

MINUTES OF 78th MEETING OF RESEARCH COUNCIL HELD ON 28th FEBRUARY 2025 AT CSRTI, MYSORE

The 78th meeting of Research Council of CSRTI-Mysuru was conducted on 28th February 2025 to review the new concept notes, concluded research projects, progress of on-going projects, Extension Communication Programmes and Capacity Building Programmes 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. Balasaraswathi, Scientist-D, and Head PMCE welcomed Director and Chairperson of RC, all the Heads of Divisions/sections, scientists and SRFs, JRFs, PAs of the main Institute and all Scientists from RSRSs, RECs and REC sub units, who attended the meeting. Director Dr. S. Gandhi Doss, in his opening remarks welcomed all the scientists of Institute, RSRS, RECs and spoke about the importance of conducting the meeting 78th RC and proposal of concept notes.

He informed the house that he has participated the Bharath Tex Expo during 17th February 2025 at New Delhi. During the event Institute has signed the MOA with Siripoorna foods, Agri Pvt. Ltd., Tumkur, regarding implementation of Industry Institutional consultancy project to develop antidiabetic formulations from mulberry leaf extract/powder and to test anti-diabetic properties of formulations by *in-vitro* and *in-vivo* methods at CSRTI Mysuru.

He further advised the scientist to take up new projects on new ideas on utilization of seriwaste for product diversification as per the MOT and also issues related to filed that can solve the problems to help the industry to grow.

CONFIRMATION OF THE MINUTES OF THE 77th MEETING OF RC HELD ON 24.12.2024.

The minutes of the 77th meeting of RC were circulated among all the members. As no comments were received from the members the minutes were confirmed.

FOLLOW- UP ACTION TAKEN ON DECISIONS OF PREVIOUS MEETINGS OF RC/ RAC

Director and Chairperson of RC, opined that separate presentation is not required as the follow up action taken on the decisions of 77th RC will be discussed then and there during the review of progress.

1. CONCEPT NOTES OF RESEARCH PROJECTS FOR APPROVAL

1. Development of Climate Smart Sericulture Village (CSSV): A Step towards Climate Resilient Silk Production

Decision: Dr. Amit Kumar presented the concept note and the committee while approving the concept note advised to revise the methodology by considering the technologies suitable for marginal farmers and the study may be restricted to Southern India. Accordingly, the concept note needs to be revised including the budget

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

2. Design and development of silk-based personnel-care products to burden-off natural resources from microplastic pollution

Decision: Dr. Amit Kumar presented the concept note and the committee approved the concept note with few suggestions. Methodology needs clarity. It is advised to use the silk produced following the SOP of medically fit silk. Apart from testing the product clinically, it is very important to consider the cost effectiveness of the products.

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

3. Development of protocol for production of wine from mulberry fruit for value addition

Decision: Dr. Mahesh R presented the concept note and the committee has approved it as a pilot study, as the recipe of wine preparation from mulberry fruits has already been studied and documented by CSGRC, Hosur, and hence the PI is advised to clarify how it differs from the earlier study in the methodology.

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

4. Development of machineries for extraction of crude oil from silkworm spent pupae

Decision: Dr. Mahesh R presented the concept note and the committee approved the concept note and suggested to fabricate and attach a washing device to the machine if feasible.

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

5. Assessment of Net Rhizodeposition: The Hidden part of Nutrient Cycling in Mulberry

Decision: Dr. Dhaneshwar Padhan presented the concept note and the committee approved as a pilot study. Committee advised to follow the official procedure while transferring the plant material to other agency for analysis as per the material transfer agreement.

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

6. Studies on Disease Dynamics in Mulberry and Factors Responsible for Disease Progression

Decision: Ms. Boggala Vajramma presented the concept note and the committee not approved the concept note as it is a regular and hence the committee suggested to take up the study as a continuous program at Institute level.

(**Action:** Ms. BoggalaVajramma, Sci-B, Mul. Pathology)

7. Cryptic Epidemics in Mulberry: Unraveling Viral, Viroid and Phytoplasmal Infections and Their Transmission Mechanisms

Decision: Ms. Boggala Vajramma presented the concept note and the committee approved the concept note with suggestions. The details of outsourcing should be specified clearly in the work plan and the methodology needs to be revised considering the similar kind of study in other crops.

