

Heirlooms for your Spring Garden

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What we will cover today

- History and background on heirloom movement.
- Why heirlooms?
- Seed saving.
- Heirlooms that grow well here.
 - Lettuce
 - Potatoes
 - Beans
 - Peppers
 - Squash
 - Melons
 - Tomatoes

What is an heirloom plant?

- Definitions seem to vary.
- A plant that is open pollinated, i.e., not a hybrid, and over 50 years in cultivation.
- A plant that has been handed down in the family for many years like furniture or jewelry.
- A plant that has been around for a long time in production, but might not be available through conventional seed companies.

Why the interest in heirlooms?

- Since WWII there has been a consolidation of seed companies until about the mid-70's.
- New varieties were often patented hybrids because of the Plant Variety Protection Act passed in 1970 which protected plant breeders' investments.
- Older varieties often were phased out of catalogues and were going extinct. Large seed companies made more \$ from farmers than gardeners, hence, they favored commercial.

Why Heirlooms?

- What Growers like:

- Crop that uniformly mature for one harvest.
- Crops that are tough and ship well.
- Productive and disease resistant seeds, mostly hybrid seeds

- What Gardeners like:

- Crop that mature over time for staggered harvest.
- Tender crops that taste good.
- Productive and disease resistant seeds.
- Lots of choices.
- Freedom to save seeds of open pollinated varieties.

The Rescue of old plants from the scrap heap of plant history.

- Living Museums like Williamsburg, Sturbridge Village, and other historic places like Monticello, Mt. Vernon have attempted to restore historically accurate gardens.
- Unlike jewelry, furniture or other artifacts of history, heirloom plants have to be renewed.
- Museums often compromise-historians are not necessarily gardeners.

Heirloom Conservation

- Seed Savers Exchange is a non-profit organization that saves heirloom seeds and grows them out to renew viability. They also publish an annual yearbook to facilitate seed exchange with gardeners and others to promote the conservation of varieties by keeping seeds growing and being saved.
- Seed Savers Exchange also offers a great catalogue of some of their finest heirloom seeds for purchase.

Heirloom varieties are worthy because:

- They may have some genes useful to plant breeders of today.
- They are a part of human history and worth saving as part of our heritage.
- They have been selected over years to produce varieties adapted to local conditions.
- They may have unique taste and other qualities of merit to gardeners.

Prepare early

- Work up beds for lettuce, carrots, potatoes in the fall if possible
- Use lots of compost for these crops.
- Cover with black plastic to keep weeds from growing in the winter
- Remove plastic and plant in early spring

Planting depth of seeds

- As a general rule plant seeds no deeper than 3x-4x the largest dimension of the seed.

Heirloom lettuces

- A large variety of beautiful, delicious, plants.
- As easy to grow as newer varieties.
- Lettuce seed saving is easy-lettuce is self-pollinating so contamination is not a problem.

How to start lettuce seeds





Forellenschuss



Marveille des Quatre Saisons



Flame



Red Sails



Red Butterworth?



Heirloom Potatoes-expert advice

- Wally Condon, retired potato farmer of Small Potatoes fame, helped with these following suggestions.

Heirloom potatoes

- Red LaSoda-developed in 1936 in Louisiana, easy to grow and great taste. Unrated.
- Yellow Finn- 4.5 stars, gourmet, buttery, moist, great taste, use in soups, salads.
- Inca Gold- yellow flesh, long keeper. Unrated.
- German Butterball-first place winner of a Rodale taste-off. 4 stars, yellow flesh, stores well.

Heirloom potatoes p.2

- Agria a.k.a. Alby's Gold, yellow skin and flesh. Unrated.
- Carola- gold fleshed, stores well, 4 stars.
- Nicola- yellow skinned, yellow flesh. Unrated.

