

MINUTES OF THE 58th MEETING OF RESEARCH COUNCIL HELD ON 28th APRIL, 2016 AT CSRTI, MYSURU

The 58th meeting of the Research Council of CSRTI, Mysuru was held on 28th April, 2016 to review the new project proposals, outcome of the concluded research projects and take stock of the progress of on-going project/programmes of the Main Institute and its nested units. The meeting was presided over by Dr. V. Sivaprasad, Director, CSRTI-Mysuru and the Chairman, Research Council (RC). The list of the participants is appended at Annexure - I.

Mr. Munikrishnappa, H.M., Scientist-C, PMCE welcomed Dr. V. Sivaprasad, Director and the Chairman, RC and all participant scientists of the Institute & nested units attending the meeting. He also welcomed the invitees, Dr. A.K. Awasthi, Sc-D, Dr. Ponnuvelu, Sc-D, and Dr. Pradeep, A. R., Sc-D (SBRL, Bengaluru); Dr. Balachandran, N., Sc-D and Dr. Jhansi Lakshmi, Sc-D (CSGRC, Hosur). He requested the Chairman, RC for his opening remarks and sought permission to take up the agenda points.

Thereafter, agenda-wise discussions were held as follows:

ITEM NO. 1: CONFIRMATION OF THE MINUTES OF THE 57th MEETING HELD ON 20th March, 2015

As no comments were received from any of the members, the minutes of the 57th RC meeting were confirmed.

ITEM NO. 2: REVIEW OF THE FOLLOW UP ACTION TAKEN ON THE DECISIONS OF PREVIOUS MEETING

Mr. Munikrishnappa, H.M., Scientist-C, PMCE informed the committee about the follow up action taken on the decisions of previous meeting. The chairman appreciated the efforts of the scientists who have initiated new projects and for achieving the targets set for the year.

REVIEW OF ONGOING PROJECTS & CONCLUDED PROJECTS

The Chairman presented the R & D highlights of achievements made during 2015-16 under ongoing projects and concluded research projects in the main Institute and nested units. The chairman informed that RFD performance score of the Institute is >94% and congratulated all the scientists of the main Institute and nested units for this achievement. As the progress of on-going projects has been covered in the highlights and detailed discussions were held on the following concluded projects.

- 1. PIB 3507:** *Development of Distinctiveness, Uniformity and Stability (DUS) descriptors for mulberry (Morus spp.) and its validation (PPV & FRA) - Dr. V. Girish Naik*
- 2. PIG 3502:** *Sustaining mulberry yields: Identification of QTLs conferring resistance to root rot disease by Linkage Disequilibrium mapping and trait introgression (Phase I – DBT) - Dr. V. Girish Naik*
- 3. AIT 3445:** *Development of robust bivoltine hybrids tolerant to high temperature through DNA marker assisted selection – Dr. S. Manthira Moorthy*
- 4. AIB 3506:** *Studies on thermo tolerance, heat shock protein synthesis during thermal shock and inbreeding in silkworm, Bombyx mori L. (SERB-DST) – Dr. S. Manthira Moorthy*

5. Consultancy Project: *Validation and refinement of SERIFIT, an inorganic compound for effective sanitation - Dr. M. Balavenkatasubbaiah*

6. PRE 3512: *Identification the pest status and eco-friendly management of mulberry thrips. (in collaboration with NBAIR, Bengaluru) – Dr. S. Mahiba Helen*

Decision: The committee critically analyzed the results of the projects completed and discussed on the utilization of outcome for implementation in the field. The Chairman advised the investigators to submit the conclusion reports within a month for onward submission to CO.

[Action: Concerned PIs]

REVIEW OF NEW PROJECTS PROPOSED FOR CONSIDERATION

1. Identification of DNA markers for root knot nematode resistance in mulberry (Morus spp.). (4 years)

Decision: The concept note was approved with a suggestion to utilize the information available for few mulberry varieties for relative susceptibility to root knot nematode, while identifying the resistant/susceptible varieties.

