



NEWSLETTER

AUGUST 1981

TAMPA BAY CHAPTER of the
RARE FRUIT COUNCIL INTERNATIONAL, Inc.

REMINDER.....THE AUGUST AND SEPTEMBER MEETINGS ARE TO BE HELD ON THE
SECOND SUNDAYS OF THOSE MONTHS.

NEXT MEETING.....SUNDAY, AUGUST 9, 1981 AT 2:00 PM

MEETING PLACE.....TOM HUGHES' VINEYARD
JUST OFF I-4 AT EXIT 9, McINTOSH ROAD, DOVER
TURN LEFT JUST PAST THE CHEVRON GAS STATION ON McINTOSH ROAD

THE PROGRAM.....The schedule for the afternoon will include a short business meeting and a tour of the vineyard, guided by Tom Hughes.
PLEASE NOTE: attending members shall NOT pick grapes. However, Tom will provide sample quantities for tasting. Also, grape plants will be available for purchase.

Special Note: Publicity Chairman Paul Rubenstein plans to have TV crews from the area stations on hand to cover the meeting, kicking off the publicity campaign for the Second Annual Plant Sale which falls on Sunday, October 18th.
Please bring any unusual fruit to show to the TV cameras. You may take it home again, but please bring it. If necessary, hold it in your refrigerator or freezer until the meeting.
Also, if you have any portable plants that are unusual and large enough for the cameras, bring them.
If you have plants for the post-meeting exchange & auction, they can serve as background for the TV coverage.
Remember that this is to be an outdoor meeting and prepare accordingly.
We hope that there will be some chairs available, but if you have one or two, it might pay to bring them.

Please mark your calendars for Sunday, September 13, 1981. As noted above, in order to avoid the Labor Day holiday, the September meeting is also on the second Sunday of the month. We will have Gene Joyner back for a program on "Insect Pests and Diseases of Fruit Trees". Gene, Urban Horticulturist with the Palm Beach County Extension Service, is a very active member of the Palm Beach Chapter and gave us a very enjoyable slide presentation on tropical fruit trees last September.

Hopefully you have been propagating and raising plants for the October Plant Sale. We want this sale to be bigger than last year. We have more space this time - in the same building as our annual state fair booth. There should be adequate parking and better security. We are going to need your plants and we are going to need you, too. There is a lot of preparation to be done on Saturday, Oct. 17th and Sunday morning.
Banana plants will be needed, all you can bring. They sell very quickly.
Dig and pot Downey Myrtles now. They were notably missing last year.
Chaya plants will sell. See P.81-16 in the April newsletter for propagation.
Be sure to label your plants clearly. Last year there were a couple of unsold unknowns. Surinam cherries, cattley guavas, and seedling loquats are almost impossible to sell. Papayas should be three to a pot. Start seeds now.
And - start propagating for next year.

TREASURER'S REPORT FOR JUNE 30, 1981

CHECKING ACCOUNT

Balance Brought Forward.....	\$2104.78
Receipts.....(Dues).....	78.00
Disbursements	
Telephone, postage & printing.....	100.00
Application for Non-Profit Corp. status..	48.00
Total Disbursements.....	148.00
Checking Account Balance.....	\$2034.78

SAVINGS ACCOUNT

Balance Brought Forward.....	\$3503.89
I.L.A. Interest.....	39.62
Savings Account Balance.....	\$3543.51

Irene Rubenstein, Treasurer

MINUTES OF THE JULY 12, 1981 MEETING

The meeting was held at the country home of Jane & Joe Constantine on Lake LeClare. President Bill Lester called the meeting to order at 2:00 PM. Several visitors were asked to introduce themselves and Dr. George Merrill was welcomed as a new member.

Pres. Lester announced that if your plants suffered cold damage last winter, the cost of the damage may be deductible for income tax purposes - provided that you had an evaluation by a recognized landscaping professional. You should, however, check with your accountant before making deductions.

The membership roster has been purged and those whose dues have not been paid have been dropped from the active list as well as from the newsletter mailing list.

Bob Heath announced that a preliminary report has been completed which is a compilation of members reports of their fruit plants and trees and how they survived last January's freeze. This is part of an effort to learn what plants will grow in this area and under what conditions.

