

Silk

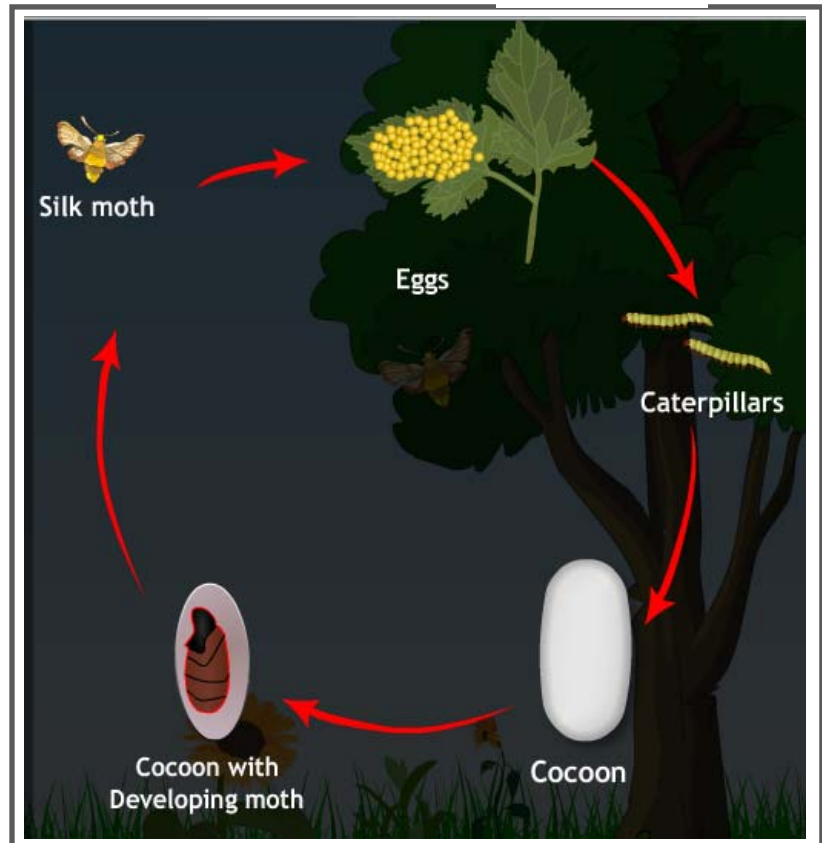
A silk fibre comes from cocoons of the silk moth and therefore is an animal fibre. The rearing of silkworms for obtaining silk is called **sericulture**.



Silk fibre

Life history of silk moth

- The life of a silkworm starts when a female moth lays eggs on the mulberry leaves.
- After sometime, these eggs hatch into larvae or caterpillars.
- Slowly these caterpillars grow in size by feeding only on the leaves of mulberry trees.
- The next stage in the life cycle of a silk moth is a pupa, it starts weaving a net around itself so that it can easily hold net.
- It secretes a fibre made of protein, which solidifies and hardens when exposed to air for some time. This is the silk fibre.



Life cycle of Silk moth

- Caterpillars continue to spin silk fibre till they completely get covered by them.
- This silk covering in which a silk moth covers itself is known as a **cocoon**.
- Further development of the silk moth takes place inside the cocoon as it enters the pupa stage.
- After sometime, the pupa enters into the adult stage and emerges out of the cocoon as a moth.
- The whole process thus continues and is known as the life cycle of a silkworm.

From cocoon to silk

Rearing silkworms:

The female silk moth lays eggs on mulberry leaves, which are then transferred to a piece of paper or cloth.



Rearing silkworms

The eggs are stored under hygienic conditions, in a specific temperature and pressure for the larvae to hatch.

When the larvae hatch, they are placed on clean bamboo trays and are fed on leaves of the mulberry tree.



Silkworms in bamboo trays

Caterpillars eat a large amount of leaves and increase in size at a very rapid pace.

The caterpillars stop eating after 25-30 days and move to a chamber in the bamboo tray.



Silkworms on mulberry leaves

There, they spin a cocoon and get attached to the tray.

These cocoons are then collected by farmers and processed to form silk fibres.



Cocoon with Silkworms

Processing silk

Cocoons are collected and kept under the sun, or boiled, or exposed to steam. This helps in separating out the silk fibres. This process of separating silk fibres from the cocoon is called **reeling the silk**. This is followed by the spinning of silk fibres into threads.



Reeling the silk