

## Coconut seedling basal stem break (069)

### Summary

- Narrow distribution. East Africa, Solomon Islands. Hosts are coconuts and grasses.
- In the nursery: older leaves die early, white fungal threads and toadstools grow between leaves and seednut. Root decay. In the field: root decay causes little-leaf but, later, palms recover (Solomon Islands). In East Africa, bole rots and death occurs.
- Spread by spores; East Africa, root-to-root contact, wounds.
- Impact uncertain: only one outbreak in Solomon Islands. In East Africa, the situation became confused when a lethal phytoplasma disease was reported from the same area, challenging the fungal nature of the disease.
- Cultural control: in nursery: weed; spacing (> 1m).
- Chemical control: trim nuts, drench in tridemorph.



Photo 1. Toadstools of *Marasmiellus cocophilus* growing from the junction of petiole and coconut husk.

### Common Name

Coconut seedling basal stem break (Solomon Islands), lethal bole rot (the name given to the disease caused by *Marasmiellus cocophilus* in Kenya and Tanzania).

### Scientific Name

*Marasmiellus cocophilus*

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Information from Bock KR *et al.* (1970) Lethal bole rot disease of coconuts in East Africa. *Annals of Applied Biology* 66: 453-464; and Jackson GVH & Firman ID (1982) Seedborne marasmioid fungi of coconuts. *Plant Pathology* 31: 187-188; and Kohler F *et al.* (1997) Diseases of cultivated crops in Pacific Island countries. South Pacific Commission, Pirie Printers Pty Limited, Canberra, Australia; and from Frison EA, *et al.* (eds.), 1993. *FAO/IBPGR Technical Guidelines for the Safe Movement of Coconut Germplasm*. Food and Agriculture Organization of the United Nations, Rome/International Board for Plant Genetic Resources, Rome. ([https://www.bioversityinternational.org/fileadmin/user\\_upload/Coconut\\_361.pdf](https://www.bioversityinternational.org/fileadmin/user_upload/Coconut_361.pdf)); Dr DN Pegler, Kew Botanic Gardens, UK, is thanked for identifying specimens of *Marasmiellus cocophilus* from coconuts of Solomon Islands.

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Photo 2. Little-leaf symptom on a seedling planted out in the field, associated with infection by *Marasmiellus cocophilus* in the nursery.

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