

# The Palm Society

Bulletin No. 6

July, 1956

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Please address communications to the editor:  
Dent Smith, 2514 S. Peninsula Drive, Daytona Beach, Florida

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## The present membership

As of June 20, 1956 the Society had 163 members. This is an increase of only 23 since April 17th, the date for which the number was last reported.

The slowing down in the rate of increase may be due to the summer weather or to vacations. Since the number of palm fanciers and growers must be quite limited in relation to the number of small-plant aficionados - of roses, for example - the gnawing doubt arises as to the existence of many palm enthusiasts other than those already members of this Society. There may be, nevertheless, many more such enthusiasts than anyone suspects. Moreover, it is certain that outside the continental limits of the U. S., the surface has not yet even been scratched.

## Finances

The Treasurer reports that 73 members had, up to June 20, 1956, contributed \$1,088.50 to the support of the Society. The generosity of these members is nothing short of amazing, to say the least of it. The fact that most of the members - 90 of them - had not contributed anything before the above date, does not mean that most of them will not contribute. It is much too early to conclude what the final result will be. As we go to "press" the Treasurer is still receiving one or two donations several times a week. No contribution of less than \$5 has been received, but no one should be deterred from making a smaller one. The contributions to date have been as follows:

Number	Amount	Total
1	\$100.00	\$100.00
4	50.00	200.00
2	30.00	60.00
9	25.00	225.00
4	20.00	80.00
3	15.00	45.00
1	12.00	12.00
23	10.00	230.00
1	7.00	7.00
1	6.50	6.50
3	6.00	18.00
21	5.00	105.00
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Grand Totals	73	\$1,088.50

The Treasurer reports the Receipts and Disbursements from April 17, 1956 to June 20, 1956 below.

Receipts		\$1,088.50	
Disbursements			
Partridge Printing Co.	\$122.48		
ABC Letter Service	114.65		
Lloyd Cox Co., Stationery & Supplies	32.24		
Postage, incl. stamped envelopes on hand	47.47		
Agricultural Extension Service (for matter to be distributed)	24.00		
The Secretary, petty cash	25.00		
The Treasurer, petty cash	9.00	374.84	
Funds in bank		\$ 713.66	

Not all of the petty cash has been expended and a good part of the expense for supplies and for printing stationery will not be recurring soon. There are no unpaid bills at present.

The above disbursements include the cost of the May bulletin but do not include the cost of this one. Indicative of today's inflated costs are the 2 pages of illustrations in this bulletin. The printer's charge for them will be \$42.13, including the paper on which the photographs are reproduced.

#### Printed publications

The cost of issuing the Society's publications must be brought into line with facts. The income received thus far is not sufficient to pay for monthly bulletins and all other expenses for the period of one year ahead.

Although printing is considerably more expensive than mimeographing, it still would be cheaper to print a Quarterly Journal of fairly respectable size and format than to mimeograph a bulletin of this bulk 12 times a year. More and better illustrations could be used, the storage problem would be much simplified, more than one type face would be available (almost a requisite for technical articles), and the general tone and dignity should be enhanced. Mailing costs, too, would be reduced by more than three-quarters. Mimeographed material gets a pretty poor shake in the postal rates, for copies not mailed at third-class bulk rates have to go first class; and because we are often obliged to mail one or only a few mimeographed copies at one time, our costs for postage have been outlandish.

Clearly, then, a printed quarterly seems our best bet, especially with the restricted funds now on hand. The number of pages in such a quarterly will have to depend on the money available for expenditure. If the Society's funds can be considerably augmented by the donations of those members who have not yet contributed, the quarterly should be a satisfactory organ and it may be possible to supplement it with mimeographed papers.

Whether the quarterly should be printed by letter-press or by off-set has not yet been determined, but the matter is now being investigated. From the funds presently available plus perhaps reasonable expectations of several hundred more dollars, we could allow ourselves not much above \$200 for each issue of the printed quarterly. Though we have now but 163 members, our original print order should be for 500 copies; the content will never be out of date, and a future demand is bound to occur.

The most desirable dates for the printed quarterly would seem to be January, April, July and October. The first issue, then, will be the issue of October, 1956, and the monthly mimeographed bulletins will be discontinued with this issue. It would seem that we have ready at hand the perfect name: PRINCIPES, Quarterly Journal of The Palm Society. (Scientific journals have names such as Baileya, Ceiba, etc.)

