

CENTRAL FLORIDA PALM BULLETIN

VOL 11 NO 4

OCTOBER 1991



A BEAUTIFULLY FORMED NEODYPSIS DECARYII SEEN
AT OUR SUMMER MEETING AT JOE ALF'S COLLECTION

DETAILS ON PGS 3-4



Editor's Comment

WELCOME TO OUR NEW EDITOR:

ALAN INGALLS FROM
SATELLITE BEACH

FAREWELL MESSAGE

It seems hard to believe but with this issue I will be wrapping up my third full year as editor for the Central Fl Palm Bulletin (this being the 12th issue). Time flies when you're having fun they say and so it would seem. As you are probably aware we have been looking for a new editor and as of last issue there did not appear to be anyone willing to take on the task and I was resigned to doing it for one more

year. But then came the phone call from Satellite Beach which was to change all of this. A young fellow named Alan Ingalls decided to heed the call to service and come to the aid of his chapter. Alan is fairly new to the IPS but comes to us with that crazed level of enthusiasm that many of us remember when we first caught "palm-fever". This enthusiasm should be key to his success since editorship is 75% exhilaration and 25% perspiration. We should all thank Alan for coming forth to take on a difficult job when no one else would. **GOOD LUCK ALAN INGALLS!!!!!!** We look forward to your first issue.

I would like to thank all the members who have generously supported the CFPB during the past 3 years. I have been amazed and thankful that a group of our limited size and means has been able to muster a newsletter of this quality. The CFPB must rank high in terms of "talent" per capita in membership. The fact that a group of 250 lost palm souls produces as many quality contributions of articles and photos of a group 2-3 times our size is testimonial to that idea. Besides contribution of material for publication, we must also recognize the financial contributions of other members.....a very generous group of folks indeed. Correct me if I'm wrong but I'm almost certain that the CFPB is the only IPS Chapter that does not require dues to receive the newsletter (South Fl was also free but is not currently in publication). Three years ago the CFPB was struggling along financially but today we are on fairly solid footing and continuing to provide our CFPB on a "free" basis. This was accomplished in a number of ways, among them have been: 1) Participation in two annual public palm sales at Leu Gardens Orlando and USF Tampa; 2) Enhanced revenue from Chapter Palm Sales at meetings; 3) Requiring subscriptions from outside our newly established free service area; and 4) A very successful fundraiser in which we challenged to raise \$5,000 from members and in so doing an anonymous donor matched our efforts with an additional \$5,000. But the job is not over...our publication costs still exceed our annual revenue. If you have not supported the CFPB in the past (and this is the majority of us) we encourage you to do so in responding to this year's mailing purge or in 3-4 years we could find ourselves struggling along again. **SUPPORT YOUR CHAPTER.....PLEASE!!!!!!**

ABOUT THIS ISSUE: As it turns out, my farewell issue will be the largest published to date, and it is chock full of local talent. Paul Meadows (which is a pen name for some unknown member and strongly resembles palmettos in enunciation) writes about Serenoa repens with some interesting observations. The photos that follow were included by myself and Ted Langley as the time seemed appropriate. Jake Freije of Clearwater makes some interesting observations on Central Florida's complex interaction of climate and microclimate. Dr Merrill Wilcox of Gainesville shares his experience and research on hybridizing members of the Syagrus group that was recently published in the Proceeding of the Fl State Horticulture Society. Bernie Peterson of Cocoa (our most prolific author) makes some important points about pruning palms...what to do and not to do. Dave Besst of Maitland shares his long search to find *Chamaedorea stolonifera* in the wilds of southern Mexico. It is a long search which spanned over 12 years so we have had to divide this long article between two issues....look for the conclusion of Dave's story in the next issue and eventually in Principes. Interspersed among all this are photos from various members, news of our last meeting, and plans for an exciting

FALL MEETING PLANNED FOR NOV 16-17

ST PETE / TAMPA

SUNKEN GARDENS, DR GARY LITMAN,
ROY WORKS, & DR U.A. YOUNG TO
HOST THE CENTRAL FL PALM SOCIETY

A super palmy weekend is planned for the 3rd annual Two Day Meeting. We will be visiting three of the Tampa Bay Areas best Palm and Cycad collections. Our hosts will be Sunken Gardens of St. Petersburg, Mr. and Mrs. Gary Litman of St. Petersburg, Roy Works of Tampa, and Dr. and Mrs. U.A. Young of Tampa. If you have not been to a Central Florida Palm Society meeting lately, this one is a must. We very much hope you are able to join us Saturday, November 16, and Sunday, November 17, for our Fall Two Day meeting.

Some of the varieties of palms you will see are Hyophorbe, Bismarckia, Carpentaria, Latania Wodyetia, Verschaffeltii, Trithinax, Borassus, Hyphaene, Brahea, Reinhardtia, Chamaedorea, Copernicia, Butia x Syagrus, (Washingtonia Filifera), plus many more tropical plants, palms, and cycads.

This weekend is for you. We hope you can join us both days. We look forward to seeing you there.

Ted Langley

ITINERARY:

St. Petersburg Sat. Nov. 16

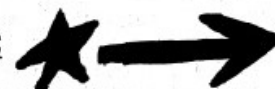
1. Sunken Gardens - arrive at 10:00 to 10:15
Cost Adults - \$7.00 Children (3-11) \$4.00
2. Visit Litman Collection - arrive at 12:30
3. Plant Sale at The Litmans approx. 2:30

Tampa Sunday Nov. 17

1. Visit Roy Works Collection - arrive at 10:00
2. Visit Dr. and Mrs. U.A. Young Collection
arrive at 12:00.
3. Plant Sale at Dr. Youngs approx. 2:30



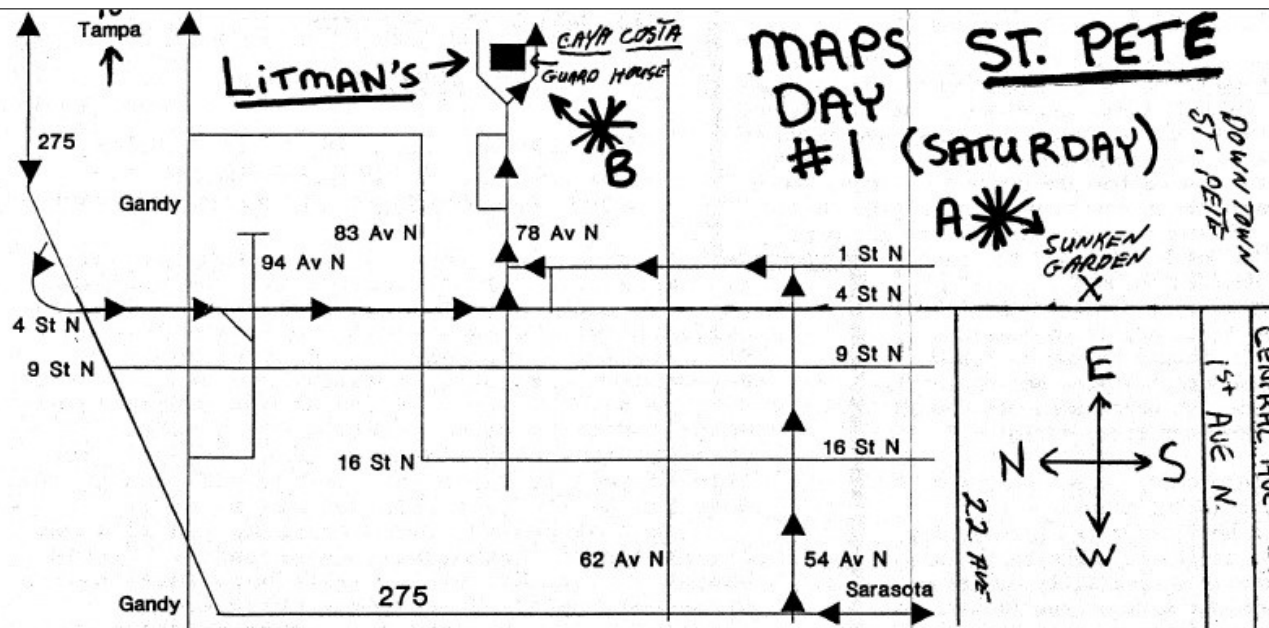
SEE MAPS ON NEXT PAGE



fall get-together in the Tampa/St Pete area. THANKS TO ALL THESE GOOD PEOPLE FOR MAKING WHAT I HOPE WILL BE AN EXCITING ISSUE FOR YOU.

IN CLOSING: I have enjoyed my term as the Editor of the CFPB....many new friends have been made for me....something I'll carry with me into the future. I urge everyone to support the new Editor, Alan Ingalls, as you have supported me. Alan has a lot to learn (as I well remember) but with all of us behind him, his success will be assured. **THANKS AGAIN AND LOOKING FORWARD TO SEEING YOU AT THE NEXT MEETING.**

Best Wishes, Stacey Peacock



The house is located on Riviera Bay in N.E. St. Petersburg in the Caya Costa development. Approximately 50 species of palm are in the ground including *Hyophorbe(s)*, *Bismarckia*, *Carpentaria*, *Latania*, *Wodyetia*, *Verschaffeltii* and another ~100 species in containers. The shallow bay, mature stand of mangrove, and proximity of adjacent houses, creates a unique microclimate for some of the more sensitive species. There also is a heated greenhouse for some of the very sensitive tropicals and seedlings. A number of additional species of tropical plants, bamboo, bromeliads and orchids can be viewed.

