

March  
2016

# VALDOSTA CAMELLIA AND GARDEN CLUB

## A Message From Our President Mark Crawford

Camellia season is about over with 2016 being a very good year for varieties that have a tendency to drop buds. Retics have been exceptional this year blooming now. The warm weather in December allowed the retics buds to mature and we had no temperatures in the low 20s that cause buds to drop. Now is the time to trim your plants and fertilize. If you have a scale problem trim the plants so the limbs are at least 18 inches off the ground. If your plants have not flushed new growth you have time to apply a dormant or Volck oil spray. If growth buds are expanded then use citrus or summer oil that will not damage new growth. It is also time to remove all the unopened buds and do general cleanup of your plants so they look good for the summer.

If you grafted plants in January and February be patient as you should begin to see growth soon with April 15 being the time when things should begin to happen with your grafts – good or bad.

Excellent progress has been made on trimming the camellias on the Whitehead Trail on the VSU campus. Emily Cantowine's students have made this huge task much easier. As of now about 75% of the camellias have been trimmed and some weed trees have been removed.

The March meeting will be our last formal meeting of the season. Bring a friend, some camellias blooms and some food. Later in May, we will be joining the Wiregrass Club for a joint picnic on Sunday May 1<sup>st</sup> at the Selph's in Quitman starting at 4 PM.

## Next Club Meeting

Tuesday  
March 22

6:30 PM

First  
Presbyterian  
Church

313 North  
Patterson St.

Bring a covered  
dish and a  
FRIEND!

## TWO COMMON CAMELLIA PESTS SOLUTION: ULTRA FINE OIL SPRAY



Tea Scale



Ultra Fine Oil



Mite Damage

# Cold Hardy Citrus Give It a Try

by J. D. Thomerson

Cold hardy citrus is a general term describing citrus with increased frost tolerance which may be cultivated far beyond traditional citrus growing regions. There are actually citrus varieties such as the Trifoliate Orange (actually not a true orange but a close relative) that can be grown in climates that get well below zero degrees Fahrenheit –

**Please Note:** I am not a citrus expert — although I did stay at a Holiday Inn Express last night. I hope folks remember that commercial or the above will sound stupid. Anyway, If any of the information in this article is incorrect Mark Crawford will correct me and I will report corrections in the next newsletter.

but, they are inedible. Well, technically you can eat anything but I can't imagine eating a trifoliate orange. I was curious one time how bad the fruit could really be so I sliced one open and just barely let my tongue touch the fruit – oh my goodness, it tasted like rotten motor oil. The juice got all over my

hands and would not come off even with soap and water. There are some other citrus varieties that withstand temps down in the single digits but these are mainly hybrids between a decent tasting citrus fruit and a trifoliate orange and the terrible taste of the trifoliate orange is still pretty bad.

Most of the good tasting citrus varieties that I will be discussing below unfortunately either do not grow well on their own roots or are cold sensitive – so, it is very important to purchase citrus plants grafted onto the proper rootstocks.



Yes, Citrus can be Grown in Valdosta

Trifoliate orange (the one that has fruit that tastes like rotten motor oil) is actually a superior rootstock for satsumas, oranges, kumquats, grapefruits, and tangerines and is strongly recommended. There are also the hybrid rootstocks with 50% trifoliate parentage such as the Swingle Citrumelo (cross between a grapefruit and trifoliate orange) and certain Citranges (a cross of sweet orange and trifoliate orange) such as Rusk, Troyer, and Carrizon. Some of these hybrid rootstocks produce larger and faster growing trees than the pure trifoliate orange but in doing so might lessen extreme cold hardiness. Sour Orange (a true orange unlike the trifoliate orange) is as its name suggest very sour but is also used in parts of the country as citrus rootstock.

One last citrus rootstock that I want to mention is the “Flying Dragon” trifoliate orange. This rootstock is nasty to handle – it has huge thorns like the normal trifoliate orange but in addition has curvy and contorted limbs that make it impossible to handle without getting stuck. The “Flying Dragon” rootstock is very good at making dwarf citrus trees. A dwarf citrus is simply one that only gets about 5 to 6 feet tall at maturity instead of 15 to 20 or more feet tall. If growing citrus in a small area or in a pot a good tasting variety grafted onto Flying Dragon rootstock would work well.



