

# FIRE BLIGHT

*Erwinia amylovora*

## DESCRIPTION

Fire blight is the most damaging bacterial disease that affects shrubs and trees in the Rosaceous family during warm spring weather combined with rains or heavy dews. This disease is most often found in pear, apple, loquat and crabapple trees and has become a nuisance to homeowners and commercial landscape managers. Flower infections can be introduced by bees and other insects from infected wood cankers that ooze bacterial substance in the spring. Trees infected with the fire blight bacterium *Erwinia amylovora* often have extensive limb cankers and dieback with a characteristic “Shepherd’s Crook” appearance at the tips of the shoots.

## SYMPTOMS

The first sign of a fire blight infection is early death of flowers and then green shoots immediately adjacent to the flower petiole. The bacterium moves into the wood of twigs and lateral branches, which express black cankers and can turn completely black. By further spreading of the bacterium with rain splashes and insects to other flowers and shoots, symptoms will often appear scattered throughout the canopy; however if the weather conditions are favorable for disease progression and spreading, the whole canopy can be severely affected with a burned appearance thus explaining the name “fire blight.”

## PHOTOS

A: Shoots infected with fire blight

B: Flowers infected with fire blight

Photo A taken by: Srdjan Acimovic, Arborjet Inc.

Photo B taken by: Srdjan Acimovic, Arborjet Inc.



# FIRE BLIGHT

## TREATMENT

Early spring injections of Arbor-OTC® just as buds break is the most optimum time to treat susceptible trees. As late spring and summer temperatures begin to climb, the bacteria will go dormant when water in the soil is scarce and when temperatures are around 85-90°F. Additional treatment with Arbor-OTC at petal fall will continue to benefit the health of the tree until daytime temperatures reach this level.

Generally, the best seasons for injection are spring and fall, since uptake occurs when trees are transpiring. The environmental conditions that favor uptake are adequate soil moisture and relatively high humidity. Soil temperature should be above 40°F for trunk injection. Hot weather and/or dry soil conditions may slow translocation of product into foliage so water trees before and after treatment application. The addition of a soil surfactant, such as NutriRoot, as a drench or sub-surface soil injection will encourage water to move deeper into the soil and increase moisture availability to the tree over time. If treating trees in the summer, inject in the morning for the quickest uptake.

## WHAT TO EXPECT AFTER TREATMENT

The earlier in the bud break the injections are conducted, the better fire blight reduction is achieved. Trees that have adequate soil moisture and warm daytime temperatures will distribute Arbor-OTC upward in the tree within 7-10 days. When early spring dead wood removal is combined with annual treatments of Arbor-OTC, canopy loss will be tremendously reduced.

## WORLD CLASS FORMULATIONS

For treatment of fire blight, use Arbor-OTC®.

Arbor-OTC is a systemic, water soluble, injectable antibiotic for the annual suppression of bacterial diseases in non-food bearing trees and palms. This shelf-stable water-soluble powder comes in two sizes and does not require refrigeration.

Our products can be purchased at your local Arborjet distributor. For a distributor near you visit [arborjet.com/distributor](http://arborjet.com/distributor)



## QUIK-JET INJECTION TREE I.V. INJECTION



## ARBORJET DELIVERY SYSTEMS

Arborjet's delivery systems are designed to be fast, affordable and effective. Contact us today to determine the right system for your needs. To find a distributor near you, go to [www.arborjet.com](http://www.arborjet.com).



QUIK-jet Kit



TREE I.V. 2-Pack Kit



QUIK-jet Air Kit



TREE I.V. Pro Kit

781-935-9070 • Visit us on the web at [www.arborjet.com](http://www.arborjet.com)

99 Blueberry Hill Road, Woburn, MA 01801 Arborjet, Inc. All Rights Reserved 2015

**ARBORJET**  
Revolutionary Plant Health Solutions