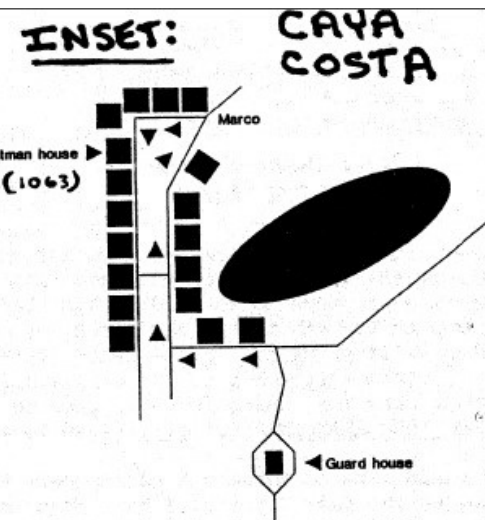
ABOUT THE LITMAN'S:

Roy Works: 4610 Central (A)
Dr Young: 505 Royal Palm Way (B)

TAMPA - ACCOMMODATIONS -

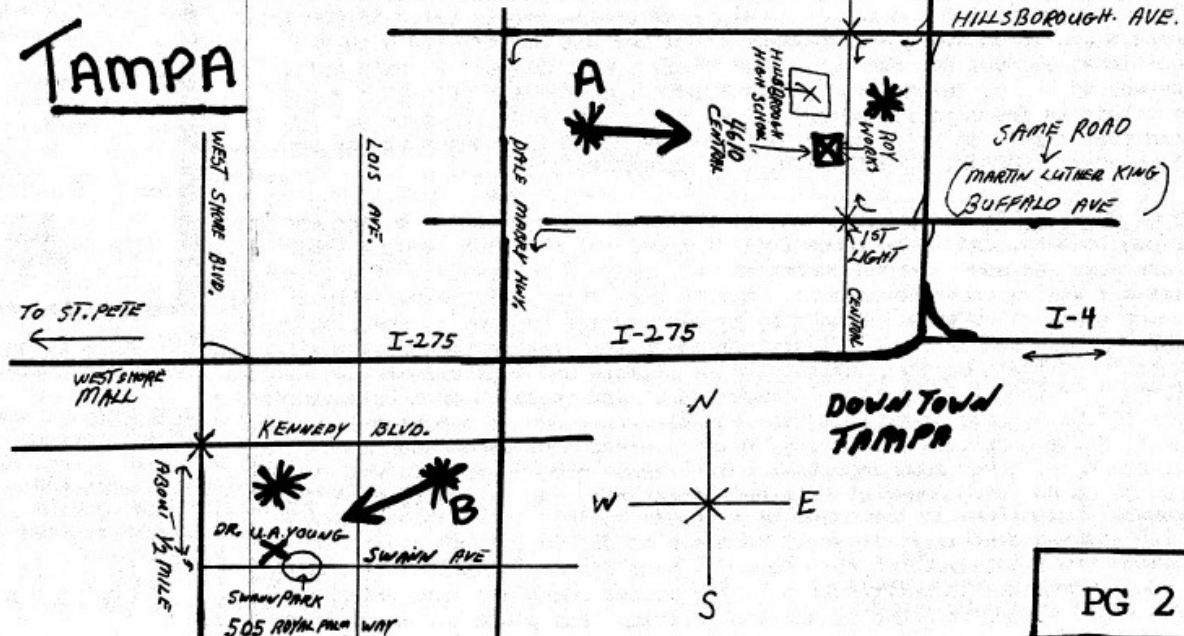
1. Tahitian Inn - Rates \$45.00 Per Night
601 S. Dale Mabry Hwy.
Toll Free 800-876-1397
2. Econolodge - Rates \$42.00 Per Night
1020 S. Dale Mabry Hwy.
813-254-3005
3. Red Roof Inn - Rates \$35.00 Per Night
2307 East Busch Blvd.
813-932-0073
4. Howard Johnsons - Rates \$35.00 Per Night
720 East Fowler Ave.
813-971-5150
5. Courtyard Inn - Rates \$56.00 Per Night
3805 West Cypress
800-321-2211

All five Hotels are in Tampa.
Plan now to join us Nov. 16 & 17-



-Follow 78th ave. all the way to the end.
That will bring you to the Caya Costa subdivision. Inform guard at the gate that you are there to visit the Litmans.

MAP DAY #2 SUNDAY



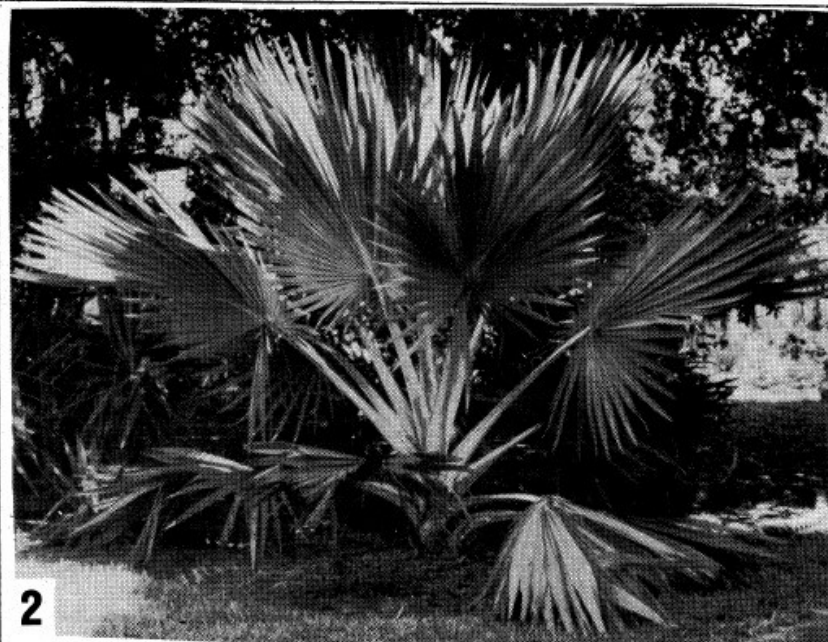
SUMMER MEETING ON JULY 28th BRINGS THEM OUT!!!

JOE ALF HOSTS FIRST STOP

Sunday, July 28, saw members of the CFPS gathering for a summer meeting at the home of Joe Alf in Melbourne. It was a large turnout for the time of year as was last year's meet at Bok Tower.... proof that the summer heat can't keep a good meeting down. We were treated to a number of tropical palms not normally grown in the Melbourne area. The reason for this is that Joe takes extraordinary measures to protect his palms in time of crisis,,,such as tenting large specimens with enclosed light bulbs to produce heat. After assembling Joe led us all on a tour of his place and then on to several neighbors yards. **ONCE AGAIN.....A GOOD TIME WAS HAD BY ALL WHO ATTENDED.** Thanks for sharing your collection with us Joe!!

PHOTOS: 1) An Archontophoenix cunninghamiana growing beside Joe's house. 2) A nice specimen on a Latania palm (see photo 5 for scale). 3) Members gather round as Joe leads the tour. 4) Joe's beautiful Borassus. 5) Mike Dahme of Grant lends scale to the Latania pictured in photo 2.

After picnicing lunch at Joe's, we all headed off to Grant to tour the collection of Mike Dahme. **SEE NEXT PAGE FOR THAT EVENT.....**



2



1



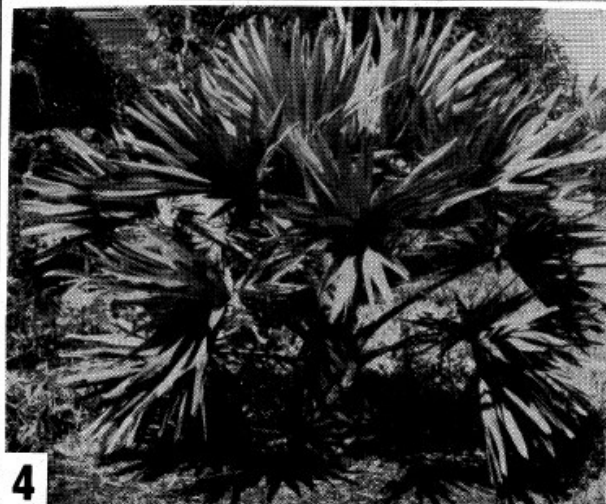
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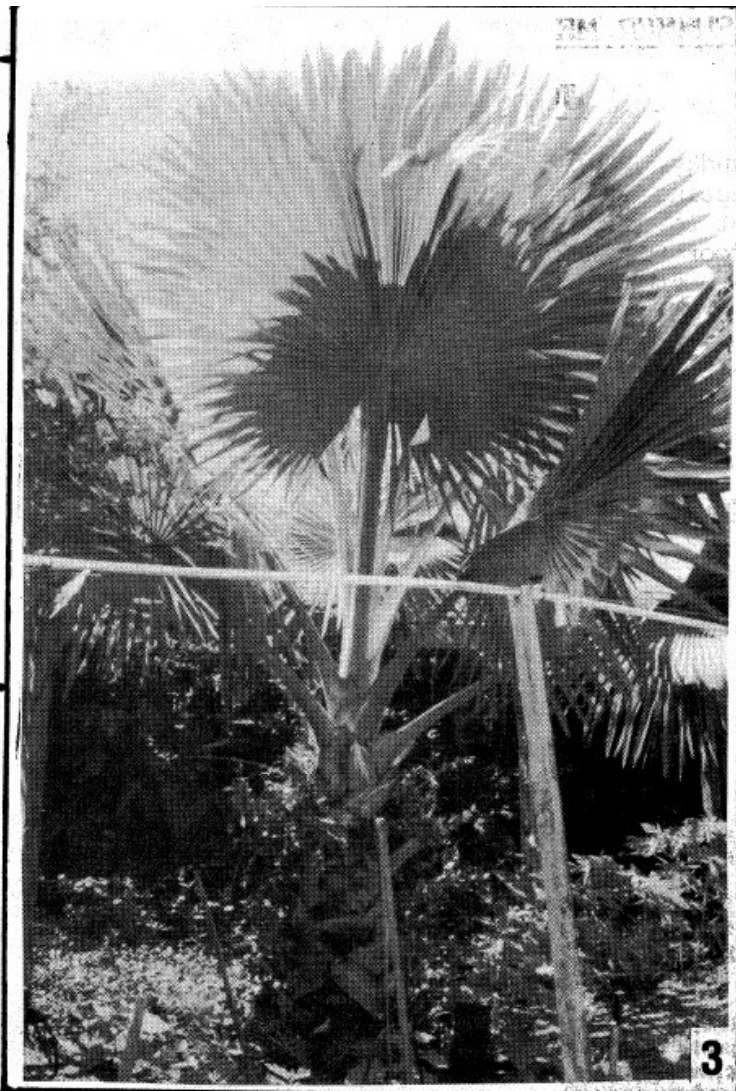
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5

PG 3

MIKE DAHME HOSTS SECOND STOP AT HIS SECLUDED OASIS!!!!



After leaving Melbourne we headed south to Grant and the home of Mike Dahme for a tour of his place. Mike's expansive acreage is a catacomb of ponds and palms in a setting that is as unique as it is beautiful. Very impressive indeed!!! It was easy to linger on here for hours and an afternoon breeze aided the effortless stay.

