Citrus in Central Texas

Williamson County Master Gardeners

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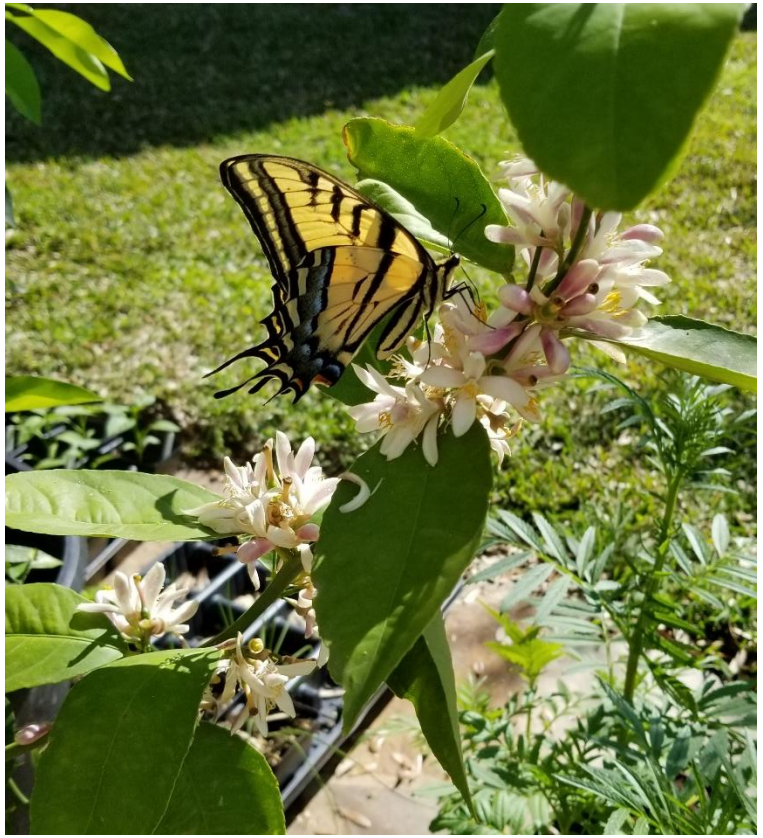
Dropbox address

https://www.dropbox.com/s/wnzzqzbcvxwm95i/Citrus%20for%20Texas%20monthly%20meeting.pptx

Citrus considerations

- Climate
- Soil
- Site Selection
- Propagation
- Plant selection
- Planting
- Care
- Pests and diseases
- Varieties



Climate

- Most citrus varieties need protection from freezes.
- Some varieties will withstand freezing
  - If they are mature.
  - If the weather has gradually cooled before freezing.
- Plan ahead before you purchase so you are ready when it freezes.
- Best bets for our area: Kumquat, satsuma, calamondin, tangerines, some tangelos, meyer lemon.

Soil Requirements

- All citrus trees require deep soil having both good surface and internal drainage.
- Soil pH range from 6 to 8.
- **Avoid soils that have a high caliche content** or are excessively salty

Site Selection

- Avoid planting near septic tank lines.
- Plant on the south and southeast side of house.
- Full sunlight for best production.
- Plant larger citrus trees 6 to 8 feet from buildings, driveways, walkways and fences, and 12 feet apart.
- The natural form of citrus is for the ends of the lower branches to almost touch the ground when fruit is present, so allow for this natural growth at planting.

Plant Selection

(4)

Citrus nursery stock

- Most retail stock is containerized.
- Bud union will be readily discernible as a cut area at a dogleg bend in the trunk.
- The cut area is where the top of the rootstock was cut off to allow the budded top to grow erect. This area should be healing over with bark at the time of purchase.
- Container trees are available year-round and can be planted anytime.
- Best results: fall to late winter.

(5)

Planting

- Container grown plants are grown in mainly soil-less medium.
- Wash off 1 inch of medium with hose around all edges, including top, to allow roots good contact with soil in hole.
- Remove lawn 3-5 feet in circumference.
- Dig the planting hole half again wider than the root ball.

Planting – 2

- Planting depth is critical to the survival of citrus trees. The rootstock is somewhat resistant to foot rot disease, but the top is quite susceptible. If the bud union is too low with respect to surrounding ground, the tree could contract foot rot and die.
- The practice of scooping out grass and soil to form a large depression for ease of watering almost guarantees the death of a citrus tree.

