

**CSB-CSRTI, MYSORE**  
**MINUTES OF 76<sup>th</sup> RESEARCH COUNCIL MEETING HELD ON 25.09.2024 AT**  
**CSRTI, MYSORE**

The 76<sup>th</sup> meeting of Research Council of CSRTI-Mysuru was conducted on 25<sup>th</sup> September 2024 to review the new concept notes, concluded research projects, progress of ongoing projects, Extension Communication Programs and Capacity Building Programs of the Institute and progress of nested units. Scientists from main institute and nested units attended the meeting. The list of the participants is appended at **Annexure - I**.

Dr. S. Gandhi Doss, Director CSRTI, Mysuru chaired the meeting and Dr. S. Balasaraswathi, Scientist-D, and Head PMCE welcomed Director, all the Heads of Divisions/sections, scientists of the main Institute and Scientist from RSRs, RECs and REC sub units and SRFs, JRFs, PAs for the meeting.

Director and Chairperson of RC, Dr. S. Gandhi Doss, in his opening remarks emphasized the importance of RC meeting for the constructive discussion on new concept notes. He also outlined several key focus areas that warrant concerted efforts, including the mechanization of sericulture practices, the effective management of diseases and pests, the enhancement of productivity in terms of Mulberry and Silkworm, and the utilization of by-products for value addition. He encouraged the young scientists to prepare the projects for external funding. He took the opportunity to congratulate the employees who tirelessly worked for the successful completion of Platinum Jubilee culmination celebration conducted at KSOU, Auditorium, Mysore. He acknowledged the institute's recognition as the recipient of the "Best Institute Award 2024". He commended the dedication and hard work of all the scientists and staff, highlighting their valuable contributions to the advancement of sericulture research. He also encouraged the team to continue striving for innovation and excellence in future initiatives, emphasizing the importance of sustained efforts to achieve even greater progress in the field.

**CONFIRMATION OF THE MINUTES OF THE 75<sup>th</sup> MEETING HELD ON 11<sup>th</sup> and 12<sup>th</sup> JUNE 2024**

The minutes of the 75<sup>th</sup> meeting of RC was circulated among all the members. Since no comments were received from the members of the committee, the minutes were confirmed.

**CONCEPT NOTES OF RESEARCH PROJECTS FOR APPROVAL**

**1. Toxicological evaluation of sericin and fibroin protein from organic cocoon of silkworm *Bombyx mori***

**Decision:** Dr. Ravindra, presented the concept note and the committee approved the concept note with the following suggestions that the PI should collaborate with suitable organization

for successful execution of project since it is the basic requirement for utilization in pharmaceutical industry and submit the same in RMIS -01 format.

(Action: Dr. Ravindra, Sci- D, SSC )

**2. Exploration of Mulberry Forage as Potential alternative Feed Resources for Sustainable small ruminant Production**

**Decision:** Dr. Purohit Pravinbhai Babubhai presented the concept note. The committee advised him to invite the Collaborator to the Institute and nearby farmers field for exposure to sericultural activities and to make an in-house interactive meet. As such, the PI is advised to revise the concept note based on the outcome of the above meeting and submit the same in RMIS – 01 format.

(Action:Dr. Purohit Pravinbhai Babubhai, Sci-B, MBL)

**3. e-Extension in Sericultural Extension Management (e-SEEM): Strengthening ICT Applications and Analyzing Impact.**

**Decision:** Dr. Joycy Rani presented the concept note and the committee approved the concept note and advised to clarify the mode of Interaction with All India Radio Programmes across the states of Southern India and the committee suggested that there should not be any overlapping of earlier concept notes.

(Action: Dr. Joycy Rani D,Scientist-C, SEEM)

**4. Effect of Methyl Salicylate (MeSA) lures on pest management in mulberry**

**Decision:** Dr. Megaladevi P, presented the results of preliminary studies the effect of Methyl Salicylate (MeSA) on pest management in mulberry as per the suggestion of the 74<sup>th</sup> RC. The committee noted the results of the preliminary study and the concept note was approved.

(Action: Dr. Megaladevi P Scientist-B, PML)

**5. Extraction of humic acid from mulberry system and its evaluation on soil quality and mulberry productivity**

**Decision:** Dr. Sobhana V presented the concept note and the committee approved the concept note with suggestion to incorporate thorough review of literature

(Action: Dr. Sobhana V., Scientist-C, SSC)

**6. Development of superior mulberry varieties for leaf yield, quality and resistant to root-knot disease of mulberry**

**Decision:** Dr. Bhavya presented the concept note and the committee approved the concept note with suggestions. This work can be collaborated with CSRTI, Berhampore and CSGRC, Hosur for conducting mulberry crossing/ hybridization experiments in three Centres for developing suitable F1 progenies in large numbers simultaneously. Further, parents of high-yielding mulberry varieties also need to be used as parents in crossing experiments.