PHOTOS:

1) Bill Black of St Cloud talks with Dr Merrill Wilcox of Gainesville while members shop for palms under a grove of *Livistona chinensis* at our meeting sale. 2) Presidents Karen and Tony Rudgers of Orlando approach Roy Works who recorded the event on video. 3) A nice specimen of *Bismarkia nobilis* which has proven a rapid recoverer from freeze damage for Mike. He rates it high on the hardiness scale. 4) A typically enchanting scene at Mike Dahme's...to the right is one of his hybrids (*Syagrus*).

RAFFLE & SALE: Thanks to Marita & Bob Bobick for kicking off a raffle by donating a sizeable *Trachycarpus Takil*...followed by Joe Alf's donation of that loved and rare *Syagrus Hybrid*. Needless to say, ticket sales were brisk. Thanks also go to Roy Works, Mike Dahme, Rockledge Gardens (Bernie Peterson), Ted Langley for their sale donations...making the meeting a financial success also.

FROM ALL OF US TO YOU...THANKS MIKE!!!



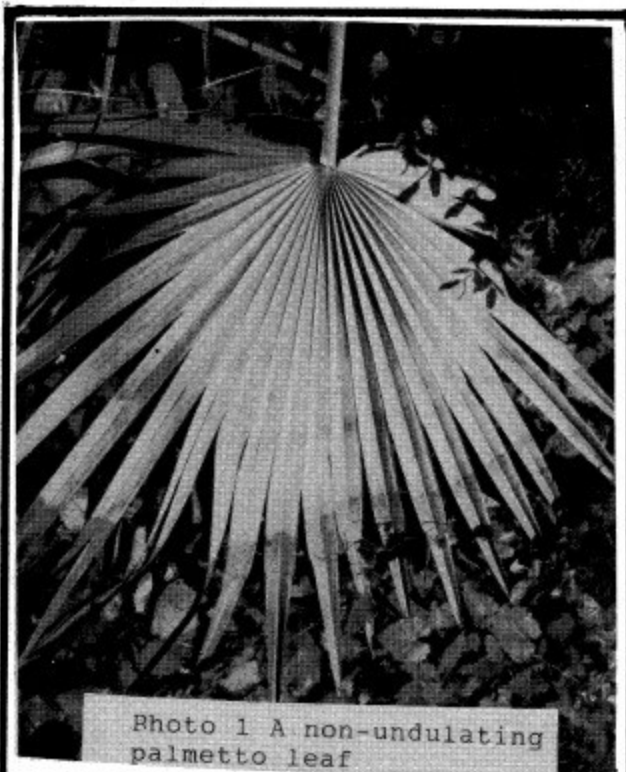


Photo 1 A non-undulating
palmetto leaf

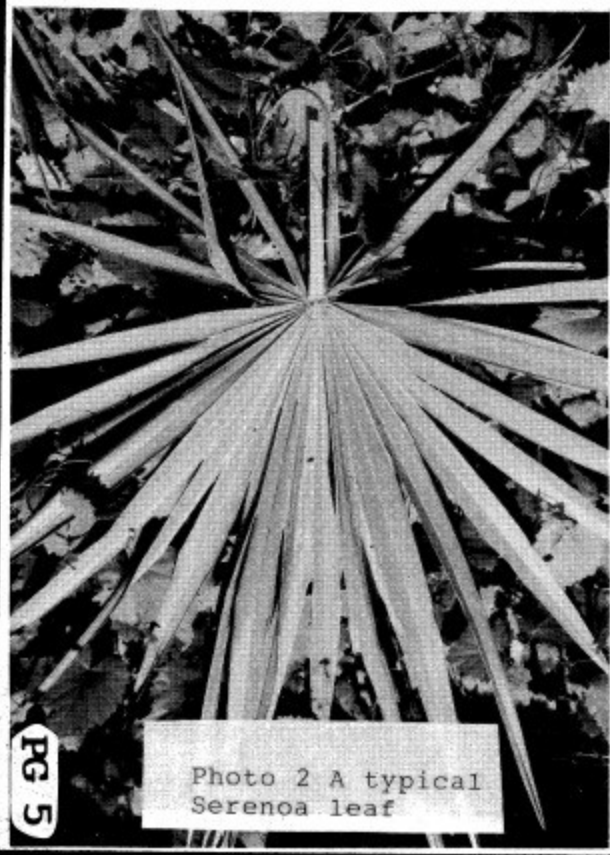


Photo 2 A typical
Serenoa leaf

PG 5

Those of us who are lucky enough to live in Central Florida have the opportunity to observe our two most common native palms in their natural habitats. Sabal palmetto, the cabbage palm, is our state tree and grows under a variety of conditions, it is relatively uniform in its characteristics, and is frequently cultivated as a landscape plant. Serenoa repens, or saw palmetto, is also found growing wild under a variety of conditions, is seldom cultivated, and displays a wide variation in many of its characteristics such as: leaf color, leaf form, stem height, and stem uprightness to name just a few.

As one travels about Florida many variations of Serenoa repens can easily be seen from the window of a car. These varieties can not be given names, as there are simply too many of them, and they are not separated geographically, in fact it is common to see distinctly different forms growing side by side, while in other cases large tracts of saw palmetto can be seen that are quite uniform in appearance. Some examples of the diversity of the saw palmetto follow. In Brevard county along U.S. 1 there is a large area of saw palmettoes with leaves like no others that I have seen. The leaves are silvery in color, and lack the undulations which are typical of Serenoa foliage. This makes the leaf very similar to that of the Paurotis palm. Photo 1 shows a leaf of one of these unusual saw palmettoes, Photo 2 shows a more typical Serenoa leaf, less silvery and with pronounced undulations. Other variations that are sometimes seen in Serenoa foliage are lax or drooping leaflet tips, these are fairly common and somewhat resemble the foliage of some of the Livistonas. I must stress that these variations occur in what are seemingly large groups of plants, or even acres of plants. It is less common to see a small oddball only a few feet across.

In addition to variations in foliar characteristics, Serenoa repens plants can be seen with wide differences in the character of their stems, Photo 3 shows a clump of very upright saw palmettoes, in this case the stems resemble those of the Paurotis palm. In other instances huge tracts of saw palmetto have been observed in which the stems achieve a uniform height of only a few feet, while only yards away another clump perhaps an acre in extent also has a uniform height of about six feet! Photo 4, while of poor quality shows the two clumps just described, on the left, barely discernible because of the line of trees in the background are the very short Serenoas, they cover a very wide area, to the right is the taller mass of saw palmettoes, they are also of a contrasting color, this and their height make them show up better in the photo. About one hundred yards further to the right, not in the photo, is a large mass of Serenoas with beautiful drooping leaflet tips. All of these plants are growing on the floodplain of the St. Johns river in Brevard county, in full sun. One possible explanation for the diversity found in three such huge clumps located adjacent to each other is that each clump is one plant, that is, a genetic individual.

At this point I must digress from the subject of saw palmettoes to mention the creosote bush of the Mojave desert. The creosote bush, genus Larrea, is a shrub which grows to about 6 ft. in height. These plants cover large areas of desert and are well spaced from each other, it is said that their roots are so efficient at gathering the scant moisture available that nothing else, not even their own seedlings, can grow anywhere near them. As the creosote bush grows it

ARTICLE CONTINUES NEXT PAGE
PHOTOS 3 & 4 ON NEXT PAGE

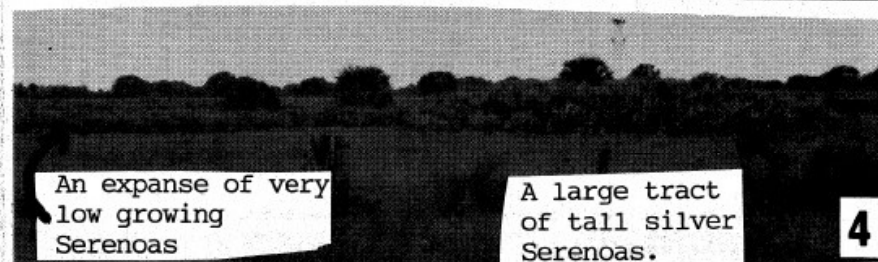
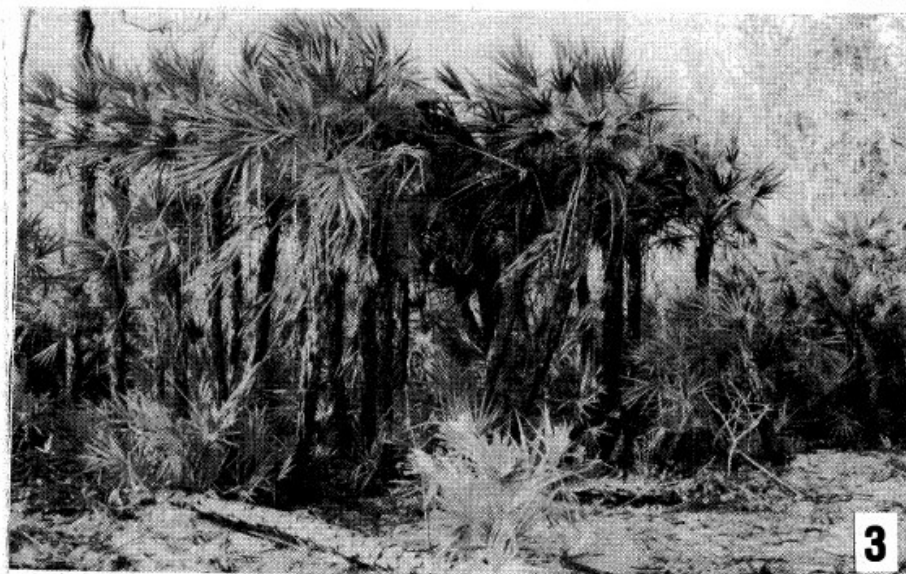
(CONTINUED)

sends up new stems from its rootstock and the plant increases slowly in diameter. At the same time the older stems in the center of the plant gradually die off leaving a large donut shaped shrub. Some of the largest plants reach a diameter of 70 ft., their age has been estimated to be as much as 10,000 years.

