

FIRE BLIGHT

Fire blight, caused by the bacterium *Erwinia amylovora* is a destructive disease of fruit trees and ornamental shrubs. Outbreaks seriously injure and kill pear, apple, crabapple, mountain ash, hawthorn, plum, chokecherry, saskatoon, cotoneaster and spirea in a single season. The bacterium over-winters in cankers on infected trees. In the spring, bacteria in the ooze exuding from these cankers are spattered about by the rain, causing new infections on twigs and blossoms of affected trees and adjacent healthy trees. The bacteria are also spread from tree to tree by pollinating insects, sucking, chewing, or boring insects and unsanitary pruning tools. The first symptom of the disease is wilting leaves that soon die and turn brown to black. When infected twigs are numerous, trees appear as if fire scorched, hence the name “fire blight”. Dead leaves may remain on the trees well into winter, and as the disease progresses, cankers develop on the main stem and at branch nodes of affected trees.

There are no chemicals registered that can cure infected trees and shrubs. The disease can be controlled, however, by carefully following a good maintenance program. Blossoms may be protected by using fixed copper (Copper-spray 50WP) at 10 g/5l water. Apply with a sprayer when 10% of the blossoms have opened. Repeat the spray when most are open and again when a few petals remain. Spraying entire trees or shrubs for protection may be done at 10-day intervals through the summer, but discontinue before fruit is harvested.

During the growing season, prune to remove diseased twigs as they occur, continuing the process as long as newly affected twigs appear. In the dormant season, (October to April) prune and burn branches with large cankers and remove severely infected trees. Make pruning cuts at least 25 cm below the diseased area in healthy wood. Dip pruning tools after each cut in a 10% solution of isopropyl alcohol or methyl hydrate. Other preventative measures to be taken as a matter of course are: remove root suckers at the base of trees, avoid using high-nitrogen fertilizers which promote succulent growth, spray for leaf hoppers, aphids and other leaf-feeding insects.

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