In connection with this suggested name, Principes, it may be well to recall Dr. Bomhard's remarks on that word. "The great naturalist, Linnaeus, in a rather whimsical 'social' ranking of the plants of the world, placed the palms first, further distinguishing them as Principes, the princes or rulers, whereas certain other groups were merely plebeians, patricians, and so forth. It is interesting to note that this term, Principes, continues to appear from time to time in publications as a synonym for the family name of the palma (Palmae or Palmaceae)."

#### New members

The Society needs many new members in order to become of more value to everyone and also in order to survive. The surest way to reduce per-member costs is to add members who will contribute toward meeting the expenses. If we could reach a membership of 1,000 it would be unnecessary for some of the members to carry a disproportionate share of the burden. Such a goal should not be, eventually, beyond our reach. If the Orchid Society can have many thousands of members, an ultimate goal of 1,000 for our group does not seem far-fetched. Long before we reach that point, but are on the way with good momentum, our financing problems will recede.

Please send the names of any prospective members to the Secretary, Mrs. Claire Hargert, 195 Halifax Drive, Ormond Beach, Fla. She will send to such persons a printed Invitation to join the Society, a stamped reply-card and a copy of our latest publication. We are eager to acquire more members abroad also, even though dollars are not so readily available to them.

#### Tax Status

We have received the following communication from the Internal Revenue Service:

"Your Application for exemption from Federal income tax under the provisions of section 501 of the Internal Revenue Code has been received.

"Determinations relative to the exempt status of organizations for Federal income tax purposes are based, in part, upon their actual activities over a period of time and to an extent sufficient to properly disclose their method of operation. Since you have not actively operated for at least 12 months - a period of time sufficient to enable you to submit adequate information - a determination will not be made at this time. Accordingly your application is herewith returned.

"If you will resubmit your application for exemption after you have actively operated over a period of 12 months in carrying out the purposes for which you were formed, further consideration will be given to your status. You should submit at that time the complete information called for in the exemption application, copies of which may be secured from this office."

Our application will be resubmitted in January, 1957, and a determination of the status should be made before the date for filing income tax returns. It will be reported to the members at once.

#### Palm culture

So far, according to one member, this Society has not even begun to fulfill one of its stated objectives, i. e., to supply information about the culture of palms. He writes as follows:

"I by no means intend to be critical. I believe, however, that one of the reasons for starting the Society was to promote an interest in the planting of palms and to dispense information to this end. I know it is difficult for those with experience and knowledge of a subject to bother with the basic and well-established facts pertaining to it. On the other hand the beginner is often lost due to lack of 'ground work.' Many of us are not young, and the trial-and-error method seems at times a gamble. Wherefore the more of the plain facts we know, the more assurance we have in attempting to develop the palms beyond the everyday run-of-mine type."

The points made by this correspondent are precisely what they should be, if only we had any considerable body of basic and well-established facts. One objective of the Society is to establish such a body of facts, and indeed the very lack of much information about palm culture was one of the motives in founding it. It can be reached only gradually, and in the meantime every gardener working with numerous palm genera and species is a pioneer, especially with plants new and strange to him. There are ample reasons why even an old hand with palms does not know all the answers. Here are a few:

There are probably at least 4,000 palm species in the world, and possibly 5,000 or more; and of the species, there are hundreds of varieties.

Most of the palms have never been cultivated.

Most palms now in cultivation have been grown only within a narrow planting range, and so their tolerance of cold, heat, wind, drought, salt, sunshine, shade, acidity, alkalinity, &c., is known only where they have been tried. Those tolerances are guessed at for different localities, but guesswork is a poor substitute for knowledge.

Many palms have been in cultivation only a few years by perhaps three or four growers.

Little or nothing is known about the precise optimum soil requirements of most palms. It is only known that many are quite tolerant of a wide variety of soil conditions, and that certain kinds take kindly to alkalinity or acidity.

Science has mainly concerned itself with what the palms are rather than with how to grow them.

Science has been engaged in a centuries-long effort technically to understand the palms. In spite of great advances, the work is not yet half done.

If the palms are not well understood, as Bailey says, as to species and varieties, then it may be concluded that culturally they are hardly understood at all, for comprehensive studies in this department have not been made. If minor studies have been made and published, the scope is too limited for general application to the entire family. But it appears that field trials, conducted under rigid test conditions, have never been made with any significant number of palms to determine their tolerances and requirements.

