

## **Interdisciplinary approach for the conservation and sustainable utilization of tropical tasar silkworm biodiversity in India**

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The commercial tropical tasariculture is a forest based activity of growing tasar silk insect, *Antheraea mylitta* Drury (Lepidoptera: Saturniidae) on its host flora, besides collecting wild cocoons from insect habitat to produce vanya silk, unique to India. The activity provides livelihood to two and half lakh tribal families in Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Orissa, Uttar Pradesh and West Bengal states of the country. However, the over exploitation of tasar resources for monetary advantage, and the deforestation, urbanization induced rapid environmental change have depleted few important tasar wild ecoraces to the levels of extinction. So, there is an imperative need to alert local tribes for rational cocoon collection and effective conservation under in-situ to protect the tropical tasar genetic diversity. To recuperate the situation, the Sericulture, Forest, Rural and Tribal development departments and Non Government Organizations (NGOs) have involved the tasar practicing tribes for self help in tasar wild silk insect conservation and made them to understand the need of such conservation for its sustainable utilization. The self help concept as Tasar Resham Dooth System among tribes has contributed to safeguard the tasar diversity through successful production of tasar cocoons and make the activity commercially feasible. The support on inputs and training made the tasar rearers to succeed in diversity conservation and its successive utilization. Hence, this self help system has adoptable potential for tropical tasar silkworm conservation and rational exploitation to attain socio economic improvement of tribes through global marketing of vanya silk.

### **Biography**

R Manohar Reddy had his Ph.D from Sri Venkateswara University, Tirupati, India in the field of animal fertility management. He is currently working as Scientist in Central Silk Board in handling basic silkworm seed stock maintenance, commercial seed production and extension management of mulberry sericulture. He has also worked in the field of tropical tasar silkworm nucleolus seed stock maintenance, breeding, conservation and domestication of commercially important wild ecoraces. He has published more than 60 scientific papers in reputed international journals, attended several conferences, patented two electrically independent tasar grainage tools and serving as an editorial member/ reviewer of several international scientific journals.

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