

**MINUTES OF 75th RESEARCH COUNCIL MEETING HELD ON 11.06.2024 AT CSRTI,
MYSORE**

The 75th meeting of Research Council of CSRTI-Mysuru was conducted on 11th and 12th June 2024 to review the new concept notes, concluded research projects, progress of on-going 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 and SRFs, JRFs, PAs of the main Institute and all Scientists from RSRs, RECs and REC sub units, 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 informed the house that concept notes/projects need to be formulated to mitigate the ill-effects of climate change, to promote by-product utilization and to promote mechanization in sericulture. He also informed that any mid-term corrections, if necessary, can be made in the ongoing projects. Further he informed that any new project/concept note where collaboration is necessary, the Investigator may collaborate with private parties to achieve the proposed milestones in time. He also informed that the Incubation Center of the Institute need to be established by the end of June 2024.

CONFIRMATION OF THE MINUTES OF THE 74th MEETING HELD ON 05.03.2024.

The minutes of the 74th meeting of RC was circulated among all the members. Since no comments were received from the members of the committee the minutes were confirmed.

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

PIN01042SNC: the project has been coded and the activities need to be carried out within the time frame. MOE01031CN: Gujarat project, action may be taken against PI, CIs and Collaborator due to non-achievement of targets/milestones. PIB3632: Two triploid genotypes, Tri-8 and Tri-9 identified from FYT project can be taken for next evaluation in AICEM project, hence a letter with required information needs to be submitted to MVAC. PPA01034 SI: The PI can meet with the referee and modify the experimental design of the project.

CONCEPT NOTES OF RESEARCH PROJECTS FOR APPROVAL

1. Value Chain Analysis in Sericulture: Enhancing Efficiency, Quality, and Profitability

Decision: Dr. Revappa M Rebasiddanavar, presented the concept note and the committee approved the concept note with the following suggestions which need to be included in the proposed concept notes. Committee suggested that the objectives and outcomes should be precise and sample size need to be increased. One CI from each of the collaborating Institutes viz., CSB-CSRTI, Berhampore, CSB-CSRTI, Pampore and CSB-CSTRI, Bangalore, need to be included in the project. Exporters also need to be incorporated in experimental samples. The title needs to be modified based on the objectives of the project. A thorough discussion with Dr. P. Kumarasen, Sci-D, CSB need to be done for revision of the project. Sample size may be divided across the State in proportion to mulberry silk production.

(**Action:** Dr. Revappa M Rebasiddanavar, Sci-B, Training Division)

2. Silk Or Milk: A comparative Economic study of rural enterprises in South Karnataka

Decision: Dr. Revappa M Rebasiddanavar, presented the concept note and the committee approved the concept note with the following suggestions. A thorough review of literature needs to be done and to be incorporated in the project. One Scientist with specialization in veterinary science needs to be included as CI in the project, sample size needs to be modified as per the objectives of the study. Samples need to be categorized to three groups viz., sericulture farmers, milk farmers and farmers producing both silk and milk.

(**Action:** Dr. Dr. Revappa M Rebasiddanavar, Sci-B, Training Division)

3. Silkworm Egg Counting Automation with Deep Learning Algorithms

Decision: Ms. Tamilselvi C, presented the concept note and the committee approved the concept note with the following suggestions. The technology should be optimized and compatible for loose eggs counting also and revise the budget accordingly.

(**Action:** Ms. Tamilselvi C, Sci-B, PMCE Section)

4. Development of mulberry genotypes with high leaf cuticular wax to enable high leaf moisture retention capacity

Decision: Dr. Manjappa, presented the concept note and the committee approved the concept note with the following suggestions. Committee suggested to collaborate with CSB-CSGRC, Hosur for taking up hybridization experiments simultaneously in CSRTI, Mysuru and CSGRC, Hosur. Further, committee also suggested to increase the number of cross combinations in the study. Leaf anatomical parameters also need to be included in the project for identification of mulberry genotypes with high leaf moisture retention capacity. Budget need to be revised. Mulberry accessions with high wax content identified under DBT-CSB funded project may be included as parents.

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

5. Development and Evaluation of Lignocellulolytic Microbial Consortia for Effective Seri Waste Decomposition

Decision: Dr. Sowmiya K, presented the concept note and the committee approved the concept note. Budget need to be revised and instead of one JRF, one project assistant can be included in the project. Mulberry leaf and compost quality parameters need to be studied. The silkworm bioassay needs to be performed by feeding mulberry leaves to ascertain that the newly identified consortia should not have a deleterious effect on silkworm. After incorporation of the suggestions, the revised concept note needs to be submitted.

