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The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

ESQUINAS EXPERIMENT STATION
CIA. BANANERA de COSTA RICA
PALMAR SUR, COSTA RICA

September 20, 1950

Dr. L. H. Bailey, Director
Bailey Hortorium
Cornell University
Ithaca, New York

Dear Dr. Bailey:

It was like old times to have your recent letter, and to know that you are still interested in Palms. I don't know whether I can be of any help on Guilielma, but I'll at least give you my personal impressions, for what they may be worth.

So far as my experience goes, I have never seen Guilielma growing as an unquestionably wild plant, either in Central or South America, with one possible exception, which I will explain in due course. The plants are always cultivated, or may persist for a few years in second growth scrub where dwellings obviously have been within comparatively recent time. The one exception to this that I remember was in the forested hills of eastern Chiriqui Province in Panama, somewhere near Remedios, where I once saw a hillside rather thickly set with Guilielmas that appeared to have been deliberately spared when a patch of forest was felled. As I remember it, the forest had the aspect of a typical climax association of the area, and I remember having been considerably surprised at seeing the Guilielmas in such a situation. However, I was in a hurry at the time, or thought I was, and thus simply added one more to the innumerable puzzles I must return to investigate some day.

Russell Seibert tells me that he has seen wild Guilielmas in the trans-Andean foothills of eastern Peru. He believes that the plants were first cultivated there, and that they have spread eastward and northward into Brazil and Central America, and I am inclined to agree with him. I am not personally convinced that the South American Guilielma Gasipaes is distinct from our Guilielma utilis. The former has larger fruits, and is, in my experience less variable in size and color, but our better Central American forms appear to be identical. In Central America a few plants are found in Honduras and northward, but they are popular and cultivated in quantity only in Panama and Costa Rica. My guess is that their distribution in northern Central America dates from post-Conquest times. In both Panama and Costa Rica the plants are found in nearly every country dooryard, but the fruits tend to be much smaller than those seen on the Orinoco, Rio Negro or Amazon, but are quite variable as to both size and color. Yellow and red forms are common, and nearly seedless, and nearly spineless varieties are sometimes found, although I know of the latter only by hearsay. Plants are almost entirely propagated by seed, with very little done to increase superior varieties. This can very easily be done by taking off the suckers from the better plants, but there is no other way of assuring fruit of high quality, since grafting is impossible and seedlings do not come true. So far as I know there are no commercial nurseries, which is unfortunate, since it is an excellent food plant.

I do not pretend to know why Guilielma is so exceedingly variable as to the size and color of the fruits, since this is not usually the case with wild palms, as you know. Cultivated plants of course often tend to exhibit more variability than wildlings, and there are of course other well known instances of variability in cultivated palms, such as the races of the coconut and the African Oil Palm.

The fruits sold on the streets in Panama and Costa Rica (always boiled

in salted water) are, so far as I know, from dooryard trees. I have heard of one or two people in the Reventazon Valley near Turrialba who are supposed to have private collections of some of the better varieties, but even these stands apparently hardly would be called plantations. I have seen nearly seedless varieties in South America (bunches of fruit in which perhaps half were seedless, and in which the remainder with seeds had seeds of smaller size than usual), and similar plants are reported from these Turrialba collections, as well as spineless varieties, but I haven't seen them myself.

It is perhaps of some interest that the fruits of the South American plants are used, at least by the Indian tribes I knew in the Rio Vaupes, as a basis for a fermented drink rather than being eaten boiled as they always are here.

When I last saw you nearly a year ago in New York your plans were for Africa, to be cut short the next day by your unfortunate accident. I have thought of you often in the interval, and hope that this finds you much improved. If I can be of any assistance to you on Costa Rican palms, I will be very glad to do so. I note that Emery Moore is back from Europe. Please give him my regards.

Most sincerely yours,

BAILEY HORTORIUM
NEW YORK STATE COLLEGE OF AGRICULTURE
CORNELL UNIVERSITY
ITHACA, NEW YORK

L. H. BAILEY, *Director*
G. H. M. LAWRENCE } *Taxonomists*
H. E. MOORE, JR. }
ETHEL ZOE BAILEY, *Curator*
MARION E. RUFF, *Illustrator*

Address:
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

14 September 1950

Dear Paul:

I am taking the liberty of enclosing this note with Dr. Bailey's letter simply to let you know that I am back from Europe and will be glad to tackle any palm collections, if and whenever you have them ready. Yours should be an interesting area and if there is anything we can do to be of service in other respects, please don't hesitate to let us know.

Most sincerely,

Henry Moore
H. E. Moore, Jr.

lm

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Sept. 14, 1950

Mr. Paul H. Allen,
Esquinas Experiment Station,
CIA Bananera de Costa Rica,
Golfito, Costa Rica.

