

SILK FIBERS – PART I

REF: TT/ AUGUST 2018 / WK 4

Introduction

Silk is a natural protein fiber produced from the cocoons of the larvae of the mulberry silkworm *Bombyx mori* reared in captivity. The shimmering appearance of silk is due to the triangular prism-like structure of the silk fiber, which allows silk cloth to refract incoming light at different angles, thus producing different colors. The protein fiber of silk is composed mainly of fibroin and is produced by certain insect larvae to form cocoons.



History of Silk

The origin of silk production and weaving is ancient. The industry began in China, existed probably before the middle of the 3rd millennium BCE. At that time it was discovered that the roughly 1 km (1,000 yards) of thread that constitutes the cocoon of the silkworm could be reeled off, spun, and woven, and sericulture became an important feature of the Chinese rural economy. Silk weaving became a major industry and one of China's chief exports in the Han dynasty. The caravan route across Central Asia, known as the Silk Road, took Chinese silk to Syria and on to Rome.

Click on the link to watch [“The story of silk”](#)



Sericulture or Silk farming

Sericulture or Silk farming is the production of raw silk by means of raising caterpillars (larvae), particularly those of the domesticated silkworm (*Bombyx mori*).

The production of silk involves two processes:

- Care of the silkworm from the egg stage through completion of the cocoon.
- Production of mulberry trees that provide leaves upon which the worms feed.

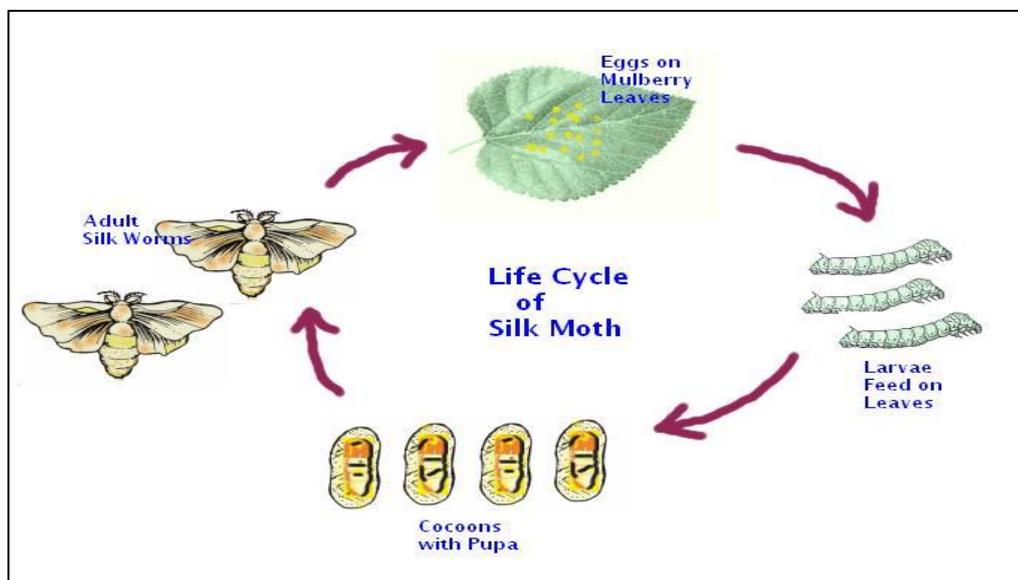


Fig 1.1 Life cycle of Silk Moth

To be continued...

Wishing you a great week ahead!

Technical Tuesdays is a knowledge sharing initiative by Resil Chemicals Private Limited

arc@resil.com | www.resil.com.