It was announced that all members should be growing plants for the October 18th Second Annual Plant Sale of the Tampa Bay Chapter which will be held at the Florida State Fair Grounds in Tampa.

Our speaker was Daniel Smith Mills, Enologist for "Florida's Vineyard and Fruit Garden", Orange Lake (between Ocala & Gainesville). Mr. Mills presented a very interesting program on grape culture and wine making, which included a slide presentation. Later, everyone enjoyed tasting the samples of wine, champagne and fresh grapes.

A plant exchange & auction was held outside after the meeting.

Willard Sarrett, Secretary

More about the September meeting: we hope to have it in the Hillsborough County Agricultural Business Center building on State Road 579, off I-4 at Exit 8 (NOT Exit 10, as erroneously stated here last month) in Seffner. Go about $\frac{1}{2}$ mile south of U.S. 92 (traffic light) and find the building on your left. We shall use one of the meeting rooms.

PROGRAM: VITICULTURE AND ENOLOGY FOR FLORIDA

by Daniel Smith Mills

There are three basic classes of grapes in the United States: (1)- Vitis vinifera, the Old World (European) grape grown almost exclusively on the west coast (California), (2)- V. labrusca, the Eastern or fox grape, the Delaware, Catawba, Concord & Niagara, the popular northeastern grapes, and (3)- V. rotundifolia, or muscadine grape, native to the southeastern U.S. from Virginia to Texas.

The muscadine grape will not tolerate extremely cold temperatures (zero degrees F. and below) and is the easiest to grow in Florida, being a native of the south and resistant to insects and to the significant grape diseases. We do have a group of bunch grapes, however, that offer some hope, commercially, for the future in Florida. As regards a wine grape, that future is here in the Stover. For fresh fruit for market, there is not yet a suitable variety.

Our bunch grapes are crosses between native bunch grapes and outstanding grapes from the rest of the country. Grape breeding takes decades to develop new commercial varieties. It takes 15 years of testing just to prove resistance to Pierce's disease alone. Pierce's disease prevents growing the excellent grapes from other areas. No cure or treatment exists for Pierce's disease since it is not understood, itself. It is transmitted by insects that suck on the leaves (sharpshooter leafhopper). Trying to grow outside grapes (e.g., Thompson Seedless) that are susceptible is a waste of time. The vine may live 6 or 7 years, but ultimately Pierce's disease will claim it. This disease gums up the cells of the xylem tissue in such a way as to prevent movement of water in the plant. This prevents the plant from cooling itself adequately on hot summer days. So the first symptom of Pierce's disease is a burning (marginal necrosis) along the leaf margin. Eventually the burning spreads to the whole leaf and then to all the leaves on that arm. The next year another arm will be affected and this continues until eventually the plant is killed. Thus, breeding has combined the resistance to disease of the native Florida grape with the desired qualities of the northern and western grapes.

Mr. Mills showed samples of bunch grapes other than Stover, e.g., one, a purple cross between Concord and the Florida release, Blue Lake. This cross remains a numbered selection (D-5157), not released, since it has not found a commercial use. It does make a better red wine than Blue Lake, since Blue Lake has no color stability. It is a female vine, however, and does have cultural problems that may prevent its release.

Lake Emerald is another popular Florida bunch grape. It is a golden color when ripe, and very tart, even when the sugar content is 20-25%. It is fairly disease resistant like Blue Lake. Fungus diseases are also a problem for bunch grapes. For commercial growers, spraying is a must. For dooryard growers, the problem is not that severe.

Liberty is another Florida bunch grape. However, it may have been released prematurely, as there seems to be some question as to its resistance to Pierce's disease. And, it was tested for 17 years.

Roucanneuf is the only French hybrid that seems to have immunity to Pierce's disease. It is one of the parents of Stover. Right now it is not doing well at Ed Grosz' "Florida's Vineyard".

Many experimental grapes are being studied at the Leesburg Agricultural Research Center. One, L-911, a pink grape, has almost perfect acid content with high sugar (22-24%). It does develop rot, however, and ripens unevenly (i.e., the bunch will have green and pink grapes at the same time, complicating harvest). It does yield enormously and has good flavor.

All the bunch grapes shown, except for D-5157, were self-fertile. As yet, there is no seedless grape for Florida.