[Action: Dr. Arun Kumar, Sc-B, Mol. Bio. L-1]

2. Mapping QTLs for alkalinity tolerance in Mulberry (Morus spp). (5 years)

Decision: The committee felt that panel of diverse germplasm should be extended to include the accessions identified for alkaline tolerance at CSGRC, Hosur and approved proposal.

[Action: Ms. Vaijyanthi, P.V., Sc-B, Mol. Bio. L-1]

3. Establishment of production prototype for cordyceps spp fruiting bodies on silkworm pupae. (2 years)

Decision: The proposal was approved with suggestions to modify the title and objectives and also to include establishment of pilot plant and use of live pupae in the methodology.

[Action: Dr. Y. Thirupathiah, Sc-B, SW Phy]

4. Identification of indices for abiotic stress tolerance in mulberry. (3 years)

Decision: The committee approved the proposal with a suggestion to revise the proposal by including the germplasm accessions identified for water use efficiency from CSGRC, Hosur.

[Action: Dr. T. Gayathri, Sc-B, MBG]

5. Engineering C4 Photo synthesis in Mulberry for Resilience to Climate Change (5 years)

Decision: The committee approved the proposal and the same will be carried out in collaboration with UAS, GKVK, Bengaluru/University of Hyderabad, Hyderabad.

[Action: Dr. Tanmoy Sarkar, Sc-B, MBG]

6. Transcriptome analysis in silkworm for identification of molecular markers for improvement of silk quality. (3 years)

Decision: The project was approved by RC as it is an important proposal for silk industry, aimed at developing markers for silk quality. Dr. A. R. Pradeep, Sc-D, SBRL, Bangalore would be included in the proposal as collaborator.

[Action: Dr. Kusuma L, Sc-B, BBL]

7. Evaluation of resource conservation technologies on soil health and fertility in mulberry cultivation. (4 years)

Decision: The proposal was approved with a suggestion to define the zero tillage and modify the title and outcome of the proposal needs to be defined clearly.

[Action: Ms. Sobhana V, Sc-B, SS&C]

8. *Demonstration on reclamation of sodic soils in mulberry farms. (4 years)*

Decision: The proposal was approved by RC as it is aimed to improve the soil health and also to make a demonstration plots at farm based units. Further, it was advised to include REC Koppal for sodic soil in the project in addition to the proposed ones.

[Action: Dr. Sibayan Sen, Sc-B, SS&C]

9. *Soil health cards for sericulture farmers in states of Karnataka, Tamil Nadu, AP, Telangana, Kerala, Maharashtra and Madya Pradesh. (3 years)*

Decision: The proposal is based on the PMO initiatives to issue the soil health cards to the farmers for judicious use of fertilizers. As per the RFD target 10,000 cards to be issued per year by main institute and RSRs. The Chairman suggested that the target for each cluster (100 Nos.) is to be fixed for the sample collection and the proposal was approved.

[Action: Ms. Sobhana V, Sc-B, SS&C]

10. *Feed supplementation studies for improving young age silkworm rearing in Chawki Rearing Centres. (2 years)*

Decision: The project was approved by RC with a suggestion to review the literature regarding diet formulations and to include the standardization of concentration, feed supplements and chawki certification parameters in methodology.

[Action: Dr. E. Bhuvaneshwari, Sc-B, SW Phy]

11. *Development of Seri-business models for enterprises in pre-cocoon sector. (2 years)*

Decision: The proposal is useful for developing Seri-business models for enterprises as a bankable model and same has been approved by RC.

[Action: Ms. Joycy Rani D, Sc-B, SEEM]

12. *Development of multi-viral disease tolerant (NPV, IFV and DNV) bivoltine silkworm breeds/hybrids of Bombyx mori L. through marker-assisted selection. (4 years)*

Decision: The Chairman approved the concept note as it is the need of the hour and part of climate resilience programme. Further, the expertise of Dr. Ponnuvel, Sc-D, SBRL, Bangalore may be utilized.

