



NEWSLETTER

JANUARY 1984

84-01

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

EDITOR: RAY THORNDIKE, NEWSLETTER ADDRESS: 3114 TROY AVE., LAKE LAND, FL 33803

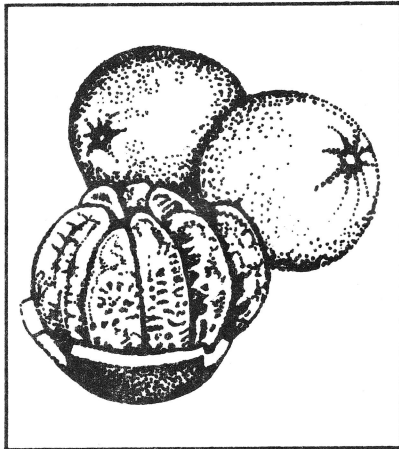
PRESIDENT: PAUL RUBENSTEIN, CHAPTER ADDRESS: P.O. BOX 260363, TAMPA, FL 33685

MEETINGS ARE HELD MONTHLY ON THE SECOND SUNDAY.

NEXT MEETING SUNDAY, JANUARY 8, 1984 AT 2:00 PM

MEETING PLACE TAMPA BAY CENTER SHOPPING MALL COMMUNITY
ROOM UNDER WEST RAMP, BUFFALO AND HIMES
AVENUES, NEXT TO TAMPA STADIUM. (TAKE
DALE MAERY TO BUFFALO AVE., AT STADIUM.)

PROGRAM DR. WILLIAM C. COOPER from Winter Park,
author of "IN SEARCH OF THE GOLDEN APPLE,"
An Adventure in Citrus Science and Travel.
Dr. Cooper is a former Director of the U.S.
Horticultural Research Laboratory in Orlando.
Now retired, he continues his writing and
research, including travel throughout the
citrus regions of the world.



* * * * *

NEW MEMBERS

A.C. & Eleanor Fleischman, 611 Apollo Beach Blvd., Apollo Beach 33570

Wilbur G. & Geraldine P. Hagerman, Route 3, Box 1747, Odessa 33556

Harry J. Klaus, 1695 - 66th Ave., North, St. Petersburg 33702, Tel. 526-5112

ADDRESS CHANGE

Maja Byvoet, 2630 Quail Hollow Blvd., Zephyrhills 34249, Tel. 973-1172

William D. (Dave) & Barbara J. Schwaderer, 976 Hurlstone Lane, San Jose, California

* * * * *

IN MEMORIAM

The black border on the cover page, as if you hadn't guessed, denotes our deep mourning over the demise of so many of our cherished plants and trees on the nights of the "Great Christmas Freeze of 1983." The rare fruits in our club

title are now much rarer in this part of the world. It wasn't enough to be told that the 1957/58, 1962, 1977, 1980, 1981 and 1982 freezes were "once in a century occurrences," but now we hear the weather experts say that the past decade is a once in 620 years event because there have been six extreme winters in that period (three too hot and three too cold.) My gut reaction is "why me?" I took up growing unusual fruits in late 1976 and the annual struggle is like banging your head on the wall. I think that I have finally proved beyond all doubt that raising tender plants (defined as any that won't tolerate 20 degrees F. for long durations, even as juveniles) in Central Florida is impossible without a very large greenhouse. Of course, I had been forewarned by others who had already been down this same trail, but I must admit that this last freeze has shaken me to the core and will cause me to re-evaluate my landscaping ideas.

Much is to be learned from each freeze if members would cooperate and record the effects observed among their plants. A Freeze Damage Report Form was devised after the January 1981 freeze and blank copies will be available at the next meeting. Much misinformation is in print on the subject of individual plant species hardiness. Our collective experiences can shed new light on this subject and by updating the plant hardiness ratings in our published Fruit List (and I hope to have a newly revised, enlarged and improved edition out in the new year) we can spread this knowledge around. For instance, I have a young Mamey Sapote and a three year old Grumichama which seemingly (at this admittedly early date) have survived long durations of low twenties temperatures. Also, I think a few of my largest Papaya trunks may live to branch out in the spring. Some of these observations repeat those of earlier freezes, proving that the survival was not a one-shot fluke, and they contradict the printed word of the so-called experts. So - please fill out a form, if you have data.

