



के. रे. बो -केन्द्रीय तसर अनुसंधान एवं प्रशिक्षण संस्थान, राँची - 383838  
CSB-CENTRAL TASAR RESEARCH AND TRAINING INSTITUTE,  
RANCHI- 835303



**MINUTES OF 73<sup>rd</sup> MEETING OF THE RESEARCH COUNCIL (RC) OF CSB-CTR TI,  
RANCHI HELD ON 06<sup>th</sup> March, 2025**

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The 73<sup>rd</sup> meeting of Research Council (RC) of CSB-Central Tasar Research and Training Institute was held on 06<sup>th</sup> December, 2025 at the Institute under the Chairmanship of Dr. N.B. Chowdary, Director, CSB-CTR TI, Ranchi to evaluate the new project proposals and to review the ongoing & concluded projects, TOTs, CBT and ECP programmes. At the outset, Dr. Jitendra Singh, Scientist-D & In-charge, PMCE Division, extended warm welcome to Dr. N. B. Chowdary, Chairman, Research Council and scientists of the Institute and its Nested Units. List of the participants is appended as Annexure-1.

Dr. N.B. Chowdary, Chairman, Research Council, welcomed all the scientists of the Institute and its Nested Unit. In his opening remarks, he emphasized and advocated the scientists to bring some noticeable impact in field for promotion of tasar. Later the meeting proceeded as per the agenda by Dr. Jitendra Singh, Scientist-D, PMCE Division.

**Agenda No.1: Confirmation of the previous RC Meeting Minutes**

The Minutes of 72<sup>nd</sup> R.C. meeting was circulated to the Scientists of the Institute and its Nested Units vide Email dated 04.01.2025. Since no comments/suggestions have been received so far, the Minutes may be confirmed.

**Agenda No. 2: Review of Action Taken of the recommendation / decisions of the previous RC meeting**

The follow-up action taken on the decisions/recommendations of the previous meetings were presented by Dr. Jitendra Singh, Scientist-D & In-charge PMCE Division. While approving the action taken report, the Chairman made the following decisions/suggestions.

**Concluded Pilot Studies:**

1. [CTR&TI/HPI/PS-30]: Comparative efficacy of nutrient formulations for improvement of leaf yield & quality of tasar host plantation. (Sept. 2023-February, 2024) [PI: Smt. Susmita Das, Scientist-D]

Chairman, suggested PI to submit the final report and patent application to the PMCE division for further action.

[Action: Smt. Susmita Das, Scientist-D]

2. [CTR&TI/SSRT/BP/32]: Efficacy of Vijetha and Ankush for body disinfection of tasar silkworm. (September, 2023-February, 2024) [PI: Dr. K. Jena. Scientist-D]

The committee suggested PI to submit final report and publish at least one popular or research article in NAAS rated/Impact factor journal.

[Action: Dr. K. Jena. Scientist-D]

3. [CTR&TUSSRT/BP/30]: Preparation and characterization of Chitosan sheet/nano fiber mat (Sept. 2023- February, 2024) [PI: Dr. K. Jena, Scientist -D]

The chairmen suggested PI to submit concluded report and publish at least one popular or

research article in NAAS rated/Impact factor journal.

[Action: Dr. K. Jena, Scientist-D]

4. [CTRRTI/PCT/PS32]: Modification of existing softening technique followed for peduncle for better yarn quality (Jan, 2024- June, 2024) (PI: Mr. Ashu Kumar, Scientist-B)

The committees suggested PI to submit concluded report and publish at least one popular or research article in NAAS rated/Impact factor journal.

[Action: Mr. Ashu Kumar, Scientist-B]

5. [CTRRTI/PCT/PS33]: Development of alternative ways of producing Ghicha tasar yarn (Jan, 2024- June, 2024) (PI: Mr. Ashu Kumar, Scientist-B)

The committee suggested PI to publish at least one popular or research article in NAAS rated/Impact factor journal and advise to submit the concluded report to PMCE division.

