Earwigs

Order: Dermaptera
Filament antennae, chewing mouthparts

Short wing covers (elytra)

Prominent cerci ("pincers")
Earwig unfolding wings. Despite the presence of a large hind wing, this species does not fly.
The cerci (aka ‘forceps’), are fairly weakly muscled. They are used during mating (by males) and can help to manipulate prey.
European earwig - male

European earwig - female
Earwigs are omnivores.

Small soft-bodied insects and insect eggs make up an important part of their diet.
Flower petals and soft plant parts are also eaten by earwigs.

Earwigs feed at night.
Earwig feeding at night. Note the chewing mouthparts.
Thigmotaxis – “a predilection for pressure”
Earwigs – Increasing as garden problems?
Mulches and Nuisance Invaders

- European earwig
- Springtails
- Millipedes

- Sowbugs/Pillbugs
- Field crickets
- Some spiders
Earwig Trials – Over-the-Counter Insecticides
Earwig Control Trials – 2006

Insecticide Evaluations

– Several pyrethroid insecticides were effective in laboratory bioassays
  • Bifenthrin
  • Deltamethrin
  • Lambda-cyhalothrin
  • Permethrin

– Several pyrethroid insecticides were not effective
  • Esfenvalerate (Bug-B-Gon)
  • Cyfluthrin

– Carbaryl (Sevin) was effective
Basic Earwig Trap Design for Bait Tests
Rolled corrugated cardboard or crumpled newspaper can be used in trap design.

Addition of either wheat bran or wheat germ greatly increase capture of earwigs in traps.

Vegetable oil in a sunken cup is highly effective for earwig capture.
Canola oil in a small cup
One night’s capture!