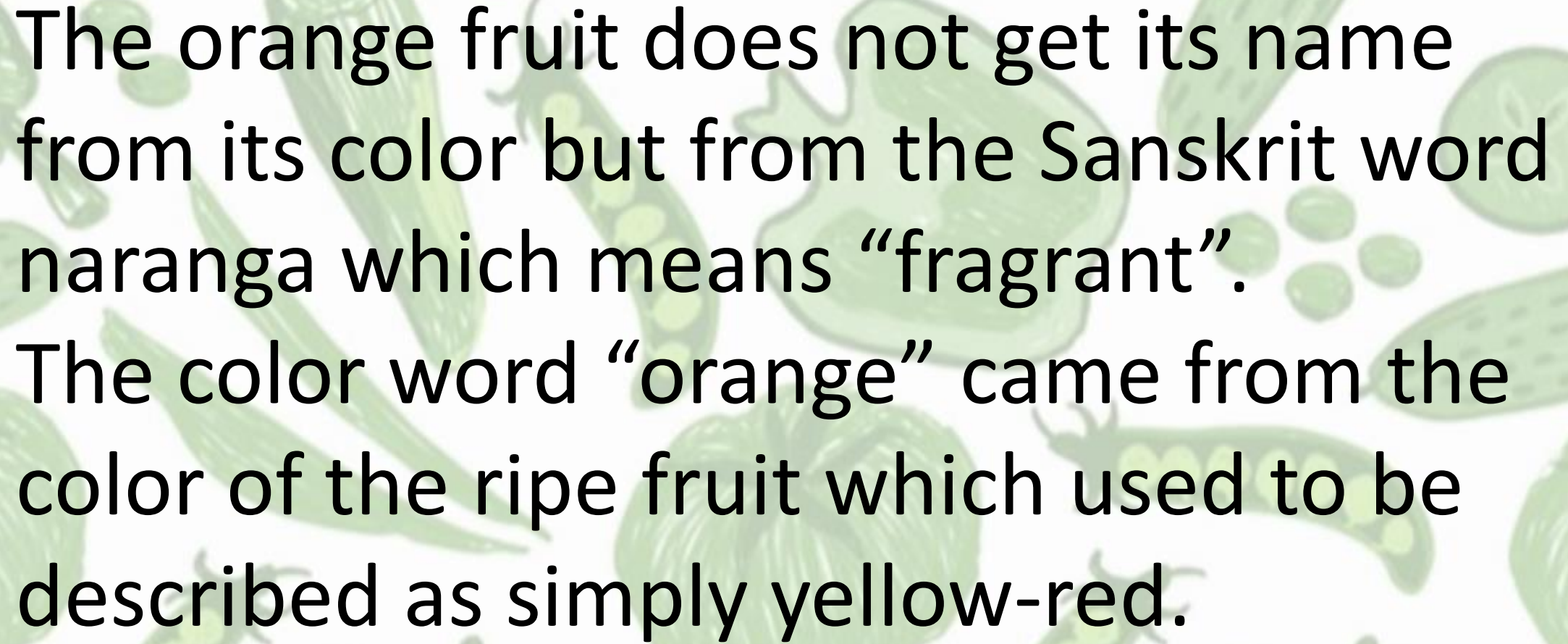


The Backyard Orchard – Citrus Module 1.5 – Sweet Orange



LSU AgCenter Backyard Orchard Certificate
Course

Dr. Raj Singh, Dr. Ed Bush, Dr. Kiki Fontenot, Dr. Joe Willis, Anna Timmerman &
Chris Dunaway



The orange fruit does not get its name from its color but from the Sanskrit word naranga which means “fragrant”. The color word “orange” came from the color of the ripe fruit which used to be described as simply yellow-red.

3 Basic Types of Oranges

1. **Bitter or sour oranges (*Citrus x aurantium*)** are usually not eaten fresh because their flesh is tart to bitter tasting. The sour flavor of these oranges is a result of the fruits' acidic juices; the bitter is due to the essential oils. The best known bitter orange varieties are Bouquet de Fleurs, Chinotto, and Seville.

Bitter oranges originated in India and made their way to the Mediterranean region around 1000 AD. Today bitter oranges are mainly grown in Europe.



3 Basic Types of Oranges

2. **Mandarin Oranges** are thought to have originated in southeastern China and spread throughout Asia in the tenth century and to Europe in the early 1800s. Today they are grown mainly in Brazil, the United States, Italy, Japan, and Spain. Mandarin oranges are loose skinned fruits—so loose that they are sometimes called zipper-skinned. Mandarin oranges are also generally smaller and flattened looking, and they typically are sweeter than sweet oranges. We've covered these: satsuma, mandarin, tangerine, tangelo.



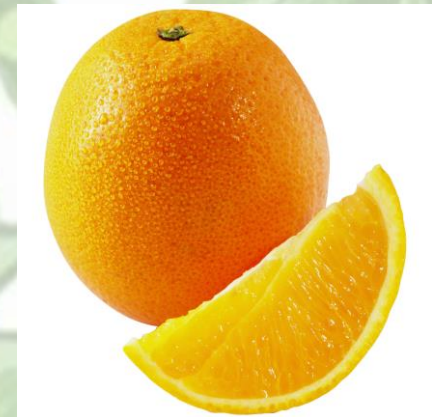
3 Basic Types of Oranges

3. **Sweet Orange (*Citrus sinensis*)** is believed to have originated in southern China and came to the Mediterranean region several hundred years after the bitter orange. Brazil, the United States and Mexico are the major growers of sweet orange. Sweet Oranges have a sweet flavor -a blend of sugar and acid - and are round to oval. Sweet oranges can be further divided into three groups.



