

Project code & Title: PIE06001SI-Collection, Characterization, Evaluation, Conservation, and Supply of Mulberry Genetic Resources (Phase-IX)

Period: November 2018 to October 2021

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Introduction: The mandate of CSGRC is collection, characterization, evaluation and conservation of mulberry genetic resources. The characterization and evaluation of diverse germplasm in a systematic manner is the primary responsibility of CSGRC, Hosur. So far this centre has completed 8 phases in project mode with specific targets. In continuation, a total of 75 accessions were targeted for characterization and evaluation in the 9th phase. This includes the collection of new germplasm, characterization, evaluation, conservation and supply of mulberry genetic resources and also to update the MGIS with the information generated at this institute.

Objectives:

1. To collect new mulberry germplasm
2. To characterize and evaluate mulberry genetic resources (MGRs)
3. To conserve mulberry genetic resources in the *ex situ* field gene bank (FGB)
4. To supply mulberry genetic resources for utilization
5. To update mulberry germplasm information system (MGIS)

Outcome: In the present study a total of 21 new mulberry germplasm were collected from Nokrek biosphere of Meghalaya. Fifteen top performing accessions were identified for each parameter every year. A total of 1289 mulberry accessions were supplied to different R & D Institutes, State Universities and organizations based on the MTA for research purpose. The supply includes both indigenous and exotic accessions. The characterization and evaluation data for every season each year for all the parameters were updated in the MGIS database.

Recommendations/Utilization:

- The existing mulberry germplasm was enriched by the addition of 21 new mulberry germplasm. This will enhance the diversity of the mulberry FGB.
- The top performing accessions identified will serve as better parent materials in future crop improvement and hybridization programs.

- A total of 75 mulberry accessions (including both indigenous and exotic accessions) were characterized and evaluated different parameters.
- The preliminary data of different parameters were updated to MGIS database for ready reference of new research activity and storing the information for a long period and also facilitated to retrieval data as when as required to stakeholders.