Minutes of 60th Meeting of Research Council
(22.04.2022 at CSRTI-Berhampore, West Bengal)

60th Research Council meeting of CSRTI-Berhampore was held on 22nd April, 2022 under the Chairmanship of Dr. C. M. Kishor Kumar, Director, CSRTI-Berhampore.

At the outset, Dr. Dipesh Pandit, Scientist-D, PMCE welcomed Chairperson-RC, Scientists and other participants. Later, agenda-wise items were discussed. List of participants is appended in **Annexure - I.**

Concluded projects

AIE06002MI: Evaluation of bivoltine silkworm genetic resources for tolerance to abiotic stress in selected hot spots (Coll. Of CSGRC, Hosur)

The project is concluded as per time frame, however, PI was advised not to consider fecundity as a trait for working out mean evaluation index (MEI) for the breeds tested. He was advised to send data/information (CSRTI-Berhampore part) to CSGRC-Hossur for finalisation and get a copy of Final Report for record purpose.

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

Ongoing Research projects/OSTs/OFTs/Routine research activities

PIB 02007 SI: Improvement of mulberry leaf longevity in E & NE states of India

The progress of the project was as per milestones, however with reference to the senescence scoring instead of manual / visual observations, PI should consider some other mechanical means for more precision in scoring senescence of mulberry leaves.

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

PPA 02005SI: Optimization of spacing and nutrient dose for the newly developed high yielding mulberry variety (C2038) under irrigated condition

The progress of the project was as per milestones however, PI along with Dr. Suresh should have a consultation with Dr. G. Srinivas for further better interpretation of the experimental data.

PIE 02013 SI: Final Yield Trial of newly identified mulberry genotypes for leaf productivity and quality

The PI was advised to recheck the data shown on the performance of the genotypes since the results of the studied parameters of the genotypes were found statistically non-significant.

[Action: Dr. Yallappa Harijan, Sci-B, MBG]

PIE 3001MI: All India Coordinated Experimental Trial for Mulberry Varieties (AICEM): Phase IV

Progress found was as per the milestones however PI was advised to look after the timely collection of propagation data from the test center's those not submitted

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

The house observed that the progress of the project was as per milestones.

PRP08002MI: Identification of candidate genes based powdery mildew resistance for utilization in disease resistance breeding in mulberry [Coll. with SBRL, Kodathi]

Progress found was as per the milestones.

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

AIB02009MI: Authorization trials silkworm hybrid, 12Y x BFC1 in E & NE India [Coll. with NSSO& CSTRI-Bengaluru]

A total of 1.23 lakh dfls of 12Y x BFC1 was field tested with the farmers' of West Bengal (102400 dfls), Tripura (20200 dfls) and Jharkhand (800 dfls) during March 2022 crop. Regarding cocoon yield, an improvement of 16.6% over control was recorded with 12Y x BFC1 in West Bengal and 3.94% in Tripura, while data collection in Jharkhand is under progress. PI is advised to prepare total achieved target of 2.88 lakh dfls under this authorisation programme for final report. 2.28

AIB0I009MI: Evaluation of New Bv Double Hybrid, TT21 x TT56 at Farmers Level for Authorization for Commercial Exploitation (Coll. with CSRTI, Mysore)

Progress found was as per milestones

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

AIB02006MI: Improvement of Nistari lines for survival and silk productivity

The progress was as per milestones. PI was advised to have a comparative data for both cold reeling and general reeling performance of the selected populations for the successive generations. Further, cocoon assessment and reeling data for the unselected population should also be collected by PI to have a comparative performance analysis

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

OFT: Evaluation of double hybrid BHP-DH (3.2x8.9) in E&NE Region

The progress was found as per milestones. However, PI was advised to look into the CV values of the comparative data which was on higher side in some instances

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

AIT08005MI: Development and evaluation of Bidensovirus resistant silkworm hybrids developed from marker assisted breeding lines- Phase-II (Coll. of SBRL, Kodathi)

Progress was as per milestones

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

The progress of the programme was found as per milestones. PI was advised to keep in touch with nested units for obtaining data regularly and time to time provide necessary guideline.

Pilot programme – **"Extraction of pharmaceutical grade sodium copper chlorophyllin from silkworm feculae"**

PI was advised to wait for the RCC decisions

[Action: Dr. M. Rabha, Sci-B, SWP]

Component-II: Popularization of Bio-Control Agents for the management of mulberry pests

Progress of the programme was found as per milestones. PI should be proactive in the routine activity of diseases and pests' surveillance as the diseases and pests incidence data from the nested units as in many cases indicated nil or no data were received.

[Action: Mr. Khasru Alam, Sci-B, Mulberry Crop Protection]

Component-III: Popularization of eco-friendly disinfectant, NIRMOOL

Component-V: Popularization of Sampoorna

The programme was found as per milestones. However, PI should consider data on cocoon yield, single cocoon analysis and associated attributes for treatment as well as control in future presentations

[Action: Dr. M. Rabha, Sci-B, SWP]

Component-IV: Popularization of Chawki rearing & Shoot Feeding (Shelf Rearing) with Collapsible Plastic mountages

Progress of the programme was as per milestones

[Action: Dr. Shafi Afroj, Sci-C, SEEM]

MOE02015MI: Evaluation of improved technologies developed in the field of mulberry sector for eastern and north-eastern India.

