CENTRAL SERICULTURE RESEARCH & TRAINING INSTITUTE, MYSURU

MINUTES OF 47th RESEARCH ADVISORY COMMITTEE MEETING HELD ON 24 & 25th JANUARY 2022 AT CSRTI, MYSURU THROUGH WEBEX PLATFORM

The 47th Research Advisory Committee meeting of CSRTI-Mysuru was held on 24 & 25th January 2022 at CSRTI-Mysuru on Webex platform for reviewing the progress of on-going projects, concluded projects, new projects, TOT, Training and extension activities of the Institute and its nested units for the period from August 2021 to December 2021. The meeting was presided over by Dr. Mahadev B. Chetti, Chairman RAC and Vice Chancellor, University of Agricultural Sciences (UASD) Dharwad. The list of the participants is appended as **Annexure -I**.

Dr. Babulal, Director and convener of RAC welcomed Chairman and members of RAC. He also welcomed all the heads of divisions/sections, scientists and JRFs, SRFs, RAs of the main Institute and heads of RSRSs and nested units who attended the meeting. Dr. Babulal, Director presented the highlights of the achievements made during the period.

The Chairman in his introductory remarks welcomed all the members and scientists of CSRTI, Mysuru to the meeting. He appreciated the progress made by the Institute even though the Pandemic was continuing affecting all activities in all levels. The training programmes conducted by the Institute during the pandemic period and the MOU with Adichunchanagiri University was well appreciated by the Chairman. He reiterated that as suggested in the last RAC each scientist has to publish atleast one research paper per year in peer reviewed journals based on the outcome of their projects.

While appreciating the patenting and commercialization activities he advised the institute to take up more number of patents and commercialization of technologies already tested and validated for their performance by the institute should reach farmers for their benefit. He further suggested that, government of Karnataka is promoting Agri start ups to promote entrepreneurship and the institute should give the technologies developed in the past two decades to such startups so that good entrepreneurs could be developed as the technologies are well validated and time tested ones.

Thereafter, meeting started as per agenda items. The brief deliberations and resolutions adopted are as under:

1. CONFIRMATION OF THE MINUTES OF 46th RAC MEETING HELD ON 20th AUGUST 2021

The Research Advisory Committee approved the minutes of the 46th RAC meeting as no comments were received from any of the members.

2. & 3. REVIEW OF FOLLOW-UP ACTION TAKEN ON GENERAL/PROJECT SPECIFIC DECISIONS OF 46th RAC MEETING

Dr. Mary Josepha Shery A.V., Scientist-D presented the follow-up actions taken on major decisions of the previous meeting to the committee. The committee expressed satisfaction regarding the follow up action taken on the suggestions of last meeting.

4. REVIEW OF CONCLUDED PROJECTS

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

Decisions: Dr.Tanmoy Sarkar, Scientist-C presented the concluding report of the project and the committee noted the progress. The committee opined that considering the drastic changes in the

climate the second phase of the project can be taken up considering its practical relevance in collaboration with GKVK.

(Action: Dr.Tanmoy Sarkar, Scientist-C, MBG)

3. PIC 3615- *Mapping QTLs for alkalinity tolerance in Mulberry* (*Morus spp.*)

Decisions: Mrs. M.R. Bavya, scientist-B presented the concluding report of the project to the committee and the committee observed that the objectives proposed were not fulfilled and same will not be completed in short period even with extension period requested, The scientist is advised to submit the concluded project report with the said objectives and submit the proposal for 2nd phase of the project to achieve the remaining objectives.

(Action: Mrs. M.R. Bavya, Scientist-B, Mol Biol)

4. **AIP 01006 Sl: Identification of probiotic consortium to improve the productivity in mulberry silkworm, *Bombyx mori***

Decisions: Dr.Y.Thirupathaiah, Scientist-C presented the concluding report of the project. The committee noted the outcome of the study and advised to conclude the project as such since the results cannot be taken forward as there is no significant outcome.

(Action: Dr.Y.Thirupathaiah, Scientist-C, S.W.Physiology)

5. PIC 01008 SI : Isolation, characterization of chitin/chitosan from silkworm pupal exuviae/spent pupae and its commercial exploitation

Decisions: Dr. K. N. Madhusudhan, Scientist-D, presented the concluding report of the project. The committee noted the outcome of the study and suggested to add the characterization studies of the pure chitin and chitosan commercially available and advised to continue to the second phase with a clear cut objective and a suitable collaborator.

