

## Chapter 8 - A Summary of the Best Varieties from our Trials 2015-2023

Starting in 2015, because I was a member of the Hawaii Tropical Fruit Growers Association, I became aware of the “Growing Grapes in Hawaii” a SARE Farmer Rancher initiative that Ken Love was conducting. I was able to get a few varieties from him and started with those. The varieties I started with were Caribe, Nesbitt, Seminole, Everglade F-272, and Tamiami. There were also many varieties that were planted that didn’t work for one reason or another. This list is included at the end of this chapter.

Over the past seven years I continued my own research and ordered new varieties from the University of California Davis Grape Repository in 2018 and 2020. The new varieties I started from scion wood in 2018 had various problems including insect damage, rooting challenges, an intense volcanic eruption, and difficult weather conditions. But those are real life conditions and I wanted to find varieties that would be tough and hardy. The 2018 varieties were important because they taught me many “grape lessons” I needed to learn, so that when I reordered new and different varieties in 2020, I was able to make better choices based on what I had learned, my previous research, and what I could glean about the variety from the UC Davis site and the internet.

I was able to obtain another six new vinifera table grape varieties from India that have come to me through a grape grower in South Kona. India and Hawaii Island share a similar sub-tropical latitude. There are other tropical areas of the world that grow grapes, but Hawaii is a subtropical region with its unique weather patterns and growing conditions and this is the focus of this research project.

### Most Promising Varieties as of Summer 2022

1. **Meyer 6-7:** (UC Davis 2020) – Much is unknown about this variety, but what is known is that the parents are TV Munson’s “Carmen” and two “Wild Mustang Grapes” one from Northern Texas and the other from Southern Texas, which is borderline sub-tropical. I had also read that “Carmen” was a good raisin variety that could grow on the coast of Texas. I observed that it was not bothered too much by Chinese Beetle, and has grown well here. However, only one of the original six scions grew. Later I was able to start more from my own scion wood and I have two more growing in the nursery, but it is a *challenging* variety to start. This is its third year of growth and had six small clusters. We tasted the first fruit recently and we were pleasantly surprised at the sweet and sprightly flavor, thin skin, small seed and ample juice. Excellent potential.
2. **Edna x Simpsoni:** (UC Davis 2020) – “Edna” is a TV Munson variety that will not grow here, but someone crossed it with Simpsoni a wild grape from Florida giving it a subtropical introduction. The TV Munson Memorial Vineyard in Texas houses 60 original Munson varieties. In their publication, they describe Edna. “This is one of the handsomest grapes that we have. Large clusters of white (green) berries of best quality.” Edna is a hybrid of Armlong crossed with Malaga has the Muscat flavor that is so good but this variety is superior owing to the peculiar combinations. The “handsome”

comment could possibly owe to its beautiful delicate pink leaves when young turning to green later. It is a vigorous grower that can outrun the Chinese Beetle but currently only two years old so taste still unknown. Great potential because of its family line and growth habits that we have observed. In its first year it hardly grew but in its second year it took off! Some vines need a probationary period giving them the benefit of the doubt.

