

# Farm History ~ J and L Gardens



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**owner**

[www.jandlgardens.com](http://www.jandlgardens.com)

# Tomato Farming



Bringing early field-grown tomatoes to market



# Tomato Farming

Hoophouse in field



Hoophouse cover

# Seed Saving

Seed must be fermented to remove the gel coating that inhibits germination. This process also destroys most virus on the seed.





## CHOOSING THE FRUIT

**Mature fruit from healthy plants during a time of the season when pollinators are not active**

# Traits



**Tomatoes can be classified by a variety of traits including:**

**Fruit color (red, pink/purple, yellow, orange, green, brown/black, blue)**

**Fruit size (cherry, salad, beefsteak)**

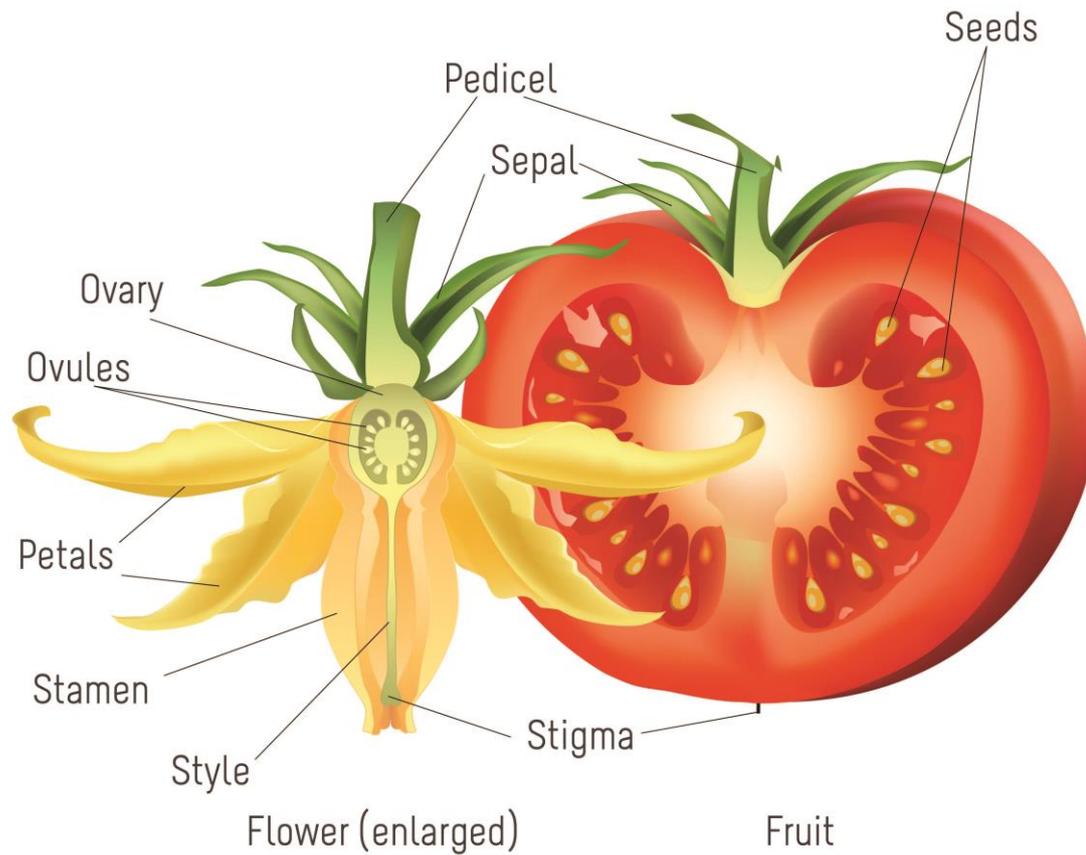
**Shape (round, pear-shaped, elongated, oblate)**

