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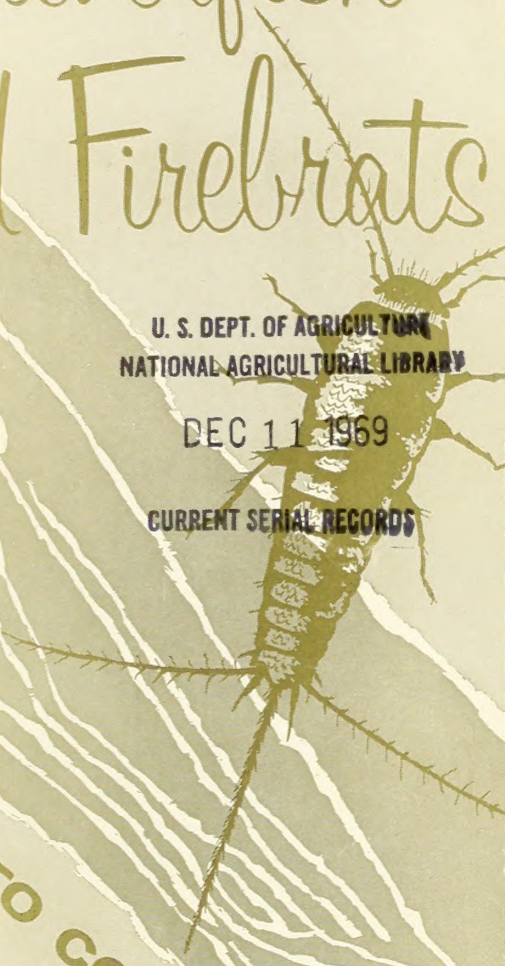
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Silverfish and Firebrats

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HOW TO CONTROL THEM

To
Leaflet 412

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3 Silverfish and Firebrats;

HOW TO CONTROL THEM

Silverfish¹ and firebrats² cause damage in homes by eating foods and other materials that are high in protein, sugar, or starch. They eat cereals, moist wheat flour, any paper on which there is glue or paste, sizing in paper (including wallpaper) and bookbindings, starch in clothing, and rayon fabrics.

¹ *Lepisma saccharina*.

² *Thermobia domestica*.

DESCRIPTION AND HABITS

Both of these insects are slender and wingless. They are covered with scales. Adults are one-third to one-half inch long. Silverfish are shiny and silver or pearl gray in color; firebrats are mottled gray. The young insects look like the adults except that they are smaller.

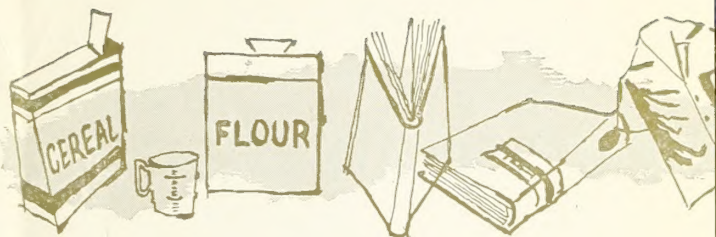
Both insects have two long, slender feelers at their head end, and three long, taillike appendages at the hind end. Each appendage is nearly as long as the body.

Silverfish and firebrats are active at night and hide during the day. When objects under which they are hiding are moved, they dart out and seek other hiding places.

WHERE FOUND

Silverfish and firebrats are common in homes throughout the United States. The silverfish lives and develops in damp, cool places, especially basements. Large numbers may be found in new buildings in which the walls are still damp. The firebrat lives and develops in hot, dark places, such as around furnaces and fireplaces, and in insulation around hot water and heat pipes.

In apartment houses the insects follow pipelines from the basement to rooms on lower floors where they find food. They may be found in bookcases, around closet shelves, behind baseboards, and behind window or door frames.



DEVELOPMENT

Silverfish and firebrats develop slowly under usual house conditions, and have few young. They are hardy, and can live without food for several months.

The females lay eggs at any season. They usually lay eggs in secluded places, such as behind books or on closet shelves; occasionally they lay them in the open.

Silverfish lay only a few eggs at one time; they may lay several batches over a period of weeks. The eggs are whitish, oval, and about one thirty-second inch long. They hatch in 2 to 8 weeks; the length of time it takes them to hatch varies with the temperature.

