Gulf Coast Fruit Study Newsletter

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Next Gulf Coast Fruit Study Meeting

Our upcoming meeting is at **7:00 PM** on **Thursday**, **May 29**, with a program devoted to the history of Southern Apples and on introducing new possibilities for successfully growing apples in the Gulf Coast region.

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May 29, 2014

A Forgotten Fruit – Southern Apples Revisited

As most are aware, the apple is not native to North America and is thought to have originated in Kazakhstan, from where it was brought to Europe and to England, before making its way into the United States. Here, the apple industry spread primarily by planting seeds and selecting useful seedling plants, as grafting techniques were not often employed. Ultimately, apples became widely planted in the South, but this apple belt was located far from Houston, in Virginia, Maryland, and southern Ohio, Indiana and Illinois where chill was not a limiting issue. Lee Calhoun (*a member of NAFEX and SFF*) with the assistance of his late wife wrote an informative book, now in its second edition, entitled, **Old Southern Apples**, first published in 1995.¹

Lee and his wife traveled widely throughout the South attempting to find ancient trees on old homesteads, collecting their scions and learning their oral history from the locals and then re-creating an orchard with true copies of the original favorite trees which were grown in large orchards in Virginia, northern Georgia, and southern Tennessee, prior to the Civil War. In this publication there are copies of original color plates of these distinctive apples (which he used to verify identity) and detailed descriptions of where they were first planted and then propagated (not by grafting but by growing root suckers of a desirable cultivar). These color plates were carefully copied from the originals in the Library of Congress, and are beautiful. Lee was largely successful, and many of these old varieties are still able to be obtained from specialty plant nurseries (but do not think they compare in fruit quality to modern apples at the supermarket). For many years he maintained his own collection of these trees. The late Dr. Leon Atlas and I visited his home in Virginia many years ago and sampled some of these. Apples were never grown as far south as the Gulf Coast area but Lee comments in his book, "There was a small commercial apple industry in Texas from 1910 to 1930 in Franklin and Camp Counties. Excellent apples were grown there, mainly Yellow Transparent, Wilson's Red June, Golden Delicious, and Lowry (possibly a contribution of Lynn Lowry's father?) but depressed prices and heavy insect and disease pressures caused the commercial orchards to be gradually abandoned"...

¹ Old Southern Apples, Creighton Lee Calhoun, Jr. The McDonald & Woodward Publishing Company, Blacksburg, Virginia, 1995, 326 pp

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A Forgotten Fruit – Southern Apples Revisited (continued)

Dr. Atlas preferentially used apple rootstocks in his grafting classes many years ago because, like pears, they are easy to graft giving confidence to beginners, and he hoped to introduce apples into our area using the very low-chill varieties developed in Israel and with scions supplied to him by the late Loy Shreve, of Uvalde, Texas, who collected low-chill plant material from South America. Dr. Atlas also introduced the **Reverend Morgan** apple, a seedling found here in Houston, and which was low-chill enough to be successfully grown here. This is a **Granny Smith** type apple with commercial potential, but it took forever to mature and by that time, the squirrels had taken all of them. I successfully grew many of the Israeli apples, but among them, only **Anna** had any flavor. Also, it became soon evident that the many commercial apple rootstocks in the trade would not tolerate our soil diseases for more than a few years. Loy Shreve grafted apples onto to hawthorn rootstock to try and bypass the soil problems, but this was cumbersome and never has been widely adopted.

Time has passed and we now have available commercial apple rootstocks selected for specific disease resistance that should survive in Houston, and it may be time to try again with apples that will work within our low-chill parameters. I have one proven apple that was one of two cultivars Loy Shreve brought back from Brazil calling it Malus 3 which I have grown successfully on an early Cornell Geneva experimental rootstock for probably 20 years. Unfortunately, I lost the other more conical fruit. Heidi at Treesearch Farms is propagating this apple as **Carnavale**. It is a heavy annual bearer of a large tart apple with a red blush and is self-fertile. Years ago I found that Mutsu (Crispin), a triploid apple, would work here, and this is a large quality commercial apple. We tasted this apple grown in an orchard in northern Georgia, and it was hard to beat. A favorite apple of Lee Calhoun and which has been widely grown to the coastal areas of Alabama is Cauley. According to Lee, this apple is a seedling of the White Spanish Reinette apple, also called Elgin Pippin, introduced into Natchez in 1640. Several SFF members grow this tree as Cauley, in Mississipi. I have perhaps the only surviving example of a limb sport of this tree named **Orange Cauley** collected by an early Nafex member, the late James Anding (noted for being the first to successfully graft blueberries on single trunk sparkleberries, improving longevity and yield), who observed an unusual specimen on a limb of his tree and grafted the sport to preserve it. Before he died, many years ago, he passed on a cutting of the Orange Cauley to Jesse Thompson, of Meridian, MS, who sent a scion to me two years ago. In the interim, Jesse's tree died in a storm and so I have returned some scions to him since my grafts took well, so he can re-create another tree for his orchard. This limb sport is clearly lower chill than Cauley, which is a large green apple used in pies. The Orange Cauley reputedly is somewhat smaller than its parent but with better external coloring and and should be an ideal quality pear for our area. Another low-chill old southern apple noted in Lee's book is Schell. Lee obtained a scion from descendents of the original owner's ancient tree. It is a medium sized yellow apple alleged to be aromatic with crisp flesh. It has done well in Florida. Ι have two others noted in Lee's book, Dixie Red Delight and Red Rebel, both alleged to be low-chill. I also have another called, Stump, noted in Lee's book, but this may be too high chill for us. The same may be the case with Arkansas Black, another old southern variety, which is a **Winesap** seedling. (continued)

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A Forgotten Fruit – Southern Apples Revisited (continued)

We think the new Cornell-Geneva 202 apple rootstock should have the best qualities for our area and is somewhat dwarfing, too. Heidi and I each purchased some of this rootstock to work with. Appended are some photos taken of immature fruit on my two year old plants.



Mutsu Apple (April 10, 2014)



Anna Apple (April 10, 2014)



Carnavale Apple (Malus 3) (April 10, 2014)

The Rio Grande Cherry

While we still have not given up on the possibility of growing true sweet cherries on rootstock suited for Houston, I think we need to seek other allegedly low-chill cherries in the trade to experiment with. I did have flowering this year, but the very late freeze damaged the blooms (as it did in a major way for pears and plums and mulberries) and spoiled the fruit set. However, there may be another plant we need to evaluate here as a cherry substitute. The Rio Grande cherry is actually native to Brazil and not a true cherry. Its botanical name is Eugenia aggregata. It seems to tolerate chill quite well and has survived and fruited well in Louisiana. David Lavergne of Jarreau, LA, claims the fruit is excellent and fairly large – up to 2 inches in length and red to purple in color. Typically, these trees are grown from seed and allegedly they take 5 years to fruit. Several nurseries sell selected seedlings at very high prices. However, it is not clear if there is actually wide variation in this fruit from different seedlings. Scions from the plant can be grafted but the take rate is said to be poor. AJ Bullard, who lives in Mt. Olive, North Carolina, purchased some of the named cultivars and is comparing them with common seeded cultivars that David Lavergne sent him. They took the cold in his area well this past winter. Heidi Sheesley kindly gave me a sizable plant which she grew from seed to try, but the late freeze this year wacked the initial blossoms. However, the plant is said to continually flower for several months and so I may yet have fruit this year. The plant itself looks fine and has new leaves. It is an evergreen with an attractive bark, and it would make a good landscape plant in addition to its fruiting qualities. If container grown, the plant may be held down to about 8 feet but planted in the ground, may be taller.