

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



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



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.

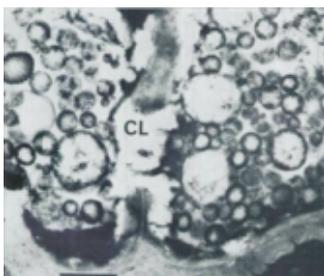


Photo 6. Rounded phytoplasma cells in two sieve cells of the phloem from leaves

with Breyenia 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 Breyenia 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 *Breyenia cernua*.

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