# Minutes of the 64<sup>th</sup> Research Council meeting held on 15<sup>th</sup> July 2023 at meeting room of CSR&TI, Berhampore

At the outset, Director, Dr. Kishor Kumar. C. M. requested the Scientists to present the new concept if any and progress of ongoing and concluding projects as the same may be presented in forthcoming RAC scheduled on 19-20 July 2023. He further advised Scientists to modify the new concepts, that are approved by CO, as per suggestions of the RCS.

#### **New Concepts:**

Dr. Rahul K., Scientist C, Silkworm Pathology Section presented a new concept note on "In vitro evaluation of potential health benefits of different botanical parts of mulberry". He explained the importance of mulberry. Since the proposal includes human cell culture studies, the Committee advised to seek IBSC approval before initiation of the project. Future plan includes utilization as nutraceutical after testing in animal models. RC suggested to elaborate the outcome and utilization and to work out Economics wherever applicable. After detailed discussion, the concept is approved for submitting to CSB for concept approval and for permission to submit to Department of Science & Technology, Govt. of India for extra mural funding.

Action: Dr. K. Rahul, Sci C, Silkworm Pathology

#### **Ongoing projects**

Dr. Harish Babu, Sci- C, RSRS, Kalimpong briefed the work done in project MTL 02017CN: Study on sericulture based IFS in hilly region of West Bengal in virtual mode. It was observed that the progress of the project was not satisfactory and not as per milestones at al. Director instructed him to prepare the slides with assistance from Co-Investigator, from the Institute and present in RAC indicating the reasons for shortfalls in the progress of the project.

Action: Dr Harish Babu, Sci C, RSRS-Kalimpong

Dr. Deepika Kumar, Sci- C, MBG, presented the progress of following ongoing projects. The progress was as per milestone. RC advised to mention mulberry variety name wherever applicable.

PIB 02007 SI: Improvement of mulberry leaf longevity in Eastern and North Eastern states of India

PIE 02013SI: Final yield trial (FYT) of newly identified mulberry genotypes for leaf productivity and quality

PPA 02005SI: Optimization of spacing and nutrient dose for newly developed high yielding mulberry variety C 2038 under irrigated condition

PIB 03013SI: Development of high yielding quality mulberry (Morus spp.) genotypes under subtropical conditions of Northern India (Coll. With RSRS-Jammu)

MOE 02015MI: Evaluation of improved technologies developed in the field of mulberry sector for Eastern & North Eastern India- [Component I: Evaluation of High Yielding & Bacterial leaf spot resistant mulberry variety C-2070; Component III: Low Cost Drip Fertigation system for mulberry.

Action: Dr Deepika Kumar Umesh, Dr Yallappa, Sci- C, MBG

Dr. K Suresh, Sci C, MBG, presented the progress of one concluded and following ongoing projects. The progress was satisfactory and found as per milestone.

**Concluding project:** 

PIE 02002 SI: Evaluation of performance of mulberry genotype C-9 under red and laterite soils

**Ongoing Projects:** 

PIB02010SI: Final yield trial of promising high yielding mulberry genotypes for Eastern and North-Eastern India

PIE13001MI: All India Co-ordinated Experimental Trial for Mulberry Varieties (Phase –IV)

MOE 02014SI: Popularization of improved technologies developed in the field of mulberry sector for Eastern & North-Eastern India. [Components: Popularization of new mulberry varieties (C-2038, Tr-23 & C-2028), Popularization of new mulberry varieties among the farmers in E & NE India; Impact assessment with regard to cocoon crop productivity]

MOE 02015MI: Evaluation of improved technologies developed in the field of mulberry sector for Eastern & North Eastern India [Component II: Evaluation of High Yielding and Low temperature stress tolerant varieties C-2060 & C-2065]

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

Mr. Khasru Alam, Sci. C, Mulberry Pathology presented the following collaborative projects:

AREO1028MI: Recommendation of novel fungicidal and insecticidal application for mulberry. The progress was as per schedule. RC advised PI to screen recommended fungicides and survival (%).

MOE 02014SI: Popularization of improved technologies developed in the field of mulberry sector for Eastern & North-Eastern India (Component II: Popularization of Bio-control Agents for the management of mulberry pests. The progress is as per schedule.