Muscadine grapes grow in small clusters instead of long bunches. They have short stems connecting to the main branch, making them difficult to harvest. Thus, normally they are picked one by one, most varieties picking "wet", i.e., having a "wet-stem-scar". They immediately start to drip juice. That prevents storage, obviously. Therefore, muscadines are picked for use as fresh fruit. Researchers are looking for a muscadine grape that picks "dry". Some releases pick 95% dry, as does Triumph. So there is hope, commercially, for muscadines.

Muscadines have excellent disease resistance, seldom requiring sprays. Stover, in contrast, is sprayed every 10 to 14 days at "Florida's Vineyard". Many muscadines are self-fertile, but, where pollinators are required, the spacing between vines must be kept to within 30 feet. Winter pruning is a necessity. An un-pruned vine will cease to bear in two years or so. Once the vine is trained to have its system of long arms, usually two or more in opposite directions, prune all spur growth to within two inches of these permanent arms. That should leave two or three nodes (buds) for the following season's growth and will provide plenty of fruit. The arms can run to 20 ft. if desired. Shorter arms are believed to give the plant more longevity.

Bunch grapes are pruned in a more complex manner, leaving some long canes from each major arm. (Editor's note- Refer to the state bulletin, #FC-17, "The Bunch Grape". For the muscadine grape, see bulletin #FC-16.)

Do not overfertilize muscadines. They have a shallower root system than bunch grapes and their roots will travel a great distance. So, scatter the fertilizer lightly over a broad area, keeping away from the trunk. One year old plants may have roots out to 12 ft. or more. They are quite drought resistant from that age onward. Muscadine seedlings will make a taproot, however.

Propagate bunch grapes from dormant cuttings - a 70% success rate is possible in merely moist soil. Muscadines will give only 4 or 5% with that treatment. Instead, use intermittent mist for muscadine cuttings. The earlier in the season the better. When the muscadines break bud in the spring, as soon as the new growth hardens to an olive color with some speckles on it, that is the wood that you want for cuttings. Take a 2 or 3 leaf green cutting and stick it in a sandy soil or a mixture of sand, peat and perlite. Keep a film of water on the leaves. It should root in 2 to 4 weeks. Also, early in the season, "plugs" several inches long may be pulled free without damage to the arm and used with mist with a very high success ratio. After the cuttings strike roots, grow them for a year in the nursery for good healthy plants.

Ground layering is also an easy method of propagation for muscadines. Allow a low growing branch to develop and bury it in the middle. In the fall, dig it up and you have a new plant.

Muscadines begin to lose their leaves in about September and go completely dormant in the winter. However, if there is no early frost, there may be a second crop of fruit for picking right up to Christmas time in mild winters. This is especially true for self-fertile grapes like Cowart and Dixie and very seldom true for females like Fry. Late in March the vines leaf out again and begin their current year's growth.

Pick muscadines when the fruit loses its shine and becomes dull looking. Purple grapes become a dull purple to purple-black and bronze grapes acquire a dirty penny look.

WINEMAKING: Before prohibition the most outstanding U.S. wine was made from muscadine grapes and sold under the trade name of "Virginia Dare". Of course, that was before the California wine industry got rolling. The method of wine making in those days was to crush the grapes and leave them in an open vat for 3 or 4 days, open to the air. Then they poured off the juice and put it in a closed container to complete the fermentation. Only one muscadine winery follows that practice today. All others have gone over to the closed fermentation method.

White wine by the closed fermentation method: First, crush (not press) the grapes to expose the pulp, then squeeze the juice. The common method up to 30 years ago was to wrap the grapes in cloths placed in stacked racks. Then this is all put in a press. Horizontal and vertical steel presses are the usual means for juice extraction today. The juice is put in five gallon water jugs (carboys), inoculated with yeast, the sugar level adjusted by adding same, and finally a water lock or fermentation lock (glass bubbler) attached to the top. Now you are set to watch the fermentation take place. The sugar level must be adjusted because muscadines lack the amount necessary for a full fermentation in order to make a 12% alcohol content. 12% is required for preservation purposes.

