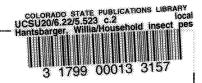
Household insect pests

characteristics and control

William M. Hantsbarger^{1/}

no. 5.523

COLORADO STATE UNIVERSITY EXTENSION SERVICE



Quick Facts

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Household pest control is important throughout the year.

Fly swatters, vacuum cleaners, screens and local control methods often eliminate insects with little effort.

Pesticides should be used with caution and only as directed on the label.

Often, professional help is needed in pest control.

When treating food storage areas, all food items and eating utensils should be removed.

Often pests can be kept out of the home by spraying outdoors around foundations, window and door frames, stair and window wells and other likely entry places.

Pests often can be eliminated by spraying nesting and breeding sites.

Many insects and near relatives become pests in homes, and some will attack and damage woodwork, furnishings or food in and on the premises.

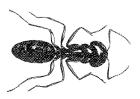
Household pest control is important throughout the year. There are cockroaches which are obnoxious, odorous and leave trails of droppings found on food and house furnishings.

Termites move into the house from the ground and attack wood, books and papers. Ants can contaminate food, damage fabrics and cause homeowners annoyance. Clothes moths and carpet beetles often destroy woolen clothing, furs and rugs. Flies are a nuisance in the home as well as outdoors.

Some insect infestations, such as termites, generally will require help from a reliable pest control operator. In some cases of household infestations, when homeowners know the identity of the pest and have the pesticide and equipment for applying it, they can take care of the problem without help.

This Service in Action sheet is designed to help the owner identify the pest and know what chemicals may be used for control. However, not all pests need to be controlled by pesticides. Flyswatters, vacuum cleaners, screens and local control methods are effective in eliminating insects. Whenever possible, these methods should be utilized. When using any pesticides listed, the homeowner should be sure to consult the labels and use only as directed. (See Table 1.)

Ants (several species)



Ants often invade homes and become a nuisance. They must have contact with a nest. Some ants feed on sweets and others on greasy food. Ants are usually found in kitchens and other areas where food is stored. Persistent methods must be used to gain satisfactory control. Control is better if the nest can be located and this area treated (ants usually nest outdoors). Otherwise, ant trails should be treated with a residual spray such as insecticides 1, 3, 4 or 10.

Bedbugs



Bedbugs are often carried about through bedding and laundry from public lodging places, camps, transportation facilities and the like. These bugs feed on blood and prefer birds and poultry but are able to subsist on humans. The mature bedbug is brown, flattened and without wings. Size varies from ½ to ½ inch (6 to 9.5 millimeters) in length. These pests like to hide by day and come out at night for blood meals.

Infested rooms and premises may be treated with solutions of insecticides 1, 9 or 10. Spraying slats, springs and frames of beds thoroughly is suggested. Mattresses should be sprayed very lightly. Spraying baseboards, wall cracks, wall pictures, bedside tables and other likely hiding places also will help in eliminating bedbugs. All linens should be replaced.

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To simplify technical terminology, trade names of products and equipment occasionally will be used. No endorsement of products named is intended nor is criticism implied of products not mentioned.

^{1/}William M. Hantsbarger, CSU extension associate professor, entomology (revised 1/15/81)

Box Elder Bugs



These black bugs are marked with red on the thorax and back and are about ½-inch (12.7-mm) long. They invade homes during the fall to overwinter and often can be found in large groups congregated on the sides of buildings and fences. For more information see Service in Action sheet 5.533, Box elder bugs—characteristics and control. For control, sprays of insecticides 3, 5, 6 or 11 outdoors and on areas where they congregate are suggested. Indoors, a vacuum cleaner and household aerosol can be used.

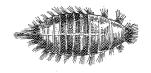
Table 1: Insecticides for household use. (Note: some materials are for outside use only.)

