CENTRAL SERICULTURE RESEARCH & TRAINING INSTITUTE (CSRTI)-MYSURU

MINUTES OF 43rd RESEARCH ADVISORY COMMITTEE MEETING 5th NOVEMBER, 2018

The 43rd Research Advisory Committee meeting of CSRTI-Mysuru was held on 5th November 2018 at CSRTI-Mysuru for reviewing the progress of R&D activities of the Institute and its nested units (November 2017 to October 2018) and new project proposals for consideration. The meeting was presided over by the Research Advisory Committee (RAC) Chairman, Prof. S.R. Niranjana, Vice Chancellor, Gulbarga University. The list of members and participants have attended the meeting is appended herewith in **Annexure-I**.

Dr. V. Sivaprasad, Director welcomed RAC Chairman and the members including farmer and reeler members on behalf of the CSRTI-Mysuru for the meeting and CSB representative Dr. K. Vijayan, Sc-D, RCS, CSB, Bangalore; also welcomed the Scientists of CSRTI-Mysuru and its nested units for the meeting.

Prof. Niranjana, RAC Chairman in his opening remarks informed that he has attended the Brainstorming workshop on by-product utilization at CSB, Bangalore on 30.10.2018 along with Director. He requested CSB to organize a brainstorming session at each CSB R&D institutes once in every six months on topics/burning field issues besides review of ongoing R&D activities for further development of Sericulture industry. He expressed his satisfaction over the progress made by the institute and congratulated the Director and Scientists for their contribution during the reporting period.

CONFIRMATION OF THE MINUTES OF 42nd RAC MEETING HELD ON 27th & 28th NOVEMBER 2017

The RAC confirmed the minutes of the previous meeting as no comments were received from any of the members. The committee felt that, RAC meeting should be conducted twice in an year to review all the R&D activities.

REVIEW OF FOLLOW-UP ACTION TAKEN ON DECISIONS OF RAC IN 42nd MEETING

The follow-up actions taken on decisions taken in the previous meeting was presented by Dr. V. Sivaprasad, Director. The committee expressed satisfaction regarding the follow up action taken on the decisions and suggestions of previous RAC.

REVIEW OF CONCLUDED PROJECT

PIB 3457: Development of disease resistance and productive mulberry genotypes with special reference to root rot and root knot diseases suitable for seri-zones of South India.

Decision: The committee reviewed the results of the project and RAC Chairman suggested to present the list of publications made out of the project. Results of the pathological studies should have benn included in the presentation. Further, the scientists were advised to monitor the performance of disease resistance in the listed resistant varieties for two to three years period.

[Action: Dr. Gandhi Doss, Scientist-D, MBG**]**

ARP 3519: Silkworm disease monitoring of seed & commercial crop rearing of South Indian States

Decision: RAC advised to conduct statistical analysis and present the results through season-wise graphs for each disease. The conclusion report of the project and salient information needs to be uploaded in the CSRTI/CSB websites.

[Action: Marry Josepha Shery. A.V, Scientist-D, SW Pathology]

AIB 3524: Improvement of PM race for productivity and silk quality

Decision: RAC suggested conducting statistical analysis of the data and improvement in filament length and neatness needs to be verified further. Further, the committee advised to conduct rearing in the favourable seasons and assess the data.

[Action: K. B. Chandrashekar, Scientist-D, MBL]

PRE-3546: Identification, characterization, synthesis and field evaluation of sex pheromone of the mulberry leaf roller (NBAII).

Decision: The committee observed that due to the non-incidence of the leaf roller in the field, the trials could not be undertaken and suggested to continue to work for completing the trials to develop a monitoring device for management of leaf roller in mulberry.

[Action: J. B. Narendra kumar, Scientist-D, PML]

PPA-3549: Evaluation of modified spacing with special reference to planting geometry for sustainable mulberry leaf production.

Decision: The committee observed that the summary data tables were not supported by sufficient data analysis and further, the evaluation of plant geometry spacing with variable parameters may not help in comparison of various spacing to arrive at any conclusion.

[Action: Vinod Kumar Yadav, Scientist-C, Agronomy**]**

MOE-3562: Socio Economic Impact of CPP in bivoltine seri farmers in Tamil Nadu.

MOE-3565: Studies on yield gap in mulberry cocoon production in the states of AP and Telangana

Decision: The committee expressed that findings of the projects are very good and the impact on CPP has been very well documented and RAC members appreciated the teams. Further, the committee advised SEEM division to involve all the PIs to make a comprehensive report with set of parameters and analyze the data for the entire South India including North Karnataka Clusters.

[Action: Dr. S. Raj Kumar, Sci-D, RSRS Salem, Dr.Vijaya naidu, Sc-D,RSRS, Anathapur and Sc-D,SEEM]

AIP-3594: Feed supplementation studies for improving young age silkworm rearing in Chawki rearing centres

Decision: RAC suggested incorporating the correlation of chawki growth parameters with the cocoon productivity. It was suggested to conduct evaluation at Model CRC before going for large scale filed trials.

