# I've provided the bug counts and tree measurements, what does it mean?

#### Angela Chuang UF/IFAS Citrus Research and Education Center June 28, 2023

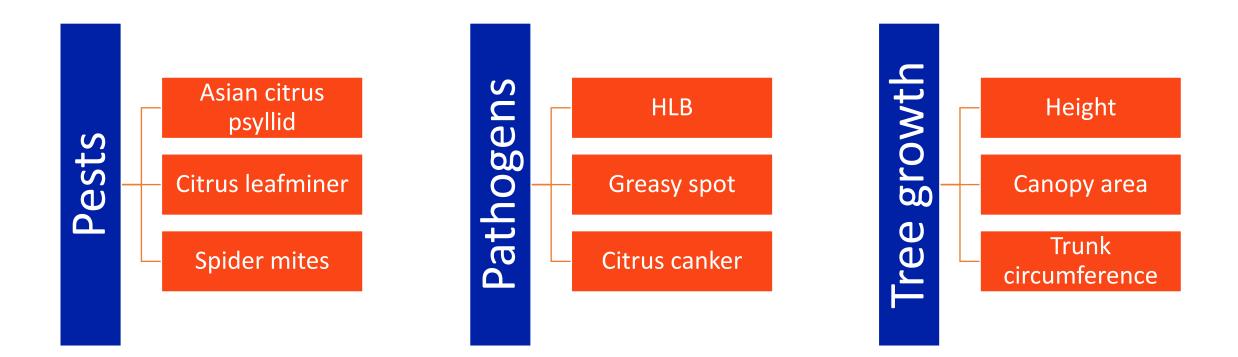




CITRUS IN THE HOME LANDSCAPE

#### **Overall research goals**

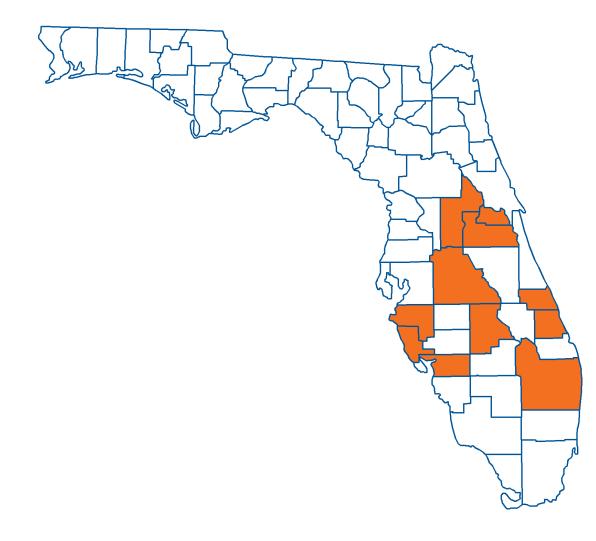
We want to test whether certain tools (kaolin sprays, individual protective covers, reflective donuts) protect young citrus trees from **pests** and **plant pathogens** as well as affect their **growth** compared to standard insecticides



#### **Overall research goals**

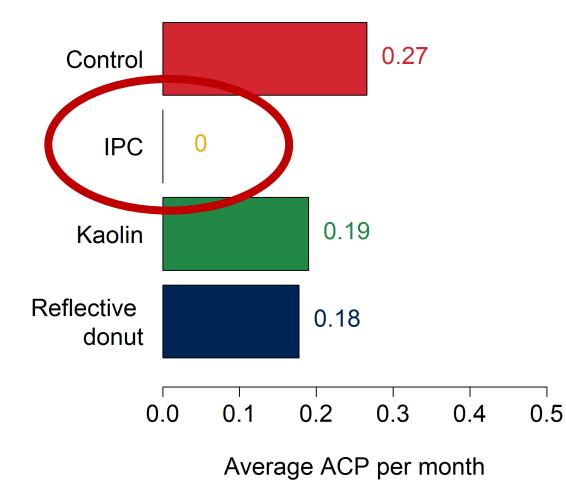
- We have been testing these tools in commercial settings but want to know how effective they are in residential settings
- We want to use our results from this study to **give recommendations that homeowners can follow** to successfully grow citrus

