

## **PROCEEDINGS OF ONE DAY WORKSHOP ON “OAK TASAR CULTURE” HELD AT DEHRADUN ON 10<sup>TH</sup> MARCH 2023.**

A one day workshop on “Oak Tasar Culture” was conducted on 10<sup>th</sup> March 2023 at Hotel Viceroy Inn, Dehradun, Uttarakhand in coordination with DOS, Uttarakhand emphasizing the growing need for developing a focused roadmap to enhance the oak tasar silk production in the country.

The Inaugural function was graced by Shri Ganesh Joshi, Hon’ble Minister of Agriculture and Farmers welfare, Govt. of Uttarakhand as the chief guest. In his address he emphasized the role of the women and their contributions in the formation of Uttarakhand state and advised them to come forward to make Uttarakhand as one of the leading producers of oak tasar silk in the country by achieving the goal of producing 10 MT oak tasar silk by 2030. Shri. Anand Kumar Yadav, Director, Directorate of Sericulture, Govt. of Uttarakhand and Dr. K. Sathynarayana, Director, CTR&TI, Ranchi graced the occasion as Guest of Honour. They also appealed the famers to promote Uttarakhand as the leading oak tasar silk producing state in the country. Dr. Sathynarayana advised the farmers to adopt the technologies of oak tasar followed by NE states and improved technologies of tropical tasar to promote oak tasar in NW states. Shri Ajeet Singh Chaudhury, Chairman UCRF, Uttarakhand also participated in the programme. He stressed to work for addressing the issue of crop loss in oak tasar culture in the final stages due to diseases. He appreciated the oak tasar dfils supplied from CSB which performed very well in the field. He also requested to organise various programmes where farmers can listen to the scientists for improvement of oak tasar silk production.

Dr.K.M.Vijaya Kumari, Director, CMER&TI, Jorhat presided over the function. In her speech, she requested the Scientists to develop technologies for field level applications to promote oak tasar silk production. She also requested the state sericulture department to produce basic seeds to meet the farmers demand and pleaded the farmers to adopt the improved technologies developed by the Institutes for increasing the oak tasar productivity. She highlighted that presently Manipur state alone is producing 4 MT of oak tasar raw silk and the total target for oak tasar raw silk production in the country is 10 MT by 2030. Therefore, NW states and other NE states apart from Manipur need to chalk out strategies to meet the 10 MT target for oak tasar in the country.

The programme was followed by a technical sessions where experts delivered lectures on different topics on pre and post cocoon sector of oak tasar and interacted with the farmers. The programme was attended by 200 participants comprising of farmers, entrepreneurs, DOS officials from Uttarakhand, Director and Scientists from CMER&TI, Lahdiogarh, Director and Scientists from CTR&TI, Ranchi, Director (Retd.), Scientists and Officials from nested units of CSB located in and around Dehradun and scientists from RSRs, Imphal. The programme ended with a field visit arranged by the DOS, Uttarakhand for the participants.

## **RECOMMENDATIONS OF THE WORKSHOP**

1. To enhance the production and productivity of Oak tasar raw silk in the country all DOSs of North East/ North West States should prepare a comprehensive action oriented rational action plan from 2023 – 2030 showing achievable targets for each year so that the production target of oak tasar raw silk can be achieved by 2030. The same should be submitted to the Director, CMERTI, Lahdoigarh by 30<sup>th</sup> April 2023.
2. The oak tasar silkworm *Antheraea proylei* has weak voltinism hence, all DOSs of NE/ NW states should attempt for an additional second crop rearing exclusively for seed during Sept./Oct. by utilizing at least 30% seed cocoons from spring harvest by terminating the pupal diapause through photoperiodic treatment for 16 =(12+4) hours a day for 20-25 days to get regular emergence of moths .
3. To check loss of seed cocoons due to erratic emergence and maintain vigour of silk moths to lay maximum eggs as well as maximum hatching infrastructures for fool proof seed cocoon preservation from June – February should be developed by the DoSs. Such practice will certainly improve the COCOON to DFL ratio and DFL to DFL ratio. Dfl to dfl ratio can be improved to 1:7.
4. A continuous inbreeding and interaction with fluctuating environment might have resulted in depression of the hybrid. *In-situ* and *ex-situ* conservation of oak tasar silkworm genetic resources should be taken up on priority for utilization in breeding programmes to develop high yielding breeds/hybrids.
5. DoSs should ensure enhanced cocoon price for seed rearers.
6. Silkworm eggs should be well disinfected by following prescribed Sodium hypochlorite Egg disinfection technology of RSRS Imphal.
7. Appropriate agronomical practices for second crop rearing should be strictly followed prior to rearing as recommended by the Research Stations to ensure more robust seed cocoons harvest for the next spring.
8. The Indoor rearing technology of oak tasar silkworm larvae up to 3<sup>rd</sup> stage and outdoor rearing under nylon net from 4<sup>th</sup> larval stage may be practiced to ensure cocoon harvest.
9. The evidence based research findings show that tiger-band-disease of Oak Tasar silkworm could be significantly reduced/ eradicated by thorough disinfection of grainage building, chawki rearing house, rearing site, rearing appliances, nylon nets etc. Using 5% Bleaching powder and by thorough spraying of 0.02% sodium hypochloride solution on the sprouting foliages, twigs and stems before rearing. The practice may be invariably followed to reduce the losses due to tiger band disease.
10. Regional Sericultural Research Stations should meet the demand of Basic seed/Nucleus seed of *Antheraea proylei* to the DOSs of NE/NW as per their requirement. RSRS

Imphal should supply nucleus seeds of the breeds C27 and RTRS1 to RSRS, Bhimtal, REC Palampur and DOSs for further multiplication and exploitation.

11. Focused research should be carried out for evolving high yielding, disease resistant and season/region specific breeds/hybrids.
12. Skill development programmes should be timely and regularly organized by the research stations to upgrade and update the knowledge of silkworm rearing to the seed/commercial rearers and also for post cocoon activities.
13. DOS Directors should visit tropical tasar areas to get first-hand information on the practices followed.



(Dr. K.M. Vijaya Kumari)  
Director,  
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