

MINUTES OF 77th RESEARCH COUNCIL MEETING HELD ON 24th DECEMBER 2024 AT CSRTI, MYSORE

The 77th meeting of Research Council of CSRTI-Mysuru was conducted on 24th December 2024 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. 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 and SRFs, JRFs, PAs of the main Institute and all Scientists from RSRSs, RECs and REC sub units, who attended the meeting. Director and Chairperson of RC, 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 RC and proposal of concept notes.

He opined that to meet the set targets for raw silk production for the year 2030 and 2047, this institute focusing on development of eco-friendly and cost effective technologies. Further, there is a need to develop technology for climate resilience and drought prone areas for horizontal expansion of mulberry cultivation and research needs to be focused on mechanization in sericulture to reduce the drudgery and to increase net income.

CONFIRMATION OF THE MINUTES OF THE 76th MEETING HELD ON 25.09.2024.

The minutes of the 76th 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

Dr. S. Balasaraswathi, Sci-D, PMCE presented the follow up action taken on the decisions of last RC and RAC. The meeting continued as per the agenda.

CONCEPT NOTES OF RESEARCH PROJECTS FOR APPROVAL

1. Grafting-mediated mulberry improvement for biotic and abiotic stress tolerance

Decision: Dr. Manjappa presented the concept note and the committee approved the concept note. and advised to restrict the number of objectives. The existing grafting technologies already developed by CSGRC Hosur can be used in the work plan and the grafting technologies should be targeted to root rot, root knot diseases and alkalinity stress.

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

2. Estimation of mulberry acreage through remote sensing in Karnataka

Decision: Dr. Manjappa presented the concept note and the committee approved the concept note and advised to submit the concept note in RIMS-01 format.

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

3. Development of Soil Fertility Mapping using Geospatial Technology for Mulberry Growing Soils of South India

Decision: Dr. Mahesh presented the concept note the committee approved the concept note and advised to submit the concept note in RIMS-01 format.

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

4. Cyanobloom foliar spray: Enhancing mulberry growth and silkworm productivity through biostimulant and probiotic action

Decision: Dr. Sowmiya K presented the concept note and the committee approved the concept note and suggested to quantify the nitrogen fixation of the cyanobloom so that chemical nitrogen fertilizer input can be minimized. Further, the effects of cyanobloom foliar spray on silkworm and the compatibility of cyanobloom with existing cyanobacteria need to be tested. Committee advised to work out the economics and calculate cost-benefit ratio of the technology.

(Action: Dr. Sowmiya K, Sci-B, Scientist-B, Agronomy)

5. Development of Standard Operating Procedure (SOP) for vermicomposting of sericulture residue

Decision: Dr. Sowmiya K presented the concept note and the committee approved the concept note as a pilot study.

(Action: Dr. Sowmiya K, Sci-B, Scientist-B, Agronomy)

6. Development of a potential bacterial consortium to improve mulberry leaf quality under drought condition

Decision: Dr. Divya Singh presented the concept note and the committee approved the concept note and advised to submit the concept note in RIMS-01 format.

(Action: Dr. Divya Singh, Sci-C, Mul. Physiol.)

7. Next-Gen Biologics: Harnessing metabolites for enhanced growth, yield and protection in mulberry

Decision: Ms. Boggala Vajramma presented the concept note and the committee approved the concept note with suggestion to include metabolites profiling in work plan.

(Action: Ms. Boggala Vajramma, Scientist-B, Mulberry Pathology)

8. Development of microbial consortia for root knot nematode management in mulberry

Decision: Ms. Boggala Vajramma presented the concept note and committee not approved and advised not to propose this concept note at present scenario since Mr. Pro has been

recommended and commercialized recently to control both root rot and root knot diseases infecting mulberry.

Action: Ms. Boggala Vajramma, Scientist-B, Mulberry Pathology)

9. Integrated Management & Strategies to Mitigate Dermestid Beetle Infestation in Sericulture

Decision: Latha Preethi A presented the concept note and committee approved the concept note with suggestions. The number of Co-Investigators need to be minimized. The duration of the project should be maximum one and half a year. A thorough review of literature and clear methodology need to be incorporated in the concept note. Further, a Co Investigator from SSPC, Mysuru can be included.