Planting – 3

- In a bare ground situation, dig the hole exactly the same depth as the root ball, but in lawn grass, dig it 1 inch less than the root ball depth.
- Set the tree in the hole, backfill about halfway, then water sufficiently to wet the backfill and settle it around the roots. Finish filling the hole and tamp the soil lightly into place. Cover the root ball with 1/2 to 1 inch of soil to seal the growing medium from direct contact with the air and prevent rapid drying of the root ball.
- Build a watering ring atop the ground around the tree, about 5 to 6 inches high and 6 to 8 inches thick. The ring should be slightly wider than the planting hole. Fill the water basin with water. When the water soaks in, it may be necessary to add a little soil to the holes made as the soil settled around the root system.

Young Tree Care

Water

- 1st week: 2-3 times
- Next 4 weeks: 1-2 times per week, depending on soil type, rainfall and time of year.
- Then, apply water when the soil begins to get dry an inch or so down. Simply fill the water ring each time. The watering ring should erode away over time (4 to 6 months), at which time the tree can be considered established and watered as needed by soaker hose or sprinkler system.

Young Tree Care – 2

- Fertilizing
  - Do not apply fertilizer until new growth appears
  - Fertilize monthly through October. Scatter fertilizer on the ground at least a foot from the tree trunk and promptly water it in thoroughly.

Amount of fertilizer/tree, applied monthly, February–October		
	Nitrogen content	
	8–13 percent	17–21 percent
First year	1 cup	1/2 cup
Second year	2 cups	1 cup
Third year	4 cups	2 cups

Young Tree Care – 3

- Weed Control
  - Reduce competition for nutrients and water
  - Reduce pest habitat
  - Eliminate all existing lawn grass and weeds for several feet around the tree.
    - Lawn mowers can damage both fruit and bark.
  - Weed control can be accomplished by mechanical means such as hoeing.
  - Organic mulches are not recommended for citrus trees because of the potential for inducing foot rot disease. If mulches are used, keep at least 12 inches of bare ground between the tree trunk and the mulch.
  - Pre-emergent herbicides may be used to prevent weed seeds from germinating.

Young Tree Care – 4

- Pruning and Training
  - Citrus trees are sold already properly shaped and pruned to develop naturally, so pruning and training of a citrus tree is not necessary.
  - The only exception is that shoots from below the head (scaffold limbs), whether on the rootstock or the scion, should be removed as soon as they are noted.

Young Tree Care – 5

- Cold Protection
  - Soil bank
    - Can be used for the 1st 2-4 winters.
    - Before banking, treat the bark to be covered with a suitable insecticide and a copper-based fungicide
    - Bank soil around the trunk as high as possible around trunk and lower scaffold limbs before first freeze.
    - Carefully remove soil from the area March 1st.
    - Die back of the upper limbs may occur.
    - Plant will regrow from trunk.
      - New plant may be multi-trunked.
    - Unbanked tree may die to ground
      - Rootstock may send up new trunk(s)

Care of Established Trees (8)

- To maintain good growth and vigor
- To maximize the production of quality fruit.
  - Irrigation, fertilization, weed and grass control.
  - Pruning is rarely necessary.
  - Pest control to produce bright, clean fruit, and occasionally to maintain tree health.

Care of Established Trees – cont.

- Water
- A good irrigation schedule for established trees is simple to develop.
  - 2 pet food cans about 2 inches tall in the middle of the yard.
  - Cover with wire mesh to prevent birds from drinking from them.
  - Fill with water immediately after a thorough soaking.
  - From mid-April through mid-September, irrigate with 1 1/2 inches of water when the cans are completely dry, then refill the cans and wait for the water to evaporate again.
  - The rest of the year, irrigate with 1 inch of water when the cans are dry. Adjust the application rate to prevent water runoff.
  - Use drip irrigation or emitter tubing when feasible.

Care of Established Trees – cont.

