

## **Minutes of 53<sup>rd</sup> Meeting of Research Council (13<sup>th</sup> March 2020 at CSRTI-Berhampore, West Bengal)**

53<sup>rd</sup> Research Council meeting of CSRTI-Berhampore was held on 13<sup>th</sup> March 2020 under the Chairmanship of Dr. V. Sivaprasad, Director, CSRTI-Berhampore.

At the outset Dr. D. Pandit, Scientist-D, PMCE welcomed Chairperson of the RC, scientists and other participants. Dr. V. Sivaprasad, in his introductory remarks, highlighted research areas for future proposals viz., waste land utilization, Seri by-product utilization, development of model rearing houses, suitable mechanization in sericulture of E & NE region and mutation breeding approaches etc by own or collaboration mode. Later, agenda-wise items were discussed. List of participants is appended in **Annexure – I**.

### **ITEM NO.1: Confirmation of the minutes of 52<sup>nd</sup> meeting of Research Council (RC) held on 6<sup>th</sup> Dec 2019 at CSRTI-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 52<sup>nd</sup> meeting of Research Council (RC) held on 06-12-2019**

The progress of new form of Morizyme-B, the scientist was advised to present the results obtained from their evaluation in forthcoming RC.

**[Action: Dr. Deepika, K. U, Sci-B, MBG]**

Regarding approved concept note titled **Final Yield Trial of newly identified mulberry genotypes**, the PI was advised to present in the Next RAC after obtaining from referees comments.

**[Action: Mr. Yallappa H., Sci-B, MBG]**

**Improvement of leaf longevity of mulberry in E & NE India**, the PI was advised to submit the full proposal to CO for obtaining code number and initiate the work at the earliest.

**[Action: Dr. Deepika K. U., Sci-B, MBG]**

**Improvement of Nistari lines for survival & silk productivity**, the PI was advised to submit the full proposal to CO for obtaining code number and initiate the work at the earliest.

**[Action : Dr. T. Ranjita Devi, Sci-B, SBG]**

**Identification of high humidity tolerant silkworm breeds for E & NE India**, the PI was advised to submit the full proposal to CO for obtaining code number and initiate the work as soon as possible.

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

Regarding **Development of an Aptamer based technique for the detection of *Nosema bombycis* infection in silkworm**, the PI was advised to submit the concept note to CSB for approval.

**[Action:Dr. Rabha M, Sci-B, SW. Pathology]**

**Silkworm disease monitoring of seed and commercial crop rearing of E & NE states**, the PI was advised to put a reminder to CO to know the status of the proposal.

**[Action:Dr. K. Rahul, Sci-C, SW. Pathology]**

Regarding the concept note **Reclamation of acidic soils for improved leaf & cocoon productivity in Assam**, the concerned was advised to re-request the CO to know its status.

**[Action : Dr. V. Vijay, Sci-C, Agronomy & Soil]**

The concept note entitled **A Novel rapid, simple and inexpensive method for assessment of soil biological health**, the PI was advised to re-request the CO to know its status. Further, the soil health kit developed from the concept, the PI was suggested to file the patent at the earliest.

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



The concept note titled **Empirical analysis on disparities of sericulture development in E & NE India**, the PI was advised to present this concept in forthcoming scientist meet scheduled at CO to understand how this proposal is different from routine impact studies.

[Action : Dr. P. Naik J., Sci-B, Training]

**AIB3577: Evaluation of multivoltine germplasm to identify potential parents for developing cross breeds suitable for S & E India**, the PI was advised to put his critical comments on final report submitted by SBRL-Kodathi and submit to PMCE for further action.

[Action: Mr. G C Das, Sci-D, Extension]

**Continuous activities of SBG (germplasm) and Entomology (pest survey) sections**, the concerned in-charge/ PIs are again advised to submit the concluded/final report to PMCE for further necessary action.

[Action: Smt. Radha, MB, Sci-B, Entomology,  
Dr. A K Verma, Sci-D and Dr. V. Lakshmanan, Sci-D, SBG]

Concept note entitled **Identification of superior Bivoltine foundation cross as a male component to improve productivity in E & NE India**, the PI was advised to wait for the CO response and accordingly take necessary action.

[Action : Dr. V. Lakshmanan, Sci-D, SBG]

Concept note titled **Biology and feeding efficacy studies of *Cheilomenes sexmaculatus* and *Chrysoperla zastrowi sillemi* predator for the eco-friendly management of mulberry whitefly**, the PI was advised to wait for the CO response and accordingly take necessary action.

[Action : Smt. Radha, MB, Sci-B, Entomology]

Concept note titled **Development of Seri-Extension Model for West Bengal**, the PI was advised to apprise the RC again, as suggested for needful approval.

[Action : Dr. Shafi Afroz, Sci-C, Extension]

Regarding **Development of Integrated Farming System Model for Livelihood Security of Farmers in the hilly regions of Kalimpong District**, the PI was advised to prepare the concept note appropriately and submit to CO for necessary approval.

