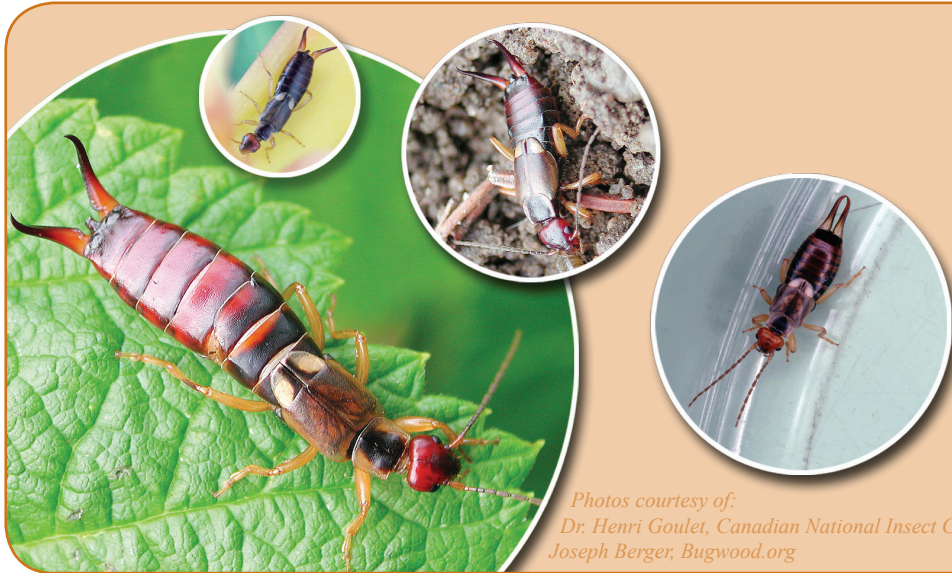




Earwigs

Pest Note

Canada



Photos courtesy of:
Dr. Henri Goulet, Canadian National Insect Collection;
Joseph Berger, Bugwood.org

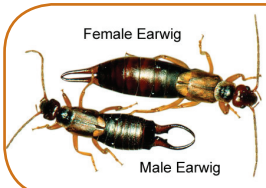


Photo: Department of Entomology, University of Nebraska-Lincoln

Earwigs: What are they?

Despite their scary appearance and reputation, earwigs are not directly harmful to humans. In fact, they are often beneficial, acting as scavengers of decaying matter and predators of insect larvae, slug eggs, aphids, and other garden pests.

Adult earwigs are about 1.5 to 2.0 cm (1/2" to 3/4") long and have antennae about half as long. The male has a large, curved pair, while the female has smaller, nearly straight ones. The earwig uses these during courtship and as a defence against attackers. Earwigs have a long, flat body with a tough, shiny, reddish-brown hard outer shell and prominent pincers (or forceps) at the end of their bodies.

Earwigs live only one year. They spend the winter in pairs hiding just below the soil surface, usually close to house foundations. Warm weather brings them out of hibernation. In the spring, each female lays as many as 60 round, pearly white eggs in a nest in the top 5 cm of the soil. The mother then chases the male away from the nest and remains to guard the eggs and tend to the young for the first two weeks.

When they are about 6 mm long, the young (nymphs) leave the nest in search of food. They generally look like the adult, but are smaller. About 20% of the females lay a second batch of eggs in June; these young (nymphs) appear in July and August.

What can they do?

While decaying organic matter forms the largest part of their diet, they also feed on the tender shoots, leaves and blossoms of flowering plants and vegetables. Earwigs, being also carnivorous, are predators of insect larvae, slug eggs, aphids, and other garden pests. They sometimes even eat each other.

During the day, earwigs like to hide in cool, dark, moist places: under stones, in garden rubbish, tubular legs of garden furniture, wooden fences, hollow aluminium doors, and other cracks and crevices. Earwigs begin searching for food at dusk. In search of food and shelter, they crawl over the ground, climb houses, fences and trees, and may begin to wander into homes in June or July. Although they are accidental invaders, it is annoying to find these insects among food and clothes and occasionally between bed covers.

How can I manage them?

The best time to begin control measures is early spring, during dry, warm weather, when the earwigs are young. In populated areas, control is most effective when carried out on a neighbourhood or community basis.

Cultivate the soil to disturb the over-wintering earwigs and expose newly laid eggs to the dry surface where they are less likely to survive. Try to create and **keep a clean, low-moisture perimeter** around your house foundation by trimming back vegetation and removing mulch, organic debris and other objects that can be used for shelter by earwigs. Repair leaky taps and downspouts, and make sure to direct water drains away from your foundation.

Keep your lawn and garden free of excess debris and decaying organic matter to make it less attractive for earwigs. Don't allow grass clippings, fallen leaves, weeds and old wood to accumulate except where organic materials are stacked for proper composting.

Start vegetable gardens as early as possible to give plants a head start before the young (nymphs) come out from their nests in June. **Remove any damaged produce** in your garden right away: earwigs like feeding on fruits or vegetables that have holes or bruises caused by other insects or disease. Before bringing in cut flowers or vegetables from your garden, inspect them to remove any earwigs hiding between leaves or inside blooms.

Remember that even if earwigs are present, they are not always to blame for plant damage. Try a night tour of the garden with a flashlight to see if other nocturnal insects or slugs are present.



Earwig
Photo: Brad Smith



Cultivate the soil in early spring to disturb over-wintering earwigs and expose newly laid eggs.



