

MINUTES OF 72nd RESEARCH COUNCIL MEETING HELD ON 05.09.2023 AT CSRTI, MYSORE

The 72nd meeting of Research Council of CSRTI-Mysuru was conducted on hybrid mode on 05.09.2023 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 CSR&TI, Mysuru chaired the meeting and Dr. S. Balasarawsathi, Scientist-D, 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 said that, new projects need to be focused on addressing the mandates, challenges and opportunities for the Sericulture/CSB fraternity for enhancing sericulture productivity in Southern India. Recruitment of project staff and purchase of equipments should be completed within first quarter of the first year of the project. Publications needs to be made based on the outcome of the ongoing/concluded projects. Request for the extension of the project if required need to be sent to CO by six months in advance prior to the expected date of completion of the project. New projects need to be formulated based on the real field constraints for enhancing productivity and mitigating the high temperature and CO₂ variations. The mulberry variety MSG2 with high bush planting system can be popularized in the resource constraint area/ high alkaline soil through extension activities.

CONFIRMATION OF THE MINUTES OF THE 69th MEETING HELD ON 10.03.2023

The minutes of the 70th meeting of RC were circulated among all the members, since no comments were received from any of the member, minutes were confirmed.

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

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

CONCEPT NOTES OF RESEARCH PROJECTS FOR APPROVAL

1. Development of tetraploids from mulberry genotypes with morpho-physiological and growth traits associated with leaf productivity for hybridization breeding

Decision: Dr. Tanmoy Sarkar presented the concept note and the committee approved the concept note with few suggestions. Committee suggested to mention few popular triploid mulberry varieties in the review of literature and to mention number of plants per accession to be used for development of colchiploids in the work plan of the concept note.

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

2. Formulation of new room and bed disinfectant for the management of silkworm diseases

Decision: Dr. Mallikarjuna G. presented the concept note and approved with the following suggestions. The committee sought clarifications on the objective and work plan in the concept note. It is advised to discuss with a Senior Silkworm Pathologist on the work plan of the concept note.

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

3. An analysis of the efficacy and effectiveness of the available bed and room disinfectant for the management of silkworm diseases

Decision: Dr. Mallikarjuna G. presented the concept note. The committee did not approve the concept note as their efficacy were already proved. Instead, the suitability of bed and room disinfectants developed by other research Institutes in the prevailing condition may be studied.

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

4. Validation of the efficacy and effectiveness of new bed disinfectant for the management of silkworm fungal diseases.

Decision: Dr. Mallikarjuna G. presented the concept note. The committee did not approve the concept note since the similar concept note was proposed by Dr.L.Sathish, Sci-C which has been submitted to RCS in which Dr. G.Mallikarjuna, Sci-C is also a CI.

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

5. Evaluation of new bivoltine double hybrid, DHP5 at farmers' level as an alternative for FC1xFC2 for authorisation for commercial exploitation

Decision: Dr. Ranjini M.S. presented the concept note. Decision will be taken after presenting the data on the performance of the breed in the ensuing HAC meeting.

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

6. Production and evaluation of mulberry shoot based biochar for improving soil fertility and mulberry productivity

Decision: Dr. Sobhana V. presented the concept note. The committee approved the concept note with few suggestions. The committee suggested to include literature on biochar production, if any from CSRTI, Mysuru or other research Institutes.

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

7. Adaptation of low cost new technologies for the Maddur Seri-farmers field

Decision: Dr. Shivkumar presented the concept note and the committee approved the concept and also advised to modify the title, feasibility, objective, work plan of the project.

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

8. Evaluation of mulberry sericulture based integrated farming system in Karnataka

Decision: Dr. S.B. Kulkarni presented the concept note. The committee approved the concept. note.

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

2. REVIEW OF CONCLUDED PROJECT/PILOT STUDY

1. PIB-3633- Development of highly productive and widely adapted mulberry using exotics and wild germplasm

Decision: Dr. G. S. Arunakumar presented the findings of the concluded project. Committee noted the output of the project.