[Action: Mr. Ashu Kumar, Scientist-B]

6. [CTR&TI/FMA/PS-36] Characterization and evaluation of propagation traits, floral biology, morphological, biochemical and reproductive parameters in the identified improved accessions of *Terminalia arjuna*. (May, 2024-October 2024)

[PI: Dr. Shreenath Y.S, Scientist-B]

Chairman advised PI to review the results thoroughly before submission of final report to PMCE Division.

[Action: Dr. Shreenath Y.S, Scientist-B]

7. [CTRRT&TI/FMA/PS/35] Isolation and characterization of culturable bacterial communities associated with salivary glands of *Forcipomyia* spp. an *ectoparasite* on *Antheraea mylitta*. ( May, 2024 – October 2024) (PI: Dr. S.M Majumdar, Scientist-C)

Chairman advised PI for timely submission of concluded pilot study report in RMIS10 to PMCE Division and publish at least one research paper from conclude pilot study.

[Action: Dr.S. M. Majumdar, Scientist-C]

8. [CTRRTI/FMA/PS/34] Enhancement of sexual and asexual reproduction in Asan [PI: Mr. Haragopal Dutta, Scientist-B]

Mr. Haragopal Dutta, Scientist-B presented the findings of the pilot study and the Committee suggested to review the methodology with IF rated journal and Submit final report to PMCE Division.

[Action: Mr. Haragopal Dutta, Scientist-B]

9. [CTRRTI/SEEM/PS/38] An analysis of the causes of low tasar raw silk production (July 2024- December, 2024)

Dr. Jagadajyothi Binkdakatti presented the findings of the pilot study and the Committee suggested to submit final report to PMCE Division.

[PI: Dr. Jagadajyothi Binkdakatti ., Scientist-D]

10. [CTRRTI/BP/PS/41] Exploring the Feasibility of Rearing of Tasar Silkworm on Lac Food Plants: Implications for Sustainable Silk Production (July 2024- December 2024)

Dr. K.Jena, Scientist - D presented the findings of the pilot study and the Committee suggested to submit final report to PMCE Division.

[PI: Dr. K. Jena, Scientist-D]

11. [CTR&TI/BP/PS/39] Eco Friendly Bioplastic Production Using Tasar Silk Eggshell: A Sustainable Approach (July 2024-December 2024)

Dr. K.Jena, Scientist - D presented the findings of the pilot study and the Committee suggested to submit final report to PMCE Division.

[PI: Dr. K. Jena, Scientist-D]

12. CTR&TI/BT/PS/37: Possibilities of indoor rearing in Tropical Tasar Silkworm *Antheraea mylitta* (July 2024-December 2024)

Dr. Divya Rajawat, Scientist-B presented the findings of the pilot study and the Committee suggested to submit final report to PMCE Division.

[PI: Dr. Divya Rajawat, Scientist-B]

**Evaluation of New Research Proposals:**

1. **Nutrient management in tasar culture through nano fertilizers** [Dr. Shantakar Giri, Scientist-D, RSRS]

Chairman suggested PI to revised proposal as per RCS comments and submit for approval.

[Action: PI: Dr. Shantakar Giri, Scientist-D, RSRS, Dumka]

2. **Development of Oak Tasar rearing Technology for early spring crop** [PI: Mr. A.S. Verma, Scientist-D, RSRS, Bhimtal]

It was notice by chairman that Oak tasar is most important and highly focused sector for Silk samagra III but RSRS, Bhimtal is not taking any projects in last five year. Committee suggested PI to submit project proposal to the PMCE division and eSubMIS by 10.01.2025 for further action.

[Action: Mr. A.S. Verma, Scientist-D, RSRS, Bhimtal]

**Agenda No. 3: New concept notes for approval: (5)**

1. Evaluating the Effect of Hormonal Treatment and Starvation on the Life Cycle and Silk Gland Activity in Tasar silkworm (*Antheraea mylitta*) [PI: Dr. Divya Rajawat., Scientist-B]

Dr. Divya Rajawat., Scientist-B presented the research project proposal. Committee suggestions PI to submit proposal in eSubMIS. for further action.

