

**MINUTES OF 74th RESEARCH COUNCIL MEETING HELD ON 04.03.2024 AT CSRTI,
MYSORE**

The 74th meeting of Research Council of CSRTI-Mysuru was conducted on hybrid mode on 4th and 5th March 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 RSRs, RECs and REC sub units, who attended the meeting physical and on line.

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 also shared the experience on attending the mega event Bharath Tex Expo 2024 conducted at New Delhi from 26.2.24 to 29.2.2024 by the Ministry of Textiles. Two MOUs on Mr. Pro. Solid and liquid production and extraction of Chitin/Chitosan technology were signed by CSRTI, Mysuru with M/S Rainbow technology and M/s. Azymus life Sciences respectively on 28.02.2024 in the International conference organized by CSTRI at New Delhi.

Further, he shared the appreciation of the Secretary and Joint Secretary in the event about the technology development and the improvement of raw silk production from 1211 MT in the year 1949 to 36582 MT in the year 2023 by CSB to the sericulture industry. Further, he encouraged the scientists to work on area of research viz., mechanization in association with the AI, the byproduct utilization to improve the cocoon productivity and to minimize the labour requirement in the field of sericulture. In addition, he expressed the byproduct and its utilization also has wide scope for taking the project and improve the economic status of the sericulturist and entrepreneurs.

CONFIRMATION OF THE MINUTES OF THE 73rd MEETING HELD ON 12.12.2023.

The minutes of the 73rd meeting of RC were circulated among all the members. However, Dr. Amit Kumar, Scientist-D raised a point on the nomenclature of the instrument figured in the minutes under MTL 01025 MI project and also on the presentation of the project progress and the same have been clarified. Then, the minutes were confirmed.

REVIEW OF 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/RAC/special RC. The meeting continued as per the agenda.

CONCEPT NOTES OF RESEARCH PROJECTS FOR APPROVAL

1. Development and validation of bed disinfectant device for silkworm rearing (Collaborative pilot project)

Decision: Dr. R. Mahesh, presented the concept note and the committee approved the concept note, subjected to following suggestions are incorporated. The technology can be validated in the large scale which includes commercial CRCs and late age rearing. Accordingly the device can be designed. Further, the committee suggested to take in project mode rather than pilot study and revise the title and budget. Some criteria need to be considered while validation of device i.e., amount of disinfectant powder falling per sq feet and number of refillings required in each larval stage.

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

2. Development of superior mulberry genotypes for higher productivity and leaf quality through conventional hybridization.

Decision: Dr. Karthik Kumar. M, presented the concept note and the committee approved and advised to include thorough review of literature, methodology with root studies, number of crops, disease scoring. Accordingly the budget should be revised. The revised concept should be submitted in RMIS 01 format for forwardal to CO.

(Action: Dr. Karthik Kumar M Sci-B, MBG)

3. Screening and Evaluation of antimicrosporidian compounds

Decision: Dr. Mallikarjuna G, presented the concept note. The committee suggested to submit the proposal by including proper review of literature and to include the specific target protein expression while evaluating. Suitable methodology should be incorporated and submit the concept note.

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

4. Validation of the antiviral compound for the controlling of grasserie infection

Decision: Dr. Mallikarjuna G, presented the concept note. The committee approved the concept note and advised to revise the trial locations and suggested to select the farm based trial locations only in the southern India. Budget can be revised according to the number of trial locations.

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

5. Evaluation of preservation methods and quality analysis of Eri pupae for human consumption.

Decision: Dr. Prasanth M. Nair, presented the concept note. The committee approved the concept note because of the essentiality in addressing the research gap. The following suggestions need to be incorporated with reference to gamma radiation techniques in preserving the pupae and inclusion of melanization and its pathway and to identify the certified sensory evaluator for the assessment of preserved pupae. Further suggested to include the mulberry pupae also in the proposal in smaller scale. The feasibility of work can be discussed with the SSPC Hosur in respect to availability of pupae for the study and National meat research institute (NMRI) Hyderabad for technical aspects.

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

6. Occupational and health hazards of the stakeholders involved in the various activities of pre-cocoon sector of mulberry sericulture.

Decision: Dr. M. Muthulakshmi presented the concept note. The committee approved the concept and advised to revise the outcome of the concept and submit in RMIS 01format.

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

7. Dynamics of economic and technological factors in chawki rearing centres: Implications for sustainable growth in Southern India

Decision: Dr. Revappa, presented the concept note. The committee approved the concept note and suggested to revise the concept note with reference to methodology related to sample size, data collection in the commercial CRC of government and private. Further suggested to restrict the objectives to 3 numbers and the outcome should be clearly spelled out.

(Action: Dr. Revappa, Sci-B, Training)

8. Development of Microbial consortia for foliar disease management and plant growth promotion in Mulberry

Decision: Ms. Boggala Vajramma presented the concept note and committee approved the concept note and advised to incorporate the following suggestions. Thorough review of literature available related to the project, the prevalence of foliar disease in the field and similar kind of work carried out at field can level.

