



# BUG BIZ

Pest Management and Insect Identification Series



## *Euborellia annulipes*, Ringlegged Earwig (Dermaptera: Anisolabididae)

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### Description

Ringlegged earwig is an introduced member of the order Dermaptera (earwigs) that is now widely distributed and common in the southern half of the United States, with isolated records as far north as Manitoba, Canada.

Adults are brown to almost black in color, wingless, and 1/2 to 3/4 of an inch (12 to 19 mm) in length. The flexible abdomen is completely exposed. A pair of forceps (cerci) extend from the tip of the abdomen, as is typical of all earwigs. Forceps of males are more curved than those of females. Legs of adults are light brown and each has two equally spaced dark bands (the “rings” of “ringlegged”). The antennae possess 14 to 16 segments each. Immatures (nymphs) are similar in appearance to adults but are smaller, lighter in color, and the cerci are less developed.

The order Dermaptera includes more than 2,000 species in 12 families globally. At least six species occur in Louisiana and are similar in overall appearance. Details of the antennae, color pattern, shape of the cerci and other anatomical details are used to distinguish them.

### Life Cycle

Ringlegged earwigs undergo three developmental stages – egg, nymph and adult – with gradual metamorphosis during the transition from nymphs to adults. Female ringlegged earwigs lay two to nine clutches of eggs, each clutch averaging 50 eggs. Eggs can be deposited during any season when the weather is warm enough for activity. Females exhibit parental care of the eggs, cleaning them and guarding them from predators, especially during early stages of development. After hatching, the nymphs disperse and undergo five growth stages (instars), with the fifth molting into the adult. In Louisiana, the species can complete up to three generations per year.



Adult ringlegged earwig feeding on St. Andrew's cotton stainers (*Dysdercus andreae*) (Whitney Cranshaw, Colorado State University, Bugwood.org, Creative Commons License).



Ringlegged earwig top view (Justin Cret, bugguide.net, Creative Commons License).

## Ecological Significance and Pest Status

Ringlegged earwigs are common and widespread in Louisiana and sometimes reach population levels that make them a minor nuisance in situations where moist organic matter and suitable food sources are available. The species is considered to be omnivorous, with a tendency towards predation. A mix of insects and various plant products form the bulk of the diet. When present in the vicinity of vegetable crops, minor damage from feeding on tender shoots and leaves may occur.

## Control

Ringlegged earwig is not considered a pest other than as an occasional nuisance. Control in small areas can be achieved by clearing organic debris and materials that provide harborage such as discarded lumber, plant containers and other human-produced debris. Earwigs are susceptible to most readily available insecticides, but these must be labeled for use against them, and applications must be made according to the label directions.

## References

- Klostermeyer, E.C. 1942. The life history and habits of the ringlegged earwig, *Euborellia annulipes* (Lucas) (Order Dermaptera). *Journal of the Kansas Entomological Society* 15: 13-18.
- Kölliker, M. 2007. Benefits and costs of earwig (*Forficula auricularia*) family life. *Behavioral Ecology and Sociobiology* 61: 1489-1497.
- Neiswander, C.R. 1944. The ring-legged earwig, *Euborellia annulipes* (Lucas). *Ohio Agricultural Experiment Station Bulletin* 648. 14 pp.

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