(Action: Dr. K. N. Madhusudhan, Scientist-D, BBL)

5. **PIC01003 CN: Multi-Component Network Project: Genetic enhancement of mulberry through Genomic approaches.**

5.1 NW2a: Validation of a high-density SNP genotyping array for QTL discovery by association mapping and bi-parental analysis in Mulberry

5.2 NW2b: Discovery of QTL to drought adaptive traits by association mapping in Mulberry

5.3 NW 2C: Identification of QTLs for yield associated traits in mulberry

5.4 NW2d: Identification of QTLs for Nutrient Use Efficiency

5.5 NW2e : Sustaining Mulberry Yield: Identification of QTLs Conferring Resistance to Root Rot Disease by Linkage Mapping and Trait Introgression

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5.6 NW3b: Development of New Generation Transgenic Mulberry for Drought Stress Tolerance and Characterization of Existing Transgenic Mulberry for Confined Field Trials

5.7 NW4a: Comparative quantitative and qualitative analysis of secondary metabolites for identification of biomarkers responsible for feed quality in mulberry.

Decisions: Dr. Aruna kumar G. S. Scientist-C presented the concluding report of the all the above components of the project. The committee noted the outcome of the study and the investigators were advised to submit the concluding report at the earliest and to prepare the second phase of the project to continue the work in components with feasible outcome.

(Action: Dr. Aruna kumar, G. S. Scientist-C and team)

5. NEW PROJECTS FOR APPROVAL

1. Development of productive, auto sexing silkworm breeds/ hybrids of *Bombyx mori* L. in egg stage and separation of male silkworm population by optical sorting method for commercial exploitation

Decision: Dr. L. Kusuma, Scientist-C, presented the new project proposal for approval of the RAC. The committee advised to include the breeding source of the eggs, survival and fecundity and the improvement over the control and to show the selection data sheet of the breed to Dr. Basavaraj , Sci-E (Retd) and member of RAC and the revised project proposal with desirable target should be sent to central office for final approval.

(Action: Dr. L. Kusuma Sci-C, BBL)

2. Estimation of crop water requirement and water footprint for mulberry production

Decision: Dr. R. Mahesha, Scientist-C, presented the new project proposal for approval of the RAC. The committee not approved the project since the information on water requirement for mulberry and production of one kg of mulberry leaf and silk are already available. More over, a collaborative project entitled "Life cycle assessment of mulberry silkworm a national assessment" is approved by CO, CSB on the same aspects to CMERTI, Lahdoigarh.

(Action: Dr. R. Mahesha, Sci-C, Agronomy)

3. Improvement of existing machines/ technologies for drudgery reduction in sericulture

Decision: Mr. S .M. Hukkeri, Scientist-D, presented the new project proposal for approval of the RAC. The committee advised to prepare details of the equipments to be developed taking inputs from the collaborator along with the designs and diagrammatic version of the equipments and submit the same to the CO for further action. It was also opined to develop low cost equipments for the benefit of the stake holders.

(Action: Mr. S. M. Hukkeri, Sci-D, SED)

4. **Development of Spectroscopic Tests for Insecticide Resistant Biomarkers in silkworm, *Bombyx mori***

Decision: Dr. L. Sathish, Scientist-C, presented the new project proposal for approval of the RAC. The committee approved the project and suggested to restrict to one CI for the project from either Silkworm Pathology or Entomology discipline.

(Dr. Satish L., Sci-C, Silkworm Pathology)

6. Evaluation of new bivoltine double hybrid, BFC1xBFC10 (AIB: 3537 outcome) at farmers level for authorization for commercial exploitation

Decision: Dr. K. B. Chandrashekar, Scientist-D, presented the new project proposal which is the outcome of the project **AIB: 3537** for approval of the RAC. The HAC held on 01. 09. 2021 approved to undertake the above authorization trial of the hybrids selected across India. The RAC opined that the objective has to be changed and the methodology for the authorization should be included. The committee approved the project and advised to check the data presented and prepare a systematic action plan for implementing the project.

