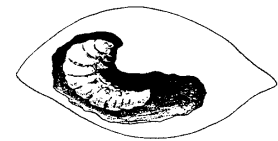


STORED FOOD PESTS

To some degree insects perpetually contaminate food products. In fact, most of these pests are brought into the home in foodstuffs that are already infested. The presence of stored food pests is not an indication of poor housekeeping.

The most common and most important pests of stored foods are the larvae of certain beetles and moths. They infest a wide range of foods including flour, whole grains, cereals, crackers, pasta, peas, beans, nuts, dried fruit, chocolate, spices and dry pet food.

Pests consume foods and contaminate them with fecal matter and other substances. They spoil the appeal of food and may affect flavor. Usually there are no adverse effects, but consumption of infested food is not recommended.



DESCRIPTION: In our area there are two species of moths and four species of beetles that cause the most problems.

Mediterranean Flour Moth, *Anagasta kuehniella* – The adult has pale gray wings marked with two black zigzag lines. Wingspan is 4/5". Larvae are white or pinkish. They spin silken tubes around their bodies as they feed. Infested materials are filled with webbing.



Indian Meal Moth, *Plodia interpunctella* - Pale gray wings with the outer half of forewing reddish brown. Larvae are dirty white. They feed within silken cases and web the infested material.



Drugstore Beetle, *Stegobium paniceum* - Adults are only about 1/10" long and are reddish brown. Larvae are about 1/4" long with white to yellow bodies and black heads.



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Sawtoothed Grain Beetle, *Oryzaephilus surinamensis* - Adults are brown, 1/8" long, slender and flattened. They have sawlike teeth on each side of the thorax. Larvae are tiny and yellowish white.



Confused Flour Beetle, *Tribolium confusum* - Adults are reddish brown and 3/20" long. Their antennae are four segmented and clubbed. Thorax is straight-sided. Larvae are tiny, white, yellow or tan.



Red Flour Beetle, *Tribolium castaneum* - Adults are reddish brown and tiny. They are similar to confused flour beetle except antennae have three segments and thorax sides are curved. Larvae are tiny, white, yellow or tan.



LIFECYCLE: Because of the number and diversity of lifecycles and behavior among these pests, it is impractical to describe individuals. However, we can make the following generalizations. Adult females lay a hundred to many hundreds of eggs. Larvae hatch from eggs, feed, grow and mature. Mature larvae enter pupal stage and emerge as adults. The egg stage and pupal stage may occur in food or elsewhere, such as cupboard corners or even on ceilings. A lifecycle can be completed in 30 days or as long as 300 days. Length of lifecycle is related to temperature and humidity. If it is warm and moist, lifecycle will be completed in a shorter time and infestation will take place rapidly.

CONTROL

Prevention: This is the simplest way to deal with stored product pests. You cannot completely prevent insects from entering your home, but you can avoid serious problems.

- Store susceptible materials in as dry a place as possible. Use screw lid glass jars or other tightly sealed containers made of material tough enough to prevent beetles from boring through them.
- Clean up spills promptly. Clean and caulk cracks and crevices. Empty and clean crumb collectors in toasters regularly.
- Try to buy foods in amounts that can be used fairly quickly - not more than a few months.

Disposal: Dispose of any infested material. Put infested material in sealed container or bag and place in garbage. Material can be put in freezer for 4 to 7 days to kill insects before disposal. If material is found to be infested when first purchased, return to store.

Direct Treatment:

- Remove all the contents from cupboards, shelves or drawers. Clean areas thoroughly with warm soapy water or disinfectants. Allow areas to dry.
 - Although it is not usually necessary, insecticide sprays may be used after cleanup. Apply pyrethrin sprays (also includes allethrin, resmethrin, sumithrin, and tetramethrin) to infested areas. Be sure spray is labeled for household use. **DO NOT** spray on food, dishes or utensils. Follow label directions carefully.
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