



# The Flower Depot

## Moth News Update

(888) 837-3376

[www.thepestdepot.com](http://www.thepestdepot.com)

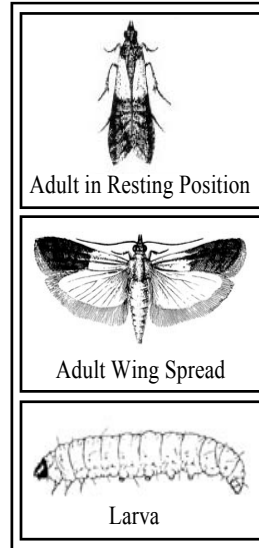
### What Are Moths?

At The Depot, we receive dozens of calls each month from individuals searching for information on how to get rid of flying insects, most notably flying moths, in their homes and businesses. The moths are seen in and around their pantries, wild bird food, pet food and clothes closets. Many report seeing moths around dried flower arrangements and in dried flowers in storage.

The moths the callers are describing are almost always Indian Meal Moths. But the moths they see are only the tip of the iceberg. It's the larva (worms) of these moths that are responsible for the destruction of everything they infest. Damage is caused by the larvae spinning silken threads as they feed and crawl, thus webbing food particles together. Besides

infesting all cereal food products and whole grains, larvae also feed on a wide variety of foods such as dried fruits, powdered milk, cornmeal, flour, raisins, prunes, nuts, chocolate, candies, health food and seeds, bird seed, dog and cat food, fish food, and pasta. In addition dried flowers used in wreaths and arrangements are a source of food the larvae find attractive.

Sometimes mistaken as clothes moths, homeowners first notice small moths flying in a zigzag pattern around kitchens, pantries and other rooms in the home.



Occasionally, the larvae or "white worms with black heads" crawl up walls and suspend from the ceiling attached to a single silken thread. Other times, larvae are found in a food package along with unsightly webbing. It is repulsive to the homeowner and costly to the manufacturer. Packages of whole wheat, flour, and corn meal are often infested. Some moths do fly into buildings during summer months through open doors or windows, but most "hitchhike" inside packaged goods and groceries. Not only homes, but restaurants, grocery stores, warehouses, pet stores and stores that sell wild bird feed or dried flowers can become infested.

### How to Avoid Moths

To be certain, you want to avoid having a moth infestation. Avoiding this problem is easy, inexpensive and effective, and boils down to one word: **PREVENTION**. That's right, taking steps now to prevent a problem in the first place will save you a lot of time, money and grief. It is MUCH more difficult to get rid of an infestation than preventing one in the first place. Prevention starts with education, and anticipation that a future problem could occur. By taking a few simple pre-

ventive measures you are unlikely to experience an infestation of moths.

**Kitchens and pantries:** Keep stored foods such as cereal, grains, nuts, cornmeal and pasta in sealed containers. Even in sealed containers these products can become infested because Indian Meal Moth eggs may have been present in the product at the time it was purchased. Containers and packages of stored food should be inspected periodically, at least every month or so. Any food that appears to have signs of webbing should be discarded immediately. Purchase foods that are seldom used in small quantities to prevent long stor-

age periods of a month or more. Susceptible material stored for six months or more, especially during hot summer months, has the possibility of developing into serious infestations. Highly susceptible foods, such as spices, can be kept in the refrigerator and other foods in the freezer. Always use older packages first, and inspect frequently to avoid any spillage, which might attract insects.

**Pet food and birdseed** should also be stored in airtight containers and regularly inspected for signs of moth infestation. Discard any product that shows signs of infestation.

### Moth Detective

Thoroughly inspect wild bird feed and pet food at the time of purchase. Some food becomes matted with silken webbing. The larval stage is the feeding or "pest stage." In stored grains, feeding is done at the surface. In bulky materials, stored in boxes, feeding may be done from the bottom of the box. When ready to pupate, mature larvae leave their spun, tunnel-like case of frass and silk, then spin a silken cocoon. You should also be looking for fecal matter, which may appear to be gritty particles of dust, that is often the same color as the infested product. To inspect bulky materials such as dried flowers, gently lift the flowers out of the storage or shipping

box and carefully inspect the debris in the bottom of the box. Under bright light, it is helpful to use a small magnifying glass to do a thorough inspection. You should also be looking for live adult moths and their larvae.

#### Pheromone Traps

Another very important preventive measure is the use of pheromone traps. Pheromone traps are used for inspection, monitoring, and pinpointing infestations of adult Indian Meal moths. Insects use pheromones to communicate with each other, and are natural compounds created in the insect body. Many have been isolated in the laboratory and are now used to lure insects into sticky traps.

