

## Bacterial crown rot

### What is Bacterial crown rot?

Bacterial crown (*Erwinia papayae*) rot is a disease caused by a bacterium called *Erwinia papayae*. The bacteria causes papaya plants to die back and causes significant yield losses in countries where it occurs. If it enters Australia it is likely to have a significant impact on Australia's papaya industry.

### What does it look like?

Bacterial crown rot causes the plants leaves to yellow and die. This is followed by darkened, water-soaked areas forming where the leaves join the stem, the crown or the midrib of the leaves. Fruit can also become infected and take on a water-soaked appearance.

### What can it be confused with?

Other, less studied, exotic bacteria belonging to the *Erwinia* genus can also cause significant damage to papaya plants. Symptoms include dark coloured cankers forming in the leaf axils and the leaves of young seedlings showing small wet lesions. If you see any unusual symptoms consult an agronomist or contact the Exotic Plant Pest Hotline on 1800 084 881.

### What should I look for?

To protect your orchard from Bacterial crown rot you should look for signs of the disease. These include yellowing or dying leaves and any plant tissues that appear to be water-soaked.

### How does it spread?

Bacterial crown rot is caused by a bacterium that could potentially enter the country on papaya plants and plant material from infected countries, on second hand machinery from infected countries or with people who have visited infected orchards while overseas. Maintaining good hygiene, such as disinfecting boots and machinery, will help minimise the risk of this pathogen entering the country.



Water-soaked lesion developing in leaf axil

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## Where is it now?

Bacterial crown rot was first identified in the Caribbean and has since been described from Malaysia. A similar disease was also reported from the Mariana Islands north of Indonesia. This disease is not known to occur in Australia but it is reported in 23 countries as listed below.

### Reported occurrences of Bacterial crown rot

Anguilla	Montserrat
Antigua	North Mariana Islands
Barbados	Philippines
Barbuda	St Croix
Brazil	St Kitts & Nevis
Dominica	St Lucia
Grenadines	Tonga
Guadeloupe	Trinidad and Tobago
Indonesia	Venezuela
Japan	Virgin Islands
Malaysia	
Martinique	

Further countries, in addition to those officially recognised as having the disease, may pose a high risk of introducing this pathogen to Australia. If purchasing overseas propagation material ensure you follow all of the requirements listed on the DAWR BICON website. See <https://bicon.agriculture.gov.au/BiconWeb4.0/> for details.



Infected fruit. Note discoloured flesh

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## How can I protect my orchard from Bacterial crown rot?

Source plant material only from clean, accredited suppliers and preferably obtain material that is certified.

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

**If you see anything unusual, call the Exotic Plant Pest Hotline**

**EXOTIC PLANT PEST HOTLINE  
1800 084 881**

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