



What's Wrong With My Plant?

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About now, whether because of time out for vacations, the abundance of produce needing to be picked or just walking more slowly through the yard and gardens because of the heat, folks are noticing some plants are not looking well and calling for information on what to do about it. Some problems, like identifying potato beetles or confirming powdery mildew, are easy to diagnose. More often than not, however, we gardeners need to turn into detectives to figure out what is wrong with our plants.

It is really helpful to understand how plants grow. There isn't enough room to provide very many details here, but I think anyone interested in plants would benefit from reading Linda Chalker-Scott's 'How Plants Work'. It covers all the essentials and explains some of the finer points of plant growth and development as they relate to climate, soils and more.

Key to figuring out what is wrong with your plant is correctly identifying it. Certain species or cultivars of a particular plant may be more or less susceptible to disease or insect problems. By reading up on your plant, you can discover its typical growth habits as well as the type of site it prefers. Common problems with the plant should also be listed or at least easy to find online or talking to experienced gardeners.

When a plant or plants aren't doing well, you want to think about 4 different categories of problems. Usually the most obvious is feeding by insects. Often there will be holes in the foliage or sections of leaves missing. Sometimes with careful examination, the culprit can be found still feeding on the leaves. This is often the case with caterpillars and some beetle species. Other beetle species as well as slugs feed at night and hide during the day. They are more difficult to spot. Also, there are root feeding insects, such as grubs.

Piercing and sucking insects, like aphids and thrips, often cause foliage to be distorted and buds fail to open. Spider mites also feed on plant sap but are difficult to see because of their small size. Their webbing plus bronzing of foliage is often evidence that they are causing a problem.

Plant diseases come in many shapes and forms and are caused by numerous organisms. Damage can range from mostly cosmetic, as with some leaf spots, to deadly vascular wilt diseases. Familiarize yourself with what diseases might affect your plant and the symptoms that they cause. Sometimes they are very distinctive, like powdery mildew. When purchasing new plants consider varieties that are resistant to common diseases of that particular species.



Iris with diseased leaves. Photo by dmp,2017

Site conditions can affect plant health. Make sure plants are placed where they receive adequate sunlight and water. This will obviously vary depending on the type of plant being grown. Succulents can tolerate hot, dry conditions but woodland azaleas prefer part shade and moderate amounts of moisture.

The soil is a key factor as well. Make sure the soil pH and fertility levels are adjusted for the type of plant being grown. Most flowers, vegetables and lawn grasses do best with a soil pH in the 6s. Blueberries, rhododendrons and many native plants prefer the soil pH to be around 5. Check if your plants prefer soil amended with organic matter or not. Consider if there is too much foot traffic around your plant which will cause soil compaction.

Environmental conditions, which are beyond our control, contribute to overall plant health. Plants are stressed both by too dry and too wet conditions. Excessive heat can adversely affect plant growth as well as fertilization. Mild winter weather preceded by a steep drop in temperatures can kill part or all of a plant as it did not have the right conditions to achieve full dormancy.

So, when looking to identify a plant problem, first think about the conditions the plant is growing in. Are they optimal or not the best fit for the plant? Consider environmental factors like temperature and precipitation. Is your plant wilting because of lack of water or could it be due to a vascular disease or boring insect? Look up the most common insect and disease problems your plant is likely to be afflicted with. Many land grant universities, including UConn, have research-

based fact sheets that address the care and potential problems of common landscape and garden plants. If you don't feel like playing detective, you can always send photos to the horticulturists at the UConn Home & Garden Education Center (ladybug@uconn.edu).

If you do have questions about your plants, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, visit our website at www.ladybug.uconn.edu or contact your local Cooperative Extension center.