



Larger Grain Borer

Prostephanus truncatus

Description

Adults: These small 4mm (0.15 inch) beetles have a uniform dark brown to black color. They have distinctive pits on the elytra and small teeth on the front of the thorax. The ends of the elytra appear jagged. These beetles are excellent fliers and are attracted to insect light traps.

Eggs: Eggs are white when first laid, turning reddish-brown before hatching. The egg is ovoid in shape and 0.6 mm (0.02 inches) long.

Larvae: The immature stage is approximately 3-4 mm (0.15 inches) long, white to yellowish in colour. It has a grub like in appearance and stubby thoracic legs.

Pupae: Pupae are reddish brown and 4 mm (0.15 inches) long.

Life Cycle

Female beetles will deposit 200 – 500 eggs in grains over a 4 -6 month life span. Eggs hatch in about three days, and the larvae can mature within 30 days or as long as 58 days depending on temperature. Adults will feed on grains continuously until death.

Damage and Detection

The Larger grain borer is a primary pest of whole grains, especially corn and cassava root. The adults chew small holes in the kernel and then lay several eggs in the grain or in the grain mass. Damage is seldom noticed until exit holes appear and adults are seen roaming the grain mass.

Corresponding Products from Insects Limited

- [Hanging NoSurvivor Traps and Bullet Lures \(IL-950\)](#)
- [Larger Grain Borer Bullet Lures Only \(IL-953\)](#)

QUICK SCAN



SIZE / LENGTH

Adult 0.15 inch (4 mm)

Eggs 0.02 inch (0.6 mm)

COLOR RANGE

Adult Dark brown to black

Eggs White, turning reddish-brown

LIFE CYCLE

Females Deposit 200-500 eggs over 4-6 months

Eggs Hatch in about 3 days

FEEDING HABITS

Primary pest of whole grains, especially corn and cassava root.

INFESTATION SIGNS

Adults chew small holes in the kernel and lay several eggs in the grain or in the grain mass.

Larger Grain Borer Monitoring Guidelines

Lure

BULLET LURE® for Larger Grain Borer is an aggregation pheromone. These are used to monitor facilities and grain bins for adult activity.

Lure Storage

Keep unopened lures 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.

Trap Designs Used with Lure

NOSURVIVOR Traps® are diamond shaped sticky traps designed to be hung.

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

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 larger grain borer 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 larger grain borer. Increase pheromone trap density to 4.5–7.5 m (15–25 feet) apart to help locate source of larger grain borer. Keep pheromone traps 7.5 m (25 feet) away from exterior doors. Larger grain borer pheromone traps are best utilized in areas that store dried goods such as food, grains, seeds, 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

- Similar species include lesser grain borer (*Rhyzopertha dominica*) and Ghoon beetles (*Dinoderus species*).
- Other common names include greater grain borer.
- Larger grain borer is an internal feeder, meaning that larvae can burrow into a grain kernel where they feed and remain until they emerge as an adult.
- Larger grain borer initiate flight at temperatures above 20°C (68°F).