[Action: E. Bhuvaneswari, Scientist-B, SW Physiology]

MOE 3595 - Development of business models for enterprises in pre-cocoon sector of Sericulture

Decision: The committee advised to incorporate few changes in commercial seed production parameters as suggested by NSSO and finalize the report. Further, the committee appreciated the work and suggested to publish the reports/pamphlets in local languages and to conduct workshops /seminars with the Bankers and stakeholders.

[Action: Joycy Rani D, Scientist-B, SEEM]

NEW PROJECTS FOR APPROVAL

Industry sponsored project: Ultra-Phen, a phenolic compound for effective disinfection in Sericulture

Decision: The committee discussed the referee comments received on the project and approved for implementation as all the referees have recommended.

[Action: Marry Josepha Shery. A.V, Scientist-D, SW Pathology]

TOT Project: Large Scale Testing and Training of Modified Loop Mediated Isothermal Amplification (M-LAMP) Assay

Decision: The committee discussed thoroughly and suggested to take up standardization of sampling techniques for chawki/larval stages through in-house studies and later the same could be proposed as a TOT project.

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

REVIEW OF PROJECTS TO BE CONCLUDED DURING 2018-19

AIB-3534: Development of improved Crossbreeds of Silkworm suitable to South India

Decision: The committee noted the progress of the project and suggested to indicate floss percentage, yield /100dfls and leaf cocoon ratio of the ICBs identified. Further, advised to send 3 kg of cocoons to CSTRI-Bengaluru for testing reeling parameters.

[Action: K. B. Chandrashekar, Scientist-D, MBL]

PPA-3552: Development of Technology for Production of Organic Silk

Decision: The committee discussed the progress of the project and suggested to consult the concerned tasar institution who have registered for organic tasar silk.

[Action: V. K. Yadav, Scientist-C, Agronomy]

PPS-3553: Carbon sequestration in mulberry cultivation and strategies to enhance carbon sequestration.

Decision: The committee reviewed the progress made under the project and suggested to check the leaf yield data recorded and also to refer to the similar work done at CSRTI- Berhampore for preparation of final report.

[Action: V. K. Yadav, Scientist-C, Agronomy]

AIB-3561: Identification of robust bivoltine silkworm hybrids suitable for different regions of high temperature and high humidity conditions

Decision: The committee noted the progress made under the project and suggested to present the statistically analyzed data of the hybrids tested.

[Action: Dr. S. Purushotham, Scientist-D, RTI]

REVIEW OF ONGOING PROJECTS

AIT- 3596 : Development of multi-viral disease tolerant (NPV, IFV and DNV1) bivoltine silkworm breeds/hybrids of Bombyx mori L. through marker-assisted selection

Decision: The committee critically reviewed the progress made under the project and felt that, though the RAPD primers are out-fashioned and suggested to adopt multiple markers for sequencing.

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

AIT-3593 : Transcriptome analysis of silkworm for identification of molecular markers for improvement of silk quality

Decision: The committee reviewed the progress of the project and advised to come out with specific markers identified through pathway.

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

AIB-3509 : Development of productive bivoltine silkworm breeds/hybrids of Bombyx mori L. tolerant to nuclear polyhydrosis virus.

Decision: The committee noted the progress of the project and advised to test the hybrids at farmers level in limited scale.

[Action: Dr. S .Manthira Moorthy Scientist-D, BBL]

PIP-3592 : Identification of indices for abiotic stress tolerance in mulberry with special reference to moisture and alkalinity stress

Decision: The committee noted the progress and observed that there was not much difference among the parameters and advised to refer other crops and follow similar plans for interpretation of data generated.

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

PIC-3620 : Engineering photosynthesis in mulberry for resilience to climate change: A C4 approach

Decision: The committee noted the progress made under the project and advised to undertake experiments to achieve the proposed objectives within the time frame.

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

PRP-3591 : Identification of resistance in mulberry germplasm for root knot nematode disease

Decision: The committee noted the progress on the presentation and advised to undertake experiments to achieve the proposed objectives as per the milestone.

[Action: Dr. Arunakumar G. S., Sci-B, Molecular Biol-I,]

PRP-3618 : Popularization of Rot-fix for management of root rot disease of mulberry among sericulture farmers of southern states.

Decision: The committee noted the progress and advised to complete the field trials at the earliest as the technology is already commercialized.

[Action: Dr. Pratheesh Kumar, P. M, Sci-D, Mul Pathology]

PRP 3567 : Assessing the efficacy of recommended chemicals in insect/disease/ weed management and their impact on soil biota of Mulberry ecosystem in South India.