(Action: Dr. K. B. Chandrashekar, Sci-D, BBL)

6: REVIEW OF PROGRESS OF ON-GOING PROJECTS

1 PIB-3631: ***Primary yield evaluation for identification of superior mulberry hybrids with drought adaptive traits under sub-optimal irrigated condition***
Decision: Dr.M.K.Ragunath, Sci-D presented the progress and the committee noted the progress

(Action: Dr.M.K.Ragunath, Sci-D, MBG)

2**. PIB-3632:** ***Evaluation of superior triploid genotypes for yield and adaptability under varied agro-climatic conditions***
Decision: Dr.M.K.Ragunath, Sci-D presented the progress and the committee noted the progress

(Action: Dr. M. K. Raghunath, Sci-D, MBG)

3. PIE13001 MI : AICEM : ***Phase-IV: All India Coordinated Experimental Trial in Mulberry Phase-IV***
Decision: Dr. Manjappa, Sci-C presented the project. The committee advised to present the salient features of performance of varieties in the specific region in 4-5 slides and to report the pest incidence scientifically.

(Action: Dr. Manjappa, Sci-C, MBG)

4. PIN-3563: ***Evaluation of improved mulberry genotypes for yield potential, nutrient uptake and use efficiency under varied cultivation practices***
Decision: Dr. Dhaneshwar Padhan, Sci-B presented the progress to the committee. The committee noted the progress.

Action: Dr. Dhaneshwar Padhan., Sci-B, Agronomy)

5. PPA 01016SI: ***Development of an agronomical package for tree mulberry cultivation for wide acceptance among the Seri-farmers of Southern India***

Decision: Dr. Dhaneshwar Padhan, Sci-B presented the progress and the committee noted the progress.

(Action: Dr. Dhaneshwar Padhan., Sci-B, Agronomy)

6. PIC01007SI: ***Development of protocol for production of medically fit silk (cocoon, sericin, fibroin) for clinical purposes***
Decision: Dr. Ravindra, Sci-C presented the progress of the project. The committee suggested to scale up the hydroponics for mulberry leaf production to take up the silkworm rearing. The PI was advised to check the certification process as per medical regulations. It was also suggested to utilize the Sericin Hope, a sericin rich breed available in CSRTI-Mysuru in the project for the production of sericin. It was also suggested to characterize the different components in sericin. The methodology for isolation of sericin and fibroin has to be modified and has to adopt only the methods suitable for medical application.

(Action: Dr. Ravindra., Sci-C, SSC)

7. PRP 01015 SI: ***Identification, evaluation and inclusion of potential antagonistic microbes in Integrated Root Rot Disease Management in Mulberry***
Decision: Dr. G. S. Aruna Kumar presented the progress and the committee noted the progress. The committee suggested to identify some new molecules to use instead of the present fungicides as most of them are going to be banned. It was also suggested to find any microbes having synergestic effect with fungicides available in MTCC that can be utilized in mulberry ecosystem.

(Action: Dr. G. S. Aruna Kumar, Sci-C, Molecular Biology-I)

8. PIB-3633 : ***Development of highly productive and widely adapted mulberry using exotics and wild germplasm***
Decision: Dr. G. S. Arunakumar, presented the progress and the committee noted the progress.

(Action: Dr. G. S. Aruna Kumar,Sci-C, Molecular Biology-I)

9. PIE-01014SI- ***Development of Distinctiveness, Uniformity and Stability (DUS) Descriptors for Mulberry (Morus spp) and their Validation - Phase III***

Decision: Mrs. Bhavya, M. R, presented the progress and the committee noted the progress.

(Action: Mrs. Bhavya, M. R., Sci-B, Molecular Biology-I)

10. AIB 01004 MI: ***Development of multivoltine breeds with improved silk quality utilizing indigenous and exotic bivoltine breeds***
Decision: Dr. K. B. Chandrashekar, Scientist-D presented the progress to the committee. The committee suggested to do statistical analysis for each character.

(Action: Dr. K. B. Chandrashekar., Sci-D, MBL)

11. AIB: 01011 S1 – ***Development of multivoltine foundation crosses for productivity and high silk percentage***
Decision: Dr. K. B. Chandrashekar, Scientist-D presented the progress of the project. The committee suggested to check the data and opined that AEI should be used for shorlisting the breeds and not for selection and evaluation. It was suggested to consider major contributing characters for evaluation and the characters should be mentioned in the presentation with AEI multiple characters. It was also suggested to analyze the data statistically.

