



Insects

European earwigs in homes and gardens

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Originally from Europe, the European earwig, *Forficula auricularia*, was introduced into the U.S. in the early 1900's and is now common throughout much of the country. It first became noticeable in Wisconsin in the early 1980's and Minnesota in the early 1990's and has since been present in varying numbers. They get their name from the old belief that earwigs climb into people's ear while they are sleeping. Fortunately, this is not true (there are a few rare cases of earwigs inadvertently being found in ears but is accidental).

Identification

Earwigs are about 5/8 inch long, with a flat, reddish brown body and very short wings. They have medium length antennae and chewing mouthparts. They are distinctive because they possess a pair of strong pinchers (cerci) on the tip of their abdomen. Males have stout, strongly curved cerci that are widely separated at the base while females possess slender, straight pinchers that are close together. Earwigs use these cerci to protect themselves and to grab and hold prey.

Nymphs are similar to adults except they are smaller. Immature earwigs have female-like, slender straight cerci. Young earwigs are generally lighter in color than adults.

Biology

Earwigs are most active at night and hide during the day in dark, confined, damp areas and are found under potted plants, leaves, welcome mats, and other objects, as well as in cracks between pavers, bricks, and similar places. You can also find them on plants in buds and folded leaves. Earwigs are scavengers feeding on damaged and decaying plant matter as well as weakened or dead insects and other small organisms. Earwigs can also feed on healthy plant material.

Earwigs mate in the fall and males and females usually spend the winter together in specially constructed nests. In early spring, females force the males out and then lay eggs. Female earwigs are very maternal, an unusual trait for insects. They guard and protect their eggs and newly hatched young. Eggs hatch within about a week. Earwig nymphs emerge from nests sometime from late May to early June, maturing into adults in late June or early July; adults are active through fall.

Importance



Photo: Jeff Hahn

Female earwig. Note slender, straight cerci.



Photo: Phil Pellitteri

Male earwig. Note curved, stout cerci.

Earwigs can be problems in one of two ways. First they can enter homes and other buildings during summer, sometimes in large numbers. Fortunately, they do not damage property or eat our food and they don't reproduce indoors but they are nuisances by their presence. Some people worry that earwigs will use their cerci to attack them. While they can grab onto objects with their pincers, they cannot squeeze very hard and are harmless to people. Earwigs can also give off a disagreeable odor as they can secrete a foul-smelling liquid from their abdomen. An individual earwig does not live long indoors, but they can continue to migrate into buildings throughout the summer.

Earwigs can also cause problems in gardens as they feed on flowers, like marigolds, dahlias, butterfly bush, and hostas, chewing irregular holes in leaves and flower blossoms. They are also reported to attack corn silk and seedlings. Larger plants will tolerate this feeding but seedlings and flowering plants can be severely damaged or killed by dense populations. Some of this damage can be confused with slug feeding. However, slugs leave a slime trail while earwigs do not. Earwig damage can also be confused with cutworm and even rabbit feeding. If you are not sure what is causing the damage you are finding, go outside at night with a flashlight check under plants for earwigs and other pests.

Management

The following steps will help to reduce earwig numbers in your home and garden. However, when numbers are high, even taking these steps does not guarantee that you will not have some problems with earwigs. Fortunately, they are a problem only during summer.

Non-chemical

To reduce the number of earwigs around your home and garden, clean up debris that earwigs can hide under, such as leaves, plant debris, bricks, piles of lumber, and similar things. It can also be useful to thin out or remove mulch.

You can set out rolled up newspapers or similar objects to trap earwigs. You can also place old tuna fish cans baited with fish oil or vegetable oil. Set them out during evening in areas where you are seeing earwigs in your garden. In morning, shake the traps above a pail of soapy water to remove and kill the insects.

Minimize excess moisture in the landscape. Be sure that the landscape has good drainage and that irrigation systems are working properly. A good strategy when watering, is to irrigate more thoroughly and deeply but less often so the surface of the soil remains drier.

To help keep earwigs out of your home, caulk and repair any obvious spaces, cracks, or gaps around the outside of your home at ground level, especially around doors and windows and the juncture of the siding and the foundation. Also, watch around water faucets and vents. However, if earwigs are determined, some will still get inside your home. For any earwigs you find inside, just remove them with a vacuum or a broom and dust pan.



Photo: Jeff Hahn

Earwigs clustered on milkweed



Photo: Phil Pellitteri

Earwig damage on vinca



Photo: Dave Moen

Earwig damage on dahlia

Insecticides

You can supplement the above non-chemical steps with an insecticide treatment. To help keep earwigs from entering your home, use a residual insecticide, e.g. permethrin or cyfluthrin, around the foundation of the building. **Be sure to read the label of the product you wish to use very carefully to ensure that it is registered for use around the exterior of buildings.** However, once earwigs are indoors, insecticides are not effective or useful.

You can also protect plants with an insecticide application. An effective method is to treat the surrounding mulch where the earwigs are hiding. Use a drench, e.g. lambda cyhalothrin, for this. You may need to attach the product to a hose to get sufficient volume. Another option is to use a bait, e.g. carbaryl, scattered on the ground around the plants you are protecting. You may also be able to protect individual plants by applying a spray, e.g. permethrin, deltamethrin, acetamiprid, or carbaryl, or a dust, e.g. permethrin or deltamethrin, to plants when damage is first noticed. **Be sure to read labels very carefully to verify that the plants you intend to treat are listed. Also be sure to follow all label directions to help protect bees and other beneficial insects.**



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