(Action: Ms. Boggala Vajramma, Sci-B, Mul Pathology)

9. Development of high fecundity bivoltine silkworm hybrid with adaptive response to redox imbalance utilizing thioredoxin peroxidase molecular marker

Decision: Dr. Ranjini, M.S, presented the concept note and committee approved the project and advised to utilize the results of pilot study in the proposed concept note.

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

10. Deciphering genetic diversity and unraveling population structure in elite eco races of Bombyx mori

Decision: Dr. Purohit Pravinbhai Babubhai presented the concept note and committee approved the concept note. The committee advised to review the similar kind of work carried out at SBRL, Bangalore and other institutes and incorporate in the concept.

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

11. Study on the effect of Wettable Sulphur and its impact on FC1 x FC2 double hybrid parents and foundation crosses.

Decision: Dr. Latha Preethi, A. presented the concept note. The committee approved the concept note since the information is very much essential. Further, it is suggested to remove the CI from P2, BSF, Yelagiri Hills and also advised to revise the title, incorporate the detailed methodology work plan for the seed crop and method of application. Accordingly the budget needs to be revised.

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

2. REVIEW OF CONCLUDED PROJECT/PILOT STUDY

1. PIB 3632: Evaluation of superior triploid mulberry genotypes for leaf yield under bush and high bush planting system in different agro-climatic conditions.

Decision: Dr. M.K.Raghunath, presented the concluded project and committee noted the outcome. The CIs from RSRS, Kodathi and RSRS Anandhapur are advised to submit the crop data to the PI for compilation of concluded report in RMIS 10 format immediately.

(Action: Dr. M.K.Raghunath, Sci-D, MBG)

3.PROGRESS OF ON-GOING PROJECTS

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

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

(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, Sci-C, presented the progress and the committee noted the progress. The PI requested for screening 36 genotypes under hotspot since the pot study proposed in the project could not give complete disease expression compare to the filed study. The committee noted and asked the PI why the methodology was not included in the project while formulating the project for approval/coding. However, considering the significance of the result, a formal approval letter may be sent to RCS.

(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, Sci-C, presented the progress and the committee noted the progress. He also informed that clarification on the construction of rainout shelter under the project has been already submitted to RCS for administrative and financial approval.

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

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

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

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

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

Decision: Dr. C.M. Babu, Sci-D, presented the progress and the committee noted the progress.

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

6. 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. Physiology)

7. MTL01025MI -Life cycle assessment of mulberry silk: A National Assessment

Decision: Dr. Amit Kumar, Sci-D presented and committee noted the progress.

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

8. 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, Sci-C presented and committee noted progress. As there were lapses in the first bidding in the procurement of optical egg sorting machine once again the

quotations were called . In this regard, PI is advised to coordinate with the store section CSRTI and CO for the procurement of the same at the earliest.

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

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

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

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

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

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

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

11. 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, Sci-D, presented the progress of the project and committee advised to achieve the set targets as per the milestones and compile the data and submit the concluded report in RMIS 10 format with in April 2024 positively.

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

12. 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 project duration was extended for 6 months and the PI is advised to achieve the set target as per the milestones and to utilize the budget fully and arrange the submission of utilization certificate by the collaborator.

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

13.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 project duration was extended for 6 months and the PI is advised to achieve the set target as per the milestones and to utilize the budget fully and arrange the submission of utilization certificate by the collaborator.

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

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

Decision: Dr. Mallikarjuna, G, Sci-C presented the progress and committee noted the progress.

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

15. ARE01029MI : Recommendations of novel fungicidal and insecticidal applications for mulberry

Decision: Dr. S. Mahiba Helen, presented and committee noted progress. The work is as per the milestone

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

16. 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. Further suggested to conduct two more trials and discuss with the PI in the NBAIR for drawing the concluded report.

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

17. MOE01031CN Technology Demonstration and Evaluation of Rearing Performance of Bivoltine

Decision: Dr. Jadhav Ashok Limbaji, presented the progress. The committee observed that the milestones are not achieved and hence suggested to arrange a online meeting urgently involving nodal officer of the state and the concerns.

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

18. 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. L. Kusuma presented the progress and committee noted the progress. Further suggested to submit the final copy of the project in RMIS 02 format with updated budget.

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

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

Decision: Dr. K.B. Chandrasekhar presented the progress and committee noted the progress. Further the committee suggested the PI to submit the final copy of the project in RMIS 02 to RCS and for referees comments.

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

20. 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. Further the committee advised to present in 51st RAC with referees comments for ratification.

(Action :Dr. Thirupathaiah, Sci-C, SW phy)

21. 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. Further the committee advised to present in 51st RAC with referees comments for ratification.

