

# **Black Carpet Beetle**

Attagenus unicolor



### Description

**Adults:** Up to 4 mm (3/16 inches) long, dark brown to black. The last three antennal segments are slightly enlarged and form a sphere shape.

**Eggs:** Females lay 50-90 small, white eggs which hatch in 6-10 days. Eggs are deposited in concealed areas near larval food supply.

**Larvae:** Dark brown to reddish brown, up to 13mm (0.5") long, slender, hairy, with a distinct tail of long hairs at tip; three pairs of thoracic legs.

**Pupae:** Pupal cases are brownish with dark beetle inside the pupal chamber.

# Life Cycle

The female beetle will lay eggs in almost any dry organic substance. Larvae will feed off the food or fiber substance for about 9-20 months depending on environment. The life cycle on average will be 11 months. Adults live for 30-60 days. One generation occurs per year depending on storage conditions.

# Damage and Detection

Only larvae cause damage to plant or animal products or textiles. The presence of cast skins is usually apparent. Holes and frayed fibers in textiles also may be present. Adults are excellent fliers and are attracted to lights. The use of pheromone traps and inspections can determine the location and degree of infestation. These beetles are commonly found in processed foods such as, spices, biscuits, meal, four, seeds, and dog food, but can also attack horn, untreated hides, wool, hair, silk, and dead insects. It is a common household pest.

# **Corresponding Products from Insects Limited**

- Black Carpet Beetle Flat Traps and Bullet Lures (IL-130)
- Black Carpet Beetle Bullet Lures Only (IL-134)
- All Beetle Trap with Bullet Lure and Dermestid Attractant (IL-2110)
- AA Carpet Beetle Bullet Lures Only (IL-243)
- Dermestid Attractant Trap and Attractant (IL-3050)
- Dermestid Attractant Only (IL-3051)

### QUICK SCAN

#### SIZE / LENGTH

Adult 3/16 inch (4 mm) Larvae 0.5 inch (13 mm)

#### **COLOR RANGE**

Adult Dark brown to black

Larvae Dark brown to reddish brown

### LIFE CYCLE

Eggs Hatch 6-10 days
Larvae Feed 9-20 months
Adult Live for 30-60 days

#### FEEDING HABITS

Larvae Cause damage to plant or animal products or textiles

#### INFESTATION SIGNS

Adult Excellent fliers, attracted to light

Larvae Cast skins, holes and frayed textiles



# **Black Carpet Beetle Monitoring Guidelines**

#### Lure

BULLET LURE\* contains sex pheromone to attract male beetles. Effective duration of attraction is 90 days.

AA Carpet Beetle Lure contains sex pheromone to attract male beetles for both Varied Carpet Beetles and Black Carpet Beetles. Effective duration of attraction is 90 days.

Dermestid Larval Attractant contains a food attractant effectively attractive to both male and female Black 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**

Keep Bullet Lures in unopened foil pouches in cool storage (less than 60° F) or place in freezer for extended storage. Lures can remain frozen for up to 24 months or at room temperature for 12 months to retain their full effectiveness for use afterwards. It is a best practice to keep the Dermestid Larval Attractant in cool storage (less than 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 and Attractants

FLAT TRAPS are low profile flat rectangular sticky traps that can be placed on level surfaces.

THE ALL BEETLE TRAP is a low profile, 3 piece trap with a clear lid that should be placed on level surfaces.

The traps are the size of a business card with circular, ½ inch (12mm) 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**

Pheromone traps can be placed out year-round but are especially recommend during warmer months when temperatures exceed 12.5°C (55°F). Floor pheromone traps like the All Beetle Trap and Flat Trap are more effective at capturing black carpet beetles compared to hanging pheromone traps, however, hanging pheromone traps tend to stay clean longer and may allow for easier inspection. Place hanging pheromone traps 1.5 m (5 feet) above ground or at eye level to allow for easy inspection when monitoring traps. In areas such as a closet or home, place one or two pheromone traps per room. In commercial areas such as warehouses or museums, place pheromone traps 7.5–15 m (25–50 feet) apart to determine the presence or absence of black carpet beetle. Increase pheromone trap density to 4.5–7.5 m (15–25 feet) apart to help locate source of black carpet beetle. Keep pheromone traps 7.5 m (25 feet) away from exterior doors. Black carpet beetle pheromone 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, spices, 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**

- Commonly confused with other Anthrenus, Anthrenocerus, and Trogoderma species.
- Black carpet beetles initiate flight at temperatures above 22.5°C (73°F).
- Black carpet beetle larvae have hairs on their body called setae that can cause gastrointestinal irritation in infants, children, and at-risk individuals. They may also cause an allergic reaction.
- Adult black carpet beetles feed on pollen and nectar of flowering plants.