- Fertilizing:
- 13 nutrient elements essential to all plant growth.
- Soils west of I35 generally are quite fertile and contain more than adequate quantities of all essential elements except nitrogen. The other elements rarely need to be applied to mature, established citrus. However, the exceptions are important.
- Clay soils usually contain plenty of iron, but citrus trees may exhibit iron deficiency in the early spring. Usually, the deficiency clears up as the soil warms up. If it does not, soil application of iron chelates is necessary.
- Where iron deficiency does occur, do not use fertilizers which contain phosphorous because high phosphorous aggravates iron and zinc deficiency in high pH (alkaline) soils.
- Red, sandy soils (east of I35 in some places) may need supplemental potassium and sandy soils in general may need additional zinc.
- Citrus does not grow well in caliche soils (east of I35).

Care of Established Trees – cont.

- Fertilizing – continued

- Mature, bearing citrus trees should receive enough nitrogen to provide for good but not excessive growth.
  - If the percentage of nitrogen in the fertilizer is less than 15%, apply about 1 pound per inch of trunk diameter per year. If the percentage is above 20%, use 0.75 pound or less per inch of trunk diameter per year. One pound of dry fertilizer is approximately 2 cups.
- Two applications are recommended, with two-thirds of the fertilizer applied in February and the balance in May.
- Spread fertilizer uniformly on the soil surface under the tree canopy and slightly beyond and water it in thoroughly.

Care of Established Trees – cont.

- Weed and Grass Control – same as young trees
  - Control weeds and grass beneath citrus trees to reduce competition for fertilizer and water. Also, weeds and grass may harbor pests which can affect the fruit or trees.
  - Mulches are not recommended because of foot rot disease. If used, keep mulches at least a foot away from the tree trunk.

Care of Established Trees – cont.

- Pruning
  - Citrus trees are pruned primarily to control tree size and to remove dead, diseased or damaged wood.
  - Allow to grow naturally without pruning.
  - Citrus trees grow an “apron” around the lower part of the trunk. This provides some protection from heat and cold. If you prune this, the tree will start suckering. (18)

Care of Established Trees – cont.

- Pest Control
  - Citrus pests in Texas include insects, mites and diseases.
  - Tristeza is a virus disease that kills citrus trees quickly, particularly those growing on sour orange rootstock.
  - Foot rot is a fungal disease present in many Texas soils.
  - Monitor and control outbreaks of pests or diseases which affect tree vigor.
    - Aphids, mites, scales, leaf minor and whiteflies are good examples. Mites, particularly the citrus rust mite, can badly blemish the rind. However, rind appearance does not adversely affect eating quality of the fruit.

Care of Established Trees – cont.

- Pest Control Continued
  - Birds: the only citrus pests I've seen in my yard (so far)
  - Grackles seem to be the main culprit, according to Julian Sauls, Citrus Specialist for Texas Cooperative Extension. (10)
  - Tulle covering to exclude birds.

Meyer lemon with bird damage.

Care of Established Trees – cont.

- **Freeze Protection**
- It's going to happen!
  - Duration of freeze
  - Severity of freeze
  - Exposure to cold weather
    - Short days and cool weather condition the tree to stop growing and acquire greater cold-hardiness.
      - satsuma may withstand 18 degrees F in early February when it is completely dormant and most cold-hardy, but may be seriously damaged at 24 degrees F in early December.
- Grow only cold-hardy types of citrus such as kumquats, satsuma mandarin, tangerines, calamondin and some tangelos.

Care of Established Trees – cont.

- Freeze Protection continued
  - Remove mulches before winter.
    - Bare ground can absorb more heat from the sun.
  - Thoroughly irrigate several days before a hard freeze.
    - Moist soil can absorb more heat and conduct heat better than dry soil.
  - Drape tops of trees with blankets and then plastic.
    - Remove covering after 4 hours above freezing.

Care of Established Trees – cont.

- Freeze Protection Continued
- Incandescent lights/electric heaters
  - Caution: many freezes begin with strong winds and often include precipitation.
- Gas lantern/camp stove
  - Will burn for 10 to 12 hours on a tank of fuel, but will require pumping up once during the night.
  - The propane types do not require pumping.
- Portable gas grill
  - Low heat; leave the lid closed.

Care of Established Trees – cont.

