

Drugstore Beetle

Stegobium paniceum



Description

Adults: Up to 3.2 mm (0.125 inches) long, brown to reddish brown. Similar in appearance to cigarette beetle but has several rows of pits (striated) on hairy elytra (hardened wings). The last three antennal segments are slightly enlarged and elongated.

Eggs: Not readily visible without magnification. Eggs are slightly oval in shape, whitish is color, satin to glossy sheen, and approx 0.2-0.5 mm (0.019 inches) long.

Larvae: Creamy white, C- shaped, slightly hairy, with a large distinct head, and three pair of thoracic legs.

Pupae: Pupal cases whitish; inside a pupal chamber within food material.

Life Cycle

The female beetle will lay eggs in almost any dry organic substance. Larvae will tunnel through the food substance for about 4-5 months. The life cycle on average is 7 months but can be as short as 2 months. Several generations can occur per year depending on storage conditions.

Damage and Detection

Packages or food items infested with these beetles usually have shot holes where adults have emerged from pupation. Adults and larvae cause damage. 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, flour, meal, and dog food, but can also attack horn, wool, hair, pharmaceuticals and even bookbindings. It is a common household pest.

Corresponding Products from Insects Limited

- Hiresis Drugstore Beetle Kit (IL-600)
- Fuji Drugstore Beetle Lure (IL-601)

QUICK SCAN

SIZE / LENGTH

Adult 0.125 inch (3.2 mm) Eggs 0.019 inch (0.2-0.5 mm)

COLOR RANGE

Adult Brown to reddish brown Larvae Creamy white, C-shaped

LIFE CYCLE

Larvae 4-5 months Life cycle 2-7 months

FEEDING HABITS

Adults and larva cause damage. Packages or food items infested usually have shot holes where adults emerge.

INFESTATION SIGNS

Commonly found in processed foods such as spices, flour, meal, and dog food.



Drugstore Beetle Monitoring Guidelines

Lure

Hiresis Drugstore beetle lures. Contains sex pheromone to attract male beetles.

Lure Storage

Keep unopened lures in cool storage less than 16°C (60°F) or place in freezer for extended storage.

Trap Designs Used with Lure

Hiresis Drugstore beetle traps and lures are manufactured by Fuji Flavor Co., LTD. and are designed to be hung or placed on a flat surface depending on the situation and structure availability.

Trap Placement Techniques

Pheromone traps can be out placed year-round but are especially recommend when temperatures exceed 12.5°C (55°F). Floor pheromone traps like the All Beetle Trap and Flat Trap are more effective at capturing drugstore beetle compared to hanging pheromone traps, however, hanging pheromone traps tend to stay clean longer and 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 pantry or home, place one or two pheromone traps per room. In commercial areas such as warehouses or retail stores, place pheromone traps 7.5–15 m (25–50 feet) apart to determine the presence or absence of drugstore beetle. Increase pheromone trap density to 4.5–7.5 m (15–25 feet) apart to help locate source of drugstore beetle. Keep pheromone traps 7.5 m (25 feet) away from exterior doors. Drugstore beetle pheromone traps are best utilized in areas that store dried goods such as food, grains, seeds, tobacco, spices, hay, dried fruit, nuts, 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 cigarette beetles (*Lasioderma serricorne*) and common furniture beetle (*Anobium punctatum*).
- Other common names include biscuit beetle, bread beetle, library beetle, spice beetle, and bakery beetle.
- Drugstore beetles initiate flight at temperatures above 20°C (68°F).
- Drugstore beetles carry a symbiotic yeast that assists in digestion of less nutritious foods and can provide resistance to certain toxins.
- The pheromone that attracts drugstore beetle also attracts the common furniture beetle (*Anobium punctatum*).