(**Action:** Ms. BoggalaVajramma, Sci-B, Mul. Pathology)

8. Extraction and characterization of Sodium copper chlorophyllin and Pheophorbide in mulberry silkworm excrement for the biomedical applications

Decision:Dr. E. Bhuvaneshwari, presented the concept note and committee approved and advised to submit it in RMIS-01 format.

(**Action:** Dr. E. Bhuvaneshwari, Sci-D, SW Phy)

9. Efficacy of hydrogels under sensor-based irrigation on growth and productivity of tree mulberry under semi-arid conditions

Decision:Dr. Ramya V S presented the concept note and committee did not approve the concept note as similar kind of study has already been undertaken by many other research Institute/agricultural University.

(**Action:** Dr. Ramya V S, Sci-B, RSRS Ananthpur)

10. Evaluation of Synergistic Effects of Microbial and Non-Microbial Biostimulants on Growth, Quality and Yield of Mulberry (*Morus* spp)

Decision:Dr. Srinivasulu Y presented the concept note and committee approved the concept note with suggestion to revise methodology including the source material of biostimulants. The project duration also to be revised.

(**Action:** Dr. Srinivasulu Y, Sci-D, REC Chitradurga)

11. Development of IOT based automation for fertigation technology in mulberry under precision farming.

Decision: Dr. Mahesh R presented the concept note and committee approved the concept note.

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

12. Optimizing Eri-Culture on Tapioca: A Sustainable Approach for Enhancing Tapioca Farmer's Income

Decision: Dr. Manjappa presented the concept note and committee approved the concept note with suggestion to revise the methodology after discussing with the experts working at Tapioca and Castor Research Station, Yethapur.

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

13. Innovative Processing of Silkworm Pupae for New Food Product Development

Decision: Dr. E. Bhuvaneshwari, presented the concept note and committee approved and advised to reduce the objectives into three.

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

2. REVIEW OF CONCLUDED PROJECT

1. **PRE01030CN: Development of an integrated management package for the broad mite, *Polyphagotarsonemus latus* (Acari: Tarsonemidae), in mulberry**

Decision: Dr. S. Mahiba Helen, Sci-D presented concluded report and the committee advised to submit the concluded report at the earliest.

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

2. **AIB01032SI: Validation of silk regulators - ubiquitin and mannosidase among silkworm breeds**

Decision: Dr. Kusuma L, Sci-D presented concluded report and the committee advised to present the results before RAC. Further it is suggested to submit the analyzed data in the concluded report in RMIS 10.

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

3. **AIB01024MI: Development of productive, autosexing silkworm breeds/ hybrids of *Bombyx mori* L. in egg stage and separation of male silkworm population by optical sorting method for commercial exploitation**

Decision: Dr. Kusuma L, Sci-D presented concluded report and the committee advised to submit the concluded report with statistical analysis.

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

4. **AIE01026MI: Evaluation of new bivoltine double hybrid, BFC1xBFC10 at farmers level for authorization for commercial exploitation**

Decision: Dr. K.N. Madhusudhan, Sci-D presented concluded report and the committee advised to season-wise statistically analyzed data in tabular form with overall performance of the hybrid need to be presented in next RAC.

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

3. REVIEW OF ON-GOING PROJECT

1. **PIE 13001 MI (AICEM Phase-IV): All India Coordinated Experimental Trial in Mulberry Phase-IV**

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

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

2. **PIE01022 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 progress and committee noted the progress.

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

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

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

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

4. PPA01034 SI: Development of customized fertilizer for higher mulberry productivity

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

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

5. PPA01035SI: Studies on natural farming in mulberry for sustainability

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

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

6. PIN01042SNC: Synthesis and characterization of nano-fertilizers and their evaluation in mulberry cultivation

Decision: Dr. Dhaneshwar Padhan presented progress and the committee noted the progress. The committee also advised to achieve the target milestones within the set time frame.

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

7. MFM01043 SNC: Development and validation of tractor mounted mulberry shoot harvester cum bundling device

Decision: Dr. R. Mahesh presented progress and committee noted the progress. The committee advised to present statistically analyzed data in next RC.

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

8. PIC01044SNC: Mitigating Human-Animal Conflicts in Forest Fringe Villages: Mulberry Based Cropping Program-Derived Animal Repellents

Decision: Dr. Arunakumar G. S. presented progress and committee noted the progress.

(**Action:**Dr. Arunakumar G. S., Sci-D, Mul. Patho)

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

Decision: Dr. Divya Singh presented progress and committee noted the progress.