#### 13 participating locations from 11 counties

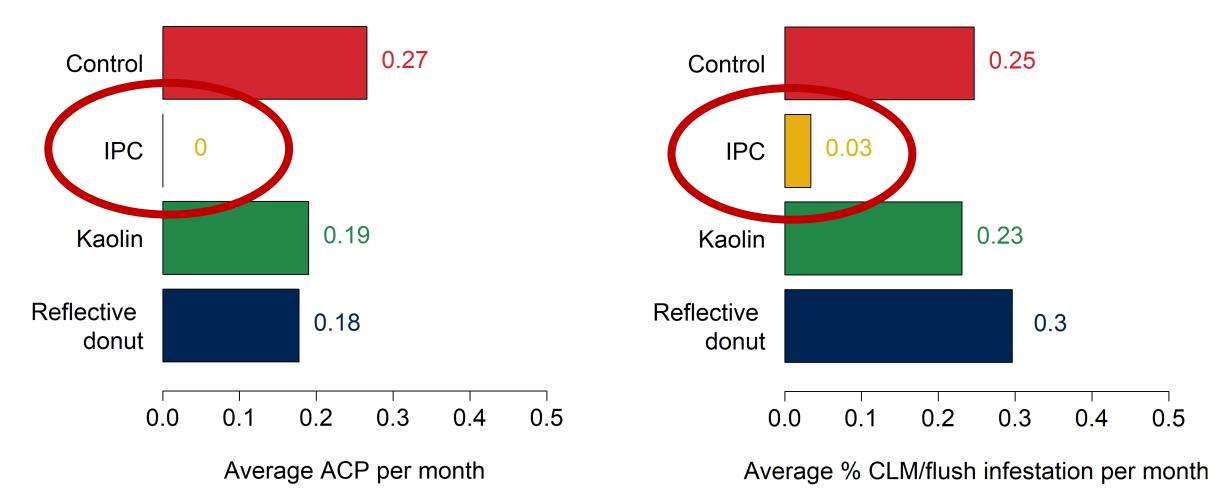


Charlotte Highlands **Indian River** Lake Manatee Orange Palm Beach (2 locations) Polk Sarasota St. Lucie Seminole (2 locations)

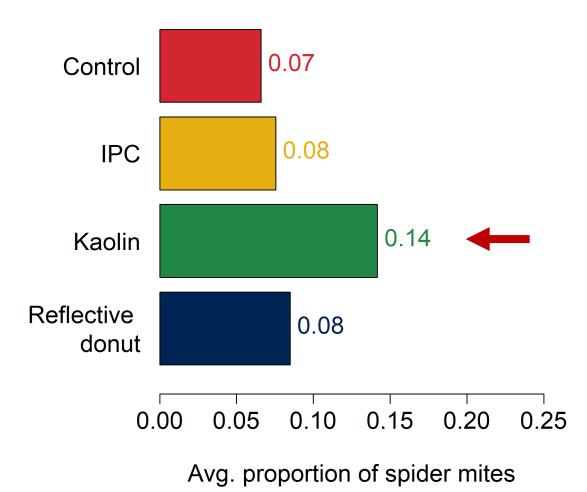
## Individual protective covers (IPCs) protect trees from adult psvllids and citrus leafminers



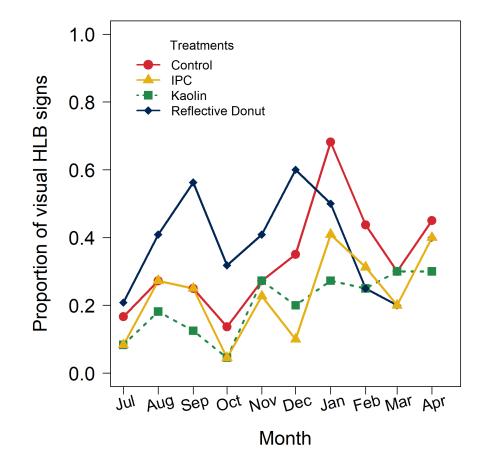
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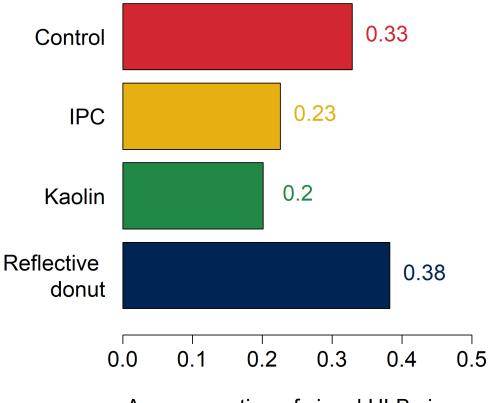


