

Cooperative Extension---The Pennsylvania State University

Plant Disease Facts

Department of Plant Pathology
University Park, PA 16802

REFERENCES FOR ARBORISTS, NURSERYMEN, and LANDSCAPE MAINTENANCE WORKERS

Gary W. Moorman, Professor of Plant Pathology

It is very helpful to know where information can be obtained to diagnose and learn more about plant diseases.

* = highly recommended

GENERAL PLANT PATHOLOGY REFERENCES

Trigiano, R. N., Windham, M. T., and Windham, A. S. Plant Pathology concepts and laboratory exercises. 2nd Ed. CRC Press, Boca Raton. 558 pp.

Agrios, G. N. 1997. Plant pathology. Academic Press, New York. 635 pp.

Barnett, H. L. and B. B. Hunter. 1998. Illustrated genera of imperfect fungi. APS Press. 3340 Pilot Knob Rd., St. Paul, MN 55121 (1-800-328-7560) (For use if you have a microscope.)

THE PENNSYLVANIA STATE UNIVERSITY PUBLICATIONS

Penn State Publication Distribution Office
112 Ag. Admin. Bldg.
University Park, PA 16802

*Scouting and controlling woody ornamental diseases in landscapes and nurseries. \$7.00

This scouting guide has color photos and general control recommendations. Specific fungicides are not listed. See videotape information below.

*Woody ornamental insect, mite, and disease management.

This guide covers the biology of the pests and diseases and lists specific chemical and non-chemical control recommendations. References are made to pages in Sinclair and Lyon. 2005. Diseases of trees and shrubs. Cornell University Press (listed below).

Disease and arthropod management in greenhouses.

This guide covers the biology of the pests and diseases and lists specific chemical and non-chemical control recommendations.

A 90 minute video, Diseases of Ornamentals, is available separately packaged with a copy of Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries and user guide for \$49.95. Contact:

Penn State Media Sales

fax-814-865-3172

118 Wagner Building

phone: 1-800-770-2111

University Park PA 16802

THE PENNSYLVANIA STATE UNIVERSITY COURSE

PPATH 300, Diseases of Horticultural Crops, is a completely online 3 credit course available through Penn State University during the Fall semester each year.

PENNSYLVANIA DEPARTMENT OF AGRICULTURE PUBLICATION

*Regulatory Horticulture. Commonwealth of Pennsylvania, Pennsylvania Department of Agriculture, 2301 N. Cameron St., Harrisburg, PA 17110

WOODY and HERBACEOUS PLANT DISEASE REFERENCES

How to detect, assess and correct hazard trees in recreational areas. 1993. Minnesota Dept. of Natural Resources-Forestry. St. Paul, MN 55155.

*Gleason, M. L., Daughtrey, M. L., Chase, A. R., Moorman, G. W., and Mueller, D. S. 2009. Diseases of herbaceous perennials. APS Press, St. Paul, MN. 281 pp (over 700 color photographs).

Forsberg, J. L. 1979. Diseases of ornamental plants. Special Publication No. 3. University of Illinois at Urbana-Champaign. 222 pp.

Jones, R. K. and Benson, D. M. eds. 2001. Diseases of Woody Ornamentals and Trees in Nurseries.. APS Press, St. Paul, MN. 482 pp. <http://www.shopapspress.org/>

Pirone, P. P. 1978. Diseases and pests of ornamental plants. John Wiley & Sons, NY. 566pp.

*Smith-Fiola, D. C. 1995. Pest resistant ornamental plants. Rutgers Cooperative Extension, 1623 Whitesville Rd., Toms River, NJ 08755-9720 . \$8.00 + \$1.50 per copy for postage and handling. Checks are payable to Ocean County Board of Agriculture.

*Matheny, N. P., and Clark, J. R. 1994. A photographic guide to the evaluation of hazard trees in urban areas. International Society of Arboriculture, Savoy, IL. 85 pp.

*Sinclair, W. A. and H. H. Lyon. 2005. Diseases of trees and shrubs. Cornell University Press, Ithaca, NY. 660 pp. (1-607-277-2211)

*Johnson, W. T. and H. H. Lyon. Insects that feed on trees and shrubs. Cornell University Press. Ithaca, NY. 464 pp. (1-607-277-2211)

APS Press, 3340 Pilot Knob Rd., St. Paul, MN 55121 (1-800-328-7560; <http://www.shopapspress.org/>)
Slide sets are available for each compendium ranging from 68(\$115) to 307 (\$430) slides, depending upon the topic. Compendia of diseases of:

Apple and pear	Nutrient Deficiencies & Toxicities in Crops
Blueberry and cranberry	*Ornamental Foliage Plants
Chrysanthemums	Raspberry and blackberry
*Conifers	*Rhododendron and azaleas
Disorders of Ornamental Palms	*Rose Diseases
*Elm diseases	Stone fruit
*Flowering Potted Plants	*Turfgrass diseases

WORLD WIDE WEB REFERENCES

[Penn State Plant Pathology ornamental and flower disease fact sheets](#)