(**Action:** Dr. Bhavya M. R., Scientist-C, Mulberry Mol Biology)

**7. Trash to Treasure: Augmenting Sericulture Farmers Income through Innovative Recycling of Seri-Waste into High-Value Mushroom Cultivation**

**Decision:** Ms. Boggala Vajramma presented the concept note and committee noticed that there is no innovations in the study as mushroom culture is a common practice at farmers level. Hence, it is suggested to explore the feasibility of collaborating with an Industrial partner for promotion of mushroom culture by using sericulture waste or otherwise the work can be taken up as a pilot study.

(**Action:** Ms. Boggala Vajramma, Sci – B. Mul Patho)

**8. Development and evaluation of anti-inflammatory and anti-acne cream from biomolecules extracted from seriwastes**

**Decision:** Dr. Madhusudhan presented the concept note and committee approved the concept note and advised to clearly specify the expected outcomes in the concept note.

(**Action:** Dr. K.N. Madhusudhan, Sci-D, BBL)

**9. GIS-based mapping of host plant wealth and top soil chemistry in sericulture: quantification and spatial distribution**

**Decision:** Dr. Amit Kumar presented the concept note and committee approved the concept note and advised to clearly specify the expected outcomes in the concept note and revise the budget institute wise. It also suggested to utilize the ground truth data of soil health card already available at the Institute.

(**Action:** Dr. Amit Kumar, Sci -D, SSC)

**10. Development of microbial consortium for improving phosphorus, potassium and zinc nutrition in mulberry**

**Decision:** Dr. Dhaneshwar Padhan presented the concept note and committee approved the concept with suggestions. A thorough review of literature on current status and outcomes of concluded projects need to be done and references need to be incorporated in the concept

note. The committee suggested to specify the size of soil samples to be used for isolation of the microorganisms and the soil samples should represent across the states of Southern India. The methodology to be revised to the result oriented objectives.

(Action: Dr. Dhaneshwar Padhan, Sci-C, Agronomy)

## **11. Development of silkworm Chitosan based Biopolymeric membranes for textiles effluent and microplastic removal**

**Decision:** Dr. Madhusudhan presented the concept note and committee approved the concept note and advised to include relevant reference and expected outcomes in precise manner in DBT format.

(Action: Dr. K.N. Madhusudhan, Sci-D, BBL)

## **2. REVIEW OF CONCLUDED PROJECT/PILOT STUDY**

### **1. MOE 01031 CN - Technology Demonstration and Evaluation of Rearing Performance of Bivoltine Mulberry Sericulture In Navasari District (Gujarat)**

**Decision:** Shri. Jadhav Ashok Limbaji presented concluded report and the committee advised the PI to discuss the project details with the all the CIs and revise the concluding report and submit the same at the earliest in RMIS10.

(Action: Shri. Jadhav Ashok Limbaji, Sci-C, REC, Parbhani)

## **PROGRESS OF ON-GOING PROJECTS**

### **1. PIE 13001 MI: All India Coordinated Experimental Trials for Mulberry (AICEM)–Phase-IV**

**Decision:** Dr. Manjappa, presented the progress and the committee noted the progress.

(Action: Dr. Manjappa, Sci-C, MBG)

### **2. PIE 01022 SI: Evaluation of promising mulberry genotypes for higher leaf yield and resistance to root rot and root knot diseases in Primary Yield Trial.**

**Decision:** Dr. Manjappa, presented the progress and the committee noted the progress.

(Action: Dr. Manjappa, Sci-C, MBG)

### **3. AIB 01024 MI: Development of productive, auto sexing silkworm breeds/ hybrids of *Bombyx mori L.* in egg stage and separation of male silkworm population by optical sorting.**

**Decision:** Dr. Kusuma L, presented the progress and the committee noted the progress and suggested to complete the forth objective as stipulated in the project and validate the egg sorting machine within the extended project period.

(**Action:** Dr. Kusuma L., Sci-D, BBL)

**4. MTL 01025 MI: Life Cycle Assessment of Mulberry Silk: A National Assessment**

**Decision:**Dr. Amit Kumar, presented the progress and the committee noted the progress. The committee advised the PI to complete the analysis of green house gases emission etc. in collaboration with IARI, New Delhi with in the stipulated project period.

