

Insects in the Vegetable Garden

Good vs. Bad?

There are usually more good insects than bad in the garden. In fact, you might not even notice all the good insects in your garden until you take the time to closely inspect and monitor and learn more.



Lady beetle larvae are considered a beneficial insect.

Beneficials

Good insects are often referred to as “beneficial” since they might be helpful in very different and important ways such as pollinating plants or helping break down organic matter in the compost and some even eat the harmful pests.

Pests

Insects and mites are classified as pests based on their ability to damage plants and reduce the harvest.

Some pests can cause a lot of damage to the garden, but others are more of a nuisance than actually causing damage or destruction.

Identify

Although it is not always easy to identify something if you’ve never noticed it before, there are resources to help identify and determine if the insect is a beneficial or pest. One of those resources might be your local county Extension office. If you’ve identified it as a good insect, great! If it’s a pest, there will be different management options for control depending on the identification and the number of insects.

Monitor

All gardeners are encouraged to monitor, scout, observe what’s going on in their garden! This is part of the fun of gardening and life-long learning. As you spend time observing what’s happening, if there are problems, you will catch them early.

Key Pests in the Vegetable Garden

Pests that feed directly on the harvested part of the plant (roots, stem, leaves, flower, or fruit) are often the most destructive and will need controlled when in large numbers.

One example is the tomato hornworm. It eats so much that it will destroy the tomato plant. Other insects might feed on leaves or parts of the plant that won’t be eaten. Many gardens can handle a low number of these pests. In fact, they might offer other benefits to the garden if they are food for beneficial insects. One way to learn more about key pests in the vegetable garden is to learn about what pests may be attracted to the plants that you are growing.

Key Pests in the Vegetable Garden (continued)

For example, if you don't grow tomatoes, you will probably not be bothered by a tomato hornworm. Some pests are very specific to certain plants, and some insects like aphids, cutworms, flea beetles, and slugs will harm a variety of vegetable plants.

Integrated Pest Management (IPM) is a pest control philosophy, rather than a pest control. It recommends using all options available to control pests and only use chemical pesticides as a last resort. Some of the steps to decrease the risk of harmful pests include keeping the garden and plants healthy and strong.

Examples of Healthy Garden Practices to Help Prevent Insect Damage

Continue to learn about beneficials and pests. Many insects go through different life stages and they might look very different at each stage. Picture the difference between a caterpillar and a butterfly. Another example, the beneficial lady beetle (lady bug) looks drastically different in the larvae stage. At that stage, it looks like a tiny gray and orange alligator! It eats many pests at this stage so it's of value to make them welcome in the garden. Learn to identify insects, then celebrate the beneficials and discourage the pests.

Plant at the recommended times for your area. This will help encourage strong, healthy, plants.

Inspect transplants (seedlings) before you purchase them to make sure they are healthy and not already infested with insects.

If you have diseased plants, remove them from the garden and dispose of immediately to reduce the source of the problem.

Keep up with recommended gardening practices – plants that grow strong and healthy are better able to withstand a minor amount of insect damage compared to poorly growing plants.

Keep out the weeds – in addition to competing with the plants you want, they can also act as host plants and then the insects can easily move from the weeds to the vegetable plants.

Row covers are one tool that some gardeners use to help control pests at certain points in the growing season. Row covers are often a lightweight outdoor fabric used to cover rows. They help to keep out insects but allow the sun and water to reach the plants. For insects that require pollinators, row covers must be removed before those beneficial insects arrive to do their job.

Mechanical removal – large insect pests (like the tomato hornworm) can be removed by hand and disposed. Small, soft-bodied insects like aphids can be washed from plants with a direct stream of water.

As mentioned before, keep observing what's going on in your garden throughout the growing season. If there is minor damage but nothing substantial, most plants will be OK.

If you decide that you must use a pesticide (after trying other steps to manage it), choose the least toxic pesticide and follow all of the instructions carefully. The label is the law.

References:

Vegetable Insects, Managing Insects in the Home Vegetable Garden by Rick E. Foster and John Overmeyer, Purdue University.
<https://extension.entm.purdue.edu/publications/pubs/veg.html>

Organic Pest Control in the Vegetable Garden by Steve Pettis, NC Cooperative Extension,
<https://go.ncsu.edu/readext?701341>