[Action: Dr. Divya Rajawat., Scientist-B]

2. Development of package of high density mixed plantation of tasar food plants for indoor rearing trial of tasar silkworm *Antheraea mylitta* [PI: Dr. J.P. Pandey, Scientist-D]

Dr. J.P. Pandey, Scientist-D presented the research project proposal. PI inform house that the project proposal has been prepared based on the instruction of HMOT and it will be review

weekly by HMOT. Committee approved the proposal and suggested PI to submit it to PMCE division for further action.

[Action: Dr. J.P. Pandey, Scientist-D]

3. Establishment of Model module for promotion of tasar based livelihood in coal mine area of Dhanbad region

Dr. J.P. Pandey, Scientist-D presented the research project proposal. Committee suggested PI to submit project proposal for CSR funding.

[Action: PI: Dr. J. P. Pandey, Scientist-D]

4. Integrated Whole genome and transcriptome analysis of *Antheraea proylei*: Unraveling molecular insights of fecundity and silk synthesis

Dr. J.P. Pandey, Scientist-D presented the research project proposal. Committee suggested PI to submit project proposal for DBT funding.

[Action: PI: Dr. J.P.Pandey, Scientist-D]

5. Smart stretchable bone implants: Promoting external fracture healing and regeneration

Dr. Trishna Bal, Asst. Professor, BIT Mesra presented the research project proposal. Chairman suggested including all type of silkworm for experiment instead of only Daba and submitting project proposal for DBT funding.

[Action: PI: Dr. Trishna Bal, Asst. Professor, BIT Mesra &  
PI: Dr. Karmabeer Jena, Scientist-D (CSB-CTR TI)]

#### **Agenda No. 4: Review on concluded projects Concluded Project (as PI): 04**

1. [AIE04004CN] Study on existence of tropical tasar silkworm ecoraces and their subsist places with the help of geospatial technology. (March, 2020- February 2023 Extended upto February 2025)

Committee members appreciated the effort of the scientists and given following suggestions. The utility of the database, which is the outcome of the project, may be ensured through a smaller project or otherwise and the gaps may be filled.

[PI: Dr. I. G. Prabhu, Scientist-D] (In collaboration with NESAC Shillong)

2. [PPA 04010 CN] Region and season specific selection of pruning and brushing schedule for tasar food plants and silkworm protection. (February, 2022- January, 2025)

The recommendations from the project outcome should be included in the Package of Practice (POP) of Tasar sericulture for the respective regions.

[PI: Dr. Jitendra Singh, Scientist-D]

3. [ARE04011MI] Diversity, yield loss and management of predatory wasps attacking *Antheraea mylitta* Drury [February, 2022- January, 2025]

Committee suggested that poison baiting may be promoted over Bio-control measures as they are not easy and feasible till further research is carried out in that line.

[PI: Dr. H.S. Gadad, Scientist-C]

#### **Agenda No. 5: Progress of Ongoing projects**

**[PIB 04009 SI]** Evaluation of identified hybrids of *Terminalia arjuna* x *T. tomentosa* and drought tolerant *T. arjuna* for their suitability in different tropical tasar silkworm rearing regions. (October 2021 - September 2026)

Suggested to explore appropriate methods for leaf analysis including those followed for mulberry leaf assessment

[Action: Dr. Aparna Kopparapu, Scientist-C & PI]

**[ARP 04012 SI]** Developing ectomycorrhizal bio-inoculants for improving survival and leaf yield of *Terminalia arjuna* and *T. tomentosa*. (Feb. 2022- Jan.2026)

Dr. Aparna Kopparapu, Scientist-C presented the progress and committee suggested PI to ensure progress of the project as per mile stone.