One fact that the resident of this region must come to grips with is that there are two separate and distinct climates here, depending on the time of year. One half of the year is fully tropical, exactly that climate of the hot, humid coastal lowlands of the real tropics. Unfortunately, and denied or wishfully overlooked by too many, including numerous chambers of commerce, is the fact that the other half of the year the climate is simply warm-temperate, usually with a wide mix of temperatures, low humidity and very low rainfall. At this time of year, growing anything but very cold-hardy cactus can be a frustrating experience. So it behooves us to come up with a list of plants guaranteed to survive these two extremely different climates and, in addition, bear fruit reliably. This will help the beginner at growing unusual fruits to avoid early despair as some of our recent plant sale customers must be experiencing.

* * * * *

APPRECIATION

TO: Janet Conard for hosting our December meeting at her home. The covered-dish luncheon was once again a success and, although the weather was quite warm and a brief downpour drove us inside, it was a very pleasant afternoon.

TO: Irene Rubenstein for doing the 1983-1984 Membership Directory, which is enclosed with this issue. This involved a number of tedious hours in preparation and we are lucky that Irene is willing to tackle this job.

TV TIME

Saturday, January 28, 10:00 AM, Channel 3, WEDU, "Mr. Green Thumb." A reminder that your Editor, Ray Thorndike will appear as Stan DeFreitas' guest on this show.

Saturday, March 10, 12:30 PM, Channel 3, WEDU, "Can-Do Clinic." Our Librarian, Historian and Executive Board Director, Kay Netscher, will appear with Hillsborough County Extension Home Economist, Ruth Ann Fowler.

DECEMBER PLANT DRAWING

<u>PLANT</u>	<u>DONOR</u>	<u>WINNER</u>
"LEE" Tangerine	Chapter	Gus Fleischman
"TANENASHI" Persimmon	Chapter	Bea Seekins
Seedling Loquat	Albert Greenberg	Jean da Costa
Seedling Loquat	Albert Greenberg	Gus Fleischman
"ABACCA" Pineapple	Bob Heath	Bea Seekins
Pitaya Cactus	Bob Heath	Bea Seekins
Chaya Spinach Plant	Bob Heath	Albert Greenberg
"WELDER" Grape	Roland Williams	Rome Vaccaro
"JUMBO" Grape	Roland Williams	Al Lima
Chaya (with nettles)	Ray Thorndike	Cleve Burbage
Chaya (no nettles)	Ray Thorndike	Albert Greenberg
Tree Tomato	Ray Thorndike	Al Lima
Solanum (species unknown)	Ray Thorndike	Albert Greenberg
Cashew	Al Lima	Janet Conard
Cashew	Al Lima	Cleve Burbage
Tangerine Fruit	Frank da Costa	Cleve Burbage
Persimmon Fruit	Frank da Costa	Arnold Stark
"Chinese Tomato" Fruit	Gus Fleischman	Al Roberts

* * * * *

MAIL ORDER NURSERIES

At the December meeting it was suggested that a list of mail order nurseries be given in the newsletter. All listed carry at least a few fruit trees or plants. Some also sell seeds of plants of interest to us. If you can add to this list, please submit the information to the Editor.

SUNSWEET FRUIT & BULB NURSERY Deciduous fruits, grapes, berries, etc.
BOX Z
SUMNER, GEORGIA 31789

PATRICK'S VINEYARD, ORCHARD NURSERY
& FARM MARKET Deciduous fruits & nuts, Paw paw
POMEGRANATE BLVD.
TTYT, GEORGIA 31795

EXOTICA SEED COMPANY Tropical and subtropical fruit, nut &
1742 LAUREL CANYON BLVD. vegetable seeds
HOLLYWOOD, CALIFORNIA 90046

NICHOLS GARDEN NURSERY Herb & vegetable seeds, garden tools,
1190 NORTH PACIFIC HIGHWAY books, seasonings, cheese & wine
ALBANY, OREGON 97321 making supplies, etc.

