Stored Product Insect Pests

Our kitchens are warm, have food and water sources. They are natural places for some pests to thrive. Kitchen pests include cockroaches, and a number of tiny beetles and moths that infest stored food in our pantry. Most of us will encounter stored product pests from time to time.

There are many insects --- particularly moths and beetles --that feed on and contaminate cereals, grains, nuts, dried fruits, spices and processed foods.

Where do these infestations come from? Some products might already be infested when we buy them. For example, an all-too-easy way to start an Indian meal moth infestation is to purchase bird seed and bring it home. It is often infested when we buy it -- just wander through the pet store and notice the little moths flying in the bird seed aisle. The extra protein won't hurt birds, but, once inside the home, it is very easy for the infestation to spread to other stored foods in the pantry. Another scenario is for insects to enter through window screens and find their way into the pantry.

Some of the most common stored product pests include:

* **Indian Meal Moth.** The infesting stage is a small, light-colored worm that produces dirty webbing that contaminates the surface of the food. After feeding, mature worms (about ½ -inch long) often leave the food and spin a small silken cocoon in cracks and secluded places. They emerge from their cocoon as adult moths that lay eggs and re-infest food.
*Dermestid Beetles.* These beetles are the most common unknown insect in the pantry. Some people call these insects "weevils", but this is a misnomer. The infesting stage is a tiny hairy, cigar-shaped larva that feeds on spices, grain-based foods and is often found in flour. Adults are small oval beetles that are not usually found in food, but may be found in window sills or light fixtures because they are attracted to light. Dermestid beetles also are called carpet beetles and chew tiny holes in natural fabrics, like wool and silk.

![Image of Dermestid Beetle]

* Sawtooth Grain Beetles.* This is a small, flattened beetle about 1/10-inch long. It has six saw-like teeth on each side of the prothorax, but a hand-lens might be needed to see this characteristic. Its varied food preferences make it one of the most common kitchen pests. It prefers processed grains, oats, pet food and seeds, but also feeds on rice, cereals, dried fruits, breakfast foods, grain meals, sugar, chocolate and pastas.

![Image of Sawtooth Grain Beetles]

*Drug Store Beetles.* These...
are small robust beetles that infest a wide range of processed foods, including dry pet food, cereals, spices, drugs and other packages foods. They also attack tobacco. They can chew through tin foil and penetrate most food packaging materials.

Control tips

Other helpful tips include:
* **Store grain-based products and nuts** in pest-proof containers such as glass or plastic containers with tight fitting lids to help protect food. Small beetles can chew their way through cardboard or plastic, so unopened packages aren't pest proof.

* **Put foods in the freezer** to protect them from getting infested and kill insects that are already in stored foods. Refrigeration will also protect non-infested food, but may not kill insects if the food is already infested.

* **Heat infested food** in the oven to 140° F for an hour to destroy insect infestations.

* **Use pheromone traps for problem Indian meal moth infestations.** Pheromones are emitted by female insects to attract males for mating. These pheromones have been synthesized by scientists and incorporated into traps. Only male insects are attracted to these traps, but it is a way to monitor infestations and passively reduce much of the population. Locating the infestation is still needed to solve the problem.

* **Finding and throwing away infested stored products** is the best approach for controlling beetle and moth infestations. The use of insecticidal sprays in pantry areas is not recommended.

Use of commercial and trade names does not imply approval or constitute endorsement. Nor is criticism implied of products not mentioned.