(Action: Dr. Latha Preethi A, Sci-B, PML)

10. Gender Dynamics in Sericulture: A Socio-Economic and Technological Assessment of Participation, Adoption, and Training Involvement

Decision: Ms. Tamilselvi C presented the concept note and approved the concept note. The committee suggested to define sample size and include more indicators in the work plan and to develop a unique scale under the project. Also suggested to include CIs from Nested Units.

(Action: Ms. Tamilselvi C, Sc-B, PMCE)

11. Seri – SOP: Development of a Solar Powered CRC model for Sustainable Sericulture

Decision: Ms. Tamilselvi C presented the concept note and suggested to develop a model in the institute instead of taking it as a project.

(Action: Ms. Tamilselvi C, Sc-B, PMCE)

2. REVIEW OF CONCLUDED PROJECT

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

Decision: Dr. Madhusudhan K.N, Sci-D presented concluded report and the committee advised to submit the concluded report at the earliest and present in upcoming RAC.

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

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

Decision: Dr. Madhusudhan K.N, Sci-D presented concluded report and the committee advised to submit the concluded report at the earliest and present in upcoming RAC.

(Action: Dr. Madhusudhan K.N, 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. Further the committee suggested to check the reeling parameters in the test varieties of mulberry in the upcoming crops.

(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 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-C, Agronomy)

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

Decision: Dr. R. Maheshpresented 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. Committee suggested coordinating for fund release and initiation of the work at TNAU Nano Technology department.

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 demonstrate the mulberry shoot harvester cum bundling device to the Scientists.

(**Action:**Dr. R. Mahesh, Sci-C, 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 intimated the house that MoA had been signed recently hence, there was a delay in initiation of the project. The committee advised to achieve the fixed milestones for the quarter.

(**Action:**Dr. ArunakumarG. S., Sci-D, Mul. Pathology)

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

Decision: Dr. Gayathri T, Sci-C presented progress and committee noted the progress.

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

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

Decision: Dr. Kusuma presented progress and committee noted the progress and advised to conduct demonstration to the Scientists from NSSO and to conclude the project within the stipulated time.

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

12.AIE 01026 MI: Evaluation of new bivoltine double hybrid, BFC1xBFC10 at farmers level for authorization for commercial exploitation

Decision: Dr. K.N. Madhusudhan presented progress and committee noted the progress and suggested to conclude the project within the stipulated time.

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

13.AIB01032 SI: Validation of silk regulators- ubiquitin and mannosidase among silkworm breeds

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

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

14.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)

15.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 suggested to analysis the data with proper statistical tool and present in the next RC.

Action:Dr. Shivkumar, Sci-C, MBL)

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

Decision: Dr. Mallikarjuna presented progress and committee suggested to forewarming and forecasting with the available data and presented in upcoming RC, RAC

Action:Dr. Mallikarjuna G., Sci-C, Silkworm Physiology)

17.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. Also advised to conclude the project with in the extended project period.

(Action:Dr.Y.Thirupathaiah, Sci-D, Silkworm Physiology)

18.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. Also advised to conclude the project with in the extended project period.

(Action: Dr.Y.Thirupathaiah, Sci-D, Silkworm Physiology)

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

Decision: Dr. Prasanth M. Nair presented the progress and committee noted the progress.

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

20.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)

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

Decision: Dr. S. Mahiba Helen presented progress and committee noted the progress. Also advised to submit the concluded report with full justification for not conducting the toxicological study.

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

22.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. Further, it is suggested to submit the revised project proposal including all the suggestions given by the experts and to initiate the work as per mile stone.

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

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

Decision: Sri. S. B Kulkarni, Sci-D presented progress and committee noted the progress. Advised to conduct an online meeting with all CIs and discuss.

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

24. SPR 01046 MIC: Studies on the factors responsible for non spinning in mulberry silkworm

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

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

PILOT STUDIES:

Evaluation of Artificial diet for popular and new breeds of silkworm *Bombyx mori*

Decision: Dr. Bhuvaneshwari, E. presented the progress and committee noted the progress. The committee advised to submit the concluded report on the data of silkworm crop performance using different diets.

(**Action:** Dr. Bhuvaneshwari, E, Sci-C, Silkworm Physiology)

Development and evaluation of multipurpose new room and bed disinfectant for the management of silkworm diseases.