Action: Mr. Khasru Alam, Sci C, Mulberry Pathology

Dr. Mihir Rabha, Sci C, Silkworm Pathology presented the ATR on the pilot study "Establishment of pilot plant for production of pharmaceutical grade sodium copper chlorophyllin from silkworm feculae". The data was also analyzed by Prof. Sankhajit Roy, BCKV. The sample contained different impurities. Hence extraction of pharmaceutical level chlorophyllin from silkworm faecal matter cannot be economical. Hence RC suggested discontinuing the program.

He also presented the progress of MOE 02015MI: Evaluation of improved technologies developed in the field of mulberry sector for Eastern & North Eastern India- Component IV: Evaluation of Ecofriendly Silkworm Rearing Bed Disinfectant Seri-Win. The progress is as per schedule. RC recommended to use graphical representations on the efficacy of Seriwin, Nirmool and Sampoorna in comparison to control, for RAC presentation.

Action: Dr.Mihir Rabha, Sci C, Silkworm Pathology

Dr. Satadal Chakraborty, Sci D, Farm Management presented progress of the project APS 02020MI: Improvement of seed crop productivity in West Bengal. He is advised to present yield data specifically for different favourable and unfavourable seasons for multi and bivoltine hybrids/ breeds. The progress is as per schedule.

Action: Dr. Satadal Chakraborty, Sci D, FM & Rearing Seed Technology

Dr. Ravi Raj, Sci C, Biotechnology presented the progress on the research projects AIB 01009MI: Evaluation of New Bivoltine Double Hybrid, TT21 X TT56 at Farmers Level for Authorization for Commercial Exploitation (Coll. of CSRTI - Mysore) (in collaboration with CSRTI, Mysore) in E & NE region.

He also presented the progress of the project AIB 02019MI: Development of bivoltine double hybrids suitable for different regions of India. The batches are in F3 generation. Cocoons were selected for further rearing from batches of Berhampore, Kalimpong and Jammu. Report from Manipur is awaited. Dr Ravi Raj presented the progress in the project AIT 02008 SI: Identification of high humidity tolerant silkworm breeds/hybrids for Eastern & North-Eastern India. The progress is as per schedule. Director advised him to include the cocoon shape (oval or dumbbell) to compare the traits.

Action: Dr. Ravi Raj, Sci C, Biotechnology

Dr Ranjita Devi T, Sci C, SBG presented the progress of the project AlB 02006 MI: Improvement of Nistari lines for survival and Silk productivity. The progress was as per milestone. She was advised to recheck the single shell weight and filament length out of single cocoon analysis. On sequence analysis of Nistari populations as suggested by RAC, estimate was collected for sequencing and permission may be sought from CO to take up the program within the project budget.

Action: Dr. Ranjita Devi T, Sci C, SBG

Dr. Satadal Chakraborty, Sci D presented progress of the project AIE 02018SI: Identification of superior Bivoltine foundation cross as a male component to improve cross breed productivity in E & NE India. The house observed that the progress was as per schedule. RC suggested to include ERR and cocoon traits

Action: Dr. Satadal Chakraborty, Sci D, FM & Rearing Seed Technology

Dr. Pooja Makwana, Sci C presented progress of the project AIT 02012CI: Characterization of mulberry silkworm, Bombyx mori L. mutants for tolerance to flacherie syndrome trough genome editing tools (DST-JSPS project). She informed the house about the International training program at Japan, microinjection experiments carried out at SBRL, Bangalore. Dr. Pooja requested for extension of the project to complete the work as the project work is initiated late in July2021. CSB agreed to apply DST for extension of the project. DST agreed to continue the work for two years since the first release of funds on 11/1/2023 within the allocated budget. RC recommended for continuing the project as per CSB-DST consent and requested to place before RAC for recommendation.

Action: Dr. Pooja Makwana, Sci C, Biotechnology

Dr. Shafi Afroz, Sci C, SEEM presented the progress of the project MOE 02011EF: Development of Seri-Entrepreneurship in chawki Rearing [NABARD funded project]. The progress was found as per schedule. He also presented the progress of the project MTS 13002 MI: Impact Assessment of Mulberry Sericulture Technologies in India. Which was also found as per milestone.

