

WHAT IS THE CAUSE OF THE PURPLE SPOTS ON PANSY LEAVES?

by Jean Williams-Woodward, University of Georgia



What is the cause of the purple spots on pansy leaves? Most likely, the cause is the fungus *Cercospora violae*. This species of *Cercospora* is specific to pansy and viola; it will not infect other greenhouse crops. Almost all growers of pansies will at some time see this disease.

Typically leaf spots caused by fungi can be characterized as having a tan to gray center that is surrounded by a darker colored border (brown, black, purple, reddish, etc.). Black fungal structures (spore producing structures) are often seen within the center of the spot. *Cercospora* leaf spot of pansy does not look like the typical fungal leaf spot.

Developing *Cercospora* leaf spot are diagnosed by large, irregularly-shaped, spreading purple spots on the lower leaves. The edges of the spot often look feathery, not solid (similar to rose black spot). Tiny purple spots and flecks appear on the upper leaves as the disease progresses upward through the plant. As the spot matures, it will develop a tan center with a purple rim.

The fungus produces abundant spores within the center of the maturing spot. Initial infection is usually on the lower leaves. Every time the infected leaf is hit with water from irrigation or rain, spores are popped-up onto adjacent leaves or plants. It is important to monitor your plants for early infections before the disease spreads through the crop.

Cercospora leaf spot is most often seen in the fall and late spring in outdoor plantings because its infection is favored by warmer conditions. Within greenhouse crops it can be found all the time. Once detected remove infected leaves or severely infected plants. Remaining plants can be treated with mancozeb-containing fungicides such as Dithane, Fore, Protect T/O, or Zyban. Thiophanate methyl containing fungicides such as Cleary 3336, Domain or Fungo Flo also can reduce disease, but some growers have had poor success when these fungicides were used alone. Always follow label directions for fungicide use and precautions.

There is another leaf spot on pansy that can be confused with *Cercospora* leaf spot. This spot is caused by the fungus *Mycocentrospora acerina*. Initial symptoms of this disease are tiny, round black spots, up to 5 mm in diameter, that have a tan center and a black rim and may have a yellow halo. The spot

looks greasy when viewed from the underside of the leaf. *Mycocentrospora* can infect other plants including petunia, lobelia, and columbine.

Infection by *Mycocentrospora* is favored by cold, wet conditions is usually seen during the winter months in outdoor plantings. The disease can be introduced into production on pansy seed. A low percentage of pansy seed may carry the fungus, but under favorable environmental conditions infection can spread rapidly. Control can be difficult. Infected plants should be removed and discarded. Avoidance of prolonged leaf wetness can reduce disease spread and development. Broad spectrum fungicides such as mancozeb, thiophanate methyl, and chlorothalonil may provide some protection.

***Please note: Mention of fungicide trade names is for clarification purposes and does not constitute a recommendation of one product over another.

The Gulf States Horticultural Expo, Inc.

January 25-27, 2001

Arthur R. Outlaw Mobile Convention Center
Mobile, Alabama

Thursday, January 25, 2001

Educational Seminars & Networking
Opportunities With Industry Leaders

January 26 & 27, 2001

600 Booth Industry Trade Show
Showcasing 395 Firms from Across the Nation

New Plant Varieties and New Products

FOR ATTENDEE OR EXHIBITION INFORMATION, CONTACT:
The GSHE, Linda Van Dyke, P.O. Box 47, Auburn, AL 36831-0047
(334) 502-7777; FAX (334) 502-7711
or via Email at alna@prodigy.net