- Freeze Protection Continued
  - Overhead sprinkling:
    - Do not cover first and don't use other heating methods.
    - Sprinkler must be started before the temperature drops to the critical level – 28 degrees F on calm nights, 30 degrees F on windy nights – and must run continuously until the temperature is sufficiently above freezing that ice in the shade begins to melt.
    - However, the ice load can cause significant limb breakage and a freeze lasting several days can result in excessive waterlogging of the soil.

Care of Established Trees – cont.

- Freeze Rehabilitation
  - It's going to happen!
  - Delay pruning until May.
    - Citrus trees lose their leaves (and fruit) after a severe freeze, but they send out new growth in March. Much of this lush spring growth dies back in April because of underlying damage to the wood and bark. Consequently, delay pruning until after the dieback has occurred.
  - Dead bark seems to shrink tightly around the limb while live bark keeps growing outward, creating a distinct ridge between the two. The ridge will be irregular around the limb. Scrape lightly across the ridge with a knife blade to delineate the green, live bark. Cut off the limb below the lowest limit of the dead bark so that live bark completely encircles the limb stub.
  - Treatment of cut-off limb stubs with pruning paint is not necessary for proper healing.

Productivity

- Most budded citrus trees can produce a few fruit in the second year after planting, but usually do not produce until the third year.
  - Production increases annually as tree size increases. Seedling trees may not bear for several years.
- There usually are four or five flushes of new growth on a citrus tree each year.
- Lemon,limes, kumquats and calamondin can flower and set fruit almost year-round.
- Offbloom (i.e., non-spring flush) fruit of oranges, tangelos, grapefruit and others are puffy, having a very thick peel, and sheepnosed in shape. Rarely is juice quality comparable to normal.

Productivity – cont.

- Fruit Drop – 3 distinct periods
  - 70 to 80 percent of the flowers during and immediately following bloom.
  - Second drop occurs a couple of weeks later, involving small fruit of pea-size to marble-size.
  - The third drop occurs in late May, involving larger fruit, almost golf ball in size.
  - Navels will drop again in mid-summer and in late summer.
  - A few fruit on all citrus will continue to drop through final harvest, but that is normal and cannot be prevented.

Productivity – cont.

- Fruit Maturation
  - Excluding the semi-everbearing citrus, such as lemons, limes, calamondin and kumquats, most other types mature in the fall, including mandarins, tangelos, grapefruit and most oranges.
  - The juice quality of all citrus fruits improves the longer it stays on the tree.
  - Citrus fruits generally store well on the tree.
    - Will eventually begin to dry out on the tree, or freeze.

Container growing

- Citrus trees need full sunlight and generally do not perform well as houseplants.
- Several kinds can be adapted to container culture.
  - Won't produce as much fruit.
  - Likely won't live as long.
- The smaller citrus types such as calamondin, limes, kumquats, lemons and limequats, are best suited to container culture.
- Containers:
  - Adequate draining.
  - Large enough to permit maximum growth, yet small enough to be readily moved indoors during freezing weather.

Container growing – cont.

- Potting
  - Cover the drainage holes with screen mesh to prevent soil from washing out. This will also prevent fire ants.
  - Potting soil is suitable.
  - Partially fill the container and set the plant at the level at which it was grown previously. The final soil surface should be 1 to 4 inches below the container rim to allow for easy watering.
  - Fill the container, firm the soil.
  - Water thoroughly.
  - Mulch with bark or gravel to deter squirrels.

Container growing – cont.

- **Light**
- Keep container grown citrus in partial shade.
  - Prevents excessive leaf drop when moved indoors.
  - Protects the roots from excessive summer heat.

Container growing – cont.

- Freezes
  - This is going to happen!
  - Move plant indoors. For a few days, it's safe to put in garage with no extra light.
  - Ideally move into a heated greenhouse.
    - It would be safe to leave in greenhouse all winter.

Container growing – Cont.

- Water
  - Don’t overwater!
  - Water only as needed. Generally, allow the upper inch of the medium to become dry before watering. Then apply water slowly to fill the container, permitting the excess to drain out the bottom.
  - Cool weather slows growth, so reduce watering frequency during winter.

Container growing – cont.

