

Guidelines for Identification and Management of Plant Disease Problems: Part IV. Plant Health Questions to Ask the Client ¹

Monica Elliott, Ken Pernezny, Aaron Palmateer, and Nikol Havranek²

Introduction

Being a successful plant problem detective requires more than being observant—it requires asking the right questions. But remember that plants don't talk, so the answers must come from the person growing or managing the plant (i.e., the client). The following is a list of questions to help you get started. As you become more familiar with the plants in your area and their likely health problems, you will add to your client question list. We would also caution that it is extremely difficult to make a diagnosis when the plant is already dead. All you can do in that situation is ask questions.

List of questions to ask a client concerning a plant health problem

- What is the plant? Often, you will only be given a plant part. The first step should be to identify the plant if the client does not know what it is. Sometimes it will be important to know the variety or cultivar of the plant species. For example: people unfamiliar with bald cypress trees often think the tree is dying when it naturally drops its leaves during the winter months.
- Where is the plant growing? Is it in a container or a landscape? Is it part of a large grouping of the same plant, such as a hedge or vegetable garden? Was it recently transplanted? How long has it been in that particular location? How much sun does the plant receive each day? Besides knowing the identity of the plant, it helps to know exactly where it is growing.
- Is this plant or plant part typical of others in the landscape, yard or neighborhood? What do the rest of the plants look like? For example: Is the entire plant affected, or only the newest leaves? Is only 1 of 12 plants affected, or are they all affected? Do you see similar plants in the neighborhood with the same problem? The answers will provide "clues" as to whether the problem is an abiotic or biotic problem.

1. This document is PP 251, one of a series of the Plant Pathology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date February 2008. Revised April 2008. Reviewed April 2011. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

2. Monica Elliott, professor, Department of Plant Pathology; Fort Lauderdale REC--Ft. Lauderdale, FL; Ken Pernezny, professor, Department of Plant Pathology, Everglades Research and Education Center (REC)--Belle Glade, FL; Aaron Palmateer, assistant professor, Plant Diagnostic Clinic, Tropical REC--Homestead, FL; Nikol Havranek, biological scientist, Everglades REC--Belle Glade, FL; Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

- If only a plant part is provided, what does the rest of the plant look like? How severe are the symptoms? For example, a wilted branch may be caused by a root rot, but the client only brought in the wilted branch. Without more complete information and sample, it may not be possible to provide a diagnosis.
- When did the symptoms appear, and what was the progression of symptoms?

These (and the following) may be difficult questions for the client to answer unless he or she is observant, but good answers will provide clues.

- • What were the recent pesticide applications (for the last 3 months if the plant is perennial)? Were the symptoms present prior to the last pesticide application? Why was the pesticide applied? Pesticides would include "weed and feed" products and horticultural oils.
- Was the wrong fungicide used, or was the original diagnosis wrong? For example: The client applied a fungicide to the plant because they thought it was suffering from a disease, but they have obtained no response to the fungicide application. OR: The client applied a horticultural oil to control an insect, but applied it when the weather was too hot. The result is a chemical burn that looks like leaf spots.
- • What is the fertility regime? What fertilizer was applied, both ratio (N:P:K) and type (soluble or slow-release). How much was applied, and how often was it applied? How was it applied (banded, spikes, broadcast).
- When was the last application? Were the symptoms present prior to the last fertilizer application? Nutrient deficiencies are often blamed on plant pathogens, but nutrient deficiencies are more common than plant diseases.
- What was the weather like just prior to and since the symptoms developed? Weather patterns can influence disease development. Some diseases are more likely to be observed after a period of rainy weather, or after a cold spell.
- What is the irrigation or watering regime? How much water is applied? How often is the plant, landscape or lawn irrigated? What time of day is the irrigation on? What is the water source? What is the proximity of a sprinkler head to the plant? Or, run-off from the roof? Symptoms associated with water issues (too little and too much) can look similar to plant disease symptoms.

Additional Resources

- Guidelines to Identification and Management of Plant Disease Problems: Part I. Eliminating Insect Damage and Abiotic Disorders (<http://edis.ifas.ufl.edu/MG441>).
- Guidelines for Identification and Management of Plant Disease Problems: Part II. Diagnosing Plant Diseases Caused by Fungi, Bacteria and Viruses (<http://edis.ifas.ufl.edu/MG442>).
- Guidelines for Identification and Management of Plant Disease Problems: Part III. Managing Plant Diseases (<http://edis.ifas.ufl.edu/MG443>).