केन्द्रीय रेशम जननद्रव्य संसाधन केन्द्र, केन्द्रीय रेशम बॉर्ड, होस्र

Central Sericultural Germplasm Resources Centre Central Silk Board, Hosur – 635 109

PROCEEDINGS OF THE 67TH RESEARCH COUNCIL MEETING OF CSGRC HELD ON 06-06-2022

The 67th Research Council meeting of CSGRC, CSB, Hosur was convened on 06-06-2022, chaired by Dr. B. T. Sreenivasa, Director, CSGRC. He initiated the meeting by welcoming all participants and advising all scientists to work on the progress of their projects as per the milestones. With this, the item-wise discussion was taken up and the progress of research projects from December 2021 to May 2022 was reviewed. The list of participants is appended in Annexure I.

ITEM NO. 1: CONFIRMATION OF THE MINUTES OF THE 66^{TH} RC MEETING HELD ON 9^{TH} DECEMBER, 2021

The minutes of the 66th RC meeting were confirmed as no comments were received.

ITEM NO. II: REVIEW OF FOLLOW-UP ACTION ON THE DECISIONS OF THE 65TH RC MEETING $\ _{\circ}$

Action taken on the decisions of the 66th RC meeting held on 09-12-2021 was reviewed and the following decisions arrived:

1. SOP of the silkworm is to be printed soon and the SOP of mulberry is to be finalized at the earliest.

[Action: All Scientists]

2. Estimation for rewriting of Plot boards/accession boards to be collected from different firms.

[Action: All Scientists of Mulberry Division]

3. Expedite the hiring/procuring of JCB and FYM by sending reminder letters to CO, CSB at the earliest.

[Action: All Scientists of Mulberry Division]

4. Reminder letter to be sent to CO, CSB for the tour approval of the scientists of this centre to Arunachal Pradesh for the exploration of new mulberry germplasm in the silk route.

[Action: All Scientists of Mulberry Division]

5. Auction committee to expedite the process of condemnation of unserviceable articles (Ref: No.CSB-26(2)/PVDSA/CSGRC-Hosur/2013-14/Admin/Vol.II(26) Dated 18-04-2022) through MSTC.

[Action: Auction Committee]

ITEM NO. III: FORMULATION OF NEW PROJECT CONCEPTS

1. Screening and evaluation of mulberry genetic resources (MGRs) against major insect pests in ex situ gene bank

Dr. G. Thanavendan, Scientist-C presented the concept note. He was suggested to modify the title and revise the objectives. A review of literature on both the national and international status of research related to the proposed study has to be included. Discuss with Dr. Narendra Kumar (Scientist-D, REC, Madivala, Kolar) regarding his earlier works on similar lines. Further discuss the methodologies and experimental setup with an Entomologist, Dr. R. Asokan, Principal Scientist, ICAR-IIHR, Bengaluru. The seasonal variations in the pest incidence should be included. The role and number of investigators should be properly justified as other investigators are not experts in the proposed study. The scientist was advised to present the revised project after incorporating all the suggestions on or before 28-06-2022.

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

 The Head, Silkworm Division also advised to prepare the X phase of the continuous project related to silkworm germplasm conservation by incorporating digitization of characterization of silkworm germplasm resources as a subproject.

[Action: Head, Silkworm Division]

ITEM NO. IV: PROGRESS OF ONGOING/CONCLUDED RESEARCH PROJECTS (DECEMBER 2021- May 2022)

1. PIG06005SI: Molecular characterization of mulberry genetic resources for the identification of duplicates and effective utilization

The PI presented the progress of the project. The committee suggested the PI to use metaphor agarose and PAGE for better resolution of PCR products.

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

2. PIG06004SI: Studies on cytological status of mulberry genetic resources

The PI presented the progress of the project. The committee suggested the PI to compare the flow cytometry data of CSRTI, Mysuru with the ploidy level of coreset accessions.

