# Verticillium Wilt (Verticillium albo-atrum/V. dahliae)







Figure 2 Verticillium wilt potato tuber



Figure 3 Verticillium wilt tomato plant

## **Damage**

Wilting is the most characteristic symptom of infection by verticillium wilt. Wilting symptoms may appear first on older, bottom leaves. Leaf edges and areas between the veins turn yellow and then brown; the leaves dry up and drop prematurely. The upper shoots may also wilt especially during mid-day. Leaf tips curl upward at the margin and defoliation may continue up the plant. In affected plants only part of the plant, such as one or two stems, will be wilted at first. Diseased plants usually appear in patches within the growing area.

### When It Is Active

Symptoms usually appear on the lower leaves in mid-August. Infected plants wilt during the warmest part of the day, and then recover at night. This disease most commonly develops when temperatures are between 65° and 83°F.

## **Susceptible Plants**

Tomatoes and potatoes, cucumber, eggplant, pepper, rhubarb, watermelon, artichoke, beet, broad bean, strawberries, and raspberries.

#### **Prevention Methods**

Do not repeatedly grow crops susceptible to verticillium wilt in the same area of your garden each year. Try to plant vegetable varieties that are resistant to verticillium wilt, especially tomato varieties (labeled V on seed packages). Plant early-maturing varieties rather than late-maturing ones. Remove and destroy any infected plant material to prevent the fungi from overwintering in the debris and creating new infections. Disinfect any tools that may have come into contact with infected areas. Keep gardens weed-free since many weeds are hosts for the pathogen.

### **Treatment Methods**

Plants infected with Verticillium cannot be cured and will eventually die.

# **Additional Information/Resources**

- UW Extension Garden Fact Sheet XHT1146 Verticillium Wilt of Vegetables
- University of Minnesota Extension Verticillium Wilt of Tomatoes and Potatoes
- Cornell University <u>Verticillium Wilt of Tomato</u> (Source of Fig. 3, below)
- Missouri Botanical Garden, William T. Kemper Center for Home Gardening, Tomato Diseases and Disorders

Photo Credits: Figure 1-UW Extension Garden Fact Sheet Verticillium Wilt of Vegetables, photo courtesy of Amanda Gevens; Figure 2-University of Minnesota Extension Verticillium Wilt of Tomatoes and Potatoes publication; Figure 3-Cornell University Verticillium Wilt of Tomato publication