

Keys to Plant Problems: Do Plants Talk? By Penny Villanueva UCCE Master Gardener of El Dorado County

Yikes! What's wrong with my plant? The day before it looked stunning, but today something is wrong. How could this happen overnight? What to do now? Some may try previous remedies, or others may consult a garden center person. But a gardener with experience follows a few basic steps before treating the plant. The basic steps are to know what the plant is, gather specifics about the problem, know the environmental conditions surrounding the plant, and treat the problem specifically.

While this amount of information seems excessive, every gardener after a few years will already know a lot about the garden. So what specifics are essential?

First, know what the plant is: don't guess. Every plant has certain problems specific to that plant variety.

Second, study the symptoms. Each symptom tells the cause. Plants are generally composed of three parts: shoots, roots, and leaves. Each part is interconnected, so what happens in one part of the plant affects the other parts of the plant. Consider how each plant structure functions.

Think of the shoots in several ways -- conductor, supporter, supplier, and messenger. Inside the shoot are two straw-like structures, moving liquid foods and water up and down between leaves and roots. Damage to the stem interferes with all these functions.

The root acts like the plant's 'brain' to ensure plant survival, growth, and production. Damage to the roots affects the entire plant. Root problems weaken the entire plant making it susceptible to diseases or insects.

Leaves are the 'digestive body' or 'stomach' of the plant producing food for the roots. On the underside of leaves, there are 'tiny holes' or stomata so the plant can breathe and manage water needs. Leaf symptoms can indicate nutrient needs, toxic chemical exposure, or excessive loss of water.

Third, practice problem solving for the plant. Know the garden well including the climate conditions and light exposure on the plant. Remember, symptoms are clues to the plant's problem but the plant is also affected by the surrounding environment. Understand the relationship between the plant's location and soil type. Become a 'plant doctor,' and take a complete history of your plant before starting to treat it.

Finally, treat the plant problem specifically and appropriately. Recall how each plant part is essential to the other? Examine the all symptoms of the plant: when did the symptom start, where did it start, what part of the plant is affected, and what is the pattern of the symptoms on the plant? Understand why this plant began having problems. Ask yourself if the plant problem is related to other gardening practices or applied treatments. Think through each of these questions before commencing with any treatment. Not every problem can be treated with a chemical, because other treatments may be more effective.

To successfully treat and salvage a plant, know what the plant is, know the symptoms, practice problem solving and then, treat correctly. This process saves money, time and effort. Once you have all the facts, check out potential problems and solutions at <u>http://www.ipm.ucdavis.edu</u>.

There is no public Master Gardener class this Saturday, June 6th. The following week, join UCCE Master Gardeners Catherine Moné and Alice Cantelow on Wednesday, June 10th for a free class on Native Plants for Home Gardens. Learn how a variety of native plants can enhance your landscape, attract bees and butterflies, and use less water than other landscape options. The three-hour class begins at 9:00 a.m. at the Cameron Park Community Center, 2502 Country Club Drive, in Cameron Park.

UCCE Master Gardeners of El Dorado County are at local farmers markets and are available to answer home gardening questions Tuesday through Friday, 9:00 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our Master Gardener website at http://ucanr.edu/edmg. Sign up to receive our online notices and e-newsletter. You can also find us on Facebook.

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