[Action : Dr. Harish Babu S., Sci-B, RSRs-KPG]

Concluded project **AIB3578 (Evaluation of exotic bivoltine silkworm breeds to identify promising parental GRs India)**, the PI was advised to submit the final report to the collaborators and collect back the complete concluded report in form of RMS-10 format from SBRL.

[Action : Mr. G C Das, Sci-D, Extension]

Concluded pilot study titled **studies on the effect of preservation of dried cocoon on reeling efficiency and yarn quality parameters**, the PI was advised to submit the concluded report in RMS-10 format to PMCE for needful action.

[Action : Mr. G. Mitra, Sci-D, R&S]

The concluded projects during 2019-20 like **PRE3589, ARP 3590, PPS 3600, PPA 3622, AIB 3614, PPA 3613, AIB-3616, PIB-3505 and AIB-3617 and pilot studies**, the PIs were advised to publish their output project information in peer reviewed Journals on priority basis.

[Action : Concerned Scientists]

**Routine programme** on mulberry pest & disease survey, the incharge(s) are/were advised to send letters to the concerned units to submit the report on periodical basis.

[Action : Dr. Anil P, Sci-B, Mulberry Pathology  
& Smt. Radha M B, Sci-B, Entomology]



### ITEM NO. 3: APPROVAL OF NEW RESEARCH PROJECTS

No new concepts were presented, however, ideas on waste land/ by-product utilization in sericulture, development of model rearing houses, development of suitable mechanization in sericulture for E & NE region and mutation breeding approaches etc. were discussed in brief for next RC proposals.

### ITEM NO. 4: Review of Concluded Projects/ Activities

The following research projects / activities which have been concluded during the period were discussed.

#### 1. PIB 3505: Development of drought tolerant mulberry variety for rainfed sericulture

**Suggestions:** The PI was advised to utilize five genotypes (PYD-08, 01, 21, 04 & 07) at Final yield trial as suggested in 51<sup>st</sup> RAC. Further, advised to submit the concluded report in RMS-10 format at the earliest.

[Action : Dr. K Suresh, Sci-C, MBG]

#### 2. AIB 3616: On farm trial of the multivoltine silkworm breeds/ hybrids developed for high shell percentage and neatness of silk filament,

**Suggestions:** The PI was advised to follow the 51<sup>st</sup> RAC suggestions in the concluded report and submit the final report in RMS-10 format at the earliest. Further, propose the new project for authorization trail of 12YxBFC1 under the outcome utilization of OFT project and follow-up of HAC meeting suggestion held during Dec 2019 at Bangalore.

[Action: Dr. A.K. Verma, Sci-D, SBG]

### ITEM NO. 5: REVIEW OF PROGRESS OF ON-GOING PROJECTS/PILOT STUDIES/ ACTIVITIES:

Following on-going projects/pilot studies/ TOT/ other R&D activities of the main institute & its nested unit were discussed and the suggestions are:

The progress of following projects/ activities was observed to be as per milestone:

- **PIB 3576:** Evaluation of new mulberry GRs for improvement in productivity & quality **PIB 3610:** Preliminary evaluation of newly evolved mulberry genotypes for mulberry improvement
- **PIB 3627:** Development of superior mulberry genotypes through Polyclonal Seed Orchard
- **PIE 02002SI:** Evaluation of performance of mulberry genotypes C-9 under red and laterite soil
- **PRP 08002MI:** Identification of candidate genes based powdery mildew resistance for utilization in disease resistance breeding in mulberry [Coll. of SBRL, Kodathi]
- All India Co-ordinated Experimental Trial for Mulberry Varieties **AICEM-Phase IV**
- **Pilot study:** Development of mulberry crop schedule for optimal silk productivity in WB
- **PRP 02003SI:** Studies on the management of mulberry root rot disease in Eastern and North Eastern India
- **AIC 02004CN:** Molecular characterization and assessment of the efficacy of low molecular weight peptides isolated from mulberry leaf against flacherie disease of silkworm (in coll. with UNB Siliguri)

**AIB3602:** Development of thermotolerant Bivoltine Breeds / Hybrids of Silkworm through MAS, the PI was advised to test the double hybrids (WB series) in the OST for the year 2020-21.

[Action: Dr. N Chandrakanth, Sci-C, SBG]

**AIB 3617:** Identification of region specific bivoltine hybrids suitable for highly fluctuating and seasonally variable climatic conditions of E & NE India, the PI was advised to conclude the project in the current month and submit the concluded report at the earliest. Further, PI was suggested to test the double hybrid (BHP3.2 x BHP8.9) in the OFT along with ruling check for the year 2020-21.

[Action: Dr. V. Lakshmanan, Sci-D, SBG]

**AIB 3619:** Development of silkworm congenic breeds from a gene pool with higher genetic plasticity, the PI was advised to finalize the results of congenic lines (RBL-MV & RBL-BV) based on their stabilization and evaluation.

