

Wax Moths

A CAROLINA™ CareSheet

Immediate Care and Handling

Immediately upon receipt, open the shipping container and inspect your wax moths. Follow the instructions included with your shipment. The culture is self-contained, and the moth will complete its life cycle in the shipping vessel. Maintain the culture at room temperature. Unless you plan on establishing a continuous culture, little additional care is required.

Culturing

For continuous culturing, you will need to transfer the culture you received into a 1- to 4-L wide-mouth jar with a wire-screen lid for ventilation. If necessary, add used bee comb (impurities in used wax provide nutrition for the larvae) beforehand so that the jar will be about 2/3 full after the addition of your culture. It is best to keep the culture jar in the dark. Although the culture will grow at room temperature, optimal growth will occur at 29–34° C (84–93° F).

The mated female moth deposits masses of small, white, slightly oblong eggs in cracks away from the light. Newly hatched larvae immediately begin to burrow into the wax. Young larvae are white, about 1 mm long, and very active. Mature larvae are about 25 mm long, golden-gray or brown, and move much more slowly.

You can expand your culture by collecting eggs. To do this, fold a piece of waxed paper accordion-style and secure with a paper clip. Place this into the culture jar. Female moths will lay egg masses between the folds of the paper. Collect eggs by flicking them off with the thumbnail or a sharp blade. To start a new culture, put about 75 eggs in a 1-L jar 2/3 full of medium. Newly hatched larvae are small enough to escape through the wire screen, so place a piece of cloth under the screen. You can remove the cloth once the larvae are so large they cannot escape.

FAQ's

How many larvae are shipped in one unit?

One unit includes 50 to 75 larvae, and they are shipped in the wax medium needed to reach the adult stage.

What are the stages of the life cycle and the length of each?

In the optimal temperature range given above for culturing: egg, 5 to 8 days; larva, 14 days; pupa, 8 days; moth, 2 weeks. At 10–15° C (50–59° F), it can take 6 months or more to develop from egg to adult.

What are the most popular classroom uses of wax moths?

Wax moth larvae are commonly used as a live food for reptiles and amphibians. Wax moths are easier and less expensive to rear than many species of Lepidoptera, yet they demonstrate typical lepidopteran morphology and life cycle. Wax moths also can be used in nutritional and behavior experiments.

How can I get more medium for culturing wax moths?

Although Carolina no longer advertises its Wax Moth Medium (item #143930) for sale, you can special order it by contacting our Live Materials Department (call 800.334.5551, 8 am to 5 pm ET, M–F; or email customer_service@carolina.com). The medium can be refrigerated for 1 to 2 months.

Can the waxworms be refrigerated?

Yes, although refrigeration will bring the waxworm’s development to a virtual standstill.

What should I do with the waxworms after we finish studying them?

Do not release waxworms outdoors because they are detrimental to honeybees, which are important pollinators. The culture is easily maintained, so you could pass it along to another teacher. If this is not possible, destroy the waxworms by thoroughly freezing the culture. Then place the frozen culture in a securely sealed plastic bag and dispose of it in the trash.

Problems? We hope not, but if so contact us. We want you to have a good experience.

Orders and replacements: 1-800-334-5551, then select Customer Service.

Technical Support and Questions: caresheets@carolina.com



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