Is There Light At The End Of The Tunnel For Florida Citrus?

By Thomas H. Spreen

After all crop reports were tallied, it’s official that 2013-2014 saw the smallest Florida citrus crop since freeze-influenced 1989-1990. It’s apparent the industry has moved into the second phase of its battle with citrus greening.

I would describe the first phase as a combination of dire warnings from plant pathologists and others who gave predictions of the potential devastating effects based on the impact of HLB in other parts of the world. It also included those who failed to understand the steps that were needed to be taken to combat the disease. For a variety of reasons, HLB is now established in Florida. It is generally agreed the disease is probably present in every commercial block of citrus in the state.

Acceptance And Action

Phase 2 is the point where we will see (and have seen) declining crops. Some growers are pulling out all stops in an attempt to ameliorate the effects of the disease on both fruit yield and tree mortality. Grove care costs have skyrocketed with some growers spending $2,200 per acre (or more) under a strategy of suppressing psyllids, aggressive application of nutritional, and in some cases, aggressive tree removal and re-setting. As a result, break-even prices have climbed. The high fruit prices seen in the 2013-2014 season should have resulted in a highly profitable season, but with lower fruit yields and higher costs, many blocks generated negative returns. Other growers have either given up or are in the process of formulating an exit strategy.

The preceding is the bad news — declining yields and increasing costs. The question is: Will there be a third phase? In other words, are there solutions to HLB on the horizon that will be available in time to allow profitable citrus production in Florida?

Solutions Sooner Than Later

I categorize the possible solutions to HLB in three broad categories. First, there are breeding solutions. In other words, plant breeders are trying to discover or develop disease resistant or disease tolerant rootstocks and/or scions.

The second category entails methods to deal with the Asian citrus psyllid. The development of either pesticide-based or natural predation or predators approaches to suppress the population of the psyllids.

The third category deals with development of antibiotics that can kill the bacteria that causes HLB. There is insufficient space for me to adequately deal with the economic dimensions of each category. In my next column, I will attempt to discuss further plant breeding advances and entomological research (psyllid control).

Recently, I have learned more about development in antibiotics. Streptomycin has been given an exemption by the FDA to be used on grapefruit. Streptomycin is apparently not 100% effective in eliminating the disease, but there is an argument that by reducing the level of inoculum in a tree, it allows the tree to better combat the negative consequences of the disease. Other research being conducted at the University of Florida follows this line and offers promise. One issue associated with antibiotics are cost-effective means to deliver these compounds to the tree, but I am sure that research will discover an approach that makes both economic and biologic sense.

It appears there is light at the end of tunnel. The question is how much longer is the tunnel? If a solution (or solutions) to HLB can be found, will it come in time before output has declined to the point that allied assets such as packinghouses and processing plants have already been closed? The answer to that question is not yet known.

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