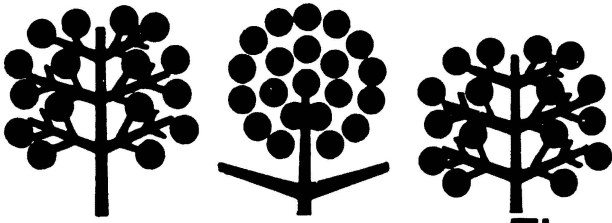


LD
5655
A761
M1197
no. 40
c. 2



V.P.I. & S.U. LIBRARY

MAY 9 1980

BLACKSBURG, VIRGINIA

Florist & Nurseryman Notebook

ORNAMENTAL AND FLOWER DISEASES

OVULINIA PETAL BLIGHT OF AZALEA

MR-40

R. C. Lambe

March 1980

Extension Specialist, Plant Pathology

Ovulinia petal blight caused by the fungus *Ovulinia azaleae* Weiss, is a serious disease of azaleas in gardens in Virginia. Although the Indian and Kurume type azaleas are severely affected, all other azaleas and some rhododendrons are susceptible. If the environmental conditions are favorable, the disease may spread so rapidly as to destroy flowers in 2-4 days.

Petal blight occurs primarily on out-of-door cultivars in the warmer regions of the southern U. S. Although Linderman reported petal blight out-of-doors in Connecticut (1), it is conceivable that survival of sclerotia in Northern states might be limited by unfavorable environmental conditions. The disease also affects azaleas in greenhouses (2).

SYMPTOMS: Spots on the petals are first apparent when about the size of a pinhead. They are pale or whitish on colored flowers, and rust-colored on white flowers. The spots are at first circular, but enlarge readily into irregular blotches with the affected tissue becoming soft and disorganized. Eventually, the entire corolla collapses (Fig. 1). Affected petals are slimy and fall apart if rubbed gently between the fingers. In this manner, the diseased flowers can be distinguished from those injured by weather, insects or by other causes. Diseased flowers dry and cling to the plants for some time, presenting an unslightly appearance whereas normal flowers of Indian azaleas fall from the plants while still displaying color and normal shape (Fig. 2).

DISEASE CYCLE: *Ovulinia* produces hard, black objects known as sclerotia in the blighted flowers (Fig. 3). Small tan, cup-shaped reproductive structures called apothecia develop from sclerotia on the soil surface in the spring (Fig. 4). Spores are propelled to flower buds initiating primary infections.

The life cycle of *Ovulinia* is described in Figure 5. Secondary spores are produced in large numbers on the infected petals. The secondary spores are responsible for widespread outbreaks of flower blight. Under greenhouse environment, an abundance of spores are produced on infected petals. Sclerotia

Figures numbered 2, 3, 4, and 5 were provided by R. G. Linderman and D. L. Coyier, Ornamental Plants Research Laboratory, USDA, SEA, Corvallis, Oregon.

Virginia Cooperative Extension Service programs, activities, and employment opportunities are available to all people regardless of race, color, religion, sex, age, national origin, handicap, or political affiliation. An equal opportunity/affirmative action employer.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, and September 30, 1977, in cooperation with the U. S. Department of Agriculture. W. R. Van Dresser, Dean, Extension Division, Cooperative Extension Service, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061; M. C. Harding, Sr., Administrator, 1890 Extension Program, Virginia State University, Petersburg, Virginia 23803.

produced in diseased petals drop to the ground and remain undetected. Unsold, container-grown azalea carrying sclerotia may be held over for forcing again the following year.

CONTROL: Picking and destroying affected flowers, and replacing the surface litter about infected plants with uncontaminated material, are means of reducing the sources of primary infection. Fungicides will protect the flower buds from infection. Application of Terraclor to the surface around the plants will prevent development of apothecia. See Pest Management Guide 10, Chemical Control of Diseases, Insects and Weeds in Nursery Crops.

LITERATURE CITED

1. Linderman, R. G. 1972. Occurrence of azalea petal blight in Connecticut. *Plant Dis. Repr.* 56:1101-1102.
2. Nelson, Paul E., C. E. Williamson and W. D. McClellan. 1956. *Ovulinia* flower spot of azalea found on Long Island. *Plant Dis. Repr.* 40:1115.

Trade and brand names are used only for the purpose of information and the Virginia Cooperative Extension Service does not guarantee nor warrant the standard of the product, nor does it imply approval of the product to the exclusion of others which may also be suitable.

KEYS TO PROPER USE OF PESTICIDES

1. Read the label on each pesticide container before each use. Follow instructions to the letter; heed all cautions and warnings, and note precautions about residues.
2. Keep pesticides in the containers in which you bought them. Put them where children or animals cannot get to them, preferably under lock and away from food, feed, seed, or other material that may become harmful if contaminated.
3. Dispose of empty containers in the manner specified on the label.

SEE YOUR DOCTOR IF SYMPTOMS OF ILLNESS OCCUR DURING OR AFTER USE OF PESTICIDES.



Figure 1. *Ovulinia* infection causing collapse of the flower tissue.



Figure 2. Blighted petal with sclerotia clinging to the plant.



Figure 3. Sclerotia produced in blighted petals.

