



Young leaves are yellow and all bunched up



Suckers: leaves are stiff, narrow,



Aphids are small, black insects that carry the virus

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Banana Action Group

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UNIVERSITY OF HAWAI'I AT HILO
College of Agriculture, Forestry and Natural Resource
Management (CAFNRM)

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Plant Industry Division

HAWAI'I BANANA INDUSTRY ASSOCIATION
(HBIA)

MAUI INVASIVE SPECIES COMMITTEE



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Banana Bunchy Top

Control for Homeowners



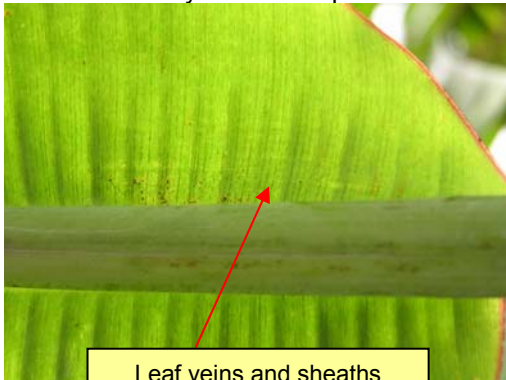
Diseased Banana Plant

- Inspect for diseased plants
- Control aphids
- Destroy infected plants properly
- Do not move banana corms, suckers, stems or leaves around the islands.
- Plant virus-free plants

Stop the Spread of Bunchy Top!

Stopping banana bunchy top disease in Hawai'i is everyone's business!

INSPECT FOR DISEASED PLANTS. Do you know how to recognize banana bunchy top disease? Check your plants at least twice per month for disease symptoms. All diseased plants should be destroyed immediately as described herein. Some symptoms on older plants are hard to see. Diseased suckers are easier to identify than older plants.



Leaf veins and sheaths have "Morse code" streaks



Leaf rib has green J-hooks, best seen from underneath

CONTROL APHIDS FIRST. Controlling the aphid vector is the most important part in controlling the spread of BBTV. Treatment of BBTV-infected plants begins with treating aphids and ants on diseased bananas and surrounding plants to reduce spread of the virus aphids to healthy banana plants. Aphids are controlled by using sprays of insecticidal soap or approved pesticides. Soapy water and oil sprays can kill aphids on contact. Aphid control should be a regular, long-term practice. Do not chop diseased plants with aphids because the aphids will fly away to infect other plants.



Aphids hide under leaf sheaths

DESTROY INFECTED PLANTS. All of the mat or plants forming the group of plants must be destroyed even if only one of the suckers is infected. After controlling the aphids on the plants, one may mechanically remove the main corm and any sucker coming from the mother plant. The corm is chopped, dried and left as mulch to avoid re-growth. Killing infected plants chemically requires Roundup UltraMAX™ or other herbicide that specifies its use as a bananacide on the label. *Be sure to follow all pesticide label directions.* Leave treated plants to die in place and use later as mulch. Replant bananas in the treated area after the treated bananas decompose.

PLEASE DO NOT MOVE BANANAS AROUND THE ISLANDS. This includes banana stems, leaves, corms and suckers. It is safe to move and eat banana fruits. Moving banana material spreads the virus and the aphids to new areas.

PLANT HEALTHY SUCKERS. Suckers with bunchy top will not make bunches and are a source of disease. It is important to plant virus-free suckers; avoid suckers from a mother plant with bunchy top disease.

CONTACT INFORMATION

UH-CTAHR
Cooperative Extension Service (808) 956-7138

Banana Bunchy Top Web Site
<http://www2.hawaii.edu/~banana>

Email: banana@hawaii.edu

Hawaii Department of Agriculture (808) 973-9538

Maui Invasive Species Committee (808) 573-6472

Please report new outbreaks of bunchy top to the Hawaii Department of Agriculture