(**Action:**Dr. Gayathri T, Sci-D, Mul. Physio)

10. MTL01025MI-Life Cycle Assessment of Mulberry Silk: A National Assessment

Decision: Dr. Amit Kumar presented progress and committee noted the progress.

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

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

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

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

12. 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 progress and committee advised to present the statistically analyzed data in the next RC.

(Action: Dr. Shivkumar, Sci-B, MBL)

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

Decision: Dr. Mallikarjuna presented progress and committee noted the progress.

(Action: Dr. Mallikarjuna G., Sci-D, SW Patho)

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

Decision: Dr. Y. Thirupathaiah presented progress and committee noted the progress. The committee advised to conclude the project within the extended project period.

(Action: Dr.Y.Thirupathaiah, Sci-D, SW Physio)

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

Decision: Dr. Y. Thirupathaiah presented progress and committee noted the progress. The committee to conclude the project within the extended project period.

(Action: Dr. Y. Thirupathaiah, Sci-D, SW Physio)

16. BPS 01045 MNC-Optimization of Preservation Techniques and Quality Assessment of Mulberry and Eri Silkworm Pupae for Human Consumption

Decision: Dr. Y. Thirupathaiah presented the progress and committee noted the progress.

(Action: Dr. Prasanth M. Nair, Sci-B, SW Physio)

17. ARE01029MI -Recommendations of novel fungicidal and insecticidal applications for mulberry

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

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

18. MOE 01048 SNC: Studies to find out prevalence of health problems faced by the stakeholders involved in pre-cocoon sector of mulberry sericulture.

Decision: Dr. Joycy Rani D presented progress and committee noted the progress and advised to fasten the process of execution of MOU with ISEC, Bengaluru.

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

19. SPR 01047 MIC: Sustainability Index analysis of existing sericulture based Integrated Farming Systems

Decision: Sri. S. B Kulkarni presented progress and committee noted the progress.

(Action: Sri. S. B Kulkarni, Sci-D, RSRS Kodathi)

20. SPR01046MIC:Studies on the factors responsible for non-spinning in mulberry silkworm

Component-1: A study on the physiological changes and disease incidence leading to non-spinning syndrome in mulberry silkworm *Bombyx mori*

Decision: Dr. E. Bhuvanewari presented progress and committee noted the progress.

(Action: Dr. E. Bhuvanewari, Sci-D, Silkworm Phy)

Component 2:Comparative cytological, cytotoxicity and transcriptome level variations in spinning and non-spinning silkworms

Decision: Dr. Ranjini. M.S presented progress and committee noted the progress.

(Action: Dr. Ranjini. M.S, Sci-D, BBL)

Component 3:Development of Integrated package for dissipating soil pesticide residue in mulberry garden for successful silkworm rearing

Decision: Dr. Satish. L presented progress and committee noted the progress.

(Action: Dr. Satish. L, Sci-D, Silkworm Path)

Component 4: Study on the impact of pesticides utilized for the control of thrips and mites on the occurrence of non-spinning condition and its impact on soil microbes

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

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

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

TRAINING DIVISION: Dr. Revappa, Sci-B presented the progress and the committee noted the progress.

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

RSRS Kodathi: Dr. V. Lakshmanan, Sci-D presented the progress activities of CBT, ECPs and CPP activities and committee noted the progress.

RSRS Salem: Dr. Dhahira Beevi, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and committee noted the progress.

RSRS Ananthapur: Dr. Kiran Kumar, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and committee noted the progress.

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

RSRS, Mulugu: Dr. Vinod Kumar Yadav, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and committee noted the progress.

P4 Hassan: Dr. Dayananda, Sci-D presented the progress of activities of P4 Hassan

SSBS Conoor: Dr. Vijay, Sci-C, presented the progress of activities of SSBS Conoor and committee noted progress.

Other Decisions on concept notes presented earlier:

The concept notes viz., GIS- based mapping of host plant wealth and top soil chemistry in sericulture: quantification and spatial distribution- Dr. Amit Kumar, Development of soil fertility Mapping using Geospatial Technology for Mulberry Growing Soils of South India- Dr. R. Mahesh and Estimation of Mulberry Acreage and green biomass through remote sensing in Karnataka – Dr. Manjappa were in same pipeline, each being subset of component with in others. Hence, the concept notes submitted by Dr. R. Mahesh & Dr. Manjappa are withdrawn.