For tasty mashed potatoes

- Yukon Gold-early, productive, large potato, yellow flesh and skin, mealy, good storage. 3.8 stars.
- Caribe-early, purple skin, white flesh, 4.3 stars.
- Raja
- Gasore

Fingerling potatoes for great flavor

- Russian Banana- white flesh, 4.5 stars.
- Ozette- white fleshed fingerling, unrated.
- French Fingerling- yellow fleshed.
- Swedish Peanut- gold fleshed heirloom 4.8 stars.
- Rose Finn Apple- resistant to scab, yellow flesh, good storage, 5 stars.

Where to get potatoes

- Lockhart Seeds on Wilson Way- usually carries Red LaSoda and Yukon Gold, White Rose and sometimes Yellow Finn.
- Potato Garden in Idaho sells a large variety of potatoes. Used to be Ronnenger's Potatoes.
- Seed Savers Exchange also carries a good selection.

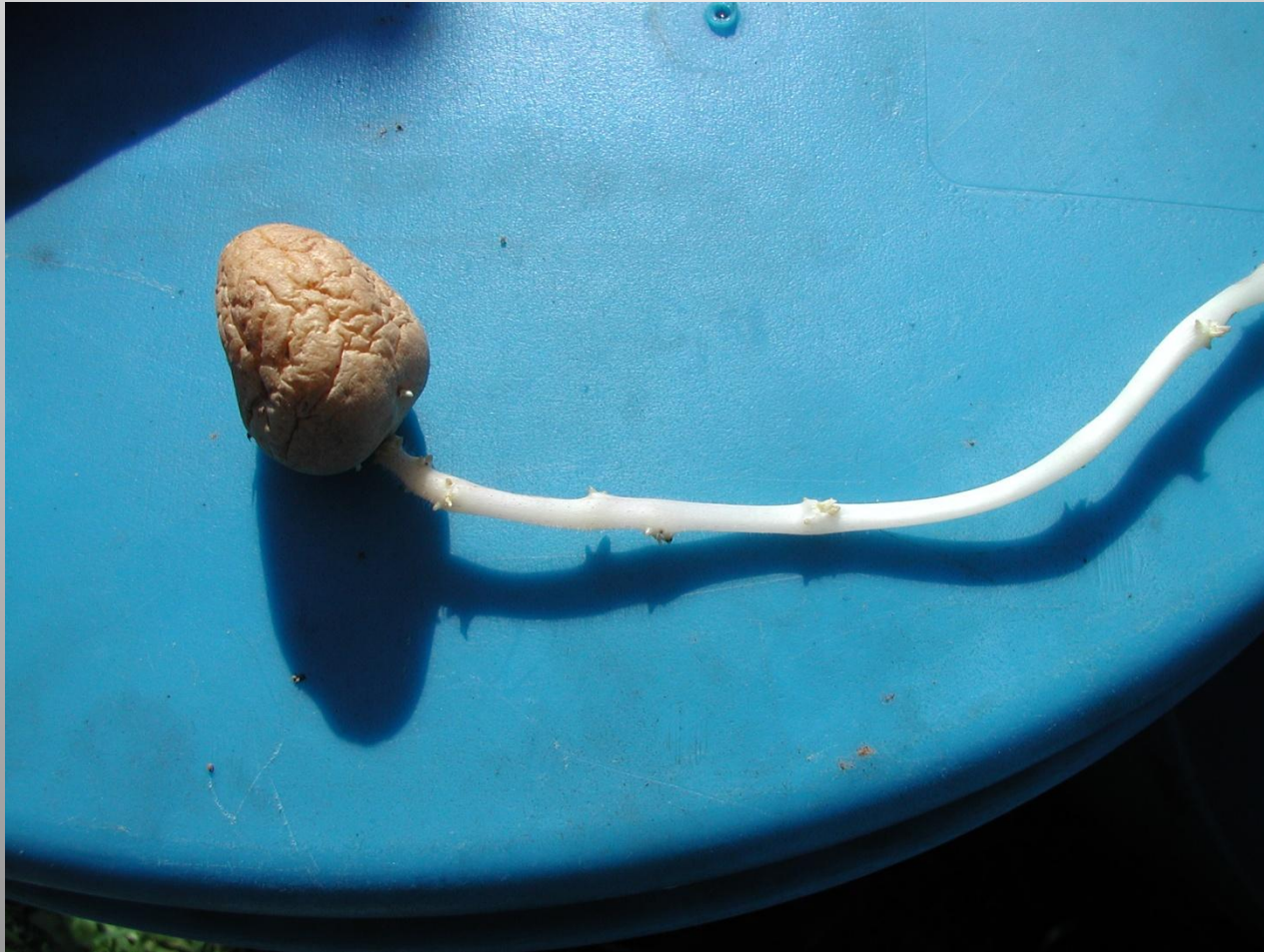
Red La Soda cut and ready to plant



Sprouted potatoes are OK to plant



Ready to go! Plant in March.



Planting/Growing Potatoes

- Plant seed potato about 6 inches deep.
- Use lots of compost.
- Hill up the potatoes after the vines are up 4-6 inches with another 3 inches of soil.
- Don't over irrigate, but keep soil consistently moist.

Red La Soda in June



Best to buy seed potatoes

- More apt to be virus free.
- Will produce larger yields than one's planted out of your cellar from last year.
- That said, you can gamble. I do and sometimes I win.

Beans

- There are lots of heirloom dried beans. I have not grown many.
- Dried beans take a lot of effort to shell them.
- For green beans, Blue Lake Bush beans and Blue Lake Pole beans are two of the best. Developed in Blue Lake area near Ukiah, CA in the early 1900's, current varieties improved by Ferry-Morse Seeds in the 1950's.

Heirloom melons

- Watermelon: Moon and Stars, Crimson Sweet, Sugar Baby.
- Cantaloupe: Charantais, Iroquois, Pride of Wisconsin, Anne Arundal.
