

Did you know?

Spot the Burn: How Fire blight Creeps Through Apple Trees

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Fire blight is a bacterial infection which usually appears on trunks, branches and twigs as cankers that ooze in spring. The ends of shoots will brown off, blacken and die. The flowers also show quite distinctive symptoms: water-soaked floral organs associated with dull, grey-green appearance – these also eventually shrivel and turn black.



Figure 1 Image supplied by Kiwicare

Why this matters:

- 'Burning' can rapidly move throughout the tree, killing branches as it goes
- The ooze is full of bacteria
- Things to look for are dead leaves and branches, blackening of the stems or branches, a 'shepherd's crook' type hood at the end of the stem
- Humid weather in spring is when it is first noticed.

How to prevent and control:

- It is essential to use sterile secateurs or saws. 70% alcohol
- Tools must be sharp to avoid tearing
- Prune approximately 30 cm below the, 'burn' to ensure you have captured all of the disease
- Apply bactericides
- Burn all off cuts
- Use resistant varieties



Figure 2 Note the pruning cut. This person may have not used sterilised tools when they made the cut

Additional Notes:

For many years NZ apples have not been exported to Australia due to what Australia believed to be a biosecurity risk due to Fire blight being on apples. However, the ban on exporting to Australia has been lifted due to the belief that the bacteria cannot live on apples once processed. In saying that, Australia is still very strict on importing NZ apples and the cost per tray to get to Australia makes sending them their cost prohibitive for some growers. See [this article](#) for more details.

Resources:

Yates (no date) *Fire blight*; [How to Control Fireblight | Yates](#)

Kiwicare (no date) [Fire Blight - Advice on Identification and Control. | Kiwicare](#)

Want to find out more? The [Bachelor of Horticultural and Plant Systems](#) is an exciting way to learn more. Contact: Bronwyn Dyer: b.dyer1@massey.ac.nz

Possible Careers using this knowledge: There are many jobs attached to understanding pest and disease control. Agronomist, Grower, Plant and Food scientist, teacher, ecologist, biological control breeders and agents, biosecurity agents, DOC workers.

Do Now Quiz: Why should pruning tools be sharp and clean? What is another management practice, other than spraying, that could be used to prevent fire blight? When is fire blight most prevalent in orchards?