Go to the Penn State home page: <http://www.psu.edu/>

and search the Penn State Web using key words such as 'dogwood diseases'

[Syracuse University course on diseases of trees](#)

<http://www.esf.edu/course/jworrall/default.htm/>

***Ohio State University**

<http://www.ag.ohio-state.edu/~plantdoc/>

***American Phytopathological Society**

<http://www.apsnet.org/>

PLANT DISEASE CLINICS

Pennsylvania

***Plant Disease Clinic**

Penn State University, Dept. of Plant Pathology

218 Buckhout Lab.

University Park, PA 16802-4507

Obtain a diagnosis form and envelop from your County Cooperative Extension office. Fill in the form and mail the sample on a day when it will reach University Park promptly without sitting in a post office over a weekend. Or, send the sample via overnight delivery service. General diagnoses are done at no charge. If forwarded to a commercial lab for virus or other specialized testing, the cost of that testing is passed on to the client.

*Pennsylvania Department of Agriculture, Bureau of Plant Industry, 2301 N. Cameron St., Harrisburg, PA 17120.

Contact your local nursery inspector for a diagnosis or to have a sample submitted to the lab.

New York

Plant Disease Diagnostic Lab

607-255-7850

321 Plant Science Building, Dept. PPATH

Cornell University

Ithaca, NY 14853-4203

All samples require a fee for processing.

New Jersey

Rutgers Plant Diagnostic Laboratory and Nematode Detection Service

Samples can be mailed to:

Plant Diagnostic Laboratory

Rutgers Cooperative Extension

P. O. Box 550

Milltown, NJ 08850-0550

Delivery services should go to:

Plant Diagnostic Laboratory

Rutgers Cooperative Extension

Bldg. 6020, Dudley Road

Cook College

New Brunswick, NJ 08903

All samples require a fee for processing.

Ohio

The C. Wayne Ellett Plant and Pest Diagnostic Clinic

2021 Coffey Rd., Room 110, Kottman Hall

The Ohio State University

Columbus, Ohio 43210

All samples require a fee for processing.

Maryland

Maryland Cooperative Extension Plant Diag. Lab

Department of Entomology

University of Maryland, College Park, MD 20742

All samples require a fee for processing.

The Maryland Department of Agriculture has both entomology and pathology labs that support the state nursery inspection program.

West Virginia

*Plant Disease Diagnostic Clinic

304-293-3911

401 Brooks Hall, Downtown Campus
West Virginia University
Morgantown, WV 26506

Samples are generally submitted through a county agent but can be sent directly to the clinic at no charge.

COMMERCIAL DIAGNOSTIC SERVICES and DIAGNOSTIC KITS

(contact each to determine what tests are available and the cost per test)

Agdia, Inc. 1-800-622-4342
30380 County Road 6 e-mail <testing@agdia.com>
Elkhart, IN 46514 World Wide Web site <http://www.agdia.com>
Samples are tested or the client can purchase kits to do virus and bacteria diagnoses.

Hydros, Inc. 508-540-2229
230 Jones Road e-mail <hydros@capecod.net>
Falmouth, MA World Wide Web site <http://www.hydros.cc/>
Can purchase kits to do virus and bacteria diagnoses.

DIAGNOSIS EQUIPMENT and SUPPLIES

Magnifying glasses, pH meters, conductivity meters, field microscopes:

Cole-Parmer Instrument Co 1-800-323-4340
625 East Bunker Court
Vernon Hills, IL 60061-1844

Magnifying glasses, pH meters, conductivity meters, field microscopes, clipboards, GPS instruments, pruning equipment, increment borers, mapping and data recording supplies, plant presses for drying plant specimens, Riker mounts for displaying flat specimens:

Forestry Supplies, Inc. 1-800-647-5368
P.O. Box 8397
Jackson, MS 39284-8397

Ben Meadows Co. 1-800-241-6401
3589 Broad St. World Wide Web <www.benmeadows.com>
Atlanta, GA 30341 Internet <mail@benmeadows.com>

PESTICIDE REFERENCE MANUAL

Farm Chemicals Handbook Internet <fchb_circ@meisterpubl.com>
Meister Publishing Co. 216-942-2000
37733 Euclid Avenue
Willoughby, OH 44094-5992

NOTICE: THE USER OF THIS INFORMATION ASSUMES ALL RISKS FOR PERSONAL INJURY OR PROPERTY DAMAGE. WARNING! PESTICIDES ARE POISONOUS. READ AND FOLLOW ALL DIRECTIONS AND SAFETY PRECAUTIONS ON LABELS. HANDLE CAREFULLY AND STORE IN ORIGINAL LABELED CONTAINERS OUT OF THE REACH OF CHILDREN, PETS, AND LIVESTOCK. DISPOSE OF EMPTY CONTAINERS RIGHT AWAY, IN A SAFE MANNER AND PLACE. DO NOT CONTAMINATE FORAGE, STREAMS OR PONDS.

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