Decision: Dr. Mallikarjuna, G presented the progress and committee noted the progress. Also advised to present the statistically analyzed data on the efficacy of disinfectant in disease management in the next meeting.

(**Action:** Dr. Mallikarjuna, G Sci-C, Silkworm Pathology)

SEEM DIVISION: Dr. Joycy Rani D M, Sci-D CSRTI, Mysore presented the progress and the committee noted the progress.

TRAINING DIVISION: Dr.Revappa, Sci-B presented the progress and the committee noted the progress. Further Committee suggested to take up necessary steps to speed up the FST program by the nested units to achieve the fixed target during 2024-25

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 committee noted the progress.

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

RSRS, Mulugu: Dr. Vidod Kumar Yadav, Scientist-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. The committee advised to submit the action taken report on the decisions of the Member Secretary during his visit to SSBS, Conoor.

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).


27/11/25
DIRECTOR
CHAIRMAN RC

Annexure-I

List of participants of institute and nested units attended 77th meeting of RC held on 24th December 2024

#	Name & Designation	#	
1	Dr.S.Gandhi Doss, Director ,CSRTI, Mysore	26	Dr.Prashanth M Nair .Sci-B, CSRTI,Mysore
2	Dr.S.Balasaraswathi Sci-D CSRTI, Mysore	27	Dr.Kartik kumar Sci-B, CSRTI, Mysore
3	Dr. C.M. Babu, Sci- D, CSRTI, Mysore	28	Dr.Revappa M R Sci-B, CSRTI, Mysore
4	Dr. Dayanada, Sci – D, CSRTI, Mysore	29	Dr.Dr.Sowmya K, S.Sci-B, CSRTI,Mysore
5	Dr.S.Mahiba Helen Sci-D, CSRTI Mysore	30	Meghaladevi Sci-B, CSRTI, Mysore
6	Dr. K. N. Madhusudhan, Sci – D, CSRTI, Mysore	31	Tamilselvi.C, Sci-B, CSRTI, Mysore
7	Dr. Kusuma L, Sci - D, Mysuru	32	Latha Preethi Sci-B, CSRTI, Mysore
8	Dr. Amit Kumar, Sci - D, Mysuru	33	Bogala Vajramma Sci-B, CSRTI, Mysore
9	Dr.Satish LSci-D, CSRTI,Mysore		RSRSs/RECs
10	Dr.Ravindra Sci-D, CSRTI,Mysore	34	Dr.V.Lakshmanan, Sci - D, RSRS, Kodathi
11	Dr.Tanmoy sarkar, Sci-D, CSRTI,Mysore	35	Dr. N. Balachander , Sci-D RSRS, Kodathi
12	Dr. Chanrdakanth, Sci - D, Mysuru	36	Sri. S. B. Kulkarni, Sci-D, RSRS, Kodathi
13	Dr.Thirupathaiyah Y. Sci-D, CSRTI, Mysore	37	Dr. K.P.Kirankumar, Sci - D, RSRS,Ananthapur
14	Dr.Arunakumar G.S.Sci-D, CSRTI,Mysore	38	Dr.VinodKumar Yadav, Sci-C, RSRS, Mulugu
15	Dr. Mahesh R.Sci – C, CSRTI, Mysore	39	Dr.V.Vijay, Sci-C, SSBS, Conoor
16	Dr.Shivakumar,Sci-C,Mysuru	40	Dr.Muthanna,Sci-C,REC, Krishnagiri
17	Dr.Dhaneswer Padhan Sci-C,CSRTI, Mysore		
18	Dr.Mallikarjuna, Sci-C, CSRTI, Mysore		
19	Dr.Joycy rani D Sci-C, CSRTI, Mysore		
20	Dr. Divya singh, Sci-C, Mysuru		
21	Dr. Manjappa, Sci – C, CSRTI, Mysore		
22	Dr.E.Bhuvanewari, Sci- C, CSRTI, Mysore		
23	Dr.Bhavya M.R,Sci-C,Mysuru		
24	Dr.Gayathri.T,Sci-C,CSRTIMysore		
25	Dr.SobhanaV,Sci-C,CSRTI,Mysore		