

Hide Beetle

Dermestes maculatus



Description

Adults: These beetles are about 13 mm (0.5 inches) long, dark brown to black and have whitish markings on the shoulders of the pronotum and underside. This species is characterized by the small spike like points at the tip of the elytra.

Eggs: Eggs are oval in shape and approx. 1.5 mm (0.06 inches) long.

Larvae: These larvae are hairy brown to blackish blue in color and about 13-19 mm (0.05-0.75 inches) long. There is a pair of stiff spines that arise from the second to last abdominal segment. These spines curve upwards.

Pupae: Pupae are slightly smaller than the larvae, and oval in shape. The pupating insect will use its last larval skin to provide a protective covering for the pupa. The end of the pupal chamber may be closed with debris or material the larvae was previously feeding on.

Life Cycle

The female beetle will lay 650-850 eggs in its 60-90 day life span as an adult. Larvae will feed on high protein material such as dried meats, pet foods and skins of animals. The life cycle on average takes 44-70 days depending on humidity, temperature and quality of food. These beetles are less active in colder months and will remain as larvae during this time. This stage can be as short as 35 days or as long as 238 days depending on when temperatures begin to rise. Pupation is a relatively short 7 days. The adult is able to fly and peak adult activity occurs in the warmer months with flights occurring until temperatures drop. Several generations can occur during the year.

Damage and Detection

This beetle is often found on dried meat products such as pet food and is most often discovered as a hairy larva in the bottom of pet food bags. These larvae can burrow into paper, cardboard, Styrofoam insulation and wood, leaving a round hole approximately 6mm (0.25") in diameter. Cast skins are numerous in heavily infested materials. Adults are frequently found perched on the top of infested material or hiding in crevices of bones and cracks with food debris.

Corresponding Products from Insects Limited

• All Beetle Trap with Hide Beetle Lure (IL-2000)

QUICK SCAN

SIZE / LENGTH

Adult 0.5 inch (13 mm) Eggs 0.06 inch (1.5 mm)

COLOR RANGE

Adult Dark brown to black
Larvae Brown to blackish blue

LIFE CYCLE

Female 60-90 day life span Life cycle 44-70 days on average

FEEDING HABITS

Larvae will feed on high protein material such as dried meats, pet foods, and skins of animals

INFESTATION SIGNS

Burrow into paper, cardboard, Styrofoam insulation, and wood leaving a round hole



Hide Beetle Monitoring Guidelines

Lure

The small cellulose lure contains both an aggregation pheromone blend for the hide beetle as well as food attractants. Adults and larvae will be attracted to these lures.

Lure Storage

Keep unopened foil pouches in cool storage less than 16°C (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. High heat 35°C (95°F) will degrade the attractants and pheromone.

Trap Designs Used with Lure

FLAT TRAPS are low profile flat rectangular sticky traps that can be placed on level surfaces. These are recommended to capture both adults and larvae.

ALL BEETLE TRAP consists of three parts: A clear lid, blue base, and snap in tray. This device can be paired with many different types of attractants available by Insects Limited depending on the insect you are monitoring. These are recommended to capture both adults and larvae.

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 most effective at capturing hide beetles. In areas such as a pantry or home, place one or two 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 hide beetles. Increase pheromone trap density to 4.5–7.5 m (15–25 feet) apart to help locate source of hide beetles. Hide beetle pheromone traps are best utilized in areas that store dried meat goods such as food, animal feed, or pet food. Keep pheromone traps 7.5 m (25 feet) away from exterior doors.

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 stagger lure replacement over several weeks. Record date and number of catches to identify trending information.

Fun Facts

- Commonly confused with other Dermestid beetles.
- Other common names include leather beetle, skin beetle, tallow dermestid, fox beetle, prickly carpet beetle, spotted carpet beetle, and thorny bacon beetle
- Red-legged ham beetles initiate flight at temperatures above 20°C (68°F).

