

Get to Know Your Insect Friends and Foes

by Scott Aker



AS GARDENERS, we are inclined to panic at the first sight of an insect on a prized plant, but before taking corrective action, it's important to make sure that the bugs in question truly are a threat. If you take a moment to quietly observe the insects in your garden, you will be treated to a colorful and ever-changing drama—it's a bug-eat-bug world! Plus, once you familiarize yourself with the various six-legged visitors you're likely to encounter, you'll have a better sense of those that are benign and those that are causing damage.

DOES IT ACT LIKE A PEST?

When you encounter an insect you don't

recognize, there are usually several clues that will help you determine if it is a pest or not. Most that you see in small numbers are either beneficial or have little impact on the plants we grow. Pest insects generally occur in large numbers and may exhibit defensive behaviors, such as dropping off a plant when disturbed. To conserve energy, they generally move more slowly than the insects that prey on them. In contrast, insects that feed on other insects are movers—they need to be to outpace their prey. And because they eat the energy-rich bodies of other insects, they can afford to expend more energy running around on a plant at a fast pace.

If your plants' leaves have holes in them, remember that many creatures can cause such damage, so don't assume that the random insect you have spotted on the tattered remnants of your plant is the culprit. First try to observe the insect in the act of feeding on your plant. This is especially important considering that many beneficial insects resemble pests while in their larval stage. For example, the larvae of syrphid flies look like small maggots that could easily be mistaken for a pest, but they feed on aphids and mites, not plants.

START SNAPPING AND STUDYING

In general, it's good practice to positively identify any insects that visit your garden.

The only way to positively identify the insect culprits causing holes on leaves is to catch them in the act of feeding—like these Colorado potato beetles.

Try to get a clear picture of them on your phone or other digital device. Compare the image with insects shown in books and online resources to identify it, or at least narrow down what it could be.

While there are several great books that can help you identify insects, there is no complete treatise on all garden insects for the entire country. Some species may only be found in your region, so seek out books focused on insects in your area. Your local Cooperative Extension Service is another resource to try, both to recommend regionally-focused identification books and to send your photos for a positive identification.

The internet also has plenty of options for insect identification. Good sites feature large images you can use to home in on small details, and include different life stages of insects. **Insect Identification** (www.insectidentification.org) of-

fers range maps and life history for the insects covered, which is just a handful of those most commonly encountered.

Insect Images (www.insectimages.org) has photographs of both insects and the damage they cause. Images of the damage done to the plants can be very important if the pest you are dealing with is small, like thrips or lace bugs, or if the damage is present but you haven't been able to find the insect to go with it.

Insect information can even be found on social media. For example, on Facebook I follow a page called **Bugs, Blooms, and Blights**, run by University of Maryland Cooperative Extension. Its posts highlight both pests and diseases in real time, as well as many non-pest species for those with a general interest in insects and diseases.

FOCUS ON THE PLANT

Because most insect pests have a limited

host range—indeed, some are confined to a single genus of plants—noting the plant your mystery bug is on can provide valuable clues for identification. Use the index in the back of your favorite book about garden pests to find the ones associated with your plant. Look each of them up, eliminating them one by one until you find the likely culprit.

If you have books devoted to roses, camellias, boxwood, or any other specific type of plant, you will find they usually have a section covering major pests and diseases. If you are searching for identification on the internet, do a search combining the plant name and the term “pest” to generate a list of possibilities. It's best to use scientific binomial names because that will more precisely pinpoint the plant than will a common name.

MAKE YOURSELF AWARE OF INVADERS

One of the downsides of global commerce has been the unintended introduction of pest insects from other countries that don't have predators here to keep them in check. Even when we manage to eradicate them, the threat of reintroduction remains.

Gardeners should be aware of insects that the U.S. Department of Agriculture's Animal and Plant Health Inspection Service deems a threat. Several of these were discovered by inquisitive citizens who noticed a new insect or damage to trees, shrubs, or other plants that they hadn't seen before. Go to www.aphis.usda.gov and click on Plant Health to find out about the latest invading threats and what to do if you find one of them. Some state agriculture departments also maintain websites that highlight invasive insects and other regional plant threats.

If you have tried everything and can't seem to identify an insect that is clearly damaging plants in your garden, don't hesitate to contact your local Cooperative Extension office or your state Department of Agriculture. You're likely to get the answers you need from these resources, and your prompt action may help prevent the spread of a newly arrived menace.

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Gardening Q&A with Scott Aker

FERN HAS LEAFLESS STEMS AND DROPPING LEAVES

My Boston fern (*Nephrolepis exaltata*) has long leafless stems that are growing out of it. Can I cut these off? Many of the fronds are also losing a lot of their foliage; how can I stop this?



The long, leafless stems you have noticed are actually stolons, and new plants can develop where the tips of stolons touch moist soil. There is no harm in cutting them off.

The loss of leaves is caused by the low humidity and low light that is typical indoors. You can cut these fronds off as the foliage yellows. Your fern may suffer while you have it indoors, but it will rebound when humidity and light levels increase in spring, especially if you are able to find it a shady spot outdoors.

CUTTING BACK PERENNIAL BORDER IN WINTER

I never had time to cut back plants in my perennial border last fall. I live in a part of the country where we seldom have snow throughout most of the winter. Should I do the job now before it does snow, or wait until spring?

Take advantage of the clear weather and do it now. You will be less likely to injure tender buds that may start to grow in early spring. You can also grab the chance to get a jump on weed control, because winter annuals and the leaves of perennial weeds are easy to spot now. —S.A.

Send your gardening questions to Scott Aker at saker@ahsgardening.org (please include your city and state with submissions).