Since *Serenoa repens*, like the creosote bush is capable of an unlimited increase in diameter, and is able to create new root systems as they inch their way outward, their lifespan is also virtually unlimited, (providing they avoid the bulldozer). This sort of "immortality" may also be the case with the needle palm, but not with single trunked species such as *Sabal palmetto*. The limiting factor in *Sabal palmetto*'s age may well be how long the base of its trunk, which is its oldest part, can resist decay and weathering, until it finally topples

I am speculating that when we see an area of saw palmettoes with a distinctive characteristic as in Photo 1 we are looking at one plant, a single genetic individual. These individuals may become disjoined or separated over a period of many years, but could still trace their beginnings to a single seedling. The *Serenoas* with the non-undulating leaves as pictured in Photo 1, cover about one-half acre and are disjoined, they range up to eight feet tall, if they are really only one plant then it must be a very old plant indeed. I cannot even guess how old they might be but probably as old as palms get anywhere in the world.

The purpose of this article is not to prove anything, but hopefully to stimulate thought and perhaps investigation into the often overlooked, but often interesting *Serenoa repens*,



Thanks to the mystery member who shared this!!!!

SUPER SERENOA !!!

TRIBUTE TO ONE OF OUR NATIVE
SONS...MORE PHOTOS ON PG 7



SUPER SERENOA !!!

The pictures on this page cite the noble nature of our often overlooked and underused native son...the sturdy yet beautiful...Serenoa repens. Enjoy!!!

PHOTOS BY STACEY PEACOCK & TED LANGLEY



Bok Tower



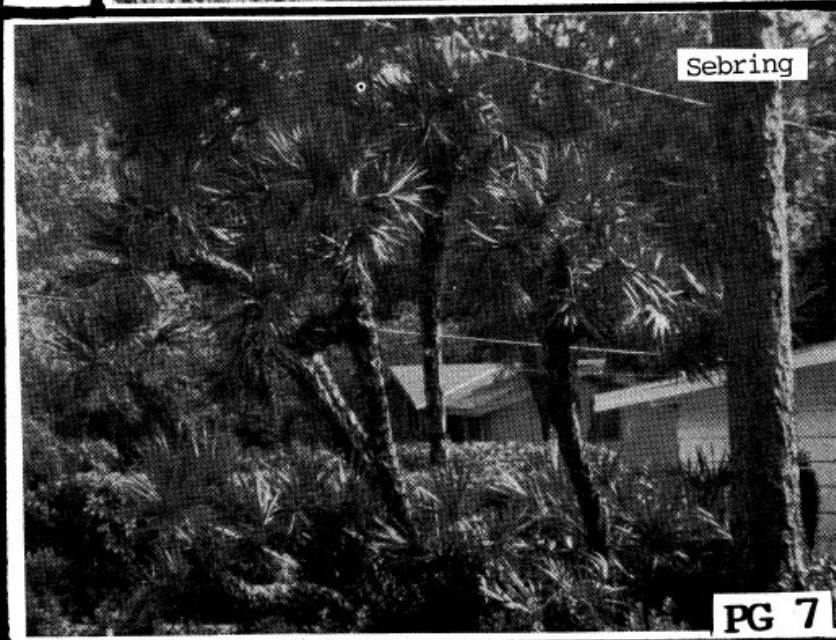
Bok Tower



Lutz



Sebring



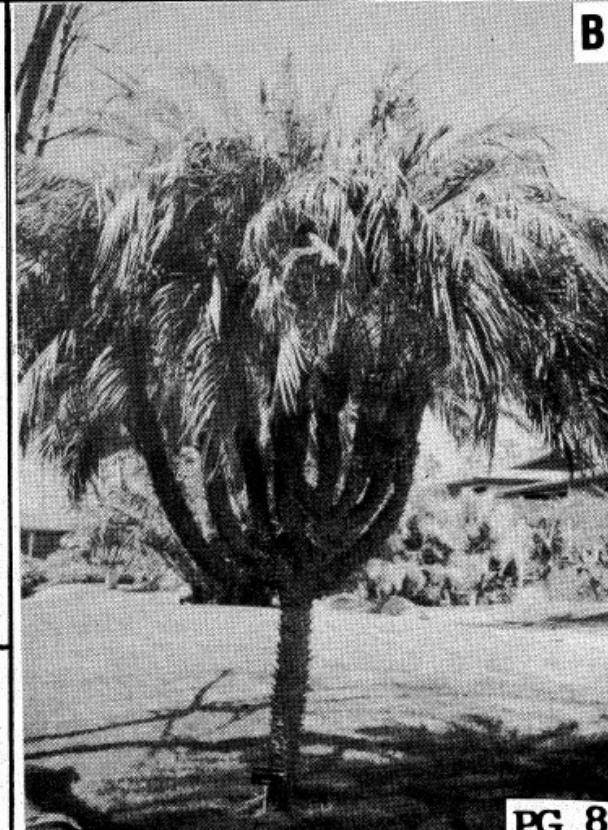
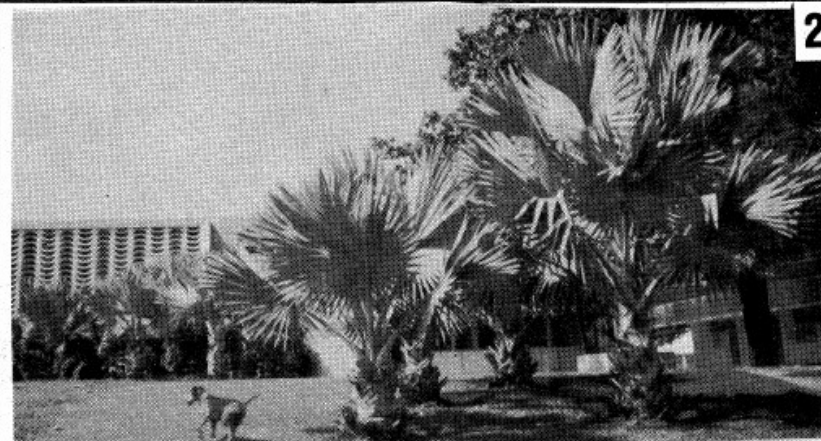
Sebring

ATTENTION PALM SELLERS!!!

November 16-17 Meeting in Tampa / St Pete: The Chapter Palm Sale will be open to all sellers on Sunday the 17th only. The sale scheduled for Saturday at Dr Litman's will be hosted by him alone with 20% of all sales being donated to the CFPS. He will have about 100 species available to sell.

DR OR YOUNG'S COLLECTION A CENT FL TREASURE!!!

This summer I had the immense pleasure of a visit with Dr Young while out with some fellow palm enthusiasts. It was my second visit to what is probably the finest collection of palms & cycads in Central Fl. The conditions of the grounds could only be described as spectacular. You won't want to pass up your chance to see this on Sun Nov 17th!!!



PHOTOS FROM BILL BLACK

#1): A Coconut Palm and Christmas Palm (*Veitchia merrillii*) found growing in Kissimmee. Perhaps these should go into your "living dangerously" column for those of us who plant tropicals.

#2): Rodger the palm dog runs along some grouped *Bismarkia nobilis* on the U. of Miami campus.

#3): A *Trachycarpus fortunei* growing near my sister's house in Seattle, Wa.

PHOTOS FROM ED & NANCY HALL: **A):** A rather gnarley looking form of *Phoenix recclinata*. **B):** A multistemmed (branched) *Phoenix roebilini*. Both pictures were taken at the Catamaran Resort Hotel in San Diego at the June 1991 IPS Board of Directors Meeting. A report on the meeting by Ed Hall can be found on Pg 10.

IN SEARCH OF CHAMAEDOREA STOLONIFERA (PART 1)

BY David Besst, Maitland

Now that Ed Hall And I have succeeded in making the 2½ hour climb to the top of a mountain in southern Mexico to actually confirm that *Chamaedorea stolonifera* is flourishing in a limited area there, I am compelled to tell of the saga of a search that began when I saw this elegant plant on a visit to Nat DeLeon's house during the June 1976 biennial meeting of the IPS. On either side of the doorway to Nat's beautiful home on Old Cutler Road in Miami stood two sentinels of the most classically elegant plants that I had ever seen. Bifid leaves of the darkest, rich blue-green color ascended in stair-step fashion on the slenderest of trunks from a container completely filled with the stolons. Having never seen the plant before, I concluded that it must be rare, but I decided then and there that I wanted to obtain this plant for myself and share it with palm lovers everywhere.

Those who have helped me in the long search for this plant are at the top of my list for "who's who in the Palm Society", and I want to take this opportunity at the very beginning to thank each and every one of them. I hope that I have not forgotten anyone, and ask forgiveness if I have. This quest has taken place over such an extended period of time that I am sure my memory of the events may have failed me along the way.

First and foremost among my most avid and helpful supporters are my longtime friends in the IPS, Mrs. Teddy Buhler and Mr. Dent Smith. Their continual support with information about locations, people to contact, and constant encouragement, kept me moving on what seemed like a hopeless task. So many others helped me that I will list them now and refer to them later as we go along. They are Mr. De Hull, Mr. Stanley Kiem, Mr Nat DeLeon, Ms. Mary Collins, Ms Nina Woessner, Mr. Dick Palmer, Dr. John Dransfield, Dr. Natalie Uhl and Dr Hal Moore.

During the late 1970's my work in aerospace often took me to California where my good friend Al Bredeson shared his home, his friends, and his garden with me on so many occasions. It was in his garden that I again saw *C. stolonifera* growing and I was told that all plants known in cultivation were exclusively female with the exception of a male plant that Dick Palmer had. These plants were not available in any nursery in the San Diego/Los Angeles area. Furthermore, the rumor was out that this beautiful plant was extinct and no longer existed in a wild state.

In the April 1979 issue of *Principes*, Dr Hal Moore was discussing endangered palm species, and in his list was found *C. stolonifera*. This brought the focus of my search back to finding a male plant in cultivation to pollinate at least one of the many females in existence. The word seemed to be out on the "weakling" males in the species that all died with the exception of Mr Palmer's. The male plants of Nat DeLeon and Hal Moore were reported as having died. Any hope of finding a male plant came down to finding a totally new cultivated source, or the slim possibility of finding a plant that still existed in the wild. (What about Mr. Palmer's? You don't mention contacting him Dave....Editor)

I had the good fortune of talking with Hal Moore at the June 1980 Biennial meeting of the IPS in Hawaii. He confirmed that his male plant of *C. stolonifera* had died, but was very interested in the possibility that there may still be isolated plants in existence in the wild. By this time I had made the decision to try to relocate the plant, if it

existed at all, in its native state. Where to start? Help from Nina Woessner, the plant recorder, and from Mary Collins, horticulturist, both of Fairchild Tropical Gardens, led me to information that pointed to the state of Chiapas in southern Mexico as the home of *C. stolonifera*. Additional help in trying to locate the home of *stolonifera* was generously given by Stanley Kiem and Nat DeLeon.

