Many kinds of beetles and moths attack stored food products. Flour beetles, saw-toothed grain beetles, flat grain beetles, carpet beetles, bean weevils, pea weevils, rice weevils, Indian meal moths, Mediterranean flour moths, and Angoumois grain moths are some of the more common ones. These insects can be found not only in packages or containers of food, but also in the cracks and crevices of cabinets or cupboards. Since most of them are capable of flying, they may enter houses in this way. However, they may also enter in food packages brought into the house. Once they gain a foothold, they will spread through other foods and become progressively more abundant.

SANITATION If you suspect the presence of insects, remove all packages from cabinets and examine a small amount from each package under a bright light for signs of insects, insect infestation, and insect fragments. You may want to destroy infested packages, or you may heat the food to 150°F for 20 minutes to kill the insects.

Sanitation is the first and probably the most-important phase in cleaning up cereal-insect infestations. Thorough cleanup of cabinets and shelving is imperative if the insects are to be controlled. A vacuum cleaner will do a better job than sweeping.

INSECTICIDES After cleaning and while the cabinets are still empty, spray the entire inside surfaces with 0.5-percent diazinon in oil from a pressurized spray can. Only a light deposit is needed. The insecticide residue will kill any insects that you may have missed during cleanup, and will also help to prevent incoming insects from becoming established.

Other preventive measures are to (1) buy food in small quantities so that it will not remain unused for a long period, (2) remove foods from their original containers and store in air-tight glass or metal containers whenever possible, (3) avoid spillage, and (4) keep food storage spaces clean at all times.

FUMIGATION If you wish to keep the infested food and heating is not possible, fumigating the products in any air-tight glass, wood, or metal container will be satisfactory. This will be particularly true of seed—peas, beans, corn, popcorn, etc.—where heat will affect germination. Use a commercial fumigant at the rate of 1 tablespoon per pound of material. You can get such fumigants from grain dealers, farm stores, exterminators, drug stores, and similar places. Fumigate and seal for 36 hours. Then remove, air, and store in a tight container. Fumigation does not affect the eating quality or germination, but both heating and prolonged exposure to fumigants (over 48 hours) will often injure seed germination.
PRECAUTIONS Remove the food and cooking utensils from the cabinet areas before treatment. Under no conditions allow diazinon to come into direct contact with foods, cooking utensils, or food-handling surfaces. Remove nearby food or cover it carefully to avoid contamination. Before using an insecticide, read the label carefully and follow the precautionary statements.

Prepared by entomologists of the Illinois Cooperative Extension Service and Illinois Natural History Survey. For additional copies, see your Extension adviser in agriculture.

Urbana, Illinois October, 1969
Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. John B. Claar, Director, Cooperative Extension Service, University of Illinois at Urbana-Champaign.