[Action: Dr. Satish L, Sc-B, BBL]

13. *Characterization of gut microbiome in silkworm Bombyx mori L. (3 years)*

Decision: The proposal is useful for understanding the gut microbiome in silkworm and same has been approved by RC

[Action: Dr.Y. Thirupathaiah, Sc-B, SWPhy]

14. *Development of quality based market models for bivoltine silk cocoons. (2 years)*

Decision: The proposal is based on the recommendations of the technical committee appointed by Government of Karnataka for promoting quality based pricing in cocoon markets. The RC approved the proposal to be taken up Ramanagaram cocoon market.

[Action: Mr. Yashavanth B.S, Sc-B, PMCE]

15. *Standardization and Validation of LAMP (Loop mediated isothermal amplification reaction) technique for detection of Nosema bombycis infection in silkworm, Bombyx mori L. (2 years)*

Decision: The proposal is aimed at Standardization and Validation of LAMP technique for the detection of *Nosema bombycis* infection in silkworm without using PCR and same has been approved by RC

[Action: Dr. G. Mallikarjuna, Sc-B, SWPath]

16. *Popularization of Serifit, a new disinfectant for effective sanitation in Sericulture. (15 months)*

Decision: RC approved the project as it is a follow up for the consultancy project and resulted in the development of product SERIFIT, a new general disinfectant developed and released during the Krishimela at Haveri. The company which produces SERIFIT would be approached for the supply of the product at a discounted rate for the project purpose.

[Action: Dr. A. V. Mary Josepha, Sc-D, SWPath]

17. *Formulation and evaluation of different artificial diets for production of Cryptolaemus beetles. (2 years)*

Decision: There are many problems for the mass multiplication of beetles on sweet pumpkin by rising mealybugs, which is limiting the production of beetles and biocontrol of mealybugs due to the limited availability of the beetles. To meet the requirement of beetles for mealybugs, alternative mass production methods are necessary and the proposed project concept was approved by RC.

[Action: Mr. J.B. Narendra Kumar, Sc-D, PML]

18. *Social Inclusion of women through sericulture - Lessons from Cluster Promotion programme. (2 years)*

Decision: RC approved the project as no such research on women has been undertaken in recent past and suggested to include Ms Joycy Rani, Sc-B, Mr. Yashavanth, Sc-B, CSRTI, Mysore, Ms. Punithavathi Sc-D, REC Udumalpet and Ms Vidhyunmala Sc-D, REC Penukonda as Co-Investigators.

[Action: Dr. G. S. Geetha , Sc-C, SEEM]

19. *Evaluation of new bivoltine hybrid silkworm double hybrid SSBS 5 X SSBS 6 at farmers level. (2 years)*

Decision: RC approved the proposal as a TOT Project which is required to be under taken as per the proposed action plan 2016-17.

[Action: Dr. E. Rajalakshmi, Sc-D, SSBS, Conoor]

20. *Genome sequencing of important Mulberry varieties of India. (5 years)*

Decision: The proposal was approved as genome sequencing has not been done before in mulberry.

[Action: Dr. Dr. V. Girish Naik, Sc-D, Mol. Bio. L-1]

21. *Development of mulberry variety tolerant to lower temperature (winter) through marker assisted breeding. (6 years)*

Decision: The committee has not approved the proposal as it is not a priority for southern India.

[Action: Dr. V. Girish Naik, Sc-D, Mol. Bio. L-1]

22. *Evolution of high yielding mulberry variety by microsatellite marker analysis for propagation through seeds. (5 years)*

Decision: The committee has not approved the proposal as it is not economical at field level.

[Action: Dr. V. Girish Naik, Sc-D, Mol. Bio. L-1]

23. *Vaporization technique for surface sterilization of silkworm seed to ensure the supply of disease free seeds. (3 years)*

Decision: The committee not considered the proposal as the proposed materials are not user friendly and are carcinogenic.