- Fertilizing – no food, no fruit!
  - Overfertilization and low light can result in leggy growth.
  - Numerous water-soluble fertilizers are available
    - Use according to label directions.
    - Deep green color of mature foliage indicates adequate nutrition.
  - Salt accumulation from water and fertilizer salts can cause a white crust on the soil or container, as well as leaf burn and twig dieback. Flush.

Container growing – cont.

- Pruning
  - Trees will become leggy when grown indoors in poor light for too long. To overcome this, cut back the entire top by about one-third to induce more branching and bushiness.
  - Twig dieback and leaf drop may occur if the top gets too large for the capability of the root system. Such plants require moderate pruning to balance the top with the roots and rejuvenate the plant.

Container Growing – cont.

- Fruit Production
  - Thinning:
    - 5 gallon tree: 4-6 fruit the first year
    - 1 fruit for every 42 leaves
    - Over-fruiting causes alternate year bearing, stunted tree growth, and the stress makes it more susceptible to pest damage and freeze injury.

Varieties – Calamondin

- Container/in-ground grown
- Hardy to 20F
- Edible fruit, 1” in diameter, orange
- 4-5 growth flushes per year, resulting in nearly continuous flowers
- Fruit is most abundant from Nov to June
- Easily grown from seeds or rooted cuttings
- Self fertile
- Begin producing fruit at 2 years.

Varieties – Meyer Lemon

- Container
- Meyer lemon (Citrus x meyeri)
  - Not a true lemon – cross between lemon and orange
  - Cold tolerant to mid-20s, but best to protect.
  - Nursery sold in two forms: shrub and tree, some thorns.
  - Propagation is t-budding or inverted t-budding
  - Seedlings aren't always true to type.
  - Interesting Fact: The Meyer lemon tree was banned in the 1940's due to the spread of viruses such as citrus tristeza virus. In 1973, a new virus-free, Meyer Improved Lemon Tree, was created.

(13, 14, 15)

Varieties – Satsuma

(17, 19, 20)

- Container and/or in-ground
  - 'Arctic Frost' Texas Superstar 2015
    - hardy to 9F
    - Grown on own rootstock by Green Leaf Nursery
  - 'Orange Frost' Texas Superstar 2014
    - Zone 8 (includes Hill Country)
    - Grown on own rootstock.
    - Hardy to 15F
    - 10 feet tall x 8 feet wide
    - 1.3 seeds per fruit
    - self fertile
  - 'Bumper': more productive but less cold hardy than Orange Frost
  - 'Miho' 2010 Superstar. (cold hardy to 20)
  - Satsumas as a group 1993 Superstars.
  - Best bet: grow as container plants for 3 years and then plant in ground.
  - Young plants are more cold sensitive.

Texas A&M AgriLife Extension Service photo by Dr. Larry Stein

Varieties – Kumquat

- Container and/or in-ground
  - Among the most cold hardy of citrus.
  - Can flower and set fruit almost year round.
  - The tree is usually small and shrubby, mostly thornless.
  - Fruit are small and showy, bright yellow to orange in color, few-seeded and not very juicy.
  - The peel is fleshy, thick, aromatic, spicy and edible.
  - The fruit matures in late November and can be eaten whole; it is also candied and used for marmalade.
  - Kumquat trees become semidormant from fall into spring, with growth occurring only at relatively warm temperatures.
  - Usually grown from own rootstock or from rooted cuttings

(29,30)

Taken at Mueller Lake Park Trail

Varieties – Lime

- Container grown in our area
- Can flower and fruit almost year round
- Least cold tolerant of citrus
- Mexican lime is also known as key lime and West Indian lime
  - Small, bushy, thorns. (Thornless varieties don't produce well.)
  - Fruit is small, rind is thin and yellow at full maturity.
- Tahiti lime is also called Bearss lime and Persian lime
  - Tree and fruit are both larger than Mexican lime.
  - Fruit is dark green at commercial maturity and yellow at full maturity.
- Mexican lime is a better choice for containers.
- Either type will start producing in 2-3 years.

