



# Bacterial Wilt

*Curtobacterium flaccumfaciens* pv. *flaccumfaciens*



FIGURE 1



FIGURE 2



FIGURE 3



# Bacterial Wilt

*Curtobacterium flaccumfaciens* pv. *flaccumfaciens*

**AUTHORS:** H.F. Schwartz (Colorado State University), M.A.C. Langham (South Dakota State University), R.M. Harveson (University of Nebraska), and G.D. Franc (University of Wyoming)

**PHOTOGRAPHS:** Courtesy of R.M. Harveson & H.F. Schwartz [06/09]

**COMMON HOSTS:** Common bean, Cowpea, Soybean

**SYMPTOMS (ON COMMON BEAN):**

**FIGURE 1** • Wilting or flaccid leaves, interveinal chlorosis and necrosis on upper and lower leaf surfaces; small water-soaked areas may be visible on lower surface

**FIGURE 2** • Necrotic areas may become more golden brown with age and water-soaked areas are more difficult to detect, dead leaves may remain attached to plants

**FIGURE 3** • Elongated, water-soaked and necrotic lesions may form on stems, petioles and occasionally pod sutures

**FACTORS FAVORING:**

- Infected seed, infested debris and volunteers from previous seasons
- Rainstorms, hail damage and irrigation
- Warm temperatures with daily highs greater than 32°C [90°F]

**ADDITIONAL DIAGNOSTICS AVAILABLE AT:**

<http://legume.ipmpipe.org>

<http://wiki.bugwood.org/PIPE:Legume>

<http://www.npdn.org/DesktopDefault.aspx>