[Action: Dr. Aparna K., Scientist-C & PI]

**[SIP 04022 SIC]** Impact of weather change on tasar food plants and silkworm (March, 2024 February, 2027).

Dr. Jitendra Singh, Scientist-D presented the progress and committee suggested PI the occurrence of hot waves and cold waves should also be documented and if possible, the recommendations to farmers to manage these situations may be documented

[Action: Dr. Jitendra Singh, Scientist-D & PI]

**[PPA 04023 SIC]** Identification of suitable package of practices for establishment of *Lagerstroemia speciosa* (Jarul) for quality leaf production (March, 2024 – February, 2029).

Co-I presented the progress and committee took note the progress.

[Action: Smt. Susmita Das, Scientist-D]

**[PPA 04024SIC]** Effect of different plant spacing and pruning heights on chawki lea productivity of tasar host plants (*Terminalia arjuna*, *T. Tomentosa* and *Lagerstroemi speciosa*) and chawki silkworm rearing. (March 2024 – February, 2027)

Dr. Harendra Yadav, Scientist-C presented the progress and committee took note the progress.

[Action: Dr. Harendra Yadav, Scientist-C]

**[APR 04015CN]** Documentation and Validation of Indigenous Technical Knowledg (ITKs) inn Tropical tasar Zone (December-2022 to November-2025)

Dr. Jagadajyothi Binkdakatti, Scientist-D & PI of project presented the progress and committee took note the progress.

[Action: Dr. Jagadajyothi Binkdakatti, Scientist-D & PI]

**[ARP04016M1]** Tasar Silkworm Disease Monitoring and Management in North an Central states of India (March, 2023-Feb, 2028)

Dr. J.P. Pandey Scientist-D & PI of the project presented the progress and committee took note the progress.

[Action: Dr. J.P. Pandey Scientist-D, Scientist-C & PI]

[A1B04017MI] Recurrent Selection and Multiplication of Thermo-Tolerant Line (s) of Tropical Tasar Silkworm (March, 2023-Feb, 2026)

PI presented the progress of project and committee suggested PI to ensure project running as per milestone.

[Action: Dr. I. G. Prabhu. Scientist-D & PI]

[AIB 04018 MI]: In situ Conservation of Modal Ecorace of Tasar Silkworm in Odisha (March, 2023-Dec, 2027)

Dr. H.S. Gadad, Scientist-C presented the progress of project and committee suggested PI to complete the signing of MoA between different organizations.

[Action: Dr. I. G. Prabhu, Scientist-D & PI]

[AIB 04019 MI]: In situ Conservation of Raily Ecorace of Tasar Silkworm in Chhattisgarh (March, 2023-Dec, 2027)

Dr. H.S. Gadad, Scientist-C presented the progress of project and committee suggested PI to complete the signing of MoA between different organizations.

[Action: Dr. H.S.Gadad, Scientist-C & PI]

[AIB 04020 MI]: In situ Conservation of Sarihan Ecorace of Tasar Silkworm in Jharkhand (March, 2023-Dec, 2027)

Co-I presented the progress of project and committee suggested PI to ensure project running as per milestone.

[Action: Dr. S. Giri, Scientist-D. RSRS, Dumka & PI]

[CEM 04021 MNC]: Evaluation of technologies and machines developed in tasar post cocoon technology (March 2024 – February, 2026).

Shri. Ashu Kumar, Scientist-B presented the progress and committee took note of the progress. The PI was advised to fine tune the existing technologies and try to arrange one wet reeling machine for the institute.

[Action: Shri Ashu Kumar, Scientist-B & PI]

[BPC 04025 SNC] Management of type II diabetic (T2D) condition through tasar sericin (March 2024 – September, 2026). (PI: Dr. K. Jena, Scientist-D)

Dr. K. Jena, Scientist-D & PI of the project presented the progress and committee took note of the progress.

[Action: Dr. K.Jena, Scientist-D & PI]

[BPS 04026 SNC] Studies on nutraceutical properties of silkworm pupae oil and development of a low-cost combination of vanya and mulberry pupae meal based feed for carp broodstock, and cultivable aquatic species (March 2024 – February, 2026) (PI: Dr. K. Jena, Scientist-D)

Dr. K. Jena, Scientist-D & PI of the project presented the progress and committee took note of the progress.