(24, 25, 26)

Varieties – Limequat

- Great for containers
- Kumquat hybridized with Lime
- Very small yellow fruit with a few seeds
- Common varieties are 'Eustis', 'Lakeland' and 'Tavares' hybridized with Mexican Lime
- Small trees, readily grown in containers

Varieties – Tangelos (26, 27,28)

- In-ground
- Ripen in fall
- Cross between tangerine and grapefruit
- Varieties:
  - Orlando, medium sized tree, seedy fruit, needs pollinizer
  - Minneola, medium sized tree, few seeds, needs pollinizer; also known as Honeybelle in Florida
- more cold hardy than oranges or grapefruit
- easy to peel and have orange peel color and rich flavor
- Require pollination and bees love the flowers

Varieties – Tangerines

- In-ground
- 'Changsha' tangerine is very much like the satsuma
- Fruit quality is not as good as satsuma and is very seedy.
- More cold-hardy than older satsumas and kumquat: will grow and fruit in Ft. Worth (15F)
- ‘Changsha' comes true from seed and the seedlings will produce within a few years.

Varieties – Loquat

- Container/in-ground
- Doesn't like hot, humid summers, can sunburn, so plant in part shade
- Killing temperature for flowers is 19F but established plants can survive 12F
- Shallow root system
- 1-2 inch long fruit, yellow to orange
- 3-5 seeds
- Bag fruit to protect from birds and sunburn
- Will tolerate limestone soils
- Grafted trees will begin to bear fruit in 2 to 3 years, compared to 8 to 10 years in seedling trees.
- Susceptible to fire blight

(31,32)

Sources for more reading

- Sources for Citrus Speech 2020
- https://aggie-horticulture.tamu.edu/fruit-nut/fact-sheets/citrus/ (1)(2)(3)(5)(6)(7)(8)(9)(10)(11)(21)(24)(26)(29)
- https://aggie-horticulture.tamu.edu/fruit-nut/fact-sheets/citrus/table-1-common-texas-citrus-varieties/
- https://aggie-horticulture.tamu.edu/fruit-nut/fact-sheets/citrus/table-2-common-citrus-problems/
- https://aggie-horticulture.tamu.edu/patiocitrus/introduction.html (great photographs of various varieties) (18)
- https://aggie-horticulture.tamu.edu/patiocitrus/introduction.html (some citrus recipes)
- https://www.plantanswers.com/Library/ViewQuestion.asp?QuestionID=8926
- https://www.plantanswers.com/Articles/OrangeFrost.asp
- https://www.plantanswers.com/Articles/TheHardySatsuma.asp
- https://www.plantanswers.com/Articles/Citrus-Pruning.asp
- https://www.plantanswers.com/citrus_damaged.htm (10)
- https://www.plantanswers.com/Articles/JuicingCitrus.asp
- https://www.plantanswers.com/changsha.htm
- http://www.crfg.org/pubs/ff/whitesapote.html
- http://www.crfg.org/pubs/ff/loquat.html
- https://aggie-horticulture.tamu.edu/citrus/lemons.htm
- https://aggie-horticulture.tamu.edu/citrus/limes.htm (26)
- http://plantanswers.com/fruit/loquat.html
- https://aggie-horticulture.tamu.edu/citrus/mandarins.htm (27)

Sources – cont.

- https://aggie-horticulture.tamu.edu/citrus/miscellaneous.htm (22)(30)
- https://aggie-horticulture.tamu.edu/citrus/oranges.htm
- https://aggie-horticulture.tamu.edu/citrus/diagnostics/greening/greening.htm
- https://aggie-horticulture.tamu.edu/citrus/l2286.htm
- https://aggie-horticulture.tamu.edu/citrus/cultivars/L2304.htm
- https://aggie-horticulture.tamu.edu/citrus/nursery/L2305.htm (23)
- https://aggie-horticulture.tamu.edu/citrus/L2306.htm
- https://aggie-horticulture.tamu.edu/citrus/water/L2307.htm
- https://aggie-horticulture.tamu.edu/citrus/nutrition/L2288.htm
- https://aggie-horticulture.tamu.edu/citrus/cold/L2287.htm
- https://aggie-horticulture.tamu.edu/citrus/pruning/L2308.htm
- https://aggie-horticulture.tamu.edu/citrus/l2326.htm
- https://aggie-horticulture.tamu.edu/citrus/l2329.htm
- https://aggie-horticulture.tamu.edu/citrus/l2309.htm
- https://aggie-horticulture.tamu.edu/citrus/l2310.htm
- https://aggie-horticulture.tamu.edu/citrus/l2311.htm
- https://aggie-horticulture.tamu.edu/citrus/l2312.htm
- https://aggie-horticulture.tamu.edu/citrus/l2313.htm
- https://aggie-horticulture.tamu.edu/citrus/l2314.htm
- https://aggie-horticulture.tamu.edu/citrus/l2315.htm
- https://aggie-horticulture.tamu.edu/citrus/l2316a.htm
- https://aggie-horticulture.tamu.edu/citrus/L2325.htm (28)
- https://aggie-horticulture.tamu.edu/citrus/l2328.htm
- https://aggie-horticulture.tamu.edu/citrus/l2317.htm
- https://aggie-horticulture.tamu.edu/citrus/l2293.htm
- https://aggie-horticulture.tamu.edu/citrus/l2318.htm
- https://aggie-horticulture.tamu.edu/citrus/l2294.htm
- https://aggie-horticulture.tamu.edu/citrus/budding/budding.htm (4)
- https://aggie-horticulture.tamu.edu/citrus/loquat.htm
- https://aggie-horticulture.tamu.edu/patiocitrus/Calamondin.html (12)

