

# Seedling Damping-Off

Farmer  
Fact Sheet

47

## What is it?

A disease of tomatoes, cabbages, lettuces, and other seedlings, caused by fungi and water moulds. The scientific names are: *Pythium*, *Rhizoctonia*, *Fusarium* and *Phytophthora*.

## Damage

There are two types of damage: a) seeds and seedlings are killed before they grow above the soil, or b) they are killed after they have grown above the soil. Sometimes the seedlings survive an attack, but become stunted or grow slowly.



## How do I identify it?

Look for following: a) gaps in the rows and seeds that are rotten; b) for seedlings that have fallen over with soft rots on the stem or decayed roots (photo, right); and c) for threads of the fungi, and water moulds, over the soil and seedlings (photo, left).

## How to manage seedling damping-off

### CULTURAL CONTROL

- Sterilise soil: a) heat it in an earth oven over hot stones covered in leaves or sacks for at least 1 hour, or b) place soil mix in boxes and treat with boiling water;
- If damping-off occurs in seed beds, move the beds to a different site;
- Water soil and plants with rain water, not with water from ponds, streams, etc.;
- Do not overwater seedlings; ensure the seed boxes have good drainage;
- Raise nursery seed boxes more than 1 metre above ground to avoid rain splash.

RESISTANT VARIETIES: No varieties have been reported to be resistant to damping-off.

### CHEMICAL CONTROL

If cultural control methods fail, treat seed with a fungicide, such as thiram. Fungicides can also be used to treat seedbeds and/or seed boxes. See your MAL extension officer for advice; see leaflet *Growing lettuces, Chinese and English (ball) cabbage the organic way* by Joini Tutua.

AUTHORS Helen Tsatsia • Grahame Jackson

HT works for MAL; GJ is with TerraCircle Inc.



Produced with support from IPPSI:  
Improved Plant Protection in Solomon  
Islands, funded by ACIAR, Canberra