

# CHRIS' CORNER



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## Diagnosing Plant Diseases

As the saying goes: “April showers bring May flowers”. If this old adage holds true, get ready to see a beautiful display of flowers in May as April was wet and cool. This is also the time of year when people are heading out to nurseries to get their bedding plants for summer. In light of last month’s weather, it may be a good idea to scout the plants in your landscape for diseases.

Here are a few things to take into consideration when you are diagnosing plant diseases:

1. **Identify the host.** Plants have specific insect pests and diseases. Identify the plant correctly and you are closer to identifying the problem. Make a mistake here and you will go down the wrong path in search of a solution.
2. **Look for signs and symptoms of diseases.** Although signs and symptoms are used interchangeably by novices, an experienced plant detective knows that signs of a disease denote the pathogen (example: white, powdery fungal growth=powdery mildew; orange spore masses denotes the fungal disease Rust). Symptoms denote damage to the plant (ex: leaf spot, root rot, stem rot, vascular wilt, etc.). Signs and symptoms are very helpful clues when identifying plant problems.
3. **Look for living (biotic) or non-living (abiotic) causes of problems.** Biotic pathogens include fungi, bacteria, viruses, nematodes; abiotic causes of plant problems include moisture, temperature, pesticide injury, nutrient deficiencies, etc.
4. **It pays to compare.** I prefer to look at plants side-by-side at the nursery or garden center to compare symptomatic plants with those that are healthy. How do they differ? Is one smaller, have irregular shaped leaves or abnormal variegation? A healthy plant gives you a standard to compare to a plant showing symptoms of disease.
5. **Collect a specimen.** If you decide you need an expert opinion to aid in plant problem diagnosis, collect a specimen. For most herbaceous plants, pull the whole plant. For woody plants, collect the portion of the plant showing symptoms.

6. **Use available resources for research.** Your County Extension Office is an excellent place to begin your research when you are diagnosing plant diseases. I see many plant problems throughout the year and would be happy to help. The webpage [www.ipmimages.org](http://www.ipmimages.org) is an invaluable searchable online library of images of various plant problems. I also recommend following the UT Extension's Soil, Plant and Pest Facebook page. Our page is an up-to-date resource on the latest diseases that are found throughout the state. I check their posts weekly!

Be a plant detective! Use these tips to develop your diagnostic skills. Scout for symptoms and signs of disease when you are choosing a new plant at the nursery or surveying your landscape.

Until next time, happy scouting!



*Christopher Cooper*

