



# CARE INFO

## Hornworms



*Did you know that the hornworm is a caterpillar?  
When it emerges from its pupa, it is called a hawkmoth.*

### Hornworm Care

Hornworms require no special care until they are ready to pupate. Their food provides all the nutrients and water they need. It comes packed in the bottom of their cup.

### Handling Hornworms

- Always be gentle! It's a good idea to wash your hands before and after you handle hornworms.
- Lift hornworms out of their cup with your fingers or the small sorting brush. Place them on a sheet of paper for observation.
- If hornworms become coated with food (it sometimes happens), rinse them off with cool water (under a faucet is fine, but be gentle).

### Frass Balls

- Frass is caterpillar dung. It has no smell and looks almost exactly like caterpillar food.
- Frass is safe to handle and should be removed from the cup every second or third day.

### Molting

- Hornworms shed their exoskeletons five times between hatching and pupation. Each time they molt, they stop eating and moving for a day or two.
- You will know that your hornworms have molted when you notice that they have suddenly gotten a lot bigger. You may notice pieces of exoskeleton stuck to their bodies. They should soon rub these off themselves, or you can gently rub them off with your fingers.

### Pupation

- After 15–20 days, your caterpillars will be 4–6 inches long and their aortas (large arteries attached to their hearts) will be visible.

### Pupation *continued*

- The aorta looks like a large, purple vein on the back of the body. You can see it pulsing slowly.
- When you see their aortas, transfer the hornworms to a cardboard box.
  - » Cover the bottom of the box with a thin layer of shredded and wadded paper. Be sure not to put anything in the box that the hornworms can use to climb out!
  - » Place the wood shavings in a paper cup or 5-inch segment of paper towel tube (tape some paper over one end of the tube). Turn the cup or tube on its side.
  - » If you're not absolutely certain that the hornworms are ready to pupate, place their cup with the remaining food on its side in the center of the house.
- The days just before pupation are called the "wandering stage." Your hornworms may do a lot of crawling around before they pupate. When they are finally ready, they will burrow under the paper or the wood shavings.
- Pupation takes about 7 days.

### Moths

- Observe pupation, but don't expect to see moths emerge—pupas often don't complete the life cycle. It may take as long as 180 days, if hawkmoths do emerge.
- Hawkmoths are considered crop pests and are regulated by the USDA. They should only be observed in the classroom and not released outside.
- If you are lucky and moths emerge in your classroom or home, try feeding them crushed watermelon, cantaloupe or oranges.
- Hawkmoths do not live long, only a few days.