FIRE BLIGHT

WHAT IS THE THREAT:

Fire blight (*Erwinia amylovora*) is the most damaging bacterial disease, affecting trees and shrubs in the Rosaceae family during warm spring weather when rains or heavy dews are prominent. Sap containing the bacterium oozes from dead cankers during rainy spring weather and is blown to nearby trees or drips onto branches below. The sap is also attractive to bees that investigate and spread the disease to flowers.

WHERE IS THE THREAT:

Fire blight is most often found in pear, apple, peach and crabapple trees in most geographical locations, but is more severe in areas where warm, damp spring weather favors the disease. Fire blight has become a nuisance to homeowners and commercial landscape managers.

SYMPTOMS:

Soon after flowering, the flowers and leaves begin to wilt and die. If the weather remains cool and wet for extended periods of time, the bacterium continues down the twig and into lateral branches, and is expressed as black cankers. Rain and insects can further spread the bacterium to other flowers and shoots, often scattering symptoms throughout the canopy. If weather conditions are favorable for disease progression, the whole canopy can be affected with a burned appearance, explaining the term "fire blight." When daily temperatures reach above 82°F consistently, the bacterium goes dormant. The cankers will become active the next season to continue the disease cycle.

WHAT TO DO ABOUT IT:

When the trees are dormant, prune out the dead wood. Apply a trunk injection of Arbor-OTC® systemic antibiotic in the spring, prior to flowering. Serious infections left unmanaged can lead to extensive canopy loss and disfigurement and eventually tree death. The addition of a soil surfactant such as NutriRoot® will encourage water to move deeper into the soil and increase moisture availability to the tree over time.

Branch of a crabapple tree showing fire blight symptoms

Pear orchard infected with fire blight

Flowers infected with fire blight

Header Image taken by: Arborjet, Inc., **Flowers infected taken by:** Arborjet, Inc., **Pear orchard damage taken by:** P.G. Psallidas, Benaki Institute, Athens, Bugwood.org, **Branch of crabapple tree taken by:** William Jacobi, Colorado State University, Bugwood.org