

Top Ten Garden Insect Pests

The following list of pest descriptions and control measures provides a good starting point for tackling pest control in gardens throughout NYC. Control solutions are listed in order of environmental friendliness. Botanical sprays, which can have detrimental effects on beneficial insects and other animals, should be used only as a last resort.

1. Aphids (many species).



Tiny, pear-shaped; long antennae.

Host/Range: Most fruits and vegetables, flowers, ornamentals, shade trees. Found throughout North America.

Damage: Aphids suck plant sap, causing foliage to distort and leaves to drop; honeydew excreted on leaves supports sooty mold growth; feeding spreads viral diseases.

Control: Wash plants with strong spray of water; encourage native predators and parasites such as aphid midges, lacewings, and lady beetles; when feasible, cover plants with floating row cover; apply hot-pepper or garlic repellent sprays; for severe problems, apply horticultural oil, insecticidal soap, or neem.

2. Whiteflies (*trialeurodes vaporariorum*)



Tiny white flies that live under a leaf and will cloud up if disturbed.

Host/Range: Many vegetable crops, weeds, and other plants. Found throughout North America.

Damage: Sap suckers that excrete sticky substances and cause leaves to yellow or die.

Control: Catch early – whiteflies are difficult to control once an outbreak occurs. If you notice that you tend to get whiteflies on the same crop every year, take a year off from

growing that crop. Preventatively apply floating row covers immediately after planting; set out transplants through slits in tar-paper squares; apply parasitic [nematodes](#) around roots; mound wood ashes or red pepper dust around stems.

Photo credit ipm.ucanr.edu



Photo credit almanac.com



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3. Caterpillars (many species)

Soft, segmented larvae with distinct, harder head capsule; six legs in front, fleshy false legs on rear segments.

Host/Range: Many fruits and vegetables, ornamentals, shade trees. Range varies with species.

Damage: Caterpillars chew on leaves or along margins; droppings soil the produce; some tunnel into fruits.

Control: Encourage native predators, parasites; hand pick; apply floating row covers; spray with Bt (*Bacillus thuringiensis*) or spinosad.



Photo credit terrain.net.nz



Photo credit allaboutsugs.com



Photo credit snail-world.com

4. Snails and Slugs (many species)

Host/Range: Many leafy greens and leafy plants.

Damage: Snails and slugs chew on leaves.

Control: Water in the morning instead of the evening; remove by hand; lay out a shallow dish or take-out container full of beer.



Photo credit almanac.com

5. Cucumber beetles and squash bugs

Host/Range: Plants in the cucurbit family: cucumbers, melons, winter squash, summer squash, pumpkins, etc. They overwinter under plant debris and rocks, and around buildings.

Damage: Squash bugs suck the sap out of leaves, causing yellow spots and a disruption of the flow of water and nutrients. Cucumber beetles do the same and also transmit disease.

Control: Pick off by hand into soapy water (or squish!); crush eggs; trap squash bugs by laying out cardboard or newspaper – they'll move under the boards overnight and can be collected in the morning; clean up cucurbit plant matter at the end of the season; lure with yellow sticky traps.



Photo credit extension.umn.edu



6. Flea beetles (several species)

Small, dark beetles that jump like fleas when disturbed.

Host/Range: Most vegetable crops. Found throughout North America.

Damage: Adults chew numerous small, round holes in leaves; most damaging to young plants; larvae feed on plant roots. Once the plant has 4-5 sets of leaves, it can usually tolerate some feeding damage.

Control: Apply floating row covers immediately after planting; repel the pests by spraying plants with garlic spray or kaolin clay.

7. Squash Vine Borer (*Melittia cucurbitae*)

Moth that looks like a red/orange wasp with long, dark, clear wings. The larvae are the borers and are whitish with brown heads, about an inch long.

Host/Range: Mostly summer squash – zucchini, etc., and winter squash or pumpkins.

Damage: Adult squash vine borers (resembling wasps) lay eggs at the base of squash plants. When the larvae hatch, they bore into the center of the stem, cutting off water and nutrients.

Control: Look out for damage around the base of squash stems starting in late June. The damage is noticeable when you can see yellow mush surrounding a small hole. Use pointed scissors or pruners to dig into the stem through this hole and pull out the larvae. There is often only one per plant when detected early.



Adult squash vine borer. Photo credit extension.umn.edu.



Larvae squash vine borer. Photo credit extension.umn.edu.



8. Japanese beetles (*Popillia japonica*)

Adults: metallic blue-green, 1/2-inch beetles with bronze wing covers. Larvae: fat, white grubs with brown heads.

Host/Range: Many vegetables and flowers, small fruit. Found in all states east of the Mississippi River.

Damage: Adults skeletonize leaves, chew flowers, may completely defoliate plants; larvae feed on lawn and garden plant roots.

Control: Shake beetles from plants in early morning; apply floating row covers; set out baited traps upwind of your garden on two sides and at least 30 feet away; apply milky disease spores or *Herterorhabditis* nematodes to soil; spray beetles with insecticidal soap.

9. Scales (more than 200 species)

Adults: females look like hard or soft bumps on stems, leaves, fruit; males are minute flying insects. Larvae: tiny, soft, crawling larvae with threadlike mouthparts.

Host/Range: Many fruits, indoor plants, ornamental shrubs, and trees. Found throughout North America.

Damage: All stages suck plant sap, weakening plants. Plants become yellow, drop leaves, and may die. Honeydew is excreted onto foliage and fruit.

Control: Prune out infested plant parts; encourage native predators; scrub scales gently from twigs with soft brush and soapy water, rinse well; apply dormant or summer oil sprays; spray with neem oil.

10. Cutworms (several species)

Fat, 1-inch-long, gray or black segmented larvae; active at night.

Host/Range: Most early vegetable and flower seedlings, transplants. Found throughout North America.

Damage: Cutworms chew through stems at ground level; they may completely devour small plants; most damaging in May and June.

Control: Use cutworm collars on transplants; delay planting; hand pick cutworms curled below soil surface; scatter bran baits mixed with Btk (*B.t. var. kurstaki*) and molasses before planting.



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