

MINUTES OF 73rd RESEARCH COUNCIL MEETING OF CMER&TI, LAHDOIGARH HELD ON 24th JANUARY, 2025 AT CSB-CMER&TI, LAHDOIGARH

The 73rd Research Council meeting of CMER&TI, Lahdoigarh was held on 24th January, 2025 under the Chairmanship of Dr. Kartik Neog, Director of the institute at conference hall, CSB-CMER&TI, Lahdoigarh. The list of participants is enclosed as Annexure-I.

AGENDA NO. 1: CONFIRMATION OF LAST RC MEETING MINUTES

The minutes of the 72nd RC meeting held on 02nd December, 2024 were circulated to all the scientists of the main institute along with its nested units were circulated to all members, and as no comments were received, they were confirmed.

AGENDA NO. 2: NEW CONCEPT NOTES OF RESEARCH PROJECTS

1. Development of Smart Portable Analyzer for Muga Silk Purity and Dye Origin Assessment in Dyed Fabrics.

Sh. Roshan Lal Meena, Sc.-B presented the concept note highlighting the objectives, Work Plan/Methodology and Expected Outcome of the proposal.

RC suggestions/comments:

- ❖ The concept note is approved by RC.
- ❖ It is advised to prepare a concept note (RMIS-01) and submit the same on eSubmis within 15 days.
(Action: Sh. Roshan Lal Meena, Sc.-B)

2. Harnessing Nanotechnology for Enhancing Systemic Defense in Eri and Muga Silkworms Against Major Pathogens

Dr. Apurba Das, Dept. of Plant Pathology, Assam Agricultural University, presented the concept note highlighting the objectives, Work Plan/Methodology and Expected Outcome of the proposal.

RC suggestions/comments:

- ❖ The concept note is approved by RC.
- ❖ Discuss the previous work done in the area of nanoparticles usage in Vanya sericulture with Dr. Pranab Dutta, Professor, AAU, Jorhat
- ❖ Ms. Brunda B N, Sc.-B is nominated from CSB-CMER&TI to collaborate and prepare a concept note (RMIS-01) and submit the same on eSubmis within 15 days
(Action: Ms. Brunda B N, Sc.-B)

3. Role of Probiotic Bacteria on Commercial Yield of Eri Silkworm (*Samia ricini* Donovan)

Dr. Th. Aruna Singha, Dept. of Sericulture, Assam Agricultural University, presented the concept note highlighting the objectives, Work Plan/Methodology and Expected Outcome of the proposal.

RC suggestions/comments:

- ❖ The concept note is approved by RC.
- ❖ Consult the outcome of the previously concluded projects by Dr. Dip Kumar Gogoi and Dr. Arun Kumar K P of CSB-CMER&TI.
- ❖ Dr. Kaiho Kaisa, Sc.-B is nominated from CSB-CMER&TI to collaborate and prepare a concept note (RMIS-01) and submit the same on eSubmis within 15 days
(Action: Dr. Kaiho Kaisa, Sc.-B)

4. Development of Bio-Intensive Integrated Management Practice Against Uzi Fly of Muga Silkworm

Dr. Roshmi Borah Dutta, College of Sericulture, Titabor of Assam Agricultural University presented the concept note highlighting the objectives, Work Plan/Methodology and Expected Outcome of the proposal.

RC suggestion/comments:

- ❖ The concept note is approved by RC.
- ❖ Modify the term used from barrier crop to trap crop or attractant crop.
- ❖ Pheromones developed in mulberry sector can be screened in Muga for use as pheromone trap.
- ❖ Ensure screening of safer dose and dipteran specific green pesticides to prevent its impact on Muga Silkworm
- ❖ Dr. Chandrakumara, Sc-B is nominated from CSB-CMER&TI to collaborate and prepare a concept note (RMIS-01) and submit the same on eSubmis within 15 days

(Action: Dr. Chandrakumara, Sc-B)

5. Rejuvenation of Oil Contaminated Soil Through Phytoremediation by Castor Farming for Livelihood Security of Farmers in Upper Brahmaputra Valley Zone

Dr. Mahima Begum, Dept. of Sericulture, Assam Agricultural University presented the concept note highlighting the objectives, Work Plan/Methodology and Expected Outcome of the proposal.

RC suggestion/comments:

- ❖ The concept note is approved by RC.
- ❖ Preliminary data on extent of area with oil contamination and scope of castor to be grown on these areas to be explored.
- ❖ Conduct pupal analysis for accumulation of heavy metals after feeding with castor leaves used in phytoremediation as it may have impact on human consumption.
- ❖ Dr. Harisha R, Sc-B is nominated from CSB-CMER&TI to collaborate and prepare a concept note (RMIS-01) and submit the same on eSubmis within 15 days

(Action: Dr. Harisha R, Sc-B)

6. Toxicity Evaluation of Pesticides Applied in Tea Gardens on Muga Silkworm (*Antheraea assamensis* Helfer)

Dr. Monimala Saikia, Dept. of Sericulture, Assam Agricultural University presented the concept note highlighting the objectives, Work Plan/Methodology and Expected Outcome of the proposal.