**Fruit set (determinate, indeterminate, semi-determinate)**

**Leaf type (regular leaf, potato leaf, rugose)**

**Plant habit (sprawling, tree-type, compact, dwarf)**

# Crossing

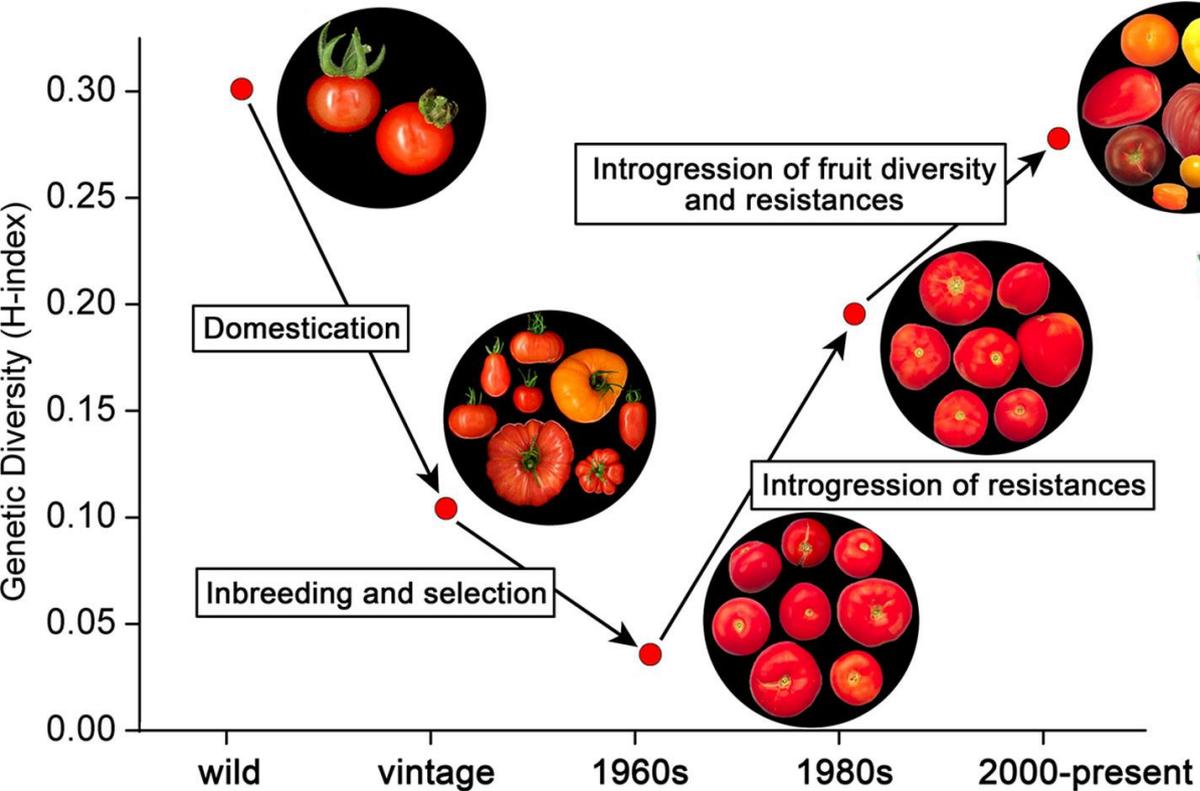


parts of the flower and fruit (above)  
emasculatation and pollination (right)



# First Crosses





# History

Part of the genus *Solanum* within the nightshade family,  
all cultivated tomatoes are a single species





## Wild Relatives



# Anthocyanin trait

<u>Gene symbol</u>	<u>species</u>	<u>accession</u>
(Abg) Aubergine	<i>S. lycopersicoides</i>	LA4425
(Aft) Anthocyanin fruit trait	<i>S. chilense</i>	LA0458
(atv) atroviolaceae	<i>S. pennelli</i>	LA0716

Sources: Tomato Genome Research Center (TGRC)

Germplasm Resources Information Network (GRIN)

# Developing a New Variety

## 'Blue' Tomatoes



# Crossing and Selection

**Amy's Sugar Gem**

**'OSU Blue' selection**



# Bosque Blue Lines

**Bosque Blue**



**Midnight Select**



**Blue Cherry**



**Dark Tiger**



# Related Lines

Gloria Blue



Black Inside-Out



Bosque Bumblebee



Black Bumblebee

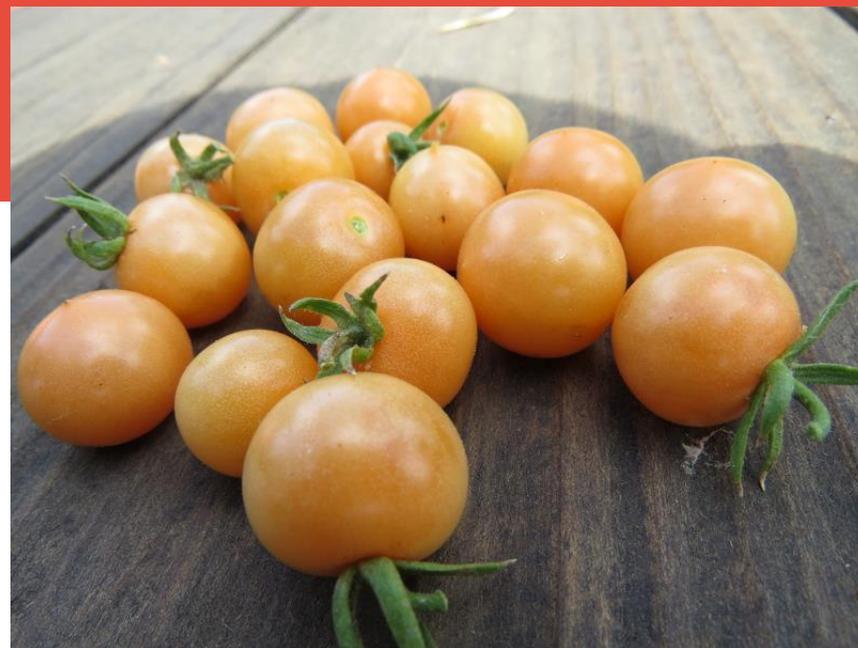


Blue Blazes



# The Ambrosia Lines

Multiyear project to dehybridize SunGold



Dwarf Project