केन्द्रीय रेशम जननद्रव्य संसाधन केन्द्र, केन्द्रीय रेशम बोर्ड, होसूर - 635 109 Central Sericultural Germplasm Resources Centre Central Silk Board, Hosur – 635 109

PROCEEDINGS OF THE 62ND RESEARCH COUNCIL MEETING OF CSGRC HOSUR HELD ON 13th January 2020

The 62nd Research Council meeting of CSGRC, CSB Hosur was convened on 13th January 2020, chaired by Dr.R.K.Mishra, Director (Addl. Charge), CSGRC, Hosur. Dr.Mishra initiated the meeting welcoming all participants followed by item-wise discussion. List of participants is appended at Annexure I.

Item No. I: Confirmation of the minutes of the 61st RC meeting held on 11th April, 2019

The minutes of the 61st RC meeting was confirmed since no comments were received.

Item No. II: Review of follow-up action on the decisions of the 61st RC meeting

Action taken on the decisions of the 61st RC meeting held on 11th April, 2019 was reviewed and following decisions were arrived at:

To opt the "Open software" freely available online for morphological characterization of
possible parameters as comparison of the measurements through manual method and
with the software did not reveal any significant difference, besides saving time and
manual labour. However, the number of replications needs to be increased while
collecting data on morphological characterization of leaf parameters.

[Action: Dr.G.Thanavendan, Scientist-C & Dr.M.C.Thriveni, Scientist-B]

 The feasibility and modalities for taking up quarantine rearing of new accessions at SSTL Kodathi whenever acquired by CSGRC Hosur may be discussed with the incharge SSTL Kodathi. However, the estimate cost for repair of the 'Introduction Block' building may be obtained from PWD and submitted before 2nd week of March 2020.

[Action: Dr.G.Lokesh, Scientist-D]

• The CSB institutes - CSR&TI Berhampore and Pampore may be informed about availability of information on the list of multivoltine silkworm genetic resources that revealed larval duration shorter than Nistari for further needful.

[Action: Smt.G.Punithavathy, Scientist-D]

• A letter addressed to Directorate of Research, GKVK, UAS, Bangalore may be sent informing about the collaborative project with Dr. H. B. Mahesh, Asst. Professor, GKVK, UAS, Bangalore. Further, simultaneously an MOU to be entered between the two collaborating institutions may be prepared and sent to GKVK for modifications if any. Subsequently, the MOU can be vetted by the Law Section of CSB, Bangalore for finalization. Meanwhile, the final project document may be prepared at the earliest and submitted to RCS, CSB Bangalore for coding.

[Action: Dr.G.Lokesh, Scientist-D]

• To acquire fruiting mulberry varieties from Thailand, to specify the fruiting variety required to be imported in the correspondences.

[Action: Dr.G.Thanavendan, Scientist-C]

Item No. III: Follow-up action on the decisions of the 38th RAC meeting held on 30th August, 2019

Concluded projects

 A minimum of three research papers should be sent for publication by 31st January 2020 based on outcome of the concluded projects

[Action: Dr.M.Maheswari, Smt.G.Punitavathy – Scientists D; Dr.G.Thanavendan, Scientist-C, Shri Raju Mondal, Scientist-B]

• All 16 post cocoon traits need to be evaluated for parental breeds identified as top combiners under the concluded projects.

[Action: Dr.M.Maheswari, Smt.G.Punitavathy and Dr.Jameela Khatoon, Scientists-D]

Item No. IV: Formulation of new project concepts

- Two project concepts were presented, "Screening of bivoltine silkworm germplasm resources for disease resistance" by Dr. Ritwika Sur Chaudhuri, Scientist-C and "Evaluation of superior and robust multivoltine silkworm accessions" by Ms. G. Punithavathy, Scientist-D
- Dr. Ritwika was advised to modify the title and specify the diseases that are being considered in the project. She was also advised to collect information on BV accessions previously screened for BmNPV and BmBDV by SBRL, Kodathi for shortlisting accessions in the proposed project.
- Ms. Punithavathy was advised to modify the title to "Identification of productive multivoltine silkworm accessions tolerant to viral diseases". It was advised to screen all available multivoltine accessions at CSGRC, Hosur, include one JRF and revise the budget allocation accordingly.
- Both the above scientists were also advised to discuss the modalities for bioassay work (screening of silkworm through disease challenging) with scientists of SSTL, Kodathi. The proposals should include updated review of literature on the relevant topics, clear and detailed methodology and expertise of the investigators.
- Subject to incorporation of these suggestions the project concepts were approved for immediate submission to C.O. for clearance.

[Action: Smt.G.Punithavathy, Scientist-D and Dr. Ritwika Sur Chaudhuri, Scientist-C]

Item No. V: Status of new project proposals

 Information on coding of one project (AIE 06003SI) by CO, CSB and initiated from December, 2019 and submission of one project to CSB out of three new projects recommended by the RAC for approval and coding was provided. The other two projects finalized during the RAC were suggested to be submitted immediately. The new project proposals on molecular characterization may be finalized immediately with SBRL Kodathi regarding the details to be included in the project document and submit to CO, CSB for approval and code allotment.