(Action: Dr. K. B. Chandrashekar., Sci-D, MBL)

12. AIB 01 009 MI: ***Evaluation of new bivoltine double hybrid, TT21 x TT56 at farmers level for authorization for commercial exploitation***
Decision: Dr. K. N. Madhusudhan, Scientist-D presented the progress of the project. The committee observed that the number of dfls in control and experiment are not uniform and not to compare single hybrid with double hybrid. It has been advised to present the rearing performance data and data of post cocoon parameters.

(Action: Dr. K. N. Madhusudhan, Sci-D, BBL)

13. BPS 01013 CN: ***Utilization and diversification of silkworm pupae products for human & animal consumption and composting*****.**
Decision: Dr. Y. Thirupathaiah, Sci-C presented the progress to the committee. The committee noted the progress.

(Action: Dr. Y. Thirupathaiah., Sci-C, SW Physiology)

14. ARP-01019SI: ***Screening of drugs to inhibit the PI3K-AKT pathway in Bombyx mori for controlling nuclear polyhedrosis virus infection***
Decision: Dr. Mallikarjuna, Sci-C presented the progress of the project. The committee observed some deviation from the objectives and suggested the PI to stick to the objectives approved. It was also suggested to modify the methodology if required to achieve the target. To study the protein expression Radio Immuno Assay and to identify the gene markers in the pathway RT-PCR study was suggested. It was advised to have a review on the progress of the project in institute level and to prepare an action plan to achieve the targets.

(Action: Dr. Mallikarjuna., Sci-C, SWPathology)

15. **ARP 01012 SI :** ***Development of a knowledge base on the silkworm diseases and pests and their management***

Decision: Dr. A.V. Mary Josepha Shery, Sci-D presented the progress to the committee. It was suggested to have thorough literature survey and also to get permission from the Journals for uploading the PDFs.

(Action: Dr. A.V. Mary Josepha Shery., Sci-D, SW Pathology)

16. PRE 01010SI: ***Development of Integrated Pest Management (IPM) module for leaf roller Diaphania pulverulentalis (Lepidoptera: Pyralidae) in mulberry***

Decision: Dr. S. Mahiba Helen, Sci-D presented the progress to the committee. It was advised to conduct a pilot study to utilize the outcome of the project "PRE01005 CN: Demonstration and popularization of pheromone trap against silkworm uzifly, *Exorista bombycis*" for the development of a pheromone trap which can be included in the IPM strategy. It was also suggested to conduct the work in a priority basis as leaf roller infestation is a serious problem in the field.

(Action: Dr. S. Mahiba Helen., Sci-D, PML)

17 MFM 01020 CN: *Development of artificial intelligence empowered multisensory approach for gender classification and separation of silkworm cocoons*

Decision: Mr. S. M. Hukkeri, Sci-D presented the progress to the committee. The machine developed for gender classification has been demonstrated at SSPC, Mysuru which was appreciated by the committee. The committee suggested for increasing the efficiency of the equipment and also to note the error in the results and to rectify it.

(Action: Mr. S. M. Hukkeri., Sci-D, SED)

18. PPF01017SI: ***Economics of Mulberry Sericulture in South India***

Decision: Dr. N.G.Selvaraju, Sci-D presented the progress to the committee. It was suggested by the committee that it is not necessary to mention the race of the silkworm while calculating the cost of production.

(Action: Dr. N.G.Selvaraju., Sci-D, SEEM)

19**. PIN 01018 SI:** ***Effect of potassium mobilising bacteria Frateuria aurentia on growth and development of mulberry***

Decision: Dr. N. Dhahira Beevi, Sci-D presented the progress to the committee. The committee suggested to recheck the data of the chlorophyll content.

(Action: Dr.N. Dhahira Beevi., Sci-D, RSRS,Salem)

22. **MOE 01021SI: Evaluation of improved technologies of mulberry sericulture in South India.**

Component 1: Evaluation of chawki feed supplement formulation in commercial chawki rearing centre.

Decision: Dr. R. Bhuvaneswari, Sci-C presented the progress. The committee suggested to increase the number of dfls in the programme.

(Action: Dr.E.Bhuvaneswari, Sci-C, Silkworm Physiology)

Component 2: Popularization of G11xG19 double hybrid in Kolar region of Karnataka.