RC suggestion/comments:

- ❖ It is observed that the currently proposed concept note lacks novel or newer approach as compared to previously conducted extensive studies on use of commonly used insecticides.
- ❖ Explore possibilities of biopesticides which can control pests of Tea but is safer on Muga
- ❖ Explore possibilities of developing antidotes to prevent impact of commonly used insecticides in tea plantations
- ❖ Develop mechanism to prevent entry of chemical insecticides into sumonis.
- ❖ Perform residue analysis on pupa
- ❖ Sh. Pulak Rabha, Sc-B is nominated from CSB-CMER&TI as CI for the project
- ❖ CSB-CMER&TI has already proposed one project entitled “*Integrating Muga Silk Heritage with Sustainable Organic Tea Cultivation*” on the similar lines which is approved by 72nd RC, RCS and RAC. It is suggested to include the work proposed under this new project with the already approved project and Sh. Sinto Antoo, Sc-B may prepare a combined project proposal in RMIS-02 and upload the same on eSubmis portal for seeking code from CO within 15 days

(Action: Sh. Sinto Antoo, Sc-B and Sh. Pulak Rabha, Sc-B)

AGENDA NO.3: ON-GOING PROJECTS / PROGRAMMES

- 1. AIP05013SI: Impact of elevated CO₂ and temperature on muga silkworm and its primary host plant**

Sh. Sinto Antoo, Sc-B, Host Plant Division, PI, highlighted the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.

(Action: Sh. Sinto Antoo, Sc-B)

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*.

Dr. S. Subharani, Sc-D, RSRS, Imphal, PI inform about the work carried so far in the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.
- ❖ Explore the possibility of procuring required chemicals from ICAR-IIHR for performing oak tasar grainage with treatment in time.

(Action: Dr. S. Subharani, Sc-D)

3. ARP05023CN: Muga and Eri silkworm disease monitoring in north eastern states of India

Ms. Brunda B N, Sc-B, Silkworm Division, presented the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.
- ❖ Record the data including the prevalent climatic conditions and disease incidence during the rearing and prepare a disease forecasting calendar for Eri and Muga.
- ❖ Prepare a month-wise schedule for all the teams including places of visit and dates for disease monitoring. Sh. Suraj Shah, JRF to give regular reminders to assigned scientists for the visit.
- ❖ Effectively utilize the funds under travel head and consumables of the project.

(Action: Ms. Brunda B N, Sc-B)

4. AIT05024EF – Advanced-Level Institutional Biotech Hubs at CMERTI-Jorhat Assam (Phase-II)

Dr. Arun Kumar K P, Sc-D highlighted the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.
- ❖ It has been observed that precious stocks/collections made earlier under the project are lost due to disease outbreak. Earlier also such incidents are reported which necessitates to develop a mechanism for control of diseases to save precious materials. Dr. Chandrakumara, Sc-B is entrusted with the responsibility to prepare a schedule of activities for proper control of disease spread from one farm/unit to another. He should also coordinate and conduct a three-day STEP training on maintaining hygiene during eri and muga rearing.
- ❖ Training division is advised to convert one ToP program to STEP training and to be conducted by March, 2025.

(Action: Dr. Arun Kumar K P, Sc-D; Dr. Mahesh DS, Sc-C, Dr. Chandrakumara, Sc-B)

5. PIB5025SIC: Characterization and evaluation of Soalu (*Litsea monopetala*) accessions for muga silkworm (*Antheraea assamensis*) rearing

Dr. O P Patidar, Sc-C, Host Plant Division, PI, presented the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.
- ❖ Calculate the Co-efficient of Variation percentage (CV%) as the evaluation is for germplasm
- ❖ Ensure efficient utilization of the funds under consumables and contingency heads of the project

(Action: Dr. O P Patidar, Sc-C)

6. SPR5026SIC: Development of suitable Muga and Eri based Integrated Farming System (IFS) for North East India

Ms. Rubi Sut, Project Assistant presented the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.
- ❖ PI is advised to assign the targets to the CI for efficient and smooth execution of the project.

(Action: Dr. Diganta Mech, Sc.-D)

7. MOE5027SIC: Economic analysis of Tapioca based Eri-culture in Assam & Nagaland

Dr. Vijay N, Sc-C, SEEM Division, presented the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones
- ❖ Ensure proper documentation of materials (plant and silkworm) sent to other institutes for analysis to prevent misuse of data generated at CSB-CMER&TI by other institutes.

(Action: Dr. Vijay N, Sc-C)

8. SPR5028SIC: Popularization of Improved Technologies of Muga Culture for Enhancing Cocoon Production in Manipur

Dr. Subadas Singh, Sc-C, RSRS, Imphal, presented the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.
- ❖ To use the funds available effectively and timely.
- ❖ It is advised to train 10 farmers for seed crop rearing during summer season.