A visit to my daughter whose husband was stationed in London, England in the fall of 1981 led me to cross paths with Dr. John Dransfield and the botanical library of Kew Gardens. I was treated to the privilege of spending an entire day researching Chamaedoreas, was taught how to use the keys and catalogues, and found so much material on this one genus alone, that I was forced to merely scan material and note the document name and page numbers involved with Chamaedoreas for later copying by Kew's able staff. Here we were being led closer to the city of Tuxtla Gutierrez in Chiapas as the source for the type location of our plant.

Back home in Florida the following year, I was encouraged by Dent Smith to pursue my gut feeling that there may be a possibility that this plant was not extinct, but had been merely overlooked by recent plant explorers. Dent was a prolific correspondent with Hal Moore and maintained an extensive file of their letter exchange; and among them was the gem of a letter by Dr. Moore detailing the location of many of the various species of Chamaedoreas in Mexico. Hal's letter to Dent was written on the occasion of a trip by Dent to Mexico in 1957. On the last page of the detailed 3 page letter to Dent, Hal pinpointed the source location of *C. stolonifera* to a finca called Las Vistas near the town of Berriozabal.

Having been told that Chiapas was not the most favorable climate for palms because of its high altitude and many areas of semi-arid terrain, I passed up Chiapas in 1982 to visit the Sierra Madre range north of Mexico City to locate the source of *C. elegans* seed which we use in our commercial nursery operation. We found the plant in abundance as an understory palm at relatively high elevations in very rocky terrain near Tamazunchale where the collection of its seed is a major cottage industry for the local people. Literally tons of the seed of this little palm are collected and shipped worldwide every year. Along with *C. elegans* there were extensive stands of *C. microspadix*. Frost is not uncommon at this high elevation, and it may explain the cold tolerance of both of these members of the Chamaedorea genus. We further explored north of Ciudad Valles and Mantes to find *C. radicalis* growing in similar terrain along with 2-3 different species of *Brahea*. Dr. Moore's advice for hunting plants in the wild is to look for "companion" plants, and to use an altimeter to generalize the better areas to look. It is good advice and has helped me to locate plants that would otherwise have been overlooked.

In 1983 the rumors of back-crossings of *C. stolonifera* with some of its close cousins in the *Eleutheropetalum* group of Chamaedoreas in order to "recreate" *C. stolonifera* again encouraged me to seek out the plant in the wild. My wife Marian and I planned a vacation trip to Chiapas in the fall of the year when the weather was expected to be a little bit drier and cooler. We combined our interest in the Mayan Indian culture with a visit to the fabulous ruins of Palenque, and then driving through the colonial mountain city of San Cristobal de las Casas and on to Tuxtla Gutierrez with the hope uppermost in our minds of seeing *C. stolonifera* in the wild. CONTINUES NEXT PAGE

CHAMAEDOREA STOLONIFERA/Besst/Continued

We first visited the botany department of the University of Chiapas to see if they knew of the plant. The staff there was not aware of this rare plant reported as having been typed in the area by Wendland back in 1882. Not completely dismayed, we turned back to a lesson taught to me by De Hull. De's recommendation to anyone hunting for a palm whose exact source is not known is to look in the gardens of the private homes of the more affluent along with hotels and public buildings. He feels that local plants of value will be collected and brought into the towns and cities and incorporated in the landscapes of the more important buildings. As luck would have it, we took a break from our plant exploration to do a little shopping for gifts to take back with us that were appropriate for the region, and found that the front garden of the largest native gift shop in the entire city was almost completely filled with *Chamaedorea stolonifera*. Hoping that a local nurseryman had supplied the plants for landscaping, we started out to visit every nursery in Tuxtla Gutierrez and Berriozabal. It didn't take us too long to find a nursery with quite a number of the plants in stock. We inquired of the owner, only to find that he was in the United States being treated for a serious back injury. I started exchanging information of my interest in *C. stolonifera* by letter and telephone with the owner. Upon his return to Mexico we homed in on a local name for the palm which seemed very appropriate: "Cola de Pescado" which means "fish-tail". Unfortunately this is also the name for *C. Ernesti-Angusti* as well. My lack of detailed Spanish communication skills coupled with a lack of good photos available to me of *C. stolonifera*, derailed attempts to secure samples of seedling plants of this precise species, and we wound up with a lot of beautiful *Chamaedoreas* being shipped to us that covered most of the *Eleutheropetalum* group but none of the *stolonifera*. As the seedlings continued to grow out and reveal their true species characteristics, we concluded that the only way to continue our search was to plan for a trip to Tuxtla Gutierrez to meet with the owners of the nursery.

THE SEARCH CONTINUES IN THE NEXT ISSUE!!!! DAVE'S STORY PROCEEDS WITH A TRIP TO THAT NURSERY IN 1988.....Stay Tuned.



IPS BOARD OF DIRECTORS MEETING REPORT JUNE 1991

by Ed Hall

The 1991 IPS Board of Directors meeting was held June 20-22 in San Diego at the Catamaran Hotel. The meeting started with a tour of the hotel grounds and a rather impressive palm collection (see hotel palm photos). From there Nancy & I toured the Bahia Resort Hotel. Both hotels are owned by Bill Evans, an avid palm enthusiast.

Friday June 21 we were off to tour several gardens in the San Diego area, starting with breakfast and a very enjoyable tour of Ed and Priscilla Moore's yard. Ed's garden features many unusual palms, cycads and bromeliads. It is one of the older palm gardens in San Diego. From there we headed north to the Rancho Soledad Nurseries in Rancho Santa Fe. After a tour of the nursery grounds, including the micro-propagation center and the huge greenhouse palmetum (about 2 stories high), we had an excellent lunch. The palmetum contained many large and rare container grown palms. From the nursery we headed back into San Diego to Jim & Lese Wright's. Being personal friends of Nancy & I, we had a chance to renew acquaintances plus see their mature palm, bromeliad and orchid gardens and have an excellent dinner.

On June 22 the official business meeting convened at 9:00 AM in the "Board Room" of the Catamaran. The treasurer reported our assets at \$312,974.00. Of that was \$303K in cash. Major sources of income for last year were as follows: **Bookstore**—\$18,000; **Seedbank**—\$5,600; **1990 biennial**—\$4,000. Per the membership report we are at 3,250 members and growing about 5% per year. After extensive discussion, the board approved publication of 7,000 copies of Don Hodel's book on the genus *CHAMAEDOREA*. It will contain several hundred color pictures and the pre-publication price will be announced shortly. Expect it to be in the \$50 range.

Growth of our society is causing several changes in the operating procedures. 1) The by-laws are being revised (the draft of which should be out by 9/91) and 2) We are looking into hiring an executive secretary to handle the increased workload the growth is generating.

The most extensively discussed topic was advertising in *Principes*. A fairer policy to accept advertising without bias was passed and the execution of said policy was defined for the Editors. The South Fl Chapter then reported on the 1992 Biennial plans. It will start about the 7th of Nov of that year. The major post convention tour will be to Costa Rica, but several pre & post convention tours are also to be planned. One is expected to be a trip to Central Florida. **YOUR TREASURER NEEDS HELP IN PLANNING THE POST CONVENTION TOUR TO OUR AREA SO PLEASE CONTACT ED OR NANCY HALL WITH YOUR IDEAS!!!!!!!!!!!!!!!!!!!!**

IPS BOARD OF DIRECTORS MEETING PHOTO:

FRONT ROW (L TO R): Lynn McKamey, Pauleen Sullivan

SECOND ROW (L TO R): Ed Hall, Maxwell Stewart, Don Evans, Ralph Velez, Leonard Goldstein, Jules Gervais

THIRD ROW (L TO R): Jim Cain, Jerry Hunter, Phillip Bergman, Lynn Muir, Ross Wagner, & Libby Besse.

UNPICTURED: Norman Bezona & Bill Theobald

PRACTICAL METHODS FOR HYBRIDIZATION IN THE SYAGRUS ALLIANCE

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mined have $n = 16$ (13,14). There is extensive research relating to pollen extraction and preservation in the cocoid genera *Cocos* and *Elaeis* (10,15,16). There is a widely adapted medium available for testing viability of palm pollen (13). These favorable considerations, together with the esteem held in the industry for the hybrid between *Butia* and *S. romanzoffianum*, were strong encouragement for studies of hybridization within the *Syagrus* alliance.

Butia is by far the most convenient palm genus to use as a female parent at the latitudes of Gainesville and Jacksonville for these studies. We quickly noted that slightly less than half of the *Butia* specimens keyed as *B. capitata*; random mixtures including other species of *Butia* were common.

Materials and Methods

Butia specimens were selected for ease of emasculating their inflorescences. Very large differences in this attribute were noted. All male and the occasional perfect flowers were removed, as the latter proved to be fertile. The emasculated inflorescence was enclosed in a large plastic bag prior to the emergence of the stigmas (Fig. 1a). Pollen was collected from desired male parents (15) and dried in a refrigerator over silica gel for two to four days. The pollen was no deeper than 10 mm in the container while dried. After the pollen was extracted from the inflorescence, the latter was heated in an oven at 40°C for one-day intervals and re-extracted (15). These batches of pollen were also dried over silica gel in the same manner. After drying, the bottles of pollen were capped and stored in the freezer. These were tested in the medium described (13), except colchicine was deleted.

Depending on the available quantity of pollen, it was applied to the stigmas either by Q-tip individually or by sprinkling the entire inflorescence. The pollen was applied shortly after the stigma emerged as in Fig. 1b, when the stigmas began to separate at their tips, through the stage depicted in Fig. 1c. The plastic bag was removed no more than a week later, as it seemed to cause precocious maturity with resultant small seed size. It is usually necessary to protect the developing infructescence with a screen-wire bag, as one squirrel can destroy hundreds of seed at milk stage within a few hours.

Additional index words. *Arecastrum*, *Butia*, *cocos australis*, *cocos* hybrid, *cocos plumosa*, queen palm.

Abstract. Methods for collection, live preservation, storage, and use of pollen in hybridization of palms in, and related to, the *Syagrus* alliance are described. Included are *Butia* (a.k.a. *cocos australis*), *Syagrus* (formerly *Arecastrum*) *romanzoffianum* (a.k.a. *cocos plumosa* or queen palm), and their hybrid (*cocos* hybrid). Virtually no laboratory equipment is used.