Where extensive knowledge is lacking, it should be clear that any basic facts known will be pitifully few. There is not always complete agreement among growers about these few, but we can recite some of the least disputatious kind for the benefit of inexperienced palm-growers, beginning with the seed.

Starting with fresh, viable seed, it is best to clean it before sowing or shipping, removing every trace of the pulp - this to prevent the formation of mildew or the action of other damaging organisms. This is not "basic" to germination, but it reduces the risk of loss. The same thing applies to the question of whether to sterilize the soil; sterilizing it reduces the risk.

Seed should be shade-dried, and it should be sown as soon as possible, for it remains viable a short time in most cases. It may be sown in well-drained flats, boxes, pots or in a wire-protected outdoor seedbed, at depths varying from one-half to two inches, depending on the size of the seed, the seasonal weather and other conditions. The sowing medium may be sharp sand alone, or a mixture of sand and peat moss, or cracked charcoal and sandy loam, or sphagnum and charcoal dust, or whatever soil is at hand. No one, apparently, has proved or even tried to prove, that his choice is the best medium. The seed should be kept moist but not wet. Warm weather or artificial heat hastens germination, and heat certainly reduces the losses that would occur from decay in cold, damp soil.

Some palm seed germinate quite readily, as in Phoenix (usually in 4 to 9 weeks), while many are extremely slow - two years or more. Success with seed depends chiefly on having good seed to start with, and thereafter sufficient warmth and moisture.

The seeds of deeply-rooting palms should not be sown in shallow germinators, and some, as of *Borassus*, are perhaps best sown in the place they are to be grown.

Any general statement about palms or their seeds has its exceptions, for the kinds of palms are legion and their growing conditions vary to an amazing degree. Some normally grow in standing water, either brackish or fresh, so the usual demand for good drainage does not apply, nor would it apply to the swamp denizens with their preference for soggy soil. The coconut is just one of several exceptions to any known rule, in that, when sown, it is neither cleaned of its husk nor quite buried beneath the soil.

Growers and experimenters have not yet published much data on the germination of palm seed. There is not even a table one may refer to for the time required to germinate only 100 different palms, or 50, or, sad to relate, just ten. There is positively no such thing as an accepted standard practice in the germination of palm seed or in the growing of palms. But the lack of uniformity is not necessarily bad, and it does not indicate that nothing is being learned by individuals about germination. The reverse is true. Every grower is more or less of an experimenter, and this fact should be productive of some data, for these bulletins, that will throw more light on the subject.

Seedling palms should be potted when the first leaf appears, and repotted in larger pots or other containers as often as their growth requires it. The size at which a palm should be planted in the ground depends on the climate and the grower's judgment of the hazards it would be subject to. The taller and more mature the specimen, the stronger and hardier it is.

How to plant palms has received attention at the hands of various writers. Everyone knows that a very wide and deep hole should be prepared and everyone knows the old dodge about how it is better to plant a 50¢ palm in a \$10 hole than a \$10 palm in a 50¢ hole. But in practice it boils down to a size that is practical for the site and the plant, as well as having to conform to the gardener's strength and energy. There is ample advice on what to use in backfilling the hole - for example, a mixture of sandy loam, peat moss, rotted cow manure, some clay and a little steamed bone meal. Excellent, no doubt, if these materials are all at hand, but usually they are not. Many native Floridians have heard of clay and even of snow, but have never seen either. Marl, which is common enough in Florida, is hardly a substitute for clay because of its lime consistency. Cow manure, rotted or not, is often hard to come by. The nearest sandy loam may be underfoot or fifty miles away. In the absence of ideal components, the common-sense way is to fill the hole with the best soil that can be found or made, enriching it with organic fertilizer of one kind or another.

If everyone followed Dr. Nehrling's advice on planting large-growing palms, not many specimens would ever get planted. "Six feet deep and six feet wide," he says, "on high and dry pineland is not too much. These holes can be used as garbage pits in which all the kitchen refuse, tin cans, bones, old rags and paper, stable manure and night soil can be thrown. Rotten wood, leaves and grass, muck and sods, clay and marl should also be used in filling up these holes. The entire mass must be well trodden down and left to the elements, rain and sunshine for at least six or eight months. The upper third I have usually filled in when the planting time arrives. If there is not stable manure at hand cotton-seed meal, castor pomace or tankage may be used,

but this must be applied several months before planting, as it is extremely injurious in a fresh state. It must be well mixed with the soil, but in every case planting must be deferred until this material has become thoroughly decomposed." Such advice, though good enough in its quaint way, seems wasted, since for nearly all gardeners it is thoroughly impractical. Plant the palm, rather, as well as you can, feed it once or twice a year and soak the soil with water during droughts long or short. What you feed it is partly a matter of sense, but mostly a matter of what you can get. Chemical fertilizers are better than none, but organic are of course to be preferred.