Sources – cont.

- https://aggie-horticulture.tamu.edu/citrus/lemons.htm (13)
- https://agrilifecdn.tamu.edu/amarillo/files/2014/12/Meyer-Lemon.pdf (14)
- https://aggie-horticulture.tamu.edu/galveston/publications/Ambrosia-Inside.pdf (15)
- https://aggie-horticulture.tamu.edu/galveston/Gardening_Handbook/PDF-files/GH-052--citrus-fruit-splitting.pdf
- https://aggie-horticulture.tamu.edu/patiocitrus/containers.html (16)(17)
- https://agrilifetoday.tamu.edu/2014/06/04/satsuma-orange-frost-texas-superstar/ (19)
- https://agrilifetoday.tamu.edu/2015/06/10/arctic-frost-satsuma-mandarin-hybrid-named-new-texas-superstar/ (20)
- https://www.plantanswers.com/Articles/CitrusSelectionStillGood.asp (25)
- https://aggie-horticulture.tamu.edu/citrus/l2311.htm
- https://aggie-horticulture.tamu.edu/citrus/l2312.htm
- https://aggie-horticulture.tamu.edu/citrus/l2313.htm
- https://aggie-horticulture.tamu.edu/citrus/l2314.htm
- https://aggie-horticulture.tamu.edu/citrus/l2315.htm
- https://aggie-horticulture.tamu.edu/citrus/l2316a.htm
- https://aggie-horticulture.tamu.edu/citrus/L2325.htm (28)
- https://aggie-horticulture.tamu.edu/citrus/l2328.htm
- https://aggie-horticulture.tamu.edu/citrus/l2317.htm
- https://aggie-horticulture.tamu.edu/citrus/l2293.htm
- https://aggie-horticulture.tamu.edu/citrus/l2318.htm
- https://aggie-horticulture.tamu.edu/citrus/l2294.htm
- https://aggie-horticulture.tamu.edu/citrus/budding/budding.htm (4)
- https://aggie-horticulture.tamu.edu/citrus/loquat.htm
- https://aggie-horticulture.tamu.edu/patiocitrus/Calamondin.html (12)
- https://aggie-horticulture.tamu.edu/citrus/lemons.htm (13)
- https://agrilifecdn.tamu.edu/amarillo/files/2014/12/Meyer-Lemon.pdf (14)
- https://aggie-horticulture.tamu.edu/galveston/publications/Ambrosia-Inside.pdf (15)
- https://aggie-horticulture.tamu.edu/galveston/Gardening_Handbook/PDF-files/GH-052--citrus-fruit-splitting.pdf
- https://aggie-horticulture.tamu.edu/patiocitrus/containers.html (16)(17)
- https://agrilifetoday.tamu.edu/2014/06/04/satsuma-orange-frost-texas-superstar/ (19)
- https://agrilifetoday.tamu.edu/2015/06/10/arctic-frost-satsuma-mandarin-hybrid-named-new-texas-superstar/ (20)
- https://www.plantanswers.com/Articles/CitrusSelectionStillGood.asp (25)