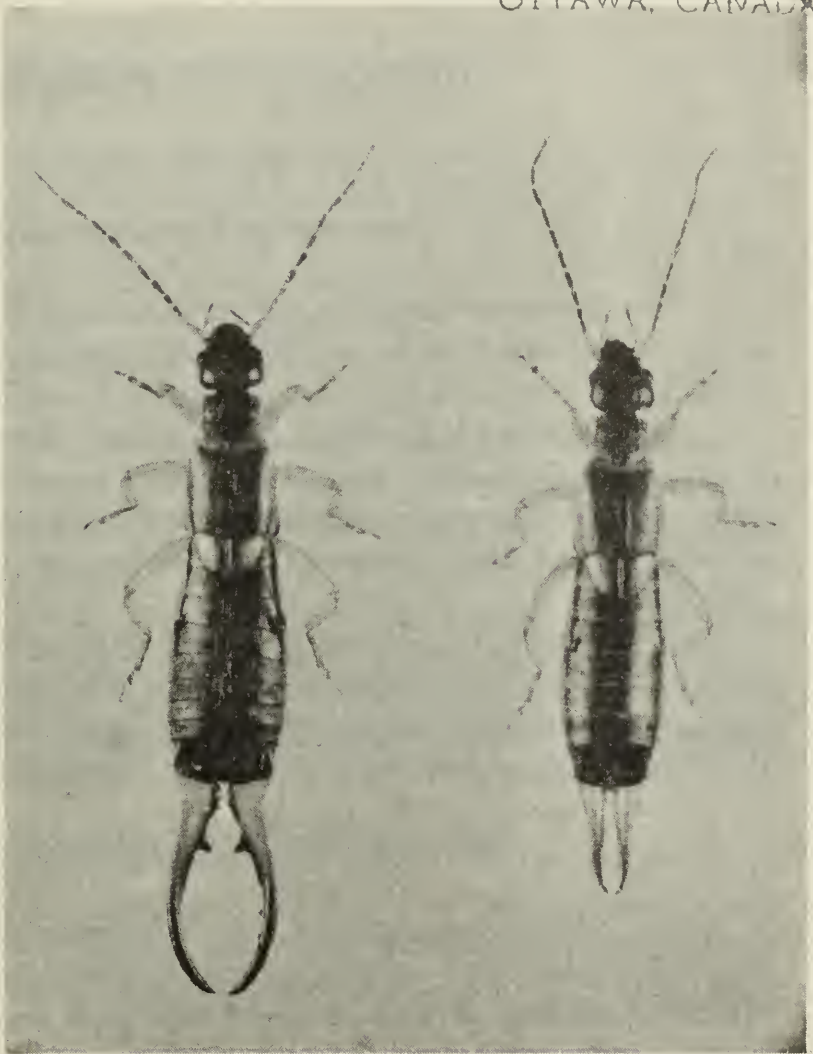


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CONTROL OF THE EUROPEAN EARWIG

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**CANADA
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CONTROL OF THE EUROPEAN EARWIG

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The European earwig¹ a native of Europe, is now an important pest in many areas of Eastern Canada and British Columbia. It was first reported in British Columbia in 1916, and as a pest in Eastern Canada in 1938.

If this insect is abundant it may damage flowers, fruits and vegetables, but it is most objectionable in and about the house. When it invades the home, its objectionable appearance, unpleasant odor, and habit of lurking among foodstuffs or clothing and dropping upon the table from among cut flowers make it a major nuisance.

The damage to gardens has often been serious; frequently seedling vegetables are completely destroyed. Among the many plants attacked are: asters, dahlias, carnations, chrysanthemums, marigolds, roses, zinnias, apricots, peaches, raspberries, beans, carrots, celery, corn, lettuce and potatoes.

DESCRIPTION, LIFE HISTORY AND HABITS

The adult earwig is about $\frac{3}{4}$ inch long and reddish brown in color. In growing, the insect sheds its skin, or molts, four times. All stages of the young are similar in general appearance to the adult, but smaller. The males have a pair of large, curved forceps at the rear of the body (cover illustration, left) whereas those of the females are smaller and nearly straight (cover illustration, right). These pincers are harmless although the insect tries to pinch with them when picked up. The adult has wings but seldom flies.