[Action: Dr. A.R.Narasimha Nayaka, Sc-D, SWPath]

24. *Evaluation of new bivoltine hybrid, S8 x CSR16 under authorization trials among the farmers. (2 years)*

Decision: RC approved for evaluation of new bivoltine hybrid, S8 x CSR16 as a TOT project which is proposed under the action plan 2016-17.

[Action: Dr. N. Mal Reddy, Sc-D, BBL]

25. *Field evaluation of Cauvery gold (MV1xS8): An improved cross breed for cocoon productivity and silk quality. (2 years)*

Decision: The committee approved for filed evaluation of new ICB as a TOT project which is proposed under the action plan 2016-17.

[Action: Mr. S.B.Kulkarni, Sc-C, MBL]

General points:

The Chairman informed all the PIs of new concept notes to revise the approved proposals and submit for CO clearance within a week's time.

[Action: All the concerned PIs]

The meeting ended with vote of thanks.

UTV, 09/05/16

Director and Chairman, Research Council

Annexure-I

**List of participants attended the Research Council meeting held on 28th April 2016 at
CSRTI, Mysore**

#	Name	Designation	Section/Unit
1.	Sivaprasad. V. (Dr.)	Director, CSRTI, Mysore	Chairman, Research Council
2.	Satish verma (Dr.)	Scientist-E	CSRTI, Mysore
3.	Awasthi A.K. (Dr.)	Scientist-D	SBRL, Kodathi
4.	Ponnuvelu, K.M.(Dr.)	Scientist-D	SBRL, Kodathi
5.	Pradeep, A. R. (Dr.)	Scientist-D	SBRL, Kodathi
6.	Jhansi Lakshmi (Dr.)	Scientist-D	CSGRC, Hosur
7.	Balachandran, N. (Dr.)	Scientist-D	CSGRC, Hosur
8.	Ambika, P.K. (Dr.)	Scientist-D	RSRS Kodathi
9.	Arun Kumar, G.S., (Dr.)	Scientist-B	CSRTI, Mysore
10.	Balavenkatasubbaiah, M.(Dr.)	Scientist-D	CSRTI, Mysore
11.	Bhagya, R. (Dr.)	Scientist-D	CSRTI, Mysore
12.	Bhuvaneshwari, E. (Dr.)	Scientist-B	CSRTI, Mysore
13.	Ch. Satyanarayana Raju	Scientist-D	RSRS, Ananthpur
14.	Dasappa (Dr.)	Scientist-D	CSRTI, Mysore
15.	Dayananda (Dr.)	Scientist-D	CSRTI, Mysore
16.	Gandhi Doss, S. (Dr.)	Scientist-D	CSRTI, Mysore
17.	Gangadhar, B. (Dr.)	Scientist-D	CSRTI, Mysore
18.	Gayatri, T. (Dr.)	Scientist-B	CSRTI, Mysore
19.	Geetha, G. S. (Dr.)	Scientist-C	CSRTI, Mysore
20.	Girish Naik, V. (Dr.)	Scientist-D	CSRTI, Mysore
21.	Gunasekhar, V. (Dr.)	Scientist-C	CSRTI, Mysore
22.	Himanthraj, M.T. (Dr.)	Scientist-D	RSRS, Kodathi
23.	Jayaram, H. (Dr.)	Scientist-D	REC SU, Kanakapura
24.	Joycy Rani, D.	Scientist-B	CSRTI, Mysore
25.	Kalpana, G. V. (Dr.)	Scientist-D	P4 BSF, Hassan
26.	Kariyappa (Dr.)	Scientist-D	CSRTI, Mysore
27.	Kulkarni, S. B.	Scientist-C	CSRTI, Mysore
28.	Kusuma, L. (Dr.)	Scientist-B	CSRTI, Mysore
29.	Lakshmanan, V. (Dr.)	Scientist-D	REC, Bidarakuppe
30.	Maheshwari, M. (Dr.)	Scientist-D	RSRS, Kodathi
31.	Mahiba Helen, S. (Dr.)	Scientist-C	RSRS, Salem
32.	Mahima Santhi, A. (Dr.)	Scientist-D	CSRTI, Mysore
33.	Mal Reddy, N. (Dr.)	Scientist-D	CSRTI, Mysore
34.	Mallikarjuna, G. (Dr.)	Scientist-B	CSRTI, Mysore
35.	Manthira Moorthy, S. (Dr.)	Scientist-D	CSRTI, Mysore
36.	Mary Josepha, A.V. (Dr.)	Scientist-D	CSRTI, Mysore
37.	Mogili, T. (Dr.)	Scientist-D	REC, V. Kota
38.	Munikrishnappa, H. M.	Scientist-C	CSRTI, Mysore
39.	Muniratnam Reddy, M. (Dr.)	Scientist-D	CSRTI, Mysore
40.	Nagaraj, S. B.	Scientist-D	CSRTI, Mysore
41.	Narasimha Nayaka, A. R. (Dr.)	Scientist-D	CSRTI, Mysore
42.	Narendra Kumar, J. B.	Scientist-D	CSRTI, Mysore
43.	Nishitha Naik, V. (Dr.)	Scientist-D	CSRTI, Mysore
44.	Pallavi, S. N. (Dr.)	Scientist-D	RSRS, Chamarajanagr
45.	Paramwshwar C	Scientist-D	CSRTI, Mysore
46.	Pratheesh Kumar, P. M. (Dr.)	Scientist-D	CSRTI, Mysore
47.	Purushotham, S. (Dr.)	Scientist-D	CSRTI, Mysore
48.	Rajakumar, S. (Dr.)	Scientist-D	RSRS, Salem

