

## MONITORING GUIDELINES

### **Black Carpet Beetle**

*Attagenus unicolor.*

#### **Description**

**Adults:** 1/8 inch to 3/16 inch long, dark brown to black. The last three antennal segments are slightly enlarged and form a spear shape.

**Larvae:** Dark brown to reddish brown, up to 1/2 inch long, slender, hairy, with a distinct tail of long hairs at tip; three pair of thoracic legs.

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

#### **Damage and Detection**

Only larvae cause damage to plant or animal products or textiles. The presence of cast skins is easily seen. Holes and frayed fibres 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 leather, horn, wool, hair, silk, and dead insects. It is a common household pest.

#### **Life Cycle**

The female beetle will lay eggs in almost any dry organic substance. Larvae will feed off the food or fibre 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.

#### **Lure**

**Bullet Lure.** Contains sex pheromone to attract male beetles. Effective duration of attraction is 6-8 weeks.

#### **Lure Storage**

Keep unopened foil pouches in cool storage (less than 60° F) or place in freezer for extended storage. Lures can remain frozen for up to 18 months to retain their full effectiveness for use afterwards.

#### **Trap Designs used with Lure**

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

#### **Trap Placement Techniques**

**Timing -** Traps should be placed in early March, just before active flights begin.

**Density -** It is recommended that traps be placed near materials susceptible to attack at one per every 10 feet. In large warehouses traps may be placed every 20 feet apart.

**Location -** Place hanging traps at just above eye height in rooms or warehouses where food is stored. Stealth traps can be placed inside drawers, under or above cabinets, inside cupboards and more confined spaces where hanging traps cannot fit.

#### **Trap and Lure Maintenance**

Traps must be replaced when filled with beetles or become dusty. Traps may remain sticky for many months. Lures must be replaced every 6 weeks. The old lure should be removed from the trap. Trapped beetles should be recorded regularly on a separate monitoring Data Sheet to determine trapping trends.

#### **Expectations and Interpretations**

1 beetle per trap per week -- Inspection of materials susceptible to attack should be carried out.  
3-5 beetles/ trap per week -- Serious damage is likely on a single product or location in the area of the trap.  
10 + beetles/trap per week -- Serious wide spread damage has occurred to products or items in the storage area.

#### **Important Notes:**

Large numbers of beetles require other means of control and management to eradicate infestations.  
Female beetles however, may actively fly around and not be attracted to the traps.