

Fire Blight

TREE DOCTOR TIPS

Fire Blight (*Erwinia amylovora*)

DESCRIPTION:

Fire Blight is a bacterial disease affecting apples, pears, and some other members of the family *Rosaceae*. It is a serious concern to apple and pear producers. Under the right conditions, it can destroy an entire orchard in a single growing season.

HOSTS:

Crabapple, apple, cotoneaster, firethorn, hawthorn, mountainash, pear and quince are plants most commonly damaged.

BIOLOGY, SIGNS AND SYMPTOMS:

In the spring, during wet weather, the bacteria is splashed onto blossoms by rain or pollinating bees. The pathogen travels down into the shoots and into fruit spurs.

- Symptoms include: wilt and blackening of leaves and twigs which form a “Shepherd’s crook.” Infected twigs develop small, slightly sunken and brown cankers. Older cankers are dark brown and sunken with brown tissue under the bark. Branch dieback and death of the plant can occur.
- Bacteria ooze from the blossoms and fruit during wet, humid weather.

MANAGEMENT:

1. Remove infected wood several inches below cankers during the dormant season, if applicable. During the growing season, place pruned material in a container and cover before leaving the area. Do not toss clippings around as this spreads the bacteria. Sterilize between each pruning cut.
2. Apply slow-release fertilizers in early spring or late fall after growth has ceased.

3. Treat for sucking insects such as aphids, leaf hoppers, plant bugs and pear psyllid that wound tissue, permitting entry of bacteria.

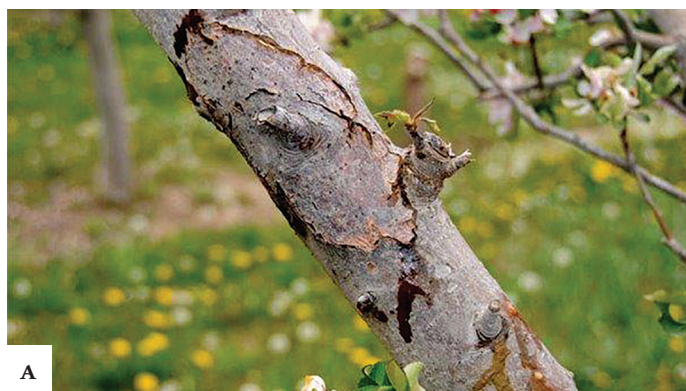


FIGURE A. RECENT BARK CANKER WITH BACTERIAL OOZE ON CRABAPPLE

FIGURE B: SHEPHERD'S CROOKING OF PETIOLES AND LEAF BLACKENING ON ORNAMENTAL PEAR

FIGURE C: SHOOT BLIGHT ON ORNAMENTAL

FIGURE D: SHEPHERD'S CROOKING AND LEAF BROWNING ON CRABAPPLE

The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.

