

Bean Pythium cottony leak (128)

Summary

- Worldwide distribution. On beans, capsicum, cucumber, tomato, and causes damping off (see **Fact Sheet no. 47**).
- Grey patches on leaves; fungal growth spreading to stems causing wilts; thick cottony growth rots pods in field and storage. Cucumber touching the soil rot.
- Usually a minor disease, except during long rains.
- Cultural control: allow air movement; avoid wounds; stake beans and cucumbers; improve drainage; use mulch; rotate with e.g., root crops; avoid harvesting in wet weather; for damping off (see fact sheet).
- Chemical control: treat seed with fungicides: captan, matalaxyl or thiram; damping-off (see FS above).

Common Name

Cottony leak and stem rot. It is also known as Pythium fruit rot or Pythium cottony leak.

Scientific Name

Pythium species, *Pythium deliense* and *Pythium aphanidermatum*.



Photo 1. *Pythium* sp. causing cottony leak disease on a bean pod. Note that the white cottony growth on the lower part of the pod is the mycelium of the water mould (it is not a fungus).



Photo 2. Cottony leak fungus, *Pythium* sp., developing on stored beans. The water mould develops in storage if the beans are not dried properly after harvest and/or they have been damaged.



Photo 4. Cottony leak, *Pythium* sp., on watermelon.



Photo 3. *Pythium* sp. causing cottony leak disease on a cucumber fruit. Note that the white patch on the lower left of the fruit is the mycelium of the water mould (it is not a fungus).

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Information (and Photo 2) *Diseases of vegetable crops in Australia* (2010). Editors, Denis Persley, et al. CSIRO Publishing; and from (including Photos 1&3) Gerlach WWP (1988) *Plant diseases of Western Samoa*. Samoan German Crop Protection Project, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Germany; and from Melanson RA (undated) Cottony leak in cucurbits. Mississippi State University. (https://extension.msstate.edu/sites/default/files/publications/publications/P3210_web.pdf). Photo 4 Jacquie (Wright) Kami, formerly Plant Pathologist, Secretariat of the Pacific Community, Suva, Fiji.

Produced with support from the Australian Centre for International Agricultural Research under project PC/2010/090: *Strengthening integrated crop management research in the Pacific Islands in support of sustainable intensification of high-value crop production*, implemented by the University of Queensland and the Secretariat of the Pacific Community.

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