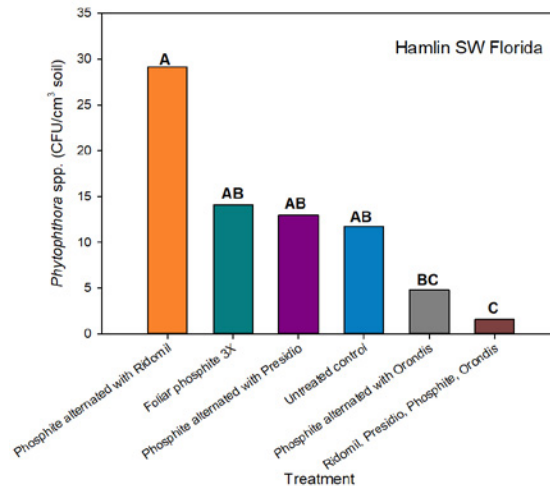


Is Phytophthora Management Effective on Mature Huanglongbing-affected Trees?

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Summary: Phytophthora diseases are frequently a concern for growers. In Florida, they are caused by two species *Phytophthora nicotianae* and *P. palmivora* and they are responsible for multiple diseases, the most common being foot rot and brown rot. Managing phytophthora foot rot prior to huanglongbing (HLB) was usually beneficial providing the grove was above the management threshold of 20 propagules/cm³. Below that threshold, populations were not considered to be damaging. It is important to sample to see if the population is above the threshold because these organisms, particularly *P. nicotianae*, are commonly found in Florida soils at low levels. Please see instructions in the UF/IFAS

Florida Citrus Production Guide for further guidance on sampling for phytophthora. A trial was initiated to see if phytophthora management in a southwest Florida HLB-affected grove was effective. We evaluated six treatments: 1) Phosphite alone, 2) Phosphite alternated with Orondis®, 3) Phosphite alternated with Ridomil®, 4) Phosphite alternated with Presidio® 5) Ridomil®, Presidio®, Phosphite, Orondis® sequentially, and 6) untreated control. Treatments were applied when root flushes were present. In the four evaluated blocks, we saw higher root density and lower propagule counts than no treatment but no change in yield. In the other three sites the effects on root density, propagule counts, and

yield were inconclusive. All sites were badly affected by hurricane Ian, which complicated our trial outcomes.

Take Home Message:

- Yield did not respond to phytophthora treatments on HLB-affected trees even when there was a reduction in propagules and increased root density.
- HLB-affected trees may have too much root damage to easily see a phytophthora treatment effect even after several years.
- While no yield effects were seen, grove decline may be more rapid with no phytophthora management in groves with above threshold propagule numbers.

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