Little cherry virus -2

Facts and controls

Fruit Tree Clean Plant Network; WSU-IAREC, Prosser
• Small cherries

• Higher packing house cull percentage

• Negative impact on color, shape & taste

Fruit Tree Clean Plant Network; WSU-IAREC, Prosser
Symptoms

- Bing & Sweetheart relatively tolerant
- Severe symptoms first year of infection
- Fruit size & color return to NEAR normal, but still reduced
- Fruit flavor never recovers

Little cherry virus-2 on ‘Sweetheart’

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Little cherry disease can be caused by one of two agents

- Little cherry virus -1
  - Prevalent in Eurasia, but also with limited distribution in North America
  - Insects that transmit this virus are unknown

- Little cherry virus -2
  - Most common form of the disease found in western North America
  - Transmitted by at least one species of mealybug

Western X disease appears similar

- Actually caused by special group of bacteria
• Apple mealybugs spread the little cherry virus-2
  – Can be controlled with insecticide spray

• It is highly likely other types of mealybugs transmit the virus, but not confirmed
Transmission

• Transmitted via grafts of non-certified budwood or rootstocks

• Root grafting can pass virus on to healthy trees

• Best defense is to plant virus-tested trees from certified nurseries. Click here for a list of certified nurseries

Fruit Tree Clean Plant Network; WSU-IAREC, Prosser
• Control mealybug vectors

• Control wild cherries (bitter cherry) near orchard

• Immediate & proper removal of infected trees

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Proper tree removal

• As cut tree limbs start to dry, the insects (and viruses) may move to nearby trees.

• To prevent vector (and virus) movement.
  – Apply good cover spray of broad spectrum insecticide/miticide to tree about 7 days before cutting.

Goal: Prevent the spread of virus

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Proper Tree Removal

- Or remove trees in winter while insects are dormant.
- Remove all of the wood from the orchard before mild spring weather.

Even though Bing and Sweetheart trees can “bounce back” after virus infection, but they never return to full production.

Healthy cherry tree surrounded by trees infected by little cherry virus-2.

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Things to consider

- Even when you remove an infected tree, the virus may still be a threat
- Keep an eye on surrounding trees for the next 2 to 3 years
- If in doubt, have trees tested
Things to consider

• Ignore the disease and it will continue to spread
  - To nearby trees
  - To your neighbors’ orchards

• Little cherry disease reduces economic viability of your orchard
  - Decrease in yield
  - Increase in culls
  - Fruit flavor never recovers

Above: Cherries with little cherry virus
Below: Virus-free Bing cherries

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Questions?

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