Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Taro rhabdovirus diseases (089)

Photo 1. The dark green distorted area on the leaf is typical of CBDV in the "male" taro, the common type of taro in the Pacific islands. This is not a serious disease as only 1-2 leaves are affected.

Photo 2. Bobone on the "female" taro variety Oga showing stunted distorted leaves (Malaita, Solomon Islands) after infection by CBDV.

Photo 3. Leaf infected with TaVCV showing the yellowing is along the smaller veins giving a feather-like symptom.

Photo 4. Leaf with symptoms of TaVCV. Note the yellow feather patterns are starting to decay as the leaf ages; this does not happen with *Dasheen mosaic virus.*

Photo 5. Feather like pattern on a leaf infected with TaVCV. Note the insects on the leaf are *Tarophagus* sp., which are likely to spread this virus.

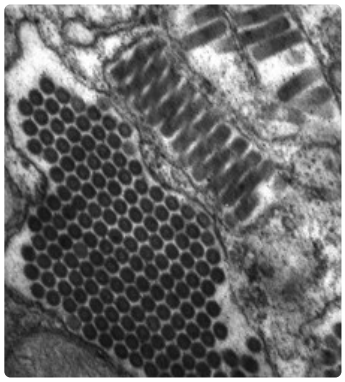

Photo 6. Rod-shaped virus particles of TaVCV in a taro leaf. The virus particles can be seen lengthways and end on.

Photo 8. The Philippine egg-sucking bug, *Cyrtorhinus fulvus*.

Photo 9. Nymphs, winged and wingless adults of *Tarophagus* species, the planthopper that spreads *Colocasia bobone disease rhabdovirus,* and most probably *Taro vein chlorosis virus*.

Summary

- Narrow distribution. Philippines (TaVCV-*Taro vein chlorosis vir*us), Oceania (TaVCV and CBDV-*Colocasia bobone disease virus*). TaVCV exists as at least two strains. Important virus diseases.
- CBDV infects all taro. Alone it causes dark green distorted patches in leaves that then recover, or with other viruses (unknown) it causes alomae, and plants die. In a few taro resistant to alomae it causes bobone: plants have stunted, thickened, green twisted leaves, but eventually they recover and appear healthy.
- TaVCV infects all taro. It causes bright yellow, feather-like patterns, often above the veins at the margins of the leaves. The veins turn brown with age.
- Spread of CBDV by planthoppers; spread of TaVCV is presumed to be by the same insects.
- Natural enemies: an egg-sucking bug limits populations of planthoppers.
- Cultural control: plants with alomae should be removed as soon as the disease is seen and burnt (cover the plant with a bag, then pull out the plant so that the insects are captured); avoid growing plants that develop alomae and those that develop bobone in the same field.
- Chemical control: use synthetic pyrethroids against planthoppers, but they will likely kill natural enemies.

Common Name

Bobone and an unnamed disease

Scientific Name

Colocasia bobone rhabdovirus (CBDV) and *Taro vein chlorosis virus* (TaVCV).

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