

Home and Horticultural

PESTS



Controlling Stored-Food Insects

A number of insects, commonly referred to as pantry or kitchen pests, infest dry or stored food products in the home. Infestations may be noted when these insects are found in some product, but more commonly when the adults are seen crawling or flying about the kitchen or pantry. Body fragments, frass (insect excrement) or off-odor may indicate hidden or past infestations.

Infestations may develop whenever stored foods are kept for long periods (60 days or more). Stored food insects, if given enough time, can penetrate any packaging except glass and metal. Infestations can start in the home, store, warehouse, mill, processing plant or in transit.

Foods Attacked

The pests feed on or breed in flour, cereals, cornmeal, cookies, crackers, macaroni, rice, grains, dried fruit, cured meat, candy, nuts and other stored foods such as dry dog and cat food, and bird and vegetable seeds.

Control

Follow these steps when food is infested:

1. Locate the source of infestation. Check seldom-used packages of cereal, oatmeal, pancake flour, cornmeal and raisins. Dry dog food stored in the basement or pantry also may be a source, and bird seed often is infested with Indian meal moths.
2. Use or dispose of infested products. You may disinfest foods such as flour with heat or cold (see Step 3), then sift and place the material in a tightly closed container. However, sifting will not remove all insect fragments or feces.

Eliminating the source may call for some extreme measures. In one unusual example, larvae of the Indian meal moth were actively feeding and reproducing on the wheat flour paste sometimes used to attach wallpaper to a wall and ceiling. Removal of the old, loose wallpaper, thorough cleaning of the surface to remove eggs as well as tiny larvae, then tightly installing new wallpaper was required to correct the problem.

3. Treat infested foods with heat or cold.

— Cold treat packaged foods such as cake mixes and spices in their original containers. Expose them to 0°F or lower temperatures for 3 days. Larger packages may need to be held at 0°F for 7 days.

— Heat treat foods such as flour, beans, nuts and whole grains. Spread in shallow pans to insure thorough, uniform heating and place in a 150°F oven for 15 to 20 minutes.

— Heat treat dried fruits by placing in a cheesecloth bag and dipping in boiling water for about six seconds.

4. Store insect-free foods in tightly closed glass, plastic (i.e., Tupperware®) or metal containers. Glass jars with screw-on lids are best.
5. Clean pantry and cupboard shelves, particularly cracks, crevices and spaces under shelves. Sealing cracks and crevices with wood putty or silicone caulk will help eliminate the food-collecting properties of these sites. Remove all crumbs and spilled food with a vacuum cleaner.
6. Insecticide treatment is supplemental to good housekeeping because it will have no effect on insects breeding within food packages. Spray inside of food cabinets very lightly and only after shelves are empty and cleaned. Use either propoxur (Baygon) premium grade Malathion (3 percent), or pyrethrin (plus piperonyl butoxide). Pyrethrins give a quick kill of insects contacted directly but leave no residual protection. Some insects may be only temporarily immobilized by the treatment, so it is a good idea to sweep up all insects found after spraying. Do not contaminate food or utensils with insecticide.
7. Allow the insecticide to dry thoroughly; 12 to 24 hours are adequate. Cover shelves with shelving paper and replace properly packaged food items (see Step 4). Repeat cleaning and treatment once or twice at 2- to 4-week intervals may be necessary to eliminate larvae emerging from hidden eggs.

Prevention

Avoid long storage periods by purchasing susceptible or seldom used foods in small quantities. Store such products in

tightly closed glass, metal or plastic snap-lock containers or in the refrigerator.

At time of purchase, examine foods such as cornmeal, coarse cereals and macaroni to insure that they are insect free. Check the packaging date to establish its freshness. If you open a package for examination, place the contents in a tight container. Do not shake or dump the package before examination because adult insects normally reside on the surface of the cereal and may be missed if they are mixed up with the product. If infested, return and exchange the product for an insect-free one.

Be sure to store susceptible foods in insect-proof containers. Use older packages before newer ones and opened packages before unopened ones.

Heat- or cold-treat dried foods that will be stored for more than 60 days (see step 3, Control). This is especially important in late summer and in the fall.

Keep storage areas clean. Do not allow cereals, flour, crumbs or food fragments to accumulate on shelves or in cracks and crevices because exposed food will attract the flying stage of pantry insects. Vacuuming is the best procedure. Cleaning with soap and water is less effective because the water washes some food particles into cracks and crevices. Infestations may be in couches and chairs where food is dropped between the cushions and not regularly cleaned-up. Occasionally, flour and carpet beetles can survive and reproduce in the vacuum cleaner. Be sure your vacuum cleaner is emptied at least every 30 days.

Don't forget to check the dry dog or cat food or your bird food for stored-product insects.

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