3. **Largo:** (UC Davis 2020) – Largo is a bunch grape developed in the 1940s in Florida. The parents are Shuttleworthii x Rufomentosa, two wild grapes and Rufomentosa x with Ribier: According to Joseph Fennell, the two wild grapes grew out of a shell midden that he found in Southern Florida. “Ribier” whose parents were Bellino x Lady Downess were two of the best old black bunch grapes from France. Last year the vine was devastated by the Chinese Beetle but this year it has made a comeback. The subtropical introduction of Shuttleworthii is an asset. The Largo was not old enough to produce fruit this year. There is potential here.
4. **Florida 13-B-5:** Probably a grape that came from a University of Florida cross as usually their crosses are numbered and only given a name when they are commercialized. The parents of 13-B are Shuttleworthii x Alden. Remember Shuttleworthii is a wild grape from the tip of South Florida and the best “introduction” to the subtropics. Alden is a cross of Ontario x Grosse Guillaume (muscat) that came from the Cornell Breeding Station in Geneva, New York. 13-B is our most vigorous grower and this is its third year. The leaf has white “felting” on the underside which discourages Chinese Beetle attack. We have five plants of different ages in various vineyards and all are showing good potential. This summer for the first time we were able to taste twenty-three small clusters which seems amazing considering it’s only three years old. The grape had a thin skin, small seed, was juicy, and had a neutral taste that will certainly improve with time. Good potential.
5. **Florida BD 7-75:** This variety is also from the University of Florida. The parents are Shuttleworthii x Lakemont x Carolina Black Rose. Lakemont is a seedless grape bred at the Cornell Station and according to Lon Rombaugh it is his favorite grape to freeze. Carolina Black Rose is a muscadine grape crossed with Black Rose a California bunch Grape developed in 1941. This is its third year of growth and we had only one bunch which isn’t unusual. We were able to taste only a few grapes but those had a thin skin, a small seed and were black in color, all are good qualities. The flavor profile will develop over time and we are expecting great things. The leaf has white felting on the underside which is a quality disliked by the Chinese Beetle.
6. **Florida BN-852:** In 2018 I ordered sixteen varieties from the UC Davis Grape Repository and this was the only variety that has survived and thrived. This variety has three wild grapes in its parentage (Simpsonii, Aestivalis, and Smalliana) all from Florida and the South, crossed with Lakemont, Paragon, Diamond, and Ontario all Labrusca type grapes that are typically grown in the North and have the Concord taste. Other parents are the Golden Muscat, Chaouch, Aurelia, and Vallard Blanc (a cross of 9 different French grapes, so you get the picture as how complex parent lines can get!). Good growth, has some white felting, and in its fifth year, there are fifty-four large clusters of

black grapes (after thinning) on the vine. Seems to have great potential. The pressed juice is green in color which is very unusual. It has a sweet delicate taste and made an excellent raisin.

7. **Tamiami:** This variety was developed by Joseph Fennell an independent grape breeder in Southern Florida in the 1930s & 40s. Its parents are Shuttleworthii x Smalliana x Malaga. Malaga is an ancient vinefera grape from Southern Spain. Because of the subtropical introduction from Shuttleworthii and Smalliana, it has become one of our best growing and producing grapes. We currently have four vines, the oldest vine is now 7 years old. It grows easily from scion wood. It has very good production of small black grapes and a small seed. In 2022 there were one hundred and thirty-two clusters on 4 plants. The Tamiami was our strongest producer this year, and produced an excellent raisin. The juice was sweet but does not have a unique flavor, but we think it could make an excellent wine. Excellent future potential!
8. **Everglade F-272:** Another Joseph Fennell variety with parents unknown. It looks like one of the parents is wild Shuttleworthii (from the Everglades) because of the white felting on the underside of the leaf. Fennell never wrote a book, only some of his reports are still available, and he was not part of the University of Florida system so there is much about his breeding work that is unknown. A good grower and does well with a 98% cut back in February. Small amount of fruit production in Summer 2022 but we were able to get some beautiful dark burgundy juice and some delicious raisins.
9. **Seminole:** A Joseph Fennell grape whose parents are Shuttleworthii x Rufotomentosa. Rufotomentosa's parents are a wild Texas Mustang Grape called Candicans x Rommel one of T.V. Munson's favorite grapes. Seminole, a black table grape, was one of his later experiments that we don't know much about. The oldest was planted in 2017, a very vigorous grower, repels Chinese Beetle (Shuttleworthi), and in 2022 we have eighteen large good quality clusters. The Seminole is a larger grape, but has a large seed also, not good for raisins, more testing next year needed. Has potential.
10. **Nesbitt:** A Muscadine table grape (*vitis rotundifolia*) bred by W.B. Nesbitt who worked in North Carolina, Georgia, and Florida. Its parents are Fry x Cowart. Ripens over a period of 4-5 weeks which is good for the home producer. Makes a sweet and complex medium pink juice (16 brix) *Brix* is a measure of soluble solids content in *grapes*, mostly as sucrose, using a refractometer and expressed in degrees. We have 4 vines each on their own pedestal. Muscadine grapes can be started using various methods; Air-layer, trench method, scion cuttings in a mist house, or from seed. The vine has small delicate leaves with a jagged edge and many small clusters with large grape size. It has good disease resistance and a Concord taste. The Nesbitt is best used for juice or wine as it has an acceptable brix level. The taste is sweet and fruity with no after taste. Because it is a Muscadine it is not a good eating grape. We also made jelly from it that had an excellent taste. Highly recommended for the Home Garden. Possible future research would include other Muscadine grape varieties from Southern Florida.