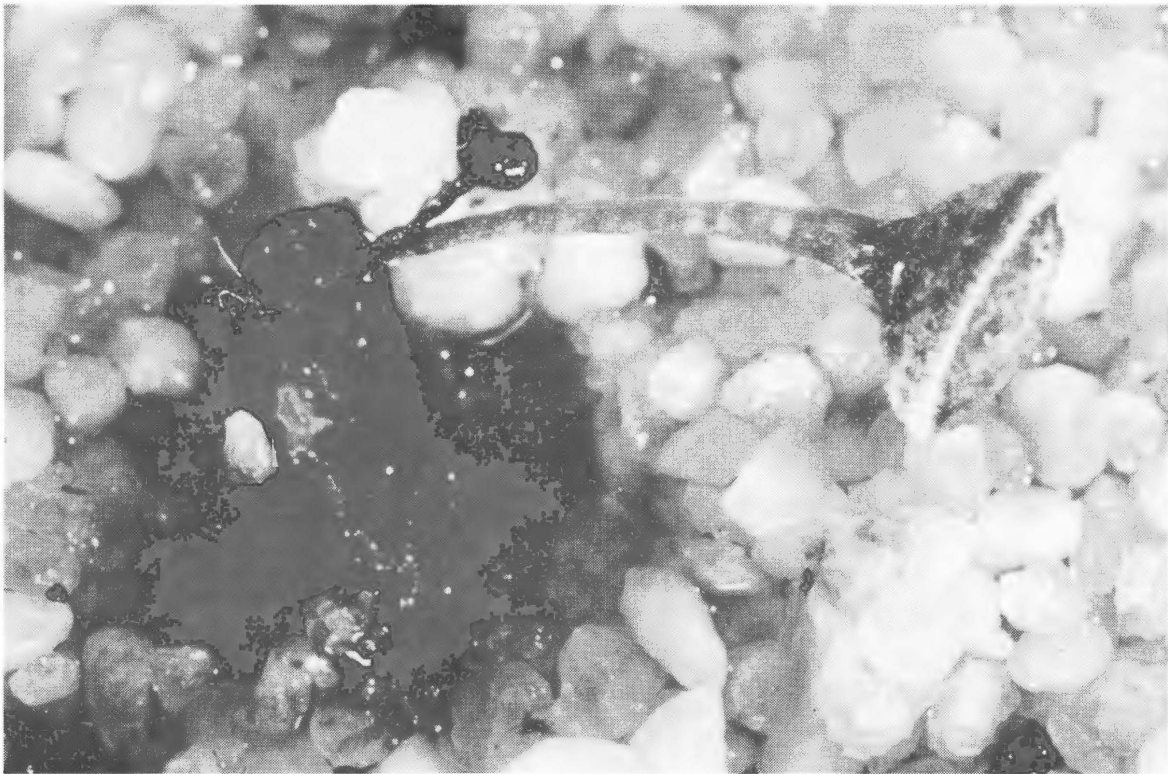


Figure 4. Apothecium growing from a sclerotium.

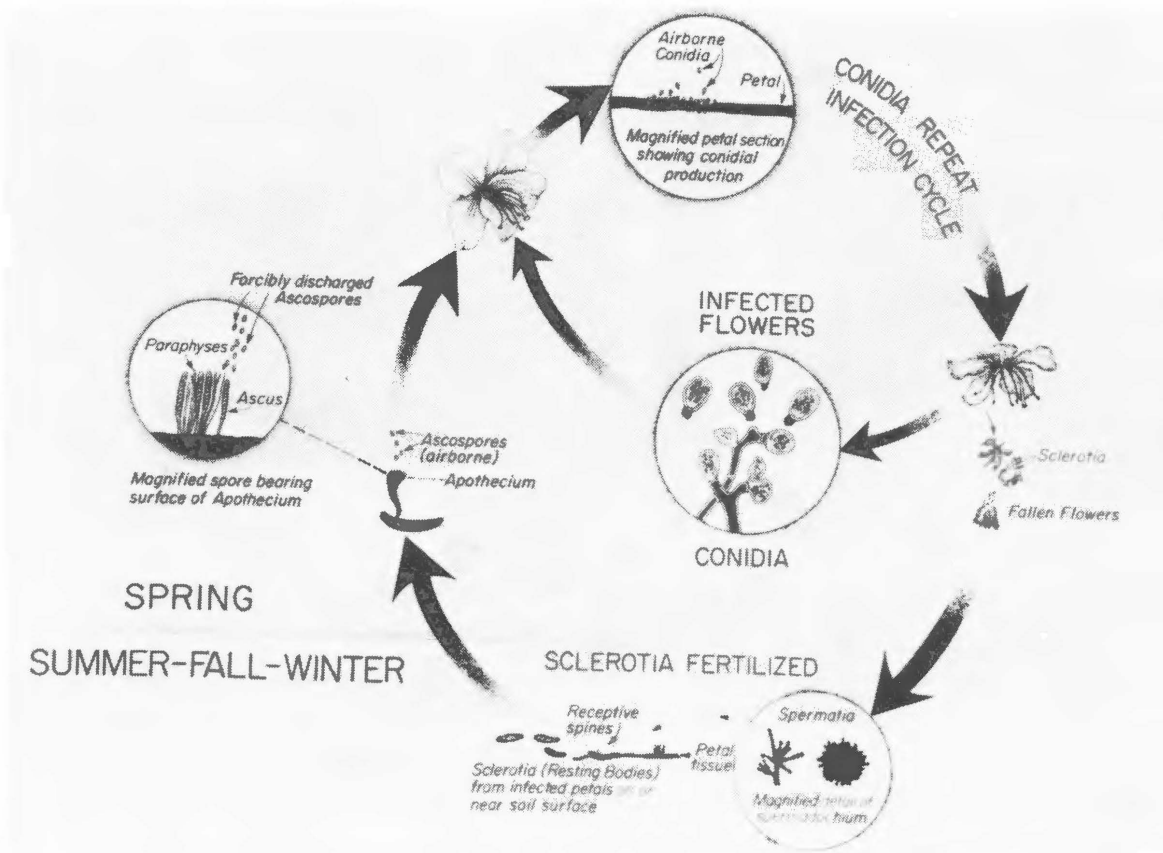


Figure 5. Life cycle of *Ovinia* petal blight on azalea.