

11.1 Incidence of Huanglongbing on Several Sweet Orange Cultivars Budded onto Different Rootstocks at the Citrus Experimental Station (EECB), Bebedouro, São Paulo, Brazil

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Huanglongbing (HLB), caused by *Candidatus Liberibacter asiaticus* and *Ca. L. americanus* and vectored by *Diaphorina citri* Kuwayama, was first reported in 2004 in Brazil and it is currently widespread in São Paulo State (Belasque et al., 2010). The EECB, in partnership with Embrapa Cassava & Fruits, conducts a citrus improvement program aimed to select scion and rootstock Citrus cultivars mainly focused on the resistance or tolerance to biotic and abiotic stresses. In 2006, the first HLB-infected tree was reported at the EECB, and since then, a program of inspection and removal of symptomatic trees has been applied, recording disease incidence data. About 200 sweet orange scion/rootstock combinations are under evaluation in trees from 4 to 20 years of age. Main commercial rootstocks such as Rangpur lime, Swingle citrumelo, and Sunki and Cleopatra mandarins are considered, as well as some hybrids, mandarins, miscellaneous genotypes obtained from germplasm banks, and some introduced materials. Sweet orange cultivars and clones primarily correspond to new budlines obtained from germplasm banks and several old budlines from regional selections that were sanitized by shoot tip grafting (STG) and inoculated with the PIAC CTV strain for cross protection. Sweet orange scions introduced from different countries and regions of the world are also under evaluation. The effects of plant age, rootstock cultivar, scion maturation period, budline type, different clones of a given cultivar, plant localization relative to the plot borders, and the interaction of all these factors on HLB incidence will be discussed.

Reference

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