

DIAGNOSIS OF FOLIAR PROBLEMS

Greenhouse and nursery growers frequently experience leaf spot damage to plant material. Leaf spots can be the result of infection by fungi, bacteria, or viruses; as well as damage resulting from other causes such as chemical toxicity. It is essential that accurate diagnosis be made for most effective problem control. Chemicals for control of fungal leaf spots will probably not be effective for bacterial problems and vice versa. The following relationships * are quite useful in helping determine foliar leaf spot problems.

SYMPTOMS OF FUNGAL AND BACTERIAL DISEASES OF PLANTS WHICH GENERALLY OCCUR

CAUSE OF DISEASE

<u>CHARACTERISTIC</u>	<u>FUNGAL</u>	<u>BACTERIAL</u>
Water-soaking	Not as common	Common
Texture	Dryish, papery	Slimy
Odor	Usually none	Fishy, rotten
Pattern	Circular, may have concentric rings	Irregular or confined to between veins
Disintegration	Uncommon	Common
Color	Common - red, yellow, and purple	Uncommon

SOME CHARACTERISTICS OF FUNGAL LEAF SPOT DISEASES COMPARED TO DISORDERS CAUSED BY OTHER FACTORS

CAUSE OF LEAF SPOT

<u>CHARACTERISTIC</u>	<u>FUNGAL</u>	<u>ABIOTIC PROBLEM</u>
Distribution of affected plants	Mainly random, but can start near Pads or doors and spread	Uniform near fans, doors, heaters
Distribution of leaf spots on leaf	Usually on newer or older leaves, rarely on all	May be on newer or older leaves, frequently on all
Pattern of leaf spots on leaf	Generally irregularly scattered	May be confined to tips, margins or between veins, uniform pattern
Development of symptoms	Generally longer than for other causes	Phytotoxicity can be almost overnight, Nutritional or environmental longer
Fungal Structures	Common	Uncommon
Nature of leaf spot	Dry or wet, with or without a halo, various sizes	Usually dry without a halo, more or less uniform size

Mushroom Information on the Internet

Frequently individuals have questions on mushrooms. They are interested in how to identify mushrooms, growing and cooking recipes. Here is a list of locations on the Internet where information can be obtained.

The following Internet addresses were taken from a variety of publications, and include as many current listings as we could easily locate. Credits belong to: Arkansas Fungi, January/February 1996; The Mycophile, July/August 1996; Mycena News, April 1996 and Mycologist, Volum 10/Part 4, November/1996. We hope you find these sites both interesting and informative, **HAPPY SURFING!**

Mycological Resources on the Internet - <http://muse.bio.cornell.edu/~fungi/welcome.html> is a World Wide Web virtual library on mycology. This is one of the most informative sites, and includes an index to all resources.

MycoElectronica - <http://www.mv.com:80/ipusers/dhabolt/dad/mushroom.html> features information on mushroom stamps, poisoning and some descriptions.

Wild Mushroom - <http://www.ijs.si/gobe/> is a site from Slovenia and has photos and descriptions of common edible and poisonous mushrooms in Slovenia. There are a surprising number of species in California, check it out!

North West Fungus Group - <http://ourworld.compuserve.com/homepages/pfh2/nwfg.htm> is the first amateur fungus recording group in the UK to go online. They provide links to other sites including the British Mycological Society home page, and generally promote the mycological community as a whole.