

Silkworms

Bombyx mori



Silkworms are the larva of a moth (Bombyx mori) that are used in the production of commercial silk, with the silk sourced from the cocoons of the moth. Silkworms typically feed on the leaves of the mulberry tree, however, recently artificial Mulberry food commonly known as 'Silkworm Chow' or 'chow' has become commercially available, which is made from powdered mulberry leaves. This artificial chow has resulted in the ability to produce Silkworms year-round, whether or not you have access to a Mulberry tree, as traditionally silkworms were only available seasonally.

Life Cycle

Silkworms take about 6-8 weeks to grow at which time, they will spin a cocoon; in the summer months this can be slightly shorter. It takes about ten days for the silkworm pupae to turn into a moth and emerge from the cocoon. Once the moth emerges, the silkworm moth generally lives for about 3 days, but can live up to ten days. While they do not typically fly, the male moths may fly briefly in search of a female. Shortly after the male and female moths have mated, the female will lay her eggs (between 200 – 500). As the moths do not eat or drink they die naturally soon after laying their eggs. The males may mate with more than one female before they die.

The eggs remain in a state called "diapause" until they have been through a cold period (winter). When the temperature rises in spring they begin to develop and hatch ready to eat the first tender shoots on the Mulberry trees or the chow. Given the availability of chow, the eggs can be forced into thinking its winter, by placing them in a fridge for 3 months. After removing from the fridge, the eggs take approximately 10-12 days to hatch and the lifecycle is complete.

Temperature

For optimal growth, it is important to maintain a constant temperature range of between 24-28C.

Feeding

The silkworms are ready to be fed to your pets. For your convenience, we have supplied addition silkworm chow. The silkworm chow in this container is available to feed to your silkworms until they are used as food themselves. There is not enough food in this container for the silkworms to grow to full adult size and spin cocoons. Silkworms receive all their water requirements from their food and as a result do not require additional water.



Silkworm Chow Cooking Instructions

Remove worms from provided container. Add three tablespoons of hot tap water to the provided bag of silkworm chow powder and mix well and pour into empty container. Place lid on container and microwave on high for 30 seconds. Allow to cool to room temperature. The container is now ready for your silkworms to start eating. Many people keep their silkworms in old cardboard shoe boxes, in which you can keep up to 25 worms per shoebox quite easily. The number 1 most important rule in keeping Silkworms is **hygiene**. High humidity can also contribute to bacterial and fungal growth. If condensation starts to build up in the container you can keep the lid off – the silkworms will stay in the container and are unlikely to escape.

Removal of waste

Open the lid (if housed in a plastic container) and discard the waste daily. Silkworms are susceptible to bacteria and mould therefore wash your hands before removing silkworms from the container. If mould develops on the silkworm chow remove the affected chow. If any worms die remove them from the container immediately. It is also important to keep the container for your silkworms **clean**. If keeping your silkworms in a shoebox, we recommend using a piece of paper towel as a 'sheet', so that you can simply remove

the sheet with the waste material as needed. If using plastic tubs or glass terrariums it is important that they are cleaned thoroughly with soap and water and dried completely before the silkworms are placed in them. Again paper towel can assist to keep the worms moisture free.

Nutritional benefits

Silkworms are naturally high in protein, calcium, iron, magnesium, sodium, and vitamins B1, B2, and B3, and are low in fat and phosphorus. With such high nutritional value encased in a soft and juicy body, silkworms are the ideal feeder, as they offer advantages over other feeder insects such as crickets, mealworms, and woodies.

Silkworms can also be kept as pets and are great for young school children as part of understanding animal life cycles.