STARK BRO'S NURSERIES AND ORCHARDS CO. Deciduous fruits & nuts, grapes, berries
LOUISIANA, MISSOURI 63353

GEORGE W. PARK SEED CO., INC. Vegetable seeds, grape, fig, berries, etc.
P.O. BOX 31
GREENWOOD, SOUTH CAROLINA 29646

MAIL ORDER NURSERIES, CONTINUED

ARMSTRONG NURSERIES, INC. Deciduous fruits, including Kiwis
P.O. BOX 4060
ONTARIO, CALIFORNIA 91761

HENRY FIELD SEED & NURSERY CO. Vegetable seeds, deciduous fruits &
SHENANDOAH, IOWA 51602 nuts, berries, Pawpaw, etc.

PACIFIC TREE FARMS Fruit, nut & berry plants & trees
4301 LYNNWOOD DRIVE for mild climates
CHULA VISTA, CALIFORNIA 92010

MAUDIE WALKER BERRY & FRUIT TREE NURSERY Deciduous fruits, grapes, berries, etc.
P.O. BOX 256
OMEGA, GEORGIA 31775

WHITMAN RARE FRUIT NURSERY Tropical & subtropical fruit trees
189 BAL BAY DRIVE
BAL HARBOUR, FLORIDA 33154

* * * * *

My two year old, eight foot tall Sapodilla is one of the few so-called tender plants to hold most of its leaves through the Christmas freeze. It is in a fifteen gallon Lerio can and was pulled up under the eaves on the east side of the house. About 40 feet away, I recorded 25 F. the first night and 21 F. the second night. Ten feet away, in a more protected spot under the same eave, a same size and age Black Sapote, also in a Lerio, seems to have been killed outright. The second night I did apply a little heat with a grove heater on minimum setting due to lack of a full tank. This was about ten feet away. The heater didn't stop a Lychee from being severely injured and completely defoliated. The "experts" do not give a young Sapodilla much hope below 28 F. and a mature tree may survive 25 F. or less. But - we had extremely long durations at below rated temperatures, ten or more hours the first night under 32 F. and about 16 hours the second night. To make matters worse, all this occurred after a long warm spell so that no trees were at all dormant and the Sapodilla was in the midst of a new growth flush. So, I salute the Sapodilla with the inclusion of the following article gleaned from the state bulletins, an Australian government bulletin and an article in the Broward RFVC newsletter. - Editor.

THE SAPODILLA

(Manilkara sapota)

The Sapodilla, Manilkara sapota (synonyms, Manilkara achras and Achras sapota), a member of the family Sapotaceae, is also known as Chico, Chiku, Dilly, Naseberry and Nispero. It is native from southern Mexico to Venezuela and is now found around the world between the 30th parallels, but is more successful within 27 degrees of the equator. It grows best at medium to low elevations but to 3000 feet within 12 degrees of the equator. The tree is tolerant of a wide range of conditions, dry as well as wet, although it prefers a short dry season. It tolerates strong winds and may be grown close to the sea. Staking may be required for the first three or four years, however. It is adaptable to many soil types, even the very poor, calcareous soils of extreme south Florida although it prefers well drained, light to medium textured soils of acid to neutral pH.

The Sapodilla tree is a handsome, slow-growing evergreen reaching a height of 40 to 60 ft. in Florida under favorable conditions. It usually has a dense spreading canopy of dark, glossy green, leathery leaves. A planting spacing of 20 to 25 feet is adequate on poorer soils, while 25 to 30 feet is best on deeper, more fertile soils.

Propagation of the Sapodilla is mainly by seed, but seedlings may take 8 to 12 years to bear fruit, if ever. Some never fruit at all due to pollen sterility. Also, seedlings are often inferior in fruit quality and productivity, so it is best to propagate superior varieties vegetatively. Cultivars propagated by grafting or by cuttings should fruit in 2 to 4 years. Propagation methods practiced successfully include cuttings, marcotting, inarching, cleft, splice and side grafting, and Forkert and shield budding. In Florida conditions, however, side veneer grafting is the best method, air layering (marcotting) and rooting of cuttings not having been successful here. Sapodilla seedlings are used as rootstocks here, but other species such as *Manilkara hexandra*, *M. kauki*, *Madhuca longifolia*, *M. latifolia* and *Mimusops brownii* have been tried elsewhere.