(Action :Dr. Thirupathaiah, Sci-C, SW phy)

PILOT STUDIES

1. Development of process for production of Biorefinaries from silkworm rearing waste

Decision: Dr. Y. Thirupathaiah presented and committee noted the progress. Since the project is going to be concluded in the March 2024 and advised to submit the concluded report within time.

(Action : Dr. Y.Thirupathaiah, Sci-C, SWPhysiology)

SEEM division

Dr.M.Muthulakshmi, Sci-D, 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/ MULUGU

RSRS Kodathi

Dr. V. Lakshmanan, Scientist-D presented the progress of 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 Mulugu

Mr. Ragavendra, STA, presented the progress of activities of CBT, ECPs and CPP activities and committee noted the progress.

RSRS P4 Hassan

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

SSBC Conoor

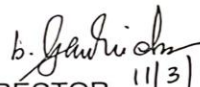
Dr. V. Vijay, Scientist-C, presented the activities of SSBC Conoor. Further committee suggested to coordinate with maintenance section and to speed up the process of fencing and installation of CCTV Camera in the station.

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

Concluded remarks by Director:

- Scientist are advised to submit the reports, project proposal and research articles in time.
- Scientist are advised to submit their interest towards working in different section to PMCE
- All the sectional heads are advised to submit the video clip for 2-3 min regarding technology developed in the respective section to SEEM division.

The meeting ended with vote of thanks proposed by Dr. S. Balasaraswathi, Sci -D, PMCE.
The ATR on the above decisions should reach this office on or before 15.03.2024


DIRECTOR 11/3/24
Chairman RC

List of participants attended Research Council meeting held on 04.03.2024

#	Name & Designation		Name & Designation
1	S. Gandhi Doss, Director and Chairperson RC	31	Latha Preethi, A CSRTI, Mysore
2	K.B.Chandrashekar,Sci - D, CSRTI Mysore	32	Boggala Vajramma CSRTI, Mysore
3	S. Balasaraswathi, Sci-D, CSRTI, Mysore	33	Purohit Pravinbhai Babubhai CSRTI, Mysore
4	Raghunath M.K. Sci-D, CSRTI, Mysore	34	H.M.Munikrishnappa CSRTI, Mysore
5	R. Bhagya, Sci-D CSRTI, Mysore	35	Nisarga N.R.,JRF
6	R Meenal Sci-D CSRTI, Mysore	36	Rashmitha, R,PA
7	C.M. Babu, Sci-D CSRTI, Mysore	37	Nandini, D R,PA
8	M. Muthulakshmi Sci-D CSRTI, Mysore	38	Harshitha, K.M,PA
9	S. Mahibha Helen, Sci-D CSRTI, Mysore	39	Madhalambika,JRF
10	Amit kumar, Sci-D CSRTI, Mysore		
11	Manjappa Sci-C CSRTI, Mysore		
12	Mahesh R. Sci-C, CSRTI, Mysore		On-line participation
13	Mallikarjuna G, Sci-C, CSRTI Mysuru	40	Dhahira Beevi, Sci-D, RSRS Salem
14	N Chandrakanth Sci-C CSRTI, Mysore	41	V. Lakshmanan, Sci-D, RSRS Kodathi
15	Thirupathaiah Y. Sci-C, CSRTI, Mysore	42	Dayananda, Sci-D, P4 Hassan
16	Ravindra Sci-C CSRTI, Mysore	43	Kulkarni, Sc-D, RSRS, Kodathi
17	Bhuvaneswari E. Sci-C CSRTI, Mysore	44	K.N. Madhusudhan, Sci-D, CSRTI, Mysore
18	Kusuma L Sci-C CSRTI, Mysore	45	Jadhav Ashok Limabaji, Sci-C, REC Parbhani
19	Ranjini MS Sci-C CSRTI, Mysore	46	Vijay V, Sci-C, SSBS Conoor
20	Gayathri, T. Sci-C CSRTI, Mysore	47	Dinesh Gupta, Sci-B, REC,Hosangabad
21	Sobhana, V. Sci-C CSRTI, Mysore	48	Siva Kumar, Sci-C, BBL
22	Tanmoy Sarkar, Sci-C CSRTI, Mysore	49	J.B.Nrendra Kumar, Sci-D, REC,Madiwala
23	Dhaneswar Padhan Sci-C CSRTI, Mysore	50	Ragavenrda, STA, RSRS Mulugu
24	Tamilselvi C Sci-B, CSRTI, Mysore		
25	Karthik kumar M Sci-B, CSRTI, Mysore		
26	Prashant Nair Sci-B, CSRTI, Mysore		
27	Sowmiya Sci-B, CSRTI, Mysore		
28	Revappa M R Sci-B, CSRTI, Mysore		
29	Meghaladevi Sci-B, CSRTI, Mysore		
30	Divya Singh Sci- C CSRTI, Mysore		