

Huang Long Bing, or Citrus Greening

Citrus greening—a disease caused by a bacterium that can infect most citrus varieties and some ornamental plants—was first detected in the United States in August 2005 in Miami-Dade County, FL. The



Figure 1

disease has seriously affected citrus production in India, Asia, Southeast Asia, the Arabian Peninsula, and Africa. Transmitted primarily by an insect called the Asian citrus psyllid, the disease could seriously impact the citrus industry and residential and ornamental plantings here in the United States.

Identification of Citrus Greening and the Asian Citrus Psyllid



Figure 2

Figure 3



1. Foliage: Early symptoms are small, yellowed leaves on one limb or section of the tree canopy. The most characteristic symptoms of citrus greening are blotchy mottling of the leaves (fig. 1) and leaf yellowing (fig. 2). Other symptoms are yellowed shoots, twig dieback, poor flowering, and stunting.

2. Fruit: Fruit are small, poorly colored, and/or lopsided (fig. 3). Fruit from trees affected by citrus greening taste bitter, medicinal, and sour. Seeds usually abort, and fruit set (formation) is poor. Symptoms vary

according to time of infection, stage of the disease, tree species, and tree maturity.

3. Insect Associates: The Asian citrus psyllid (*Diaphorina citri*) is the insect most closely associated with the spread of citrus greening. Figure 4 depicts adults and figure 5, a nymph.

To learn more about citrus greening, please visit our Web sites at: <http://www.aphis.usda.gov/ppq/ep/citrus_greening/index/html> or <<http://www.doacs.state.fl.us/pi/enpp/ento/citrusgreening.html>>.

Figure 4



Figure 5

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