

Identifying common pests



Aphids clustered on the underside of a kale leaf.

Aphids

Aphids are tiny, slow-moving, soft-bodied insects that may be green, yellow, or black, sometimes with wings and sometimes without. They weaken plants by sucking juices from tender growth and spreading disease. Damage includes curled leaves, yellowish spots, and shiny leaves from “honeydew,” a sticky substance the aphids produce.

Why is this pest in my garden? Almost every vegetable has at least one species of aphid that likes to feed on it. Most plants can live with a little aphid damage. Plants that are sickly, stressed, underwatered, under-fertilized, or over-fertilized have trouble protecting themselves from aphids.

Control methods: Keep plants healthy by giving them enough nutrients, water, and sunlight. Use organic fertilizers, which release nitrogen slowly into the soil. Introduce natural predators like ladybugs and green lacewings. Avoid broad-

spectrum pesticides, which kill a wide range of insects, including natural predators. Plant “trap crops” like nasturtium to lure aphids away from your vegetables. Use a strong stream of water from a hose to blast aphids off plants or crush the aphids by hand. Be sure to check the undersides of leaves so you get all the aphids on the plant. Insecticidal soap is a good control for aphids, but you have to spray it directly on the aphids to kill them.

Cabbage maggots

Cabbage maggots feed on the stems and roots of cabbage family crops, such as broccoli, cabbage, Brussels sprouts, radishes, and turnips. They stunt the plants, cause them to wilt during the day, and sometimes even kill them. Root crops with cabbage maggot damage may be too full of holes to eat by the time you harvest them.

Why is this pest in my garden?

Cabbage maggots can overwinter in old plant material and emerge as adult flies the following spring. Wild mustard is also a home for this pest.

Control methods: Get rid of overwintering sites by cleaning up and destroying plant debris in fall. Also, get rid of any wild mustard around your garden. Cover plants with floating row covers to keep the adult flies from laying eggs on or near the plants. Those eggs will develop into cabbage maggots. A paper disc on the soil around the stems of your plant might help keep maggots from moving off your plants and into the roots.

Typical cabbage maggot damage on a root crop.



Cabbage worms

These small green caterpillars are the young form, or larvae, of the imported cabbage butterfly. They attack cabbage family varieties, such as kale, broccoli, and collard greens, by eating large, jagged holes in the leaves. The size of the caterpillars depends on their age. They are usually easy to see on stems or the undersides of leaves.

Why is this pest in my garden?

Cabbage worms overwinter on cabbage family plants and appear in mid-spring. Leaving cabbage family plants in the garden during winter encourages cabbage worms.

Control methods: Older plants can handle some damage from cabbage worms. Cover young cabbage family plants with floating row cover to prevent the adult butterflies from laying eggs on the plants. Those eggs will develop into cabbage worms. Remove worms by hand picking. Remove cabbage family plants in fall.

Cabbage worms eat large, jagged holes in plant leaves.



Courtesy of Frank Meuschke/NYCGARDEN



Courtesy of Billy Cox

Cucumber beetles look like green ladybugs with black spots.

Cucumber beetles

These small but easy-to-see beetles look like green ladybugs with black spots. They chew holes in cucumber, zucchini, squash, and melon leaves. As they feed on the plants, they spread plant diseases.

Why is this pest in my garden?

Cucumber beetles spend the winter in protected sites, such as under old plant material, in wooded areas, and in cracks of buildings and fence posts. They come out when temperatures reach 50°F in spring. In summer, cucumber beetles like the moist soil under cucumber, melon, and squash fruits.

Control methods: Use floating row covers to protect young squash, melon, and cucumber seedlings. Remove the covers when the plants start to bloom so that bees can pollinate them. Take away hiding spots by growing plants vertically. In late summer, water only the roots of plants to limit cucumber beetle damage. After harvest, remove old plant material, especially roots and fruits. Hand pick and squish cucumber beetles when you see them.

Flea beetles

These tiny, blue-black beetles eat holes in the leaves of many vegetables. Leaves with flea beetle damage look like they have been hit with a spray of tiny bullets. The beetles are about the size of a pinhead and jump like fleas when you get near them.

