केन्द्रीय रेशम जननद्रव्य संसाधन केन्द्र, केन्द्रीय रेशम बॉर्ड, होसूर - 635 109

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

PROCEEDINGS OF THE $63^{\rm RD}$ RESEARCH COUNCIL MEETING OF CSGRC HOSUR HELD ON $10^{\rm th}$ DECEMBER 2020

The 63rd Research Council meeting of CSGRC, CSB Hosur was convened on 10th December 2020, chaired by Dr.B.T.Sreenivasa, Director, CSGRC, Hosur. At the outset, Director welcomed all the participants and initiated the meeting by advising all scientists to prepare well for the upcopming Reconstituted Research Advisory meeting which will be conducted very shortly. He advised the newly joined Research Fellows to attend all research related meetings of the centre. With the above remarks, Director took up the meetings as per agenda. List of participants is appended at Annexure 1.

Item No. I: Confirmation of the minutes of the 62^{nd} RC meeting held on 13^{th} January, 2020

The minutes of the 62nd 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 62nd RC meeting held on 13th January, 2020 was presented by Dr.M.Maheswari, Scientist-D, PMCE reviewed and following decisions were arrived.

• Since no correspondence has been received to carry out quarantine rearing of new collection of silkworm accessions at SSTL, Kodathi. CSGRC may send proposal for New Building if required instead of renovation of dilapidated rearing house - Introduction Block constructed during 1992.

[Action: Head, SW Division & Dr.G.Lokesh, Sc-D]

• Discussions on project proposal entitled "Molecular characterization of silkworm genetic resources" were held with GKVK and Central Office. The proposal may be submitted after final revision at the earliest.

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

• Since Thailand is one of the Member under International Sericultural Commission (ISC), the scientist may pursue the issue of acquiring fruit yielding mulberry varieties from Thailand, through ISC platform.

[Action: Head, Mul. Division & Dr. G. Thanavendan, Sc-C]

• The stipend of Project Assistant approved under the project AIT-06006MI may be increased to Rs.15,000/- and the same may be requested for approval from RCS, Central Office.

[Dr.Ritwika Sur Chaudhuri, Sci-C]

Item No. III: Follow-up action on the decisions of the 39th RAC meeting held on 23rd October, 2020

Research papers should be published on data obtained from concluded projects as well as
data generated from the VIIIth phase of maintenance of mulberry and silkworm
germplasm resources at the earliest.

[Action: All scientists]

• INDOSTAT or SPSS software package may be purchased for carrying out statistical analysis for which training will be arranged.

[Action: All Scientist-D, Divisional Heads]

Item No. IV: Formulation of new project concepts

Dr. G. Ravikumar presented the concept note on the topic entitled, "Screening of silkworm genetic resources for tolerance/resistance to microsporidia and an attempt to develop microsporidia-resistant silkworm using genome editing with CRISPR/Cas technology". The title should be modified and concised. It was suggested to take up the inoculation of microsporidia/bioassay work should be taken up at SBRL, Kodathi. The concept note was approved for submission to C.O. for clearance at the earliest.

[Action: Dr. G. Ravikumar, Sc-D]

Item No. V: Status of new project proposals

The new project proposal on "Molecular characterization...silkworm genetic resources" may be finalized immediately and submitted to CO, CSB for approval and code allotment.

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

Item No.VI: Outcome of concluded projects

Dr.Thanavendan, CI, informed that the project entitled "PIB-3505: Development of drought tolerant mulberry variety for rain fed sericulture (Coll. project of CSR&TI, Berhampore with CSGRC, Hosur) was concluded during December, 2019 and final report was obtained from CSR&TI, Berhampore. He was suggested to present the complete final report along with photographs in upcoming RAC meeting.

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

Item No. VII: Progress of ongoing research projects

1) PIG-06004SI: Studies on cytological status of mulberry genetic resources

The PI presented the progress of the project. The committee suggested that further verification of the data on Cluster analysis for identification of duplicates is required.

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

2) PIG-06005 SI: 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 that the budget utilized as on date should be mentioned along with period of utilization in the presentation. The achievement against milestones should be presented in tabular form. Further verification of the data on Cluster analysis for identification of duplicates is required.

It was suggested that a taxonomist may be invited to get clarification on identification of *Morus sps*.

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

3) PIE-06001 SI: Collection, characterization, evaluation, conservation and supply of mulberry genetic resources - Phase IX

The PI presented the progress of the project. It was advised that the CIs of the project- Dr. M.C.Thriveni, Sc-B should involve in germplasm characterization activities and Shri. Raju Mondal, Sc-B, should involve in germplasm evaluation studies under the project.

Interact frequently with fellow scientists for smooth functioning of R&D works.

[Action: Dr. G. Thanavendan, Sc-C; Dr. M.C.Thriveni, Sc-B; Shri. Raju Mondal, Sc-B]

4) PIB-3586:Development of superior mulberry varieties through controlled hybridization for North-West Indian states (Coll. project of CSRTI, Pampore with CSGRC, Hosur)

The PI presented the progress of the project. The house took note of the same.

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

5) PIB-3629: Development of mulberry genotypes suitable for rainfed hill farming in North - West India (Coll. project of RSRS, Jammu with CSGRC, Hosur)

The PI presented the progress of the project. The house took note of the same.

