

Bacterial Wilt on Cucurbits (*Erwinia tracheiphila*)



Figure 1 Wilt symptoms



Figure 2 Striped, 1/5-1/4" long

Damage

On cucumbers and muskmelon, infected leaves turn dark green and wilt during the day, but recover at night or on cloudy days. Later the infected leaves wilt and die. On pumpkin and squash plants, only the margins of leaves die.

When Are They Active

The bacterial wilt pathogen is spread by cucumber beetles ingesting bacteria when feeding on infected plants, which is spread to new plants through their feces and contaminated mouthparts. Even though the spotted and the striped cucumber beetles can spread the pathogen, the striped beetle is a more serious problem in Wisconsin. These beetles become active in mid-spring, often mid-May, when temperatures increase. However, there is no good way of predicting when the activity will begin.

Susceptible Plants

Primary crops affected are cucumbers and muskmelon. Pumpkins and squash may also be affected but damage is not as severe. Watermelon appears not to be affected and certain varieties of cucumber and squash show varying degrees of resistance to this disease.

Prevention Methods

Control involves preventing the beetles from accessing the plants. Cover young plants, which are more susceptible to feeding damage and bacterial wilt infection, with floating row cover. Uncover flowering plants to allow bees to enter and pollinate. Grow susceptible crops on rotation every third year. Grow varieties that tolerate bacterial wilt, like butternut or acorn squash and Saladin and County Fair 83 cucumbers.

Treatment Methods

Scout for adult beetles 2-3 times per week early in the season (May) and weekly thereafter. Pay particular attention to field edges where beetles initially congregate. Smash or hand-pick adults. If bacterial wilt is spotted, remove diseased plants immediately.

Additional Information/Resources

- UW Extension Bulletin [A3272 Vine crops disorder: Bacterial wilt](#)
- [Wikipedia Bacterial Wilt](#)
- UW Extension Fact Sheet [XHT1092 Cucumber Beetles](#)
- University of Minnesota Extension [Cucumber beetles in vegetable gardens](#)
- Dane County UW Extension Horticulture Hotline 608-224-3721 (M-F 9 a.m.-12 noon, April 15-October 31) or horticulture@countyofdane.com