

EXOTIC PEST FACT SHEET 5

Bacterial wilt of bean (*Curtobacterium flaccumfaciens* pv. *flaccumfaciens*)



What is it?

Bacterial wilt of bean is a disease caused by the bacteria, *Curtobacterium flaccumfaciens* pv. *flaccumfaciens*.

What are the main hosts?

The processed vegetable host crops are beans and peas.

What does it look like?

Bacterial wilt of bean causes plant wilting, seedling death, and pod and seed discolouration. The disease is characterised by the wilting of leaves or leaf parts (Fig 1, 2). The leaves turn brown or display golden/yellow coloured necrotic lesions. The margins of the lesions are irregular. Colour changes (yellowing) and symptoms similar to those that occur on leaves can also appear on pods. Seeds can become infected although the pods may appear healthy. Discolouration of the seedcoat can be an indication of infected seeds. Infection of young plants usually leads to plant death. Older plants that become infected can continue to grow to maturity.

The bacteria are resistant to drying and can remain viable in the soil for at least two years (between rotations).

Why is it an issue?

Bacterial wilt of bean can cause heavy crop losses.

How does it spread?

Bacterial wilt of bean is transmitted within and on seeds. The main pathway for entry is via the seed pathway, by trade in infected bean seeds.

Where are they present?

Bacterial wilt of bean is present in North and South America, Mauritius, Tunisia, Turkey, Iran, parts of Russia (southern, far east), and Australia.

How can I protect my industry?

Check your production sites frequently for the presence of new diseases and unusual symptoms. Make sure you are familiar with common pests and diseases of your industry so you can recognise something different.



Fig 1. Leaves showing symptoms of bacterial wilt caused by *Curtobacterium flaccumfaciens* on a bean plant. Image: Howard F. Schwartz, Colorado State University, Bugwood.org.



Fig 2. Bean plants in the field showing symptoms of bacterial wilt caused by *Curtobacterium flaccumfaciens*. Image: Howard F. Schwartz, Colorado State University, Bugwood.org.