

## Bacterial Wilt of Potato

*Ralstonia solanacearum*

While *Ralstonia solanacearum* is not new to the U.S. or other parts of the world, race 3 biovar 2 of this pathogen, which has been detected on potato plants recently, is. In 2003, Bacterial Wilt of Potato plants was detected in five U.S. states. Currently, it is **not present in Rhode Island**.



H. David Thurston, Cornell University



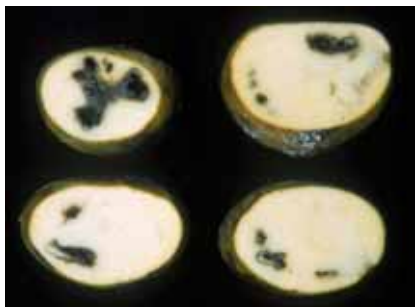
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### Transport:

This bacterium is transported via water. In fields, contaminated surface water from irrigation provides the pathogen movement and allows for a potential establishment of these bacteria in susceptible watercourse weeds. "Ebb and flow" irrigation systems in greenhouses also prove to be highly conducive to bacteria movement.

This pathogen can manifest itself slowly in hosts, producing no symptoms thus complicating detection.

***Ralstonia solanacearum*, race 3 biovar 2, can survive for many years in association with alternate hosts.**



### Damage (Potatoes):

- At the end of each day the leaves on the potato wilt. Overnight they will recover. Eventually however, recovery will not take place and the plant will die.
- Brown staining will be apparent on vascular ring. When tuber is squeezed, pus may exude.
- Pale ooze exuding from the eyes and heel end of potato may be visible. Soil may also adhere to the eyes if oozing.
- Milky white strands will exude from cross-section of a stem if placed in water.

### Information Sources

Emergin Pests *Ralstonia* (*Pseudomonas*) *solanacearum* (E.F. Smith 1986) Yabuuchi et al. 1995 race 3 biovar 2. 2001 December 12. 24 February 2009 <<http://www.pestalert.org/Detail.CFM?recordID=70>>

Bacterial Wilt – *Ralstonia solanacearum* race 3 biovar 2. 25 February 2008. 24 February 2009 <<http://www.massnrc.org/pests/pestFAQsheets/ralstonia.html>>.

### Image Sources

Bacterial Wilt – *Ralstonia solanacearum* race 3 biovar 2. 25 February 2008. 24 February 2009 <<http://www.massnrc.org/pests/pestFAQsheets/ralstonia.html>>.