



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.

## Maple

Tar Spot, caused by *Rhytisma acerinum*, or *R. punctatum*, is a largely cosmetic fungal leaf spot disease. Many species of maple are susceptible, including Red maple, Silver maple, and Sugar maple among others. It has also been found on Boxelder, willow, and tulip-tree. Leaf spots begin as small, yellowish spots that may enlarge to about  $\frac{3}{4}$ " in diameter as the season progresses. The center of the lesion becomes raised and turns black, resembling a spot of tar on the leaf. Line patterns develop on the tar-like spots that resemble fingerprint patterns. By late summer, heavily infected leaves begin falling prematurely from the tree. Cultural controls are usually all that is required. Rake up all fallen leaves and destroy or remove from the property. Fungicides are generally not considered necessary for control of Tar Spot, as it does not kill the tree. However, for badly affected trees fungicide treatment may be made: one treatment done at bud break, a second treatment when the leaves are half expanded, and the final treatment when the leaves are fully expanded. Products containing triadimefon or mancozeb are effective

### Maple Tar Spot-*Rhytisma* spp.



Keith Perkins University of Arkansas Cooperative Extension

## Hazelnut

Bacterial Blight of hazelnut, caused by the bacterium, *Xanthomonas arboricola* pv. *corylina*, can be serious in new orchards. Leaf symptoms begin as small, angular or round yellowish-green, water-soaked spots that turn reddish brown with age. Buds may be killed, turning brown and failing to leaf out. Twig infections begin as dark green water-soaked areas on the bark that turn reddish to purplish brown. If the lesion girdles the stem, twig death occurs. If trunk cankers develop, a grower may lose the tree. During periods of high humidity, exudates containing bacteria ooze from infected tissue. All fallen leaves should be raked up and removed from the orchard. Infected twigs and branches should be pruned 8-10 inches below the cankers in late winter and removed from the orchard. Up to three applications of a copper fungicide may be used per year: the first in late August or early September, the second in the fall when  $\frac{3}{4}$  of the leaves have fallen, and the third in the spring just before budbreak.

### Hazelnut Bacterial blight- *Xanthomonas arboricola* pv. *corylina*



Sherrie Smith University of Arkansas Cooperative Extension

## Dayflower

Asiatic dayflowers, *Commelina communis*, are annual herbs with stems that are usually decumbent, meaning that they are prostrate at the base but become erect



towards the tips. In spite of being an invasive species, some people cultivate it for the pretty blue flowers it produces all season. Dayflower prefers moist open, semi-shaded growing conditions. Occasionally, in areas under overhead irrigation, Dayflower becomes infected with a fungal leaf spot disease caused by *Cercospora commelinicola*. Symptoms are roughly round to oblong purple spots on foliage and stems. The lesions may coalesce to blight large portions of the leaves. Because Dayflower reseeds itself freely, it is easier to pull up diseased plants and dispose of them. However, fungicides may be used if the grower does not want to destroy infected plants.

### Dayflower Cercospora Leaf spot- *Cercospora commelinicola*



Jesse Bocksnick University of Arkansas Cooperative Extension

### Dayflower Cercospora Leaf spot- *Cercospora commelinicola*



Jesse Bocksnick University of Arkansas Cooperative Extension

### Soybean

Wildfire, caused by the bacterium *Pseudomonas syringae* pv. *tabaci*, can cause defoliation of soybeans when environmental conditions are favorable for disease. This bacterium contains a toxin that can cause severe damage in susceptible cultivars. Symptoms are brown, necrotic spots on leaves, nearly always surrounded by a broad, yellow halo. However, sometimes dark brown to black lesions occur without the yellow halo. The lesions may enlarge and coalesce during wet periods to blight large portions of the leaf. The affected areas become dry and tattered. There is a correlation between Wildfire lesions and Bacterial pustule, caused by *Xanthomonas axonopodis* pv. *glycines*. Almost always a bacterial pustule can be found in the center of a Wildfire lesion. It appears the pustule acts as a natural infection court for the Wildfire. Cultivars with resistance to Bacterial pustule and Wildfire should be used. Crop residue should be plowed under, and cultivation avoided when the foliage is wet.



**Soybean Wildfire- *Pseudomonas syringae* pv. *tabaci***



Sherrie Smith University of Arkansas Cooperative Extension

**Soybean Wildfire- *Pseudomonas syringae* pv. *tabaci***



Sherrie Smith University of Arkansas Cooperative Extension

**Request for help from Dr. Robbins:**

Root knot nematode populations are needed for our Arkansas species study. I am a nematologist in the department of Plant Pathology in Fayetteville. My student and I are trying to amass populations of as many species of Root knot nematode (*Meloidogyne* sp.) as possible for species identification using molecular techniques. At present no root knot species in Arkansas have been identified using molecular technology. We are interested in receiving populations from home gardens, shrubs, flowers, trees and grasses. For samples we need about a pint of soil and feeder roots in a sealed plastic bag that is plainly identified by plant host, location (City County, physical address, collector and date of collection). Please send samples to us at the follow address:

*Sherrie Smith*



*Department of Plant Pathology*

**PLANT HEALTH  
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