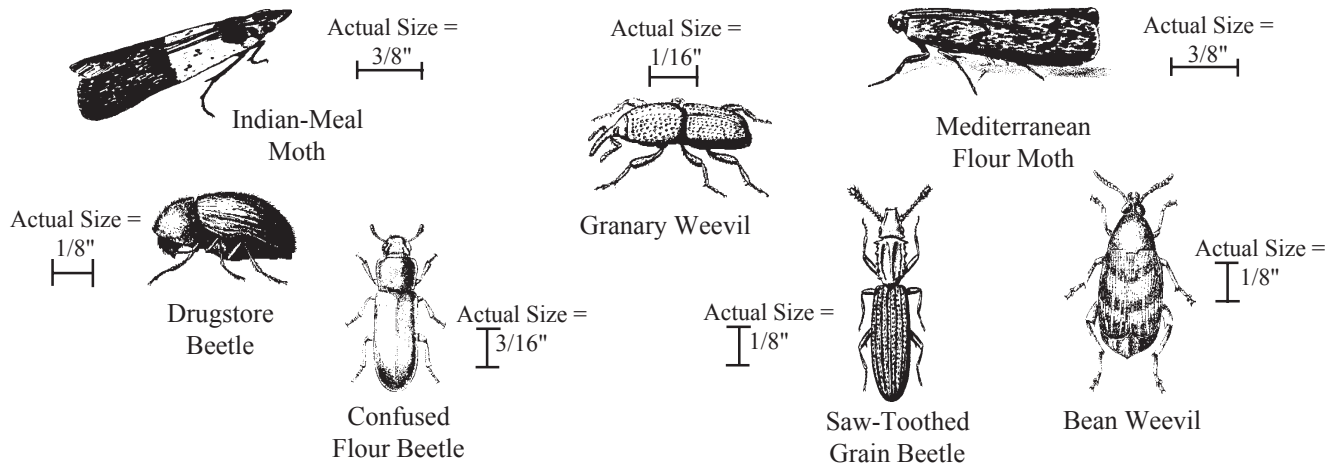


FLOUR MOTHS AND PANTRY BEETLES



GENERAL INFORMATION

Flour or meal moths and "pantry beetles" are often found in and near stored food products, where they complete their life cycle. Most kinds of dried foods are attacked including cereals, flour and macaroni products, nuts, seeds, beans, dried fruits, spices, herbs, dog food, candies, tobacco, and museum specimens. Spilled or opened food products set aside or forgotten commonly become infested. The source of these pests may be in adjoining areas such as a garage or shed. When infestations are heavy, specimens may be found far from their original food source.

Moths: The two most common species are the Indian-meal moth and the Mediterranean flour moth. Adult moths are about one-quarter to three-eighths inch long and narrow, gray with distinctive dark markings on the wings, especially near the tip. The larvae are pale in color and one-half inch long when mature. These larvae spin webbing in the material they infest, causing it to stick together in chunks. Upon completing their development they often leave the food-stuff and spin silken cocoons nearby.

Pantry Beetles: There are various species of small beetles, including weevils, found in or near stored food. Some species are general feeders and others are restricted. In general, they are small, brown, oval or elongated beetles. The larvae are pale with dark heads, often grub-like, about one-tenth inch long, and do not

spin webbing in food stuff.

CONTROL

If the pest is discovered before they start to migrate, destroy the infested product. Thoroughly clean the shelves, drawers, cupboards, and floors close to the infested area. Place all uninfested products in containers with tight-fitting lids. Purchase cereals and similar products in small quantities until the infestation is eliminated. Keep storage units dry. Moisture encourages pests.

Treatment: Small quantities of products (except candies and chocolate, which would melt) can be sterilized in an oven and all stages of the insects can be killed by exposure to temperatures of 140°F. for one-half hour. The products must be heated throughout this period of time. The contents of large packages should be spread on cake pans or pie pans so the heat can penetrate easily. A temperature of 180°F. will cause a rapid kill but may result in some food breaking down or turning rancid. At least two hours time would be needed at 130°F. Insects in dried fruits can be killed by immersing fruit in boiling water for about a minute. Spread the fruit to dry before storing. Products stored at temperatures below 40°F. will not show further damage. Usually, a lethal cold treatment at 0°F. or below requires three days up to one month.

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This information is provided to help homeowners with their pest problems. Insecticides may be purchased at nurseries, hardware, farm supply, and pet stores. If additional help is needed, contact with a licensed pest control operator is suggested.

No endorsement of trade names or products is intended, nor is criticism implied of similar products not mentioned.

PRECAUTIONS

1. Handle insecticides with care and follow instructions on the label.
2. Do not use around open flame or exposed foods, and always clean food preparation areas after the use of pesticides.
3. Store out of reach of children and pets, preferably in locked cabinets.
4. Never keep pesticides in anything other than the original container.
5. Never reuse the pesticide container to store any other materials.
6. Dispose of all empty containers by placing them in the trash can for removal to the local disposal area.



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