

# Morphological Characters of Silkworm (*Bombyx mori*)

Silkworms have four main stages in their life cycle — egg, larva, pupa, and adult moth — and their appearance changes in each stage.

## 1. Egg Stage

- **Shape & Size** – Small, oval, about 1 mm in diameter.
  - **Color** – Initially yellowish, later turns grey or black before hatching.
  - **Covering** – Hard chorion (outer shell) protects the embryo.
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## 2. Larva Stage (Caterpillar) – *Silk-producing stage*

- **Body Shape** – Cylindrical, soft-bodied, segmented.
- **Color** – Creamy white or pale yellow.
- **Size** – Can grow up to 7–8 cm in length.
- **Head** – Small, with chewing mouthparts for eating mulberry leaves.
- **Thorax** – Bears 3 pairs of jointed true legs.
- **Abdomen** – Has 5 pairs of fleshy prolegs (false legs) for holding onto leaves.
- **Special Feature** – Possesses silk glands (sericteries) which produce silk through the spinneret located below the mouth.

### 3. Pupa Stage (Cocoon)

- **Shape** – Oval cocoon surrounding the pupa.
- **Cocoon Color** – White, yellow, or golden, depending on breed.
- **Pupa Body** – Immobile, soft, enclosed in the cocoon; transformation into moth takes place inside.

## 4. Adult Moth Stage

- **Size** – About 2.5–3 cm long.
  - **Color** – Creamy white with small black markings on wings.
  - **Antennae** – Feathery in males, thread-like in females.
  - **Mouthparts** – Non-functional (adults do not feed).
  - **Sex Difference** –
    - Males are smaller, with bushy antennae and more active.
    - Females are larger, with a bulky abdomen filled with eggs
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