

# Citrus - Squeeze the Day!

There are over 3,000 growers farming 320,000 acres of citrus in California. Citrus trees are **propagated** through a procedure known as grafting, where two different plant parts are physically joined and grow together as one plant. One part, the **rootstock**, is selected for its hardiness and the other part, the **scion**, is selected for its fruit quality.

There are only three original species of citrus fruits—mandarin orange, pumelo, and citron. All other citrus fruits we see today are actually products of **crossbreeding** these original species. What varieties of citrus have you tried listed on this page? What seed varieties did they originate from? Answer below using the information on this page.

The acidity in lemons, along with metal conductors, create enough electricity to illuminate a small lightbulb.

## Citron Tree

**Growing Region:** Coastal and desert regions of California.

**Common Relatives:**

- Eureka and Lisbon lemons are bitter-flavored lemons that can be used to flavor both sweet and savory dishes.
- Pink variegated lemons are known for their pink flesh and acidic flavor.
- Persian limes are traditional limes known for their tart flavor.

**Nutritional Value:** Along with supplying substantial amounts of vitamin C, the health benefits of these fruits also rest in their fiber and phytochemicals.



### Come Clean with Citrus

Citrus concentrates are easy-to-make and effective cleaning solutions. Learn how to make an all-natural disinfectant, anti-adhesive, and air freshener. Visit [sunkist.com/healthy-living](http://sunkist.com/healthy-living) to learn more.

## Mandarin Tree

**Growing Region:** 75% of oranges are grown in the San Joaquin Valley.

**Common Relatives:**

- Valencia orange is commonly used to make the orange juice in your refrigerator.
- Navel orange is known for their belly button-like apex and sweet aroma.
- Blood orange is known for their crimson flesh and a flavor that is both sweet and tart.

**Nutritional Value:** All orange varieties are a good source of vitamin C, folate, fiber, and antioxidants.

## Pummelo Tree

**Growing Region:** The desert regions of California.

**Common Relatives:**

- Pummelos look like a large grapefruit, but are less acidic. Red and pink grapefruits get their color from lycopene, a natural antioxidant.
- White grapefruits are actually yellow in color and available year round.

**Nutritional Value:** Pummelo varieties are an excellent source of vitamin C, and a source of many other nutrients such as fiber, folate, thiamin, vitamin A, and potassium.

### Size Up Your Citrus

Collect a variety of citrus fruits to conduct an analysis of size and shape. Measure the citrus fruits both in standard and metric units. Determine the diameter, circumference, weight, and volume of each citrus fruit. Use the provided scale to illustrate and label your citrus fruit according to size.

Standards: CC Math 3.MD.A.2, 5.MD.C.3, 8.G.C.9

very small    small    medium    large    very large

### Particularly Pesky Pests

Invasive species are organisms that are moved by nature, people, or animals into an ecosystem where they have not been previously found. Currently, California citrus is under the threat of attack by a tiny bug with a big impact. The bug is called the Asian Citrus Psyllid and it causes Huanglongbing disease. Although the pest is only the size of a sesame seed, it slowly kills the tree and stops it from producing fruit.

Research the latest Asian Citrus Psyllid sightings and plot them on a map (using digital or print sources). Which sighting is closest to your school? How far away is it? Learn more about Asian Citrus Psyllid from Ag in the Classroom's Fact and Activity Sheets. [LearnAboutAg.org/resources/fact](http://LearnAboutAg.org/resources/fact).



Contact CDFA to report suspicious insects or disease symptoms in your citrus trees.

Standard: CA History Social Science 3.1

Orange you glad you read this page?

Orange peels sprinkled over garden soil can act as a natural slug repellent.

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Red and pink grapefruits get their color from lycopene, a natural antioxidant.