

THE TEN MOST IMPORTANT INSECTS IN THE GARDEN

It is a known fact that plant-feeding insect populations are regulated by a number of predatory and parasitic critters that prey upon them. A gardener can learn to recognize and identify these beneficial insects.

PREDATORS are insects and spiders that capture and devour weaker, more helpless and often less intelligent prey. Almost every gardener has seen lady bird beetles [lady beetles] devouring aphids. A single adult lady beetle can eat as many as 50 aphids per day. These predators are often key regulating factors in the garden ecosystem.

PARASITES make their homes in the bodies of other insects (the hosts.) A familiar example is the Braconid wasp, that forms numerous small white cocoons on the body of the tomato hornworm.

COMMON NAME: Assassin Bug
DESCRIPTION: Black or brown, ½” long, somewhat flattened, large front legs armed with spines for grabbing prey.
LIFE CYCLE: Different life cycles, mostly one generation a year. Over-winter as adults, nymphs or eggs.
HOST(S): Voracious predators that feed on flies, mosquitoes, beetles, large caterpillars and other insects.
HABITAT: Varies with species. Avoid pesticide use in the garden.

COMMON NAME: Braconid wasp
DESCRIPTION: Adults 1/10" long, black or brown with characteristic narrow waist. They do not sting.
LIFE CYCLE: Eggs are laid in the bodies of hosts. White wormlike larva develop within the host. Several generations a year. Hibernate as larvae or pupae in their hosts.
HOST(S): Aphids, tomato hornworm, codling moth and others.
HABITAT: Females need nectar for sustenance while laying eggs, grow nectar plants with small flowers - dill, parsley, yarrow.

COMMON NAME: Green Lacewing
DESCRIPTION: Adults ½” to ¾” long with slender body and delicate long green wings
LIFE CYCLE: Eggs hatch in 6-14 days. In 203 weeks, they spin whitish pea-sized cocoons over a leaf. Larvae are ½” long, yellowish grey with brown marks and tufts of long hair. Over-winter as cocoons.
HOST(S): Common native predators in gardens. Larvae feed on aphids, thrips, mealybugs, scales, moth eggs, small caterpillars and other soft-bodied insects.
HABITAT: To attract plant pollen and nectar flowers, planting some between garden plants. Provide water source.

COMMON NAME: Ground Beetle
DESCRIPTION: Blackish-purple, 1" long with hard shells and long legs.
LIFE CYCLE: Eggs: whitish laid in soil. Larvae: yellowish-grey to white; flat with sharp jaws. Adults called caterpillar hunters over-winter in soil. Many species.
HOST(S): Common predators of slugs, snails, cutworms, cabbage maggots, codling moth pupae and other pests that spend part of life cycle in soil. Some prey on plant and trees.
HABITAT: Plant permanent beds and perennials among garden plants for stable habitats. Provide permanent pathways to provide refuges.

COMMON NAME: Lady bird beetle [or Lady bug, or Lady beetle]
DESCRIPTION: Adult: Shiny, round beetle with spots, 1/4" long.
LIFE CYCLE: Eggs: orange spindle-shaped. Larvae: 1/4" to 1/2" long, covered with spines, grey or black with blue and orange marking, resemble tiny alligators. Fully grown in 20 days.
HOST(S): Larvae and adults eat aphids, thrips, mealybugs, various small larvae, beetle grubs, scales, spider mites, whiteflies, other soft-bodied pests, and insect eggs.
HABITAT: Provide food for adults with pollen and nectar flowers - angelica, dill, wild carrot, yarrow. Supply moisture & undisturbed site.

COMMON NAME: Rove beetle
DESCRIPTION: Slender bodies, 3/4" to 1 1/4" long. Short wing covers. Resemble earwigs without pinchers, often hold tip of abdomen bent upward.
LIFE CYCLE: Eggs: Laid in soil or decaying plant or animal matter. Larva: Similar to adult.
HOST(S): Predators of aphids, springtails, mites, nematodes, slugs, snails, maggots
HABITAT: Attracted to compost, mulch. Provide daytime shelter.

COMMON NAME: Soldier beetle
DESCRIPTION: Adults are 1/2" long, black with white head. Resemble fireflies.
LIFE CYCLE: Eggs: Yellowish, laid in masses in or on soil. Larva: Pinkish with dark lines on first few segments. One or two generations a year. Mature larvae over-winter in soil.
HOST(S): Larvae and adults are native predators of aphids, caterpillars, beetle larvae (esp. cucumber beetle) and others.
HABITAT: Lured to catnip, hydrangea, goldenrod. Feed on pollen and nectar of milkweed and wild parsley. Provide undisturbed shelter.

COMMON NAME: Syrphid fly [Hover fly]
DESCRIPTION: Adult is 1/2" long with short antennae, one pair of wings.
LIFE CYCLE: Larvae are legless, tan and green slug-like maggots.
HOST(S): Hardy, native predators of most aphid species.
HABITAT: Plant pollen and nectar flowers, allow some to grow in waste areas or between crop plants.

COMMON NAME: Tachinid Fly
DESCRIPTION: Adult looks like housefly but larger. Nearly 1/2" long. Gray or brown sometimes with markings, bristly.
LIFE CYCLE: Eggs: white, deposited on foliage or on body of host. Larvae: a yellow maggot. Usually many generations a year. Larvae hibernate in the body of the host.
HOST(S): Parasitize adult and larvae of beetles, cutworms, grasshoppers, caterpillars (including Gypsy moth and browntail), armyworm, sawflies, corn earworm, squash bug.
HABITAT: Feeds on nectar and plant exudate.

COMMON NAME: Trichogramma wasps
DESCRIPTION: Adult is tiny.
LIFE CYCLE: Eggs: Deposited on insect eggs. Lays its eggs in eggs of two hundred different insect pests. [Wasp eggs are mailed to consumers in host eggs.]
HOST(S): Parasitize eggs of aphid, armyworm, cankerworm, cabbage looper, fall webworm, leaf roller, Gypsy moth, mealybugs, scale, whiteflies, and various beetle larvae. Parasitized eggs turn black.
HABITAT: Adult: Feeds on the nectar of small flowers.
