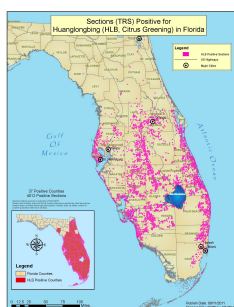


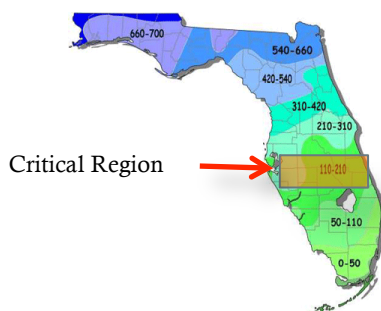
Florida Olive Council Report



Citrus Greening Crisis Prompts Low-Chill Olive Research



Citrus HLB Infection (2011)



Historic Florida Chill Map

Huanglongbing (HLB) disease (citrus greening), is a bacteria infecting 99% of Florida's citrus groves. The disease causes fruit to deform and drop early from the tree rendering it virtually unmarketable.

In 2004, Florida's growers produced 200 million boxes of citrus; last year they produced 75 million, a 50-year record low. Despite spending \$250 million in 10+ years researching a cure: No economically viable solution has been found.

As indication of the severity of the issue, this year Florida Agriculture Commissioner Adam Putnam secured a "crisis declaration" from EPA allowing growers to inject bactericides (oxytetracycline & streptomycin) into the trunk of citrus trees. The anti-bacterial treatment offers disease mitigation for several months but unfortunately it is not a cure.

(Cont'd Page 2)



Hardee County Establishes Alternative Crop Research

Responding to a drastic reduction in citrus acreage due to Huanglongbing (HLB) disease and other factors, the Florida Olive Council and the Hardee County Economic Development Authority (EDC) embarked on a program to research alternative cash crops. Olive trees are a feature of the project.

William (Bill) Lambert, Director of the EDC, said, "We see olives a strong potential alternative to citrus. It makes sense for a large agricultural economy to diversify and not be dependent on a monoculture such as citrus."

While Lambert acknowledges citrus must remain the main focus of research, he believes it essential to explore alternatives. "Diversity, diversity, diversity," Lambert said.

In addition to 1,000 olive trees of 19 different varieties, the 20-acre plot features hops, turmeric, ginger, and several other crops. Uses for the facility include studies of essential oils, olive leaf extract and related products.

Croatia Trip Report

FOC president Michael O'Hara Garcia reports on his recent trip to the VIII International Olive Symposium in Split, Croatia.

Page 2

Italian Olive Mill

A visit to Italian olive mill manufacturer Perialisi and several mills demonstrate modern olive milling operation.

Page 4

North Florida Groves

New groves and mills are in full operation in north Florida. Newest grove is 135 acres.

Page 3

President's Corner



Solta, Croatia

Last month, I visited Split, Croatia to attend the VIII International Olive Symposium. The quadrennial event featured seventy-five presentations by olive experts on a wide range of topics. Later, I visited the University of Cordoba (Spain) to inspect their olive germ plasm collection.

Since the Florida Olive Council is focused on exploring a low-chill olive that will reliably produce in the diminished chill zone around Florida's I-4 corridor (Tampa-Orlando), I was particularly interested in the symposium presentations on genomics and discussions of olive culture in warmer climates. Due to global warming, Cordoba and others are conducting more research on low-chill varieties. I learned some varieties growing in the southern areas of North Africa might require fewer chill hours. Varieties like: *Toffahi* from Egypt, *Meski* from

at Cordoba germ plasm
With Dr. Muñoz Díez

Tunisia and *Haouzia* from Morocco. There are at least 44 known varieties in

the Middle East and North Africa. We hope to find one with potential for low-chill. In the end, it is imperative that we continue to look for alternative crops for our distressed citrus growers.

Michael O'Hara Garcia is president of the Florida Olive Council, LAA, a non-profit IRS 501(c)(3) organization supporting agricultural research and advocacy.

Greening and Low Chill Olive Research

(Cont'd from Page 1)

Until a cure is found, prudence suggests we explore other proven cash crops with established markets; particularly grove-type crops that can leverage existing citrus infrastructure. We have peaches, blueberries, pomegranates and the like; but we have no high profit, low cost crop. Virtually all of the above have market issues; either from competition or customer awareness.