(**Action:**Dr. Amit Kumar, Sci-D, SSC)

**5. AIE 01026 MI: Evaluation of new bivoltine double hybrid, BFC1xBFC10 at Farmer's level for authorization for commercial exploitation**

**Decision:** Dr. K.N Madhusudhan, presented and committee noted progress and suggested to achieve the milestones with in the project closure period.

(**Action:** Dr. K.N. Madhusudhan, Sci-D, MBL)

**6. BPS 01027 CN: Immunomodulatory and Adjuvant effects of Chitosan Nanoparticles Extracted from *Bombyx mori***

**Decision:** Dr. K.N Madhusudhan, presented the progress of the project and committee noted the progress. The concluded project report in RMIS10 format should be submitted on or before 30<sup>th</sup> November 2024 for forwardal to RCS.

(**Action:** Dr. K.N. Madhusudhan, Sci-D, BBL)

**7. BPS 01028 CN: Value Addition of Cellulose and Chitin Isolated from Sericulture Waste for Advanced Packaging Applications**

**Decision:** Dr. K.N Madhusudhan, presented the progress and the committee noted the progress. The concluded project report in RMIS10 format should be submitted on or before 30<sup>th</sup> November 2024 for forwardal to RCS.

(**Action:** Dr. Madhusudhan K.N, Sci-D, BBL)

**8. ARE 01029 MI: Recommendations of novel fungicidal and insecticidal applications for mulberry**

**Decision:** Dr. S. Mahiba Helen, presented and committee noted progress.

(**Action:** Dr. S. Mahiba Helen, Sci-D, PML)

**9. PRE 01030 CN:Development of an integrated management package for the broad mite, *Polyphagotarsonemus latus* (Acari: Tarsonemidae), in mulberry.**

**Decision:** Dr. S. Mahiba Helen, presented and informed that despite the field evaluation results showing suppression of the mite population, the selected mulberry field treated with all biological control agents was severely affected by broad mites. This indicates that the biocontrol agents were not effective in fully controlling the broad mite population. The committee advised to present the said information in 52<sup>nd</sup> meeting of RAC.

(Action: Dr. S. Mahiba Helen, Sci-D, PML)

**10. AIB 01032 SI: Validation of silk regulators - ubiquitin and mannosidase among silkworm breeds**

**Decision:** Dr. Kusuma L, presented the progress and committee noted the progress.

(Action: Dr. Kusuma L., Sci-D, BBL)

**11. ARP 01033 CN:Mulberry Silkworm Disease Monitoring and Management in Southern States of India.**

**Decision:** Dr. Sathish, L presented the progress and committee noted the progress.

(Action:Dr. Mallikarjuna, Sci-C, S.W. Pathology)

**12. PPA 01034 SI: Development of customized fertilizer for higher mulberry productivity**

**Decision:** Dr. Mahesh R, presented the progress and the committee noted the progress.

(Action: Dr. Mahesh R., Sci-C, Agronomy)

**13. PPA 01035 SI: Studies on natural farming in mulberry for sustainability**

**Decision:** Dr. C.M Babu, presented the progress and the committee noted the progress.

(Action: Dr. C.M. Babu, Sci-D, Agronomy)

**14.PIE 01036 SI: Final yield evaluation of mulberry genotypes for leaf yield under optimal and sub- optimal input conditions**

**Decision:** Dr. Tanmoy Sarkar, presented the progress and the committee noted the progress.

(Action: Dr. Tanmoy Sarkar, Sci-D, MBG)

**15. PIP 01037 SI: Identification of promising mulberry genotypes for physiological efficiency and their relationship with yield and quality under sub-optimal conditions**

**Decision:** Dr. Gayathri T, presented the progress and the committee noted the progress.

(Action: Dr. Gayathri T, Sci-C, Mul. Phy)

16. **SIB 01038 MGC: Utilization of Japanese silkworm genetic resources for the development of productive bivoltine hybrids** (collaboration with CSRTIBerhampore, Pampore and SBRL-Bengaluru)

**Decision:** Dr. N. Chandrakanth, presented the progress and committee noted the progress.

(Action: Dr. N. Chandrakanth Sci-D, BBL)

17. **SRE 01039 MIC: Mapping of Pesticide Residues in pupae of Mulberry Silkworm, *Bombyx mori***

**Decision:** Dr. Thirupathaiah, presented the progress and committee noted the progress. The committee advised the PI to put up the request for extension of the project based on the date of signing of MoU in the ensuing RAC.