(Action: Dr. G. S. Arunakumar, Sci-C, Mol. Bio. I)

2. Isolation, identification and characterization of drought tolerant plant growth promoting microbes

Decision: Dr. Divya Singh presented the concluded report of the pilot study. The committee suggested to propose a project based on the outcome of the pilot study.

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

PROGRESS OF ON-GOING PROJECTS

1. PIB-3632: Evaluation of superior triploid genotypes for yield and adaptability under varied agro-climatic conditions

Decision: Dr. M.K. Raghunath, Sci-D, presented the progress and the committee noted the progress

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

2. 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)

3. 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.

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

4. 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.

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

5. MOE 01021 SI: Evaluation and popularization of improved technologies developed in the field of mulberry sector for South India.: Impact of drip fertigation technology on mulberry productivity.

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

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

6. 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)

7. 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)

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 Physiology)

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

Decision: Amit Kumar, presented and committee noted progress.

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

10. PRP-01015 SI: Identification, evaluation and inclusion of potential antagonistic microbes in Integrated Root Rot Disease Management in Mulberry

Decision: Dr. G. S. Arunakumar, Sci-C presented committee noted progress.

(Action : Dr. G. S. Arunakumar, Sci-C, Mol. Bio. I)

11. 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. The committee suggested to speed up the procurement of optical sorting machine.

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

12. AIE 01026 MI: Evaluation of new bivoltine double hybrid, BFC1xBFC10 at farmers 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, BBL)

13. AIB 01009 MI: Evaluation of new bivoltine silkworm double hybrid TT21xTT56 at farmers level for authorization and commercial exploitation

Decision: Dr. K.N. Madhusudhan, Sci-D, presented and committee noted the progress. The committee advised to complete the milestones with in the extended period.

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

14. BPS 01027 CN: Immunomodulatory and Adjuvant effects of Chitosan Nanoparticles Extracted

from Bombyx mori

Decision: Dr. Madhusudhan K.N presented and committee noted the progress.

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

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

Decision: Dr. Madhusudhan K.N presented and committee noted the progress.

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

16. 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)

17.AIT-01019-SI: Screening of drugs/Inhibitors to inhibit the PI3K-Akt pathway in Bombyx mori for controlling Nuclear Polyhedrosis Virus infection.

Decision: Dr. G. Mallikarjuna, Sci-C presented and the committee advised to verify the experimental data on the efficacy/inhibition of drugs in controlling NPV infection.

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

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

Decision: Dr. Mallikarjuna, G, Sci-C presented the progress and committee advised the check the data on the incidence of diseases during the period under report and to increase the sample size while recording the incidence of diseases infecting silkworm.

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

19. AIC01023SI: Development of Spectroscopic Tests for Insecticide Resistant Biomarkers in silkworm, Bombyx mori

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

(**Action** : Dr. Sathish L., Sci-C, S.W. Pathology)

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 the progress. The committee advised to complete the toxicological studies of *Hirsutella thompsonii* against silkworm.

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

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

Mulberry Sericulture In Navasari District (Gujarat)

Decision: Jadhav Ashok Limbaji presented the progress. The committee advised to submit a status report on the construction of rearing house under the project. Actual progress achieved must be reported in the montly report with out fail.

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

PILOT STUDY

Development of process for production of Biorefinaries from silkworm rearing waste Decision:

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

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

SEEM division

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

Sericultural Engineering Division

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

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

Progress of RSRS/P4 Hassan/SSBS Coonoor

RSRS Salem

Dr. Dhahira Beevi, Sci-D, RSRS Salem, presented and committee noted the progress.

RSRS Kodathi

Dr. V. Lakshmanan, and S.B. Kulkarni Sci-D, RSRS Kodathi presented and committee noted the progress.

RSRS Mulugu

Dr. Vinodkumar Yadav presented and committee noted the progress.

