

Coconut embryo rot (070)

Summary

- Widespread distribution. In South America, north Africa, Oceania. On coconut, banana, taro and weeds, causing minor diseases. It is also reported as a sheath rot disease of maize, and a crown rot of rice, but not in the Pacific. Occasionally important.
- The fungus also causes taro corm rots and sheath rots on banana and maize. Spores enter the calyx end of seednuts while still attached to the palm, infecting the embryo as it germinates. Later, the fungus grows on the shoot or enters the nut cavity destroying the contents.
- In the nursery, toadstools form on the germinated and dead seednuts. In Samoa, losses in Malayan Dwarf are about 50%.
- Cultural control: local tall varieties are tolerant (Samoa and Solomon Islands); those with Malayan Dwarf as female parent are very susceptible (Samoa).
- Chemical control: none recommended; post-harvest fungicides found to be ineffective.

Common Name

Coconut embryo rot, coconut pre-emergence shoot rot, banana sheath rot, taro corm rot, sheath rot of maize.

Scientific Name

Marasmiellus inoderma (previously known as *Marasmiellus semiustus*).



Photo 1. Cottony growth of *Marasmiellus inoderma* at the base of a coconut shoot.



Photo 2. Seedling with cottony growth of *Marasmiellus inoderma* over the leaves. The growth of the seedling is poor due to the infection.



Photo 4. New leaves of banana are slow to emerge due to infection of pseudostems by *Marasmiellus inoderma*.



Photo 5. Cottony growth of the fungus, *Marasmiellus inoderma*, between leaves of banana.



Photo 3. Toadstools of *Marasmiellus inoderma* on coconut. They developed on a coconut log, but similar toadstools forms on seednuts.



Photo 6. Toadstools of *Marasmiellus inoderma* on the rotting trunk of banana.



Photo 7. Close-up of the sporophore (toadstool) of *Marasmiellus inoderma* on banana.



Photo 8. Shallow rots in a taro corm due to infection by *Marasmiellus inoderma*.



Photo 9. Toadstools of *Marasmiellus inoderma* on the dead and decaying petioles (leaf stalks) of taro.



Photo 10. *Marasmiellus inoderma* showing the white, widely-spaced gills, many of which do not reach the stalk. Note the orange cottony growth of the fungus at the base of the stalk.

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