Pacific Pests, Pathogens, Weeds & Pesticides - Online edition

Banana bunchy top (121)

Summary

- Restricted distribution. Asia, Africa, Oceania. On bananas and other *Musa* species. BBT is caused by a virus. It is spread by aphids, and in suckers for planting. Major losses occur in 2-3 years.
- Dark-green dots and dashes along leaf veins (insert).
- Cultural control: regular monitoring and removal of plants as soon as BBT seen: (i) kill aphids: spray with kerosene or insecticide; (ii) dig out the matt or kill the plant with herbicide (e.g., glyphosate).
- Chemical control: to kill aphids on diseased plants only, (i) bananas for home – use soap, white or horticultural oils (or kerosene); (ii) commercial plantations – use synthetic pyrethroids. Note, chemicals will not prevent spread of BBT.

Common Name

Banana bunchy top

Scientific Name

Banana bunchy top nanavirus. There are 2 groups of BBTV isolates from different regions: the South Pacific group (including Australia, Burundi, Egypt, Fiji, India, Tonga, Western Samoa) and the Asian group (including Philippines, Taiwan, Viet Nam). The mean sequence difference between the two groups has been reported as approximately 10 percent. The abbreviation is BBTV.

Photo 1. Banana plants of different ages showing symptoms of *Banana bunchy top virus* disease. Notice the stunted plants and the colour of the leaves, which are pale yellow at the margins.

Photo 2. Symptoms of *Banana bunchy top virus*. Notice the leaves are upright, stunted and tend to cluster in the throat of the plant; leaves like this are said to be 'choked', and give the bunchy top symptom.

Photo 3. Underside of a banana leaf showing veins that have dark and light areas (dots and dashes) along them. The veins near the midrib bend down, 'hooking' into it.

Photo 4. Colony of the banana aphid, *Pentalonia nigronervosa*. Note the dark colour of the adults and the nymphs. The dark veins of the winged adults can just be seen on the insect at the top left corner.

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Information from CABI (2015) Banana bunchy top virus (bunchy top of banana) Crop Protection Compendium. (https://www.cabi.org/cpc/datasheet/8161); and from Banana bunchy top virus (2017) Plant Biosecurity and Product Integrity, Department of Primary Industries. NSW Government, Australia. (https://www.dpi.nsw.gov.au/biosecurity/plant/insect-pests-and-plant-diseases/bunchy-top) and from Bunchy top, banana - Australia (Queensland, New South Wales) Alert. ProMED. (http://www.promedmail.org). Photo 1 Richard Markham. ACIAR, Canberra.

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