

University of Florida/IFAS

# Pomegranate Field Day, Water Conserv II

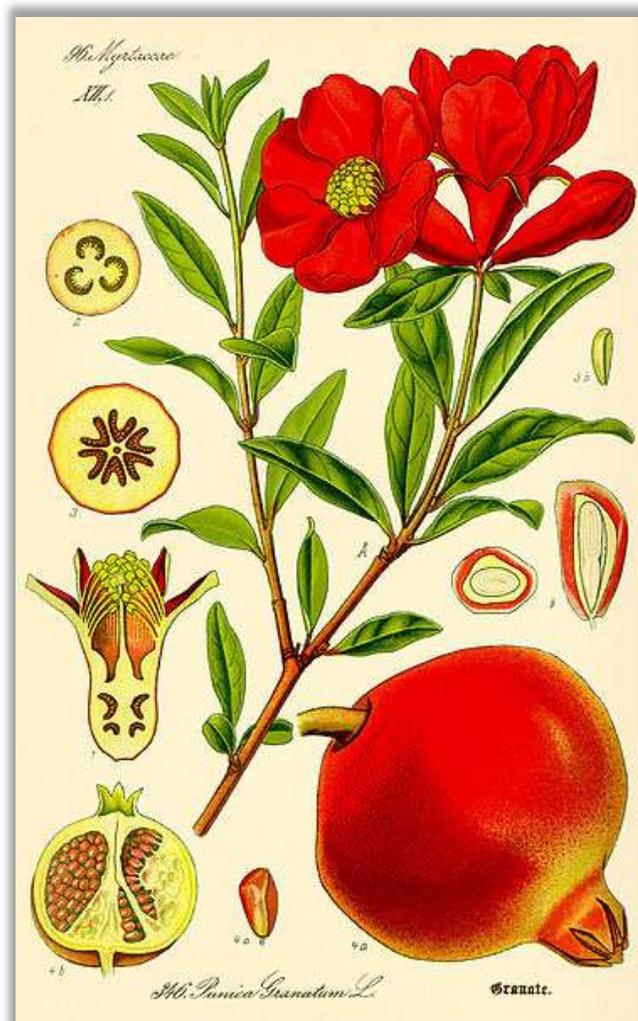
September 15, 2010

## Hosts

Ryan Atwood, Multi-County Extension, Lake County  
Gary England, Multi-County Extension, Sumter County

## Presenter

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**Q1. What's with pomegranates?**

A. Your health! Pomegranate juice products made from the aril [a fleshy outer seed coat] have many supposed advantages for heart health because of anti-oxidants and various other compounds.

**Q2. Can pomegranates be grown in Florida?**

A. Yes, as a dooryard plant especially in an edible landscape setting or as an ornamental. There are many dooryard plants throughout north and central Florida, some as old as 100 years. Pomegranates are presently offered in nurseries. But, a commercial pomegranate enterprise? To Be Determined!

**Q3. Yes, but can pomegranates really be grown in Florida?**

A. There are challenges. Pomegranates are cold hardy [more so than citrus], are easy to propagate, and appear not to be seriously bothered by any pests or diseases. However, pomegranate evolved in hot, dry climates. Therefore, while it has been clear for many years that the pomegranate plant will grow very nicely in Florida, it is not so clear whether the plant will flower consistently, set fruit and keep those fruit on the plant to maturity.

**Q4. Ok. So what then is the mission of the UF/IFAS Pomegranate Team?**

A. Pomegranates are already a dooryard plant of some importance and there may be potential for fresh fruit and juice fruit plantings as small farm enterprises. Thus, we are collecting named selections, propagating them and getting them into the hands of interested cooperators for evaluation.

**Q5. What pomegranates can be grown in Florida?**

A. An effort is underway to determine the answer. Plants available in nurseries often are sold as "pomegranate" and sometimes have a name attached to them. There are actually more than 500 named selections. Most of them are unknown in Florida and, thus, have not been evaluated. We now have 42 selections collected and being established in field trials at the CREC, Lake Alfred, and here at Conserv. We have propagated 3,000 plants and 1,000 have already been distributed to cooperators. We are adding to that collection by bringing new ones from elsewhere to Florida and by searching the State and collecting from nurseries and dooryards.

**Q6. How do I grow a pomegranate?**

A. In full sun light and treated much the same as an orange tree. They can be fertilized with citrus materials at citrus rates. We have cautiously used citrus herbicides.

One question to be decided early after planting concerns training and pruning. Plant shoots are weepy so staking the plant for a year or so is helpful, and suckers develop at the base of the plant which need to be removed. The plant can be trained to either a single trunk leading to the tree form, or to multiple stems [no more than 3 or 4] leading to a bush form. Suckers are generally removed during the winter. Selecting the tree form has the advantage for allowing

tree wraps to be used for protection against herbicide damage, etc. What effect either forms will have on yield and plant management is yet to be determined.

Pomegranate flowers are borne along current spring growth; therefore, be careful not to prune away those shoots.

**Q7. What spacing is best for planting and how long before fruiting starts?**

A. Plants grown in the tree form will probably be 8-12 feet tall at maturity with nearly equal canopy width. Therefore, our best guess at distance in the row is 8 feet with the distance between rows dependent on your equipment used to culture the plants.

Presently, our oldest trial plantings were set out in mid-2009. After surviving the winter of 2009-10, those plants set some fruit in 2010, but it appears that significant cropping will begin in the 2<sup>nd</sup> or 3<sup>rd</sup> year after planting. Furthermore, preliminary evidence suggests that emphasis should be placed on good growth the 1<sup>st</sup> two years.

**Q8. What is likely to be the pomegranate season and how do you tell when a fruit is ripe?**

A. Dooryard plants seem to ripen their fruit from about mid-August until October. Apparently, you can tell a fruit is ripe when the hard skin begins to soften and it can be easily scratched with your fingernail.

**Q9. What problems are likely to be encountered?**

A. So far, it appears that fungal problems may be the most serious limiting factor. The brown leaf spots shown in the figure below are caused by *Cercospora punicae*. We have already seen this fungus on leaves of trial plants. The fungus causes leaf drop, but is probably easily controlled with copper sprays. The fungus is an Ascomycete like *Mycosphaerella citri*, the organism that causes greasy spot.



The more serious problem appears to be another fungal problem with begins at the blossom-end of the fruit and affects the skin and can enter the locules and affect the edible part of the fruit. There is no convincing evidence that identifies the causal organism, but it likely to be one that is encountered while trying to grow other crops in Florida. Therefore, management of this problem is wide open for grower observation, discovery and innovation.

### **On-line Resources**

Robert Hodgson, 1917. The Pomegranate [go to Google books and enter pomegranate].

Fla. Dept. Agric. Consumer Serv. Plant Path. Circular re Cercospora leaf spot.  
<http://www.doacs.state.fl.us/pi/enpp/pathology/pathcirc/pp194.pdf>

University of California Pomegranate Establishment Cost Study.  
[http://www.agmrc.org/media/cms/pomegranatevs2005\\_652CB989981D9.pdf](http://www.agmrc.org/media/cms/pomegranatevs2005_652CB989981D9.pdf)

Ashton, Richard. "The Incredible Pomegranate." [Book available online, e.g., @ Amazon]

University of California Fruit and Nut Research and Information Center.  
[http://groups.ucanr.org/fnric/Fruit\\_and\\_Nut\\_Fact\\_Sheets/Growing\\_Pomegranates\\_in\\_California.htm#b](http://groups.ucanr.org/fnric/Fruit_and_Nut_Fact_Sheets/Growing_Pomegranates_in_California.htm#b)