

MONITORING GUIDELINES

Lesser Grain Borer

Rhyzopertha dominica

Description

Adult: These tiny (2mm) beetles have a uniform medium to dark brown color. They have distinctive pits on the elytra and small teeth on the front of the thorax. These beetles are excellent fliers and are attracted to insect light traps.

Larvae: The immature stage is approximately 2-3 mm long, white to yellowish in colour. It has a grub like in appearance and stubby thoracic legs.

Damage and Detection

The lesser grain borer is a primary pest of whole grains, especially wheat and corn. The adults chew a small hole 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. This beetle can be found in pearled barley, and bird seed.

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 30days or as long as 58 days depending on temperature. Adults will feed on grains continuously until death.

Lure The Bullet Lure for Lesser Grain Borer is an aggregation pheromone that is best designed for the hanging No Survivor trap. The pheromone lure lasts for 60 days. These are used to monitor facilities and grain bins for adult activity.

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 12 months to retain their full effectiveness for use afterwards. Shelf life of lures at room temperatures is 6 months.

Trap Designs used with Lure

No Survivor 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

Timing - Traps can be placed year round in warm locations but should be in greater numbers during the warmer months.

Density - It is recommended that traps be placed near materials susceptible to attack at one per every 10-50 feet.

Location - Trapping along corners, walls and posts is most effective for these beetles and trap designs. In residences, place on shelving of cabinets near food products. Use all traps at once for faster catch.

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 6-8 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

Threshold limits need to be established for each client where a trapping program is in place.

Important Notes:

Large numbers of beetles require other means of control and management to eradicate infestations. The aggregation pheromones used with these trapping combinations cannot be successfully be used in a mass trapping program for control, but are excellent tools to help you locate infested products in the early stages.