

What's Wrong with my Plant?

By Raymond Schoenwandt UCCE Master Gardener of El Dorado County

Many of us plant a garden in the hopes that it will provide us with an abundance of flowers, vegetables, and fruits for our enjoyment or consumption. Most of the time we are successful in this endeavor, but sometimes something goes wrong. Often people will try to fix the problem without any understanding of what is wrong with the plant. They may give it extra water, fertilizer, or spray it with an insecticide or fungicide. Sometimes this works, however often it does not do anything to fix the problem and may even make the problem worse. It is usually at this time that people call the Master Gardener office asking, "What is wrong with my plant?" followed by, "What can I do about the problem?" They may also bring a sample of the plant to the office, thinking that it will make the task easier. Usually by this time, it may be too late to fix the problem -- it is very difficult to determine what is wrong with a plant once it has died or is nearly dead.

So, it is important that gardeners know the basics of diagnosing problems with their plant. Diagnosing plant problems requires that you keep an open mind and not jump to conclusions. Causes of problems with plants could be due to insects or mites, diseases such as fungi, bacteria or virus, misuse of herbicides, insecticides, or fungicides, weather, fertilization, watering, and soil amendment practices. Without a good idea of what is wrong with your plant, you could waste a lot of time and money. Failure to correctly determine what is wrong with your plant could also endanger your other plants.

The process of diagnosing problems with a plant is simple; you are gathering information for the purposes of determining what is wrong with your plant. Remember that real problems are always caused by something. There are five basic steps to determining what is wrong with your plant. Writing your answers to the questions in following process will make it easier to determine the problem.

Step One, IDENTIFY THE PLANT. Know the scientific name for your plant. Do not use the common name. Common names can change by the region of the country. Once you know the scientific name of the plant consult either a written or internet site to determine what kind of problems are common issues with the plant.

Step Two, DEFINE THE PROBLEM. What is does your plant look like when it is healthy? When did you first notice that something was wrong with your plant? Do you see any insects, webs, insect eggs, foaming, sticky residue or other materials that should not be on the plant? Do not assume that because you see an insect or signs of powdery mildew that you have found the problem. Always consider that you may have more than one problem. Insects and diseases can be opportunistic, but the real problem may have an entirely different cause.

Step Three, COLLECT INFORMATION. Ask yourself when and how often do you water? What is the condition of the soil around the plant, too wet, too dry, compacted or overgrown with weeds or even other flowers? When was the last time you fertilized this plant or plants? When was the last time you pruned this plant? Is this a new plant or old? Has the soil around your plant been disturbed? Have you or your neighbor recently used an herbicide in or around your plants? Has any activity occurred near the plant? Do you see, or smell, animal feces around the plant(s)?

Step Four, LOOK FOR PATTERNS. Is more than one plant affected or are multiple plants affected with the same problem? Does the problem develop at the same time every year? Has there been a recent period of unusually cold, hot, dry or wet weather? What part of the plant is affected: leaves, flowers or fruits? Are the leaves discolored, damaged or no longer on the plant? Is the damage confined to pruned plants? Is the problem affecting old or new growth? Is the problem confined to plants in one area of your property or multiple areas? Is the plant(s) near a driveway, fence or pond? Are your neighbors plants affected with the same problem?

Step Five, FORMULATE A TENTATIVE DIAGNOSIS. Review your answers to the questions in the five step process. Compare what you know about the problems that can develop with this plant and your observations. A tentative diagnosis means that the problem can be narrowed to two or three possible answers. Keep in mind that solutions can only be determined once you have a most probable cause of what is making your plant sick. Do not be upset if you still cannot determine what is wrong with your plant, remember your Master Gardeners are here to help when things go wrong, so give us a call!

Join Master Gardeners this Saturday for a mini-series on three topics: Miniature Greenhouses, Bucket Cloning, and Compost Tea. Master Gardeners will demonstrate how to root cuttings in inexpensive miniature greenhouses any time of the year. Next, learn how to clone more difficult plants like the professionals by using hydroponics and aeroponics. Also, learn the benefits and dangers involved with compost tea. The free, three-hour class starts at 9:00 am in the Government Center Hearing Room, Building C, 2850 Fairlane Court, Placerville. Master Gardeners are available to answer home gardening questions at local farmers markets and in their office at 311 Fair Lane in Placerville from Tuesday through Friday, 9:00 a.m. to noon. Walk-ins are welcome, or call (530) 621-5512. For more information about our public education classes and activities, go to our Master Gardener website

at <u>http://ucanr.edu/sites/EDC_Master_Gardeners/</u>. Sign up to receive our online notices and e-newsletter at <u>http://ucanr.edu/mgenews/</u>. You can also find us on Facebook.