

**Speaker:**

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Date: Monday, May 10, 2021

Time: 4:00 pm - 4:50 pm

Zoom: 952-3324-4564

Passcode: 835322

Title:

“Effect of environmental conditions on the flight behavior of the Asian citrus psyllid”

Abstract:

Diaphorina citri Kuyawama (Hemiptera: Liviidae), commonly known as Asian citrus psyllid (ACP), is an invasive insect pest and the vector of the bacterium causing Huanglongbing (HLB), a lethal disease of citrus. In the United States, ACP has been established in all citrus producing zones, all of which have very different environmental conditions. The spread of ACP and more importantly, HLB has progressed differently depending on the state, with more rapid spread in Florida and Texas than in California. Climatic variations between the regions are likely a strong factor in the observed spread rate difference. However, it is unknown how the flight capacity of *D. citri* is influenced by the particular combination of high temperatures, low humidity and wind conditions experienced in California. We will present data from flight mill assays under different temperatures and humidity levels, as well as data from wind tunnel assays to evaluate ACP movement under different wind speeds. Our data suggests that temperature and wind strongly affect *D. citri* flight and dispersion capacity. The effect of Californian environmental conditions in the dispersion capacity of *D. citri* will be discussed in the context of HLB spread.