Some palms demand shade, and lacking it these kinds will languish and perhaps die. Nearly all young palms appreciate some shade and remain greener because of it; overhead leaves and boughs also afford more protection from cold and frost than one might expect. Adult coconut and a good many other palms require full sunlight for their best development. Native environments furnish the best clue, if one may determine what these are.

Some palms are extremely drought-resistant and a few almost xerophytic, but the majority thrive on moisture. It is virtually impossible to over-irrigate a palm that has perfect drainage. The growers in areas of lesser rainfall are confronted with the endless labor of watering if the palms are to be maintained in prime condition. This is something to give pause to the incipient collector unless he is prepared to install an effective irrigation system; for otherwise either he or his hired hand may have to spend a large part of his life on one end of a garden hose. The collector with low land and a high water table has no problem of that sort.

We know that applications of manganese sulphate will overcome chlorosis in a few kinds of palms, notably chlorosis in *Arecastrum*. With that, we have stated nearly everything that is commonly believed to be basic to the cultivation of palms. Many other things may be basic, but there is no general and certain knowledge of what these things may be. Some growers say that applications of chelated iron are beneficial to palms, and that the benefits become visible. There seem to be no published data upon this practice, nor any relating to the possible benefits from mineralizing the soil with a number of trace elements. Nutritional sprays have been used, but nothing conclusive can be said of them. The diseases of palms and their pests from another subject, so they will not be touched on here.

The growing of palms, as matters stand now, is anything but a certain science. Success with them is due not so much to knowledge as to using judgment. There is no such thing as a green thumb or any other necromancy with plants, but there is such a thing as plant sense and also industry. Lacking specific information, the way to grow palms is to muster up as much ordinary sense as possible and apply it to the job. If there are any known facts, such as the soil composition where the palm grows natively, so much the better; but seldom do we know anything of the soil components in the native habitat.

If we knew all about the palms, there would be no reason for a palm society. "I can think of no other group of plants," says Dr. R. J. Seibert, head of the Longwood Gardens, "that more sorely needs the benefit of a society dedicated to its well-being and popularization." What Dr. Seibert says is eminently correct. The family needs study and it needs students.

If all that has been said seems too elementary, it was purposely so, for it is directed at the members who have had little or no experience with the growing of palms. It has been necessary to dispel their very natural assumption that experienced gardeners have any considerable body of knowledge to draw on. The gardener picks up one thing here and another there as he goes along. But beginners can gain some comprehension of the palm family and its complexities from reading Bailey, in the Gentes Herbarum series. They should read especially the fascicle entitled Herbarium Palmarum (vol. VII, fasc. II) in which they may learn what it is to collect from the wilds a palm for study later on in the herbarium. "A man's job," Bailey calls it. It is a superman's job, or even an impossible one, with the largest palms in the least accessible places.

Anyone, the beginner included, may be the first to learn something new. The field is vast and the study of the palms can be fascinating. If it is formidable too, that only adds interest to the challenge and zest to the task.

- D. S.

#### Palms at St. Leo

The Reverend Father Jerome of St. Leo Abbey has grown palms for 25 years or more at St. Leo, Florida, about 27 miles northeast of Tampa. His comments on the palms at that locality are always interesting.

"In the past," he says, "I have experimented with about 150 kinds of palms. Today only about 10 kinds are alive. Our lowest temperature has been 18 degrees F. 20 and 22 degrees quite often. Acrocomia Total survived unsinged in 18 degrees."

In another letter Father Jerome has this to say:

"Speaking of Dr. Bailey, this is credited to him, although it is said to have been found in a student's textbook (Bailey's textbook) in some college:

If there should come another flood  
Unto this book I'd fly.  
If all the world were wet  
This book I'd still find dry.

