



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.

## Apple

Apple scab, caused by *Venturia inaequalis*, is the most economically important disease of apples in the United States. Severe crop losses may occur in areas with wet, cool springs. Scab lesions may occur on fruit, leaves, blossoms, petioles, and peduncles, with the most obvious symptoms on the leaves and fruit. Lesions are often found first on lower leaves, and as leaves unfurl both sides may become infected. The spots are velvety brown to olive green with feathery edges. As the lesions age and become hardened, leaf malformation may occur. Leaves that become completely covered with lesions yellow, shrivel, and fall from the tree prematurely. Infected fruit gets the same lesions and can become deformed and cracked. The fruit lesions eventually become dark brown to black circular rough spots. Applications of Fruit tree sprays every 7-10 days should be made from the tight cluster stage until terminal shoot growth ends in midsummer. All fallen leaves and fruit should be cleaned up. Dormant pruning of infected terminals aids in removing primary inoculum, but is time consuming and can affect yield.

### Apple Scab leaf lesions-*Venturia inaequalis*



Sherrie Smith University of Arkansas Cooperative Extension

### Apple Scab-*Venturia inaequalis*



Sherrie Smith University of Arkansas Cooperative Extension

### Apple Scab-*Venturia inaequalis*



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## Hosta

The clinic has been receiving several hosta samples a week with sunburned leaves due to both the high heat indices and poor cultural practices. Several fungi can attack hosta leaves, especially when plants are stressed by adverse environmental factors. Hostas grow best and develop the fewest problems when planted in moist, well-drained soil that is rich in organic matter. The ideal pH is 6-7.5. They are heavy feeders, requiring a balanced slow release fertilizer throughout the growing season. They also require large amounts of water, but cannot tolerate heavy, poorly drained soil. Hostas prefer bright light, but do poorly in hot, afternoon sun. Species of *Alternaria*, *Colletotrichum*, and *Cercospora* can cause leaf spots and blights on Hostas, especially those that are already distressed. Cultural practices should be evaluated and corrective measures taken if leaf problems arise. Severely blighted leaves should be removed, and an ornamental fungicide applied. Bayer Advanced Garden-Disease Control for Roses, Flowers, Shrubs, or a product containing myclobutanil or chlorothalonil may be used to help control leaf pathogens.

### Hosta *Cercospora* leaf spot- *Cercospora* spp.



Sherrie Smith University of Arkansas Cooperative Extension

## Oak

More than 15 species of moth caterpillars feed on oaks. Although a few feeding on the leaves are harmless, repeated, severe infestations can cause defoliation and twig death. Oak Leaf tiers and oak leafrollers are the common names given to these caterpillars, depending on the way they attack leaves. The leaf tier caterpillar binds several leaves together with strands of silk and then feeds and rests between them. After feeding ceases, the larva drops to the ground and pupates in the litter or duff. The leafroller larva rolls or folds one leaf, and ties it with strands of silk. It feeds and rests within the rolled or folded leaf. Most pupate on the ground. Control on mature trees is difficult. Tree health should be maintained with adequate water and fertilizer per soil test. Valuable ornamental trees can be protected for aesthetic purposes by spraying when the buds begin to break with carbaryl or cyfluthrin, or with Bayer Advanced Tree and Shrub Insecticide or Merit.

### Oak Leaf tier damage-note several leaves stuck together



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## Oak Leaftier unidentified species



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## Oak caterpillar damage



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## Oak Spring Leafroller-*Chionodes formosella*



James B. Hanson, USDA Forest Service, Bugwood.org.jpg