#	Name	Designation	Section/Unit
49.	Rajalakshmi, E. (Dr.)	Scientist-D	SSBS, Conoor
50.	Rajashekar, K.	Scientist-D	CSRTI, Mysore
51.	Raveendra Mattigatti (Dr.)	Scientist-D	REC SU, Kudligi
52.	Ravikumar, J. (Dr.)	Scientist-D	RSRS, Salem
53.	Sabitha, M. G.	Scientist-D	CSRTI, Mysore
54.	Santha, P. C. (Dr.)	Scientist-C	CSRTI, Mysore
55.	Sarala, K.	Scientist-D	REC, Palakkad
56.	Shanthan Babu, M. A.	Scientist-D	RSRS, Anathapur
57.	Sharmila, K. K. (Dr.)	Scientist-D	CSRTI, Mysore
58.	Satish, L. (Dr.)	Scientist-B	CSRTI, Mysore
59.	Sobhana, V.	Scientist-B	CSRTI, Mysore
60.	Somaprakash, D. S. (Dr.)	Scientist-D	CSRTI, Mysore
61.	Sreenivas, B. T. (Dr.)	Scientist-D	CSRTI, Mysore
62.	Srikanta Swamy, K. (Dr.)	Scientist-D	RSRS, Chamarajanagar
63.	Srinivasulu Reddy, P. (Dr.)	Scientist-D	REC, Suryapet
64.	Sudhakar, P. (Dr.)	Scientist-D	RSRS, Kodathi
65.	Suma, A. S. (Dr.)	Scientist-D	CSRTI, Mysore
66.	Sumathy, R. (Dr.)	Information Officer	CSRTI, Mysore
67.	Tanmoy Sarkar (Dr.)	Scientist-B	CSRTI, Mysore
68.	Vineet Kumar (Dr.)	Scientist-D	CSRTI, Mysore
69.	Vinod Kumar (Dr.)	Scientist-D	CSRTI, Mysore
70.	Virendra Kumar (Dr.)	Scientist-D	CSRTI, Mysore
71.	Yashavanth, B. S.	Scientist-B	CSRTI, Mysore