[Action: Dr.G.Lokesh, Scientist-D]

Item No.VI: Outcome of concluded projects

• The project on identification of region-specific promising bivoltine parental resources (AIB 3578) was concluded in September, 2019. Dr. M. Maheswari, Scientist-D and PI presented the outcome of the project. The house advised to modify the presentation of the project outcome by highlighting the economic parameters of the best performers. Under outcome and future plan of utilization, it was suggested to include large-scale trials of the best performing hybrid combinations. It was also suggested to check the disease tolerant character of the top performers using molecular markers in future.

[Action: Dr. M.Maheswari, Scientist-D]

 Dr.Thanavendan CI of the project on development of drought tolerant mulberry variety for rainfed sericulture (PIB 3505) informed that the project was concluded during December, 2019 and final report is under preparation by the main institute - CSR&TI, Berhampore. He was suggested to pursue with the Institute for final report.

[Action: Dr.G.Thanavendan, Scientist-C]

Item No. VII: Progress of ongoing research projects

• Dr.Thanavendan, Scientist-C and PI presented the progress of the project on conservation of mulberry genetic resources (PIE06001SI) and it was suggested to complete the survey work by February, 2020.

[Action: Dr.G.Thanavendan, Scientist-C]

Dr.M.Maheswari, Scientist-D and PI of the project on abiotic stress (AIE06002MI) presented the progress of the project which was noted to progress as per the milestones.
 It was suggested to present the progress of molecular marker study with gel photographs for clarity.

[Action: Dr. M.Maheswari, Scientist-D]

 Dr.Thanavendan, Scientist-C and CI presented the progress of the projects (PIB-3586, PIB 3629 and PIC01003CN), which were as per milestone. With regard to supply of germplasm it was suggested to obtain feedback details on the previous supply of germplasm from the indenters before any further supply is effected. Regular reminders should be sent to previous indenters for the same.

[Action: Dr.G.Thanavendan, Scientist-C]

Item No. VIII: Action Taken Report on Scientific / Technical Audit observations

 The action taken report was perused by the Committee and it was decided to take up the discussions during the forthcoming technical audit meeting.

Item No. IX: Any other points with the permission of the Chair

- Dr. Jameela Khatoon, Scientist-D was advised to discuss with Director, CSTRI, Bangalore for formulating collaborative project on post-cocoon aspects. He suggested taking up exploratory work on characterization of germplasm based on cocoon colour.
- Director suggested to update the database and the draft catalogue of the same up to Phase VIII should be ready by 1st week of February, 2020.
- The new cataloguing of mulberry germplasm should be done as per guidelines of Royal Botanical Gardens, Kew.

[Action: Dr. Jameela Khatoon, Scientist-D, Dr.M.C.Thriveni and Shri Raju Mondal, Scientists-B]

- As proposed, it was agreed to raise an additional plot of V1 mulberry variety for use as chawki garden.
- The estimate for repair of Nethouse may be obtained from the agency and submitted with appropriate justification.
- Director advised to explore possibility of availing state government schemes for laying drip irrigation system in the mulberry gardens.
- Further, he advised to avoid utilization of chemicals in mulberry garden and adopt regular release of biocontrol agents for control of pests and diseases. The build-up of pests and diseases over seasons should be monitored and comparative data be prepared.

[Action: Dr.M.C.Thriveni, Scientist-B]

 Supply of silkworm and mulberry accessions should not be effected till receipt of feedback details from the indenters.

[Action: Smt.G.Punitavathy, Scientist-D; Dr.G.Thanavendan, Scientist-C]

 New catalogues of silkworm and mulberry genetic resources up to Phase VII to be prepared and published. The draft document to be ready by 1st week of February 2020.

[Action: Mulberry and Silkworm Divisions]

Concluding the deliberations, the meeting ended with thanks to the chair.

DIRECTOR & CHAIRMAN RESEARCH COUNCIL

Annexure I

List of participants for the 62nd Research Council Meeting of CSGRC, Hosur convened on 13/01/2020

- 1. Dr. R.K. Mishra, Director (Addl. charge), CSGRC, Hosur
- 2. Dr.K.M.Ponnuvel, Scientist-D, SBRL Kodathi
- 3. Dr.D.S.Somaprakash, Head, Silkworm Division, CSGRC, Hosur
- 4. Dr. Geetha N. Murthy, Scientist D, CSGRC, Hosur
- 5. Dr. M. Maheshwari, Scientist D, CSGRC, Hosur
- 6. Ms.G.Punithavathy, Scientist D, CSGRC, Hosur
- 7. Dr. G. Lokesh, Scientist D, CSGRC, Hosur
- 8. Dr.Ritwika Sur Choudhuri, Scientist D, CSGRC, Hosur
- 9. Dr. G. Thanavendan, Scientist C, CSGRC, Hosur
- 10. Shri S. Sekar A.D (Comp), CSGRC, Hosur
- 11. Dr.M.C.Thriveni, Scientist B, CSGRC, Hosur
- 12. Shri Raju Mondal, Scientist B, CSGRC, Hosur