

# Pomegranates as a Small-Farm Enterprise. Really?

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EXIT

24



RASPBERRY BIN  
**\$8.98**

POMEGRANATE BIN  
**\$8.98**



**AFGANSKI**, at 2 years of age,  
June 2011.



Flowers and fruit  
produced  
immediately.

Dwarf pomegranate  
available today at Home  
Depot.





Wonderful



Seed

Aril



Sin Pepe



‘AZADI’



# DPUN 0059 'Sakerdze'



- This accession came to the Davis repository from the USDA/ARS Southeastern Fruit and Tree Nut Research Lab in Byron, Georgia from Michael Hothchkiss. Originally from Georgia.
- It is a sweet-tart to tart type with medium to large fruit, red rind, medium to large sized dark red arils, and hard seeds. It has good fruit flavor and color and seems to be quite productive. Good for juice.

# DPUN 0109 'Medovyi Vahsha'



- This variety came from Dr. Gregory Levin when he was stationed at the Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Its name means “honey”.
- It is a sweet type with medium sized fruit, pink/red rind, medium sized dark red arils, with extremely soft seeds. Good for fresh eating, with a sweet mild fruit flavor. It is particularly desirable due to its combination of being sweet, soft seeded and pink/red.

# DPUN 0107 'Gissarskii Rozovyi'



- This variety came from Dr. Gregory Levin when he was stationed at the Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala
- It is a sweet-tart type, with good balanced flavor and medium to large sized fruit. Pink and yellow rind with medium large arils and soft seeds.

# DPUN 0015 'Parfianka'



- This variety came from Dr. Gregory Levin when he was stationed at the Turkmenistan Experimental Station of Plant Genetic Resources, Garrygala. Levin named this variety based on the name of the ancient oriental empire, Parfijia, located where Garrygala now stands.
- It is a sweet-tart type, with medium to large sized fruit, red rind, medium large sized dark red arils, with very soft seeds. It has an excellent balance of flavor. It has consistently done very well at taste tests and is excellent for fresh eating or juice.
- Fruit harvested on October 21st, 2008 had Brix = 15.23, TA = 1.04% (citric acid).

# DPUN 0060 'Al Sirin Nar'



- This accession came to the Davis repository from the USDA/ARS Southeastern Fruit and Tree Nut Research Lab in Byron, Georgia from Michael Hothchkiss. Originally from Azerbaijan or Turkmenistan.
- This is a sweet-tart type with large fruit, red rind, large sized dark red arils, and very hard seeds. It has good fruit flavor with citrus/floral notes and excellent color. This variety is very productive from a young age and is best suited to juice.

# Opportunities – Aha!

## Plants and/or Fruit

- Fresh fruit grown conventionally or organically.
- Small farm enterprise with local marketing.
- Fruit grown for juice and blending.
- Ornamental uses.
- Edible landscape.
- Fresh-packed arils.

- Collect pomegranate selections and cultivars and establish mother blocks.

[85 accessions]

- Propagate from the collection and provide plants to interested growers.

[Thousands]

- Establish cooperative projects and evaluate the selections.

[more than 30 cooperators]

# Status of the UF Project

- 85 accessions. Collections in Georgia.
- Propagation by cuttings is easy.
- Two Foundation blocks: CREC and Water Conserv II.
- 30 cooperators ranging in size from a few plants to 200.
- 4-H and Master Gardener projects.



AZADI (1)  
AZADI



AZADI (1)



SIN PEPE (6)



SIN PEPE  
(7)  
SIN PEPE

Cultivar	Yield [fruit count]			
Afganski	38		Parfyanka	21
Al-sirin-nar	5		Sakerdze	42
Angel Red	37		Salavatski	47
Azadi	30		Shirin Zigar	5
Azadi	16		Sin Pepe	12
Desertnyi	20		Sirenevyi	3
Double Red #2	0		Surh-anor	37
Gissarskii Rozovyi	4		Sweet	6
Grenada	35		Toryu-shibori	12
Kazake	15		Vkusnyi	15
Kunduzski	25		Wonderful	10
Medovyi Vahsha	15			

**Table 1. Results of pomegranate fruit tasting held at Water Conserv II, August 30, 2011. Cultivars are listed according to the percentage of 'green' ratings. See narrative for explanation.**

<b>Cultivars</b>	<b>No. responses</b>	<b>Green, %</b>	<b>Yellow, %</b>	<b>Red, %</b>	<b>Brix</b>
Salavatski	40	78	3	20	15.0
Angel Red	48	75	19	6	14.3
Sin Pepe	45	75	19	6	13.1
Medovyi Vahsha	47	68	23	9	14.5
Wonderful	39	51	44	5	13.6
Azadi	52	51	43	6	14.0
Afganski	45	47	40	13	14.0
Sakerdze	32	38	28	34	15.0
Grenada	43	33	40	26	13.1
Desertnyi	45	33	38	29	14.3
Vikusnyi	43	33	53	14	no data
Parfyanka	53	25	49	26	13.8
Kunduzski	37	11	41	49	14.6
Surh-anor	39	10	62	28	11.0
Kazake	Not included in the taste test.				15.3

**Table 2. Fruit characteristics of pomegranate selections included in the fruit tasting held at Water Conserv II, August 30, 2011. See the narrative for explanations.**

