

## Bele (Abelmoschus) Phytophthora wilt (149)

### Summary

- Worldwide distribution. On bele bele (*aibika*, *sliperi kabis*, island cabbage, *Abelmoschus manihot*), tomato (see **Fact Sheet no. 157**), and also attacks capsicum, citrus, papaya, passionfruit (see **Fact Sheet no. 154**) and pineapple. A water mould, an oomycete, not a fungus. The wilt is worse in waterlogged soils.
- Spread is in rain splash, ground water, soil on machinery and shoes; perhaps, soil on cuttings, and the horticultural trade.
- Survival is by thick-walled spores. Other types of spores infect and rot the roots, causing plants to wilt.
- Cultural control: plant on ridges and make ditches; remove wilted plants with soil around the roots; avoid land planted previously with e.g., papaya, passionfruit, pineapple, okra; avoid taking cutting from wilted plants; 4-year crop rotations.
- Chemical control: not recommended.

### Common Name

Bele Phytophthora wilt

### Scientific Name

*Phytophthora nicotianae*; previously, *Phytophthora nicotianae* pv. *parasitica*.



Photo 1. Bele wilt, caused by the water mould, *Phytophthora nicotianae*, attacking the roots.



Photo 2. Bele wilt, *Phytophthora nicotianae*, showing the death of the young shoot at the top of the plant.



Photo 4. Root rot caused by *Phytophthora nicotianae*. Note the lack of roots, and that the lower stem has lost its bark, exposing the wood.



Photo 5. Several plants have lost their leaves and are dying due to root and basal stem rot caused by *Phytophthora*

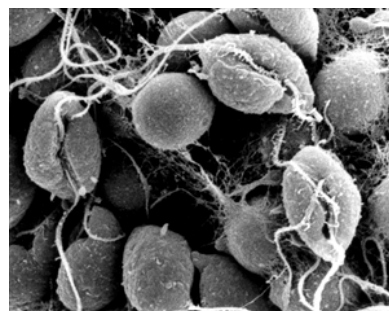


Photo 3. Highly magnified photo of zoospores of *Phytophthora nicotianae*, showing the whip-like hairs used for movement (each zoospore has two).

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Information from Trakunsukharat P (2011) Foot and root rot (*Phytophthora parasitica*): PaDIL - <http://www.padil.gov.au>. Photos 1&3 Mike Furlong, University of Queensland. Photo 2 AR Hardham, Plant Cell Biology Group, Research School of Biology, The Australian National University, Canberra, Australia. Photos 4&5 Pita Tikai, ACIAR ICM/IPM project, Solomon Islands.

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