Insecticide		Usual amounts required for 1 gallon (3.9 liters) water	Dusts
1.	Malathion (Premium grade) 57%	6½ fluid ounces (195 milliliters).	4%
2.	Chloropyrifos (Dursban)	2 fluid ounces (60 ml).	-
3.	Diazinon (Spectracide)	Available only as 0.5% aerosol. Use according to label directions.	~
4.	Propoxur (Baygon)	Available in 0.5 to 1.0% aerosols. Use according to label directions.	-
5.	Carbaryl (Sevin) 50% wettable powder	3 ounces (85 grams).	5%
6.	Dichlorvos (Vapona)	Available as a 0.5% aerosol. Use according to label directions.	~
7.	Chlorobenzilate (Acaraben) 45% liquid;	1 teaspoon (5 ml).	-
	25% wettable powder	1 tablespoon (15 ml).	
8.	Dicofol (Kelthane) 18.5% liquid	2-3 tablespoons (30-45 ml).	-
9.	Pyrethrins & Piperonyl	Available as aerosols.	-
10.	butoxide Lindane, liquid; 25% wettable powder	Use according to label directions. 1 tablespoon (15 ml). 2.5 ounces (70.9 g).	-

*In some cases, ready-to-use aerosols or oil solutions may be preferable to water solutions—labels should be consulted.

Carpet Beetles (several species)





Adult

Larva

The adult beetles are small, about 1/8-inch (3.2 mm) long and hard-shelled beetles of a black or brown color. Both adults and larvae feed on any product of animal origin as well as cereal grain. The larvae are about 1/4-inch (6.4 mm) long and bristly in appearance, from light tan to black in color. Their habits are much the same as the clothes moth but they do not produce webbing.

For control, residual sprays of insecticides 1, 3 or 6 can be used.

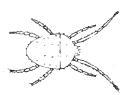
Clothes Moths (two species: case-bearing and webbing)



The adult clothes moth is buff colored and quite small, having a wing-spread of less than ½-inch (12.7 mm). They are usually seen flying aimlessly in darkened corners away from bright lights. Only the larvae feed on clothing. Any cloth or clothing made from animal fibers is likely to be attacked, such as wool, silk, fur, feathers and hair. It usually takes two months for the clothes moth to complete its life cycle.

Control methods include spot treatments with insecticide 1 or naphthalene and paradichlorobenzene flakes used as a preventative in clothing storage areas. Periodic dry cleaning or sunning of garments will help.

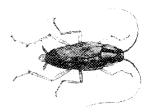
Clover Mites



Clover mites are tiny spider mites about the size of a small pin head. They invade homes during the winter months. They are harmless but leave a stain when crushed. Houses constructed with brick or stone are more frequently invaded. For more information see Service in Action sheet 5.505, Clover mites—characteristics and control.

Insecticides to use are 1, 3, 7 or 8. These should be applied as a barrier spray outdoors. Indoors, using a vacuum cleaner and painting around window sills with insecticide 8 is recommended.

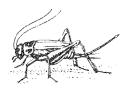
Cockroaches (several species)



Roaches are scavengers and feed on stray food particles they can find. Many times they are carried into homes on packages. They have filthy habits and hide during the day, coming out at night to feed. Roaches are frequently found around plumbing, sinks, baseboards and cupboards. Eggs, in capsules, are deposited in protected areas such as behind baseboards or around plumbing.

For control, spilled food items should be cleaned up and insecticides 1, 2, 3 or 4 used. Insecticides can be applied to such areas as around pipes going through walls, behind baseboards, under sinks and around window and door frames. When treating food storage areas, all food items and eating utensils should be removed. They may be replaced when storage area is dry.

Crickets

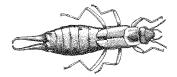


Crickets at times enter homes and are usually found in basements or in crawl spaces, occasionally coming up to the first floor through pipes and other spaces. They usually enter dwellings in the fall. ucs

Crickets sometimes damage clothes and fabrics, particularly those containing starches.

For control, sprays of insecticides 1, 2, 3 or 4 may be applied.

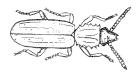
Earwigs



Earwigs normally inhabit lawns and gardens but occasionally invade homes. They are wingless brown insects about ¾-inch (19.1 millimeters) long when fully grown. They are slender and have a pair of pincer-like or forcep-like appendages at the rear of the body. They are scavengers, much like the cockroach.

The main control should be aimed at keeping these pests out by using residual sprays outdoors around foundations, stairs and window wells of insecticides 3, 4, 5 or 10. Indoors, household preparations of insecticide 4 can be used.

Flour Beetles (several species)



This group contains tiny, slender beetles or their larvae which often are found in flour, breakfast cereals, dried fruits and nuts. Most insects of this type are introduced through infested foods purchased at the grocery store. Often they migrate to houses from farmstored feeds and grain.

For control of these pests, see Service in Action sheet 5.516, Insect pests of home-stored foods—characteristics and control. Insecticides 1, 6 or 9 are effective on these beetles.

