

Brighton & Hove City Council
Arboricultural Information Note No. 9

**Fireblight of ornamental
Trees and shrubs**
(Erwinia amylovora)



Fireblight is a disease caused by the bacterium *Erwinia amylovora*. Originating in the United States it was first recorded on Pear trees in Kent during 1957 and then spread slowly to affect trees in most parts of England and Wales before progressing northwards.

The disease affects Rosaceous trees and shrubs with apple-like fruits, principally Apple, Pear, Thorns, Whitebeam, Rowan, Fire Thorn and Photinia species. Cherries, Plums, and Swedish Whitebeam are **not** affected. Symptoms are varied and diverse and include wilting followed by browning of the leaves (resembling scorching), fruit and leaves persisting on the tree, shoot dieback, bark cankers and red-brown staining in the inner bark. Symptoms are most obvious between June and September or after leaf-fall.

In ornamental plants the severity of damage or death is dependent on particular species and weather conditions. Wet and warm conditions aid the production of infectious Slime Flux (a mucilage containing myriads of bacteria). Warm sunny days encourage increased activity in flying insects, especially bees, which assist in the spread from plant to plant situated within a few hundred metres of a diseased plant. Summer storms, often associated with heavy rainfall, may cause damage to leaves and may provide additional entry points for the bacteria. The infection can also be spread on pruning tools.

Once inside the tree, the bacteria multiply and spread rapidly through the intercellular spaces within the inner bark, killing it. Less susceptible plants may suffer no more than isolated shoot or twig death, although susceptible species are not likely to survive.

The risk of infection can be reduced by:-

- ◆ specifying that nursery stock is to be disease free on ordering and checking for symptoms on delivery or when collecting from a supplier;
- ◆ trimming Hawthorn hedges or other vulnerable plants to reduce flowering in order to reduce local build-up of disease;
- ◆ inspecting vulnerable plants during the infection period;
- ◆ cleaning pruning tools with methylated spirit or hypolorite, e.g. Domestos or household bleach;
- ◆ grubbing out and destroying any plant showing staining of the inner bark.