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#### **Title**

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# Occurrence of *Diaphorina citri* Kuwayama in an unexpected ecosystem: the Lake Kissimmee State Park Forest, Florida

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In July 2012, we captured Asian citrus psyllids (ACP), *Diaphorina citri*, at the Lake Kissimmee State Park (Polk county, FL). ACP were captured on yellow sticky traps deployed in a wet flatwood ecosystem. Specimens were sent to the Florida Department of Agriculture and Consumer Services (FDACS) and were all identified as *D. citri*.

From the 12 July through 8 October 2012, we monitored the ACP population at this location. Capture of ACP on 19 July reached a maximum of 1.3 ACP per trap per week. ACP collected were submitted to qPCR and 20% of captured ACP in this forest were positive for *Candidatus* Liberibacter asiaticus (Las).

After exploration of the surrounding area, we found four non-cultivated tangerine plants on the border of Lake Rosalie, 1 km away from the original ACP collection site. These four plants were tested for Las and all were negative. Yellow sticky traps were also deployed on these citrus trees but no ACP were collected at this location.

Plants found in the original area of collection were identified, and to our knowledge, none are currently known as alternative hosts of ACP. We are performing bioassays and thus far, we found that ACP were able to feed and survive on gallberry (*Ilex glabra* L.). These results suggest that ACP may have a wider alternative host acceptance range and / or higher dispersal ability than previously thought and occur within a dense Florida forest in the absence of surrounding citrus groves within at least 3 km.