Dr. Bailey was a genial gentleman, very witty and very humble. I have walked through a hammock with him, and several times asked him, 'What is this plant, Doctor? What is that? And that?' His prompt answers were: 'I don't know.' In speaking about palms he told me that their nomenclature is in a state of chaos and that it would require 10 years of research and a quarter million dollars to bring order into their nomenclature.

"I wrote you that I had purchased several kinds of Butias from Reasoner Bros. 25 or more years ago. Dr. Bailey called for their flowers. Two palm men came from the University at Gainesville and collected the blossoms for Dr. Bailey. Here is a list of the names as I bought them and Dr. Bailey's decision after examining the flowers.



- |    |       |            |                              |                          |
|----|-------|------------|------------------------------|--------------------------|
| 1. | Butia | Yatay      | Bailey changed it to         | B. capitata              |
| 2. | "     | Alphonsei  | " " " "                      | B. capitata var. pulposa |
| 3. | "     | eriospatha | " " " "                      | B. capitata              |
| 4. | "     | eriospatha | Bailey let the name stand as | eriospatha               |
| 5. | "     | Bonneti    | Bailey changed it to         | B. capitata var. odorata |
| 6. | "     | Gaertneri  | " " " "                      | B. capitata              |
| 7. | "     | Entre Rios | " " " "                      | B. capitata              |

One Butia on our lawn Dr. Bailey let stand as B. Yatay. The men who came to collect the Butia flowers observed that the flowers on some Butias seemed insured against self-pollination by the stigma not being ready to receive pollen on the same palm tree from its own anthers.

"I know very little about palms except possibly this: If you have a 20-foot Royal palm and it freezes to a pulpy mass at 20 degrees Fahr., take your time about cutting it down. I had four such palms - they froze at 20 degrees F., and I cut them down. After splitting them lengthwise, I found a fresh heart-pip uninjured. Had I let them alone, perhaps we would have Royals at St. Leo today.

"Your report about Cowgill's sugar palms astounded me. His flat-woods are afflicted with colder weather than our hills. I tried the sugar palm and lost it. Perhaps it was too young at the time of a sharp freeze. I have very little to show for my early enthusiasm for palms. Too, too cold up in our country for tropicals except Tampa's Tropical Beer."

#### Availability of palm specimens

Another stated objective of the Society has, until now, had short shrift, to wit, assistance in locating desired palm specimens for planting. Very few nurseries have in stock at any one time any large number of palm species, and usually what they have are of kinds fairly common in a given locality. Even the commoner palms may not be on hand in the size desired.

How and where to find certain specimens is of some concern to everyone who buys, or tries to buy, palms of any kind, big or little, either frequently or only occasionally. Often the buyer will scour all the nurseries within driving distance and come home empty-handed. Once the grower has located, bought and planted all the commoner palms, he is at great pains to find anything new and different for his collection. And, we repeat, there is much wear and tear in finding exactly the desired size of even the commonest palms. In a word, palm-hunting may be fun but it finally becomes a headache.

How to assist the members in this regard has posed something of a problem, for we as a Society would avoid the appearance of plugging one nurseryman's stock to the detriment of others. At last, however, we may have a solution.

With this bulletin we are mailing our latest Roster of Members which contains mail addresses as well as names. Our nurserymen members have official sanction to circularize the roster with a list of their available palm plants, preferably - and this is important to searchers - with the size or sizes of the plants, and, if they wish, with the prices. Some nurserymen might feel constrained not to do this, fearing that it would seem they were commercializing their prerogatives as members. After soberly considering this aspect, it seems obvious that such circulation would amount to rendering the other members an outstanding service, no matter whether a profit resulted or not. It makes sense both from the nurseryman's standpoint and from that of every other member, and how else to fill this very pressing need is not in any way apparent.

To the nurseryman who thinks it is a fine idea but, like so many in the trade, just can't find the time to make up a list of plants, we can only suggest that it is a good bet. For this Society, small as it is, is made up of active growers and buyers of the palms at retail, and, for all we may know to the contrary, at wholesale too.

What we have here is a description of the Langlois palm collection at the Retreat, their home in Nassau, written for the Society by Mrs. Langlois. Many of the members have had an immense curiosity about that renowned collection. Only the genera have been listed, for with the Langloises the emphasis has been placed much more on genera than on species.

