



Toronto Master Gardeners

Toronto Master Gardeners are trained volunteers dedicated to providing horticultural information to the public.

For answers to horticultural questions contact the Toronto Master Gardeners' Info Line at the Toronto Botanical Garden (416) 397-1345 (Mon. to Fri. 10 a.m. to 1 p.m. and Sat., Sun. and Holidays noon to 3 p.m.) or our website, www.questions.torontomastergardeners.ca.

Links

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Toronto Botanical Garden

Toronto Botanical Garden is a volunteer-based, charitable organization whose purpose is to inspire passion, respect and understanding of gardening, horticulture, the natural landscape and a healthy environment.

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Earwigs- (European Earwig (*Forficula auricularia* L.), Ringlegged Earwig (*Euborellia annulipes* (Lucas))

Description:

Earwigs can be tiresome nuisances in the garden. These flattened, elongated insects are easily recognizable: about 2 cm long, reddish-brown, leathery with scary-looking, hook-like appendages that look like pincers (which are actually harmless) at the hind end. They have chewing mouthparts. Not all have wings.

Plants Affected:

Mostly, earwigs feed on decayed organic matter. They will also chew flower petals and leaves to tatters. Earwigs also like young carrots, beans, beets as well as celery, corn, potatoes and strawberries.

Symptoms of Earwig Infestation:

Earwigs leave irregularly shaped holes in leaves and flower petals as they chew. They will also tunnel right into centres of flowers, like bees, or into stems. The excrement they leave behind can damage the entire plant.

Life Cycle and Habits:

Earwigs overwinter as adults in nests in the soil. Eggs are laid in late winter and hatch in May. A second clutch of eggs hatches about the end of June, and there may be a third clutch of eggs. The female tends the eggs, and the young return to the family nest during the day. There may be one or two generations a year. They

usually make their presence felt in mid-summer. They feed at night - most extensively in late summer.

Earwigs scurry for cover if disturbed. They hide during the day in soil or under rocks, debris, rotting tree stumps or on the underside of leafy vegetables. Earwigs rarely fly and are unable to crawl long distances preferring to move by 'hitchhiking'.

Organic Management/Control Strategies:

The City of Toronto adopted a new municipal by-law (spring 2004) that restricts the use of pesticides. For details about the by-law visit the Pesticide by-law page on Toronto Public Health's Web site at www.city.toronto.on.ca/pesticides or www.toronto.ca/health. Questions may be e-mailed to pesticide@toronto.ca.

Natural Controls:

- Diatomaceous earth kills earwigs; it will puncture their shells. Sprinkle on the plants, but be aware that it is toxic to bees. You must also renew after it rains.
- The tachinid fly is a natural predator of the earwig.
- A microscopic nematode called *Steinernema carpocapsae* will parasitize earwig larvae provided you apply it to the soil early in spring. This is available from Natural Insect Control, RR 2, Stevensville, ON L0S 1S0. A million nematodes will cover 2,000 to 3,000 square feet. Visit their website at <http://www.natural-insect-control.com>.

Mechanical Controls:

- Lay 12-18 inch lengths of old garden hose in the garden bed. Each morning, dunk the lengths in a bucket of hot, soapy water. Alternatively, you bait them with bran or oatmeal placed in boxes with tiny entrance holes. Be quick when removing them.
- You can also scrunch up pieces of damp newspaper and leave them around the garden at night. Then dunk these in the soapy water. Some people use lengths of bamboo - or a flowerpot filled with dry moss and turned upside down.

Cautions/Considerations:

Clean up garden debris. Earwigs lurk under dead leaves, last year's dried-up plant stems etc. Remove these from the garden in spring and you'll have fewer problems with earwigs.

Earwigs are not entirely harmful. They eat fruit tree aphids and the larvae of many other insect pests.

References:

The Toronto Botanical Garden Weston Family Library is an excellent source for horticultural information.

Yepson, Roger B. Jr. ed. *The Encyclopedia Of Natural Insect and Disease Control*. Pennsylvania, U.S.A.: Rodale Press, 1984.

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Alford, David V. *A Colour Atlas of Pests of Ornamental Trees, Shrubs and Flowers*. Portland, Oregon: Timber Press, 2003.

The Gardener's Handbook - An Integrated Approach to Insect and Disease Control, Toronto, Canada: Publication 64. Ontario Ministry of Agriculture, Food and Rural Affairs, Queen's Printer for Ontario, 1998.

Factsheets are produced by the Toronto Master Gardeners in association with the Toronto Botanical Garden. They provide introductory information about a broad range of horticultural topics and are intended for personal use and study purposes. Should your gardening group or organization wish to use multiple copies we ask that you inform the Toronto Botanical Garden at info@torontobotanicalgarden.ca.

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