Decision: Dr. K. N. Madhusudhan, Sci-D presented the progress. The committee suggested to present the performance of the breed in comparison with the existing variety and the popularization has to be done systematically. It was suggested to present the target and achievement. The PI was advised to

prepare action plan in consultation with DOS and also to conduct awareness programme including DOS Karnataka at Kolar area to popularize the breed to complete the trials successfully.

(Action: Dr.K.N.Madhusudhan, Sci-D, BBL)

Component 3: Evaluation of productive double hybrid DHP5 at farmers level.

Decision: Dr.R.Meenal, Sci-D presented the progress and the committee noted the progress and suggested to compare the new hybrid with FC1x FC2.

(Action: Dr.R.Meenal, Sci-D, BBL)

Component 4: Evaluation of newly developed multiviral diseases tolerant bivoltine hybrid RD1N1

Decision: Dr. L. Sathish, Sci-C presented the progress. The committee suggested to test the hybrid in North West India for autumn season.

(Action: Dr.L.Sathish, Sci-C, Silkworm Pathology)

Component 5: Evaluation of Cauvery Gold (MV1xS8): An improved crossbreed for cocoon productivity and silk quality

Decision: Dr. K. B. Chandrashekar, Sci-D presented the progress. The committee suggested to analyze the crop performance and also to present the details of no. farmers, yield frequency, crop losses , post cocoon analysis etc. It was also suggested to identify farmers for the seed rearing.

(Action: Dr. K. B. Chandrashekar, Sci-D, MBL)

Component 6: Evaluation of Improved Pure Mysore PM-4 line at BSF of DOS, Karnataka and crossbreed at farmers level.

Decision: Dr. K. B. Chandrashekar,Sci-D presented the progress. The committee suggested to hand over the race to DOS after presenting the performance of the breed to the Commissioner of Sericulture Karnataka. It was suggested to check the data of the race once again for confirmation before handing over the race.

(Action: Dr.K.B.Chandrashekar, Sci-D, MBL)

Component 7: Evaluation of robust bivoltine silkworm hybrids suitable for different regions of high temperature and high humidity conditions.

Decision: Dr. R. Meenal, Sci-D presented the progress and committee noted the progress.

(Action: Dr.R.Meenal, Sci-D, BBL)

Component 8: Validation of the M-Lamp technology in Mulberry and Vanya sector

Decision: Dr. G. Mallikarjuna, Sci-C presented the progress. The committee suggested to give the percentage of false positive results if any. It has suggested to complete the validation of the Muga samples.

(Action: Dr.G.Mallikarjuna Sci-C, Silkworm pathology)

Component 9: Impact of drip irrigation in mulberry productivity

Decision: Dr. R. Mahesh, Sci-C presented the progress and the committee noted it.

(Action: Dr.R.Mahesh, Sci-C, Agronomy)

Item No. 7. Progress of RSRSs, P4 Hassan and SSBS, Conoor

RSRS,Salem

Dr.N.Dhahira Beevi, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and the committee noted the progress

(Action: Dr.N.Dhahira Beevi, Sci-D, RSRS,Salem)

RSRS, Ananthapur

Dr. P. Sudhakar, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and the committee noted the progress.

(Action: Dr. P.Sudhakar, Sci-D, RSRS,Ananthapur)

RSRS, Chamrajnagar

Mr. Sivasubramoian, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and the committee noted the progress.

(Action: Mr.Sivasubramonian, Sci-D, RSRS,Chamrajnagar)

RSRS, Kodathi

Dr.S.B.Kulkarni, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and the committee noted the progress.

(Action: Dr.S.B.Kulkarni, Sci-D, RSRS,Kodathi)

RSRS, Mulugu

Dr.Praveenkumar, Sci-D presented the progress of activities of CBT, ECPs and CPP activities and the committee suggested to go for silkworm rearing also in the unit.

(Action: Dr.Praveenkumar, Sci-D, RSRS,Mulugu)

SSBS, Conoor

Dr. V. Vijay, Sci-C presented the progress of activities of the station and the committee noted the progress.

(Action: Dr. V. Vijay, Sci-C, SSBS, Coonoor)

P4 Hassan

Dr. Dayananda, Sci-D presented the progress of activities of the station and the committee noted the progress.