#### Comments on Growing Palms in the Bahamas

To grow palms in great variety in Nassau requires courage and perseverance. The rainfall has a yearly average of 45 inches. The soil is alkaline and for the most part scarce or not at all. There are certain valleys that have deep soil but this is more the exception than the rule. There are a few palms which prefer an alkaline soil, some others that will tolerate it, but a great many that object to it. One usually associates palms with deep red clay - usually acid - and a heavy rainfall.

A condition in the Bahamas of "pan and pot hole" is sometimes encountered. This consists of hard rock, sometimes with just a thin layer of soil and natural holes (solution), known locally as pot holes, supposedly because they are for the most part pot-shaped; in size from a foot wide to occasionally 50 feet, and ranging in depth from 3 to 7 feet, and usually devoid of soil. This condition exists on the property known as "The Retreat" and was later found to be ideal for the growing of palms.

The pot holes were often shaded by native growth and when filled with rich red clay, with an almost neutral reaction, were quite an asset to the growing of palms. Before the filling of the hole with soil it had to be certified that it was root-proof, because the roots of the

coppice trees are very searching and demanding, and scores of small palms have been lost owing to the entry of these competitive tree roots into the pot holes. It would be well at this point to say that if there had been sufficient soil and moisture for everything this precaution would have been unnecessary.

Later it was learned that better results were obtained by using the larger holes instead of the small individual ones in which were planted from 3 to 10 palms depending upon the size of the hole. Palms like to grow together if started at the same time as smaller plants. There is more scope and more root room. When these larger holes are used, temporary shelters have to be erected to insure sufficient shade for the young plants.

Rain water only is used for the watering of the rare exotics and is eventually piped from the tanks to the near vicinity of the plantings, sometimes a distance of 500 feet.

Before the pot holes were discovered as a solution to the problem, holes were blasted in the hard rock in the main garden, but under these conditions all the rarer palms were lost and only a few of the hardier palms survived these plantings, such as Heterospatha, Livistona, Arecistrum, Phoenix, etc.

Over a period of 25 years seeds or seedlings of 135 genera have been tried and today there are 100 genera still with us, 50 of which have reached fruiting size and a few of which are yet in the seedling stage. The palm genera listed below are represented by approximately 400 plants covering 180 species. The greater number of these represent the smaller types of palms rather than the giants. The latter require much soil and much rain.

List of palm genera at The Retreat garden, May, 1956

(#, denotes fruited. X, flowered but failed to set fruit to date. S, seedling only).

- |                         |                               |
|-------------------------|-------------------------------|
| # Acrocomia             | X # Chrysalidocarpus          |
| # Actinophloeus         | # Cocos                       |
| X Actinorhynchis        | Coelococcus (S)               |
| # Adonidia              | # Coccothrinax                |
| X Aiphanes (Martinezia) | # Coleospadix                 |
| Archontophoenix         | Colpotherinax (S)             |
| X Areca                 | X Collinia                    |
| # Arecastrum            | # Copernicia                  |
| X Arenga                | Corozo                        |
| # Arikuryroba           | Corypha                       |
| X Astrocaryum           | # Cryosophila (Acanthorrhiza) |
| Bactris                 | Cyrtostachys (S)              |
| Bentinckia              | Calyptronoma (Calyptrogyne)   |
| Borassus                | X Daemonorops                 |
| Brahea (S)              | # Desmoncus                   |
| Butia                   | # Dictyosperma                |
| Calamus                 | # Didymosperma                |
| X Calyptrocalyx         | # Drymophloeus                |
| # Caryota               | Deckenia (Acanthophoenix)     |
| # Chamaedorea           | Elaeis                        |
| Chamaerops              | # Eleutheropetalum            |

	Erythea (S)	XX # Polyandrococos (Diplothemium)
	Euterpe	Pritchardia
	Gaussia	Pseudophoenix
X	X Geonoma	X Pseudopinanga
	# Guilielma	X Ptychoraphis
	# Heterospatha	# Ptychosperma
	Howea	X Pyrenoglyphis (Bactris)
	Hyphaene (S)	Rhapidophyllum
	Jubaea (S)	X Rhaps
	Jubaeopsis	Rhopaloblaste
	Kentiopsis	# Rhyticocos
	Korthalsia	# Roystonea
	# Latania	Sabal
	# Licuala	Scheelia
	Livistona	Schippia
	# Malortiea (Reinhardtia)	# Siphokentia
	# Mischophloeus ? (Areca)	Socratea (S)
	Myrialepis (Plectocomiopsis)	Stevensonia
	Mascarena (Hyophorbe)	# Syagrus
	# Nannorhops	# Synecanthus
	Neonicholsonia (S)	# Thrinax
	Neoveitchia ?	Trachycarpus (S)
	Nephrosperma (S)	Trithrinax
X	X Normanbya	# Veitchia
	Oncosperma (S)	Vitiphoenix
	# Opsiandra	# Wallichia
	Orbignya	Washingtonia
	Paurotis (Accelorrapphe)	Zalacca (S)
	# Phoenix	Zombia
	Pinanga	