Flies



The house fly is the major pest in and around homes. The larvae or maggots develop in decaying vegetable matter and manure. Likely breeding places around homes are animal droppings, garbage cans and compost piles. Flies have short life cycles (10 to 14 days) and are able to reproduce in tremendous numbers. Control should be directed towards eliminating breeding sites and applying residual sprays to eliminate adults. Indoors, spraying with household aerosols or preparations of insecticides 1, 6, 9 or 10 is recommended. Outdoors, fly resting surfaces may be sprayed with insecticides 3 or 10.

House Centipedes

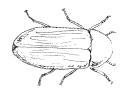


The house centipede often lives indoors where it feeds on soft-bodied insects and spiders. Its appearance

and fast movements often frighten householders. The centipede is tan in color, from 1 to 3 inches (2.5 to 7.6 centimeters) long with two long antennae in front and 14 pairs of long legs.

Indoors, insecticides 1, 3 or 6 may be used. Outdoors, spraying around foundations and entryways with insecticides 3 or 11 is suggested.

Powder Post Beetles



There are several species of small beetles that feed on wood and become problems in homes. Some will feed on hardwood, others on softwoods. Often infestations are a result of infested wood used in construction or brought into the home. Signs of infestations are small shot holes in the wood and fine saw-dust materials near the holes.

If the infestation is light and the area of wood is easy to get at, the homeowner might try to control the pests. Otherwise, it may be best to contact a pest control sprayer.

A 5-percent prepared solution of pentrachlorophenol may be used to treat wood by painting on the infested area, however, the material will damage the finish and fumes are flammable. Treated areas should be thoroughly dry before pets or children come in contact.

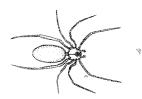
Silverfish or Firebrats



Silverfish are very active, wingless insects, about ½-inch (12.7 mm) long when full grown. They feed on starchy foods and any materials containing paste or glue. They are found in similar locations as roaches. Life cycles may be completed in three months. Eggs and adults are easily transported in cardboard boxes and similar containers.

Use of residual sprays on such places as floor and wall mouldings, behind doorways, under furniture and in floor cracks and crevices will help control these pests. Insecticides 2, 3, 4, 6 or 9 can be used.

Spiders



Spiders usually invade homes in the fall to escape colder weather. Some species may be found indoors the year around. The black widow and the brown recluse are the only poisonous species found in Colorado.

For control, a residual spray can be used outdoors around foundations and window wells to prevent entry, with insecticides such as 1, 2, 3, 4 or 10. Indoors, insecticides 1, 3, 4 or 6 are recommended. For further information see Service in Action sheet 5.512, Spiders—characteristics and control.

Spider Beetles



Spider beetles feed largely on cereal products. They are small, shiny, brown or black insects which closely resemble spiders.

For control methods, see Service in Action sheet 5.516, Insect pests of home-stored foods—characteristics and control. Insecticides 1, 6 or 9 are recommended.

Termites





Worker

Winged form

Subterranean termites live in nests in the ground, close to a source of wood, and often build tunnels upward to attack the wood in structures above them. Workers are approximately ¼-inch (6 mm) long, white in color and wingless. They are seldom seen unless infested wood or the earthen tubes connecting wood and soil are broken open. Adults are black, with two pair of large wings. They do not have the narrow thread-like waist found in ants. Termites swarm from nests and fly about, often collecting in large numbers.

Termite control usually is a job for professional pest control operators. The basic principal of control is to break the pest's contact between wood and soil. Soil

treatments of aldrin or dieldrin are used to make a chemical barrier.

Wasps



Occasionally wasps and hornets will nest in or around a dwelling and become a nuisance as well as occasionally stinging occupants. Wasps can be mud daubers, constructing nests of clay, or they can build their nests of paper. A few species will nest in the ground. The best control is treating the nest with a spray of insecticide containing 3, 5, 6 or 10. Applying sprays to the nest at night and repeating treatments if necessary will help in eradication. For ground nests, spraying directly into opening and plugging holes should eliminate wasps. For more information on wasps and bees, see Service in Action sheet 5.525.

Weevils



Certain weevils, particularly the strawberry root weevil, migrate into homes. They do not cause any damage indoors but can become a nuisance.

For control, sprays of insecticides 1 or 3 can be used. Outdoors around foundations, insecticide 10 also could be used.