

MINUTES OF 70th RESEARCH COUNCIL MEETING OF CSB-CMER&TI, LAHDOIGARH HELD ON 21.03.2024

The 70th RC meeting was held on 21st March 2024 under the Chairpersonship of Dr. K M Vijaya Kumari, Director of CMER&TI Lahdoigarh. The list of participants is enclosed as Annexure-I. The meeting proceeded with discussions as per the agenda items.

AGENDA NO. 1: CONFIRMATION OF LAST RC MEETING MINUTES

The minutes of the 69th Research Council meeting were circulated to all members, and as no comments were received, the minutes were confirmed.

AGENDA NO. 2: REVIEW ON CONCLUDED PROJECTS

Four research projects were concluded during the period and the concerned investigators presented the concluding report of the project

1. AIB-05012-SI: Inter and intra-specific hybridization for improvement of eri silkworm, *Samia ricini* Donovan

Dr. Aftab A Shabnam, Sc-D presented the final outcome of the project and the following observations were suggested during the meeting;

- Compile and statistically analyze the hybrid evaluation data and include the data in final report with recommendations.
- 02 fecundity lines to be maintained by silkworm division (Dr. Jigyasha) and follow recurrent selection in subsequent generations for attaining purity.
- Present the final conclusion of the project to members of the RAC for final review and recommendations.

*Action: Dr. Aftab A. Shabnam, Sc-D; Incharge Silkworm Division and
Dr. Jigyasha, Sc-B*

2. APR-05018-MI: Effect of various host plants separately and in combination on Rearing and grainage performance of Muga silkworm, *Antheraea assamensis* Helfer

Dr. D K Jigyasu, Sc-C presented the final outcome of the project and the following observations were suggested during the meeting;

- Compile the statistically analyzed data along with recommended packages of practices in the final report.
- Present the final conclusion of the project to members of the RAC for review and recommendations.

Action: Dr. D.K. Jigyasu, Sc-C, Host Plant Division

3. APS-05020-MI - Commercial egg production technology for ericulture

Dr. Mahesh D S, Sc-C presented the final outcome of the project and the following observations were suggested during the meeting;

- Submit the concluding report with all statistical analysis and present it to members of the RAC for review and recommendations.

Action: Dr. Mahesh DS, Sc-C, Silkworm Division

4. MOE-05022-MI: Evaluation and popularization of improved technologies developed in the field of Muga, Eri and Oak sector for Northeastern India (OST/OFT of CMER&TI)

Dr. D K Jigyasu, Sc-C presented the compiled validation trials of all the OST/OFTs under the project and the following suggestions were made during the meeting;

- The concerned PI/investigators should compile the validation of their respective OST/OFTs and present it to members of the RAC for final review and recommendations.

Action: Dr. D.K. Jigyasu, Sc-C and all the CIs of the Project

AGENDA NO. 3: NEW CONCEPT NOTES

1. Influence of different food plants and its nutritive values on rearing and grainage performance of Oak tasar silkworm, *Antheraea proylei* Jolly during Spring and Autumn crops.

Dr. Reeta Luikham, Sc-D presented a new concept note and the following suggestions were made:

- Relook into the practices followed by the traditional rearers whether going for changing or combination of host plants is feasible/practical to adopt. Only upon assessing the actual necessity with sufficient reliable data, such studies can be proposed with necessary justification.
- Concept note not approved at this stage and with these objectives.

Action: Dr. Reeta Luikham, Sc-D, RSRS, Imphal

2 Development of mobile based application for organized Muga seed sector

Mr. Pulak Rabha, Sc-B presented a new concept note and the following suggestions were made:

- Nomenclatures given by MESSO to be used to avoid confusion.
- Bifurcate the data collection into registered and un-registered groups in order to keep the actual track of registered beneficiaries involved in seed production.
- Concept note is approved with above suggestions. PI to submit the revised concept note within 15 days in RMIS 01 format for onward submission to CO, CSB and upload the same on eSubmis portal.

Action: Mr. Pulak Rabha, Sc-B, REC Lakimpur

AGENDA NO. 3: STATUS OF CONCEPT NOTES PRESENTED IN LAST RC MEETING

1. Breeding for development of genetically improved Som (*Persea bombycina*) genotype

Instead of the previous concept, Dr. Harisha R, Sc-B presented a new concept note titled “**Genetic improvement of tapioca genotypes for higher leaf yield and quality attributes through clonal selection**” to the committee and the following suggestions were made during the meeting:

- Modify the title to suit the objectives and outcome of the work.
- Take reference materials from TNAU (Salem) and ICAR institute as well.
- Concept note is approved with above suggestions. PI to submit the revised concept note within 15 days in RMIS 01 format for onward submission to CO, CSB and upload the same on eSubmis portal.