- Casaba- good keeper.
- Hearts of Gold (Hoo Doo) midsize, tasty
- Galia- Israeli melon, green flesh holds well, delicious.
- Ha'ogen- Israeli melon, green fleshed.

Melons (Continued)

- Jenny Lind- before 1840
- Minnesota Midget
- Green Honeydew
- Orange Honeydew
- Ambrosia- hybrid, not an heirloom, but a delicious, orange-fleshed melon
- Hales Best- old time favorite muskmelon.

Moon and Stars watermelon



Heirloom peppers

- Yolo Wonder Bell
- California Wonder
- California Wonder Golden
- Napoleon
- Red-Ruffled Pimento
- Marconi and Giant Marconi
- Anaheim
- Jalapeno
- Poblano
- Serrano



Red Ruffled Pimiento



Marconi



Pablano



Napoleon



Squash



Summer squash

- Summer Crookneck
- Summer straightneck
- French White Bush Zucchini
- Black Beauty Zucchini

Winter squash

Waltham Butternut squash
AAS winner in 1970, stores
long, tastes good.

Queensland Blue- from
Australia 12-15 lbs.



2010 haul of Butternut squash



Heirloom tomatoes



Greenhouse for plant starts



Water harvesting for the greenhouse







Growing Organic Tomatoes

- Compost in each hole



Growing Organic Tomatoes

- Drip Irrigation layout for about 60 tomatoes



Growing Organic Tomatoes

- Staking and caging- mid April



Tomatoes- April 27, 2007



Tomatoes, May 17, 2007



Tomatoes – June 16, 2007



Tomatoes – July 3, 2007



Whence cometh the tomato?

- Native to South America.
- Domesticated by Native Americans in Central and North America.
- Conquistadors brought the tomato to Spain.
- First cultivated in Spain and Italy but spread to all of Europe and back to N. America.
- Thought to be poisonous for a long time. On the steps of the Salem, NJ Courthouse, Colonel Robert Johnson in 1820, ate a basket of tomatoes to prove they were not toxic.

Amazing diversity

How many tomatoes are there?