(Action: Dr. Thirupathaiah, Sci-D, S.W. Phy)

18. **SIB 01040 SIC: Identification of a new male component for Pure Mysore replacing CSR2 (PMxCSR2) for better crop stability and silk quality.**

**Decision:** Dr. Shivkumar, presented the progress and committee noted the progress.

(Action: Dr. Shivkumar, Sci-C, BBL)

19. **BPS 01041 SGC: Evaluation and validation of nutritive and feeding value of silkworm (*Bombyx mori*) pupa meal in broiler and layer chicken.**

**Decision:** Dr. Thirupathaiah, presented the progress and committee noted the progress.

(Action: Dr. Thirupathaiah, Sci-D, S.W. Phy)

20. **PIN 01042 SNC: Synthesis and characterization of nano-fertilizers and their evaluation in mulberry cultivation**

**Decision:** Dr. Dhaneshwar Padhan, presented the progress and the committee advised to expedite the process of inking of MOA with TNAU in order to avoid the delay in initiation of the scheduled works as per milestone.

(Action: Dr. Dhaneshwar Padhan, Sci-C, Agronomy)

**21. MFM 01043 SNC: Development and validation of tractor mounted mulberry shoot harvester cum bundling device**

**Decision:** Dr. R. Mahesh, presented the progress and the committee noted the progress.

(**Action:** Dr. R. Mahesh, Sci-C, SED)

**22. PIC 01044 SNC: Mitigating Human-Animal Conflicts in Forest Fringe Villages: Mulberry Based Cropping Program-Derived Animal Repellents**

**Decision:** Dr. Arun Kumar, presented the progress and the committee noted the progress and advised to expedite the process of execution of MoA with FC&RI and DOS Tamil Nadu as early as possible in order to initiate the work as per the milestone.

(**Action:**Dr. Aruna Kumar G.S., Sci – D, Mul Patho)

**23. BPS 01045 MNC: Optimization of Preservation Techniques and Quality Assessment of Mulberry and Eri Silkworm Pupae for Human Consumption.**

**Decision:** Dr. Thirupathaiah, presented the progress and committee noted the progress.

(**Action:** Dr. Prasanth M Nair, Sci-B, Silkworm Phy)

**SEEM DIVISION**

Dr. R. Bhagya, Sci-D, SEEM presented the progress and the committee noted the progress.

**TRAINING DIVISION**

Dr. G.S. Geetha, SRA, Training Division, presented the progress and the committee noted the progress.

(**Action:** Dr. Meenal, Sci-D, Training Division)

**PROGRESS OF RSRS/ P4 HASSAN/ SSBS CONOOR/ SALEM/ ANANTHPUR/ KODATHI**

**RSRS KODATHI**

Dr. V. Lakshmanan, Scientist-D presented the progress activities of CBT, ECPs and CPP activities and committee noted the progress.

**RSRS Salem**

Dr. Muttanna, Scientist-C presented the progress of activities of CBT, ECPs and CPP activities and committee noted the progress.

**RSRS Ananthapur**



Dr. Kiran Kumar, Scientist-D presented the progress of activities of CBT, ECPs and CPP activities and the committee noted the progress. The committee advised to take care of the activities under REC, Vijayawada by deputing a staff/scientist.

(Action: Dr. B. Srinath, Sci-D, RSRS, Ananthapur)

### **RSRS, Chamrajnagar**

Dr. Sathish, L, Sci - D presented the progress of the RSRS Chamrajnagar.

### **RSRS, Mulugu**

Dr. Vinod Kumar Yadav, Sci - C presented the progress of the RSRS Mulugu. The committee suggested to visit REC Vikarabad to monitor the regular activities of the center. The committee also advised proper recording and submission of data in time pertaining to AICEM project which needed for proper execution of the project. The committee sought the information pertaining to the experiment on intercrop cultivation of mulberry and oil palm of the center.

(Action: Dr. Vinod Kumar Yadhav, Sci-C, RSRS, Mulugu)

### **P4 Hassan**

Dr. Babual Saini, Scientist-B presented the progress of activities of P4 Hassan.

### **SSBS Conoor**

Dr. Vijay, Sci-C, presented the progress of activities of SSBS Conoor and advised to complete the pending tasks assigned by Member Secretary during his visit to conoor.

(Action: Dr. Vijay, V, Sci-C, SSBS, Conoor)

### **Comments of Director (Tech)**

Dr. S. Manthira Moorthy, Dir (Tech) remarked that there is an outbreak of Broad mite and thrips in mulberry garden of Southern India. Hence, he suggested to form a team of scientists to have a field visit on the infested mulberry garden and advised to give the remedial measures immediately and execute the same in all areas in consultation with respective DOS of all states.

(Action: SEEM and PML)

### **Concluding remarks by the Director**

Director advised all project investigators to take immediate action to submit request letter for extension of the project well in advance (if necessary).