Thorny Spines of Flying Dragon Rootstock

That is a lot of discussion about rootstocks – but, to be successful growing citrus in our area rootstocks are very important. Most citrus (not all but most) will grow from seed and will be the same as the fruit from which the seeds originated – or in other words will come true from seed. However, citrus grown from seed takes many years (sometimes 10 years or more) to fruit. Also, the seedling variety will probably not have enough cold tolerance to survive in our area. This is why grafting on a good rootstock is so important – you can obtain good fruit in just a couple of years after grafting and the proper rootstock increases the cold tolerance.

You can graft citrus much like camellias (using a cleft graft) or using a technique called “budding” where you slip one

growth eye into a small upside down “T” type split in the rootstock bark. Like camellias several different varieties can be grown on one plant.

If you want to learn a lot more about citrus you should talk with Mark Crawford and Jake Price (Lowndes County Extension Agent.) These guys know citrus. In fact, Jake (with Mark’s help) is coordinating a citrus rootstock trial at Lomax-Pinvale Elementary School here in Valdosta. Jake, Mark, members of the Valdosta Master Gardeners, and other volunteers (including me) have planted approximately 100 satsuma citrus plants on several different types of rootstocks and will be conducting a study to try and determine the best rootstock for our area. They will be keeping statistics of all kinds of things such as cold tolerance, growth rate, taste of fruit, and other factors. The fruit that will soon grow on these trees will be served to the elementary school children at Lomax-Pinvale and other area schools.

Now that we have discussed the importance of citrus rootstock I now want to briefly list and discuss several outstanding cold hardy citrus varieties that taste great and can be grown in our area. The varieties I list are just a few of my favorites that have proven to do well in our South Georgia climate.

## MANDARINS

This type of citrus is what most of us call or think of as tangerines – but mandarins also include clementines and satsumas. Compared to oranges in general, Mandarins tend to be smaller in size, have a looser peel, and are less tart. The fruit is easy to peel, has few seeds and separates easily into segments.

**Owari Satsuma:** If you can only grow one citrus this is your best bet. It is the hardiest and most consider best tasting of all the mandarin (tangerine type) varieties. It ripens in mid to late November and is hardy to around 18° F and grows to around 15 to 20 feet tall.



**Owari Satsuma**

**Miho Satsuma:** Similar in all respects to the Owari except it ripens about one month earlier than Owari. By growing both Owari and Miho varieties this is a wonderful way to have great tasting Satsuma Mandarins for a longer time.

**Juanita Tangerine:** This variety originated as a chance seedling from a grocery store tangerine. It was planted by a Juanita Barrineau of Lake City, South Carolina. There are reports that this tree actually survived 0° F in 1985. I would not want to test my plant in my yard surviving at zero degrees (that just sounds too good to be true) but it is known to be

very cold tolerant. The Juanita tangerine looks and taste similar to the satsumas mentioned above but it is unique having a very upright growing shape unlike most other broad shaped mandarins.

**Keraji Sweet Lemon:** This is my daughter Katie’s favorite citrus. I really don’t know what category this citrus really falls under but it peels like a satsuma so I will include it under the mandarins. The Keraji Sweet Lemon produces small 2-inch fruit (too small for commercial production) that has a sweet lemonade taste unlike any other citrus fruit. Kids love them – well, I do too. Since they are small I typically eat two or three at a time. The peel is extremely easy to remove. The tree is very cold-hardy surviving short dips into the upper teens. Yes, it is called a sweet lemon and “sweet” it is – to me it taste like a lemonade life saver. The trees get very large (30 feet tall) and can be grown from seed or cuttings.

## ORANGES -- (Sweet and Navel)

**Ambersweet:** The Ambersweet orange is relatively new having been developed in Orlando in 1989. The fruit is almost as big as navel oranges. Ambersweet orange tree is actually a Mandarin x Sweet Orange hybrid – but looks and tastes like an orange. This is a good fresh eating or juice orange that ripens early and has a nice balance of sweet tart flavor.