#### Kaolin trees had spider mites more often



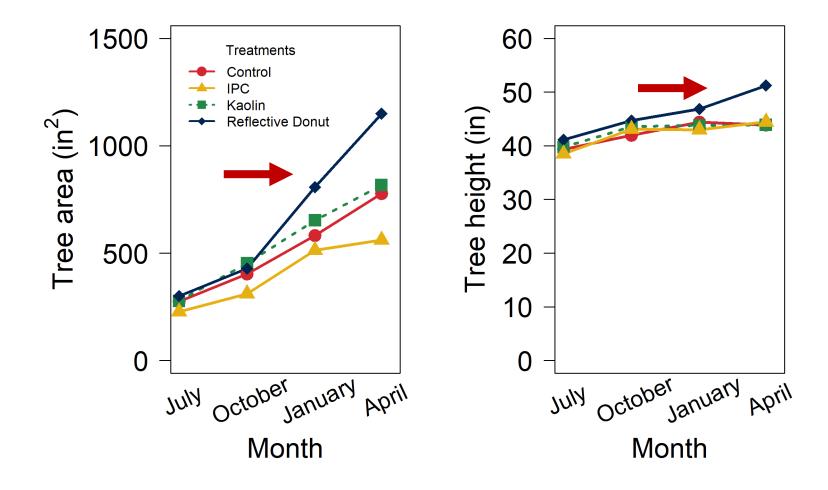
# Visual signs of HLB are variable but more common in control and reflective donut trees



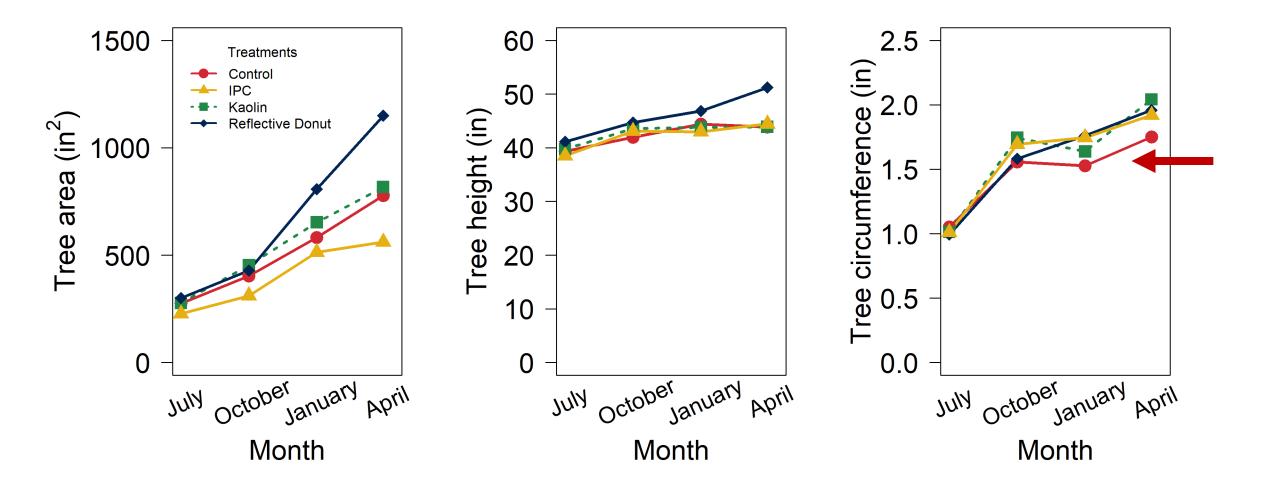


Avg. proportion of visual HLB signs

#### **Reflective donut trees had greater area and height**



#### **Control trees had a lower tree trunk girth**



#### **Overall findings and conclusions**

- Individual protective covers may protect young citrus trees from major pests (Asian citrus psyllids and citrus leafminer), but not spider mites
- IPC and kaolin trees seem to have fewer visual signs of HLB/stress
- Trees with reflective donuts grow faster
- Data from Year 2 will give us a clearer picture of how our treatments affect our trees
- We are gaining valuable data from your contributions- so thank you for all that you are doing!

### **Any questions?**

### **Thank you!**





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