- 11. Waimea Isabella:** Starting in 2015, I found five different Isabella grapevines from various regions of Hawaii Island and one from UC Davis and grew them out. The one that did the best came from Waimea. The Isabella has a long history in Hawaii. No one knows for sure, but the variety could have come as early as the 1790s. Grapes can live hundreds of years so it's possible there are still vines here today. The parent lines are unknown, although there is *much* speculation. The grape is a tough and hardy grower that does well in many different climatic areas, resistant to Chinese Beetle, makes a decent juice if *very* ripe, has a thick skin with bitter tannins and a large seed. The Isabella comes in over a month, and all grapes on the cluster do not ripen at once. Later in the season the grapes were a bit sweeter than at the beginning of the harvest. Easy to grow. A good variety for the home garden.
- 12. Caribe:** Caribe is a Fennell grape whose parents are Fairchild x Tropico. Caribe is a black tough and hardy table grape from Florida. All Fennell grapes have wild subtropical parents that have been introduced into the varieties he developed. Two years ago I cut the grape at the bottom of the stem, after reading about this advice from a grower. Luckily I had a few scions that I had started because the grape never recovered. I replaced it with another plant that is now only 2 years old and although it has vigorous growth I have not tasted the grape yet.

**All these varieties above showed no disease, and the only pest observed was the Chinese Beetle.**

#### **New and Promising Varieties shared from Kona Growers**

**Southern Home:** This variety was shared with us from another "grape enthusiast" in South Kona. I had been looking for this one for a few years as I had twice tried to get it from UC Davis. Joseph Fennell is the breeder. The parents have two rotundifolias, two muscadines, two simponii from Florida, and a grape from Southern Mexico named Popenoei or Totoloche another muscadine grape. These were crossed with the Black Morocco. It has complex parent lines, but it has one wild subtropical grape (simpsoni) that gives it an introduction to Hawaii. I received one small plant that is now in one of the main vineyards. Another variety to look for is called Southern Jewel.

**Indian Vinifera (Bunch Grape) Varieties:** The following varieties came from our grower friend in South Kona, and are all table grape varieties that are common in the Indian subtropics. They all came from UC Davis. We contacted the National Research Centre for Grapes in India, and were told that they did not have any parent information for these varieties. But since they all grow in the subtropical regions of India, they are worth trialing. I started them from scion wood, and this is their first year. At this point it looks like Malta Seedless is the only survivor. Chinese Beetles loved these varieties. This shows me that subtropical varieties without a wild parent in the genetics may not work. Wildness confers diversity.

1. Bhokari
2. Fakdi
3. Kali Sahebi

4. Royal
5. Bhokri
6. Kandhari
7. Black Corinth
8. Malta Seedless

Here is a list of grape varieties that were tried but did not grow well here and were removed. Grapes that are numbered are from a university and have not received a name because they are experimental.

1. Grew out five Isabella from five different regions on Hawaii Island, and took out four of them that did not grow or produce well. Kept one.
2. Dracut Amber
3. Florida 15B-23
4. Kyoho
5. Dunstan X73-26
6. Requa
7. Zhender 70-8-1
8. Cottage
9. Carolina Black Rose
10. Florida CN1-90
11. Honeydew
12. Excelsior White
13. Daytona
14. Florilush
15. Conquistador
16. Blue Lake
17. Orlando Seedless
18. Herbemont
19. Florida AN 2-36
20. Florida BN 6-85
21. Florida W 1521
22. Florida CA 4-72
23. Florida CA 8-15
24. Florida CD 4-22
25. Florida A 4-23
26. Dunstan Demko
27. El Bejuco
28. Salamanada
29. Cloeta
30. Mericadle
31. Volney
32. Wapanuka
33. Miss Blue
34. Fairchild
35. Flame Seedless
36. Fennell 3-way hybrid

37. Lynn's Grape from Kaloko.
38. Four different Isabella varieties
39. An unnamed variety from Hawaii Tropical Fruit Growers
40. Dunstan DRX-73-26
41. Taylor
42. Seven Indian varieties (listed above)