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

6. Mechanization in weight and packaging of silkworm eggs and starch spreading during preparation of loose egg sheets

Decision: Dr. Ranjini M S, presented the concept note and the committee approved the concept note. Further, suggested that concept note need to be discussed with Dr. Senthil Kumaran, Principal Scientist, IIHR, Bengaluru and RAC Member. Further committee suggested that Industrial partner for collaboration need to work out. Also, committee suggested that starch spreading and drying mechanism also need to be incorporated in the fabrication of machine for both purposes like starch spreading and drying of sheets.

(**Action:** Dr. Ranjini M S, Sci-C, BBL Section)

7. Improvement of sericin rich breeding resource through conventional breeding programme

Decision: Dr. Ranjini M S presented the concept note and the committee approved the concept note. The committee suggested to focus on development of sericin rich silkworm hybrids.

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

8. Exploration of mulberry new productivity potential under different irrigation systems

Decision: Dr. Ramya V S presented the concept note and the committee approved the concept note. The title needs to be changed and methodology needs to be revised with inclusion of only one mulberry variety in the study. Replications to be fixed based on the degrees of freedom in the experimental design.

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

9. Developing an IoT-Based System under precision farming in mulberry cultivation for sustainable sericulture

Decision: Dr. Y. Srinivasulu, presented the concept note and the committee approved the concept note. Committee advised to modify the objectives. The concept note should be revised based on the decisions of the meeting to be held with Fasal team on 13.06.2024.

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

10. Evaluation of artificial diet for popular and new breeds of silkworm *Bombyx mori*

Decision: Dr. Bhuvaneshwari E. presented the concept note and the committee approved the concept note. The Committee suggested to include TT21x TT56 in the experiment.

(Action: Dr. Bhuvaneshwari E. Sci-C Silkworm Physiol)

2. REVIEW OF CONCLUDED PROJECT/PILOT STUDY

1. AIB 01009 MI: Evaluation of new bivoltine silkworm double hybrid TT21xTT56 at farmer's level for authorization and commercial exploitation

Decision: Dr. K.N. Madhusudhan, presented the progress of the project and committee advised to present the season wise statistically analyzed data in comparison with double hybrid FC1xFC2. Further, it is suggested to complete the trial of 4000 dfls before HAC meeting and submit the final concluded report by incorporating all suggestions in RMIS10 format by 30-06-24.

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

2. ***Development of process for production of Biorefinaries from silkworm rearing waste***

Decision: Dr. Y. Thirupathaiah presented and committee noted the progress. The committee advised to submit the concluded report immediately.

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

3. **PROGRESS OF ON-GOING PROJECTS**

1. **PIE13001MI: All India Coordinated Experimental Trials for Mulberry (AICEM)–Phase-IV**

Decision: Dr. Manjappa, presented the progress and the committee noted the progress. Committee suggested to recheck data on the leaf/cocoon ratio of the test and check mulberry genotypes.

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

2. **PIE01022SI: 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. **PIE01036SI: 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. Committee suggested to establish the rain out shelter and to procure equipment proposed under the project within 1st quarter of 2024-25.

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

4. **PPA01034SI: Development of customized fertilizer for higher mulberry productivity**

Decision: Dr. Mahesh R, presented the progress and the committee noted the progress. Based on the comments of the expert as mentioned by the RAC chairman the treatments may be revised.

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

5. PPA01035SI: 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)

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

Decision: Dr. Dhaneshwar Padhan, presented the progress and the committee noted the progress. Committee suggested to expedite the process of MoU with TNAU.

(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 the progress and the committee noted the progress.

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

8. 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, presented the progress and the committee noted the progress.

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

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

Decision: Dr. Amit Kumar, presented the progress and the committee noted the progress. The committee suggested after getting the information from IARI, the revised project proposal should be prepared and forwarded to RCS.

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

10.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. Committee suggested to follow up the budget utilization at ACU, BG Nagara. The project should be completed within the extended period of the project and the concluded project report should be submitted in time.

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

11.BPS01028CN: 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.

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

12.AIB01024 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 of the project and the committee dissatisfied with the progress. Further, Dr. Kusuma L explained the reasons behind the delay in the procurement of the optical egg sorting machine within the project period. The committee insisted that all project investigators involve themselves in the execution of the project activities actively and an appeal for extension of the project period may be submitted to draw conclusive results in the project.

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

13.AIB01032SI: 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)

14.AIE01026MI: Evaluation of new bivoltine double hybrid, BFC1xBFC10 at Farmer's level for authorization for commercial exploitation

Decision: Dr. K.B. Chandrashekar, presented and committee noted progress.