Each female lays about 60 round, pearly white eggs during the early spring. They are laid in small nests in the top 2 inches of soil. The mother tends the young in the nest for the first two weeks. When they are about $\frac{1}{4}$ inch long they leave the nest in search of food. The insects usually reach the adult stage in about 70 days.

About one fifth of the females lay a second batch of eggs in June. The young from these appear in July and August.

Earwigs live only one year. Many die in the winter and the survivors are mainly females, which die after rearing their young in summer.

In their search for food and shelter, earwigs crawl over the ground and readily climb houses, fences and trees. They forage at night and hide in dark places during the day. They eat both plant and animal food. At times they eat soft-bodied insects, such as aphids and small caterpillars, but this limited usefulness is completely outweighed by their objectionable habits.

¹ *Forficula auricularia* L.

NATURAL ENEMIES

About 25 years ago the main enemy of the earwig in Europe, a small parasitic fly, was introduced into Canada. It was reared in large numbers and released in most provinces. Although the maggots of this fly have killed many earwigs, insecticides are necessary to keep the pest under control.

CHEMICAL CONTROL

In populated areas, control measures against this insect are most effective when they are applied on a neighborhood or community basis. Earwigs move about very freely, and for this reason a garden to which chemicals have been applied may soon become infested again unless those nearby are treated at the same time.

The best time to apply poisons is during warm, dry weather when the earwigs are young. The time varies for different areas of each province. For example, in southwestern British Columbia it is late May to early June but in the southwestern part (Kootenays) it is mid-June. For northern Alberta and Newfoundland it is mid-July. For detailed information on timing applications consult your local agricultural representative.

The poisons may be applied in baits, dusts or sprays. Apply them along building foundations, sidewalks, fences and woodpiles and also to the trunks and crotches of trees, under shrubs and near other ground cover that affords hiding places for this insect. Do not sprinkle treated areas for at least two nights after the application.

Poisoned bait

Earwigs are strongly attracted by fish-oil bait made as follows:

Bran	12 pound
Sodium fluosilicate	1 pound
Fish oil	1 quart

Mix the dry bran and poison thoroughly, add the fish oil and mix thoroughly again. Do not add water. This quantity of bait is enough for one baiting for an average-sized city lot, or about 8,000 square feet.

Broadcast the bait like lawn seed, evenly and thinly without leaving any piles. Do not scatter it on foliage, for it may cause injury.

Commercial baits containing fish oil are available where the earwig is a common pest.

Dusts and sprays

DDT and malathion are also effective, in dusts or sprays. For a dust use one containing 5 per cent of the chemical. For a spray use 1 pound of 50 per cent DDT wettable powder in 25 gallons of water (4 tablespoons to 1 gallon of water), or the same amount of 25 per cent malathion. If you use an emulsible liquid,

apply half a pound of the active ingredient of DDT or a quarter of a pound of malathion in 25 gallons of water. DDT kills earwigs more slowly than malathion but remains effective for a longer period.

CAUTIONS: Follow closely all the cautions listed on the insecticide label, especially the following. Do not allow any insecticide on vegetables such as lettuce and celery that may be eaten. Keep the insecticide away from small children and domestic animals. If poultry or game birds are likely to pick up some of the bait, place it in boxes or cans perforated with small holes to allow the earwigs to enter.

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For further information, consult your agricultural representative or provincial entomologist, or write to the nearest insect laboratory of the Canada Department of Agriculture or to the Scientific Information Section, Canada Department of Agriculture, Central Experimental Farm, Ottawa.

SUMMARY

The European earwig is an important pest in homes and gardens in many areas of Eastern Canada and British Columbia. It may be controlled with a bait containing the poison sodium fluosilicate, or with a dust or a spray of DDT or malathion. In populated areas, control measures are most effective when applied on a neighborhood or community basis.

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