



INDIAN MEAL MOTH **Plodia interpunctelia**

INJURY: The Indian meal moth is one of the more common moths infesting stored grains and grain products. Others may include the Mediterranean flour moth and the meal moth.

The larval stage causes the injury. Larvae feed on flour and meal products, dried fruits, nuts, bird food and dried pet foods. As the larva feeds, it spins a web leaving behind a silken thread wherever it crawls. Small particles of food often adhere loosely to the thread making it conspicuous.

Many times an infestation is noticed when moths are seen flying around the home in the evening. They are attracted to lights and often appear in front of the television screen.

DESCRIPTION: The Indian meal moth has a wingspan of about $\frac{3}{4}$ -inch (18-20 mm). The outer $\frac{2}{3}$ of the wings are bronze to reddish-brown, while the inner $\frac{1}{3}$ is a grayish-white. The larvae (caterpillars) are about $\frac{1}{2}$ -inch (12.5 mm) long when mature. They are a dirty white color, sometimes exhibiting pinkish or greenish hues. The pupa (resting stage) is in a loose silken cocoon spun by the larvae and is a light brown color.

LIFE HISTORY: A female Indian meal moth can lay from 100 to 300 eggs during her lifetime. Eggs are laid singly or in groups of food materials. Within a few days the tiny whitish caterpillars emerge. These larvae feed for a few weeks and when they are mature they often crawl up the walls to where wall and ceiling meet, or crawl to the top of the cupboard to spin the silken cocoon in which they pupate and from which the adult moth emerges. Mating occurs and the life cycle repeats itself. In warm weather, the cycle may take only 6 to 8 weeks.

MANAGEMENT: The following suggestions may be useful in bringing an infestation quickly under control. Prompt action can be important in preventing losses of quantities of foods stored on kitchen or pantry shelves.

CONTROL FOR MOTHS INFESTING FLOUR AND MEAL: The following suggestions may be useful in bringing an infestation quickly under control. Prompt action can be important in preventing losses of quantities of foods stored on kitchen and pantry shelves.

- (1) Carefully examine all susceptible foods that may have been exposed to infested material.
 - (a) Do not forget birdseed, dog, cat and fish food. These are often the source of an infestation.
 - (b) Insects may even be found in paper-wrapped products that have not yet been opened in the home. All infested packages should be discarded. There is no satisfactory way of separating the insects from the food products, flour, or meal.
- (2) The contents from opened packages that appear to be uninfested should be transferred to glass jars with tight fitting tops. It is possible that eggs were laid in these products and they may hatch later and

lead to a new infestation if not contained.

- (3) Remove all food containers and utensils from the infested area and clean thoroughly, first with a vacuum cleaner and then with soap and water. Special attention should be paid to cracks and corners where bits of flour, meal, or other products may have accumulated.
- (4) If needed, treat corners of storage areas with cyfluthrin. Use a spray can or apply the solution (see manufacturers' directions) with a paintbrush, taking great care to avoid contamination of utensils and food. Allow to dry thoroughly, put down clean shelf paper, and replace contents to shelf or cupboard.
- (5) Continue to observe the area for several months after treatment. If moths reappear, the clean up may have been inadequate, or a newly infested package may have been brought into the kitchen.

Long storage of meal and flour products often leads to infestation and, therefore, such products should be purchased in quantities suitable for early use unless adequate containers are employed.

Insecticides should be used only according to instructions on the label and such materials should never be stored with foods.

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