- Wikipedia - 7500 cultivars.
- Seed Saver's Exchange Yearbook for 2007
 - 552 orange-yellow tomato varieties.
 - 584 pink-purple varieties.
 - 2,439 red varieties.
 - 484 other color varieties-- black, green, white.
 - Total of 5,059 listed, if I counted right.

Tomatoes are an international fruit

- Germany-Eva Purple Ball, German Pink, German Breault.
 - 13 Red cultivars listed in Seed Saver's Yearbook start with German and 17 Pink cultivars start with German.
- Greece-Thessalonika
- Sweden- Selandia
- Balkans – Kosovo, Crnkovic Yugoslavian

Tomatoes are an international fruit

- Poland- Soldacki, Polish Dwarf.
- Italy- Principe Borghese, Pantano Romanesco
- France- Coustralee
- Belgium- Giant Belgium
- Russia- Black Krim, Black from Tula
- Bulgaria-Druzba, Bulgarian #7
- Hungary-Hungarian, Hungarian Oval.
- United States-Brandywine, Mortgage Lifter.

Red Heirlooms for the Central Valley

- Aker's West Virginia
- Coustralee
- Druzba
- San Marzano
- Mortgage Lifter
- Thessalonika
- Italian Heirloom
- Sioux (U. Nebraska 1944)
- Pantano Romanesco



Druzba



Aker's West Virginia



Aker's West Virginia



Thessalonika



Sioux



Pantano Romanesco



Mortgage Lifter



Coustralee



Italian Heirloom



Pink-Purple Heirlooms

- Ozark Pink
- German Pink
- Crnkovic Yugoslavian
- Eva Purple Ball
- Purple Cherokee
- German Breault
- Soldacki



Purple Cherokee



Ozark Pink



German Pink





German
Pink

Bicolor

Heirlooms

- Big Rainbow
- Hillbilly
- Marvel Stripe
- Marizol Gold



Hillbilly- not yet ripe





HILL BILLY



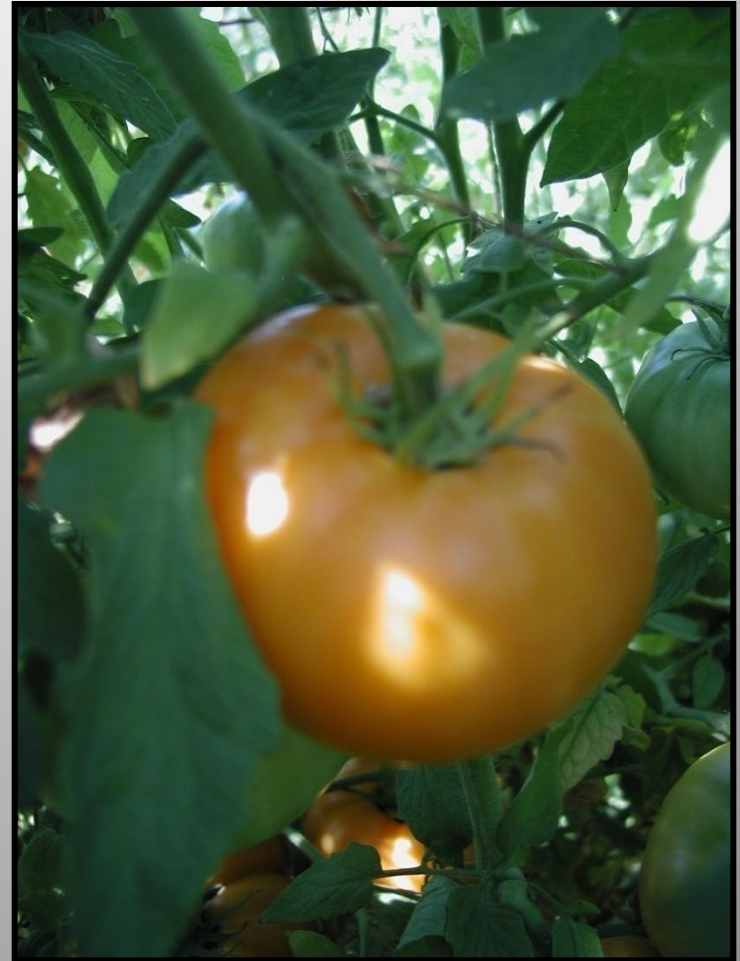
BIG
RAIN BOW

Yellow and orange tomatoes for the Central Valley

- Amana Orange
- Golden Jubilee
- Golden Queen
- Moonglow
- Azoychka
- White Wonder



