3.14 Seasonal Abundance of Diaphorina citri (Hemiptera: Psyllidae) and Natural Enemies in Citrus Groves of Yucatán, Mexico

Jasso-Argumedo, J.¹, Lozano-Contreras, M.¹, Barroso-Aké, H.¹, López-Arroyo, J.I.²

¹INIFAP, Centro de Investigación Regional del Sureste. Mérida, Yuc., México
²INIFAP-Centro Regional de Investigaciones del Noreste. Río Bravo, Tam., México
jasso.juan@inifap.gob.mx

Diaphorina citri Kuwayama (Hemiptera: Psyllidae), the Asian citrus psyllid (ACP), has been present in the Peninsula of Yucatán, Mexico, since 2002; however, in spite of its distribution in the area and the occurrence of infective specimens in neighboring countries, the first plant infected by Ca. Liberibacter spp. was not found until July of 2009 in Tizimín, Yucatán, México. The objective of this study was to determine the seasonal abundance of D. citri in 14 groves of Persian lime and sweet orange. In young irrigated orange trees, the abundance of D. citri was constant throughout the whole year with densities in the range of 0-1.8 adults per tap; pest infestation ranged from 10 to 30%, though it was detected at a peak of 60%. In mature orange trees growing with scarce water during the dry season, the highest abundance of ACP was 0.2 adults per tap, the average abundance during the year was 0.02 adults, and pest infestation ranged from 10 to 30%. In Persian lime groves, the abundance of D. citri ranged from 0 to 1.56 adults per tap, while pest infestation was 21.05% on average per year. The most abundant beneficial insects were Cycloneda sanguinea followed by Chrysoperla sp. Olla v-nigrum and Ceraeochrysa sp.