

PIL 21

## Common Pantry Pests

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Any grain product, seeds, dried-fruits, nuts, chocolate and condiments are frequently infested by flour beetles, flour moths, drugstore beetles, or booklice (psocids). They are especially troublesome in the home. Secondary molds and fecal contamination make the food unsafe for consumption.

Bran bugs are small, elongate, reddish beetles about 1/8-inch long. Two common species are the red flour beetle and the confused flour beetle (figure 1). A third common species, the saw-toothed grain beetle (figure 2), can be distinguished from the other two types by the saw-toothed edge of each side of the thorax.

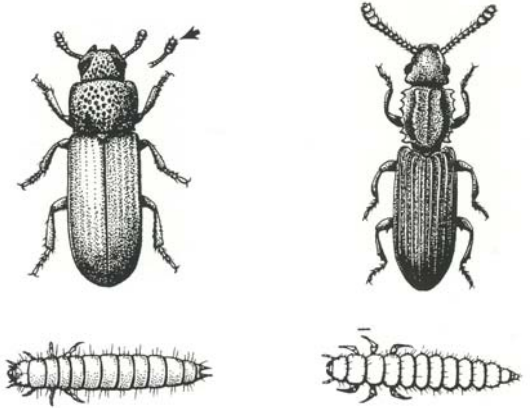


Figure 1

Figure 2

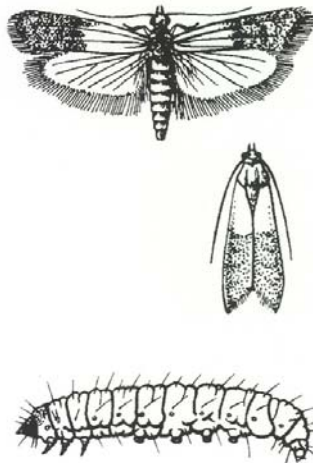


Figure 3

All stages of bran bugs can be found at the same time but it is the adults that are first seen in the home. Both the whitish or brownish-white, elongate, six-legged larvae and the adults feed on stored products. Sound seeds are rarely attacked. Under household conditions, there can be four to six generations a year.

Three species of flour moths occur in Oregon, the Indian meal moth (figure 3), the Mediterranean flour moth (figure 4) and the meal moth. All have a wing expanse of 1/2 to 3/4-inches. The Indian meal moth, a common pest in English walnuts, bird seed, grains, feathers and even powdered milk, has dark, reddish-brown wing tips. Wings of the other two species are a uniform gray color.



Figure 4

Full grown larvae are about 1/2-inch long and are white or sometimes pinkish or greenish in color. Signs of infestation are small moths flying about the house or the characteristic webbing done by the larva in affected products. Larvae are often found climbing the walls to pupate.

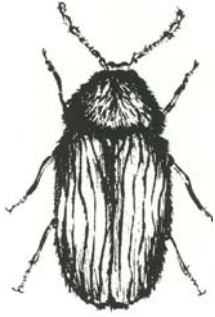


Figure 5



Figure 6

The drugstore beetle, of all the pantry pests, can be found infesting the greatest variety of stored foods and will attack wool, hair, leather, horn and medications.

The drugstore beetle (figure 5), is a small cylindrical, light-brown insect about one-tenth of an inch long. Its head is partially bent down so when viewed from above, the head is somewhat concealed and gives the beetle a slight, humped appearance. The immature stage is a white, slightly fuzzy, c-shaped grub with a tan head (figure 6). The entire life cycle may pass in less than 2-months.

Carpet beetles may be black or spotted. The larvae feed on animal proteins, cereals and seeds. They also eat wool and silk fabrics. The spotted form is the common one. The larva is very hairy.

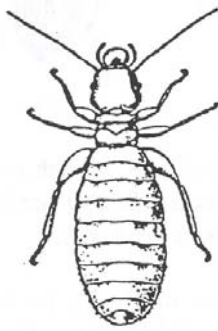


Figure 7

Booklice (psocids) can be a pest of stored foods particularly under excessively humid conditions. They can be found infesting a wide variety of foodstuffs, including cereals, flour, cake mixes, etc. Also, psocids are frequently associated with mold or mildew on foods or other surfaces.

Psocids are tiny, soft-bodied insects not much larger than the size of a pin head, about 1/25-inch long (figure 7). They are pale gray or yellowish white, wingless, louse-like insects with poorly developed eyes and long slender antennae. The immature forms closely resemble the adults but are smaller in size. The pearly white eggs of booklice are fairly large, about a third the size of the adult insect and are deposited in or near the food source. The life cycle from egg to adult requires about a month at 80° F.

All these pests can be controlled in the same way:

1. Locate and destroy source of infestation.
2. Thoroughly clean food shelves and cupboards, using a pine, orange or chlorine based cleaner.
3. Freeze-dry products for a week before storing in tight containers.
4. Store infrequently used food products in containers with tight lids.
5. Keep a check on dried food items that are infrequently used, such as cornmeal, coarse ground cereals, dried fruits and nuts.
6. There are no pesticides listed for use by homeowners.