# Fact sheet





Pineapple leaves invaded by *Erwinia chrysanthemi*, Source:

http://www.ctahr.hawaii.edu/acad/ Research/Downloads/ResearchNews /CTAHR\_Research\_News\_Jan\_07.pd f

## EXOTIC THREATS: BACTERIAL FRUIT COLLAPSE/BACTERIAL HEART ROT

### What is it?

*Erwinia chrysanthemi*, which causes bacterial heart rot and fruit collapse, is a soft rot pathogen. The pathogen can form latent, nearly undetectable infections in planting material. The pathogen is dispersed by wind, wind-blown rain, and insects, most often ants and souring beetles.

#### What do I look for?

Symptoms typically begin as water-soaked lesions on the white basal parts of the leaves in the centre of the whorl. Symptoms progress to "blisters" (gas filled brown streaks on the laminar). It is this symptom that distinguishes bacterial heart rot from Phytopthora heart rot. Fruit collapse usually appears on fruit 2-3 weeks before normal ripening. Infected fruit exude juice and release gas similar to what occurs during fermentation. The fruit shell becomes olive green in colour and cavities develop within the fruit.

Plants 4 to 8 months old which have been initiated from crowns and suckers are most susceptible to infection. If the conditions are favourable, complete collapse of the plant may occur 1-2 weeks after the initial infection.

The Singapore Spanish cultivar and low acid pineapple hybrids are most susceptible. Smooth Cayenne is more resistant but can be affected.

#### Where is it found?

Bacterial heart rot and fruit collapse occurs in Malaysia, Brazil, Costa Rica, the Philippines and Hawaii.

#### Reporting

If you suspect you may have seen bacterial heart rot or fruit collapse, you should report it immediately to maximise the chances of eradicating this pest before it can become established in Australia.

Growers may report suspected exotic pests to the Exotic Plant Pest Hotline (1800 084 881) or can directly contact their relevant state agriculture or primary industries department.

To minimise the risk of disease spread, samples should not be moved until they have been checked by an expert.

This fact sheet is part of the Pineapple Industry Biosecurity Plan. For more information about the Biosecurity Plan, please contact Plant Health Australia.

#### **Sources**

http://www.eppo.org/QUARANTINE/bacteria/Erwinia\_chrysanthe mi/ERWICH\_ds.pdf

Diseases of Tropical Fruit Crops. Edited by R. C. Ploetz. 2003. CABI Publishing, Wallingford



FOR MORE INFORMATION Contact Plant Health Australia

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