The *Syagrus* alliance is a group of more than fifty species of pinnate cocoid palms of widely differing forms comprised within the *Butiinae* (14) subtribe (Table 1). The forms vary from the massive *Jubaea spectabilis*, having a solitary trunk (11) through clustering (e.g., *Syagrus flexuosa*), and non-clustering (e.g., *Butia*) species of moderate size, to grass-like species such as *S. graminifolia* and *S. vagans* (2,3,6,14). The group varies widely in cold-hardiness; *Jubaea* and *Butia* are among the most cold-hardy of pinnate palms, while many others are tender or unevaluated. Several naturally occurring hybrids have been noted within the alliance as listed in Table 2 (1,4,5,7,8,9,12,17). These naturally occurring hybrids have comprised various combinations of clustering and non-clustering parents. The majority of the species in the *Syagrus* alliance whose chromosome number has been deter-

A beautiful specimen of the *Syagrus* Hybrid in Avon Park. Photo: S. Peacock

Table 1. Summary of the Subtribe *Butiinae* (14)

Genera	Species contained
<i>Allagoptera</i>	5
<i>Butia</i>	8
<i>Cocos</i>	1
<i>Jubaea</i>	1
<i>Jubaeopsis</i>	1
<i>Lytocaryum</i>	3
<i>Parajubaea</i>	2
<i>Polyandrococos</i>	2
<i>Syagrus</i>	33

Florida Agricultural Experiment Station Journal Series No. R-01350. The graphics of Lyda Toy were invaluable. We thank Noel Lake and John B. Taylor for their support and encouragement, and David Bell, Stanley Kiem, Don Evans, and Mary Collins of Fairchild Tropical Garden for plant materials.

Table 2. Naturally-occurring hybrids in the *Syagrus* alliance.

Hybrid	Fertility status	Reference
<i>Butia</i> x <i>S. romanzoffianum</i>	sterile	9,12,17
<i>Butia</i> x <i>Jubaea</i>	fertile*	
<i>S. coronata</i> x <i>S. oleracea</i>	fertile	8
" x <i>S. romanzoffianum</i>	-	4
" x <i>S. schizophylla</i>	fertile*	4
" x <i>S. vagans</i>	-	1
<i>S. oleracea</i> x <i>S. romanzoffianum</i>	-	5

*Unpublished observations by the authors.

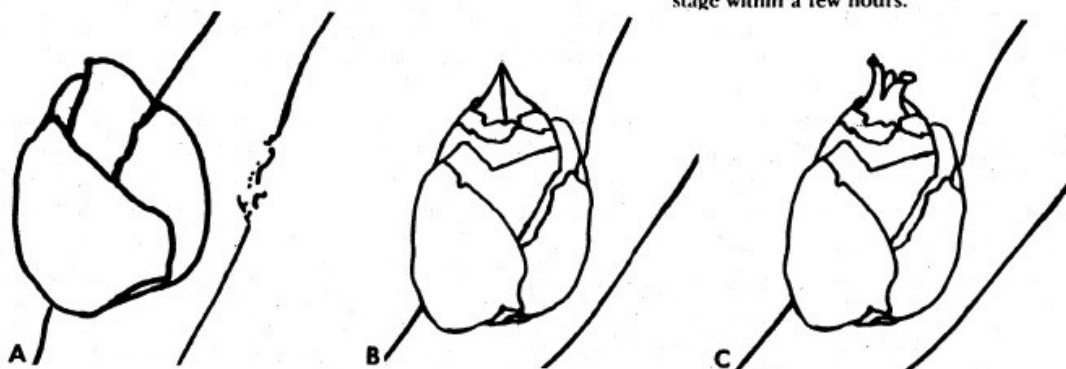


Fig. 1. Female flower of *Syagrus* alliance (a) before emergence of stigmas, (b) after emergence of stigmas, and (c) at end of receptive interval (enlarged).

HYBRIDIZATION IN SYAGRUS

Continues Here

Results and Discussion

Using the very simple extraction and preservation methods described herein, it was possible to store for a year in viable condition pollen of *Allagoptera arenaria*, *Syagrus x tostana*, and all of the *Syagrus* species listed in Table 2, except *S. schizophylla*. The latter species and *Butia* and *Jubaea* were not as amenable to the extraction procedure; nevertheless some pollen could be extracted and preserved and crosses were made from their pollen. We pollinated *Butia* with viable pollen from *Cocos* or *Elaeis* many times under ideal conditions without success. There is a widespread belief in the Florida nursery industry that the *Butia* x *S. romanzoffianum* hybrid is extremely vigorous. Our belief is that those hybrid seedlings that are discovered randomly in some *Butia* seedbeds are usually the genetically superior survivors from a much larger population of hybrid seedlings of mediocre vigor. The average vigor of seedlings from controlled crosses has been disappointingly low.

The authors feel that modern asexual propagation of selected hybrids offers considerable commercial horticultural promise because of the wide variety of plant forms available in the *Syagrus* alliance.

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Thanks for this article Merrill !!!

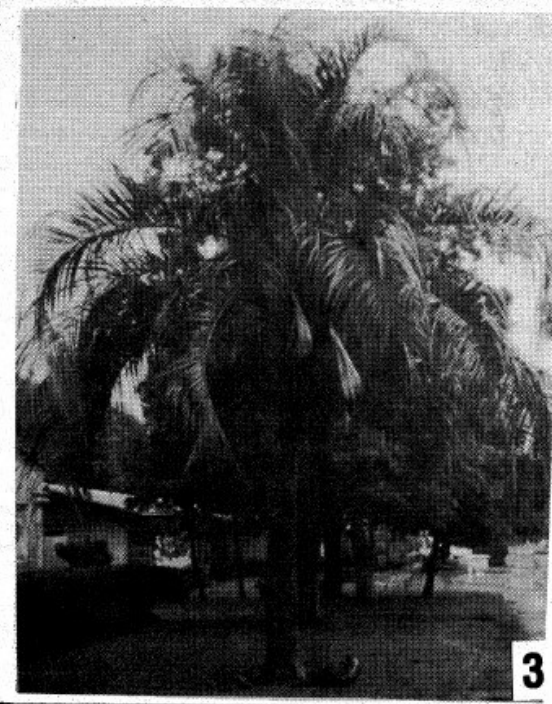


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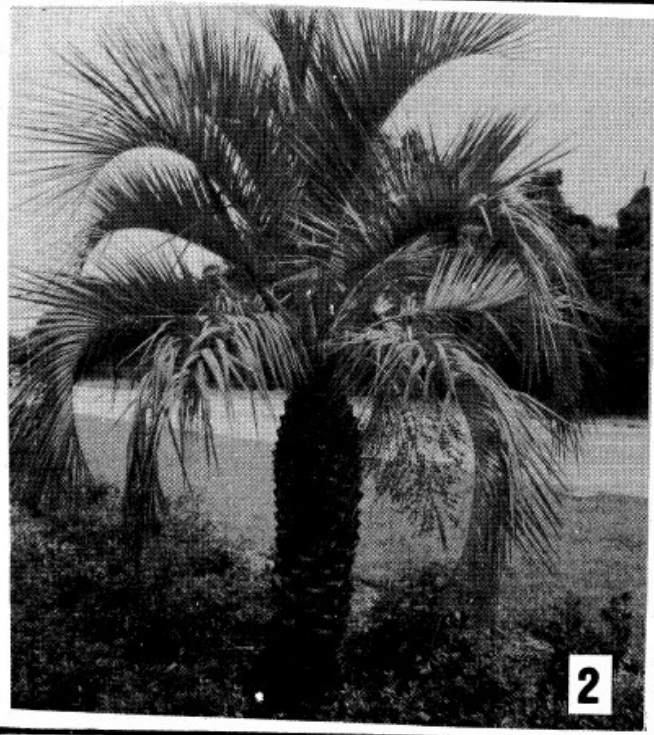
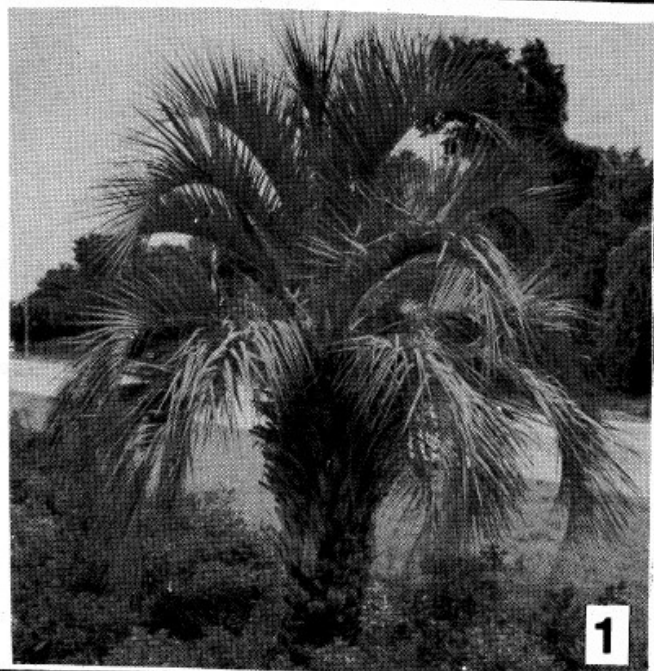
Photo 1: Ed Hall beams with pride beside his *Syagrus* Hybrid at his home in Maitland.

PHOTOS 2 & 3: Were sent in with this caption by Merrill Wilcox: "We recently noted some unusual palms in Clearwater. The Queen Palm (#2) has several heads, which we were not able to count accurately. It is suspected that this specimen of *S. romanzoffianum* on Gulf to Bay Blvd is responding to tree trimmers who are more interested in nearby wires. The unusual grace of the Hybrid (#3) on Osceola Dr. in Bel Air suggests that it is the reciprocal of the well known *Butia* cross; that in this case the mother may be the Queen Palm."

Merrill Wilcox



TRIMMING & PRUNING YOUR PALMS



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There have been many fine books and articles written about the cultivation of palms, but little has been written about the pruning and trimming of palms. It is not surprising therefore that many shabby unpruned, or worse yet horribly overpruned palms can be seen in Central Florida.

