

# **Dermestid Larvae**

Dermestidae



## Description

**Adults:** Many dermestid beetle attracted by the dermestid larval lure will be small, 1-3 mm (0.04-0.1 inches) long. Beetles can vary in color from black/brown to yellow/orange with a variety of markings and patterns depending on species. Most adult dermestid beetles live several months.

**Eggs:** Most dermestid eggs will not be visible without microscopic examination.

**Larvae:** Larvae can vary in size but are often larger than the adults. Larvae have varying patterns and density of stiff hairs (setae) on the body and tip of the abdomen.

**Pupae:** Pupal cases are similar in size to the last larval instar and are often composed of the last shed skin of the larvae.

## Life Cycle

Many dermestid species live outdoors and readily enter structures in search of food. Adults are adept at finding small amounts of food materials, textiles, and dead insects to lay their eggs. Many dermestid larvae can go through protracted larval periods of 3 to 18 months and some dermestid pupae can enter an extended, hibernation-like, state called diapause which is part of the extended larval lifespan strategy.

## Damage and Detection

Dermestid larvae can feed on a wide variety of stored foods including cereals, candy, flour, fishmeal, noodles, dried spices, nuts, dead animal carcasses (drier stages), and pet foods. They can also feed on some textiles, furs, feathers, and dead insects. The larval stage prefers to hide in dark areas where food is stored, including processed and packaged foods, or in cracks and crevices where waste food has accumulated. The use dermestid larval monitors and inspections can determine the location and degree of infestation, as well as draw larvae away from other items upon which they are feeding.

## Corresponding Products from Insects Limited

• Dermestid Attracrant Trap and Attractant (IL-3050)

### QUICK SCAN

SIZE / LENGTH

Adult 0.04-0.1 inch (1-3 mm)

Larvae Varies, but often larger than adults

#### **COLOR RANGE**

Adult Black/brown to yellow/orange

Larvae Varying patterns and stiff hairs

#### LIFE CYCLE

Larvae 3 to 18 months

#### FEEDING HABITS

Cereals, candy, flour, fishmeal, noodles, dried spices. nuts, dead animal carcasses, and pet foods, some textiles, furs, and feathers

#### **INFESTATION SIGNS**

Larvae prefers to hide in dark areas where food is stored, including processed and packaged foods, or in cracks and crevices where waste food has accumulated.



## **Dermestid Larvae Monitoring Guidelines**

#### Lure

Dermestid Larval Attractant contains a food attractant effectively attractive to both male and female Varied Carpet Beetles as well as the larval stage of the same insect. Dermestid Larval Attractant can be stored in any temperature and has an effective attractiveness if the pellet maintains its structure and has not gotten wet.

### **Lure Storage**

Since the attractants are of animal origins it has potential to spoil under hot conditions. For long term storage the traps should be refrigerated. All the traps are contained within polyethylene bags to help with preservation of odors. It should also prevent odors from escaping into the refrigerator.

It is a best practice to keep the Dermestid Larval Attractant in cool storage at 16°C (60°F) or in a freezer for extended storage to protect from moisture and condensation. However, this practice is not required.

## Trap Designs Used with Lure

The traps are the size of a business card with circular, 0.5 inches (12 mm) cartridge attached to contain the Dermestid Larval Attractant. These devices are not designed to capture and hold the larvae with sticky glues and should be used to discover if a target pest is feeding on the attractant.

### Trap Placement Techniques

Food lure traps can be out placed year-round but are especially recommend when temperatures exceed 12.5°C (55°F). Floor traps like the All Beetle Trap and Flat Trap are most effective at capturing dermestid larvae. In areas such as a closet or home, place one or two traps per room. In commercial areas, such as warehouses or retail stores, place food lure traps 7.5–15 m (25–50 feet) apart to determine the presence or absence of dermestid larvae. Increase food lure trap density to 4.5–7.5 m (15–25 feet) apart to help locate source of dermestid larvae. Dermestid larvae food lure traps are best utilized in areas that store items that contain natural fibers and stored foods such as wool, hair, feathers, furs, upholstered furniture (containing natural wools and leathers), food, grains, seeds, nuts, dried fruit, animal feed, or pet food.

## Trap and Lure Maintenance

Replace traps when glue is filled with insects or becomes dusty. Replace pheromone lures every 90 days. Replace all pheromone lures in a location at the same time. Do not cut the cap off the bullet lure. Do not stagger lure replacement over several weeks. Record date and number of catches to identify trending information.

#### **Fun Facts**

- Similar species include many other Anthrenus, Anthrenocerus, Attagenus and Trogoderma species.
- Dermestid larvae have hairs on their body called setae that can cause gastrointestinal irritation in infants, children, and atrisk individuals. They may also cause an allergic reaction.

