

PROJECT PROFILE

Title of the project: **Production of multi-parent intercross populations of eucalypts for salinity tolerance**

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Duration: 2016-2019

Objectives:

1. Generation of multiparent intercross populations of eucalypts for salinity tolerance
2. Precision phenotyping of morphological and physiological traits for salinity tolerance

Funding Agency: Indian Council of Forestry Research and Education (ICFRE)

Summary:

- A genetic resource for genetic mapping for salt tolerance using molecular breeding approaches was generated.
- First and second generation clones of eucalypts were assessed for their salt tolerance potential and 15 clones were identified to have different levels of tolerance.
- Four inter-cross families were generated using a salt tolerant clone as pollen parent and one family with higher level of tolerance was identified.
- Specific leaf area and root:shoot ratio were found to be the best indicators of salt tolerance in eucalypts.