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Low acquisition rates of '*Candidatus* Liberibacter asiaticus' by *Diaphorina citri* Kuwayama from citrus plants exposed to high temperatures

Lopes, S.A.[1], Luiz, F.Q.B.Q[1]., Martins, E.C.[1], Fassini, C.G.[1], Sousa, M.C.[1], Barbosa, J.C.[2], and Beattie, G.A.C.[3]

[1]Fundecitrus, Araraquara
[2]UNESP, Jaboticabal, SP, Brazil
[3]University of Western Sydney, Penrith South DC, Australia

'*Candidatus* Liberibacter asiaticus' (Las) is the most prevalent liberibacter species associated with huanglongbing (HLB) in Brazil. Within the state of São Paulo (SP), the disease spread more rapid to regions with relatively mild summer temperatures. This suggests that climate can influence disease spread. In order to test this hypothesis, Las titers in immature flush growth of Valencia orange plants exposed to different temperatures regimens, and Las acquisition by adult *Diaphorina citri* allowed to feed on flush growth of these plants, were determined in two experiments. The first experiment comprised plants with three levels of infection, three incubation periods (IP), and environments favorable (14.6-28°C) and unfavorable (24–38°C) to Las. The second experiment comprised plants with severe, late stage infections, 10 IPs (based on 3 d intervals over 27 d) and 3 environments (12–24°, 18–30° and 24–38°C). After each IP, plants were removed from each environment, and adult *D. citri* were confined on new flushes for 48-h. After confinement, flushes and insects were analyzed by qPCR. Overall, Las titers were lower in flush growth of plants maintained in the 24–38°C environment than in the other environments, and the percentages of Las+ psyllids that fed on flush growth of these plants were lower than in psyllids that fed on flush growth of plants maintained in the other environments. The results indicate that the incidence and less rapid spread of Las in warmer than in cooler regions of SP may be related to the influence of ambient temperatures on multiplication of Las in leaves.