

FSL-3447: DEVELOPMENT OF DATABASE MANAGEMENT SYSTEM FOR SILKWORM GENETIC RESOURCES

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Introduction :

The development of silkworm genetic resource database was initiated during 2008 for photo documentation of morphological structures & long-term systematic data storage, customized data retrieval, statistical reports, selection of accessions for further research and easy identification of similar accessions based on phenotypic parameters. In order to handle huge data, CSGRC has developed a database namely, Window version of Silkworm Germplasm Information System (SGIS) incorporating various facilities for data storage along with retrieval facilities including photo documentation.

Objectives:

- To develop a silkworm database with photo documentation for long-term systematic data storage customized data retrieval, statistical reports, selection of accessions for further research and easy identification of similar accessions based on phenotypic parameters.
- Preparation of silkworm germplasm database CD

Outcome:

Features of Window-SGIS

A. Data Entry: This module has the facility of entering passport data, characterization & evaluation data etc. In order to enter the data entry, easy and error free descriptors states were provided in combo boxes.

- ✓ Modified the DOS based Silkworm Germplasm Information System [SGIS] as Window Version of SGIS was developed.
- ✓ Designed user friendly data entry screens and shifted, stored all back data in the new system for future use.
- ✓ The Win-SGIS developed in this line by CSGRC involves storing data and retrieval of information in terms of qualitative and quantitative data along with photograph of morphological structures/life stages of each accession.

Crop-wise rearing and reeling data management module

In order to enter crop-wise data and report generation and data analysis a separate module is developed (Win-Rear) and installed in silkworm division

and all data from the year 1995 has been imported

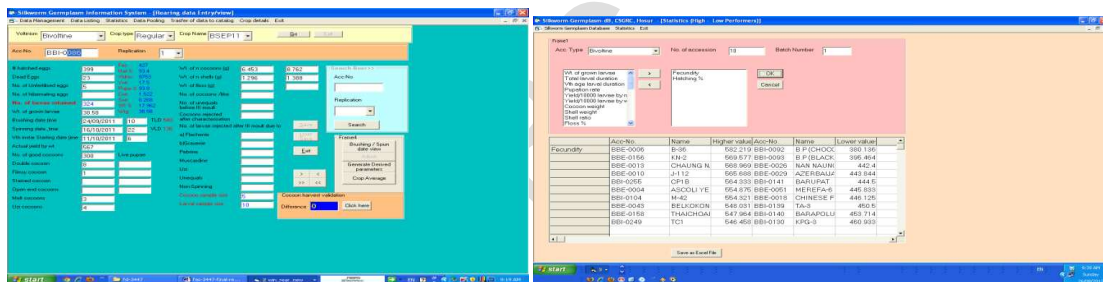
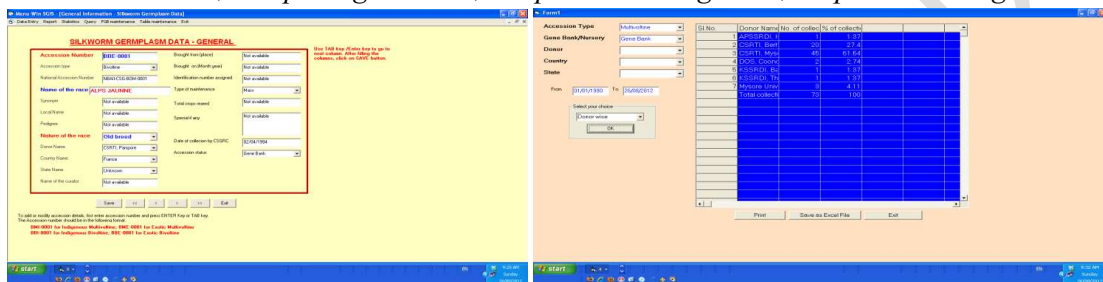
to this new system and stored crop-wise

for further analysis and pooling data.

- Accession data, Morphological data, Crop-wise rearing data, Crop-wise reeling data



its



Recommendation/Utilization

- ✓ The SMGIS is installed in the computers and is being used by the scientists for systematic data storage and retrieval of data on query basis for further research work.
- ✓ The silkworm database of silkworm germplasm with limited characters is also made available in the CSGRC website www.silkwormgermplasm.com under the web page "Research".
- ✓ A national silkworm germplasm databank has been developed at CSGRC, Hosur for the use of all Sericultural scientists throughout the country and the database will be made available under CSGRC website.