Red wine. For red wine the fermentation must be started on the skins in order to extract the color. After several days or even a week, when the color is adequate, then the juice is pressed out and poured into a closed container having an airlock. The color thus comes from the skin, not the pulp. After completion of fermentation, the wine is racked (the clear wine decanted or siphoned off to separate it from the lees or dregs in the bottom of the container). This clarified wine is put in another container which is filled as full as possible in order to eliminate head space (air space). There must be minimal contact with air. The fermentation lock is then inserted. If any additional fermentation does take place due to residual sugar, the carbon dioxide can bubble out through this lock without the danger of the container bursting.

One of the hazards of home winemaking is the bursting of bottles due to uncompleted fermentation. This may occur should some residual sugar be present after the wine is sealed in an airtight bottle. All of the wine samples brought to this meeting were in champagne bottles having crown caps. These caps insure that the bottles will not burst, yet do provide an airtight seal. Once the home winemaker becomes more sophisticated, he can go to corked bottles, but the beginner should avoid the possibility of exploding bottles.

Traditional muscadine grape wines are made from Noble for red wine, and Welder or Dixie for white wine. And, to repeat, for bunch grape wine, Stover makes the best white wine and the experimental grape, D-5157, the best red. Red wine made from Blue Lake will frequently deteriorate in a month or two. There are some other experimental grapes that will hold their color well, like D-5157. Since D-5157 has a great deal of Concord in its parentage, its wine has the Concord flavor. Lake Emerald "browns" severely on fermentation or even before, making it unsuitable for red wine. It also has nearly twice the desirable acid content.

There are two new wineries under construction here in Florida, one in Anthony (6 miles north of Ocala) and another in Freeport (near De Funiak Springs, in the panhandle). They will be making commercial wines out of muscadines which should hit the market in a year or two. There are already commercial wineries in Mississippi, North & South Carolina and in Tennessee using muscadines. These wines cannot be compared to California or any other area wine. It is comparing apples and oranges. The Florida wines should be "good, sound wines", but will be different from California or European wines and have their own distinct appeal.

(Editor's note - Another bulletin published by the state of Florida is #FS-3, "Home Wine Making in Florida". It does not go into detail, but does list the important books, periodicals and out-of-state bulletins plus mail-order supply houses & wine associations.)

Research & Fruit List Committee Chairman Bob Heath has compiled a list of fruits for Central Florida. Divided into five groups by cold hardiness, here is Group 1. Please direct any additions, corrections or comments to Bob.

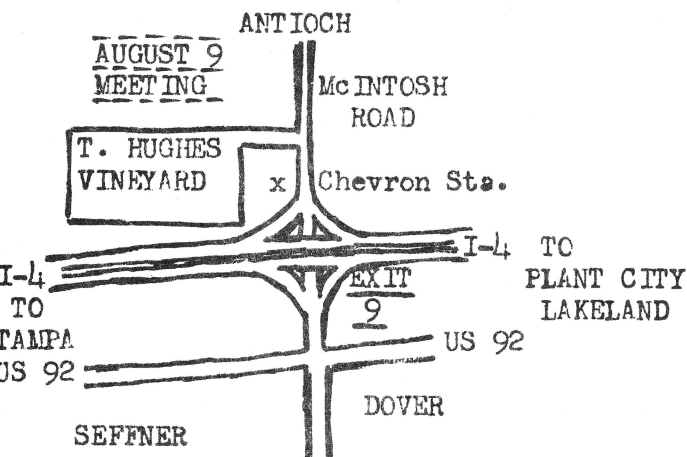
Group 1: Completely hardy. No damage ever recorded in Florida.

Actinidia chinensis	Kiwifruit
Actinidia kolomitka	Manchurian Gooseberry
Butia capitata	Jelly palm
Carya illinoensis	Pecan
Castanea mollissima	Chinese chestnut
Cydonia oblonga	Quince
Diospyros kaki	Oriental persimmon
Diospyros virginiana	Native persimmon
Feijoa sellowiana	Feijoa
Malus pumila (Pyrus malus)	Apple
Morus spp.	Mulberry
Prunus persica	Peach & Nectarine
Prunus salicina	Plum
Punica granatum	Pomegranate
Pyrus communis	Pear
Rubus spp.	Blackberry
Vaccinium spp.	Blueberry
Vitis spp.	Grape

There are two Grape Field Days at IFAS Agricultural Research Centers in August:
August 25 - Fort Pierce & August 26 - Monticello.

Ray Thorndike, Editor

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