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Arkansas Plant Health Clinic Newsletter

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Maple

Tar Spot is fungal leaf disease that causes dramatic leaf spotting but does little real damage. Tar Spot, caused by *Rhytisma acerinum*, or *R. punctatum*, is 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 ¾ “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 chlorothalonil or mancozeb are effective.

Maple Tar Spot-*Rhytisma acerinum*

Photo by Keiddy Urrea, University of Arkansas Cooperative Extension

Maple Tar Spot-*Rhytisma acerinum*

Photo by Keith Perkins, University of Arkansas Cooperative Extension

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Birch

Homeowners are often frightened by the sudden defoliation of their birch tree in mid to late summer. Birch Leaf Spot or blight, caused by *Cryptocline betularum,* can cause severe premature leaf shed. Up to 30% or more of the tree's leaves may end up on the ground. Fortunately, this occurs late enough in the season that tree health is not much affected. Control consists of cleanup of the fallen leaves, and good care of the tree including proper fertilization and water. If repeated severe defoliations occur, fungicides containing chlorothalonil may be used at bud break in the spring and continues at two intervals for 2 or 3 applications. This is generally not necessary unless the tree is very young and vulnerable.

Birch leaf Spot-*Cryptocline betularum*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Birch leaf Spot Spores-*Cryptocline betularum*

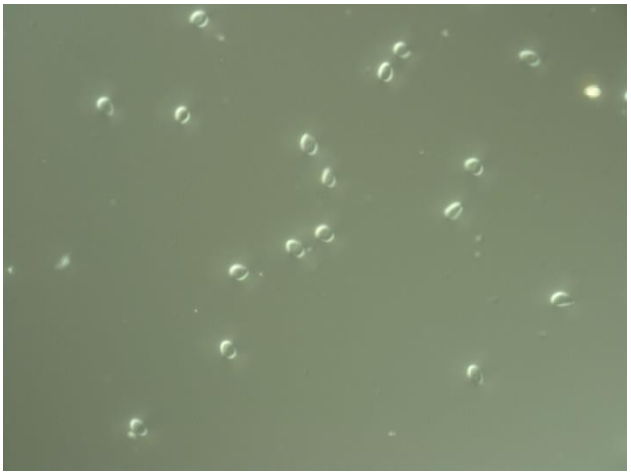

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Pear

Fabraea Leaf and Fruit Spot, caused by *Fabraea maculata*, is a fungal disease found wherever pear is grown. Other susceptible hosts are quince, apple, crabapple, serviceberry, cotoneaster, hawthorn, photinia pyracantha, and mountain ash. Leaf lesions begin as tiny reddish-purple spots. The spots become larger, turning dark brown and may coalesce to blight large portions of the leaf. Massive defoliation may occur as severely infected leaves turn yellow and drop. Lesions on fruit are the same as leaf leaves becoming shrunken, cracked and scab-like over time. There is some resistance to Fabraea in pear cultivars, for example the cultivar Bartlett. Cultural practices such as removal of all fallen leaves and fruit, and the avoidance of overhead

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irrigation are helpful. Fungicides are effective if application begins before the establishment of disease on the leaves. Ziram, Ferbam, and Bonide Mancozeb are labeled for treatment of Fabraea. Follow label for rates and repeats.

Pear Fabraea Leaf Spot-*Fabraea maculata*

Photo by Josh Yates, formerly University of Arkansas Cooperative Extension

Pear Fabraea Leaf Spot-*Fabraea maculata*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Squash

It is too late now for control of Squash vine borer in summer squash. Control measures should have been started as soon as vines began to run in spring and early summer. If you keep an eye out for the adults at that time of year, you will often see them flying through the vegetable garden in the spring looking for suitable host plants. The borers are the larvae of a clearwing moth, *Melittia satyriniformis*, which emerges from the soil in the spring and lays eggs singly on the undersides of squash

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and pumpkin vines, usually at the base of the plant. When the larvae hatch, they burrow into the stem and start feeding. This causes the eventual collapse and death of the vine. Growers don't notice anything wrong until the vine starts wilting. Large white worms with brown heads can be seen if stems are cut open. You can sometimes find the larvae in the squash fruit as well. Mature larvae eventually exit the plants, burrow into the soil where they pupate until the following spring. Products containing bifenthrin, or Malathion applied as sprays or dusts are effective. Continue a 7-to-10-day reapplication schedule for 3 to 5 weeks.

Squash Vine Borer in Fruit- *Melittia satyriniformis*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Squash Vine Borer in Stem- *Melittia satyriniformis*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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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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