3 Groups of Sweet Oranges

1. **Navel** oranges are sweet oranges that develop a small second fruit within the larger fruit at the blossom end of the orange.
2. **Blood** oranges are similar in appearance to common oranges but their flesh and peels range in color from pink to red to purple. The juice of blood oranges is red with some more red than others. Blood oranges have a rich, berry-tinged flavor.
3. **Common** oranges are the largest group of sweet oranges. Any sweet orange that is neither a navel or a blood orange. They are sold as fresh fruit and almost all orange juice comes from common oranges.



Washington Navel

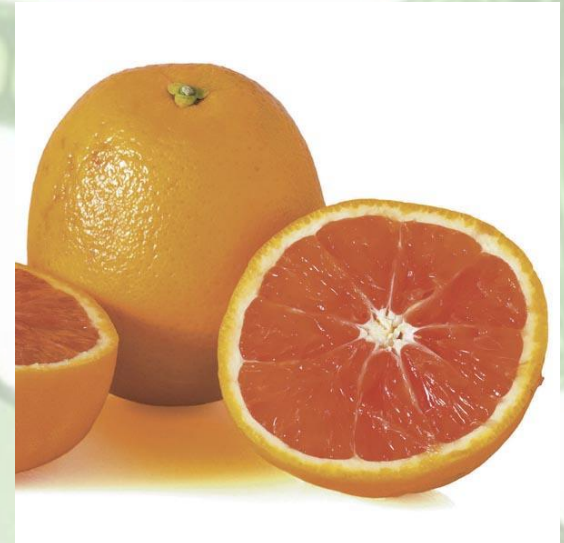


- Imported into the United States in 1870. One of the original trees is still producing fruit in Riverside, CA.
- Flowers lack viable pollen, fruit is seedless
- Large spherical fruit 3" to 4.5" diameter
- Harvest November – January
- Fruit stores well on the tree



Cara Cara Red Navel

- Tree reaches a mature ht. of 10'-15'
- Large seedless fruit stores well on the tree
- Red color comes from lycopene, beta-carotene and cryptoxanthin
- Believed to be a cross between Washington navel and Brazilian bahai navel
- Harvest November – January
- Fruit stores well on the tree



Dream Navel

- Dream Navel was discovered in Orlando Florida in 1944.
- Medium size fruit with a loose skin
- Fruit sweet and less acidic than most navels
- Harvest December - January
- Fruit stores well on the tree



Moro Blood Orange



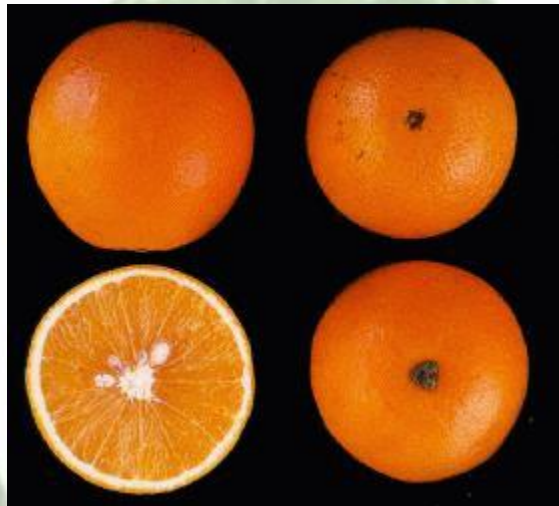
- Blood oranges may have originated near the Mediterranean where they've been grown since the 1700's.
- The red color in blood oranges is from anthocyanins
- The fruit is smaller than the other orange groups
- The color only develops when nights are cool
- Post-harvest storage at 45-50°F for several weeks will increase anthocyanin content (color)
- Harvest December – March
- Alternate bearing tendencies
- Fruit holds well on the tree
- Fruit is mostly seedless
- Tree 7-10' ht.



Hamlin Sweet



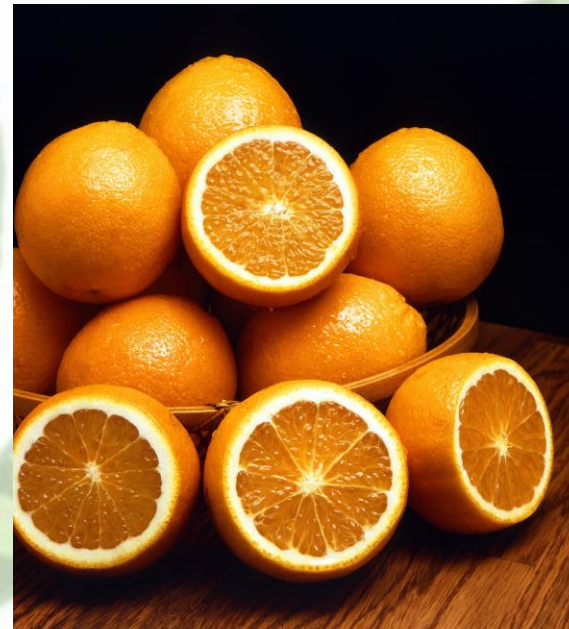
- Medium to large tree
- Heavy annual producer
- Small to medium fruit, mostly seedless
- Harvest December – February
- Most widely grown of the early orange varieties



Ambersweet



- Hybrid of Clementine by Orlando tangelo crossed with a mid-season sweet orange
- Medium pear-shaped fruit
- Harvest October – December
- Fruit is very seedy



Valencia



- Vigorous upright tree
- Very juicy with thin rind.
- The main juice orange and most widely planted orange variety worldwide
- Harvest April – June
- Prefers winter temp in 35-50°F range, southernmost LA



Pineapple



- Medium size slightly pear-shaped fruit
- Very seedy
- Has a slight pineapple flavor
- Harvest December – February
- Least cold hardy of the varieties





Please post all your questions and results to the message board that was emailed to you.