

10.4

HLB Progress on Tahiti acid lime grafted onto eight rootstocks

Stuchi, E.S.^{1,2}, Reiff, E.T.², Sempionato, O.R.², Parolin, L.G.², and Bassanezi, R.B.³

¹Embrapa Cassava & Fruits, Cruz das Almas, Brazil

²Citrus Experimental Station, Bebedouro, Brazil

³Fundecitrus, Araraquara, Brazil

The State of São Paulo is the main Tahiti (Persian) lime producer in Brazil with 65% of 43,000 ha grown in Brazil. In 2003, an experiment was planted in the Citrus Experimental Station (EECB), Bebedouro, Northern São Paulo State, with the objective of characterizing the performance of Tahiti acid lime grafted onto eight rootstocks: Davis A and Flying Dragon trifoliolate oranges, Swingle citrumelo, HRS 849 [“citradia 1708” (Argentina trifoliolate orange x Smooth Flat Seville)], Morton citrange, Rangur lime and Volkamer lemon, at 8 x 5 m spacing. In 2004, citrus huanglongbing (HLB), was first reported in the São Paulo State and the trees in the experiment started to show HLB symptoms in 2009. From July 2010 to May 2012, disease severity was evaluated four times and the bacteria titer quantified once. The numbers of qPCR positive replications were in a range of five to eight. Severity data was used to calculate the area under the disease severity progress curve (*AUDSPC*). The data were analyzed by Fisher LSD test (5%). Flying Dragon and Davis A trifoliolate oranges, and Swingle citrumelo, had lower values of *AUDSPC*, differing from Morton citrange, Orlando tangelo, Rangpur lime and Volkamer lemon. The citradia HRS 849 [citradia 1708 (Argentina trifoliolate orange x Smooth Flat Seville) had intermediate behavior. The canopies were removed but the rootstocks are still alive, so, new studies using the rootstock’s new shoots and the roots will be done aiming to quantify *Candidatus* Liberibacter asiaticus titer in them and to confirm the rootstock’s tolerance identified in the canopies.

Financial support: PRODETAB and FAPESP