Decision: The committee noted the progress and advised to achieve the proposed objectives as per the milestone.

[Action: Dr. S. Balasaraswathi,, Sci-D, RSRS,Salem]

PIC-3615 : Mapping QTLs for alkalinity tolerance in Mulberry

Decision: The committee noted the progress on the project and advised to achieve the proposed objectives as per the milestone.

[Action: Dr. P.V. Vaijayanthi, Sci-B, RSRS, Mul. Physiology]

COLLABORATIVE PROJECTS ASSOCIATED WITH OTHER INSTITUTES

AIB-3537 : Improvement of silkworm breeding in India and Bulgaria

Decision: The committee noted the progress and advised to achieve the proposed objectives as per the milestone.

[Action: Dr. S. Manthira Moorthy, Sci-D, BBL]

AIT-3628: Assessment of SNP Variation in Silkworm (Bombyx mori L) by Genotyping by Sequencing and genome-wide association mapping of important commercial traits". (Funded by DBT)-Networking project with RVCE, Bangalore

Decision: The committee noted the progress of the project and advised to undertake the proposed work as per the milestone.

[Action: Dr. S.Manthira Moorthy Scientist-D, BBL]

AIP-3568 : Development of value added products from spent pupae of mulberry silkworm.

Decision: The progress was presented by the collaborator, Dr. Chandrashekariah (NIANP). The committee appreciated the progress made under the project and advised to look after the requirement of regulatory authorities for patenting and commercialization of the products develop at the end of the project.

[Action: Dr. Chandrashekariah (NIANP) & Dr. Y.Thirupathaiah, Sci-B, S.W.Physiology]

General points

All the PIs/CIs of concluded projects are advised to submit the concluded project by incorporating the suggestions of RAC within 15 days of the RAC meeting to forward the same to the CO, Bangalore.

[Action: All the concerned PIs/Co-PIs of institute and RSRSs]

Director (Tech) has informed that Telangana Govt. has provided sample of "Waste decomposer" for its validation for mulberry farmers and also to advise Sci-D, REC-V.Kota to collect the data on its performance with farmers of AP and submit to CSB-Bangalore. In this regard Mr. V.K. Yadav, Sc-C, Agronomy is advised to undertake the testing of the materials received form CO at institute level and submit the performance data at the earliest.

(Action: Dr. Srinivas Reddy, Sc-D-REC,V. Kota & Mr. V.K.Yadav,Sc-C, Agronomy)

RAC Comments:

Chairman suggested to all the Scientists to publish their findings as research articles & Technical bulletins & Scientific papers. Further, he advised to take the scientific advice or suggestions from other scientists/organizations to strengthen the R&D activities of Sericulture Industry.

The meeting ended with vote of thanks to the chair.

SD/-

CHAIRMAN

LIST OF MEMBERS ATTENDED 43rd RAC MEETING HELD ON 5th NOVEMBER 2018

#	Name of the Member/invitees	
1	Prof. S .R. Niranjana, V C, Gulbarga University	Chairman
2	Dr. V. Sivaprasad, Director, CSRTI-Mysuru	Member Convener
3	Dr. Chandrasekharaiah, Director (Rtd.), APSSRDI-Hindupur	Member/invitees
4	Dr. A. Ramesh Sundar, Scientist, ICAR, Coimbatore	
5	Prof. Ranganathan Ramani, Dir (Retd,) (IINRG), Chennai	
6	Dr. R. K. Mishra, Director (Tech), CSB, Bengaluru	
7	Dr. V. Subhas Naik, Director CSTRI, Bengaluru	
8	Dr. K. Vijayan, Sci-D, RCS, CSB, Bengaluru	
9	Mr. Narayana Swamy, DD, Mysuru (Rep Commissioner DOS, Karnataka)	
10	Smt. P. Arul Mani, DD (Seed) (Rep DOS, TN)	
11	Sri. Mohammed Anwar, Reeler, Karnataka	
12	Mr. S. Hanumantharayappa, Farmer, Karnataka	
13	Mr. S. Perumal, Farmer, Tamil Nadu	
14	Dr. M. Chandrashekariah, Principal Sci. ICAR, NIANP, Bengaluru	
Members who sought leave of absence		
15	The Commissioner of Sericulture, Govt. of Telanagana, Hyderabad	
16	The Commissioner of Rural Development, Govt. of Kerala	
17	The Commissioner of Sericulture, Govt. of Madhya Pradesh, Bhopal	
18	The Director DOS , Maharashtra, Nagpur	
19	The Commissioner of Sericulture, Govt. of Andhra Pradesh, Guntur	
20	Dr. K. C. Narayanaswamy, UAS, GKVK, Banaglore	