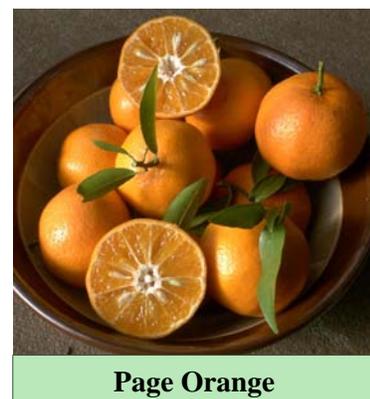


**Ambersweet Orange**

**Hamlin:** Smaller than the Ambersweet orange this round shaped fruit is thin skinned, has few seeds, and a delicious tangy sweet flavor. Hamlin is the most widely grown early-season sweet juice orange grown in Florida and the tree among the most cold tolerant. Hamlin oranges are very prolific at setting fruit.

**Cara Cara Navel:** Often called the “Red Navel Orange.” Yes, this one has deep reddish orange flesh. The fruit of the Cara Cara Navel orange has the same great rich sweet flavor as other navel oranges, but it ripens early enough to escape freezes that might ruin the fruit. Just Fruits and Exotics nursery states that this is their most popular overall variety.

**Page:** The Page orange is actually a cross between a Minneola Tangelo and a Clementine – so, why do I list it here in the orange category. Well, it looks like an orange and tastes much like an orange and does not really fit in any category. A Tangelo is a cross between an orange and a grapefruit and the other half of the Page



**Page Orange**

parentage is a clementine. This is probably my favorite tasting citrus that I can grow. The Minneola Tangelo is my absolute favorite but it gets too cold most years for it to do well in Valdosta. The Page orange must have acquired much of the great taste of the Minneola in its DNA because it is one great tasting citrus. The fruit is too small and soft to ship so you'll probably never see this variety in the grocery store but it is great as a dooryard citrus. This is one variety of citrus that needs (or produces more fruit) with a pollinator citrus nearby so do not plant this one individually.

## KUMQUATS

I really like the Kumquats and they are quite cold hardy and perhaps the easiest of all the citrus to grow in our area. Kumquats are very unique in that you eat the skin as well as the flesh. Kumquats have small fruits (smaller than a golf ball) but produce them in abundance on compact growing plants. They are great to plant in courtyards and other locations where a smaller growing tree is required. Even if you did not like the taste of the Kumquat they make great looking ornamentals with all the orange colored balls of fruit. There are two main varieties of Kumquats:



**Nagami Kumquat**

**Meiwa:** This is the Kumquat variety that I prefer. It is round in shape and is much sweeter tasting than the Nagami.

**Nagami:** Oblong or oval shaped fruit, very decorative, but a bit too sour of taste for some people. I often see Nagami Kumquats for sale in grocery stores around Christmas season. This variety is often used to make delicious preserves and marmalade.

**Calamondin** – Ok, this is not considered a kumquat but I don't know where else to list it. Perhaps I should not list it at all because it is not edible – I don't care what anyone says. The Calamondin is believed to be a cross between an orange of some kind and a kumquat – but, it did not get the good taste of either. The fruit is smaller than the smallest orange but is larger than a kumquat. It is very sour tasting -- so why would anyone grow this citrus? Well, it is very cold hardy even down into the teens and it makes a very ornamental small citrus tree that produces fruit off and on year round. The calamondin actually taste more like a lemon or lime and some folks use it as such in various drinks.

## GRAPEFRUIT

When I was young I could not believe my parents would eat grapefruit. It was so bitter and sour to my taste. Then, as a



**Popular Grapefruit Varieties: Duncan, Marsh, & Rio Red**

young adult I began to like grapefruit as long as I added a big spoonful of sugar. Now that I am middle aged I really like grapefruit straight off the tree. Grapefruit trees get very large (20 – 30 feet tall) and are more cold-sensitive than Mandarins, Kumquats, and Oranges but placed in strategic locations in protected areas of the yard they can be grown in our area. There are three huge grapefruit trees in three different backyards of houses within one mile of my house. One I believe to be a Duncan, one a Marsh, and one I have been too embarrassed to ask the homeowner.

**Duncan:** This is an old variety with white flesh and lots of seeds. However, it is considered to be the sweetest of all the grapefruit varieties as well as the most cold tolerant. The only big drawback of the Duncan is all the seeds (up to 40 or 50 per fruit.)

**Marsh:** This is currently the most often grown white (or pale yellow in this case) grapefruit. Marsh Grapefruit trees bear big fruit that are often seedless. Fruit holds well on the tree for a very long time, up to six months without loss of flavor but are not as cold tolerant as the Duncan.