- New technology of the Institute can be demonstrated to stake holders in the training programme and be demonstrated to the Scientists/Technical Staff in workshops with updated pamphlets/booklets.
- The power point presentation should be prepared as per the guidelines provided by PMCE for the up-coming RAC.
- Workshops can be conducted by inviting Experts/Retired Silkworm and Mulberry Breeders of the Institute to make a strategic planning to streamline Silkworm and Mulberry breeding programme
- Research on Eri host plant like castor and tapoica cultivation needs to be taken up at the earliest.
- Concept notes presented in 75<sup>th</sup> and 76<sup>th</sup> RC should be submitted RMIS – 01 format on or before 20.10.2024
- Concepts note on developing prototype/device of silkworm mountages to increase the uniformity % of cocoon size and yarn quality than that of the existing mountages.

The ATR on the decisions of the 76<sup>th</sup> RC meeting should reach PMCE on or before 20.10.2024.

*b. Gendrich*  
30/9/24  
DIRECTOR

**Annexure-I**

**List of participants of institute and nested units attended 76<sup>th</sup> meeting of RC  
held on 25<sup>th</sup>September 2024**

#	Name & Designation	#	
1	Dr.S.Gandhi Doss, Director ,CSRTI, Mysore	27	Dr.Prashanth M Nair .Sci-B, CSRTI,Mysore
2	Dr.S.Balasaraswathi Sci-D CSRTI,Mysore	28	Tamilselvi.C, Sci-B, CSRTI, Mysore
3	Dr. R. Bagya, Sci - D, CSRTI, Mysore	29	Purohit Pravinbhai Sci-B, CSRTI, Mysore
4	Dr. C.M. Babu, Sci,- D, CSRTI, Mysore	30	Revappa M R Sci-B, CSRTI, Mysore
5	Dr. K. N. Madhusudhan, Sci – D, CSRTI, Mysore	31	Kartik kumar Sci-B, CSRTI, Mysore
6	Dr. AmitKumar, Sci - D, Mysuru	32	Meghaladevi Sci-B, CSRTI, Mysore
7	Chanadrashekar M.N., Sci - D, Mysuru	33	Latha Preethi Sci-B, CSRTI, Mysore
8	Dr.S.MahibaHelen Sci-D CSRTIMysore	34	Bogala Vajramma Sci-B, CSRTI, Mysore
9	Dr.KusumaL.Sci-D, CSRTI,Mysore	35	Dr.G.S.Geetha,SRA(SS),CSRTI,Mysore
10	Dr.SatishLSci-D, CSRTI,Mysore	36	Mr.H.M.Munikrishnappa, AD,CSRTI, Mysore
11	Dr.RavindraSci-D, CSRTI,Mysore	37	RSRSs/RECs
12	Dr. Chanrdakanth, Sci - D, Mysuru	38	Dr.V.Lakshmanan, Sci - D, RSRS, Kodathi
13	Dr.Arunakumar G.S.Sci-D, CSRTI,Mysore	39	Dr. K.P.Kirankumar, Sci - D, RSRS,Ananthapur
14	Dr.Tanmoy sarkar, Sci-D, CSRTI,Mysore	40	Dr.Vinod Kumar Yadav, Sci-C, RSRS, Mulugu
15	Dr.ThirupathaiahY. Sci-D, CSRTI,Mysore	41	Dr.V.Vijay, Sci-C, SSBS, Conoor
16	Dr.Gayathri.T,Sci-C,CSRTIMysore	42	Dr.A.L.Jadav, Sci-C, REC, Parbhani
17	Dr.SobhanaV,Sci-C,CSRTI,Mysore	43	Dr.Muthanna,Sci-C,REC, Krishnagiri
18	Dr.Joycy rani D Sci-C CSRTI, Mysore	44	Dr.Babulal Saini, Sci - B, P4BSF Hassan
19	Dr.RanjiniM.SSci-CCSRTIMysore	45	JRF/PA
20	Dr. Mahesh R.Sci – C, CSRTI, Mysore	46	Chitra.S,PA
21	Dr. Manjappa, Sci – C, CSRTI, Mysore	47	Nandini.D.R,PA
22	Dr.Shivakumar,Sci-C,Mysuru	48	Harshita.C, PA
23	Dr.Bhavya M.R,Sci-C,Mysuru	49	Harshitha R, PA
24	Dr.Dhaneswer Padhan Sci-B,CSRTI,Mysore	50	Prakruithi.C.S, PA
25	Dr.Megaladevi P, S.Sci-B, CSRTI,Mysore	51	Chandana R,JRF
26	Dr.Sowmya K, S.Sci-B, CSRTI,Mysore	52	Madlambika PA