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

6) PIC-01003CN: Genetic enhancement of mulberry by genomics approaches: A multi component network project: NW4b: Mimic alkaloids in mulberry and their role in modulating host plant – Insect interactions (Coll. project of CSR&TI, Mysore with UAS-GKVK, Bangalore, CSIR-NCL, Pune and CSGRC, Hosur)

The PI presented the progress of the project. The house took note of the same.

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

7) PIT-08004: Study on epigenetic and autophagy modifiers on induction of haploid microspore embryogenesis in mulberry

The CI presented the progress of the project. The house took note of the same.

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

8) AIE-06002MI: Evaluation of bivoltine silkworm genetic resources for tolerance to abiotic stress in selected hotspots (Collaboration with SBRL, Kodathi, CSR&TI, Mysuru, Berhampore & Pampore)

The PI presented the progress of the project. The Committee suggested improving the presentation slides.

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

9) AIE-06003-SI Evaluation of silkworm genetic resources of *Bombyx mori* L. with reference to inbreeding depression and their conservation (3 years)

The PI presented the progress of the project. The house took note of the same.

[Action: Dr. C.M.Kishor Kumar, Sc-D]

10) AIT-06006MI Marker-assisted screening to identify silkworm genetic resources tolerant to BmNPV and BmBDV

The PI presented the progress of the project. The house took note of the same.

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

ITEM No. VIII: Any other points with the permission of the chair

• Division-wise instrumentation room should be made for effective maintenance of the scientific equipments.

[Action: Divisional Heads & Scientists]

• Files and registers pertaining to the division should be kept in Divisional Head's room for easy access.

[Action: Divisional Heads & Scientists]

• The information/photographs shared on the official Whatsapp group should be saved by the concerned scientists in their respective computers for future reference.

[Action: All scientists]

• All the scientists are advised to prepare powerpoint (PPT) slides with contrast colours and font for clarity presentation. And do not use multi and faded colours. Use good clarity photographs wherever necessary.

[Action: All scientists]

 Mulberry division Head and scientists should initiate suitable action to utilize the vacant land at CSGRC Hosur campus as per earlier letter sent to C.O., CSB for maintenance of mulberry germplasm, coconut plantation. They may also seek proposal for drilling of borewell from Hydrogeological Survey.

[Action: All scientists, Mulberry Division]

• Plot boards/accession boards should be updated at the earliest. Layout of all the mulberry plots datewise should be made available to all scientists.

[Action: All scientists, Mulberry Division]

• Project Assistants/Junior Research Fellow (JRF) may suitably guided for project works as per milestone.

[Action: All scientists, Mulberry Division]

• Since the approval for closing of open dried well has been obtained from C.O, CSB, AD (A&A) is advised to issue note to execution committee for completion of the work.

[Action: Asst.Director (A&A)]

 Mulberry division scientists are advised to fill the compost pits with sericultural waste/farm residues for recycling purpose. One or two compost pits may also be prepared for rainwater harvesting by hiring JCB.

[Action: All scientists, Mulberry Division]

• CSGRC website should be updated by following the websites of other CSB institutes.

[Action: Asst.Director (Comp)]

 Re-establishment of mulberry museum plot may be taken up with standard spacing for further maintenance with layout board.

[Action: All scientists, Mulberry Division]

 Repairing/replacing of nets of the net house is essential for maintaining the mulberry genetypes collected from temperate regions and therefore it should be taken up subject to fund availability in the current financial year.

[Action: All scientists, Mulberry Division]

 Work abstract of form workers should be maintained in the respective sections and utilize their services effectively for R&D works as per C.O. norms and guidelines.

[Action: Divisional Heads & Scientists]

 Maintenance committee is advised to carry out the repair of wash basins in the laboratories and in different sections and damaged almirahs for their effective utilization.

[Action: Maintenance committee]

Purchase committee should speed up the purchase process through GeM or offline so as
to achieve the progress of the projects as per mile stone.

[Action: Store Purchase Committee]

The meeting ended with thanks to the Chair and all the scientists are requested to submit follow up action on the decisions of 63rd RC immediately to PMCE for compilation and communication to RCS, C.O.

Director & Chairman Research Council CSGRC, Ilnsur

Annexure-l

List of participants for the 63rd Research Council Meeting of CSGRC, Hosur convened on 10/12/2020

- 1. Dr. B.T.Sreenivasa, Director & Chairman, Research Council, CSGRC, Hosur
- 2. Dr. C.M.Kishor Kumar, Scientist D & Head, Silkworm Division
- 3. Dr. G. Ravikumar, Scientist-D & Head, Mulberry Division
- 4. Dr. M. Maheswari, Scientist –D, Head, PMCE Division
- 5. Smt. G. Punithavathy, Scientist D
- 6. Dr. Jameela Khatoon, Scientist D
- 7. Dr. G. Lokesh, Scientist D
- 8. Dr. Ritwika Sur Chaudhuri, Scientist C
- 9. Dr. G. Thanavendan, Scientist C
- 10. Shri. Raju Mondal, Scientist B
- 11. Dr. M.C. Thriveni, Scientist-B
- 12. Ms. Sreya Antony, JRF
- 13. Ms. Madhurya, Project Assistant