[Action: Dr. K.Jena, Scientist-D & PI]

[AIT 04026 SIE] Development of KASP Based SNP Barcoding System for the Molecular Identification of Tropical Tasar Silkworm Ecoraces [PI: Dr. I. G. Prabhu, Scientist-D]

Dr. Jitendra Singh, Scientist -D presented the progress of the project and the Committee noted the progress

[Action: Dr. I. G. Prabhu, Scientist-D & PI]

[AIT04028SNE] Inflatable mucoadhesive vaginal tablet coin (VTC) for instant spermicidal action as local vaginal contraceptive and microbicide (PI: Dr. K. Jena, Scientist-D)

Dr. K. Jena, Scientist-D & PI of the project presented the progress and committee took note of the progress.

[Action: Dr. K.Jena, Scientist-D & PI]

### **Ongoing Projects as Co-PI**

[SRP08012MNC] Development of a Rapid Antigen Test Kit for Diagnosis of Cytoplasmic Polyhedrosis in Vanay Silkworms (*Antheraea assamensis*, *A. mylitta* and *A. proylei*) (Collaboration with SBRL) (February 2024- January 2026)

Dr. H.S. Gadad, Scientist-C presented the progress and committee took note of the progress.

[Action: Dr. H.S. Gadad, Scientist-C & PI]

## **AGENDA NO. 6: PROGRESS OF PILOT STUDIES/ PROGRAMME OF WORK**

### **A. Ongoing Pilot Studies:**

1. Assessment of Arjun plants growth and yield parameters in different plant spacing [PI: Dr. Harendra Yadav., Scientist-C]

Dr. Harendra Yadav., Scientist-C presented the progress and committee took note of the progress.

[Action: Ms. Susmita Das., Scientist-D]

2. Utilizing Tasar Host Plant Wood Waste for Cellulose Production: A Green Approach

[PI :Mr. Hargopal Dutta, Scientist -B]

Mr. Hargopal Dutta, Scientist –B presented the progress and committee suggested to work out the B C ratio.

[Action: Mr. Hargopal Dutta, Scientist -B]

3. Metabolite profiling of tasar food plants and silkworms to study their potential impact on silk production. [PI: Dr. Nidhi Sukhija, Scientist -B]

Dr. Nidhi Sukhija, Scientist -B presented the findings of the pilot study and committee took note of the progress.

[Action: Dr. Nidhi Sukhija, Scientist -B]

4. [ CSB-CTR TI/2024-25SP/01] Evaluation of Efficacy of Commercial Drug Formulations against Pebrine in Tasar Silkworm (*Antheraea mylitta*) [PI: Dr. Sruthy K.S, Scientist -B]

Presented the progress of the project and committee took note the progress

[Action: Dr. Sruthy K.S, Scientist -B]

5. [CTR TI/BP/PS/39] [CTR T&TI/BSMTC/PS/40] Studies on standardizing techniques for preservation of Diapausing nucleus Seed cocoons and Egg production in basic seed grainage.[PI: K. S. Prakash, Scientist-D, BSMTC, R.C Varam, AP]

Co-I Presented the progress of the project and committee took note the progress

[Action: K. S. Prakash, Scientist-D, BSMTC, R.C Varam, AP]

6. CTR&TI/BT/PS/37: [CSB-CTR TI/2024-25HP/PS/02] Design & Development of Conveyor Belt for Tasar Silkworm Pebrine Identification System (October 2024 –March, 2025) [PI: Ms. Susmita Das, Scientist -D]

Co-I Presented the progress of the project and committee took note the progress

[Action: Ms. Susmita Das, Scientist -D]

7. [CSB-CTR TI/2024-25HP/PS/01] Development of a counting machine for tasar cocoons (October 2024 –March, 2025) [PI: Ms. Susmita Das, Scientist -D]

Co-I Presented the progress of the project and committee took note the progress

[Action: Ms. Susmita Das, Scientist -D]

8. CTR TI/PCT/PS-33: Comparative Analysis of physical and chemical properties of Oak Tasar, Korean Tasar, Muga and Tropical Tasar Silk: A Study on Colour, Strength, Fineness, and Durability (15 January to 15 April 2025) [PI: Mr. Ashu Kumar , Scientist-B]

Co-I Presented the progress of the project and committee took note the progress

[Action: Mr. Ashu Kumar, Scientist-B]

## **B. On-going Programme of Work (of continuous nature)**



Pl presented the progress of Programme of Work.

