

Pacific Pests, Pathogens and Weeds - Online edition

Breynia bunch (478)

Summary

- Narrow distribution. Malaita and Guadalcanal, Solomon Islands.
- Serious disease of *Breynia*, a secondary forest species, associated with a phytoplasma identified by electron microscopy. Note, phytoplasma are bacteria that grow only in the phloem of plants; none have so far been cultured in the lab.
- Shoots proliferate developing massive bunches of little leaves, along the trunk, but mostly along branches. Dieback eventually occurs, and death, as trees become overgrown by other species.
- Spread: leafhoppers or planthoppers are likely to spread the disease, but none identified so far.
- Cultural and Chemical control: none recommended. *Breynia* is not a tree of economic importance.

Common Name

Breynia bunch

Scientific Name

Breynia bunch phytoplasma disease.



Photo 1. *Breynia* bunch on lower parts of a branch of *Breynia cernua* showing the exceptional branching and little leaf symptoms typical of infection.



Photo 2. *Breynia* bunch on *Breynia cernua* at an early stage where it is confined to some branches only.



Photo 4. Defoliation and dieback of *Breynia cernua* with *Breynia* bunch phytoplasma disease.



Photo 3. *Breynia cernua* with severe symptoms of *Breynia* bunch on all branches.



Photo 5. Close-up of stems on *Breynia cernua* with *Breynia* bunch showing weak branching shoots and small light green leaves, some of which appear to have died.

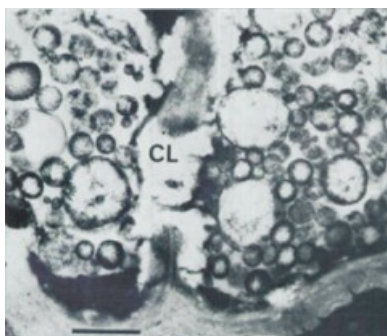


Photo 6. Rounded phytoplasma cells in two sieve cells of the phloem from leaves with Breyntia bunch. (CL is callus between the two cells.)

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Information (and Photo 6) from Dabek AJ, Jackson GVH (1977) Association of mycoplasma-like organisms with Breyntia bunch, a newly discovered disease on Malaita, Solomon Islands. *Phytopath. Z.* 90:132-138. JPM Brenan, Royal Botanic Gardens, Kew, UK, is acknowledged for the identification, distribution and economic significance of *Breyntia cernua*.

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