

PESTS NOT KNOWN TO OCCUR IN THE UNITED STATES OR OF LIMITED DISTRIBUTION, NO. 27: CITRUS CANKER

Prepared by USDA, APHIS, PPQ, Biological Assessment Support Staff, Federal Building Room 626, Hyattsville, MD 20782

Dec., 1982

Kingdom: Division Procaryotae: The Bacteria

Part: Family Gram-negative aerobic rods and cocci: Pseudomonadaceae

Pest CITRUS CANKER or CITRUS BACTERIAL CANKER DISEASE (CBCD)
 (including biotypes/pathotypes A, B, and C)
Xanthomonas citri (Hasse) Dowson 1939 or
Xanthomonas campestris pv. citri (Hasse 1915) Dye 1978

Selected Common names: Asiatic, A type, or true canker; cancrisis
Synonyms B, B type, or false canker; Galego (Mexican, Key) lime,
 or type C canker

 Scientific names: Bacillus citri (Hasse) Holland 1920,
Bacterium citri (Hasse) Doidge 1916, Phytomonas citri
(Hasse) Bergey 1923, Pseudomonas citri Hasse 1915
(Kothekar 1978, personal communication).

Economic Citrus canker is a serious disease adversely affecting
Importance both the appearance and flavor of commercial citrus
 fruits. In all countries where it occurs this disease is
 one of the most damaging, especially where the pathogen
 causes defoliation and fruit drop. Rapid spread and the
 quick onset of high severity make necessary the immediate
 implementation of difficult and very expansive controls.

 The citrus canker pathogen was first introduced into
 Florida around 1912 in a nursery in Monticello, and was
 recognized as a new disease in 1913. The source of
 infection appears to have been infected trifoliolate-orange
 (Poncirus trifoliata) seedlings from Japan shipped to
 Alabama, Florida, and Texas.

 Losses were heavy and drastic actions were required to
 eradicate this disease, one of the worst diseases of
 citrus ever introduced into the United States. Eradi-
 cation was accomplished in Alabama (1927), Georgia (1918),
 Louisiana (1940), South Carolina (1917), and Texas (1943).
 The cost of eradication was \$2,500,000 in Florida (1927)
 where 257,745 grove trees and 3,093,110 nursery trees were
 destroyed (Knorr 1957).