



Extension FactSheet

Plant Pathology, 2021 Coffey Road, Columbus, OH 43210-1087

Septoria Leaf Spot of Tomatoes

Richard M. Riedel, Sally A. Miller and Randall C. Rowe
Department of Plant Pathology

Septoria leaf spot is a disease of the foliage and stems. It does not affect fruit directly. The disease causes rapid defoliation when weather is warm and moist.

Symptoms

Although the symptoms may appear on the leaves and stems at any stage of plant development, they usually become evident after plants have begun to set fruit in mid-July. Initially the fungus causes small, water-soaked, roughly circular spots scattered randomly over the leaf. These spots enlarge to become 1/16 to 1/8 inch in diameter with dark margins and tan centers. Small, dark, pimple-like fruiting bodies in which spores of the fungus are produced can be seen in the center of the lesions. Older leaves near the ground usually show symptoms first. Symptoms appear rapidly on younger foliage in rainy weather. When leaves are heavily infected, they drop prematurely. Exposed fruits are subject to sunscald. The fungus which causes this disease can grow on weeds such as Jimson weed, horse nettle and nightshade.

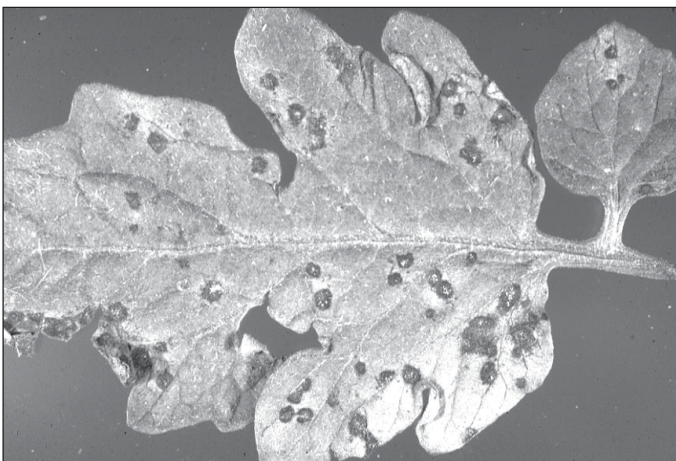


Figure 1. Septoria leaf spot on tomato leaf.

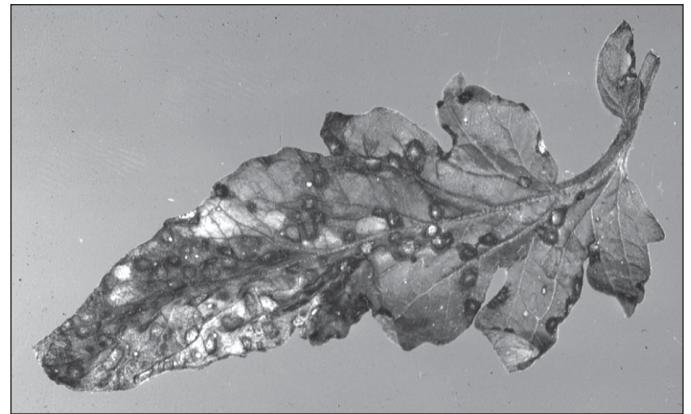


Figure 2. Leaf blight resulting from severe infection of Septoria leaf spot on tomato leaf.

Causal Organism

Septoria lycopersici lives between tomato crops in the soil on infested debris of tomato and weeds. Spores formed on crop debris splash onto foliage and start the disease. Wind and rain spread spores produced in the dark bodies formed in leaf spots to adjacent uninfected leaves. The fungus is most active between 60 and 80 degrees F when rainfall is abundant.

Control:

1. Rotate out of tomatoes for 4 years.
2. Deep plow, preferably in the fall, to bury all plant refuse.
3. Grow tomato transplants in sterilized soil.
4. Control weeds, especially horse nettle, Jimson weed, and nightshade.
5. Use of a protectant fungicide may be necessary to adequately control Septoria Leaf Spot when conditions are favorable for disease development. For effective fungicides and spray schedules consult the Ohio Vegetable Production Guide (OSU Extension Bulletin 672).

Visit Ohio State University Extension's web site "Ohioline" at:
ohioline.osu.edu

All educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status.

Keith L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension
TDD No. 800-589-8292 (Ohio only) or 614-292-1868