

## *Dickeya dianthicola*

### What is it?

*Dickeya dianthicola* is a serious bacterium that causes soft rot and blackleg in potatoes and significant yield losses in potato crops.

*Dickeya dianthicola* can also infect other crops, including some ornamentals (including carnation, lily, chrysanthemum, dahlia, begonia, flaming Katy, freesia, hyacinth and iris), globe artichoke and chicory.

Other pathogens already present in Australia can cause similar soft rot and blackleg symptoms. However, *Dickeya dianthicola* is more aggressive and causes disease at lower infection levels.

### What does it look like?

The first symptom of the disease can be poor emergence due to rotting seed tubers. Plants wilt and typically have slimy, wet, black stems extending upwards from the rotting tuber.

Infected tubers are macerated and have a tapioca-like appearance, but may not have the pungent smell associated with typical blackleg.

*Dickeya dianthicola* can be present in a plant without causing symptoms, particularly if temperatures remain low. Symptoms often develop after a period of hot weather, especially when plants are also stressed.



Blackleg symptoms in a potato stem caused by *Dickeya dianthicola*.  
Photo courtesy of Steve Johnson, Crop Specialist from the University of Maine

### How will it spread?

It is generally accepted the main source for blackleg infection is latently infected seed tubers.

## What can it be confused with

There are other pathogens present in Australia that cause similar symptoms. However, *Dickeya dianthicola* is:

- more aggressive.
- causes disease at lower infection levels.
- will develop after hot weather – not following wet growing conditions.
- does not have the typical, pungent smell associated with other blackleg diseases.
- less able to survive in soil and other environments than typical blackleg.



Blackleg symptoms in a potato stem caused by *Dickeya dianthicola*.  
Photo courtesy of WA Department of Primary Industries and Regional Development)

## What should I do?

Growers can put on-farm biosecurity measures in place to reduce the chance of pests and disease getting onto their properties.

These include:

- using pest-free propagation material and seedlings, sourced from a reputable supplier
- putting up farm biosecurity signs on gates and fences to manage visitors coming onto your property
- avoiding sharing equipment
- keeping equipment and vehicles clean and free of plant matter
- wearing clean clothing before visiting other growers' properties
- teaching farm workers on-farm hygiene practices, what to look for and how to report unusual pests and diseases.
- report suspect symptoms to the Exotic Plant Pest Hotline

**EXOTIC PLANT PEST HOTLINE  
1800 084 881**