

Minutes of 50th Meeting of Research Council (26th April 2019 at CSR&TI, Berhampore, West Bengal)

50th Research Council meeting of CSR&TI, Berhampore was held on 26th April 2019 under the Chairmanship of Dr. V. Sivaprasad, Director in the Institute.

Dr. D. Pandit, Scientist-D (PMCE) welcomed Dr. V. Sivaprasad (Director&Chairperson), scientists and other participants. At the outset, Dr. V. Sivaprasad in his introductory remarks highlighted R & D targets for 2019-20 and thrust areas of sericulture. He added each scientist should be involved in the project(s) either as PI or CI and one scientist can be associated with a maximum of four projects. He further added that the role of Scientists should be demarcated clearly in project proposals and job charts, similarly for associates (TAs/SRFs/JRFs). New research proposals should be prepared following new guidelines circulated by CSB. He also encouraged the scientists to make collective efforts for the development of sericulture in the zone. Later, agenda-wise items were taken up for discussion. List of participants is appended in **Annexure – I**.

ITEM NO.1: Confirmation of the minutes of 49th meeting of Research Council (RC) held on 15th & 16th November, 2018 at CSR&TI, Berhampore.

As, no comments were received from any of the members, the minutes were confirmed.

ITEM NO. 2: Review of follow-up action taken on the recommendations/ decisions of 49th meeting of Research Council (RC) held on 15th & 16th November, 2018.

Regarding quality control analysis of the products developed by the Institute, manufacturers need to pay for the analysis. It was also advised to explore the possibilities to develop powder formulation of Morizyme-B.

[Action: Dr. K. Rahul, Dr. Anil Pappachan and Dr. Deepika, K. U, Sci-Bs]

With regard to the long pending procurement of farm machineries for Agronomy & Soil Science Section, it was advised to go for continuous follow-ups for the procurement of the same in the year 2019-20.

[Action: Dr. R. Mahesh, Sci-B, Agronomy & Soil Science]

With regard to the concluded projects AIB 3514 (*Development of multivoltine based congenic/NIL breed of silkworm, through introgression of ID gene and its uses*) & AIB 3547 (*Development of high temperature & high humidity tolerant bivoltine breeds of silkworm*), the RC advised the PIs to take necessary action on the suggestions made during technical audit.

[Action: Dr. A. K. Verma, Sci-D & Dr. N. Chandrakanth, Sci-B, SBG]

With regard to the approved concept note of project entitled "*Identification of mulberry leaf endophytes for management of leaf spot diseases*", PI was advised to submit the full proposal (as per the new guidelines) for referee's comments **within 15th May 2019**.

[Action: Dr. A. Pappachan, Sci-B, Mul. Pathology]

With regard to the project PPF 3585, PI was advised to submit the concluded report (as per the format) by **15th May 2019**.

[Action: Dr. R. Mahesh, Sci-B, Agronomy & Soil Science]

Regarding CPP of E & NE India, it was observed that progress was not satisfactory as only 60% of the targets for year 2018-19 were achieved and RC advised CDFs to make collective efforts for achieving CPP targets for 2019-20. Further, coordinator was strictly advised to issue memo's to the CDFs for explaining reasons for lower crop performance and for not achieving the set targets.

[Action: Shri G.C. Das, Sci-D, SW physiology RTI & Bv Cell]

ITEM NO. 5: APPROVAL OF NEW RESEARCH PROJECTS

The following new research proposals/concepts were presented by the concerned scientists and RC critically reviewed the proposals. The decisions are as follows:

Title: Evaluation of selected mulberry genotypes for leaf & cocoon productivity under irrigated condition

Duration: 3 years

Observation/Suggestion: PI was advised to modify the project title as “*Final Yield Trial of newly identified mulberry genotypes*”. He was also advised to incorporate considering 3’x3’ spacing with detailed methodology in the proposal.