Firebrats lay about 50 eggs at one time; they may lay several batches. The eggs are soft, white, and opaque when laid; later they have a yellowish tinge. They hatch in about 2 weeks.

Silverfish and firebrats reach maturity 3 to 24 months after hatching. Their rate of growth depends on the temperature and humidity.

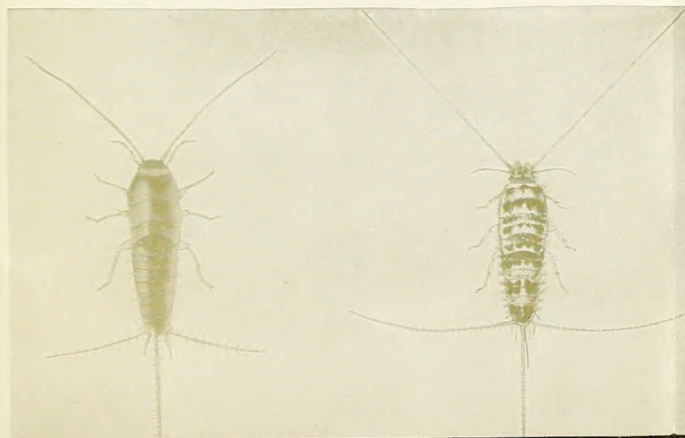
CONTROL

Silverfish and firebrats can be controlled by using commercially prepared sprays or dusts that contain Baygon, chlordane, DDT, diazinon, dieldrin, heptachlor, lindane, malathion, or ronnel.

Control with sprays and dusts may not be immediate. But if the spray or dust is properly

SILVERFISH

FIREBRAT



and thoroughly applied it will leave a residue that will bring about control of either insect in a few weeks. If some degree of control is not achieved in 2 or 3 weeks a second and more thorough treatment is advisable.

SPRAYS

Oil sprays containing either 5 percent of DDT, 2 percent of chlordane, 2 percent of malathion, 1 percent of Baygon, 1 percent of ronnel, 0.5 percent of lindane, 0.5 percent of diazinon, 0.5 percent of heptachlor, or 0.5 percent of dieldrin are preferable for home use.

Apply the spray with an ordinary household sprayer. Spray around baseboards, door and window casings, bookcases, shelving, closets, and in other storage areas, and places where pipes go through walls or floors.

Spraying only the warmer parts of the building is usually sufficient to control firebrats.

DUSTS

Dusts containing either 5 or 10 percent of DDT, 5 or 6 percent of chlordane, 4 percent of malathion, 1 percent of lindane, or 1 percent of dieldrin may be used if there is danger that the oil solution would cause a fire.

Apply the dust with a hand duster. Blow the dust into cracks, or spread a thin film wherever the appearance of the deposit will not be objectionable.

PRECAUTIONS

Insecticides used improperly can be hazardous to man and animals. Use them only when needed and handle them with care. Follow the directions and heed all precautions on the labels.

Keep insecticides in closed, well-labeled containers in a dry place. Store them where they will not contaminate food or feed, and where children and animals cannot reach them.

Do not contaminate food, dishes, or utensils while applying insecticide.

Do not use oil sprays in places where they could be ignited, particularly by open flames, pilot lights, or electric sparks.

Avoid repeated or prolonged contact of insecticide with your skin.

Avoid prolonged inhalation of insecticide dusts or mists.

Avoid spilling insecticide on your skin, and keep it out of your eyes, nose, and mouth. If you spill any on your skin, wash it off immediately with soap and water. If you spill it on your clothing, remove clothing immediately and wash contaminated skin. Launder the clothing before wearing it again.

After handling an insecticide, do not eat, drink, or smoke until you have washed your hands and face. Wash your hands and face and any other exposed skin immediately after applying insecticide.

Dispose of empty insecticide containers at a sanitary land-fill dump, or bury them at least 18 inches deep in a level, isolated place where they will not contaminate water supplies. If you have trash-collection service, wrap small containers in several layers of newspapers and place them in the trash can.



Use Pesticides Safely
FOLLOW THE LABEL
U.S. DEPARTMENT OF AGRICULTURE

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