In warmer climates, South Florida for instance, many so called self-cleaning palms are grown, these are mostly crownshaft palms. Their tidy appearance is one thing that makes them so popular with the palm buying public. In Central Florida few of our palms are self-cleaning to the extent that a royal palm is. In most cases several dead leaves are present in the palms crown of foliage, unless they are pruned out. A queen palm for example may have 4' or 5' dead leaves and a few dried spadices, Sabal palmetto is about the same. Washingtonia is an extreme case, and a young tree may have many dead leaves clinging to its trunk. Incidentally the retention of dead leaves by a plant is known as marcescence, in the case of Washingtonia this is thought to provide a thorny protective barrier to keep climbing animals from reaching flowers or immature seeds in the crown of the tree.

Whether or not to prune the dead leaves from a palm is largely a matter of taste, some palms have an air of informality about them and look just fine even with some dead foliage on them, mature Sabals fall into this category. Palms which have a more formal appearance might be Canary Island Date, Queen Palm, and Butia.

The leafbases of some palms provide them with such a strong symmetry that leaving them unpruned is a waste of beauty. Butia capitata is the best example of this, if left untrimmed it resembles an untidy bundle of sticks. In a recent article in "Principes", T. Myers eloquently describes the beauty of a well pruned Butia, Photos 1 and 2 are before and after shots of a healthy Butia which I pruned. Note that the leafbases have been cut to a uniform short length, this is what brings out the symmetry of the tree. Also note that only a few green leaves have been removed, removing healthy leaves does not improve the appearance of a palm. Young Sabals which still have leafbases or "boots" on their trunks should be pruned in a similar manner, as would other young palms which retain their leafbases. Members of the genus Phoenix have long sharp spines on their leafbases, when their dying leaves are trimmed away the cut should be made between the trunk and the spines, thus ensuring that no spines are left attached to the trunk. Photo 3 shows a poorly pruned Canary Island Date with the spiny portion of the leafbases left on the trunk, as can be seen, the beautiful symmetry of the trunk is lost, and the unpruned spines are dangerous as well.

At this point a few more words about overpruning are in order. Palms, like any other plant need their green leaves to manufacture food through the process of photosynthesis, cutting the leaves off reduces the plants ability to manufacture food. In addition, as plants grow they have the ability to translocate certain nutrients, notably magnesium, from older leaves into the newly produced leaves. Premature removal of too many leaves interferes with this transfer of nutrients and may result in a magnesium or other deficiency. Magnesium

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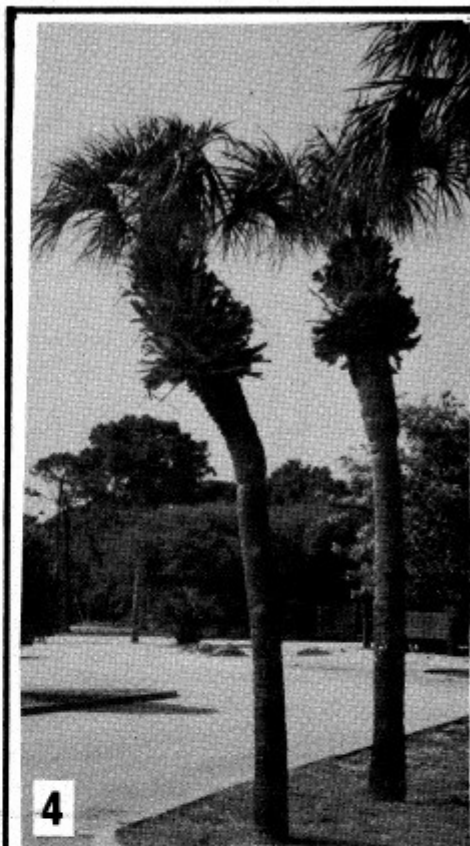
TRIMMING & PRUNING PALMS (CONTINUED)

By Bernie Peterson

deficiency is common with *Phoenix* spp., and results in a yellowing of the oldest leaves of the tree, if the tree's owner does not recognize the nature of the problem he may cut off even more leaves to get rid of the yellow ones and thus begin a vicious cycle, which can result in a very unattractive palm. Due to their size, habit of growth, and spiny nature Canary Island Dates, as well as other species, must sometimes be overpruned, in such cases it is important that the palm be well fed. In an effort to save time landscape maintenance personnel sometimes are guilty of overpruning palms, Photo 4 shows a pair of Sabal palmettos, which have been butchered. These trees some twenty in number are part of the landscaping at an apartment complex in a rather fancy neighborhood adjacent to a country club, once a year they are cut in this manner, presumably to do a whole years worth of pruning at one time. Or to put it another way to subdue something which is considered a nuisance for another year. Clearly palms treated in this manner do nothing to beautify the grounds, as I have already stated Sabal palmetto, in most cases looks best when left natural, or unpruned.

Multi-trunked palms like *Paurotis* or *Phoenix reclinata* are the most challenging to prune, yet they offer an opportunity to control the growth of the plant which is not possible with single trunked palms. Pruning may be considered optional on multi-trunked species also, but thinning out the smaller trunks and suckers reveals the graceful curves of a *P. reclinata* stem, or the neat patterns of *Paurotis* trunks. Photo 5 is a beautifully groomed *Paurotis* at the home of Robert and Kathy Fowler in Ft. Pierce, by regular pruning and removal of overgrown trunks and unwanted suckers this plant could be maintained at this size indefinitely, the same could be done with other multi-trunked palms.

The purpose of pruning a palm should be to enhance the beauty and symmetry of the plant. Pruning the leafbases of a *Butia* can be fairly time consuming if the plant has been neglected or improperly pruned in the past, but maintaining a correctly trimmed palm is easy. To sum up pruning of palms is easy and in many cases optional. But as with pruning of other types of plants one must be careful not to do too much



4



3

PG 14



5

THE EFFECT OF MICROCLIMATE IN CENTRAL FLORIDA

by Jake Freije / Clearwater

Climate is a general term defining the average or mean weather, the sum of which is used to describe the aggregate conditions occurring in a given location. Our climate is specifically stated as humid sub-tropical and stretches throughout the southern U.S.. This classification joins the gulf coast with parts of the Ohio river valley.

It seems peculiar that Miami, FL and Miami, OH would share the same climatic status. But in fact both are classed as humid sub-tropical. Obviously peninsular Floridians would have trouble with this but, it is correct! Of course, Miami, FL is at a lesser latitude, is situated on an ocean coast and is moderated via on-shore prevailing winds. We can refer to these characteristics as factors of Miami's micro-climate.

For our case-in-point city, we shall utilize the city of St. Petersburg, FL.. St. Petersburg, like Miami, is located on the southern end of a peninsula surrounded by warm ocean water. Some obvious differences being prevalent topography, scale, and the fact that St. Petersburg stretches from coast to coast. Also, this discussion will compare the micro-climates of portions of St. Petersburg instead of utilizing the whole city.

The elevation of downtown St. Petersburg's central ridge plays an important part of the evaluation of different areas. The areas herein will be Old North East (central and N.E. portions of Tampa Bay), Pinellas Point (the southern most mainland peninsular areas), and the gulf beaches.

Old North East is the most well protected of the three places noted due to the moderating effects of Tampa Bay to the east and north as well as the St. Petersburg central ridge (60' + elevation) to the west. This offers quite a sweep of protection from desiccating winds and brutal inversionary frost.

The Pinellas Point area has similar protection from the gulf and bay waters. Although not extremely close to the downtown ridge, it still maintains a slight degree of protection from winds from the north.

The gulf beaches of St. Petersburg are barrier islands hugging the coast on the north end (facing due west) and gaining a little distance on the southern island (which line up from NW to SE). The area to the NNE of the northern beaches is relatively flat and receives only little protection from desiccating winds from that direction, whereas the southern most areas receive protection from the NNW around to the NE.. This measure of protection makes for quite a change in flora when traversing the length of Gulf Boulevard.

When comparing the flora of all these areas, one must take into account natural protection as well as man-made protection. Some Old North East streets are still lined by old Royal Palms (60' tall). Many have survived with some help from the thick canopy of broad-leaves which acts as a great windbreak barrier. Likewise, you are likely to find a few scattered coconut palms (mainly dwarfs) in protected locations such as courtyards and next to large buildings with southern exposure.

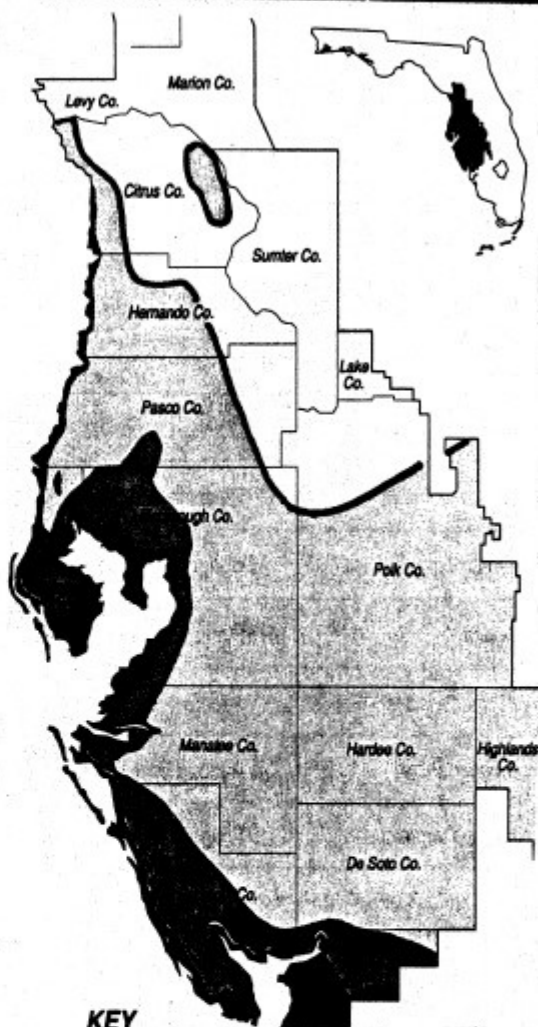
The scale of you home to your lot is much greater than downtown St. Petersburg is to Pinellas Point. Palms planted on the south side or corner of large densely crowned trees of one's house gain great protection from cold desiccating winds. These winds are the most brutal aspect of our cold waves for most tender palms. Palms from areas with long dry seasons (Livistona, Phoenix, Washingtonia, Latania) usually can withstand greater durations of desiccation due to their naturally slow rate of transpiration. Alternately, palms from moist areas and forests (Archontophoenix, Pritchardia, Howea, Syagrus) are more susceptible to desiccation and are likely to benefit the most from protection.

