

## Fire Blight Infection

Do your apple or pear trees appear to scorched or blackened on the outer branches? If so, they have been hit by a bacterial infection known as Fire Blight. While this disease is usually seen on apple and pear, it can also affect cotoneaster, crabapple, hawthorne, ornamental pear, mountain ash, firethorn, plum, quince and spirea. This has been a frequent disease diagnosis at the Extension office over the last several weeks.

Although blossom blight can occur, the most often noticed disease cycle is shoot blight. This occurs when the bacterium enters the shoot and moves quickly down the stem. The evidence is brown and black leaves and a shepherd's crook at the end of the stem. If the disease progresses further, limb and trunk blight can occur and can girdle the tree. This disease cycle will be evidenced by sunken cankers on the limbs or trunk.

Understanding the disease cycle will help you minimize the potential risk of this devastating disease. The bacterium overwinters in the trunk and branches of the tree. The disease begins to spread in the spring when the temperatures reach 65 F and will be worsened by wet periods. The disease affects the tree as long as shoot growth continues which will be approximately 8 weeks. This is why corrective pruning in mid-Spring should be avoided. Any pruning will initiate new shoot growth and lengthen the period of time of Fire Blight susceptibility.

The bad news is you can't do anything about Fire Blight this late in the season. The good news is that most likely there will not be any long-term affects for the tree. There are some management tips to help you minimize the severity of the disease next year.

Winter pruning is one of the most effective strategies for controlling fire blight in your apple and pear trees. You should prune out blackened twigs and branches at least four inches below the affected area the buds swell and begin to grow next year. Pruning tools should sterilized with a 10% bleach solution to prevent spreading the infection.

Streptomycin, an antibiotic, is an affective preventative control for the disease. This must be applied during bloom before evidence of the infection is apparent. Trees must be sprayed every three to five days.

Depending on variety and the severity of the fire blight pressure of the given year, you may see fire blight infection regardless of how much you spray and prune. This is worsened anytime trees are damaged either by humans, insects such as cicadas, hail, or wind damage.