**Bloomsweet Grapefruit:** This is a very interesting variety – unlike any other citrus. Big oblong fruit larger than a typical grapefruit. The fruit is easy to peel and segment much like a huge mandarin. Trees are very hardy and withstand temps down to around 15 F. There is no agreement on exactly what type of citrus the Bloomsweet Grapefruit belongs – many consider it a hybrid of pomelo, grapefruit, and perhaps mandarin. But, since it taste much like a sweet grapefruit most citrus folks list it in the grapefruit category. Whatever this citrus is it grows to be huge (tall and wide.) I like the taste and how easy it peels and



**Bloomsweet Grapefruit**

prefer the Bloomsweet to the true grapefruit varieties. Mark Crawford and I have grafted several Bloomsweet Grapefruit scions onto Flying Dragon rootstocks in hopes of reducing the mature size of this monster citrus.

**Flame, Rio Red, Star Ruby, Henderson, Ray:** All of these (and there are others I did not list) are red fleshed grapefruit – some having darker red flesh than others. Even though they all taste almost identical to the white/yellow fleshed Marsh grapefruit these red fleshed grapefruits for the most part are the only ones you can purchase at most grocery stores. People just like the looks of the red flesh. All get to very large size and have similar cold hardiness as the Marsh.

## POMELO

Pomelo fruit are huge and can be as large as a basketball. This is a fruit tree that stands out in the landscape and makes a great conversation plant. Besides the enormous size, pumelos



**Comparison Size: Pomelo on left & tangerines on right**

are valued for being less acidic and sweeter than traditional grapefruit. Unfortunately, Pummelo are not very cold hardy -- they can tolerate temperatures a little below freezing, but will probably be killed if the temperature falls below 24° F for more than a few hours without protection. Randolph Maphis acquired a Melogold pomelo fruit (actually a grapefruit x pomelo hybrid) that he said was huge and had unbelievable great tasting flesh. We are not sure how cold hardy the Melogold pomelo plant is but I think he has planted one in his yard so in the years to come we will find out. There are several other varieties of pomelo and pomelo/grapefruit hybrids but I will discuss the one that supposedly is the most cold tolerant and that does the best in the hot humid southeast.

**Hirado Butan:** This pomelo hybrid variety produces pink-fleshed fruit. It has a marvelous chewy texture and a flavor much like grapefruit but without a hint of bitterness. There is much work to do to prepare this fruit to eat. The fruit is first sectioned and then



**Hirado Butan Fruit**

the sections are peeled of their tough outer skin. The results are what look like giant pink peeled shrimp, the texture is chewy and the flavor is out of this world. The description above about the Hirado Butan is from what I have read – I have a large healthy plant but it has not produced fruit for me yet.

## LEMONS AND LIMES

I am grouping lemons and limes together because these two types of citrus share many attributes. Both are typically used in cooking and in drinks and are not eaten out of hand. Both are very cold sensitive – especially limes. Out of about 10 different citrus plants in my yard I have only had one die from the cold and that was the Eureka lemon (the Eureka is like the lemon found in the grocery store.) However, there are a few varieties that can be grown successfully in our area.

**Meyer Lemon:** This tree is a hybrid from China (1/4 tangelo and 3/4 lemon) that is thin-skinned and juicy. It is prized by cooks for its unique mild flavor. This variety is more cold-hardy than most lemons, able to withstand temps in the low to mid-twenties. This variety bears fruit year around and grows very well in large pots.



**Meyer Lemons Grow Great in Pots**



**Sanboken Lemon**

### Sanboken Lemon:

Sometimes sold as “Sambo Lemon” this is a little known variety, with a pronounced basal nipple and knobby rind that looks very different from other citrus. Fruit peels fairly easy and can be eaten like a tangerine. The flesh is tender and somewhat sweet like a mix of sweet orange and grapefruit. Sanboken

lemon has good cold tolerance similar to that of the Meyer. Mark Crawford gave me one of these plants and it has done very well in my yard. It has handled three winters with no problems and had lots of big yellow interesting shaped fruits this year. I like it very much as an ornamental and the taste is not bad and can definitely be used as a substitute for a normal grocery store lemon.