(**Action:** Dr. K.B. Chandrashekar, Sci-D, MBL)

15. 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. N. Chandrakanth, presented the progress and committee noted the progress .

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

16. SIB01040SIC: Identification of a new male component for Pure Mysore replacing CSR2 (PMxCSR2) for better crop stability and silk quality.

Decision: Dr. Purohit Pravinbhai, presented the progress and committee noted the progress. Committee suggested to include all popular bi-voltine breeds.

(**Action:** Dr. Sivakumar, Sci-C, BBL)

17. ARP01033CN: Mulberry Silkworm Disease Monitoring and Management in Southern States of India.

Decision: Dr. Sathish, L presented the progress and committee noted the progress. Further, he clarified set of objectives under the project and Pebrine monitoring committee to the members. The work is as per mile stone.

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

18. SRE01039MIC: 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 to achieve the set milestones within the project period.

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

19.BPS01041SGC: *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. The committee advised to execute MoU with VC&RI, Namakkal and insisted to achieve the set of milestones within the time period.

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

20.ARE01029MI : *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)

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

Decision: Dr. S. Mahiba Helen, presented and committee noted progress. Committee recommended for extension of the project.

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

22.MOE01031CN: *Technology demonstration and evaluation of rearing performance of bivoltine*

Decision: Dr. Jadhav Ashok Limbaji, presented the progress. The committee advised to submit a request letter for extension of the project with proper technical justification. Further, Nodal Officer, Gujarat and PI are requested to arrange an online meeting by 1st week of July 2024 and an off line meeting for project site inspection with the MD, Real silk farmers' federation.

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

SEEM DIVISION

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

TRAINING DIVISION

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

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. N. Dhahira Beevi, Scientist-D 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 presented the progress of the centre.

P4 Hassan

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

SSBS Conoor

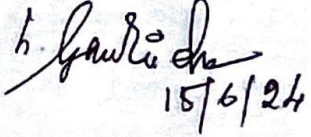
Dr. K.B. Chandrashekar, Sci-D, presented the progress of activities of SSBS Conoor and committee noted progress. Committee suggested that old silkworm breeds/races may be replaced with new races/breeds for maintenance.

Concluding remarks by the Director

1. Director advised all project investigators to take immediate action to submit request letter for extension of the project well in advance (if necessary) and to initiate procurement of equipment/machine within 1st quarter of 2024-25.
2. Concluded project report needs to be uploaded in eSubMIS within 1 month after completion
3. Research Articles should be submitted along with the concluded project reports of all concluded projects
4. Monthly report should be submitted on or before 3rd day of every month

5. Timely submission of work done report of PA/JRF/SRF/Skilled-Worker/Semi-Skilled workers on or before 4th day of every month on google form.
6. The progress made in the projects whose progress are submitted to RCS, Bengaluru, for want of information to report to MoT, must be submitted through Google sheet created by PMCE on or before 03rd of every month.

The ATR on the decisions during the 75th meeting of RC and the approved concept notes after incorporating the suggestions should reach PMCE on or before 01.07.2024.