Action: Dr. Harisha R, Sc-B, Host Plant Division

2. Characterization of stem borer complex in Som (*Persea bombycina*) and validation of their mitigation strategies

Instead of the previous concept, Dr. Chandrakumara, Sc-B presented a new concept note titled “**Info-chemicals mediated multifarious behavioural tactics for Uzi fly management in Muga culture**” to the committee and the following suggestions were made during the meeting:

- Relook into the budget as it is being proposed on the higher side.
- Investigators may propose the project for external funding under twining project mode.
- Modify the objectives and include identifying the repellants/repellent study.
- Concept note is approved with above suggestions. PI to submit the revised concept note within 15 days in RMIS 01 format for onward submission to CO, CSB and upload the same on eSubmis portal.

Action: Dr. Chandrakumara, Sc-B, Silkworm Division

3. Characterization of Genetic Architecture Underlying Pupal Hibernation in Muga Silkworm

Dr. Kaiho Keisa, Sc-B presented a new concept note to the committee and the following suggestions were made during the meeting:

- Relook into the budget and propose appropriately with one JRF only.
- Concept note is approved with above suggestion. PI to submit the revised concept note within 15 days in RMIS 01 format for onward submission to CO, CSB and upload the same on eSubmis portal.

Action: Dr. Kaiho Keisa, Sc-B, Silkworm Division

4. Assessment of carbon sequestration potential and nitrogen-use efficiency of Som (*Persea bombycina* Kost)

Instead of the previous concept, Mr. Sinto Anto, Sc-B presented a new concept note titled “**Enhancing Nitrogen Use Efficiency in Kesseru (*Heteropanax fragrans*) for Climate Smart Ericulture**” to the committee and the following suggestions were made during the meeting:

- Since the Kesseru germplasm conserved at the Institute is narrow, it is advised to drop the work-plan of breeding for Nitrogen Use efficient genotypes with improved yield. Instead the PI is advised to focus on screening the available germplasm and collection of new accessions for enriching the gene-pool.
- Concept note is approved with above suggestion. PI to submit the revised concept note within 15 days in RMIS 01 format for onward submission to CO, CSB and upload the same on eSubmis portal.

Action: Mr. Sinto Anto, Sc-B, Host Plant Division

5. Validation of ITKs in Eri PCT and Exploring Opportunities for Enhancement.

Sh. Roshan Lal Meena, Sc-B (R&S) and PI of the project informed the house that the concept note is uploaded on e-submis portal for consideration by RCS, CO, CSB.

Action: PMCE Division for follow-up

6. PCR based detection of pathogens of muga silkworm

Instead of the previous concept, Ms. Brunda, Sc-B presented a new concept note titled “**Management of Bacterial Flacherie Using Bacteriocins in Muga Silkworms**” to the committee and the following suggestions were made during the meeting:

- More focus is needed on viral flacherie/viral diseases as it is off major concern in the field.
- The PI is advised to review the earlier work carried out for control of bacterial diseases in Muga such as the work carried out under the project “**ARP-5887: Isolation and characterization of lytic bacteriophages infecting bacterial pathogens of Muga silkworm *Antheraea assamensis* Helfer**”
- Concept note is not approved at this stage and the Investigator was advised to formulate a new concept based on the pertinent viral diseases.

Action: Ms. Brunda, Sc-B, Silkworm Division

7. Exploring the Genetic Landscape: Comparative Analysis of Wild and Cultivated Muga Silkworms

Instead of the previous concept, Dr. Jigyasha, Sc-B presented a new concept note titled “**Development of double hybrids in eri silkworm**” to the committee and the following suggestions were made during the meeting:

- The PI is advised to utilize the outcome of the project “AIB05012SI” for developing double hybrids, since 03 hybrid combinations are already shortlisted under the project based in specific combining ability studies.
- Concept note is approved with above suggestion. PI to submit the revised concept note within 15 days in RMIS 01 format for onward submission to CO, CSB and upload the same on eSubmis portal.

