



Angoumois Grain Moth

Sitotroga cerealella

Description

Adults: Moths are 13 mm (0.5 inches) long with light grey to buff colored wings. There may be tiny spots on the forewing. The hind wings have a unique curved edge with pointed tip. Similar species like clothes moth have spear shaped hind wings.

Eggs: Oval, ivory in color and 2 mm (0.08 inches) long. Eggs are laid in kernels of corn with 1 egg per kernel.

Larvae: Creamy white, brown head capsule, and legless. The larvae are internal feeders of corn.

Pupae: Pupation occurs inside the corn kernel. Light brownish colored pupa skins may be visible on emergence.

Life Cycle

Adult moths live for 10-30 days where upon mated females can lay 40-300 eggs in kernels. Eggs hatch in 3-5 days in warmer months and up to 7 days in cooler months. Larvae feed and become mature in 25 days or as long as 64 days depending on food quality, temperature and humidity. Larvae will pupate inside the kernels. Adults will emerge from the pupae in 10 to 14 days depending on temperature. Several generations can occur per year.

Damage and Detection

This moth prefers to feed on field corn still on the cob. Rice and shelled corn in bins may also be attacked on the top layers. Exit holes are distinctive; they have a clear flap of 'skin' hanging on the edge of the hole. These moths are easily monitored using the sex pheromone in hanging traps.

Corresponding Products from Insects Limited

- [Bullet Lures Only \(IL-753\)](#)
- [Hanging NoSurvivor Traps Only \(IL-1100\)](#)

QUICK SCAN

	SIZE	/	LENGTH
Adult	0.5 inch	(13 mm)	
Eggs	0.08 inch	(2 mm)	

	COLOR RANGE
Adult	Light grey to buff colored wings
Eggs	Ivory

	LIFE CYCLE
Adults	Live 10-30 days
Eggs	Hatch in 3-5 days in warmer months and 7 days in cooler months

	FEEDING HABITS
	Prefers to feed on field corn still on the cob. Rice and corn in bins may also be attacked on the top layers.

	INFESTATION SIGNS
	Exit holes are distinctive; they have a clear flap of 'skin' hanging on the edge of the hole.

Angoumois Grain Moth Monitoring Guidelines

Lure

BULLET LURE® - Contains sex pheromone to attract male moths.

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 that can be hung from many locations. This design is the preferred trap for this moth that flies well.

THE SIGHTTRAP™ is the size of a NoSurvivor hanging trap and provides daily images and catch data to help with early detection. The data is available on the web and app-based software, ForesightIPM.

Trap Placement Techniques

Pheromone traps can be placed out year-round but are especially recommend during warmer months when temperatures exceed 12.5°C (55°F). 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 Angoumois grain moth. Increase pheromone trap density to 4.5–7.5 m (15–25 feet) apart to help locate source of Angoumois grain moth. Keep pheromone traps 7.5 m (25 feet) away from exterior doors. Angoumois grain moth pheromone traps are best utilized in areas that store dried goods such as food, grains, seeds, nuts, dried fruit, 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

- Other common names include French grain moth, grain moth, rice grain moth, and small grain worm.
- Like many food moth species, adult Angoumois grain moths do not eat. Their larvae are vivacious feeders and damage dried goods.
- Unlike other food moth species, the Angoumois grain moth is an internal feeder. The larvae can burrow into a grain kernel where they feed and remain until they emerge as an adult.
- The exit holes on grain kernels are like those produced by grain weevils.
- Larvae do not bind grain with silks as many other food moths do.
- Fumigation is recommended to eliminate this pest because of their internal feeding behavior.
- Angoumois grain moths initiate flight at temperatures above 12.5°C (55°F).
- The pheromone that attracts the Angoumois grain moth also attracts the pink bollworm (*Pectinophora gossypiella*).