

# Mid Florida Citrus Foundation's A.H. Krezdorn Grove

**By Ryan Atwood**

*This is the first of two articles that will report on the current status of the Mid Florida Citrus Foundation's A.H. Krezdorn grove and current citrus research being conducted at the facility. The second article will appear in the May issue of Citrus Industry.*

**T**he A.H. Krezdorn grove located in Orange County was originally established in 1988 as a 20-acre research block with the purpose of evaluating the effects of reclaimed water used for irrigation in citrus groves. Since that time, the A.H. Krezdorn research grove has grown to 100 acres with multiple citrus research projects being conducted by scientists from the University of Florida's Institute of Food and Agricultural Sciences, the United States Department of Agriculture and private organizations.

This facility is run by the Mid Florida Citrus Foundation (MFCF), a non-profit organization made up of local citrus growers. The property is leased from the city of Orlando and Orange County. Recently, a new lease was approved allowing the MFCF the opportunity to continue conducting research at the facility for the next 20 years.

The biggest challenge for MFCF's



*New peach varieties under evaluation*

future is financial. Historically, the MFCF has received grant funding from the city and county. However, this

funding has been diminishing and will be discontinued in less than two years. Historically the MFCF also relied on



*Topworking citrus with experimental material to promote early evaluation opportunities*



*Four genetically improved varieties of citrus buds emerging on topwork*



contributions such as fertilizer and pesticides from cooperators and industry partners to help offset the cost of grove care. The past few years, this source of support has lessened. The majority of funding comes from fruit sales, although this is somewhat limited as a number of research projects do not produce a marketable crop. During the last 20 years, much of the research at the MFCF has been conducted without an imposed fee. The mission of the organization is to support citrus research efforts.

Like other organizations in the citrus industry, we have been challenged with Huanglongbing (HLB). This past year in February, statewide survey crews detected three trees that were HLB positive (tested with PCR); the trees were immediately removed. Our most recent survey conducted in September resulted in 15 PCR positive trees. The positive trees are in the process of being netted to protect them from psyllid feeding and reproduction, while allowing research to be conducted on the trees.

Citrus canker has also been found in neighboring areas, but has not been found in the research grove. Current plans include planting a windbreak around the grove. The facility will be used as a seed and tissue bank for genetically improved *Eucalyptus grandis* cultivars that were recently released by Don Rockwood from the University of Florida's School of Forest Resources and Conservation. There is excitement about using fast-growing *Eucalyptus* as windbreaks around citrus and harvesting them periodically for biomass energy production.

### JAN. 22 FIELD DAY

Currently at the A.H. Krezdorn grove, 10 researchers are working on more than 14 citrus research projects,

Research Projects at A.H. Krezdorn Grove (Current projects in black; future projects in red)		
Researcher	Research Project	Organization
Fred Gmitter	Triploid mandarin seedlings, irradiated mandarin selections, and seedless Midsweet oranges	CREC
Jude Grosser	Trial of genetically manipulated Valencia cultivars for improved traits and dwarfing rootstocks	CREC
Bill Castle	Navel orange scions and rootstocks for navels with emphasis on size control.	CREC
Michael Rogers	Pesticide trials for controlling psyllids	CREC
Lukasz Stelinski	ULV spray technology, leafminer pheromone, psyllid pesticide trials	CREC
Steve Futch	New herbicides in the development stages to control various broadleaf and grass weeds in citrus.	Extension
Larry Parsons	Sensors for irrigation management and scheduling	CREC
Kim Bowman	Citrus rootstock trial	USDA/ARS
Bob Johnson	Psyllid control, leafminer and rust mite pesticide trials	Private
Gary England	Evaluation of containerized blueberries	Extension
Dennis Gray	Grape genetics research	MREC
Ryan Atwood	Evaluation <i>Jatropha curcas</i> in Central Florida	Extension
Gary England & Ryan Atwood	Evaluation demonstration of peaches, plums, persimmons, muscadine grapes, and pecan cultivars and production practices	Extension
Megan Dewdney Tim Spann and Arnold Schumann	Nutrition of HLB infected trees, HLB distribution in citrus trees, difference in HLB symptoms over time	CREC
Don Rockwood and Bill Castle	Windbreak research	SFRC/CREC
Kelly Morgan, Larry Parsons and Bill Castle	Open Hydroponic System on the Florida Ridge	SWFREC/ CREC
Bill Castle	Evaluation of Pomegranates in Central Florida	CREC
CREC = Citrus Research and Education Center; MREC = Mid Florida Research and Education Center; Extension = Florida Extension Service; SFRC = School of Forest Resources and Conservation; SWFREC = Southwest Florida Research and Education Center		

with five new researchers and multiple projects starting next year (see table next page). Field Days are held periodically as an opportunity to share research results with citrus growers throughout the state. The next field day is scheduled for Jan. 22 from 9:30 a.m. to noon. The field day will focus on citrus plant improvement (variety and rootstock) trials and researchers will share the results of their experiments. For more information on the field day, contact Ryan Atwood at (352) 343-4101.

Part of the leased property is dedicated to evaluation of other potential Florida fruit crops such as peaches, plums, nectarines, grapes, persimmons, containerized blueberries and pecans. Gary England, a multi-county extension agent, coordinates the management of the deciduous fruit demonstration and evaluation area. At the field day, Gary will lead a tour and discussion of the deciduous fruit crops from 9:30 a.m. to 10 a.m.

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