It might be helpful, in as few words as possible, to comment on the adaptability of certain palm groups to conditions as found at The Retreat. Of the "stilt" palm group, the Iriarteae, we have tried Iriarteae, Socratea, Catoblastus and Wettinia, and have found them difficult to grow. At present we are on our third attempt to grow the Socratea durissima. We feel it is lack of humidity and possibly the alkalinity of the soil that discourages the growth of these palms in Nassau.

Some of the New World Areceae in the group Euterpe and allies, such as Oenocarpus, Jessenia, Prestoea, Hyospatha are difficult to grow under our conditions. The Roystonea, which we also place in this group, is the only willing one of the group. We have tried all the others with the exception of the Hyospatha. The chief drawback is possibly the alkalinity of the soil, certainly in respect of the Jessenia, which likes a very acid soil. The Oenocarpus panamensis has been tried three times and gets no further than the first three leaves.

We are hoping to grow the Oenocarpus distichus, which has been promised us, as we understand this palm has been reported growing in dry and arid places outside of Belem, Brazil. It is an interesting palm, with all its leaf segments in one plane, and we are looking forward to having the chance to grow it.



S. E. ASIA RATTAN

Photos by A. C. Langlois. Upper left: *Orbignya Cohune*; young plant at an attractive stage. Upper middle: *Myrialepis Schortechiana*; showing interesting arrangement of prickles on stem. Upper right: *Chrysalidocarpus* sp.; heavy bunches of fruit; grown from seed gathered in a park in Bahia, Brazil. Lower left: *Licuala* sp.; bought seedling labeled *L. peltata*, but we think it is not that sp. Lower middle: *Opsiandra Maya*; heavy fruiter; had 17 spadices at this time in differing stages of growth. Lower right: *Korthalsia* sp., leaf detail only; a tender climber that cannot grow except in shade.





*Near the orange grove  
Palau or Misaki Islands*

Photos by A. C. Langlois. Upper left: *Rhyticocos amara*; very green leaf, good grower. Upper middle: *Kentiopsis macrocarpa*; slow-growing under Nassau conditions. Upper right: *Siphokentia Beguinii*; Kahatola Is. off Halmahera, fruited 8 yrs. from seed, Exp. "Cheng Ho." Lower left: *Pinanga* sp., FTG 192, Sangihe Is., Exp. "Cheng-Ho." Lower middle: *Mischophloeus* sp., suckering palm, orange-red leaf sheaths. Lower right: *Calyptrocalyx spicatus*; part of long fruiting spadix; spadices can grow to 8 feet or more.



Another group that is not for the most part easily grown by us is the Geonomeae, comprising such genera as Geonoma, Welfia, Pholidostachys, Calyptronoma, Asterogyne, Manicaria, Bentinckia, Neonicholsonia and seven other genera we have not tried. We have succeeded so far in growing only the Geonoma, Calyptronoma and Bentinckia. The latter has been rather difficult to grow, exactly seven plants having been tried and one only having been kept alive. We thought it might like an acid soil; however, we placed a couple of young plants at Mrs. Archbold's filled-in fresh water swamp at Prospect, and one of these now has a 12-foot trunk. Apparently it required moisture.

We had grown a lovely little plant of the Asterogyne to the flowering stage, but lost it during a drought. The Manicaria grows in swamps, so that is out as far as we are concerned. We are at present endeavouring to grow seedlings of the Neonicholsonia. They appear to be quite willing and a couple of them quite vigorous.

On the bright side of the picture the Ptychospermate palms of the Areceae group grow well for us, preferring shade, and will succeed even in a blast hole in the close vicinity of a coconut palm, provided there is shade. The ones in the open burn badly during the hot dry periods. Those doing well for us are Actinophloeus, Ptychosperma, Drymophloeus, Coleospadix, Adonidia, Normanbya and Veitchia. There are others in this group that we are most eager to get as we feel that they would be good growers here.