Decision: *Approved and advised to submit the full proposal to CSB at the earliest.*

[Action: ShriYallappaHarijan, Scientist-B, MBG]

Title: Identification & improvement of resistance against whitefly in mulberry

Duration: 3 years

Observation/Suggestion: PI was advised to modify the title of project as “*Identification of resistance against whitefly in mulberry*”. Further, PI was advised to refer the methodology adopted in agriculture and horticulture crops for insect resistance and give detailed screening procedure in the proposal. After identifying the sources of resistance, bio-assay studies should be undertaken to test the leaf palatability.

Decision: *Approved and advised to submit the concept note to CSB within 15.05.2019.*

[Action: ShriYallappaHarijan, Scientist-B, MBG]

Title: Improvement of leaf longevity of mulberry in E & NE India

Duration: 3 years

Observation/Suggestion: PI was advised to consider other mulberry varieties/ genotypes like BC₂59 (Hilly region), C-2028 (water-logged region) etc. in addition to the proposed genotypes. In the methodology, procedures to be followed for maintenance of soil moisture in the pot culture experiments should be incorporated.

Decision: *Approved and advised to submit the concept note to CSB within 15.05.2019*

[Action: Dr. Deepika Kumar Umesh, Scientist-B, MBG]

Title: Mulberry crop schedule for optimal silk productivity in WB

Duration: 3 years

Observation/Suggestion: RC advised the PI to highlight wherever new interventions have to be made for crop re-scheduling in comparison to the existing crop schedule.

Decision: *Approved and advised to submit the concept note to CSB within 15.05.2019.*

[Action: Dr. K. Suresh, Scientist-B, MBG]

Title: Reclamation of acidic soils for improved leaf & cocoon productivity in Assam

Duration: 3 years

Observation/Suggestion: PI was advised to consider similar-aged mulberry plantation and follow the recommendations advised by Agriculture universities and also explore the cost effective reclamation measures/materials instead of rock phosphate & lime, if any. PI should also decide on the optimum sample size. REC, Mongaldoi should be part of the project proposal for better coordination.

Decision: *Approved as location specific research and advised to submit the concept note to CSB by 15.05.2019.*

[Action: Ms. Immanuel Ch. Haokip, Scientist-B, Agronomy & Soil Science]

Title: Isolation & characterization of endophytic bacteria from mulberry (*Morus* spp.) roots for yield improvement

Duration: 3 years

Observation/Suggestion: After threadbare discussion, PI was advised to review the proposal meticulously about the work on endophytes undertaken/concluded in other CSB institutes.

Decision: *Not acceptable in the current form and needs through revision.*

[Action: Dr. V. Vijay, Scientist-B, Agronomy & Soil Science]

Title: Improvement of Nistari lines for survival & silk productivity

Duration: 3 years

Observation/Suggestion: RC advised the PI to decide on desired parameters (rearing & reeling) along with benchmark values to improve silk productivity in Nistari lines. For stabilization of breed or line, at least 8-10 generations are necessary; accordingly, the proposed duration of project should be for four years. Methodology has to be detailed regarding line-specific SNP markers development and maintenance of lines.

Decision: *Approved and advised to submit the concept note to CSB within 15.05.2019.*

[Action: Dr. Thangjam Ranjita Devi, Scientist-B, SBG]

Title: Identification of high humidity tolerant silkworm breeds for E & NE India

Duration: 3 years

Observation/Suggestion: PI was advised to modify the title appropriately as suggested in the meeting. Further, detailed methodology needs to be specified in the final proposal.

Decision: *Approved and advised to submit the concept note to CSB within 15.05.2019.*

[Action: Dr. Raviraj V.S., Scientist-B, SBG]

Title: A Novel rapid, simple and in-expensive method for assessment of soil health

Duration: 3 years

Observation/Suggestion: PI was advised to fix the sample size required and develop standard curves for determining the nutrient/health parameters individually. Repeatability of experimental results should be ensured before final recommendation/standardization of the method and duration of the project should be reduced to two years.