Responsible Pesticide Use

Before Purchasing a Pesticide

- Identify the pest correctly.
- Use physical control methods and alternatives to pesticides.
- Read the label directions and safety precautions before buying the product. The label must include the name of the pest to be controlled and the treatment location (e.g., indoor, outdoor, garden uses, pet treatment).
- Purchase only the quantity of product needed for the treatment.
- Consider hiring a licensed pest control operator.

Using a Pesticide

- Carefully read all label instructions and precautions before using pesticides.
- Do not drink, eat or smoke while applying pesticides.
- Persons and pets should vacate the area during treatment. Cover or remove aquaria.
- If kitchen area is to be treated, cover or remove food, dishes and utensils.

After Using a Pesticide

- Always wash your hands thoroughly after handling any pesticide product.





Create an earwig trap with a partially buried tin containing oil.
Photo: Susan Mahr



Collect earwigs in rolled up newspaper and kill them daily.
Photo: Susan Mahr

Trapping

Take advantage of the earwigs’ habit of hiding in small, dark places by setting up simple traps in areas where they commonly go for shelter. You can use:

- pieces of corrugated cardboard that are rolled up, secured with a rubber band, and stood on end
- flower pots stuffed with moistened straw or newspaper, inverted onto upright stakes
- hollow bamboo canes or short sections of old garden hose tied into bundles

For best results, the traps described above must be checked regularly and the trapped earwigs dropped into a pail of soapy water.

Traps that attract and kill earwigs can also be placed near foundations and other strategic places in the yard:

- Earwigs are strongly attracted to fish oil, and to a lesser extent, vegetable and other oils. Shallow containers, like sardine cans, partly filled with oil and buried to the rim in the soil will attract and trap many earwigs.
- Using empty UNRINSED frozen juice containers, fill the tins two-thirds of the way with water; add liquid soap; and place in strategic locations.

Products

If cultural and physical methods are not enough, many products registered in Canada to control earwigs can be bought at garden centres or hardware stores. Keep in mind the most important target areas for treatments: around building foundations and sidewalks; along fences, hedges and woodpiles; and under shrubs and other ground covers. Most garden insecticides are only effective when the insect comes into contact with them. Large infestations may develop tolerances to a particular chemical being used.

Poisoned baits

Set out carbaryl-based baits in small piles of pellets as bait stations, covering each pile securely with a board, shingle or weighted foil plate to protect children and pets from exposure. Covering the bait stations also makes them more attractive to earwigs. Place bait stations in target areas where earwigs are noticed.

CAUTION: Keep children and pets away from baits. Do not use baits in your home.

Chemical sprays and dusts

Use **dust products** only where children and pets cannot come into contact with treated surfaces. The best time to apply insecticides is during warm, dry weather when the earwigs are young, in June or early July. Applications should be done during the evening so that residues are fresh when the earwigs become active. Do not water areas you’ve treated for at least two nights after application. Treatment later in the summer is less effective.

Diatomaceous earth can be applied indoors or outdoors and remains active until it is washed away. When in contact with the insect, its sharp particles cut through the insect’s outer layer and the insect dies from dehydration. When attractants are added and the insect ingests the powder, its digestive system is affected as well.

Carbaryl spray and carbaryl powder can safely be applied as directed on the label to ornamental plants and vegetables under attack. Do not apply to any flowers, including fruit and vegetable blossoms, as carbaryl is very poisonous to bees. Insecticidal soaps can also be effective when used where they will contact earwigs directly. You may need to repeat applications at regular intervals. Always check the label directions for frequency.

When the presence of earwigs in dwellings is a persistent problem, treatment with an insecticide is an option to consider, although the earwigs will eventually die out on their own. Remember, a more effective and long-term solution is to find and treat the outdoor source of the infestation.

To discourage earwigs from invading your home, **propoxur formulations** can be painted or sprayed around exterior window frames, doors, and the foundation and nearby soil (not on vegetation). Indoor spot treatments with a residual spray containing propoxur or pyrethrins can be done along baseboards, drainpipes, and under the edges of carpets and surrounding rugs.

Please note: Some provinces and municipalities have banned the use of pesticides for cosmetic purposes. Please check with your city, province, or local lawn care centre for more information. You may also read Cosmetic Pesticide Bans and the Roles of the Three Levels of Government for more information about cosmetic pesticide bans."



*Photo: Dr. Henri Goulet,
Canadian National Insect
Collection*

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Fax: 613-736-3798

www.healthcanada.gc.ca/pmra



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Note: These are general recommendations.
Consult the label for specific instructions.
When in doubt, contact a professional.

- Do not permit persons or pets to contact treated surfaces until residue has dried completely.
 - Provide adequate ventilation of treated areas after use.
 - Wipe clean all surfaces that come in direct contact with food, such as counters, tables and stovetops, including indoor and outdoor surfaces.
 - Always store pesticides out of reach of children and pets and away from food and beverages.
- #### Accidental Poisoning
- Call a poison control centre immediately and seek medical attention.
 - Take the pesticide container or label with you to the emergency facility or physician.
 - Follow first aid statements on the label.
 - In case of accidental poisoning of pets seek veterinary attention immediately.
 - Report pesticide incidents to manufacturers (phone number on label). They are required to send them to Health Canada.
- #### Disposing of Pesticides
- Do not reuse empty pesticide containers. Wrap and dispose of in household garbage.
 - Follow the product label instructions or contact provincial authorities for disposal of pesticides.

