UNIVERSITY OF ARKANSAS DIVISION OF AGRICULTURE
Cooperative Extension Service

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PLANT HEALTH CLINIC NEWS

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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.

Peach

Silverleaf is a destructive fungal disease that attacks plums, peaches, nectarines, cherries, almonds, apricots, willow, poplar, and many others. The fungus easily moves back and forth between different hosts. The causal agent is *Chondrostereum purpureum,* a bracket-like fungus. Thin, leathery, sporophores form on the trunk of dead trees. The sporophores are gray to brown with a fawn to purple-lilac colored spore bearing layer. The spores are released during rainy weather, and penetrate into the wood of nearby trees through recent wounds such as pruning cuts and storm damage. Xylem tissue becomes darkly stained as the wood is killed by the pathogen. Toxins from the fungal infection cause the outer cells of the leaves to separate, resulting in the silver sheen that gives the disease its name. A single limb may be affected or the entire tree. Apple trees may recover, but stone fruits are usually killed in 2-3 years. There are no chemical controls for Silverleaf. Any wood with the sporophores should be removed from the area. Stumps should be pulled out or ground up or covered with soil. Pruning in the winter increases the chance of infection as the cool rainy days promote spore release.

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Peach Silverleaf Disease-
Chondrostereum purpureum

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Peach Silverleaf Disease-
Chondrostereum purpureum

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Peach Silverleaf Disease-Xylem discoloration *Chondrostereum purpureum*

Eric Allen, Natural Resources Canada, Canadian Forest Service_jpg

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Hydrangea

Hydrangeas can be a valuable addition to the landscape. They are available in a size to fit any garden scheme, from tree form to dwarf varieties. Some cultivars bloom more than once a season. They are tolerant of a range of soil conditions and pH, but prefer evenly moist, well drained soil with some afternoon shade. Cercospora leaf spot, caused by *Cercospora hydrangeae,* is a common pathogen, especially on plants under overhead irrigation. Symptoms on big leaf varieties are small, circular purple to brown spots appearing first on lower leaves and spreading upward through the plant. The centers of the spots become tan to light gray with age, surrounded by a purple halo. Leaves with numerous lesions turn yellow and fall from the plant. Lesions on oak leaf hydrangea are more angular than circular. Good sanitation is important in controlling Hydrangea Cercospora leaf spot. All fallen leaves should be raked up and removed from the planting. Hydrangea should be watered at ground level and the use of sprinklers avoided. Fungicides containing chlorothalonil, or myclobutanil, or thiophanate-methyl, or mancozeb, or azoxystrobin, give good results when applied in a timely manner.

Hydrangea Cercospora leaf spot-*Cercospora hydrangeae*

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Hydrangea Cercospora leaf spot-*Cercospora hydrangeae*

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Zinnia

Zinnias are delightful annuals that love the heat, and bloom constantly in an array of sizes, and colors. However, they can become infected with the bacterium *Xanthomonas campestris pv. Zinniae,* which causes a leaf, petal, and stem blight. Symptoms begin with dull gray, water-soaked spots that become yellow to tan and finally brown as the tissue is killed. The bacteria can survive in plant debris for as long as a year and is an important source of contamination when new plants are introduced to that site. The bacterium can be easily spread plant to plant by splashing irrigation water.

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Growers should avoid handling plants and working in the bed when the foliage is wet. Plants with leaf spots should be pulled up and removed. Fungicides containing copper hydroxide are labeled for control of Xanthomonas on ornamentals, but are only marginally effective.

Zinnia Bacterial leaf spot-
Xanthomonas campestris pv. Zinniae

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Zinnia Bacterial leaf spot-
Xanthomonas campestris pv. Zinniae

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Dogwood

Septoria leaf spot, caused by *Septoria cornicola*, is a late season disease that under most conditions requires no chemical controls. However, on trees with a severe history of the disease, the use of fungicides may be necessary. Symptoms are grayish, angular spots with a dark red or purple border. Tiny, dark fruiting bodies of the fungus can be observed in the center of the lesions, using a hand lens. The spots first appear on lower leaves and move upward through the canopy. All dead leaves should be raked up and removed from the planting. Good air circulation, proper fertilization, and the avoidance of overhead irrigation help limit the incidence of Septoria leaf spot. Fungicides containing chlorothalonil, or mancozeb, or thiophanate-methyl can be used, beginning in the spring just before flower bracts are fully expanded and repeated 2-3 times 10-14 days apart. This also gives good protection against Dogwood Spot anthracnose.

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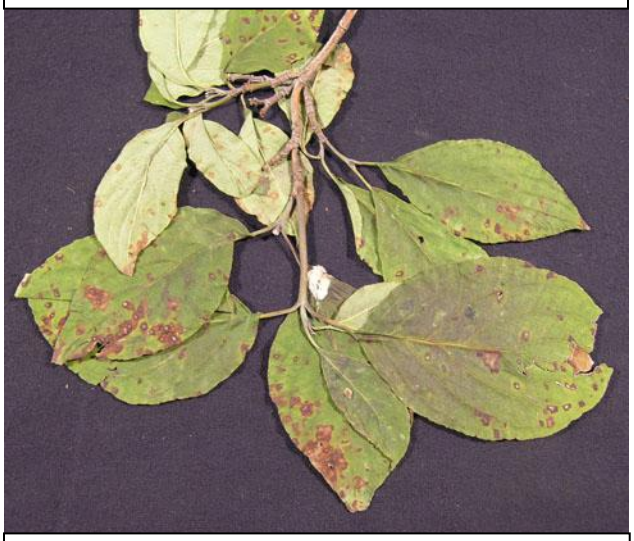
Dogwood Septoria leaf spot-
Septoria cornicola



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Sunburn on yew

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Sunburn on yew

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Sunscald on trees and Shrubs

We are seeing many examples of plants suffering from sunscald/burn from the extremely high temperatures and heat indices this summer. Plants that are turning brown only on the side facing west or south west are probably heat injured. This has occurred even when plants received adequate water. Those that turned uniformly brown all over and were not watered are suffering drought stress. Plants under constant irrigation that yellowed before turning brown are likely suffering root rot from too much water.