Everyone certainly has noticed a so called "frost-shadow" around the crown of a citrus tree on still, cold mornings. This "shadow" or circle of green unfrosted grass under the fall of the crown represents a micro-climate in itself. Trees with crowns capture and/or inhibit release of terrestrial radiation headed skyward hence moderating the minimums experienced below. Trees with dense crowns close to the ground offer the greatest protection. Taller, sparser trees, while not protecting as well as low dense ones, do offer a considerable measure of protection as opposed to open sky.

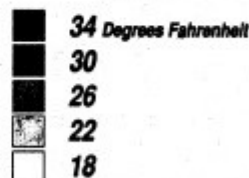
A few suggestions for fast growing evergreen windbreak trees for all of our areas might include: Cherry Laurel (*Prunus caroliniana*), Magnolia (*M.grandiflora*), Camphor (*Cinnamomum camphora*), and of course Live Oak (*Quercus virginiana*). [NOTE: These trees are not without their own problems.] Growers in the warmer sections could also utilize the more tropical trees which include: Toog (*Bishofia javanica*), the Ficus' family (*F.retusa*, *F.laurel*, *F.benjaminia*, *F.aurea*, *F.altissima*, etc.), Mahogany (*Swietenia mahogani*) and Schefflera (*Brassaia actinophylla*). In coastal

ARTICLE CONTINUES ON NEXT PAGE

Temperature Zone Map



KEY
In a typical year, temperatures will not go below:



PG 15

IMPORTANT NOTE:

The zones on this map were derived from a compilation of information supplied by the Institute of Food and Agricultural Sciences (IFAS) County Extension Agents within the Southwest Florida Water Management District. Although the information was validated using data supplied by the National Weather Station in Ruskin, Florida, there may be slight localized differences in climatic conditions within a temperature zone.

MICROCLIMATE/FREIJE/CONTINUED HERE

areas where salt drift and soil conditions merit salt tolerant trees, one might utilize Seagrape (*Coccoloba uvifera*), Sea Hibiscus (*H. tiliaceus*), Portia (*Thespesia populnea*), or Buttonwood (*Conocarpus erectus*). Of course you should check with your local nurseryman, county co-op, and your neighbors who have trees which might be suitable for your location.

A much overlooked part of climate, macro or micro, is moisture. From October through April our precipitation is often below the level required by the more tropical and sometimes ill-advised palms. Groundwater levels are usually sufficient for established plants from mid-June through November. But, a warm, dry fall season can be the set-up of the most disastrous of freezes. Allowing a tropical plant to decline due to a warm, dry November/December (daily maximums in low to mid-eighties sans rain-bringing cold fronts typical of that time of year, and without supplemental waterings) spells certain doom in the case of freezing temperatures that winter. Water supplementation is most critical at this time of the year (winter). Although, growing is minimal due to weather, hours of sunshine available, and lack of fertilization, some watering is a must.

When news of a strong cold wave is forecast it is wise to immediately irrigate heavily all delicate plantings and surrounding areas. By making moisture more available to plant tissue we can inhibit the effects of desiccation more fully. Also excess surface-soil moisture helps to "blanket" the earth and abate frost formation.

I've said for years that if we could do away with five days each winter, we could grow almost anything here in central Florida. But, since we can't we will all have to work a little harder to protect those palms we do have. Remember the old adage 'Think ten times before you plant a tree' - let's make that eleven and consider protection also. It might make the difference of a degree or two someday when it really counts!

Thanks for the great article Jake! (Ed.)

NOTEWORTHY

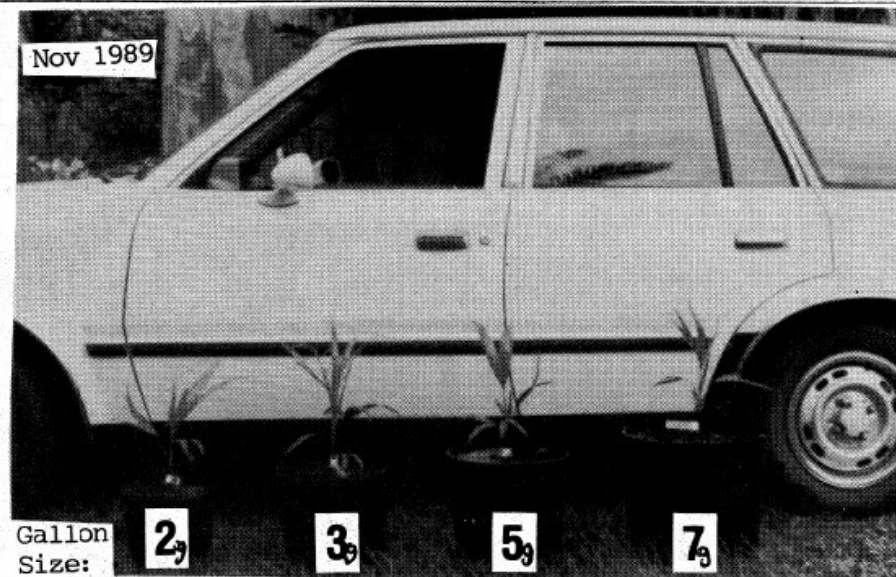
CFPB BACKISSUES FOR SALE: There are a limited number of backissues of the newsletter available from the past three years. They are now offered to raise operating funds for the chapter as listed: 1 year--\$7....2 yrs--\$11.00....3 yrs--\$14.00. Each year is 4 issues. Please add \$1.25 for each year ordered (postage & handling). Even if you have all of a year...it would certainly make a nice gift to someone you know who might be getting interested in palms. Please specify the year 1989/1990/or 1991 when ordering. Make checks payable to the Central F1 Palm Soc and send to S. Peacock, Rt 2 Bx 168 Zolfo Spgs 33890

VIDEO NEWSLETTER

My musings about an IPS sponsored Video Newsletter drew no response. But I'm not giving up! If you would be an interested and possible subscriber, write S Peacock at the address above. I estimate the costs of tapes alone to be \$20/yr.

GROWTH RATE OF RAVENEA RIVULARIS

The photos below show the growth of *R. rivularis* over a 22 month period. Shortly after being potted in Nov 89, came the Xmas Freeze 89. The seedlings were totally defoliated...being covered in ice under continuous irrigation. Results on pot size were mixed...3g & 7g the best.



If and when (usually March) there is a Chapter Palm Sale at Leu Gardens next year, organizing needs to get underway. Only one more issue of the Newsletter will come out before that time so plans need to be finalized for announcement at that time. **NEEDED: ONE SALE ORGANIZER FROM THE ORLANDO AREA!!!!!!** Meanwhile all interested parties should contact Alan Ingalls. See address below. **ALSO:** Ted Langley has already agreed to act as Organizer for the **Spring Sale at USF/Tampa**. feel free to contact him about your interest in attending that event as a seller. Look for more info in the next issue. These sales are an important source for Chapter revenue and have grown to offer an impressive amount of species to local enthusiasts.

*****C L A S S I F I E D A D S *****

**Clinostigma • Normanbya • Latania (blue, red, yellow) • Wodyetia (seedling to 6')
Hyophorbe • Welfia • Veitchia • Pinanga (12 species) • Phenicophorium
and 40-50 other tropical species**

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**OR VISIT DR LITMAN AT
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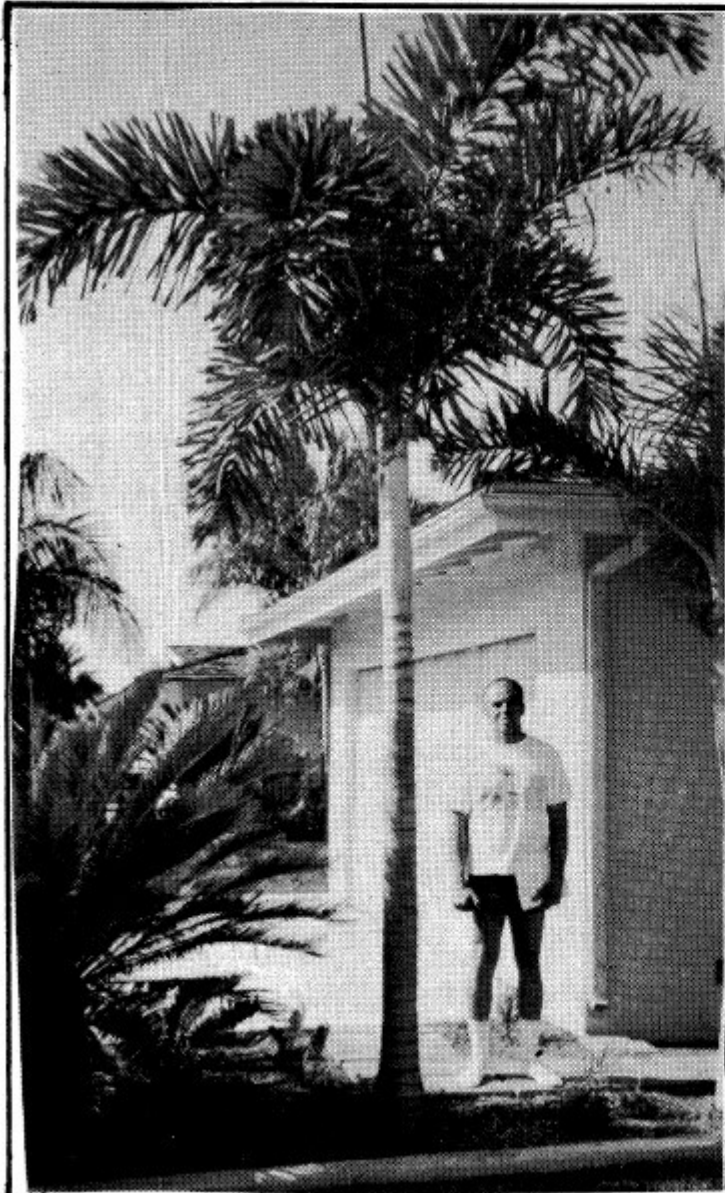
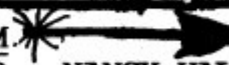


PHOTO LEFT: Normanbya normanbyi growing at the home of Richard Cirino in Costa Mesa, Ca. Purchased from the Waimaea Arboretum in 1982, it has been unaffected by Santa Ana winds and has twice survived lows of 30°F. It is planted in the hottest spot in the yard. Reprinted: **The Palm Journal**, 7/199

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