On the Rebound
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By Steve Heisler

Hurricanes and disease have challenged Florida’s grapefruit industry during the past several years. But with the help of open-minded growers and scientists’ diligence, the industry is showing signs of recovery.

“"You have had a number of calamitous events that have really worked on the tree population," says Tom Spreen, an agricultural economics professor with the University of Florida's Institute of Food and Agricultural Sciences in Gainesville. "On the demand side, we'd been in a declining consumption of fresh grapefruit and grapefruit juice in the '90s and into the early 2000s.”

The former IFAS department chairman traces grapefruit’s dwindling numbers to a mandatory citrus canker eradication program that forced the destruction of 65,000 acres.

Canker, a bacterial disease of citrus, causes reduced tree vigor and yields and sometimes even tree death. It is harmless to humans.

That loss in 2004 was intensified when Florida was hit by four hurricanes in six weeks, two of which passed through the epicenter of grapefruit production, Indian River County.

The number of 85-pound boxes shipped dropped from 60 million to 20 million.

Under the earlier canker eradication protocol, each time a tree was confirmed positive, growers had to remove trees within 1,900 feet. That meant fallowing 240 acres.

"[Hurricane] Wilma exited in the Indian River area and that stirred up the canker even more," Spreen says. "The hurricane itself didn’t push down a lot of trees, but then greening came in behind."

Growers adapt

The downturn affected growers, such as Pete Spyke of Fort Pierce’s Arapaho Citrus Management Inc. While handling 100 acres and managing other groves, Spyke has experimented with production techniques that may pave the way for industry growth.

He is enthusiastic about open hydroponics in which a high concentration of nutrients are spoon fed through drip irrigation.

Through its development, he hopes that his fruit-packout rate will increase from about 60 percent to more than 80 percent.

"Open hydroponics allows us to control the tree [size] and in so doing control the quality and size of the fruit," he says. "We want to improve uniformity of sizes within the high-value range."

That means developing blemish-free mid-sized fruit to meet the fresh produce grade at retailers, such as Wal-Mart, and in highly discriminating Japanese and European markets.

For Spyke, hydroponics and more scar-reducing windbreaks prompt optimism.

Hurricanes had reduced the 2005-06 grapefruit crop to 30.6 million boxes, the smallest since the 1940s. With the small crop came higher prices for fresh fruit and processed juice and a run on peel oil because of anticipated short supplies.
But potential grapefruit buyers, many elderly, opted for other produce because of grapefruit’s interaction with statins in many blood pressure medications.

“We didn’t have as much to sell so they raised the price,” Spykes says. “We basically priced our buyers out of the market. This is a temporary deal, we’re going to be fine.”

That optimism is shared by Dan Richey, chief executive officer of Vero Beach’s Riverfront Groves LLC. The former chairman of the state’s citrus commission, Richey oversees 4,200 acres with a focus on ruby reds for the international market.

He credits his growers’ management strategies for a 62 percent packout rate, despite production costs doubling to $2,000 from $1,000 in five years.

Included are four additional annual copper sprays to prevent citrus canker. And it has paid off: Riverfront lost 400 acres due to the canker eradication program. But its juice quality, based on Brix, remains high.

“Supply and demand are getting into alignment,” Richey says. “The industry has consolidated.”

Riverfront has adopted a successful vertical integration, growing, packing and marketing all of its own fruit.

“This was all due to the trends in the industry,” he says. “It made a lot of sense to create a totally integrated company. With disease pressures [and] hurricanes, the crystal ball said the industry’s changing, and the survivors and thrivers are going to be vertically integrated.”

Those same practices helped enhance food safety, allowing Riverfront to meet GLOBALGAP export standards, Richey says.

And citrus greening, also known as Huanglongbing or HLB, has not been a major factor, based on research results.

“Greening doesn’t have the market access issue with it [that canker does],” he says. “Grapefruit is not as susceptible to greening [as other citrus]—that’s the sense we’re getting from the scientific community.”

Meeting the canker challenge

Doug Bournique, executive vice-president of the Vero Beach-based Indian River Citrus League, agrees, saying greening is primarily a sweet orange problem. Canker remains the greatest challenge for grapefruit producers, especially since, until recently, Homeland Security had halted research, he says.

“We had to beg the secretary of agriculture to beg Homeland Security to delist it,” Bournique says. “They’ve taken the shackles off and UF researchers and others around the world have been hired to help us.”

Those assisting include Fort Pierce’s Agricultural Research Service’s lab filled with researchers seeking disease-resistant varieties and other solutions.

Some growers are sitting with fallow land, Bournique says. But once solutions are found that may involve disease resistance, denser plantings and new technology, he’s confident those acres will return.

“They took and shifted money at the Department of Citrus out of advertising and into direct applied research,” Bournique says. “You want the answer today, and tree crops take years. But the pieces of
the puzzle are starting to take shape, and the growers, once they feel some of the solutions are imminent, you'll see a resurgence here."

A bright future ahead

Hope for that resurgence is based on research through the Florida Citrus Research and Development Foundation. The newly created Lake Alfred-based foundation became essential as disease hit in 2006.

President Tom Jerkins pointed to its increased budget—from $2 million in 2007 to $7 million in 2008 and double that this year—as an indication of the industry's commitment. Much of that funding comes through grower assessments.

Convincing other citrus-producing states, such as Texas, Arizona and California, as well as Europe that fruit with a few canker lesions can't carry disease is a priority, Jerkins says.

“Shipping fruit with canker lesions cannot infect healthy citrus trees in another area," he says. “We're trying to use that research to open markets that would be unsure about receiving fruit. A big part of Florida canker research is to provide the support that we can ship that fruit and not put their citrus industries at risk.”

That research is led by Tim Gottwald, a plant pathologist with the USDA's Horticultural Research Laboratory in Ft. Pierce.

Gottwald worked with international experts to show canker-infected fruit poses little risk to citrus industries elsewhere.

“You can never have zero concern, but through a whole series of experiments we were able to demonstrate that the fruit had no epidemiological significance," Gottwald says. “We found that once the fruit is removed from the tree and it's in storage, the population of [canker] bacteria falls off very fast.”

Based on those findings, the USDA has proposed final regulations that would allow fruit from canker-infested groves to move to citrus-producing states as long as it is treated with an approved disinfectant and meets other grade standards.

Depending on the input received during the 60-day comment period, the restrictions could be lifted as early as November, says Paul Hornby, USDA state plant health director in Gainesville.

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