Decision: *Approved and advised to submit the concept note to CSB within 15.05.2019.*

[Action: Dr. Aparna Kopparapu, Scientist-B, Biotechnology]

Title: Development of an Aptamer based technique for the detection of *Nosema bombycis* infection in silkworm

Duration: 3 years

Observation/Suggestion: After threadbare discussion, PI was advised to prepare the concept as India-China collaborative proposal and should refer the related papers presented in APSEERI-2019. The proposal requires for detailed review and PI was advised to attend to the concept further carefully.

Decision: *The concept was approved in principle.*

[Action: Dr. Mihir Rabha, Scientist-B, Silkworm Pathology]

Title: Silkworm disease monitoring of seed and commercial crop rearing of Eastern & North Eastern states

Duration: 3 years

Observation/Suggestion: RC suggested the PI to highlight the revised methodology and include data collection format in the proposal.

Decision: *Approved as continuous activity and advised to submit full proposal to CSB by 15.05.2019.*

[Action: Dr. K. Rahul, Scientist-B, Silkworm Pathology]

Title: Empirical analysis on Disparities of Sericulture Development in Eastern and North Eastern India

Duration: 3 years

Observation/Suggestion: PI was advised to take into consideration of mulberry crop schedules of different states while undertaking the study. In addition, the PI should consult and obtain specific comments from Dr. R. S. Deshpande, RCC member (CSB) for bettering the proposal.

Decision: *Approved and advised to submit the concept note to CSB at the earliest.*

[Action: Dr. Parameswara Naik, J., Scientist-B, Extension]

Title: Impact Assessment of Mulberry Sericultural Technologies in West Bengal

Duration: 3 years

Observation/Suggestion: PI was advised to consider five important technologies for studying the impact assessment.

Decision: *Approved under thrust area of sericulture and advised to re-submit proposal as discussed in the meeting to CSB by 15.05.2019.*

[Action: Dr. Manjunatha, G. R., Scientist-B, PMCE]

Title: Development of Integrated Farming System Model for Livelihood Security of Farmers in the hilly regions of Kalimpong District

Duration: 3 years

Observation/Suggestion: PI was advised to refer the IFS models developed in Agriculture/Horticulture in Hilly regions or GKVK (UAS Bangalore) or ICAR R&D institutes in the zone. Accordingly, PI should choose appropriate IFS model and fine-tune those models with emphasizing sericulture as a major farming activity. Role & share of collaboration with KVK should be clearly demarcated in both financial & technical aspects. Further, PI was suggested to make necessary correspondence with NABARD through proper channel for extramural funding.

Decision: *Approved in principle and advised to submit the revised concept note in prescribed format to CSB at the earliest.*

[Action: Dr. Harish Babu S, Scientist-B, RSRS Kalimpong]

ITEM NO. 6A: REVIEW OF CONCLUDED PROJECTS

Three following research projects which have concluded during the period were discussed.

- PPA 3588: Evaluation of Low Cost Drip Fertigation Systems on Yield and Quality of Mulberry Leaves
- AIB-3577: Evaluation of multivoltine germplasm to identify potential parents for developing cross breeds suitable for S & E India
- PPA-3560: Studies on High Bush mulberry plantation under rainfed condition of Odisha

PIs were advised to discuss the concluded report with competent authority for detailed review.

[Action: Concerned PIs]

ITEM NO. 6B: REVIEW OF CONCLUDED PROGRAMMES

Following institute-coded programmes were discussed & advised for submission of conclusion reports to the undersigned at the earliest and were suggested to continue the same as routine activity.

- BPI (P) 025: Maintenance of Mulberry Germplasm Bank at CSR&TI, Berhampore (WB)
- B-PRP(P) 045: Forewarning of mulberry diseases of Eastern and North Eastern India
- BAI (RP) 003: Maintenance of Multivoltine and Bivoltine Germplasm
- BPR(P) 022: Survey and Surveillance of Mulberry Pests in the Eastern and North Eastern regions of India
- BPR(P) 021: Survey, surveillance and monitoring of silkworm diseases in seed and commercial crops in Eastern and North Eastern India (In collaboration with RSRs, RECs, DOS & NSSO)
- B-MOE(P) 44 Adarsh Swachh Resham Gram Project at Mallickpur-Diara Village
- B-KPG (RP) 017 Maintenance of Bivoltine Silkworm Germplasm
- B-JRH (P) 046 Studies on mulberry germplasm in Agro climatic conditions in North-eastern states

[Action: Concerned PIs]

ITEM NO. 6: REVIEW OF PROGRESS OF ON-GOING PROJECTS/PROGRAMMES/PILOT STUDIES:

All the on-going projects/pilot studies at main institute & nested units were discussed in brief and PIs were advised to achieve the milestones as per approved project proposals.

