

Sericulture: Importance and potential

Ruchi Kumari and Shiv Kumar Yadav

Department of Plant Pathology,

Sam Higginbottom University of Agriculture Technology and Sciences, Prayagraj

ARTICLE ID: 046

Introduction

Sericulture plays a major role in rural employment, poverty alleviation and earning foreign exchange. A lot of entrepreneurial opportunities are available in various fields of sericulture. Sericulture is practised in various states viz., Karnataka, Andhra Pradesh, Jammu & Kashmir, West Bengal and states like Madhya Pradesh and Maharashtra have also started practising Sericulture. The non-mulberry sericulture is practised in Assam, Jharkhand, Bihar, Orissa and Madhya Pradesh.

What is Sericulture?

Sericulture is the breeding and management of silkworms for the commercial production of silk. Sericulture deals with a series of events that include the rearing of silkworms on plants, collection and processing of silkworm cocoons to extract raw silk fibers from them. Silk is called the “Queen of Textiles” and is known for its qualities like luxury, elegance, class and comfort. According to Chinese literature, the Chinese Empress Shiling Ti discovered it in her teacup.

Type of silk

- **Mulberry-** The bulk of commercial silk produced in the world come from this variety and is considered to be superior in quality as compared to other varieties. *Bombyx mori*, the mulberry silkworm feeds on mulberry leaves. About 92 per cent of the total production of the country consists of mulberry silk. Mulberry sericulture is practised in Karnataka, Andhra Pradesh, Tamil Nadu, Kerala, Maharashtra, West Bengal and Jammu & Kashmir.



- **Tasar-** Tasar is copperish coloured, coarse silk mainly used for furnishings and interiors. It is less lustrous than mulberry silk but has its feel and appeal. Tasar silkworm, *Antheraea mylitta* mainly thrives on the food plants Asan and Arjun. In India, Tasar silk is mainly produced in the states of Jharkhand, Chattisgarh and Orissa, besides Maharashtra, West Bengal and Andhra Pradesh.



- **Eri-** Eri culture is a household activity practised mainly for protein-rich pupae, a delicacy of the tribals. Eri is multivoltine silk spun from open-ended cocoons, unlike other varieties of silk. Eri culture is mainly concentrated in areas of North Cachar, Mikir hills, Kamrup and eastern Goalpara in Assam, North Tripura, Muzaffarpur, Bhagalpur and Purnia in Bihar, Cooch Behar and Jalpaiguri in West Bengal and West Manipur. Now, it is being practised commercially in other parts of the country also. The silk is used indigenously for the preparation of chaddars (wraps) for their use by the tribals. Eri silkworms mainly feeds on castor plants.
- **Muga-** Muga silkworm, *Antheraea assama* is unique in secreting an unusual golden-yellow coloured lustrous silk (Fig. 1.2). Muga production is the prerogative of India and the pride of Assam state. The popular name ‘Muga’ is an Assamese word that indicates the brown colour of the cocoon. These silkworms feed on the aromatic leaves of Som and Soalu plants and are reared on trees similar to those of tasar. The Muga silk is used in products like sarees, mekhalas, chaddars, etc., and is costly.



Importance

- High employment potential
- Important Agro-based Enterprise Adding Value in Villages
- Ideal Programme for Weaker Sections of the Society
- Low Gestation, Low Investment and High Returns
- Women Friendly Occupation

Eco-friendly activity

- The Sericulture industry is an eco-friendly activity because as a perennial crop with good foliage mulberry contributes to soil conservation and provides greenery.
- Wastes from silkworm rearing can be recycled as input to the garden.
- Development programmes initiated for mulberry plantation are mainly in upland areas where unused cultivable land is made productive.

Why sericulture?

The food plants of silkworms can grow in a wide variety of lands starting from plains to hilly areas with minimum rainfall and these plants also help in the conservation of soil. Sericulture assumed importance in the socio-economic structure of the developing countries as it could be practised during the free time of the farmer while raising other crops. Thus, it is more suitable for women who can rear silkworms in the house alongside their housework. It provides good returns at the family level. It could be started with low investment. It could be practised with minimum technical skills.