Apart from these projects he briefly narrated the extension activities of the CSRTI-Berhampore & its field unit including Bivoltine cluster program, Cluster promotion program, social media and pamphlet printed etc.

Action: Dr. Shafi Afroz, Sci C, SEEM

Dr. Parameswar Naik, Sci C, Training presented the progress of the project MOT 02016EF: Seri-Entrepreneurship Development in Aspirational Districts of North-Eastern India (DBT funded). The progress found was satisfactory and as per milestone. He informed that the reeling units are supplied however, installation was pending due to regional disturbances. He briefed the training activities of the section, PGDS program progress and admission progress of new batches. RC suggested to convene a meeting to discuss on PGDS syllabus modification.

Action: Dr. Parameswar Naik, Sci C, Training

#### Any other points:

Dr. A R Pradeep, Sci D informed the house that OST program on BmBDV resistance in SK6R.7R and an authorization (OFT) program on Nistari x MASN (multi x bi) are proposed by SBRL which may be permitted to present in the forthcoming RAC meeting to be held on 19-20<sup>th</sup> July 2023.

Dr. Mihir Rabha presented the OST program on BmBDV resistance in SK6R.7R developed by SBRL. The rearing has to be conducted at CSRTI-Berhampore, RSRS-Kalimpong and REC-Bagmara, Mothabari

Dr. A. R. Pradeep briefed the OFT program on Nistari x MASN and will be taken up as per DoS suggestions.

RC agreed to present the programs to RAC by Dr. Mihir Rabha/ Dr. K. Rahul and Dr. A. R. Padeep/ Dr. Satadal Chakraborty on the respective programs.

#### **General suggestions:**

For OST and OFT programs, presentation may be restricted to Title page, progress and outcome.

Minutes approved

(Dr. Kishor Kumar C.M.)

Director

### Annexre-I

## List of Scientists/Participants in the 64<sup>th</sup> Meeting of Research Council (RC) held on 15.07.2023 at CSRTI-Berhampore, West Bengal

| #  | Name                     | Designation                                     |
|----|--------------------------|---|
| 1  | Dr. Kishor Kumar C.M.    | Director  |
| 2  | Dr. G. Srinivas          | Scientist-D, SEEM                               |
| 3  | Dr. A.R. Pradeep         | Scientist-D, Biotechnology & Silkworm Pathology |
| 4  | Dr. D. Pandit            | Scientist-D, PMCE                               |
| 5  | Dr.Satadal Chakrabarty   | Scientist-D, Farm Management & RST              |
| 6  | Dr. K. Suresh            | Scientist-C, MBG                                |
| 7  | Dr. Pooja Makwana        | Scientist-C, Biotechnology                      |
| 8  | Dr. K. Rahul             | Scientist-C, Silkworm Protection                |
| 9  | Dr. Shafi Afroz          | Scientist-C, SEEM                               |
| 10 | Dr. Deepika Kumar Umesh  | Scientist-C, MBG                                |
| 11 | Dr.Thangjam Ranjita Devi | Scientist-C, SBG                                |
| 12 | Dr. Mihir Rabha          | Scientist-C, Silkworm Protection                |
| 13 | Dr. Parameswara Naik J.  | Scientist-C, Training                           |
| 14 | Mr. Khasru Alam          | Scientist-C, Mulberry Protection                |
| 15 | Dr. Raviraj, V.S.        | Scientist-C, Biotechnology                      |
| 16 | Shri Arun Kumar          | Scientist-B, Reeling & Spinning                 |
| 17 | Y.S. Devi                | PA Biotech                                      |
| 18 | Md. Shahin Hossain       | JRF, Plant Protection                           |
| 19 | Susmita Devi             | PA, Training                                    |
| 20 | Anowar Hossain           | PA, SBG   |
| 21 | Shuvam Mandal            | PA, Farm Section                                |
| 22 | Manjarul SK              | PA, Mulberry Pathology                          |
| 23 | Lipika Mardi             | PA, SEEM Division                               |
| 24 | Shahnaz Khatun           | PA, Mulberry Pathology                          |
| 25 | Sabina Khatun            | JRF, Biotech                                    |