



## Arkansas Plant Health Clinic Newsletter

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### Photinia

Entomosporium Leaf Spot, caused by *Entomosporium mespili*, is an aggravating and serious disease of Mountain ash, Firethorn, Indian hawthorn, Juneberry, Loquat, Photinia, and Flowering quince. Symptoms start on leaves as tiny, raised dots on either side of the leaf. The lesions become bright red with gray centers. Small, black fruiting bodies may be observed in the centers of the lesions using a hand lens. Large portions of the leaf become blighted when the lesions coalesce. The blighted areas take on a purple cast. Severely affected leaves fall prematurely. Repeated infections can seriously weaken the plant. There is no real resistance to the disease in Photinia. Plants that are already stressed by poor planting locations and severe pruning seem to suffer the most. New foliage is the most susceptible. Protective applications of fungicides started at bud break in the spring and repeated at 10–14-day intervals give good control. Chlorothalonil (Daconil), thiophanate-methyl (Halt, Green Light Systemic), and myclobutanil (Immunox) are labeled for Photinia.

### Photinia Leaf Spot-*Entomosporium mespili*



Photo by Sherrie Smith, University of Arkansas  
Cooperative Extension

### Photinia Leaf Spot-*Entomosporium mespili*



Photo by Sherrie Smith, University of Arkansas  
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## Indian Hawthorn Leaf Spot- *Entomosporium mespili*



Photos by Sherrie Smith, University of Arkansas  
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## Cleyera

*Cleyera japonica* is an evergreen shrub with attractive foliage and small, scented, creamy flowers. It flowers early in summer, followed by small round black berries. Growing to 10 feet tall by 8 feet wide, Cleyera is happiest in locations with afternoon shade, adequate moisture, and well-drained soil. They are understory plants in their native Asian habitat, much as our native dogwoods are understory plants. Although they can tolerate sunny planting sites, they typically don't do as well in hot, sunny locations. Cleyera is hardy to zone 7. Temperatures below 5° F can damage or kill *Cleyera*. The most common disease we see on these plants is Cercospora Leaf Spot; caused by *Cercospora* spp. Symptoms begin as small purple spots, which may coalesce to become large purple blighted areas. Heavily infected leaves fall from the plant prematurely, often defoliating up to 30% of the plant by midsummer. Control consists of good sanitation, resistant cultivar selection, and the use of fungicides. Fallen leaves should be raked up and destroyed. The same fungicides labeled for control of Photinia leaf spot may be used to control Cercospora Leaf Spot. Chlorothalonil (Daconil), thiophanate-methyl (Halt, Green Light Systemic), and myclobutanil (Immunox) are suitable. The cultivar LeAnn seems to be less affected by Cercospora Leaf Spot.





## Cleyera Cercospora Leaf Spot- *Cercospora* spp.



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## Ornamental Pear

Ornamental pears are in various stages of bloom all over the state. Bloom time is the only time to spray for Fire Blight. Fire Blight is a bacterial disease caused by the bacterium *Erwinia amylovora*. This disease attacks members of the rose family, including apples, blackberries, cotoneaster, crabapples, hawthorn, pears, photinia, pyracantha, quince, raspberries, and roses. Twig and branch cankers ooze bacterial slime that attracts bees. The bees carry the bacteria from bloom to bloom and from tree to tree. Bloom clusters wilt and die a few weeks after infection, with the infection spreading down the twig. Cankers begin as water-soaked areas and then turn dark brown or black. The bark on older cankers becomes sunken and cracked. Fire Blight can

kill blossoms, leaves, twigs, limbs, and in severe cases, the entire tree. Infected petioles and young shoots form a typical shepherd's crook, brown colored in apples, and black in pears, with the dead leaves remaining on the tree. The best method of control is planting resistant cultivars. An ornamental flowering pear with excellent resistance is *Pyrus ussuriensis* 'Prairie Gem'. Resistant apples are Haralson, Liberty, Prima, Priscella, Red Delicious, Redfree, and Winesap. The most susceptible apples include Braeburn, Fuji, Gala, Idared, Jonagold, Jonathan, Liberty, Lodi, Rome, Tydeman's Red, and York. Stayman and Golden Delicious cultivars are moderately resistant. Susceptible pears are Bartlett, Bosc, Clapp's Favorite, and D'Anjou, while Magness, Maxine, Moonglow, and Seckel are highly resistant. Most Asian pears are moderately to highly susceptible except for the more resistant Seuri, Shinko, and Singo pears. Susceptible trees should be sprayed at green tip, at 5% bloom, and at 50% bloom with Agri-strep, Agri-mycin, or a copper fungicide, such as Kocide. All dead tissue should be pruned out 10-12 inches below the damage. Cutting tools should be dipped between cuts in a 10% bleach solution, (nine cups water to one cup bleach).



## **Pear Fire Blight-*Erwinia amylovora***



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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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