(Action: Dr. Kh. Subadas Singh, Sc.-B)

9. PIT5029SIC: Development of clonal propagation methods in Borpat (*Ailanthus grandis* L.) for its mass multiplication

Dr. O P Patidar, Sc-C, Host Plant Division, and Dr. Satyam Bordoloi, ICFRE-RFRI presented the progress of the project.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.
- ❖ Collect around 1 to 2 kg of seeds from farmers at Tinsukia district and explore germinated seedlings to be used as explants for callus generation.

(Action: Dr. O P Patidar, Sc-C)

10. MOE5030SNC: Evaluation, optimization & Popularization of Eri-culture Practices in Castor Growing Areas of Gujarat

Dr. Mahesh D S, Sc-C, presented the progress of the project in virtual mode from Gujarat.

RC suggestion/comments:

- ❖ Continue the project as per the set objectives and target milestones.

(Action: Dr. Mahesh D S, Sc-C)

AGENDA No. 4: EXTENSION COMMUNICATION PROGRAMMES

Dr. Vijay N, Sc-C & Head SEEM Division presented the overall progress of the Extension activities conducted thus far during 2024-25. It was advised to strive for achieving the financial and physical targets by the end of February 2025.

AGENDA No. 5: CAPACITY BUILDING & TRAINING PROGRAMMES

Dr. Harisha R, Sc-B, Training Division presented the events conducted so far and henceforth plans to be carried out during 2024-25. It was advised to strive for achieving the financial and physical targets by the end of February 2025.

AGENDA No. 6: TRIAL OF TECHNOLOGIES (OSTS/ OFTS)

SEEM division presented and updated the progress of the ongoing OST/OFT carried out during 2024-25. It was advised to strive for achieving the financial and physical targets by the end of February 2025.

AGENDA No. 6: OTHER POINTS/GENERAL SUGGESTIONS

- ❖ All scientists must strategically plan and diligently work towards achieving their respective project targets within the stipulated timelines and budget.

The meeting ended with a vote of thanks by PMCE.



(Dr. Kartik Neog)
Director & Chairman-RC

Annexure-I

List of the participants of 73rd RC meeting of CSB-CMER&TI, Lahdoigarh held on 24th January, 2025 at CSB-CMER&TI, Lahdoigarh

#	Name & Designation
1.	Dr. Kartik Neog, Director, CSB-CMER&TI, Lahdoigarh
2.	Dr. Reeta Luikham, Scientist-D, CSB-RSRS, Imphal
3.	Dr. D. Mech, Scientist-D, CSB-CMER&TI, Lahdoigarh
4.	Sri S.A.S. Rahman, Scientist-D, CSB-RSRS, Boko
5.	Dr. Laishram Somen Singh, Scientist-D, CSB-RSRS, Imphal
6.	Dr. Aftab Ahmed Sabnam, Scientist-D, CSB-CMER&TI, Lahdoigarh
7.	Dr. Sinam Subharani Devi, Scientist-D, CSB-RSRS, Imphal
8.	Dr. D.K. Jigyasu, Scientist-D, CSB-REC, Fatehpur (U.P.)
9.	Dr. Kh. Subadas Singh, Scientist-C, CSB-RSRS, Imphal
10.	Dr. Vijay N., Scientist-C, CSB-CMER&TI, Lahdoigarh
11.	Dr. Om Prakash Patidar, Scientist-C, CSB-CMER&TI, Lahdoigarh
12.	Sh. Roshan Lal Meena, Scientist-B (R&S), CSB-CMER&TI, Lahdoigarh
13.	Dr. Kaiho Kaisa, Scientist-B, CMER&TI, Lahdoigarh
14.	Ms. Brunda B N, Scientist-B, CSB-CMER&TI, Lahdoigarh
15.	Dr. K. Chandrakumara, Scientist-B, CSB-CMER&TI, Lahdoigarh
16.	Dr. Harisha R, Scientist-B, CSB-CMER&TI, Lahdoigarh
17.	Sh. Sinto Antoo, Scientist-B, CSB-CMER&TI, Lahdoigarh
18.	Dr. Satyam Bordoloi, Scientist-E & Head, GTI, ICFRE, RFRI, Jorhat
19.	Dr. Roshmi Borah Dutta, Asstt. Professor, AAU, Jorhat
20.	Dr. Aruna Singh, Asstt. Professor, AAU, Jorhat
21.	Dr. Apurba Das, Asstt. Professor, AAU, Jorhat
22.	Dr. Pooja Borah, Asstt. Professor, AAU, Jorhat
23.	Dr. Monimala Saikia, Asstt. Professor, AAU, Jorhat
24.	Dr. Mahima Begum, Asstt. Professor, AAU, Jorhat
25.	Sh. Prabin Dutta, Field Assistant, CSB-REC, Sille (A.P.)
26.	Sh. Rajdeep Boruah, JRF, ICFRE, RFRI, Jorhat
27.	Ms. Akshita Choudhury, JRF, CSB-CMER&TI, Lahdoigarh
28.	Ms. Raisa Begum, PA, CSB-CMER&TI, Lahdoigarh
29.	Ms. Rubi Sut, PA, CSB-CMER&TI, Lahdoigarh
30.	Ms. Laishram Roshni Devi, PA, CSB-CMER&TI, Lahdoigarh