Why is this pest in my garden? Flea beetles feed on many crops, including beans, beets, cabbage family members, corn, mustard and other greens, eggplant, peppers, potatoes, and tomatoes. They like small, tender leaves and do more damage to young seedlings than older plants, which have “outgrown” them.

Control methods: Older plants can handle a lot of flea beetle damage without suffering, so control may not be necessary. You could plant large, healthy transplants that will quickly outgrow flea beetles. Or you could use floating row cover to protect seedlings and small transplants.



Leaves with flea beetle damage look like they have been hit with a spray of tiny bullets.



Leafminers

Leafminers are tiny white or yellowish maggots that live inside leaves. You will notice leafminer damage before you notice the maggots. Leafminers feed on the plant tissue between the upper and lower surfaces of the leaves. They make squiggly, hollow tunnels as they move through the leaves. If you notice this damage, you can tear one of the mined leaves in half to see the tiny maggot inside. The maggots grow into adult leafminer flies.

Why is this pest in my garden?

Leafminers feed on beets, chard, spinach, and other members of the beet family, including common weeds like lamb’s quarters and pigweed. They overwinter in the soil near crops that they fed on the year before. Then they come out in April or May to feed on leaves.

Control methods: Place floating row covers over your beet, chard, and spinach plants as soon as you seed them. This will keep leafminer flies from laying eggs on the plants. Crop rotation helps to keep overwintered leafminers from reaching next year’s crop. Rotate your beets, chard, and spinach to a new spot in your garden each season. Keep your garden free of weeds, especially lamb’s quarters and pigweed. If you find damaged leaves, cut them off your plants and put them in your green waste or garbage bin, not your compost.

Leafminers create hollow tunnels in spinach, chard, and beet leaves.

Courtesy of Lindsey Shapiro, Root Mass Farm



Slugs

Slugs are like snails without a shell. They are soft-bodied and slimy, and can be less than an inch to several inches long. Slug damage on a plant is easy to see. The plant has slime trails and irregular holes with smooth edges.

Why is this pest in my garden? Slugs prefer mild winters, wet springs, moist summers, and watered soil. The amount of slug damage depends mainly on rainfall and nighttime temperatures. Slugs need soil moisture, and they feed only when temperatures are over 50°F. They hide and lay eggs in places like grass, mulch, soil cracks, rocks, boards, debris, and worm tunnels. Slugs lay eggs in fall after rains start, usually in late September and early October. It is best to control slugs before they lay eggs.

Control methods

Hand picking. Slugs come out at night, so hand pick them off plants about 2 hours after sunset. Slice them in half, sprinkle them with salt, or scrape them into soapy water. In the daytime, turn over boards and other hiding places, and get rid of the slugs you find.

Trap boards. Slugs look for shelter during daylight. Place small, flat boards under plants and between garden rows. Get rid

of the slugs you find under the boards each morning.

Beer traps. The smell of yeast attracts slugs. To make a beer trap, cut a 2-inch hole about two-thirds up the side of an empty margarine or yogurt container. Bury the container so the hole is just above ground. Add 2 to 3 inches of beer, and cover with a lid. Instead of beer, you could mix together 1 tablespoon yeast, 1 tablespoon flour, 1 tablespoon sugar, and 1 cup water. Remove dead slugs every day. Replace with new beer or yeast mixture every week.

Trap crops. Slugs love marigolds. Plant marigolds along your vegetable garden border, and hand pick slugs at night.

Baits. Iron phosphate granules (Sluggo, WorryFree, and Escar-Go) kill slugs by freezing up their digestive systems so that they can no longer eat. Slugs cause the most damage to vegetable gardens when plants are young. Use the bait just before or when you plant or seed. If the soil is dry, sprinkle it with water just before putting down the bait. That will encourage slugs to come out of their hiding places. Put out bait again in early fall, before slugs start laying their eggs. Bait once more a little later in fall to kill slugs that just hatched. Read the product label before using.

Slugs are attracted to the smell of yeast and will drown in a "beer trap."



Courtesy of Anneliese Emmans Dean, theBigBuzz.biz