The meeting was ended with the vote of thanks.

Sd/-
Dr. V. Sivaprasad
Director & Chairperson
Research Council
CSR&TI, Berhampore

ANNEXURE -I

LIST OF SCIENTISTS/PARTICIPANTS IN THE 50TH MEETING OF RESEARCH COUNCIL (RC) HELD ON 26.04.2019 AT CSR&TI, BERHAMPORE, WEST BENGAL

#	Name	Designation	Address
1.	Dr. V. Sivaprasad	Director	CSR&TI, Berhampore
2.	Dr. T. Dutta (Biswas)	Scientist-D, Extension & Pub. Division	CSR&TI, Berhampore
3.	Dr. V. Lakshmanan	Scientist-D, SBG Section	CSR&TI, Berhampore
4.	Dr. S. Chattopadhyay	Scientist-D, Biotechnology Division	CSR&TI, Berhampore
5.	Dr. A. K. Verma	Scientist-D, SBG Section	CSR&TI, Berhampore
6.	Dr. Dipesh Pandit	Scientist-D, PMCE Division	CSR&TI, Berhampore
7.	Shri D.Chakravarty	Scientist-D, Moriculture Division	CSR&TI, Berhampore
8.	ShriGoutamMitra	Scientist-D, R & S	CSR&TI, Berhampore
9.	Mr. Zakir Hossain	Scientist-D, RSRS	Kalimpong, WB
10.	ShriS.K.Misro	Scientist-D, RSRS	Koraput, Odisha
11.	Shri P.Kumaresan	Scientist-C, RSRS	Jorhat, Assam
12.	Dr. V. Vijay	Scientist-B, Agronomy and Soils. Section	CSR&TI, Berhampore
13.	Dr. Manjunatha, G. R	Scientist-B, PMCE Division	CSR&TI, Berhampore
14.	Dr. R. Mahesh	Scientist-B, Agronomy and Soils. Section	CSR&TI, Berhampore
15.	Dr. Anil Pappachan	Scientist-B, Mulberry Pathology Section	CSR&TI, Berhampore
16.	Dr. N. Chandrakanth	Scientist-B, SBG Section	CSR&TI, Berhampore
17.	Shri Suresh K.	Scientist-B, MBG Section	CSR&TI, Berhampore
18.	Dr. K. Rahul	Scientist-B, Silkworm Pathology Section	CSR&TI, Berhampore
19.	Dr. Raviraj V.S.	Scientist-B, SBG Section	CSR&TI, Berhampore
20.	Dr. Mihir Rabha	Scientist-B, Silkworm Pathology Section	CSR&TI, Berhampore
21.	Dr. Aparna Kopparapu	Scientist-B, Biotechnology Division	CSR&TI, Berhampore
22.	Mr. YallappaHarijan	Scientist-B, MBG Section	CSR&TI, Berhampore
23.	Dr. Parameswara Naik.J.	Scientist-B, Extension Division	CSR&TI, Berhampore
24.	Ms.ImmanuelChongboiHaokip	Scientist-B, Agronomy and Soils. Section	CSR&TI, Berhampore
25.	Dr. ThangjamRanjita Devi	Scientist-B, SBG Section	CSR&TI, Berhampore
26.	Dr. Deepika Kumar Umesh	Scientist-B, MBG Section	CSR&TI, Berhampore
27.	Dr. Harish Babu	Scientist-B, RSRS	Kalimpong, WB
28.	Shri Chandan Maharana	Scientist-B, RSRS	Jorhat, WB
29.	Ms. T. Shirisha	Stenographer	CSR&TI, Berhampore