





# **Arkansas Plant Health Clinic Newsletter**

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### Squash

Whiteflies are a serious pest in many field and greenhouse crops. They damage plants by injecting a toxin into plant cells and feeding on the contents of the cells. Symptoms are stunting, yellowing, wilting, and plant death. The Silverleaf whitefly, Bemisia argentifolii, has become common across Arizona, California, Florida, Georgia, Louisiana, New Mexico, and Texas. We have not verified this species in Arkansas but are seeing plants with symptoms. Feeding by the Silverleaf Whitefly causes striking symptoms on young squash plants. Their feeding triggers the upper layer of epidermal cells in the leaf to separate from the lower layer of cells, producing a silver or white leaf color. Stunting and serious production loss may occur. Once the whiteflies are controlled, new leaves should be normal. However, control of whiteflies is not easy. Populations have built up resistance to many insecticides. Also, many natural enemies are killed by insecticidal treatments. Yellow sticky traps help somewhat control large populations. cannot Insecticidal soap or neem oil may be used effectively but be sure not to use soap when temperatures will be above 80°F, as leaf burn may result. You may also use Bio Advanced Fruit, Citrus and Vegetable Spray.

# Squash-Silverleaf Whitefly damage-Bemisia argentifolii



Photos by Dustin Blakey, formerly University of Arkansas Cooperative Extension







## Cherry

Cherry leaf spot caused by, Blumeriella jaapii, anamorph Phloeosporella padi, is the most import fungal disease of cherry wherever cherries are grown. Plums are susceptible as well. Symptoms begin as small reddish to purple circular spots on the leaves. On the underside of the leaves, extruded masses of white to pink spores are produced during wet conditions. The leaves take on a mottled appearance as the tissue becomes yellow, leaving the area around the lesions green. On plums, the necrotic lesions may drop out, giving a shot hole The infected leaves appearance. fall prematurely, reducing fruit vields and weakening the tree. In severe cases complete defoliation may occur. Early defoliation may reduce bud survival and fruit set for at least two The fungus overwinters in leaves seasons. fallen on the ground which were infected the previous season. Therefore, sanitation is important in controlling Cherry leaf spot. Clean up all fallen leaves. Fungicides should be applied at petal fall and at 7–10-day intervals to harvest. Commercial growers may use a copper fungicide, or Syllit, or Gem, or Pristine. Homeowners may use Captan, or a copper fungicide.

Cherry Leaf Spot-Blumeriella jaapii, anamorph Phloeosporella padi



Photo by Sherrie Smith University of Arkansas Cooperative Extension







Cherry Leaf Spot-Blumeriella jaapii, anamorph *Phloeosporella padi* 



Photo by Sherrie Smith University of Arkansas Cooperative Extension

Cherry Leaf Spot-Blumeriella jaapii, anamorph Phloeosporella padi



Photo by Sherrie Smith University of Arkansas Cooperative Extension

Cherry Leaf Spot-Blumeriella jaapii, anamorph Phloeosporella padi

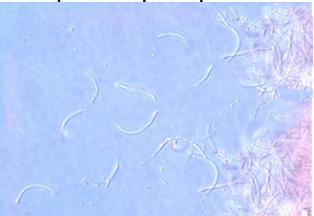


Photo by Sherrie Smith University of Arkansas Cooperative Extension

#### Oak

A common fungal leaf disease of oak in Arkansas is Oak Leaf Blister, caused by Taphrina caerulescens. All oak species are vulnerable with red oaks being particularly susceptible. Prolonged periods of cool, wet weather in the spring are conducive for disease development. Symptoms become apparent in early summer as yellow, blister--like, circular, raised areas, 1/16 to 1/2 inch in diameter. The blisters are scattered over the upper leaf surface with corresponding gray depressions on the lower surface. As the spots age, they turn from yellow to brown with pale yellow margins, becoming dull brown in color. Several blisters may coalesce and cause the leaves to curl. Although unsightly, the disease usually does not greatly impact tree health. Control consists of raking up all fallen leaves and twigs, and the application of preventative fungicides







## Sherrie Smith Keiddy Urrea

where practical. Practicality usually depends on tree size as most homeowners are unable to reach the canopy of large oaks. One application of Chlorothalonil, copper, or mancozeb during dormancy is effective. Fungicides do not have any effect after bud swell in the spring.

## Oak Leaf Blister-Taphrina

caerulescens



Photo by Sherrie Smith University of Arkansas Cooperative Extension

## Oak Leaf Blister-Taphrina caerulescens



Photo by Sherrie Smith University of Arkansas Cooperative Extension







## Oak Leaf Blister-Taphrina

caerulescens



Photo by Rick Cartwright University of Arkansas Cooperative Extension

This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

"This work is supported by the Crop Protection and Pest Management Program [grant no. 2017-70006-27279/project accession no. 1013890] from the USDA National Institute of Food and Agriculture."