties can be deployed in commercial plantations to increase pulpwood production. More elaborate testing with larger number of accessions than what the present study covered need to be undertaken in future to have a broad genetic base for continuous genetic improvement. The tree-to-tree variation existing within the individual seed sources can be exploited through clonal selection. Vegetative propagation through rooting of coppice shoot cuttings is feasible for large scale production of clonal plants.