Component-I: Evaluation of High Yielding & Bacterial leaf spot resistant mulberry variety C-7.

With regard to the implementation of the project in Mamring, PI should find out practices of organic sericulture or organic doses of nutrient to compensate chemical inputs, as in Sikkim its application is banned.

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

Component-II: Evaluation of High Yielding and Low temperature stress tolerant varieties C-1 & C-11

The project has just started and progress was found as per milestones

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

Component-III: Low Cost Drip Fertigation system for mulberry

PI was advised to have thorough discussion with RSRS, Kalimpong for finalization of number of crops/year to be taken up. PI should also send details of experimental plan to all the trial locations and the same should also be followed up properly with regard to the smooth running of the projects at nested units.

[Action: Dr. Yallappa Harijan, Sci-B, MBG]

Component-IV: Evaluation of Eco-friendly Silkworm rearing Bed Disinfectant Seri-Win

PI was advised to consider cocoon yield and associated attributes both for Seriwin treatment and control batch while collecting data for the trial in future

[Action: Dr. M. Rabha, Sci-B, SWP]

MOT 02016EF: Seri-Entrepreneurship Development in Aspirational Districts of North-Eastern India

Project is just initiated, completed recruitment of Project Assistants; and progress is as per milestone.

[Action: Dr. Parmeswarnaik J., Sci-B]

AIC02004CN: Molecular characterization and assessment of the efficacy of low molecular weight peptides isolated from mulberry leaf against flacherie disease of silkworm (Coll. with UNB, Siliguri)

PI requested for extension of project for NBU part (requested by collaborator of NBU) without any additional fund. PI was advised to submit the proposal for extension of the project at the earliest, if any

AIT 02012CI: Characterization of mulberry silkworm, *Bombyx mod* L. mutants for tolerance to flacherie syndrome through genome editing tools (DST-JSPS project)

The project was found as per milestones

[Action: Dr. Pooja Makwana, Sci-C, Biotech]

AIT02008SI: Identification of high humidity tolerant silkworm breeds/hybrids for Eastern & North-Eastern India

The progress was found as per milestones.

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

MOE02011EF: Development of seri-entrepreneurship through sericulture chawki business by setting up 02 chawki rearing centers (CRC) as demonstrative units in Murshidabad district, West Bengal (NABARD funded project)

The progress of the project was found satisfactory and as per milestones however PI needs to show a comparative data of cocoon rate both for chawki reared farmers and directly brushed rearing farmers

[Action: Dr. Shafi Afroj, Sci-C, SEEM]

New Proposal:

1. A new concept note **'Molecular characterization of newly developed bivoltine breeds of *Bombyx mori* for Eastern & North Eastern India'** has been approved with modifications. PI was advised to have a discussion/consultation with Silkworm Breeding and Genetics section for modifications, if any

[Action: Dr. Pradeep A.R., Sci-D, Biotech]

2. A new concept note **Economics of sericulture** was approved with following modifications

a) Possibilities of including all NE states to consider
b) Collaboration with any other CSB institutes may be considered

[Action: Dr. G. Srinivas, Sci-D, SEEM]

MOE02014SI: Popularization of Improved Technologies Developed in the Field of Mulberry Sector for Eastern and North-Eastern India

Component-I: Popularization of New Mulberry Varieties in Eastern and North-Eastern India

Progress found was as per the milestones

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

Progress of the activities of Training Division were presented and were found as per milestones.

[Action: Dr. P. Naik., Sci-B, I/C Training Division]

Activities of R&S

The routine *activities* of R&S section was looked after by the Incharge SBG Section and were found as per milestone.

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

Activities of RSRS, Koraput

The progress of the centre was found satisfactory and advised to complete the ECPs on time.

[Action: Dr. Dip Gogoi, Sci-D]

Activities of RSRS, Kalimpong

MTL 02017CN: Study on sericulture based IFS in hilly region of West Bengal

The PI was advised to speed up the work and activities of the project as per milestone strictly.

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

Regarding progress of other activities, the centre was found satisfactory and advised to complete the ECPs on time.

[Action: Dr. Zakir Hossain, Sci-D]

Activities of RSRS, Jorhat

The progress of the centre was found satisfactory and advised to complete the ECPs on time. Targets with regard to the popularization of Plastic collapsible mountages and shoot rearing needs to be completed in time

New concept: Improvement of BV seed cocoon productivity in NE region

The PI should have a data on commercial seeds demand in all the NE states for matching estimation of seed cocoon production improvement. Further consultation with NSSO should be made regarding consumption of the Dfls out of the project.

[Action: Dr. P. Kumaresan., Sci-D]

(Dr. Kishor Kumar C.M. Director & Chairman RC)