

## STUDY THE EGG LAYING PREFERENCE ON DIFFERENT DEVICES FOR TASAR SILKWORM *ANTHRAEA MYLITTA* DRURY (LEPIDOPTERA: SATURNIIDAE) SEED PRODUCTION

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**Abstract:** Tasar silkworm *A. mylitta* was evaluated with different egg laying devices at Janjgir, Chhattisgarh for better seed production of tasar grainagers. Earthen cup was recorded maximum number of laid eggs (241) and first day highest hatching (45 per cent). The second day maximum hatching (43 per cent) was recorded in paper cup and the third day highest hatching (31 per cent) was recorded in plastic box but nylon net bag was found superior in case of maximum total hatching (90 per cent) with least unlaidd eggs (17.20) and highest coefficient of egg laying (93.04 per cent). The time taken for harvesting of eggs was minimum (21.33 second) in case of wax coated paper cup. Among all the devices, nylon net bag was the most cost effective and durable device for egg laying.

**Keywords:** Oviposition, Laid eggs, Unlaidd eggs, Egg laying devices, Hatching *Antheraea mylitta*

### REFERENCES

- Barsagade, D. D., Thakur, M. P., Meshram, H. M., Gathalkar, G. B., Gharade, S. A. and Thakur, R. P. (2012). Venya Tasar Silkworm, *Antheraea mylitta* Eco-race Bhandara, The Local Race and its Conservation Strategy (Lepidoptera: Saturniidae). *Proceeding of UGC Sponsored National Conference on Current Status of Fresh Water Aquatic Biology and Wetland Conservation*. Journal of Science Information, 3:17-23. [ [Google Scholar](#) ]
- Bhatia, N.K., Bhat, M.M. and Khan, M.A. (2010). Tropical Tasar-Utilization and Conservation of Natural Resource for Tribal Development. The Bioscan, Special issue Vol, 1: 187-19. [ [Google Scholar](#) ]
- Debaraj, Y., Sarmah, M.C. and Suryanarayana, N. (2003). Seed technology in Eri silkmoth experimenting with other oviposition devices. *Indian J. Seric.* 42(2): 118-121. [ [Google Scholar](#) ]
- Jolly, M.S. and Sonwalkar, T.N. (1976). Improved reeling technique for tasar cocoons. *Indian silk* 15: 7-9. [ [Google Scholar](#) ]
- Jolly, M.S., Chaturvedi, S.N. and Prasad, S.A. (1968). Survey of tasar crops in India. *Indian J. Seric.*, 1: 50-58. [ [Google Scholar](#) ]
- Kapila, M.L., Choudhary, A., Dubey, O.P., Choudhary, C.C. and Sinha, S.S. (1992). Studies on the preservation of seed cocoons of the tasar silkworm *Antheraea mylitta* D during diapauses. *Sericologia* 32(4):579-591. [ [Google Scholar](#) ]
- Kumar, Dinesh, Pandey, J. P., Kumari, Jagnu, Sinha, A.K. and Prasad, B.C. (2012). Evaluation of *Antheraea mylitta* Cocoons Preservation for Synchronize Seed Production through Eco-tasar-friendly Technique. *Ecologia* 2(2): 43-51. [ [Google Scholar](#) ]
- Mohanty, P. K. (1998). Tropical Tasar Culture in India. Daya Publication House Delhi 96-98. [ [Google Scholar](#) ]
- Reddy, R.M., Hansda, G., Ujha, N. G. and Suryanarayana, N. (2009). Utility scope of hybridization in seed production of tropical tasar silkworm *Antheraea mylitta* Drury. *Sericologia* 49, 547-591. [ [Google Scholar](#) ]
- Roychoudhury, N., Bajpai, R. and Singh, B. P. (2011). Tropical Tasar Silk: a Potential NTFP for Forest Dwellers of Central India. *Indian forester* 137(11): 1280-1288. [ [Google Scholar](#) ]
- Sarkar, B.N., Sarmah M.C. and Giridhar, K. (2015). Grainage performance of eri silkworm *Samia ricini* (Donovan) fed on different accession of castor food plants. *Int J Ecol Ecosolution*, Vol. 2(2):17-21. [ [Google Scholar](#) ]
- Sinha, B.R.R.P., Singh, M. K., Rao, P. R.T., Tewary, P., Alam, M.M., Sinha, S.S. and Sengupta, K. (1992). Improved egg laying device in *Antheraea mylitta* Drury (Lepidoptera: Saturniidae). *Sericologia*, 32:499-503. [ [Google Scholar](#) ]

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