Adult moths live only five to seven days with their major function to reproduce. Male moths are attracted to a pheromone scent (sex-attractant). Traps can be located indoors next to the ceiling, behind shelves, etc. to capture moths on a sticky surface.

#### Pheromone Traps





## Clothing Moths

Non-toxic, odorless trap that attracts and captures Clothing Moths. Traps use a special Clothing Moth Pheromone, that will draw male moths into the sticky inner trapping surface. Each package contains 2 Clothing Moth traps and lasts for 2 months.

## Foggers

Foggers automatically “release” all of its contents at once, creating a dense fog of insecticide that fills the air and settles on virtually every thing that is exposed. Best used for instant knock down of moths as well as cock roaches, fleas and many other insects. A complete selection of foggers are available to provide instant knock-down of moths. Foggers are effective for many situations.



## How to Identify Moths

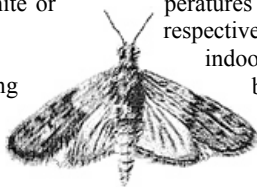
The Indian Meal moth have four life stages: egg, larva, pupae and adult. Eggs are ovoid, .5 millimeters in diameter and whitish, or yellowish-white. Pupae are contained within silken cocoons. Newly formed pupae are yellowish-brown. Moths are 5 to 10 millimeters in length with a wingspread of 16 millimeters. Upon emergence, moths are very colorful (head and thorax are reddish-brown; abdomen grayish-brown; front one-third of fore wings is silvery-white or gray).

### Life Cycle

Indian meal moths are sexually mature and capable of mating immediately after they emerge from pupae. Female moths

live up to 2 weeks and are capable of depositing up to 400 eggs each. Eggs are deposited singly or in clumps on or near potential food sources. Newly emerged larvae begin feeding immediately. There are 5 to 7 larval stages. Mature larvae either pupate where they are feeding or wander about before selecting a hidden or protected site (crack or crevice) in which to prepare silken cocoons within which they pupate.

Under indoor conditions, where temperatures are "comfortable," Indian meal moths are capable of continual development. With ideal temperatures and relative humidity (86 degrees F and 70 percent, respectively), development from egg to adult requires 3 to 4 weeks. In indoor situations 7 and 8 generations per year have been reported by various authors.



## How to Get Rid of Moths

**BE SURE TO READ AND FOLLOW ALL INSTRUCTIONS ON THE LABEL OF ALL PESTICIDES.**

If you see moths flying around inside your home or business and you think you may have an infestation, you should take immediate steps to get rid of the moths. First, find the source of the problem. Locate the food source where moth larvae is presently feeding. In home kitchens and pantries, carefully examine all packaged food items mentioned earlier, both opened and unopened. Often unopened food contains moth eggs at the time of purchase. Inspect all cracks and crevices in pantry cabinets and shelves, including the shelf bracket holes drilled inside of wood cabinets. Often the larvae will seek out those kinds of places to pupate.

Discard any and all foods where signs of moths or larvae are present. Remove all items from the cabinet or pantry. Vacuum surfaces of shelves, walls and floors. Pay special attention to cracks and crevices, no matter how large or small. Thoroughly wash all containers that will be reused. Place pheromone traps in pantry, and through out house. The traps will help you locate additional infestations. The same steps should be used for areas where pet food or wild birdseeds are stored.

Place “Insect Guard” pest strips where appropriate. Pest strips emit a vapor that will kill adult moths and their larvae.

### What is a Pest Strip?

A Insect Guard pest strip is an insecticide impregnated plastic strip, housed in a white plastic cage. It is not a sticky type trap. A Insect Guard pest strip is an insecticide.

### Do Pest Strips Have a Strong Odor?

There is no strong chemical odor associated with pest strips. They do have a slight sweet smell if you are very close to them.

### Are Pest Strips Messy or hard to Use?

Insect Guard strips are not messy and they are very easy to use. Just remove the strip from its foil wrapping and hang the strip where you want to kill and eliminate moths, flies, mosquitoes, cockroaches or silverfish.

### Do Pest Strips Really Work?

Yes. Insect Guard pest strips kills adult moths and their larvae.



### Where can Insect Guard strips be used?

CLOSETS, WARDROBES AND STORAGE SPACES Inset Guard pest strips also protects clothes from moths and leaves no smell. GARBAGE CANS AND DUMPSTERS to control flies.

ANIMAL BUILDINGS Controls flies, mosquitoes, and gnats in horse barns and dog kennels

### How long do Pest Strips Last?

Once an Insect Guard strip is removed from its foil wrapping it will continue to be effective for at least 4 months, and if unopened, will retain effectiveness for several years.

**Call us for a complete line of Moth Control products and pricing.**

