



Lesser Grain Borer

Rhyzopertha dominica

Description

Adults: These small 3 mm (0.125 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 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 up to 58 days depending on temperature. Adults will feed on grains continuously.

Damage and Detection

The lesser 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 Lesser Grain Borer Bullet Lures \(IL-900\)](#)
- [Lesser Grain Borer Bullet Lures Only \(IL-903\)](#)
- [Pantry Patrol Traps with Gel \(IL-1700\)](#)
- [All Beetle Trap with SPB Lure and Glueboard \(IL-2800\)](#)
- [All Beetle Trap with RTU Gel \(IL-2750\)](#)

QUICK SCAN

	SIZE	/	LENGTH
Adult	0.125 inch		(3 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 then lay several eggs in the grain or in the grain mass.	



Lesser Grain Borer Monitoring Guidelines

Lure

BULLET LURE Contains aggregation pheromone to attract male beetles.

PANTRY PATROL Pheromone /oil dispenser. Contains grain-based food attractants and aggregation pheromones to attract males and female Lesser Grain Borer.

STORED PRODUCT BEETLE Lures are food bait and pheromone lures that was specifically designed to make the Pantry Patrol gel into a tablet form.

ALL BEETLE TRAP READY-TO-USE TRAY is a preloaded accessory of the ALL BEETLE TRAP that contains either the PANTRY PATROL Pheromone/oil dispenser or the STORED PRODUCT BEETLE LURE and glueboard.

Lure Storage

Keep unopened BULLET LURES, PANTRY PATROL pheromone /oil dispensers, READY-TO-USE TRAYS, and STORED PRODUCT BEETLE LURES in cool storage for 12 Months or in refrigeration for up to 24 months before using or discarding.

Trap Designs Used with Lure

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.

PANTRY PATROL “CORNER” pitfall traps contain a triangular pit to receive full dispenser of pheromone /oil. Dust cover is incorporated into cardboard packaging.

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 lesser 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 lesser grain borer. Increase pheromone trap density to 4.5–7.5 m (15–25 feet) apart to help locate source of lesser grain borer. Keep pheromone traps 7.5 m (25 feet) away from exterior doors. Lesser 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 larger grain borer (*Prostephanus truncates*).
- Other common names include Australian wheat weevil, grain bark beetle, grain beetle, and smaller grain borer.
- Lesser 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.
- Lesser grain borer initiate flight at temperatures above 20°C (68°F).