H. Gauri Shah
15/6/24

DIRECTOR

Annexure-I

List of participants attended Research Council meeting held on 11.6.2024

#	Name & Designation		Name & Designation
1	S. Gandhi Doss, Director and Chairperson RC	26	Ranjini MS Sci-C CSRTI, Mysore
2	K.B.Chandrashekar, Sci - D, CSRTI Mysore	27	Gayathri, T. Sci-C CSRTI, Mysore
3	C.M. Babu, Sci-D CSRTI, Mysore	28	Joycy Rani D, Sci-C CSRTI, Mysore
4	S. Balasaraswathi, Sci-D, CSRTI, Mysore	29	Dhaneshwar Padhan Sci-C CSRTI, Mysore
5	R. Bhagya, Sci-D CSRTI, Mysore	30	Divya Singh Sci-C CSRTI, Mysore
6	R Meenal Sci-D CSRTI, Mysore	31	Prasanth M. Nair Sci-B CSRTI, Mysore
7	Dhahira Beevi, Sci-D, RSRS Salem	32	Sowmiya .K Sci-B CSRTI, Mysore
8	V. Lakshmanan, Sci-D, RSRS Kodathi	33	Megaladevi, P Sci-B CSRTI, Mysore
9	K.P. Kiran Kkumar, Sci-D, RSRS Ananthapur	34	Boggala Vajramma CSRTI, Sci-B CSRTI, Mysore
10	Y. Srinivasulu, Sci-D, REC Chithradurga	35	Purohit Pravinbhai Babubhai Sci-B CSRTI, Mysore
11	Dayananda, Sci-D, P4 Hassan	36	Latha Preethi, A. Sci-B CSRTI, Mysore
12	M. Muthulakshmi Sci-D CSRTI, Mysore	37	Revappa M.R. Sci-B CSRTI, Mysore
13	S. Mahibha Helen, Sci-D CSRTI, Mysore	38	Tamilselvi. C. Sci-B CSRTI, Mysore
14	Madhusudhan, Sci-D CSRTI, Mysore	39	Ramya, V.S Sci-B RSRS Ananthapur
15	Amit kumar, Sci-D CSRTI, Mysore	40	H.M.Munikrishnappa CSRTI, Mysore
16	N Chandrakanth Sci-D CSRTI, Mysore	41	Dr.G.S. Geetha
17	Arun kumar G.S Sci-D CSRTI, Mysore	42	Nisarga N.R,JRF
18	Satish L, Sci-D CSRTI, Mysore	43	Rashmitha, R,PA
19	Thirupathaiah Y. Sci-D, CSRTI, Mysore	44	Nandini, D R,PA
20	Ravindra Sci-D CSRTI, Mysore	45	Harshitha, K.M,PA
21	Kusuma L Sci-D CSRTI, Mysore	46	Madalambika, JRF
22	Tanmoy Sarkar, Sci-D CSRTI, Mysore	47	Shamath, D.H. PA
23	Manjappa Sci-C CSRTI, Mysore	49	Prarthana, M.S. JRF
24	Mahesh R. Sci-C, CSRTI, Mysore	50	Sahana, PA
25	Bhuvanewari E. Sci-C CSRTI, Mysore	51	Chinmaye A.C

Annexure-II

List of participants attended Research Council meeting held on 12.6.2024

#	Name & Designation		Name & Designation
1	S. Gandhi Doss, Director and Chairperson RC	26	Prasanth M. Nair Sci-B CSRTI, Mysore
2	K.B.Chandrashekar, Sci - D, CSRTI Mysore	27	Sowmiya .K Sci-B CSRTI, Mysore
3	C.M. Babu, Sci-D CSRTI, Mysore	28	Megaladevi, P Sci-B CSRTI, Mysore
4	S. Balasaraswathi, Sci-D, CSRTI, Mysore	29	Boggala Vajramma CSRTI, Sci-B CSRTI, Mysore
5	R. Bhagya, Sci-D CSRTI, Mysore	30	Purohit Pravinbhai Babubhai Sci-B CSRTI, Mysore
6	R Meenal Sci-D CSRTI, Mysore	31	Revappa M.R. Sci-B CSRTI, Mysore
7	V. Lakshmanan, Sci-D, RSRS Kodathi	32	Tamilselvi. C. Sci-B CSRTI, Mysore
8	Dayananda, Sci-D, P4 Hassan	33	Ramya, V.S Sci-B RSRS Ananthapur
9	M. Muthulakshmi Sci-D CSRTI, Mysore	34	H.M. Munikrishnappa CSRTI, Mysore
10	S. Mahibha Helen, Sci-D CSRTI, Mysore	35	Dr. G. S. Geetha
11	K.N.Madhusudhan, Sci-D CSRTI, Mysore	36	Shamath, D.H. PA
12	Amit kumar, Sci-D CSRTI, Mysore	37	Prarthana, M.S. JRF
13	N Chandrakanth Sci-D CSRTI, Mysore	38	Chinmaye A.C PA
14	Arun kumar G.S Sci-D CSRTI, Mysore	39	Harshitha , K.M PA
15	Satish L, Sci-D CSRTI, Mysore	40	Harshitha , R PA
16	Thirupathaiah Y. Sci-D, CSRTI, Mysore		
17	Ravindra Sci-D CSRTI, Mysore		Online participants
18	Kusuma L Sci-D CSRTI, Mysore	41	Siddique Ali Ahmed, Sci-D, CBT , Bangalore
19	Tanmoy Sarkar, Sci-D CSRTI, Mysore	42	Humayun Sharief Sci-D, REC Baramati
20	Manjappa Sci-C CSRTI, Mysore	43	Ashok Jadhav Limbaji, Sci-C, REC Parbhani
21	Mahesh R. Sci-C, CSRTI, Mysore		
22	Bhuvanewari E. Sci-C CSRTI, Mysore		
23	Ranjini MS Sci-C CSRTI, Mysore		
24	Gayathri, T. Sci-C CSRTI, Mysore		
25	Joycy Rani D, Sci-C CSRTI, Mysore		
26	Dhaneshwar Padhan Sci-C CSRTI, Mysore		
27	Divya Singh Sci-C CSRTI, Mysore		