UC Riverside

Journal of Citrus Pathology

Title

HLB Progress on Tahiti acid lime grafted onto eight rootstocks

Permalink

https://escholarship.org/uc/item/9br769gr

Journal

Journal of Citrus Pathology, 1(1)

Authors

Stuchi, E. S. Reiff, E. T. Sempionato, O. R. et al.

Publication Date

2014

DOI

10.5070/C411025262

Copyright Information

Copyright 2014 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

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

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 trifoliate oranges, Swingle citrumelo, HRS 849 ["citradia 1708" (Argentina trifoliate orange x Smooth Flat Sevile)], 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 trifoliate 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 trifoliate orange x Smooth Flat Sevile) 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

¹Embrapa Cassava & Fruits, Cruz das Almas, Brazil

²Citrus Experimental Station, Bebedouro, Brazil

³Fundecitrus, Araraquara, Brazil