(Action: Dr. Dayananda, Sci-D, P4 Hassan)

Item No.8. Extension and other programmes

Dr. N. G. Selvaraju, Sci-D, SEEM presented the progress of extension division and the committee noted the progress.

(Action: Dr. N. G. Selvaraju Sci-D, SEEM)

Item No. 9. Training (Capacity Building and Training) and other programmes

Dr. S. Purushotham, Sci-D presented the progress of the Training Division. The committee noted the achievements.

(Action:Dr. S. Purushotham, Sci-D, Training)

Item No. 10. Progress of Pilot studies

1: Development of Project Management Database of CSRTI, Mysuru

Decision: Dr. L. Kusuma,Sci-C presented the progress of the pilot study. The committee noted the progress.

(Action: Dr. L. Kusuma, Sci-C, BBL)

2 : Studies on fecundity enhancement by application of natural stimulants during oviposition in silk moth *B. Mori* L.

Decision: Dr. R. Bhagya, Sci-D presented the progress of the pilot study. The committee suggested to find the active principle responsible for the stimulus. It was also suggested to standardize the extraction procedure.

(Action: Dr. R. Bhagya, Sci-D, TVDC)

3 Identification of candidate gene markers for the development of silkworm hybrid with longevity associated with stress tolerance and productive traits

Decision: Dr.M.S.Ranjini,Sci-C presented the progress. The committee suggested to study the functional gene using cDNA.

(Action: Dr.M.S.Ranjini, Sci-C, BBL)

4. Standardization of hydroponics method for multiplication of mulberry

Decision: Dr. Divya Singh, Sci-B presented the progress. The committee noted the progress.

(Action: Dr.Divya Singh, Sci-B, Mulberry Physiology)

5 A study on the Physio biochemical changes in the Silkworm *Bombyx mori*, showing non spinning syndrome

Decision: Dr. E. Bhuvaneswari, Sci-C presented the progress. The committee observed that the parameters suggested for the study are not relevant and the literature survey is also very minimum and suggested to discontinue the work and to take up the study in the lines suggested.

(Action: Dr. E, Bhuvaneswari, Sci-C, Silkworm Physiology)

6. Identification of endophytes for mulberry foliar diseases and plant growth promotion

Decision: Dr.L.Sathish, Sci-C presented the progress. The committee suggested to include the positive control in the experiment.

(Action: Dr. L. Sathish, Sci-C, Silkworm Pathology)

7 Design and development of 3-D fabric based mountages suitable for silkworm rearing

Decision: Dr.S.M.Hukkeri,Sci-D presented the progress. The committee suggested to study the spinning performance and the post cocoon parameters and to compare it with rotary mountage.

(Action: Dr.S.M.Hukkeri, Sci-D, SED)

8. **Exploring the possibilities of utilizing UV disinfection to ensure the highest standards of disinfection for room/equipments of CRC/late age rearing**

Decision: Dr. S. M. Hukkeri, Sci-D presented the progress. The committee suggested to discontinue the work as the technology is not effective for disinfection.

(Action: Dr.S.M.Hukkeri, Sci-D, SED)

9 A new rotating model of shoot rearing system - An approach for better cocoon quality

Decision: Dr. K. B. Chandrashekar, Sci-D presented the progress. The committee suggested to drop the study as the design is not having any practical application.

(Action: Dr.K.B.Chandrashekar, Sci-D, BBL)

Item No. 11. Any other points for discussion

Concluding remarks by RAC Chairman and members

Dr. Mahadev B. Chetti, VC, UASD, Darwad, RAC Chairman

- Suggested to have midterm corrections with experts to critically evaluate the progress of the projects.
- To conduct Internal review on the budget utilization
- To have MOUs with universities and Institutes working on sericulture or other allied science to use their expertise for the benefit of the stakeholders and publication of papers in Journals having NAAS rating and Impact Factor.

Dr. V. Sivaprasad, Director (Tech), CSB, Bangalore, Member

Suggested to check the presentations of each projects before placing to the RAC.

Dr. H. K. Basavaraja, Retd. Director (I/c), CSB, Member

- Suggested to present statically analyzed data
- Suggested to use the results of the molecular and biochemical studies in the conventional research.