[Action: Dr. A.K. Verma, Sci-D, SBG]



**ARP3605:** Validation of the DNA markers in silkworm breed developed by introgression of DNA markers associated with NPV resistance using MAS breeding and large-scale field trial of the breed [*DBT funded Coll.* SBRL, B'lore, CSR&TI-Mysore & Pampore], the PI was advised to present yield/100 dfls of MASN lines in the form of frequency distribution using farmers data across the crop seasons.

**[Action: Shri G. C. Das, Sci-D&Dr. A.K. Verma, Sci-D, SBG]**

**ARP 3630:** Evaluation of new room and silkworm bed disinfectants, the house was accepted the unique trade name NIRMOOL for developed new general disinfectant for rearing room and its appliances. Further, the PI was advised to file the patent application and commercialize the product through NRDC-New Delhi at the earliest.

**[Action : Dr. Rahul K, Sci-C, Silkworm Pathology]**

**Training,** in-charge was advised to introduce the new training programme in form of sericulture hands on training for NE region for the year 2020-21 and also execute the modernization of class rooms for CSRTI-BHP trainings.

**[Action : Dr. S. Chattopadhyay & Dr. S. Sarkar, Sci-Ds, Training]**

**Extension & CPP activities,** the in-charge was advised to execute limited number of RKMs/ECPs in E & NE region, as discussed in Action Plan Meeting for next year 2020-21; and similarly initiate the 8 mega clusters (modified form of Bv-CPP) for bivoltine promotion, as suggested by Member Secretary, CSB during VC.

**[Action : Dr. T D Biswas,  
& Mr. GC Das, Sci-Ds, Extension]**

The in-charges/ scientists were advised to revise/refine the guidelines existed under following ToTs for the year 2020-21, if any:

- Mass multiplication and maintenance of bio-control agent – *Scymnus pallidicollis* and its popularization at farmers' level
- Popularization of newly authorized mulberry variety, C-2038/BC<sub>2</sub>59/any
- Popularization of New Silkworm Hybrids
- Demonstration of bio-control agents (*Chrysoperla* & *Scymnus bettles*)
- Popularization of chawki rearing
- Popularization of Collapsible Plastic Montages & shoot Feeding (Shelf Rearing)

Further, the concerned were advised to shoot the 3-min videos on above ToT activities and upload in the institute website/ facebook. Besides, publish these new technology information in local news papers like Anand Bazar Patrika in West Bengal.

**[Concerned Scientists]**


**General Suggestions:**

- ✓ SRF/JRF/ Project Assistant should be invariably attend monthly & RC meeting.
- ✓ Before presenting the concluded reports to the Director for obtaining comments, the expert evaluation in the form of remarks (within institute) should be presented.

**[All Scientists]**

The meeting ended with the vote of thanks.

Date: 21<sup>st</sup> March 2020

  
 (Dr. V. Sivaprasad)  
 Director & Chairperson  
 Research Council  
 CSRTI-Berhampore

**ANNEXURE -I****LIST OF SCIENTISTS/PARTICIPANTS IN THE 53<sup>RD</sup> MEETING OF RESEARCH COUNCIL (RC) HELD ON  
13.03.2020 AT CSRTI-BERHAMPORE, WEST BENGAL**

#	Name	Designation
1.	Dr. V. Sivaprasad	Director
2.	Dr. T. Dutta (Biswas)	Scientist-D, Extension & Pub. Division
3.	Dr. V. Lakshmanan	Scientist-D, SBG Section
4.	Dr. S. Chattopadhyay	Scientist-D, Biotechnology/Training Division
5.	Dr. Dipesh Pandit	Scientist-D, PMCE Division
6.	Shri D. Chakravarty	Scientist-D, Mriculture Division
7.	Shri Goutam Mitra	Scientist-D, R & S Division
8.	Dr. S. Sarker	Scientist-D, Training Division
9.	Shri G.C.Das	Scientist-D, Extension & Pub. Division
10.	Dr. Manjunatha, G. R	Scientist-C, PMCE Division
11.	Dr. N. Chandrakanth	Scientist-C, SBG Section
12.	Dr. Suresh K	Scientist-C, MBG Section
13.	Dr. V. Vijay	Scientist-C, Agronomy&Soil Sci. Section
14.	Ms. P. Makwana	Scientist-C, Biotechnology Division
15.	Dr. R. Mahesh	Scientist-C, Agronomy&Soil Sci. Section
16.	Dr. Shafi Afroz	Scientist-C, Extension & Pub. Division
17.	Dr. K. Rahul	Scientist-C, Silkworm Pathology Section
18.	Dr. Anil Pappachan	Scientist-B, Mulberry Pathology Section
19.	Dr. Mihir Rabha	Scientist-B, Silkworm Pathology Section
20.	Dr. Raviraj V.S.	Scientist-B, SBG Section
21.	Dr. Thangjam Ranjita Devi	Scientist-B, SBG Section
22.	Dr. Aparna Kopparapu	Scientist-B, Biotechnology Division
23.	Dr. Parameswara Naik.J.	Scientist-B, Training Division
24.	Dr. Deepika Kumar Umesh	Scientist-B, MBG Section
25.	Mr. Yallappa Harijan	Scientist-B, MBG Section