

Pacific Pests, Pathogens and Weeds - Online edition

Betel nut disease (067)

Summary

- Narrow distribution. Only known from Solomon Islands (from Reef Islands). On betel nut. An important disease of unknown cause.
- Yellow spots, up to 2 cm wide, starting on leaves 6 or 7; long red vertical lines of rot, 1-2 cm wide, on the trunks, narrowing to the growing point, where cavities are filled with gum.
- Flowers and buds rot. Palms die, mostly before they produce fruit.
- Molecular tests have shown presence of *Coconut cadang-cadang viroid*-related nucleic acids, but it is not known if these are the cause of the disease.
- Cultural and chemical control: none can be suggested until the cause of the disease is known.

Common Name

Betel nut decay. There is no common name; this disease occurs only in Reef Islands, Solomon Islands, and has been recorded only since the 1970s. It has not been reported elsewhere in Solomon Islands, or in other parts of the Pacific.

Scientific Name

None. The cause is unknown.



Photo 1. Spots are first noticeable on the youngest sixth or seventh leaf.



Photo 2. Thin red lines of rot occur from the top of the palm to the soil.



Photo 4. Internal rot extends through the vascular system to the pith.



Photo 3. Close-up of the lines of red rot.



Photo 5. Leaf production ceases and young leaves are seen as a fan partially exposed at the 'throat' of the palm.



Photo 6. Unexposed parts of the shoot show large areas of decay with cavities filled with gum.

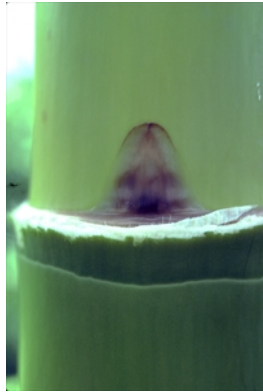


Photo 7. At an advanced stage of the disease, buds rot.

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Information from Hanold D, Randles J (Eds.) Report on ACIAR-funded research on viroids and viruses of coconut palm and other tropical monocotyledons 1985-1993. ACIAR Working Paper No. 51 August 1998. Waite Agricultural Research Institute, University of Adelaide, Glen Osmond, South Australia. (https://www.aciar.gov.au/sites/default/files/legacy/node/2259/report_on_aciar_funded_research_on_viroids_and_vir_88070.pdf).

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