

## Citrus Maturity and Packinghouse Procedures

### Commercial Varieties of Citrus<sup>z</sup>

#### A. Oranges

##### 1. Early (September to December)<sup>x</sup>

'Hamlin': Relatively low in total soluble solids and acid, pale rind and juice color, seedless, smooth texture, small average size.

'Parson Brown': Several strains, relatively low in total soluble solids and acid, slow to degreen with rind and juice color pale until late in season, seeded, very rough texture, medium size.

'Marrs' 'Marrs Early'): Relatively low in total soluble solids and acid, rind and juice well-colored late in season, medium texture, moderately seedy, medium size (Texas).

##### 2. Early-midseason (October to November)

Navels: About 20 cultivars derived from the original 'Washington', relatively low in total soluble solids and acid, pale to medium in rind and juice color, characteristic tough membranes and juice sacs (make juice more difficult to extract), seedless, rough to medium texture, erratic bearing with a wide range in sizes with most varieties, poorly adapted to Florida, one of the 2 major oranges in California.

##### 3. Midseason (December to February)

'Pineapple': Best round orange, low total soluble solids early but high solids and acid when fully mature, deep rind and juice color, seeded, rough texture,

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<sup>z</sup>Seedless means 0 to 6 seeds.

<sup>x</sup>Months in parenthesis indicate normal shipping season

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Commercial Varieties of Citrus (cont.)

tends to bear in clusters, medium size (most sensitive orange variety to creasing, chilling and other physiological disorders).

"Seedlings": High total soluble solids and acid, deep rind and juice color at maturity, seeded, rough texture, variable in size and shape (early and late types also exist).

'Jaffa': High total soluble solids and acid, deep rind and juice color, seeded, rough texture, erratic in bearing and size (very subject to alternaria [internal] rot = "black rot").

'Homosassa': High total soluble solids and acid, deep rind and juice color, seeded, rough texture, erratic in bearing and size.

'Queen': Similar to 'Pineapple' but lacks distinctive aroma, matures somewhat earlier.

4. Late (February to May)

'Valencia': Single most important citrus variety in the world; high total soluble solids and acid, deep rind and juice color, often regreens after growth starts in spring (especially when weather is warm and wet), seedless, medium texture, oblong to round shape, holds well on tree after maturity, medium to large size; numerous strains.

'Lue Gim Gong': Matures later than typical 'Valencia' as rule indistinguishable otherwise.

'Pope Summer': Very late variety often maturing in June or July; high total soluble solids and acid, medium to deep rind and juice color, seedless, medium to rough texture, round, medium to large size, reputed to resist regreening.

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**B. Grapefruit**

1. White seeded:

'Duncan', 'Florida Common', 'Walters', 'Bowen', 'McCarty', etc.:  
High total soluble solids and acid, large size (except  
'Leonardy'), numerous cultivars.

2. Pink seeded:

'Foster': Mutant of 'Walters', blush on rind, large size,  
similar in quality to 'Duncan'.

3. White seedless:

'Marsh' ('Marsh Seedless'): Medium total soluble solids, medium  
size, only cultivar grown in California--Arizona.

4 Pink and red seedless:

Pink: 'Thompson' ('Pink Marsh'): Medium total soluble solids  
and acid, medium size, mutant of 'Marsh'.

Red: 'Ruby' ('Ruby Red', 'Redblush', etc.): Blush on rind,  
low total soluble solids and acid, small size,  
flesh color tends to fade during season in Florida  
(but not in Texas), several mutants from 'Thompson'  
and 'Marsh'.

'Burgundy': Low total soluble solids and acid, small  
size, retains its flesh color better than 'Ruby',  
periclinal chimera from 'Marsh'.

'Star Ruby': High total soluble solids, medium acid,  
retains its flesh color during the season, derived  
from irradiated seed at Texas A & I (Weslaco),  
unusual in red blush on rind and vegetative growth.

Specialty Fruits

1. 'Temple' (tangor?): Midseason, excellent quality with dis-  
tinctive spicy aromatic flavor, deep rich rind and flesh  
color dulling late in season, oblate shape, seeded,

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smooth to rough texture, susceptible to scab and mealybugs, tends to bloom several times during the year.

2. Tangerines:

'Dancy': Main commercial variety, midseason (December to January, high total soluble solids and acid, erratic in size (often too small), shape (oblate to pyriform), and deepness and uniformity of rind color, texture often rough, becomes puffy late in season, ships poorly.

'Ponkan' ('Chinese Honey', 'Warnuco'): Early (November), pale rind color, rough (pebbled) texture, poor shape (not uniform), alternate bearer.

'Clementine': Same season as 'Dancy', light rind color, high total soluble solids and acid.

'Robinson' (hybrid of 'Clementine' and 'Orlando' tangelo): Early (November), deep red rind color, rough texture, medium size, fair to good quality, quite susceptible to anthracnose.

'Honey' tangerine (formerly 'Murcott'; tangor?): Late (February to April), light orange-yellow rind color, deep orange flush, medium size, smooth texture, very high total soluble solids and medium acid, heavy bearing, good shipper.

3. Satsumas:

'Owari' only commercial cultivar, very early (September to October), often at peak edibility before rind has degreened, low to medium total soluble solids and low acid, medium size, rough to smooth texture, seedless, subject to scab, ships poorly. (Now being marketed non-degreened by Sealdsweet as "Emerald tangerine".)

4. Tangelos (Tangerine x grapefruit hybrids):

'Orlando': Early (November to December), medium size, smooth texture, oblate shape, deep orange rind and flesh color,

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small if seedless, larger if seeded, principal tangelo in Florida.

'Nova' (Same parentage as 'Robinson'): Similar to 'Orlando' except deeper rind color and slightly earlier in season.

'Minneola' ("Red" tangelo): Midseason (January), medium size with distinct neck and jug shape thus very difficult to handle on packinghouse machinery, deep red color, deep orange flesh, excellent quality, short season, neck breaks down while fruit are still on tree, commonly marketed as gift fruit.

'Thornton': Midseason (December to January), medium size, rough texture, deep yellow rind and flesh color, almost obsolete.

'Seminole': Late (February to April), similar to 'Orlando' but retains high acidity late in season.

5. 'K-Early': Early (October to November), inferior quality, oblate, medium color. (An insult to a pig's palate.)

D. Acid Fruits

1. Lemons: About 40 cultivars of which 'Bearss' is the principal cultivar in Florida, grown mainly processing but comparable in color, flavor, acidity and juice content to California fruit when carefully cured for the fresh market

2. Limes:

'Persian' ('Tahiti'; 'Bearss' in California): Large, seedless grown for both fresh market and processing.

'Key' ('Mexican', 'West Indian'): Small, seeded, not grown commercially in Florida. (Even seeds for test plants for tristeza are from fruit imported from Mexico!)

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Commercial Varieties of Citrus (cont.)

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