Concluding remarks by the Director

Director advised all project investigators to prepare presentation slides as per the guidelines circulated by PMCE Section. Proper statistical analysis has to done in each project.

b. Gandhi 4/4/25

DIRECTOR
CHAIRMAN RC

Annexure-I

List of participants of institute and nested units attended 78th meeting of RC held on 28th February 2025

#	Name & Designation	#	
1	Dr.S.Gandhi Doss, Director ,CSRTI, Mysore	31	Dr. Kartik kumar M, Sci-B, CSRTI, Mysore
2	Dr.S.Balasaraswathi, Sci-D CSRTI, Mysore	32	Dr. Meghaladevi, Sci-B, CSRTI, Mysore
3	Dr. R Bhagya, Sci-D CSRTI, Mysore	33	Dr. Latha Preethi, Sci-B, CSRTI, Mysore
4	Dr. Dayananda, Sci-D, CSRTI, Mysore	34	Bogala Vajramma, Sci-B, CSRTI, Mysore
5	Dr. C.M. Babu, Sci,- D, CSRTI, Mysore	35	Devasagaram D, A.S(A), Computer (I/c)
6	Dr. M. Muthulakshmi, Sci,- D, CSRTI, Mysore	36	Pushpa Prajapati, JE (Elect.) Maintenance
7	Dr. K. N. Madhusudhan, Sci – D, CSRTI, Mysore	37	Prarthana MS, PA, Mol. Bio. Lab II
8	Dr. Amit Kumar, Sci - D, CSRTI, Mysore	38	Harshitha C, PA, BBL
9	Dr.S.Mahiba Helen, Sci-D, CSRTI, Mysore	39	Sahana G, PA, SWPath.
10	Dr.KusumaL., Sci-D, CSRTI, Mysore	40	Thippeswamy L, PA, BBL
11	Dr.SatishL, Sci-D, CSRTI, Mysore	41	Tunvi Rahman, PA, Agronomy
12	Dr.RavindraSci-D, CSRTI, Mysore	42	Swathi KR, JRF, Agronomy
13	Dr. Chanrdakanth N, Sci - D, CSRTI, Mysore	43	Krishna Kumar R, PA, Agronomy
14	Dr. Arunkumar GS, Sci - D, CSRTI, Mysore	44	Prakruth CS, PA, MBL
15	Dr. Mallikarjuna G, Sci-D, CSRTI, Mysore	45	Shamitha M, PA, SSC
16	Dr.Tanmoy sarkar, Sci-D, CSRTI, Mysore	46	Nandini DR, PA, BBL
17	Dr.ThirupathaiyahY., Sci-D, CSRTI, Mysore	47	Manikanta N, PA, Agronomy
18	Dr.SobhanaV, Sci-C, CSRTI, Mysore	48	Chandini S, JRY, MB-I
19	Dr.E.Bhuvaneswari, Sci-C, CSRTI, Mysore	49	Nisarga NR, YP-I, Mol Bio-I
20	Dr.Joycy rani D, Sci-C, CSRTI, Mysore	50	HM Munikrishnappa, AD, PMCE
21	Dr.Ranjini M.S, Sci-C, CSRTI, Mysore		
22	Dr. Mahesh R., Sci – C, CSRTI, Mysore		RSRSs/RECs
23	Dr. Manjappa, Sci – C, CSRTI, Mysore	51	Dr.V.Lakshmanan, Sci - D, RSRS, Kodathi
24	Dr.Shivakumar, Sci-C, CSRTI, Mysore	52	Sri. S. B Kulkarni, Sci - D, RSRS, Kodathi
25	Ms. Bhavya M.R, Sci-C, CSRTI, Mysore	53	Dr. K.P.Kirankumar, Sci - D, RSRS,Ananthapur
26	Dr. Divya Singh, Sci-C, CSRTI, Mysore	54	Dr. N DhahiraBeevi, Sci - D, RSRS Salem
27	Dr. Dhaneshwar Padhan, Sci-C, CSRTI, Mysore	55	Dr. Y Srinivasalu, Sci – D, REC Chitradurga
28	Ms. Tamilselvi.C, Sci-B, CSRTI, Mysore	56	Dr.VinodKumar Yadav, Sci-C, RSRS, Mulugu
29	Dr. Sowmiya K, Sci-B, CSRTI, Mysore	57	Dr.V.Vijay, Sci-C, SSBS, Conoor
30	Dr. Revappa M R, Sci-B, CSRTI, Mysore	58	Dr. VS Ramya, Sci-B