Cultivars	Fruit size	Peel color	Aril size	Aril color	Seed hardness	Flavor	
Afganski	S	Yellow-pink	M		H	Tart (not mature?)	
Angel Red	This selection lacked color development, but the arils were large and of pleasant flavor.						
Azadi	M	Yellow-pink	M	Cream	M	Mild	
Desertnyi	M	Pink blush	M	Red	S	Mild; low acid	
Grenada	M	Golden	M-L	Cream	S-M	Tart (not mature?)	
Kazake	S	Yellow	M	Lt. pink	H	Good	
Kunduzski	M	Pink	M	Pink-Lt. red	M	Tart (not mature?)	
Medovyi Vahsha	M	Lt. pink	L	Pink	S	Mild; low acid	
Parfyanka	M	Lt. blush	M	Lt. red	S-M	Mild; sl. acid	
Sakerdze	M	Pink-lt. red	VL	Lt. pink	H	Tart (not mature?)	
Salavatski	S-M	Pink blush	S	very lt. pink	H	Tart (not mature?)	
Sin Pepe	M	Lt. pink	M	Cream	S	Pleasant; low acid	
Surh-anor	M-L	Golden	M	Cream	S-M	Tart (not mature?)	
Vikusnyi	No data						
Wonderful	M-L	Reddish	M	Red	S-M	Pleasant	

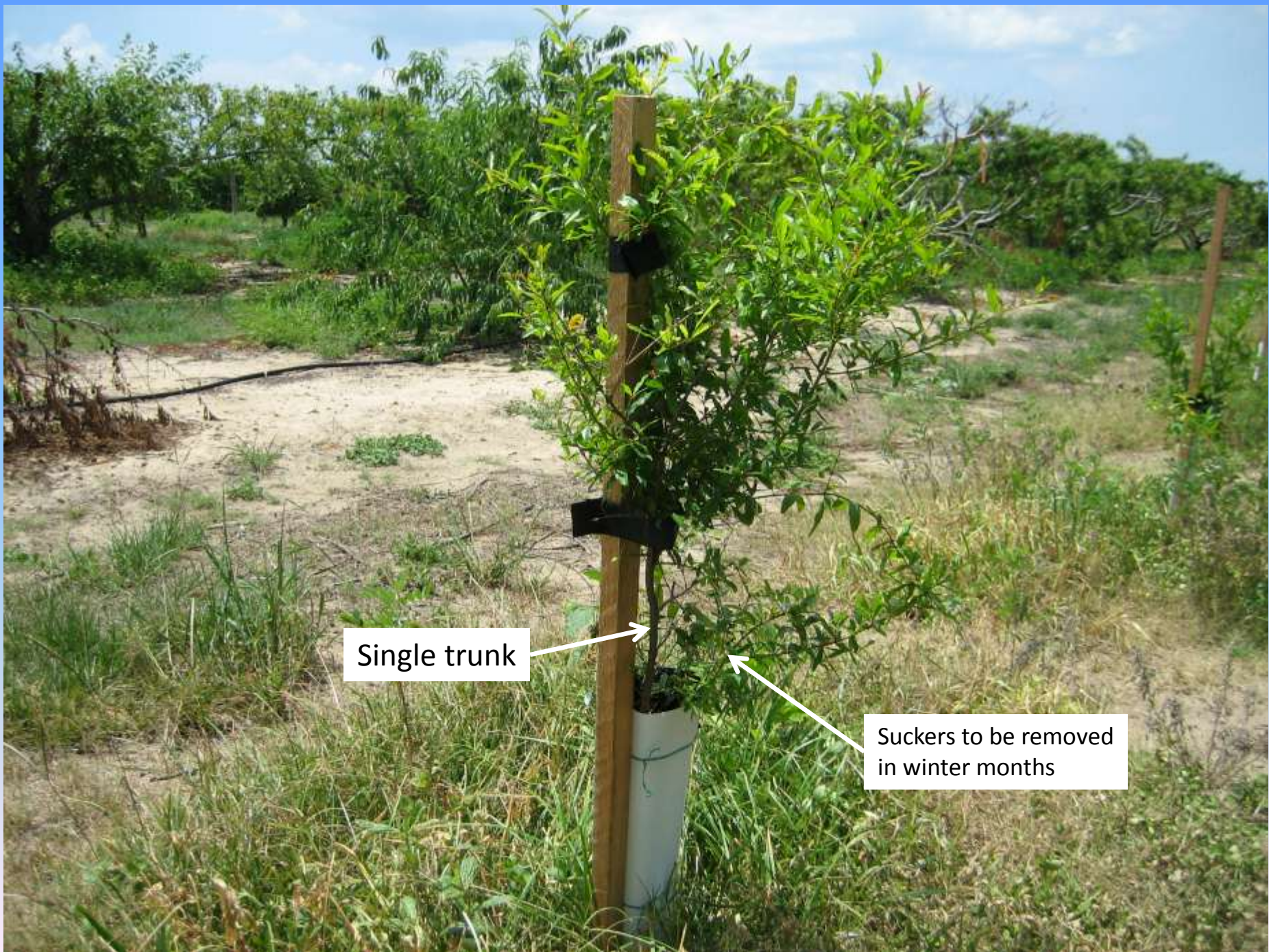
# Cultural Practices

“Treat them like orange trees”

- Spacing – 12 x 18 ft.
- Plant establishment, training and pruning.
  - Organic enrichment.
  - Single- or multiple-stemmed.
  - Suckers.
- Irrigation.
- Fertilization.
- Pests and diseases.







Single trunk

Suckers to be removed  
in winter months



FREE FORM plant as  
grown in South  
Carolina.



Most likely these are the serious problems to be encountered in growing pomegranate.

Usual suspects: *Cercospora*, ***Colletotrichum***, *Alternaria* and *Botrytisphaeria*



# Persistent questions?

- What should I plant?
- How cold tolerant are pomegranate plants?
- Do they have a chilling requirement?
- Where can I get plants for acres?





# Future?

Very promising.

A few hundred plants available Spring 2012.

Commercial nurseries beginning to propagate.

