

# **Mid Florida Citrus Foundation**

# **Field Day: Pomegranate**

### August 23, 2012: 9:30 AM to 12:30 PM

<u>Host</u>

Gary England, Multi-County Extension, Lake County

Presenters:

Bill Castle, Professor Emeritus [bcastle@ufl.edu]

Mickey Page, Research Farm Manager, Mid Florida Citrus Foundation

### Attendees, please pre-register at:

http://www.eventbrite.com/event/4008020096?ref=elink

## PROGRAM

- Performance of evaluation plants with emphasis on the younger set.
- Anne Vitoreli from the IFAS Plant Disease Clinic on diseases.
- Cultural program at Water Conserv II.
- Observation on the past winter and chilling requirement.
- Plans for Water Conserv II.
- Best cultivars to plant [so far!].
- Plant availability.
- Taste test.

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**Florida Pomegranate Association** 

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http://www.crec.ifas.ufl.edu/

#### Q1. How were the plants after the winter of 2011-2012?

A. The past winter was different, certainly from a temperature standpoint. It was a relatively mild winter, punctuated by a couple of serious cold snaps. Here, at Water Conserv II, the winter had no damaging effects on the older plants. Some of the younger plants set out in April 2011, were damaged badly, but not killed. Reports from some of our cooperators indicated a similar outcome: damage, but not death.

No strong evidence was generated this past winter allowing cultivars to be ranked according to their relative cold tolerance.

#### Q2. Pests and diseases?

A. Samples of suspect fruit and leaves have been submitted this summer to the UF/IFAS Plant Disease Clinic [PDC] in Gainesville. Their assistance has been excellent and very timely.

Our objective this year has been primarily to: [1] confirm the problem with the fungus *Botryosphaeria*; and [2] test chemicals for possible management of the fungus.

**RESULTS? The bad news:** Clearly because we live in Florida where the summers are hot and rainy, various fungal diseases are happy campers! The samples this year have Botryosphaeria and some Botyrtis anf Fusarium. However, the main culprit appears to be Botryosphaeria which cause the fruit rot that is commonly observed throughout Florida. **The good news**: With the support of various agrichemical manufacturers, we initiated a demonstration-type trial in late Spring this year with these products: Pristine, Cabrio, Luna Sensation, Fontelis and Actinovate AG. **The information provided** 

# in this handout is not and must not be considered as either an express or implied recommendation of pesticide product use. The products are labeled for other crops, but are not presently registered for pomegranates in Florida.

B. Insects – **SAP BEETLES**. These beetles do not normally infest healthy fruit, but when a fruit is overripe or damaged, these little brown opportunistic beetles will invade. They can often be seen emerging from the blossom end of the fruit. They probably do not warrant any attempt to control.



#### Q3. How should poms be fertilized and weeds managed?

- A. Here is what fertilizer has been applied at WCII:
  - 9-19-11. Fertilized all of North Block with 50 gal/A 9-0-9.
  - 2-13-12. Applied 400#/A of 10-2-13 dry fertilizer.
  - 3-29-12. Sprayed with Keyplex 350 @ 3 qts/A. Trees not fully flushed out.
  - 4-20-12. Applied 75 gal 10-0-13 liquid fertilizer on entire block.

7-2-12. Hand sprayed with Keyplex @ 3 qt/A, Delegate @ 6 oz/A, Regalia @ 1 gal./100 gal water.

- B. Here is the weed management activity at WCII:
  - 8-17-11. Herbicide with Glystar @3 qt/A plus Aim @ 2 oz/A.
  - 8-25-11. Spot spray with Glystar @2 gals/!00 gal water.
  - 8-31-11. Sprayed with Kocide 3000 @2#/A.
  - 10-31-11. Sprayed with Lorsban @ 1qt/A and Regalia @ 3 qt/A.
  - 3-20-12. Applied Glystar herbicide @ 3 qt/A plus Chateau Herbicide @ 6 oz/A.
  - 5-1-12. Spray with Azadirect Direct @ 1 qt/A plus Regalia @ 3 qt/A.
  - 5-11-12. Sprayed with Kocide 3000 @ 2#/A.
  - 6-18-12. Herbicide with Glystar @ 3 qt/A.
- C. Also, have you seen this on your plants? It is **Fe deficiency** that probably results from the plants being too wet rather than actually there being a shortage of available Fe.



#### Q4. Do poms have a chilling requirement?

A. Mea culpa! As any farmer will tell you, every year is different which means every year we gain experience and learn something. Last year, after a normal cold winter, there was a fantastic bloom and fruit set on the poms. This past year, not enough chill hours?



Most plants at WCII did not shed their leaves until late winter/early spring. Also, among the older plants [now 3+ years old], flowering this spring was markedly reduced compared to last year. **Conclusion?** It is too soon to draw a conclusion, but the outcomes over the two years do suggest that while poms are cold tolerant, they also require some timely winter cold temperatures to flower. **LEAF LOSS** still seems to be a useful tool to determine how the winter is going, i.e., if leaves drop by late fall/into the winter, that probably means there will be good flowering the following spring.

#### Q5. Are there any plans for poms at WCII?

- Yes. Cuttings of four varieties have already been rooted and are growing off for planting in a 1-acre plot next year. The cultivars selected are: Azadi, Desertnyi, Medovyi Vahsha, and Salavatski. Also, seedlings are being grown for a 2<sup>nd</sup> acre.
- B. **New selections**. The search continues. New selections were added this past year from a contact in North Carolina and various Florida hobbyists. Our accessions now total nearly 100.

#### Q6. What should I plant?

- A. From the **WCII study**, based on the **older plants**, the selections identified in Q5 above still look very promising for yield, juice flavor and soft seed. But, it is still not known where they are best grown in the State, or if there actually is a difference among locations.
- B. Among the **younger plants at WCII**, the performance differences are already starting to emerge. Among those have grown well and produced flower and fruit this year are 'SHARI'S' and 'VIETNAM.' The latter one exhibited <u>very</u> different behavior through the winter and spring. It has grown very well and is among the largest plants. It went through the winter fine and produced fruit in the winter and spring.
- C. Among **cooperators**, several of the larger plantings were visited this spring and the plants rated. The results confirm the choices mentioned in Q5 and add SUHR-ANOR, VKUSNYI, SIRENEVYI [soft seeds], GISSARSKI ROZOVYI [soft seeds], AFGANSKI, AL-SIRIN-NAR, APSERONSKI KRASNYI, and GIRKANETS. The data are limited, but from plant growth and the start of flowering, these look interesting.

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