

HLB ECONOMICS

Costly For

FLORIDA CITRUS

Current conditions are forcing growers to be more savvy with their spending.

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Since HLB was first discovered in Florida in 2005, we have learned its vector, the Asian citrus psyllid, prefers to feed on young flush of trees. Therefore, young trees are more susceptible to the disease than older trees. Older trees also may be infected with the disease for up to two years before exhibiting symptoms that include yellowing of leaves, premature fruit drop, aborted seeds, and most importantly, the production of small, misshapen fruit which contain bitter juice that is of no economic value.

This disease disrupts the phloem of the tree and thereby affects the ability of the tree to uptake nutrients from its roots and deposit them in the leaves and fruit so that HLB can be confused with nutrient deficiency.

Dr. Jose Bové, a French plant pathologist, is credited with first identifying the disease. He recommends a strategy to deal with HLB consisting of a three-prong program: (1) initiation of a scouting program, (2) immediate eradication of symptomatic trees, and (3) implementation of a psyllid control program.

At present, there is no cure for the disease. So the logic behind the strategy of

Bové is by eradicating infected trees, the level of inoculum in a particular block will be reduced. And by controlling psyllid populations, the ability of the disease to spread also will be mitigated. If the incidence of the disease can be reduced, then it could be economically tolerated.


Dollars And Sense

From an economic perspective, this strategy raises several concerns. The period of latency in older trees means that it is unlikely that a block will ever be rid of the disease. The disease also spreads slowly in older trees so that a policy of eradicating symptomatic trees means that years of future production will be lost if a newly found symptomatic tree is destroyed. If a farmer waits too long to begin the eradication process, it is entirely possible that an entire block could be eradicated. Although there is no independent confirmation, it is likely that all commercial blocks of citrus in Florida have infected trees.

In response to these concerns, enhanced foliar nutritional techniques were developed. In this approach, nutritional applications were done primarily through foliar techniques. Some growers have reported success in maintaining fruit production in face of a high incidence

of HLB using enhanced foliar methods. Nearly all growers in Florida have adopted some variation of enhanced foliar nutrition. Many growers also are participating in citrus health management areas (CHMAs) in which coordinated sprays for psyllid are being conducted. Many CHMAs have been successful in reducing psyllid populations.

To What End?

A major point being made here is that the development of enhanced foliar nutritional techniques was an economic response to the challenge offered by HLB. Yet the Citrus Research and Development Foundation has allocated a very small portion of its budget to economic and management related research. While plant pathologists, entomologists, and plant breeders are working on long-term solutions to HLB, citrus growers are making economically driven decisions today in order to survive until longer-term solutions are found. 

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