Waxworms

Species: mellonella
Genus: Galleria
Family: Pyralidae
Order: Lepidoptera
Class: Insecta
Phylum: Arthropoda
Kingdom: Animalia

Conditions for Customer Ownership

We hold permits allowing us to transport these organisms. To access permit conditions, click here.
Never purchase living specimens without having a disposition strategy in place.

There are currently no USDA requirements for this organism, although your state may require that you obtain an end-user permit for this organism. Please contact us for current requirements in your state. In order to protect our environment, never release a live lab-oratory organism into the wild.

Primary Hazard Considerations

- Always wash your hands thoroughly after you handle the waxworms.
- Waxworms are docile and do not pose a threat to humans. Be aware that the moths can fly

Availability

Waxworms are generally available year-round.

Arrival Care

- Your waxworms will arrive in a waxed paperboard container with wood shavings and food.
- You should place your waxworms into their new habitat as soon as possible.
- If storage is necessary, the waxworms may be held in their shipping containers in the door of your refrigerator for up to 3 weeks.
- We over-pack each order of waxworms. It is normal to have some deceased waxworms in the container. You will receive at least the quantity of live waxworms stated on the container.

Captive Care

Habitat:

- Remove the waxworms from the wood shavings they are shipped in and put the waxworms in a large jar with the food provided. Use a glass or metal container such as a wide-mouth glass jar or a plastic crisper. Larvae can chew through wood and soft plastic. Use 20 mesh wire-screen or cloth for a lid; you can secure it with a rubber band. Make a tube of dark paper to slip over the jar, or place it in a paper bag or box to keep it in the dark.
- You can add some crumpled balls of wax paper to the culture as well.
- Waxworms do best in temperatures above 28°C (82°F). If this is not the temperature in your classroom, you can provide a heat lamp for additional warmth.
- At normal classroom temperatures, the waxworms may stay in the larval and pupal stages for an extended period of time. Pupae may make hard shells instead of cocoons. These are both normal occurrences, and the wax moths will eventually emerge.

- When a significant number of adults have emerged, put them all in a fresh 2-liter jar where they can mate and lay eggs. Supply them with crumpled wax paper on which to lay their eggs. The moths are inactive early in the day, so plan to transfer them in the morning. Cover the jar with a ventilated lid. Have it sitting loosely on the jar during the transfer. Screw it on securely after transfer is complete.
- You should clean out the dead waxworm larvae from the culture at least once per week.

Care:

- The prepared food included with your order is a sufficient diet for the waxworm larvae.
- The moths do not eat or drink.

Information

- **Method of reproduction:** Sexual.
- **Determining sex:** Male wax moths are slightly smaller and can be distinguished by a scalloped front wing margin compared to a smooth one in females.

Life Cycle

- Complete metamorphosis.
- Eggs are laid in the cracks of beehives in batches of up to 300. Eggs hatch in 5–8 days.
- Larvae burrow into the beeswax comb and feed for 1–5 months. Fully-grown larvae have a dark, hard head capsule, three pairs of segmented legs, and several body segments. They are initially white, turning dark grey with age, and about 2 cm long.
- Fully-grown larvae form cocoons commonly attached to the frame of the beehive. Pupae can hatch rapidly or take up to 2 months to hatch depending on temperature.
- Adult wax moths are ¾" with longer wing span (1¼–1½"). They live for about 1–3 weeks, during which time they mate and lay eggs.

Wild Habitat

- The wax moth is found in most of the world, including Europe, North America, Turkey, Russia, and Australia, where it is an introduced species.
- It lives in and around beehives.

Special Notes

- The wax moth is regionally called the bee moth, the wax (or bee) miller, or a webworm.
- In contrast to its name, the wax moth does not digest beeswax. It lives on impurities in the comb and for this reason prefers to infest beeswax comb that has been used for brood rearing.

Disposition

- We do not recommend releasing any laboratory animal into the wild, and especially not insects that are considered to be pests or not native to the environment.
- Adoption is the preferred disposition for any living animal.
- If the insects must be euthanized at the end of study, follow one of these procedures:
  - Put them into a container or bag and freeze for 48 hours.
  - Place the organism in 70% isopropyl alcohol for 24 hours.
  - Autoclave the organism @ 121°C for 15 minutes.
- A deceased specimen should be disposed of as soon as possible. Consult your school's recommended procedures for disposal. In general, dead insects should be handled as little as possible or with gloves, and wrapped in an opaque plastic bag that is sealed (tied tightly) before being placed in a general garbage container away from students.

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