[Action: Shri. Raju Mondal, Sci-B]

 PIT08004: Study on epigenetic and autophagy modifiers on induction of haploid microspore embryogenesis in mulberry (Coll. Project of SBRL, Kodathi with CSGRC, Hosur)

The CI presented the progress of the project. It was suggested to evaluate different phytohormones for induction of gynogenic haploids.

[Action: Shri. Raju Mondal, Sci-B]

4. AIE06002MI: Evaluation of bivoltine silkworm genetic resources for tolerance to abiotic stress in selected hotspots (Collaboration with SBRL, Kodathi, CSR&TIs-Mysuru, Berhampore & Pampore) (Concluded Project)

The final report of the concluded project was presented by the PI. Errors in the PowerPoint slides are to be corrected.

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

5. AIE06003SI: Evaluation of silkworm genetic resources of *Bombyx mori* L. with reference to inbreeding depression and their conservation

The PI presented the progress of the project. She was suggested to estimate the inbreeding depression from the data analyzed far. The results should be properly analyzed using statistical tools by consulting a statistician at CO, CSB. Also, the 'inbreeding depression' word should be removed from the title and the same can be included as a subproject in the next phase of the project.

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

6. AIT06006MI: Marker-assisted screening to identify silkworm genetic resources tolerant to BmNPV and BmBDV (Collaboration with SSTL, Kodathi)

The CI presented the progress of the project. The Committee advised the CI to use

candidate genes tolerant to *BmNPV* available in the recent literature for screening of silkworm germplasm. The bioassay studies are to be expedited and completed at SSTL, Kodathi.

[Action: Dr. Ritwika Sur Chaudhuri, Sci-C]

 AIG06007MI: Molecular characterization and assessment of genetic diversity in silkworm Bombyx mori L (Collaboration with SBRL, Kodathi)
 The PI presented the progress of the project. The Committee suggested expediting the

The PI presented the progress of the project. The Committee suggested expediting the outsourcing work to be completed as soon as possible.

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

ITEM NO. V: DISCUSSION ON GENERAL COMMENTS/SUGGESTIONS OF RC

- 1. Reminder letter to be sent to CO, CSB for authorizing JE, Electrical, and Asst. Director (Computer) of this centre for certifying unserviceable electronic instruments and computers, printers, etc., respectively.
- 2. Follow up with CPWD, Coimbatore to obtain estimates for the renovation of the office building, rearing and grainage buildings, staff quarters, guest house and security shed and submit the proposal to Central Office.

[Action: Maintenance Committee]

3. Dr. G. Thanavendan, Scientist-C has to monitor the establishment of the demonstration plot of fruit yielding mulberry accessions at RSRS, Kodathi.

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

4. Budget utilization of all the projects should be improved.

[Action: All Scientists]

5. Conference participation/presentations, and publications to be increased.

[Action: All Scientists]

6. The clarity of Powerpoint slides and presentations should be improved.

[Action: All Scientists]

7. Before communicating research articles to any journal, the same has to be submitted to the publication committee of the institute for screening.

[Action: All Scientists]

8. The purchase of a spectrophotometer is to be initiated again through GeM by following the procedure used by CTR&TI, Ranchi.

[Action: All Scientists]

Annexure-l

LIST OF PARTICIPANTS FOR THE 67TH RESEARCH COUNCIL MEETING OF CSGRC CONVENED ON 06-06-2022

- 1. Dr. B.T. Sreenivasa, Director & Chairman, Research Council, CSGRC, Hosur
- 2. Dr. M. Maheswari, Scientist -D & Head, Silkworm Division
- 3. Dr. G. Ravikumar, Scientist-D & Head, Biotechnology/Mulberry Division
- 4. Smt. G. Punithavathy, Scientist D
- 5. Dr. G. Lokesh, Scientist-D
- 6. Dr. G. Thanavendan, Scientist C
- 7. Dr. M.C. Thriveni, Scientist-B
- 8. Mr. Raju Mondal, Scientist B
- 9. Mr. S. Sekar, Asst. Director

Chairman, Research Council