Action: Dr. Jigyasha, Sc-B, Silkworm Division

AGENDA NO. 4: REVIEW OF THE PROGRESS OF ON-GOING PROJECTS

The progress of the following ten ongoing projects was reviewed and the respective investigators were advised to continue the projects as per the set target milestones and effectively utilize the allocated budget under each project:

1. AIB 5013 SI: Impact of elevated CO₂ and temperature on muga silkworm and its primary host plant
2. APS-05021-EF: Studies on population diversity and role of host plant volatile cues for enhancing egg laying in temperate tasar (Vanya) silk moths *Antheraea proylei*.
3. ARP05023CN: Muga and Eri silkworm disease monitoring in north eastern states of India
4. AIT05024EF - Advanced-Level Institutional Biotech Hubs at CMERTI-Jorhat (Phase-II)
5. PIB 5025 SIC: Characterization and evaluation of Soalu (*Litsea monopetala*) accessions for muga silkworm (*Antheraea assamensis*) rearing
6. SPR 5026 SIC: Development of suitable Muga and Eri based Integrated Farming System

(IFS) for North East India

7. MOE 5027 SIC: Economic analysis of Tapioca based Ericulture in Assam & Nagaland
8. SPR 5028 SIC: Popularization of Improved Technologies of Muga Culture for Enhancing Cocoon Production in Manipur
9. PIT 5029 SIC: Development of clonal propagation methods in Borpat (*Ailanthus grandis* L.) for its mass multiplication
10. MOE 5030 SNC: Evaluation, optimization & Popularization of Ericulture Practices in Castor Growing Areas of Gujarat

AGENDA NO. 5: EXTENSION COMMUNICATION PROGRAMMES

Dr. D Mech, Sc-D & Head SEEM Division presented the overall progress of the Extension activities conducted during 2023-24.

AGENDA NO. 6: CAPACITY BUILDING & TRAINING PROGRAMMES

Sh. Bitopan Das, Sc-D & Head Training Division presented the overall progress of the Training programs conducted during 2023-24.

The meeting ended with vote of thanks by PMCE with an advice to all Scientists to be ready with up-to-date presentations for the upcoming (43rd) RAC meeting.



(Dr. K M Vijaya Kumari)

Director & Chairperson-RC

**LIST OF PARTICIPANTS IN THE 70th RESEACH COUNCIL MEETING OF
CMER&TI, LAHDOIGARH HELD ON 21st March 2024**

1. Dr. K. M. Vijaya Kumari; Director, CMER&TI, Lahdoigarh
2. Dr. Reeta Luikham, Scientist–D, CMER&TI, Lahdoigarh
3. Sh. Suraj Pal, Scientist-D, EREC, Fatehpur, Uttar Pradesh
4. Dr. D. Mech, Scientist-D, CMER&TI, Lahdoigarh
5. Dr. Laishram Somen Singh, Scientist-D, RSRS, Imphal
6. Dr. Aftab A. Shabnam, Scientist-D, CMER&TI, Lahdoigarh
7. Sh. Bitupan Das, Scientist-D, CMER&TI, Lahdoigarh
8. Dr. Sinam Subharani Devi, Scientist-D, RSRS, Imphal
9. Dr. Arun Kumar K.P., Scientist-D, CMER&TI, Lahdoigarh
10. Dr. D.K. Jigyasu, Scientist-C, CMER&TI, Lahdoigarh
11. Dr. K. Subadas Singh, Scientist-C, RSRS Imphal
12. Dr. Vijay N., Scientist-C, CMER&TI, Lahdoigarh
13. Dr. Mahesh D.S., Scientist-C, CMER&TI, Lahdoigarh
14. Dr. Manjunath R.N., Scientist-C(R&S), CMER&TI, Lahdoigarh
15. Dr. Om Prakash Patidar, Scientist-C, CMER&TI, Lahdoigarh
16. Sh. Roshan Lal Meena, Scientist-B (R&S), CMER&TI, Lahdoigarh
17. Dr. Kaiho Kaisa, Scientist-B, CMER&TI, Lahdoigarh
18. Ms. Brunda B N, Scientist-B, CMER&TI, Lahdoigarh
19. Dr. Chandrakumara, Scientist-B, CMER&TI, Lahdoigarh
20. Dr. Jigyasha, Scientist-B, CMER&TI, Lahdoigarh
21. Dr. Harisha R, Scientist-B, CMER&TI, Lahdoigarh
22. Sh. Sinto Antoo, Scientist-B, CMER&TI, Lahdoigarh
23. Sh. Pulak Rabha, Scientist-B, REC Lakhimpur

Technical staff/Research Fellows

24. Sh. Simanta Saikia, SFA
25. Sh. Akib Hussain, JRF
26. Sh. Suraj K Shah, JRF
27. Ms. Akshita Choudhury, JRF
28. Ms. Rubi Sut, JRF
29. Ms. Raisa Begum, PA
30. Shri Saif Afridi Hussain, Project Assistant
31. Shri Porag Das, Project Assistant
32. Shri Mohmudur Rohman, Project Assistant