RSRS Ananthapur

Dr. K.P. Kiran Kumar, Sci-D, RSRS Ananthpur, presented and committee noted the progress

P4 Hassan

Dayananada, Sci-D, P4 Hasan presented and committee noted the progress.

SSBS Coonoor

Dr. V. Vijay presented and committee noted the progress.

The meeting ended with vote of thanks to chairperson.


DIRECTOR 30/9/2023

Annexure-I

List of participants attended Research Council meeting held on 05.09.2023

#	Name & Designation		Name & Designation
1	S. Gandhi Doss, Director and Chairperson RC	28	Rekha M DD (Stats) CSRTI Mysore
2	K.B.Chandrashekar, Sci - D, CSRTI Mysore	29	H.M.Munikrishnappa, AD, CSRTI Mysuru
3	S. Balasaraswathi, Sci-D, CSRTI, Mysore	30	Madolombika, PA, CSRTI Mysuru
4	Raghunath M.K. Sci-D, CSRTI, Mysore	31	Nandini D.R. PA, CSRTI Mysuru
5	Dayananada, Sci-D, P4 Hasan	32	Keerthana Varshini S. PA, CSRTI Mysuru
6	Babu C.M, Sci-D, CSRTI, Mysore	33	Harshitha R. PA, CSRTI Mysuru
7	K.N. Madhusudhan, Sci-D, CSRTI, Mysore	34	Prarthana M.S. JRF, CSRTI Mysuru
8	Amit Kumar Sci-C, CSRTI, Mysore	35	Varsha G.S. PA, CSRTI Mysuru
9	Shivakumar, Sci-C, CSRTI, Mysore	36	Sindhu B.C. PA, CSRTI Mysuru
10	N. Chandrakanth Sci-C, CSRTI, Mysore	37	Shruthi R. PA, CSRTI Mysuru
11	Ravindra Sci-C CSRTI, Mysore	38	Nisarga N.R, JRF, CSRTI Mysuru
12	Dhaneswar Padhan Sci-C CSRTI, Mysore	39	Jashwanth S, PA, CSRTI Mysuru
13	Manjappa, Sci-C CSRTI, Mysore	40	Shananth D.H, CSRTI Mysuru
14	Ranjini M.S, Sci-C, CSRTI Mysore	41	Azad Gul, Sr.FA, CSRTI Mysuru
15	Gayatri T, Sci-C, CSRTI Mysore		
16	Kusuma L. Sci-C, CSRTI, Mysore		On-line participation
17	S. Mahiba Helen, Sci -D, CSRTI, Mysore	1	Dhahira Beevi, Sci-D, RSRS Salem
18	Thirupathaiah Y. Sci-C, CSRTI, Mysore	2	Sreenivasulu. Sci-D, REC Chitradurga
19	Satish L Sci-C CSRTI, Mysore	3	Vinodkumar Yadav, Sci-C, RSRS Mulugu
20	Mahesh R. Sci-C, CSRTI, Mysore	4	S. Rajadurai, Sci-D, REC Vikarabad
21	Mallikarjuna G, Sci-C, CSRTI Mysuru	5	Narendra Kumar JB, Sci-D, REC Madivala
22	Arun kumar, Sci-C CSRTI, Mysore	6	Vijay V, Sci-C, SSBS Conoor
23	Tanmoy Sarkar. Sci-C CSRTI, Mysore	7	Jadhav Ashok Limabaji, Sci-C, REC Parbhani
24	R. Bhagya, Sci-D, CSRTI, Mysore	8	Kulkarni, Sc-D, RSRS, Kodathi
25	M. Muthulakshmi, Sci -D, CSRTI, Mysore	9.	N.Balachandran, Sci-D, RSRS, Kodathi
26	Bhuvaneswari E. Sci-C CSRTI, Mysore	10.	V. Lakshmanan, Sci-D, RSRS Kodathi
27	Divya Singh Sci- C CSRTI, Mysore	11.	K.P. Kiran Kumar, Sci-D, RSRS Ananthpur