

Fact Sheet 01-41

EARWIGS

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Earwigs look alarming with pincers at their hind end and bother even seasoned gardeners who normally have an attitude of “live-and-let-live”. The most common earwig problems gardeners and homeowners notice are damage to developing seedlings and flowers, earwigs coming out of ripening fruit, or earwigs scurrying away from compost or piles of garden litter.

Earwigs are glossy brown, somewhat flattened insects ranging in size from ½ to 1” in length. Their most distinctive feature is a rather formidable set of “pincers” or forceps, extending from the tip of the abdomen. The forceps of males are larger and more distinctly curved than those of females. They might be capable of giving a good pinch, but it is unlikely.

Female earwigs use these forceps to guard their eggs and newly hatched young from other insect predators. Earwigs live about a year with a few females from the previous fall surviving the winter to lay up to 60 round white eggs in small clusters in the upper few inches of soil or debris. They may have two batches of eggs, one in spring and another in summer. They overwinter as adults under bark, garden debris, rocks, and boards. Young earwigs are similar to adults in structure and habits. Earwigs may be winged or wingless, but they rarely fly.

There are 22 known species of earwigs in North America, 12 of which have been introduced from the tropics and Europe. The Nevada Department of Agriculture’s insect collection lists four species of earwigs, three of which –*Labidura riparia* (Pallus), the dainty ring-legged earwig; *Euborellia annulipes* (Lucas); and *Euborellia cincticollis* (Gerstaecker)–are most common in southern Nevada. In northern Nevada the most prevalent is the European earwig, *Forficula auricularia* (L.), which is primarily a garden dweller although sometimes it wanders into homes looking for a cool moist place to live.

Earwigs are nocturnal, preferring damp cool places or hiding in organic mulch, in crevices, under bark, and in garden debris. They will eat almost anything including other

insects. They eat dead and dying plants, soft fruits like strawberries and stone fruits, petals, pollen, and seedlings. Their eating of the silks on corn plants can cause poor kernel development. Typical earwig damage on most plants is small holes in the margins of leaves. Whole seedlings may disappear. They chew shallow gouges or holes in fruit.

NOT ALL THE NEWS ABOUT EARWIGS IS BAD.

A species of earwig in southern Nevada is a predator of other insects, foraging at night eating the eggs, young, and adults of small insects, mites, and nematodes. Northern Nevada earwigs are not widely known to be predators. Earwigs also eat algae and fungi. Earwigs thrive in gardens because of the organic matter. Gardeners often assume damage to the fruit and vegetables is caused by earwigs. Earwigs often are blamed for damage more likely caused by snails, slugs, cutworms, or other garden pests hiding in damp debris. Go out at night with a flashlight to spot what is actually eating the plant.

HOW TO DEAL WITH EARWIGS?

Remember that earwigs are primarily beneficial. Although a minor predator of other insects and mites, they primarily eat organic matter breaking it down and aerating soil surfaces. Management strategies may be required if the earwig has been identified as the cause of damage to plants. Use an integrated approach combining the following:

Mulch: Use organic matter like compost or chipped bark to provide a complex soil surface with many organisms on which the earwigs can feed. If your yard is well mulched, and you suspect earwigs are chewing on garden seedlings, raise seedlings indoors and transplant them outside when they are large enough to withstand damage.

Direct Physical Controls: Earwigs are easy to trap. Trap them by placing tuna cans with ½ inch of vegetable oil around the affected plant. Bamboo tubes, dampened rolled up newspapers, damp rags, or pieces of hose also make good traps because earwigs like dark moist places. A clay or plastic pot filled with damp sphagnum moss and placed upside down on a stake to provides an inviting earwig abode. Place the traps near the plants just before dark. Check the trap the following morning and shake the trapped insects into a bucket of soapy water to drown them. Reset traps daily in order to drop the earwig population down to the point of grudging coexistence.

Keep earwigs out of mature trees by encircling the trunk with a six-inch band of a sticky barrier. There are products sold for that purpose. Diatomaceous earth also works well as a barrier around plants.

Sanitation: Removing boards and rubbish from areas with large populations of earwigs eliminates their hiding places in areas you want to protect. Earwigs like to congregate in a cool moist environment like pots, planter boxes, and containerized gardens. Get rid of earwig havens by raising containers slightly off the ground on stands, or pot feet. Earwigs will go elsewhere.

Biological Controls: Various wasps, yellowjackets, spiders, and other organisms may be of minor value as predators of earwigs.

Chemical Controls: Some chemical products are labeled for earwig control like pyrethrin products, although insecticides are rarely needed. Insecticidal soaps are also labeled for earwig control as a contact insecticide. **Always read a label, understand it, and follow directions.**