

Types of Silkworm

Silkworms are insects that produce silk fibres during the cocoon stage of their life cycle.

They are mainly classified into **Mulberry** and **Non-Mulberry** types based on the food plants they eat and the silk they produce.

1. Mulberry Silkworm

- **Scientific name:** *Bombyx mori*
- **Food plant:** Leaves of the Mulberry tree (*Morus alba*)
- **Origin:** Domesticated in China thousands of years ago.
- **Silk quality:** Produces fine, smooth, lustrous silk — Mulberry silk, which is white or off-white in colour.
- **Climate requirement:** Thrives in temperate and tropical climates.
- **Economic importance:** This is the most important commercial silkworm, contributing over 90% of the world's silk production.
- **Distribution in India:** Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal, and Jammu & Kashmir.

2. Non-Mulberry Silkworm

Non-mulberry silkworms feed on plants other than mulberry.

India is special because it produces all three main types of non-mulberry silk: Tasar, Eri, and Muga.

a) Tasar Silkworm

- **Scientific name:** *Antheraea mylitta* (Tropical Tasar), *Antheraea proylei* (Temperate Tasar)
- **Food plants:** Arjun (*Terminalia arjuna*), Asan (*Terminalia tomentosa*), Sal (*Shorea robusta*).
- **Silk quality:** Coarse, strong, copper-brown coloured silk.
- **Distribution:** Jharkhand, Chhattisgarh, Odisha, Maharashtra, Madhya Pradesh.
- **Use:** Sarees, furnishings, and jackets.

b) Eri Silkworm

- **Scientific name:** *Samia ricini*
- **Food plants:** Castor (*Ricinus communis*), Kesseru (*Heteropanax fragrans*).
- **Silk quality:** Soft, warm, and wool-like; often called Ahimsa silk because cocoons are harvested without killing the moth.
- **Distribution:** Assam, Meghalaya, Nagaland, Manipur, Bihar.
- **Use:** Shawls, blankets, and winter wear.

c) Muga Silkworm

- **Scientific name:** *Antheraea assamensis*
- **Food plants:** Som (*Machilus bombycina*), Soalu (*Litsaea polyantha*).
- **Silk quality:** Natural golden-yellow lustre, unique to Assam.
- **Distribution:** Exclusively in Assam.
- **Use:** Traditional Assamese dresses like Mekhela Chador, wedding attire.

Table – Types of Silkworm

Type	Example species	Food plant	Silk colour/quality	Distribution
Mulberry	<i>Bombyx mori</i>	Mulberry leaves	White, fine, lustrous	Karnataka, Tamil Nadu, West Bengal
Tasar	<i>Antheraea mylitta</i>	Arjun, Asan, Sal	Coarse, copper-brown	Jharkhand, Chhattisgarh
Eri	<i>Samia ricini</i>	Castor, Kesseru	Soft, wool-like (Ahimsa)	Assam, Meghalaya
Muga	<i>Antheraea assamensis</i>	Som, Soalu	Golden-yellow, lustrous	Assam