



Indian Meal Moth

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Introduction

Indian meal moth (*Plodia interpunctella*) belongs to the family Pyralidae in the order Lepidoptera. The larvae are a common pest of many stored products.

Description

Indian meal moth larvae are shiny, smooth-skinned, off-white to pinkish caterpillars with brown head capsules (Fig. 1). They measure about 1.27 (0.5 inch) when mature. They typically pupate in a loosely woven silk cocoon.



Figure 1. Indianmeal moth larva (Clemson University, USDA Cooperative Extension Slide Series, Bugwood.org).

Adult Indian meal moths are small moths measuring about 10 mm (0.4 inch) long. The wings are held tented over the body at rest (Fig. 2). Some of the mouthparts project forward from the head, giving the moth a distinctly “snouted” appearance. The head and thorax are reddish-brown to dark brown. The front half of the wings is grayish-white and the lower half is rusty or coppery with darker brown markings. Some individuals may be darker than others. The adults usually fly at night; they fly in a zigzag fashion if disturbed during the day.



Figure 2. Adult Indianmeal moth (Whitney Cranshaw, Colorado State University, Bugwood.org).

Life Cycle

Indian meal moth has a complete life cycle of egg, larva, pupa, and adult stages. Adult female moths may lay 40-350 eggs on or near food sources. After hatching, the young caterpillars spin silk threads in the infested food. They feed for about two weeks before reaching maturity. Mature larvae crawl to the surface of the infested foods and may travel up walls or across ceilings before pupating in a silken cocoon. It is not uncommon to find full-grown larvae and pupae on ceilings. Adults emerge in about 30 days and live one to two weeks. The entire life cycle from egg to adult requires about six weeks, and there are 4-6 generations each year. Indian meal moth can be active year-round indoors.

Distribution

Indian meal moth is cosmopolitan and can be found throughout the United States wherever their food sources are stored.

Damage

The Indian meal moth is one of the most common and troublesome of the moths infesting stored

products. The caterpillars feed on a variety of grains, meal, breakfast cereals, pasta, dried nuts, seeds, chocolate, powdered milk, birdseed, and especially dry pet foods. The caterpillars often spin sheets of webbing in infested materials. Indian meal moth larvae may migrate away from their food source before pupating and are often reported crawling on walls and ceilings. Adults are often seen flying around infested areas, too.

Control

Sanitation is key to the control of Indian meal moth. Routinely clean and vacuum cabinets and pantries to monitor for possible infestations. Locate and dispose of any infested food sources. Use a vacuum cleaner to remove any life stages and spilled foods that support larvae hiding in cracks and crevices. Keep all stored products in airtight bags or sealable containers. Foods that are susceptible to infestation can also be stored in the freezer. Infested foods can be heat treated at 120° F for 1 hour to kill the larvae. Indian meal moth larvae are not poisonous and will not cause harm if ingested accidentally. Infested bird seed can be fed out to birds as they will eat the caterpillars along with the seed.

Revised

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