

REDUCING PESTICIDES

it's perfectly natural.



HOW TO COMBAT COMMON INSECT PESTS ORGANICALLY

This fact sheet focuses on pesticide-free controls for some of the more common insect pests that you may find in your garden. The fact sheet “Controlling Insects without Pesticides: An Overview” provided general approaches that will reduce the frequency with which you encounter troublesome insects in your garden.

You should also refer to the fact sheet “Organic Pest Control Products: Know What You’re Using” for a summary of the most common organic pest control products. It provides information on which product is most effective for which pests and provides cautions for using these products appropriately.

Some of the insect pests you may encounter in your garden include:

Name / Description	Identifying Its Damage	Prevention & Control
<i>Aphids</i> – small, pear-shaped sucking insects (1/16 – 3/8” long); various colours	- puckered, curled or withered leaves - sticky substance (honeydew) and/or sooty mould on plant	- spray aphids off plants with strong stream of water (repeat as needed) - spray with insecticidal soaps - dormant oil may control over-wintering eggs
<i>Earwigs</i> – long (3/4”), hard-shelled brown beetles with pincers at the back; nocturnal	- chewed leaves - only a problem if present in excess since primarily eat decayed plant matter and other insects such as aphids	- trap them in 6” – 10” lengths of garden hose placed on ground, in morning submerge hose in soapy water to drown earwigs
<i>Slugs</i> – soft, slime-covered molluscs 1/8” – 1” long; nocturnal <i>Snails</i> – similar, but with coiled shells on back	- ragged holes in leaves, leaving a telltale trail of slime	- spread diatomaceous earth around susceptible plants - place copper or zinc strips around edges of growing beds - “lure” under boards laid on the soil, lift during the day and destroy hiding slugs - use an inorganic mulch in areas where slugs are a serious problem
<i>Scale</i> – small, oval sucking insects (1/12” – 1/5” long); usually various shades of brown or grey	- wilting plants - scale usually occur in groups that look like “bumps” on the plant stems or undersides of leaves	- dormant horticultural oil applied in late winter will kill over-wintering adults - insecticidal soaps are effective against the immature, crawling stage if timed correctly in late spring/early summer



This fact sheet has been prepared by the Toronto Master Gardeners



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<i>Birch leaf miner</i> – adults: 1/8” long black sawfly; larvae: 1/4” whitish, slightly flattened, visible inside damaged leaves	- larvae “mine” the internal leaf tissues leaving blotches or tracks on leaves; serious infestations appear browned or scorched	- maintain tree’s health by shading root zone; fertilizing in spring with high phosphorus fertilizer; and by watering deeply to provide at least 1” water/week - horticultural oil applied as soon as adults emerge in spring and repeated weekly until mid-June may reduce egg-laying activity - clean up leaf litter in the fall and rake vigorously under tree to destroy pupae.
<i>Lily Leaf Beetle</i> – adults: 3/8” long, bright red with black legs, head & antennae; larvae: plump greenish yellow or brown, carry excrement stuck on backs; eggs: orange and laid in lines on undersides of leaves	- feed on buds, leaves and stems of plants, primarily lilies – initially create ragged holes, but can consume entire plant parts	- remove plant debris and mulch at end of growing season from area where lilies are grown to reduce over-wintering of adults - hand pick and destroy all stages of beetle when found - spray with insecticidal soap
<i>Thrips</i> – extremely tiny (1/50” – 1/25”), elongated, fast-flying, dark-coloured sucking insects	- leaves speckled or streaked with silver - distorted flowers	- for fruit trees, use dormant horticultural oil spray; for other plants, spray with insecticidal soap - prune off and destroy badly affected areas
<i>Japanese Beetle</i> – adults: metallic blue or green 1/2” long; larvae: plump, C-shaped grey grubs with brown heads (3/4” long)	- larva chew grass roots - adults eat leaves and flowers, can defoliate plants	- hand-pick adult beetles from susceptible plants (or knock them off onto a sheet on the ground under the plant) and destroy - don’t use beetle traps – they just attract more beetles!
<i>Cucumber Beetle</i> – striped or spotted elongated 1/4” long, greenish yellow, yellow or orange with black markings	- chew holes in leaves, can completely defoliate susceptible plants - can spread virus and bacteria to plants, especially vegetable crops	- plant disease-resistant varieties of susceptible vegetables - cover susceptible vegetable seedlings with floating row covers - spray adults with insecticidal soap every 2 – 3 days for 2 weeks

If you need more detail than can be provided in these fact sheets, a good reference book is [Insect, Disease & Weed I.D. Guide: find-it-fast organic solutions for your garden](#), edited by J. Jesiolowski Cebendo and D.L. Martin and published by Rodale Inc. in 2001.