List of Participant Scientists CSRTI, Mysuru and its nested units for 42nd RAC

Name	Designation	Section/Unit
Dr. Vineet Kumar	Scientist-D	CSRTI, Mysuru
Dr. Sreenivas, B. T	Scientist-D	CSRTI, Mysuru
Dr. S. Rajakumar	Scientist-D	RSRS Salem
Dr. Jalaja S. Kumar	Scientist-D	RSRS Kodathi
Dr. K. Praveen Kumar	Scientist-D	RSRS Shadnagar
Dr. P. Sudhakar	Sceintist-D	RSRS Ananthapur
Dr.Gandhi Doss, S.	Scientist-D	CSRTI, Mysuru
Dr.Mary Josepha, A.V.	Scientist-D	CSRTI, Mysuru
Anuradha H Jingade	Scientist-D	CSRTI, Mysuru
Dr.Santha, P. C.	Scientist-D	CSRTI, Mysuru
Dr. N. Balachander	Scientist-D	CSRTI, Mysuru
Dr.R.Meenal	Scientist-D	CSRTI, Mysuru
Dr. Mahima Shanthi	Scientist-D	CSRTI, Mysuru
P.V.Soudamini	Scientist-D	CSRTI, Mysuru
C.Parameshwar	Scientist-D	CSRTI, Mysuru
Dr.Manthira Moorthy, S.	Scientist-D	CSRTI, Mysuru
Rajashekar.K	Scientist-D	CSRTI, Mysuru
Dr. N. G. Selvaraj	Scientist-D	CSRTI, Mysuru
J.B.Narendra kumar	Scientist-D	CSRTI, Mysuru
Kulkarni, S. B.	Scientist-D	CSRTI, Mysuru
Dr. M. Muthu Lakshmi	Scientist-D	CSRTI, Mysuru
Dr . K. B. Chandrashekar	Scientist-D	CSRTI, Mysuru
Dr . C.M. Kishore Kumar	Scientist-D	CSRTI, Mysuru
Dr.S.Purushotham	Scientist-D	CSRTI, Mysuru
Sri. Shivakumar Hukkeri	Scientist-D	CSRTI, Mysuru
Dr. S. Balasaraswathi	Scientist-D	RSRS Salem
Dr.V.Girish Naik	Scientist-D	RSRS,Ch.nagara
Dr. Dayananda	Scientist-D	BSF, Hassan
B.Vijaya Naidu	Scientist-D	RSRS,Anantapur
Dr. B. Mohan	Scientist-D	SSBS,Conoor
Dr. P.S.Reddy	Scientist-D	REC, V.Kota
Dr. G. S. Geetha	Scientist-C	CSRTI, Mysuru
Vinod Kumar Yadav	Scientist-C	CSRTI, Mysuru
Y. N. Sanath Kumar	Scientist-C	CSRTI, Mysuru
Dr.Madhu sudhan	Scientist-C	CSRTI, Mysuru
Dr. Gnanesh, B. N.	Raman. Fell.	CSRTI, Mysuru
G. R. Venkata Reddy	AEE	CSRTI, Mysuru
Rekha, M.	AD(Stat)	CSRTI, Mysuru
Munikrishnappa, H. M.	AD(SM)	CSRTI, Mysuru
Joycy Rani, D.	Scientist-B	CSRTI, Mysuru
Dr. Kusuma L.	Scientist-B	CSRTI, Mysuru
Dr. P. V. Vaijayanthi	Scientist-B	CSRTI, Mysuru
Dr.Gayatri, T.	Scientist-B	CSRTI, Mysuru
Dr.Bhuvaneshwari, E.	Scientist-B	CSRTI, Mysuru
Dr. Ranjini M.S.	Scientist-B	CSRTI, Mysuru
Dr. Ravindra, A	Scientist-B	CSRTI, Mysuru
Dr.Mallikarjuna, G.	Scientist-B	CSRTI, Mysuru
Dr.Tanmoy Sarkar.	Scientist-B	CSRTI, Mysuru
Dr.Thirupathaiah, Y.	Scientist-B	CSRTI, Mysuru
Arunakumar G. S.	Scientist-B	CSRTI, Mysuru
Dr. Satish, L.	Scientist-B	CSRTI, Mysuru
Dr.Sumathy, R.	Info. Officer	CSRTI, Mysuru
P. Sowbhagya	SRF	CSRTI, Mysuru
L. C. Bindiya	JRF	CSRTI, Mysuru
Sneha M.V.	JRF	CSRTI, Mysuru
Bharath Gowda	JRF	CSRTI, Mysuru
Ravindra K. N.	JRF	CSRTI, Mysuru
Paramesha B.P.	JRF	CSRTI, Mysuru
Ravi Kumar R	JRF	CSRTI, Mysuru
Kruthika, H. S.	Ph.D. Scholar	CSRTI, Mysuru
Rukmangada M. S.	Com Optr	CSRTI, Mysuru
B.Lakshmikanthamma	Steno	CSRTI, Mysuru