

Taro corm rots - post-harvest (179)

Summary

- Worldwide in the tropics, on many crops. Important diseases.
- Fungi, water moulds (oomycetes) and bacteria cause the rots. They enter corms at harvest when suckers are broken off. The common ones are: (i) *Athelia* – pink with white border; (ii) *Pythium* - white crumbly rot; (iii) *Phytophthora* taro leaf blight - firm brown rot; (iv) *Lasiodiplodia* - black, spongy, sour-smelling rot; and (v) *Erwinia* - soft rot.
- Cultural control: harvest, remove suckers and soil, and store in (i) leaf-lined soil pit, or (ii) plastic bags or (iii) plastic-lined cardboard boxes, if for markets.
- Chemical control: improve storage in plastic bags by first dipping corms in bleach (1% for 1-2 mins).

Common Name

Taro corm rots (post-harvest)

Scientific Name

The following are the commonly recorded rots that develop in taro corms after harvest:

Athelia rolfsii (see Fact Sheet no. 11)

Lasiodiplodia (Botryodiplodia) theobromae

Pythium splendens

Phytophthora colocasiae (see Fact Sheet no. 14)

Erwinia species: *Erwinia carotovora* subsp. *carotovora* (see Fact Sheet nos. 101, 214, 289, 296); now renamed *Pectobacterium carotovorum* subsp. *carotovorum*, and *Erwinia corysanthemii*.



Photo 1. The dry white crumbly rot at the bottom of the corm is caused by *Pythium splendens*. The pinkish tissues above and slightly to the right are a reaction to infection by the corm tissues. The white semi-circle on the left is the cottony growth of *Athelia rolfsii*.

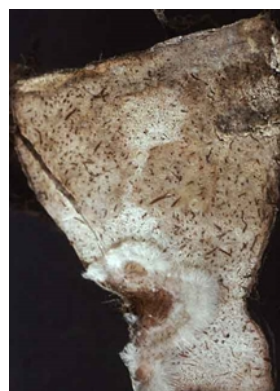


Photo 2. Light brown firm rot caused by *Phytophthora colocasiae*. The rot on the lower left side is caused by *Athelia rolfsii*. The corm has been incubated at high humidity overnight to stimulate the growth of the fungus.



Photo 4. Black spongy rot caused by *Lasiodiplodia theobromae*. These rots usually follow those of *Pythium* and *Phytophthora*, or they come in later after the corms have started to lose moisture.

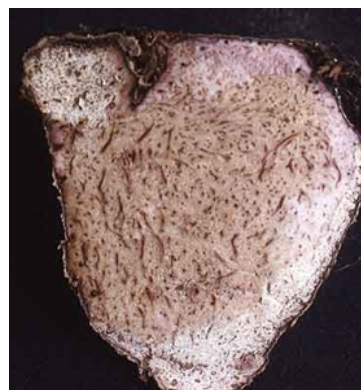


Photo 3. Light brown firm rot in a taro corm caused by *Phytophthora colocasiae*, after about 8 days.

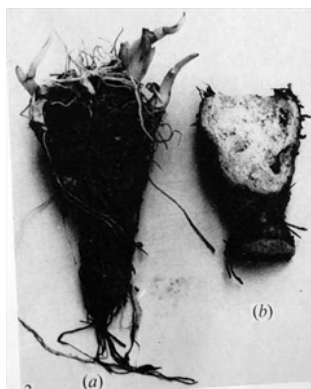


Photo 5. These two corms have been in a plastic bag for 4 weeks; the one on the left is still healthy whereas the one on the right has been destroyed by the soft rot

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Information from and from Biosecurity Australia (2011) Review of import conditions for fresh taro corms. Biosecurity Australia, Canberra. (https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/ba/plant/2011/taro/Review_of_Import_Conditions_for_Fresh_Taro_Corms_clean.pdf); and from Carmichael A, et al. (2008) TaroPest: an illustrated guide to pests and diseases of taro in the South Pacific. ACIAR Monograph No. 132, 76 pp. (<https://ird.spc.int/about-ird/ird-project-partners/taropest>).

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