Amana Orange





Golden
Jubilee



Moon glow

White Wonder



Some regular tomatoes for the Central Valley

- Ace
- Roma
- Early Girl*
- Celebrity
- Shady Lady
- Ball's Beefsteak
- Better Boy



*Lee's favorite tomato

Early Girl



Ace



Celebrity



Shady Lady



Better Boy



Roma



Unusual-- Green, black, white

- Green zebra
- Green thumb
- 17 tomatoes in the SSE Yearbook named Green__
- Black from Tula
- Black Krim
- Black Prince
- 29 tomatoes in the SSE Yearbook named Black_____

Black Prince



Heirloom Tomato Sports---

Tomato Tasting



Photo credit: Marcy Hachman

Tomatoes that didn't work for me.

- Delicious- World's largest ever tomato
 - Doesn't set fruit very well in Central Valley-too hot
- Santiam-cool temperature tomato for Oregon
- Brandywine- great flavor, but sets poorly most times.

Temperature and fruit set*

Good tomato year 2008 and bad one 2007

Fruit set is:

reduced at temperatures $> 90^{\circ}$ F.

optimal at day temperatures $65-80^{\circ}$ F.

optimal at night temperatures $59-68^{\circ}$ F.

poor at temperatures $< 55^{\circ}$ F.

* Source: Virginia and UC Davis Cooperative Extension.

Problems with Tomatoes

- Spotted Wilt Virus: A fatal virus carried by Western Flower Thrip.
- Blossom-end rot: Calcium imbalance in the plant due to watering unevenly.
- Early and Late Blights
- Consult: UC Davis Integrated Pest Management website for information on pests and diseases.

Spotted Wilt Virus kills



Spotted wilt virus in tomato



How to be a Tomato Seed Saver.



Don't save seeds from hybrids

- They will not come true to their parentage.

Ferment tomato seeds for 3 days.



Wash the seeds, dry and label.



How to save and store seeds

- Seeds need to be dry. Can dry on newspaper.
- Identify the seeds-place in envelope, label with date, seed name, source.
- Store in Ziploc, Tupperware or other air tight, sealable container.
- Keep cool, dry, and dark. 40 F is a good storage temperature and a refrigerator is cool and dark.

What to do with all those tomatoes?



Make sauce or juice with a Squeezeo.





Happy Gardening and Happy Canning



Books on Heirloom Tomatoes

- Male, Carolyn J., *Smith & Hawken: 100 Heirloom Tomatoes for the American Garden*. Workman Publishing, N.Y. **The best of her 1000 tomatoes grown in her N.Y. garden.**
- Goldman, Amy. 2008. *The Heirloom Tomato, From Garden to Table*. Bloomsbury Publishing Plc. **Features artistic photos, history, recipes. Features 150 heirlooms.**

Resources

- <http://vegvariety.cce.cornell.edu/index.php>
- Heirloom tomatoes for San Joaquin County.
Lee Miller
- Home grown tomatoes from seed to harvest.
Lee Miller

Where to buy heirloom seeds?

- Gary Ibsen's Tomato Fest
- Tomatobob.com—600 varieties
- Tomato Supply Company, Florida
- Seed Saver's Exchange-Membership/catalogue
- Southern Exposure Seed Exchange
- Nichols Garden Nursery catalogue
- Lockhart seeds, Stockton
- Riemer seeds

More Seed places

- Victory Seeds
- Baker Creek Heirloom Seeds



Thank You----
and Happy Gardening