Dr. S. M. Moorthy, Scientist-D & Head, RCS, Bangalore, Member

- Suggested to check the requests for extension of the projects before submission.
- The budget utilization of the projects is minimum and suggested to increase it.

General points

It was suggested that CSR&TI should focus on developing potent male components to replace the CSR2.

The meeting ended with vote of thanks to the Chair.

(Dr. Mahadev B.Chetti)
RAC,CHAIRMAN
and
Vice Chancellor,
University of Agricultural Sciences (UASD)
Dharwad

Annexure-I

List of Members attended 47th Meeting of RAC held on 24&25th January 2022

#	Name of the Member	Participation
1	Dr. Mahadev B.Chetti, Vice Chancellor, UAS, Dharwad- Chairman	(through Webex)
2	Dr. Babulal Director CSRTI-Mysuru Member Convener	In person
3	Dr. H. K. Basavaraja, Director (I/C) (Rtd.), CSB, Bengaluru -Member	(through Webex)
4	Dr. E. Sreenivasa Rao, Principal Scientist, IIHR, Bengaluru- Member	(through Webex)
5	Prof. (Dr.)S. Janarthanan, University of Madras, Chennai - Member	(through Webex)
6	Dr.V.Sivaprasad Director (Tech.) CSB, Bengaluru - Member	(through Webex)
7	Dr. S. M.Moorthy, Sci-D and Head, RCS, CSB, Bengaluru - Member	(through Webex)
8	Mr. N. Ramamoorthy, DD (Seed, Hosur) (Rep. DOS, TN) - Member	(through Webex)
9	Mr. Y. Shankar Reddy, Farmer, Palamaner, AP- Member	(through Webex)
10	Dr. K. Narayanagowda, UAS, GKVK, Bengaluru- Member	Absent
11	Mr.D,Varanagabhushana, Additional Director (Rep. DOS, Karnataka) -Member	(through Webex)
12	The Comm of Sericulture, Govt. of Madhya Pradesh, Bhopal- Member	Absent
13	Mr.Arjun Gore, (Rep. DOS, Maharashtra)- Member	(through Webex)
14	Mr. Shaik lsmail, Reeler, Chikkaballapur, Karnataka- Member	Absent
15	Smt.C.Arun kumari, additional Director (Rep. DOS, AP) - Member	(through Webex)
16	Dr.P.J.Raju, Director, APSSRDI, Hindupur (Rep. DOS, AP) - Member	(through Webex)
17	The Commissioner of Sericulture DOS, Telengana - Member	Absent
18	Dr. K. Sashindran Nair Sc-D, (Rep. NSSO, Bengaluru) - Member	(through Webex)

List of participants of Institute & Nested units attended 47th Meeting of RAC held on 24 &25.01.2022

#	Name & Designation (In person)	#	(through Webex)
1	Dr.MaryJosephaSheryA.V,Sci-DCSRTI, Mysore	30	Dr. Sobhana V Sci-C CSRTI, Mysore
2	Dr.K.B. Chandrashekar Sci-D CSRTI, Mysore	31	Dr. Ravindra Matigatti Sci - D, CSRTI Mysore
3	Dr. N. G. Selvaraju Sci-D CSRTI, Mysore	32	Mr. Abhilash H.K.SRF, CSRTI Mysore
4	Dr. Raghunath M.K. Sci-D CSRTI, Mysore	33	Mr. Bharath Gowda SRF, CSRTI Mysore
5	Dr. C. M. Babu Sci -D CSRTI, Mysore	34	Mrs. Bhavya M. R. Sci- B CSRTI, Mysore
6	Dr. Purushotham S. Sci-D CSRTI, Mysore	35	Dr. N. Dhahira Beevi Sci-D RSRS Salem
7	Dr. Dayanada Sci-D, P4 BSF, Hassan	36	Dr.P.Sudhakar Sci-D RSRS Ananthapur
8	Mr.Sanath kumar Sci-D CSRTI, Mysore	37	Mr. Sivasubramaniayan, Sci-D RSRS, Ch. Nagar
9	Dr. Thirupathaiah Y. Sci-C CSRTI, Mysore	38	Dr. V. Vijay, Sci-C, SSBS, Conoor
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13	Dr. Manjappa Sci-C CSRTI, Mysore	42	Dr.M.Venktachallapathi,Sci-D,REC, Palamaner
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