The olive (*Olea europaea*) is one of several alternative crops with possibilities. Like citrus, olives like full sun and drained soils. In 1748, Minorcan settlers grew olives near St. Augustine. There were at least two olive groves in Fernandina Beach in 1865. A producing olive tree was reported near Tampa in 1935. Today there are over 50 olive growers in Florida cultivating 400 acres. There is a 20-year old producing grove in Marianna.

Native to desert areas, olives require minimum water and simple nutrients. Pest problems are minimal. Olive oil can bring an attractive return on investment. In October 2016, olive oil from a mill in Jeri, Italy sold for €9.50/liter or \$38.31/gallon. Five-year-old high-density olive groves in California can produce 100-200 gallons/acre.

However, the high-density olive varieties grown in California (Arbequina, Koroneiki), require a minimum of 200 "chill hours" (32° - 47° F.) between November and March. Unfortunately, citrus groves south of Interstate 4 often achieve less than 200 chill hours (map page 1). Although the Olive Council's research team has observed Arbequina flowering and fruiting below I-4; more research is needed to confirm a profitable crop.

Cultivars from warm-winter regions in North Africa and experiments with evaporative cooling and genetic research show promise in finding a low-chill olive for Florida.



AOOPA Hosts Olive Research Meeting

The American Olive Oil Producers Association (AOOPA) met at the

University of California's Olive Center in Davis, CA in September. In addition to representatives from FL, GA, TX and CA olive growers associations; several olive oil producers participated in the program. The purpose of the meeting was to establish olive research objectives for the federal Specialty Crop Research Initiative (SCRI). Note: AOOPA will host the annual member meeting 25 Feb 2017. [Register Here](#)

NORTH FLORIDA OLIVE NEWS



Eduardo Espinoza

Clear Creek Farms

Bill and Kay Dennis have produced another fine selection of olive oils at their modern grove and mill outside of Ocala. They bottled a late harvest Mission and a superior Arbequina. The oils are also offered as infusions. Supplies are limited. Contact [Clear Creek Farms](#).



Jonathan Carter

Florida Olive Farms

The Carter Brothers (Jonathan and Stephen) have milled a new batch of their outstanding olive oil. The Carters operate a 30 acre olive grove and 1-ton olive mill a few miles outside of Live Oak, FL. The brothers were the first to install a modern high-density olive grove in north Florida. Contact [Florida Olive Farms](#).



Tom Oleson

Tom Oleson's Chemlali

Tom "Oliveson" Oleson is a true Florida olive pioneer. Over the past 15 years, his grove near Hastings, FL has been a testing ground for many olive varieties and cultivation techniques. In the photo to the left, Tom stands beside a 3 year old Chemlali. At right, Tom checks groundwater level. Contact Tom at: shipscarver@hotmail.com.



UF-IFAS Grove West Florida

UF/IFAS West Florida Research and Education Center (WFREC) director Dr. Wes Wood reports olive test plot of 11 varieties doing well going into their second year. Dr. Wood hopes to find viable cultivars for west Florida. woodwes@ufl.edu

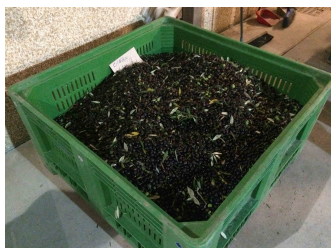


165 Acres of Olives

Ron St. John and partners have planted 165 acres of Arbequina, Arbosona and Koroneiki near Trenton, FL. The trees are planted in a high-density configuration to maximize yield. mike.casey@svfeeds.com

ITALIAN OLIVE MILL VISIT

In October, Denis Animali, the U.S. sales representative for [Pieralisi](#) invited FOC president Michael O'Hara Garcia on a tour of the olive mill manufacturing facilities near Jeri, Italy. After touring the plant, Garcia visited several local olive mills offering a chance to see the mills in operation. Pieralisi has installed a mill at [Clear Creek Farms](#) near Ocala and is in discussion with other Florida growers.



Olives ready to mill



Olive mill near Jeri, Italy



Olive *Pate'* malaxing
 Releases oil from paste



Pieralisi malaxers



Pieralisi "decanter" is a centrifuge
 efficiently separating oil from
 water and organic matter.



Olive waste is fed into olive
 pit processor below



Fresh olive oil price Oct 2016



Fresh olive oil after secondary
 decanting to remove water



Olive pit reclamation. Sell
 for \$13.00/bag



Denis Animali with old mill
 stones



Compact .25 ton *Il Molinetto* olive
 mill is a favorite of small growers

For more information contact: [Denis Animali](#) – PH: 39 0731 231254