Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Taro Hirschmanniella nematode (010)



Photo 1. Early infection of a corm by mitimiti nematode, *Hirschmanniella*. At this stage, decay is mostly in the outer parts of the corm.



Photo 3. Adult Hirschmanniella species.



Photo 2. Late symptoms of mitimiti; infection by the nematode, and secondary rot-causing organisms, has caused complete decay of the corm.



Photo 4. Stunted taro growing on the atoll of Ontong Java, Solomon Islands. Taro was a major crop in the atoll before the introduction of *Hirschmanniella*.

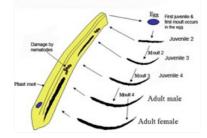


Diagram. Life cycle of Hirschmanniella.

Summary

- Narrow distribution.In Papua New Guinea, Solomon Islands and Taiwan, in dry land and swamps. An important nematode disease.
- The nematodes attack roots causing wilts, and invades corms from the base, causing brown, crumbling rots. Healthy parts turn red.
- Spread short distances by swimming or being moved in ground water. Long distance movement in planting pieces ("tops").
- Cultural control: remove roots from the tops, and inspect corm piece; do not plant down slope from previously infected fields; use hot water (51°C for 10 mins) to establish source of disease-free plants.
- Chemical control: none recommended.

Common Name

Mitimiti disease, Mitimiti corm rot

Scientific Name

Hirschmanniella miticausa

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Photo 3 Hanny van Megen, Wageningen UR. (www.wgeningenur.nl). Diagram Sailaja K Nematode biology, Physiology and Ecology.

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