**Sunquat:** A Sunquat, also known as lemonquat, is a chance hybrid between a lemon and a kumquat (likely a Meiwa.) The cold hardiness of the Kumquat helps make this lemon handle winter temps in our area. The round yellow fruit are a bit larger than a golf ball and are juicy and sweet enough to be

eaten out of hand (I like them.) They also taste enough like a lemon that they could be used as a true lemon substitute when cooking.

**Limes:** Unfortunately, true limes are very cold sensitive and I do not know of any varieties that can handle our South Georgia winters. However, they grow well in pots that can be moved to shelter during winter freezes. Popular varieties include: Persian (also known as Tahitian and Bearss) and Kaffir.



**Limequat**

**Limequat:** Yes, you guessed it – a Limequat is a hybrid between a lime and a kumquat. Like the Sunquat, the Kumquat improves the limes cold hardiness. The Limequat is not as cold hardy as the Sunquat (my goodness, that is a lot of “quats”) but I have successfully grown one outdoors the past three years (I have thrown a sheet over the plant when temps dip into the low twenties.)

**PLEASE NOTE:** In order to successfully grow citrus (even these cold hardy varieties) in our climate zone you do need to give young citrus plants protection. Young citrus plants are much more vulnerable to cold than larger established plants. Blankets, tarps or similar covers are very effective and have the advantage of being quickly draped over the young tree. More elaborate protection can be provided by erecting a frame structure of wood or PVC pipe over the plant to facilitate the

use of plastic or large tarps during particularly severe cold weather. Supplemental heat can also be provided under the covers; incandescent bulbs and heat lamps are useful. Insulated foam like the kind you wrap around outdoor water lines can also be placed around the trunk making sure to cover up above the graft union.

Once citrus plants grow large they can handle colder temps with less damage but it is still important to make sure plants are well watered before the onset of freezing temps. Dry and thirsty plants cannot handle the cold as well as watered plants and the soil temp stays warmer when wet. It also helps to keep the ground around the base of the citrus plant free of grass and mulch – the soil can absorb and maintain daytime heat better this way.

#### **GIVE CITRUS A TRY**

Growing citrus in our area is challenging but is also very doable. We have several very knowledgeable citrus experts (Mark Crawford, Jake Price, and others) in our area that would love to help get you started. The fruit taste better (much better) than what you buy in grocery stores. Once established a single citrus tree can produce lots of fruit for many years. Citrus trees also make attractive plants especially when orange and yellow balls of fruit hang on the limbs and they are always conversation pieces with visitors to your yard. Yes, I encourage everyone to give citrus a try.



**Make sure cover goes all the way to the ground**

## **Good Places to Purchase Cold Hardy Citrus**

**Just Fruits and Exotics, Crawfordville, FL**  
website: [justfruitsandexotics.com](http://justfruitsandexotics.com)

**Loch Laurel Nursery, Valdosta, GA**  
website: [lochlaurelnursery.com](http://lochlaurelnursery.com)

**Brite Leaf Citrus Nursery, Lake Panasoffkee, FL**  
website: [briteleaf.com](http://briteleaf.com)

**Harris Citrus Nursery, Lithia, FL**  
website: [harriscitrus.com](http://harriscitrus.com)

# Join the Valdosta Camellia & Garden Club Today

- ❖ Informative meetings – Camellias and much more!
- ❖ Share your gardening ideas and expertise with other members
- ❖ Group events

Meetings are typically held the 4<sup>th</sup> Tuesday of the month from September through March  
at

**First Presbyterian Church  
313 North Patterson St.  
Valdosta, GA 31601**

**Call Mark Crawford at 229-460-5922 for more information.**

- \$10.00 Individual member
- \$15.00 Joint membership

**Name:**

**Address:**

**City, State Zip Code:**

**Telephone:**

**Email:**

**Gardening Interests:**

**Mail or give to:**

Sandra Seago  
Treasurer, Valdosta Camellia & Garden Club  
1802 N. Oak St.  
Valdosta, GA 31602

**We look forward to seeing you at the upcoming meetings!**

(Please come as our Guest and you can decide if you want to join later)

**Typical Meeting Time: 6:30 PM**

**4<sup>th</sup> Tuesday of the month from September through March**

**But please e-mail or phone Mark Crawford to make sure of meeting date/time/location as we occasionally meet on other dates and at different locations**

**E-mail: [craw142@bellsouth.net](mailto:craw142@bellsouth.net)**

**Phone him at 229-460-5922**