

## Black stem blight

### What is it?

Black stem blight (also known as Asian pear blight) is a bacterial disease of Nashi pear (*Pyrus pyrifolia*) which is similar to fire blight. The disease was first identified in Nashi orchards in South Korea in 1995 and the pathogen *Erwinia pyrifoliae* was described as a new species in 1999. *E. pyrifoliae* is closely related to but distinct from *Erwinia amylovora*, the causative agent of fire blight of apple and European pear. The extent and severity of black stem blight in Korean pear orchards is unknown, however severe losses in fruit production have been reported.

### What do I look for?

The symptoms of black stem blight include black to brown stripes in the leaf midribs, dark brown leaf spot and necrotic petioles. Necrotic symptoms may occur on large parts of the trees and affect entire branches, blossoms and fruitlets.

*E. pyrifoliae* can be differentiated from the closely related Fire blight pathogen *E. amylovora* based on morphological, biochemical and molecular characteristics. In addition, *E. pyrifoliae* is only known to affect Nashi pear (*P. pyrifolia*) and European pear (*Pyrus communis*), whereas *E. amylovora* has a broader host range.



Bacterial growth on an immature pear

Bacterial Genetics and Biotechnology Laboratory



Apple & Pear Australia Ltd.

Compiled by Suzy Perry  
Department of Employment, Economic Development and Innovation



Necrotic symptoms caused by *E. pyrifoliae*

### Where is it found?

The black stem blight pathogen was first detected in Nashi pear orchards near Chuncheon, South Korea in 1995. The disease has not been reported to occur in other countries.

### How can I protect my orchard from Black stem blight?

Check your farm frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common pome fruit pests so you can tell if you see something different.

**If you see anything unusual, call the Exotic Plant Pest Hotline on 1800 084 881**

**EXOTIC PLANT PEST HOTLINE  
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