Named varieties include "Prolific", "Brown Sugar," "Modello" and "Russell." Mature "Prolific" trees will bear four to six bushels of good quality fruit in a normal year, but productivity for the other varieties has not yet been determined. The fruit may be round or egg-shaped, depending upon the variety, and two to four inches in diameter. "Russell" is among the larger varieties and "Prolific" averages about $\frac{1}{2}$ " smaller. The skin is brown and scurfy, the flesh light brown with a smooth to granular texture, and the flavor rich and sweet. There may be from 0 to 12 shiny black, hard seeds, about $\frac{3}{4}$ inch long, which separate from the flesh readily. Because no change in fruit color occurs at ripening, it is difficult to know when Sapodillas are ready to pick. For home use they may be gathered when of good size and easily detachable from the stem with little flow of latex. At this stage, fruit will complete ripening within a few days. They are not edible until quite soft, as unripe fruits contain tannin, making them unpleasantly astringent.

For commercial harvest and picking for shipment to distant markets, the fruit must be removed from the tree in a more immature condition. When some of the fruits soften on the tree and drop, it is generally time to pick all of the larger fruit for market. Practically all such fruit will soften to satisfactory edible condition inside of 14 days. In Florida, harvest occurs from May to September with the greatest yield in June and July.

Sapodilla fruit are used primarily fresh, out of hand. As a dessert fruit, it is improved by chilling before eating. Other uses include a drink made from the juice, which may also be boiled down into a sirup. The mashed fruit may be added to breads and to pancakes. A jam can be made from it or it can be combined with citrus in marmalades.

The latex obtained from the bark of the tree is called chicle and for many years was the principal ingredient of chewing gum. This was then an important industry in Mexico and Central America. The tree also furnishes an extremely hard and durable wood.

To this date there are no significant disease problems with the Sapodilla. A rust fungus which sometimes attacks the leaves can be controlled with copper sprays. Oil sprays will control scale insects which leave black sooty mold on the leaves. The major pest is the Caribbean Fruit Fly which will destroy the fruit it leaves eggs in. There is no control for this problem.

Because of its handsome appearance and tolerance of neglect, the Sapodilla tree is a highly recommended ornamental for landscaping in south Florida. The delicious fruit is an added bonus. It is worth a try in protected locations in central Florida.

TISSUE CULTURE BRIEFS

by George Merrill and Walter Vines

Weyerhaeuser's Oakdell Tissue Culture Laboratory in Apopka is an eye opener. For the present they only produce foliage plants (nandina, liriope, dieffenbachia, syngoniums and spathiphyllum), but that may not last for long. On their "White Butterfly" syngonium, they run 30,000 per week (1.3 million per year.) Right now they have 12 products in production that were selected from 750 prime candidates in which all required parameters were graded and accepted both by review staffs at Apopka and at the California research center. In the aseptic production room, the lab employs a staff of 12 each on 2 shifts who work under laminar flow hoods. The techniques employed ensure that the plants are delivered to the buyer disease and contamination free. The big lab is working out the bugs in production, skills and facilities for whatever turns up. Why should they be interested in tissue culture? Read on ...

Mostafo Abo El-Nil is a woody tissue culture expert (i.e., on trees) from Tacoma whose presentation at the recent seminar in Apopka showed the considerable progress being made in that field (not too far from our fruit culture interests.) After all was said and done, he attested that everything is very much the same as in what has been going on in non-woody tissue culture. The same old growing media and general approach. The big difference is that one has to understand all about the individual plant's physiology, its growth, and how it behaves before you try to work with it. A conifer lives a long time and must survive its environment, seasons of heat and cold, and knowing when it is to flush and flower. All this is built into its genetics, so, unless you consider all this, you can neither grow it nor know how to break its dormancy in order to make it grow. It is apparent that most of the factors are well on the way to being controlled for propagation of conifers. It may not be long before commercial production becomes possible. Yet to be determined is the economic feasibility.

Tampa Bay Chapter Newsletter
Rare Fruit Council International, Inc.
3114 Troy Avenue
Lakeland, Florida 33803



P. JUDSON NEWCOMBE
314 DEER PARK
TEMPLE TERRACE, FL 33617

JANUARY 1984 NEWSLETTER
TAMPA BAY CHAPTER, RFCI
EDITOR: RAY THORNDIKE
PRODUCTION STAFF: ROBERT & DORIS LEE,
GEORGE MERRILL AND WALTER VINES.