



Arkansas Plant Health Clinic Newsletter

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Oak

Oak is both an important forest tree and a valuable landscape ornamental. They are ubiquitous in most areas of the country and are so taken for granted that people are surprised at how many pests they have. A common fungal leaf disease of oak in Arkansas and one we see frequently 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 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 Rick Cartwright, University of Arkansas
Cooperative Extension

Oak Leaf Blister-*Taphrina* *caerulescens*



Photo by Sherrie Smith, University of Arkansas
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Sherrie Smith
Keiddy Urrea

Oak Leaf Blister-*Taphrina caerulescens*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Sycamore

The most damaging disease of sycamore is Sycamore anthracnose, caused by the fungus *Apiognomonia venta*. Symptoms appear on new leaves as they unfold. Black to brown lesions occur along veins, eventually enlarging to cover the entire leaf. Twigs may be killed back 8 to 10 inches. Sunken cankers may develop on the main trunk and limbs. During cool wet weather in the spring these cankers become active and produce spores that infect new leaf buds. Death of individual twigs and limbs occurs when a canker girdles them. Repeated twig death results in a witch's broom type of growth, with a mix of dead and live twigs in clusters. Treatment begins in the spring as buds begin to swell. Fungicides containing chlorothalonil, or thiophanate methyl or copper should be applied

at 7–14-day intervals as long as cool wet weather persists. It is difficult to treat large trees. Planting resistant cultivars and species is the best option. The American sycamore is extremely susceptible. Susceptibility varies among cultivars of the sycamore, sold as London Plane tree with, Bloodgood, Columbia and Liberty having resistance to anthracnose.

Sycamore Anthracnose-*Apiognomonia venta*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



Sycamore Anthracnose- *Apiognomonia venta*



Photo by Sherrie Smith, University of Arkansas
Cooperative Extension

Cherry

Cherry Leaf Spot (shothole), caused by *Blumeriella jaapii*, (formerly known as *Coccomyces hiemalis*) anamorph *Phloeosporrella padi*, is the most important 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 appearance. The infected leaves fall prematurely, reducing fruit yields and weakening the tree. In severe cases complete defoliation may occur. Early defoliation may reduce bud survival and fruit set for at least two seasons. The fungus overwinters in leaves 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 Gem, or Pristine. Homeowners may use Captan, or a copper fungicide.

Cereza (Cherry) by Keiddy Urrea

La mancha de la hoja de la cereza es una de las enfermedades fúngicas más comunes en la planta de cereza, causada por el hongo *Blumeriella jaapii* (también conocido como *Coccomyces hiemalis*) anamorpho *Phloeosporrella padi*. Las plantas de ciruela también son atacadas por este patógeno. Los síntomas empiezan como pequeños agujeros circulares de color rojo en las hojas, a medida de las lesiones maduran las hojas toman un color verde moteado hasta que se amarillan completamente. En condiciones de alta humedad relativa, en el envés de la hoja sobresale una masa de esporas de color blanco y rosado. En las ciruelas las manchas necróticas en las hojas se caen y dejando agujeros circulares en las hojas. Las hojas infectadas se pueden caer prematuramente durante el otoño, esta defoliación afecta el rendimiento y la salud del árbol, como también puede causar la supervivencia de las yemas y la formación de frutos de los dos subsecuentes años. En casos severos la planta puede defoliarse completamente. El hongo sobrevive el las hojas se caen al suelo que fueron infectadas en la pasada temporada de cultivo.



Sherrie Smith
Keiddy Urrea

Por lo tanto la sanidad del cultivo es muy importante para el manejo de esta enfermedad, se recomienda coleccionar todas las hojas que se encuentre en el suelo al final de cada temporada. Fungicidas se deben aplicar cuando los pétalos se caen en intervalos de 7 a 10 días hasta la época de cosecha. Para cultivos comerciales se recomienda el uso de fungicidas cúpricos, Gem o Pristine. Para pequeños cultivos se recomienda el uso de Captan o fungicidas cúpricos.

Cherry Leaf Spot-*Blumeriella jaapii*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Cherry Leaf Spot-*Blumeriella jaapii*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Cherry Leaf Spot Spore Mass-*Blumeriella jaapii*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Cherry Leaf Spot Spores- *Blumeriella jaapii*



**Photo by Sherrie Smith, 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.

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