We have succeeded with a few of the Old World palms listed under the large group of Arecineae. These for the most part require coddling. The Areca, Mischophloeus, Actinorhynchis, Pinanga, Pseudopinanga, Calyptracalyx, Siphokentia, Howea, Kentiopsis, Ptychoraphis and Rhopaloblaste are growing for us and a few have fruited. The first seven genera listed require shade and burn badly during the dry, hot periods after their tops grow above the shade of the coppice trees. In this group we find the hardy Dictyosperma and Heterospatha.

The Seychelles palms are very interesting but difficult to grow. We have tried the Nephrosperma, Verschaffeltia, Deckenia, Stevensonia, Oncosperma, and have to admit that they are fussy palms, but they are so attractive that we are encouraged to keep on trying. The Roscheria has not been procurable to date. Also in this group are the little-known New Caledonia palms and other obscure palms from the islands of the Pacific, as well as quite a few little-known genera from Madagascar.

The Attaleae are easily grown by us in Nassau with four exceptions. This group is comprised of the genera Cocos, Rhyticocos, Arecastrum, Arikuryroba, Butia, Syagrus, Barbosa, Diplothemium, Polyandroccocos, Jubaea, Parajubaea, Jubaeopsis, Orbignya, Attalea, Scheelia and Maximiliana. The four exceptions are Barbosa, Parajubaea, Jubaeopsis, Jubaea and Maximiliana. We had two thriving seedling plants of the Barbosa, and when planted out in the garden they became sickly and died. We would like to try it again. The Jubaea and Parajubaea may find Nassau too hot. The Maximiliana may require a more acid soil than we can provide.

The fan palms under the heads Sabaleae and Borasseae are easily grown, or at least the ones we have tried. Some are remarkable for their slow growth, but they are hardy without exception.

The group Morenieae are very easily grown and are quite rewarding. They are usually small or medium-sized palms but very graceful and interesting. Those grown by us are Chamaedorea, Eleutheropetalum, Collinia, Synecanthus, Malortia, Chrysalidocarpus, Mascarena, Gausia, Pseudophoenix and Opsiandra.

The Caryoteae grow well under Nassau conditions and we have grown easily the Didymosperma, Wallichia, Arenga and Caryota. The other one in this group, the Orania, refuses to grow for us. We have tried it twice, and we shall keep on trying.

Of the Bactrideae we have had good results with Aiphanes, Acrocomia, Desmoncus, Bactris, Pyrenoglyphis and Guilielma. The last three require good treatment.

The Astrocaryum has been extremely difficult to grow and shows chlorosis in the leaf. Its near relative, the Hexopetion, has never been tried by us, but we have been promised one.

There are some palms in that group with which we have been unsuccessful, such as Metroxylon - it requires water at the foot - and the Pigafettia, which is a handsome palm but evidently requires a heavy rainfall and acid soil. There are very fine Pigafettia specimens growing at the Summit Experimental Gardens in the Canal Zone. Others in this group have not been tried by us.

The Elaeis and Corozo of the tribe Cocconeae and sub-tribe Elaedeae are doing well for us. The result will be in proportion to the quality of the planting - good hole with good soil. The Corozo likes water and will grow to very fine specimens if water is available. It will survive, however, without it. The Barcella in this group has never been handled by us. It appears to be rather obscure and is reported from the Amazon.

It will be noted that no mention has been made of the Cyrtostachys Renda, usually known as the "sealing wax palm" and the ultimate goal of every palm lover in the New World. It is growing in Rio, Trinidad and Summit and perhaps elsewhere, but in The Retreat it is not yet established. We have had it off and on since we started to grow palms, but we are still expecting and hoping to grow it some day. We have, however, a very lovely substitute. Instead of lakka-red leaf sheaths this palm - a Mischophloeus species - has orange-red leaf sheaths and very handsome leaves. It can be described as equal in colour and attraction to the Cyrtostachys. This palm was grown from seed received through the kindness of Mrs. Anne Archbold and the Fairchild Tropical Garden, and resulted from the expedition of the "Cheng Ho" to the Moluccas. It was found growing on the Volcano Sopoetan in Minahasa, Celebes. This one is considered the prize palm of the "Retreat Garden" and fully rewards us for all our endeavours to grow palms under Nassau conditions for the past twenty or more years.

Nassau, Bahamas  
June, 1956

- M. A. Langlois