**[CTR&TI/HPP/POW-02]** Farm Management & Developmental works

Dr. Harendra Yadav, Scientist-C presented the progress of farm management and committee took note the progress.

[Action: Dr. H. Yadav, Scientist-C]

#### **AGENDA NO. 7: TRIAL OF TECHNOLOGIES (OSTs/ OFTs)**

Dr. Jagadajyoti Binkadakatti., Scientist-D of SEEM Division presented the progress of TOTs. Committee took note of the progress. The progress was found to be satisfactory.

[Action: Dr. Jagadajyoti Binkadakatti, Scientist-D]

#### **AGENDA NO. 8: EXTENSION (ECP) AND OTHER PROGRAMMES**

Dr. Vishal Mittal, Head, SEEM Division presented the progress of ECPs. The council took note of the progress. The progress was found to be satisfactory.

[Action: Dr. Vishal Mittal, Scientist-D]

#### **AGENDA NO. 9: TRAINING (CBT) AND OTHER PROGRAMMES**

Dr. Vishal Mittal, Scientist-D and Head Training Division presented the progress of CBT. The committee took note of the progress. The progress was found to be satisfactory. It was advised to expedite the establishment of new SRC as per the set milestones.

[Action: Dr. Vishal Mittal, Scientist-D]

#### **AGENDA NO. 10: DISCUSSION ON GENERAL COMMENTS/SUGGESTIONS OF RC/ RAC**

Chairman suggested all scientists to complete work as per approved Annual Action Plan 2024-25.

#### **AGENDA NO. 11: ANY OTHER POINT WITH PERMISSION OF THE CHAIR**

The meeting ended with a vote of thanks to the chair.



Date: 26.03.2025

Dr. N. B. Chowdary,  
Director

*Annexure-1*

**LIST OF PARTICIPANTS ATTENDED 73<sup>nd</sup> MEETING OF THE RESEARCH COUNCIL (RC) OF CTR&TI RANCHI HELD ON 6<sup>th</sup> MARCH, 2025**

1. Dr. N. B. Chowdary, Director, CSB-CTR&TI, Ranchi (Chairman)
2. Dr. J. P. Pandey, Scientist-D, CSB-CTR&TI, Ranchi
3. Dr. Vishal Mittal, Scientist-D, CSB-CTR&TI, Ranchi
4. Dr. K. Jena, Scientist-D, CSB-CTR&TI, Ranchi
5. Dr. Trishna Bal, Asst. Professor, BIT Mesra
6. Dr. Jitendra Singh, Scientist - D, CSB-CTR&TI, Ranchi
7. Dr. Dr. Jagadajyoti Binkadakatti, Scientist-D, CSB-CTR&TI, Ranchi
8. Dr. Harendra Yadav, Scientist-C, CSB-CTR&TI, Ranchi
9. Dr. H.S. Gadad, Scientist-C, CSB-CTR&TI, Ranchi
10. Dr. Aparna K., Scientist-C, CSB-CTR&TI, Ranchi
11. Dr. Shreenath Y. S, Scientist-B, CSB-CTR&TI, Ranchi
12. Mrs. Divya Rajawat, Scientist-B, CSB-CTR&TI, Ranchi
13. Mr. Haragopal Dutta, Scientist-B, CSB-CTR&TI, Ranchi
14. Dr. Nidhi Sukhija, Scientist-B, CSB-CTR&TI, Ranchi