Dear Mr. Allen:

Perhaps you can help me with information about the pejibaye or Guilielma that is native or at least widespread in Costa Rica. Large fruits of different sizes and colors appear in the market. I wonder whether these fruits are always obtained from trees growing here and there in the wild or whether there may be plantations of them as we have orchards of apples and pears. If they are planted trees that yield these large fruits, there must be nurseries where the trees are grown for sale and I wonder whether these trees are merely seedlings or are they grafted or budded by some means as are peaches and plums? I suspect they are propagated merely from suckers from the roots of the trees.

I shall be greatly obliged for any information you can give me.

Cordially yours,

L. H. Bailey

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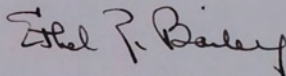
Dec. 27, 1949

Mr. Paul H. Allen,
Cia Bananera de C. R.,
Palmar, Costa Rica.

Dear Mr. Allen:

Your Christmas card to Dr. Bailey brings us your latest address. This letter is to inform you that our last palm paper, *Gentes Herbarum* vol. VIII, fascicle 2, was sent you at the last address we had for you in Panama. As many new species are described in this issue based on your collections, including *Attalea Allenii*, you should by all means have a copy. If the one mailed you in Panama has not been forwarded to you, please let us know and we will send another one.

Sincerely yours,



Curator, Bailey Hortorium

Bamboo, Canal Zone
July 3, 1946

Dr. L. E. Bailey
Bailey Hortorium
Ithaca, New York

Dear Dr. Bailey:

Your account of palm finds on Trinidad and Tobago, and in the Guianas simply serves to illustrate again that the palms of the American tropics have been scarcely touched. It is simply unbelievable that an old British colony like Trinidad should continue to yield novelties, but it can probably be best accounted for in the difficulty of making adequate specimens of the larger things, which serves to discourage the average botanist.

Of particular interest was your account of seeing wild stands of a *Roystonea* resembling *R. oleracea* in the Orinoco delta. The wild *Roystonea* seen by myself in the Rio Meta in Colombia (an Orinoco tributary) certainly also looked like what I have known as *R. oleracea* in cultivation, but I had never previously seen such gigantic specimens. My very poor specimens will reach you in due course, under my collecting No. 3407-A, consisting of the tip, mid-section and base of a mature frond, portions of the inflorescence, and mature fruits in pickle. Isolated specimens were first noticed about the vicinity of Remolino, on the Rio Meta, with groves along the river banks lower down, often being found in stands of *Sapium* which we were working for rubber. Mature specimens average eighty feet or more in height, carrying 12-16 live fronds 10-12 feet in length above the crownshaft. Leaflets averaged 200-250 in the specimen felled. A prominent green crownshaft typical of *R. oleracea* was measured and found to be 6 1/2 feet. Fronds were carried horizontally, with drooping tips. The grey, obscurely ringed unarmad trunks of several mature specimens were measured breast height, and found to vary from 20 to 24 inches. Inflorescences averaged 2-3 in number, were typically infrafoliaceous, with ascending angles from their attachment with the trunk of about 45 degrees, the pendant strands of the rachillae being strongly undulant. Mature fruits were black, with about 1% showing a curious tendency toward twinning.

Your observation of very possibly the same thing in the Orinoco delta raises the interesting possibility that *Roystonea oleracea* may have a very extensive, and previously unsuspected distribution on the continent of South America. I hope that your magnificent specimens may, after all, be adequate for defining the species.

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

June 24, 1946

Dr. Paul H. Allen,
Box 43, Gamboa, Canal Zone.

Dear Dr. Allen:

Roystonea from Colombia will indeed be a novelty to me. I shall wait for your specimens with an unusual interest, even though they may be inadequate. In my recent journey I flew over stands of native Roystonea in the Orinoco-delta region; I suppose them to be *R. oleracea* of Trinidad and Barbados.

In my recent trip I also went to Surinam and French Guiana and I have plenty of puzzles from that region. Just now I am working up the palms of Trinidad and Tobago and find a surprising number of novelties from a region in which the palms are supposed to have been known for two or three generations. I had collected on Trinidad a number of times in years past but had never seen Tobago and Little Tobago until this recent trip.

I shall be particularly interested in any palm materials from Dr. Woodson and from you. I thank you for the Kodachrome

Cordially yours,

L. H. Bailey

MISSOURI BOTANICAL GARDEN

St. Louis

OFFICE OF THE DIRECTOR
2315 TOWER GROVE AVENUE

CABLE ADDRESS
"MOBOTGARD"

ARBORETUM, GRAY SUMMIT, MO.
TROPICAL STATION, BALBOA, C. Z.
EUROPEAN REPRESENTATIVE,
HOVE, SUSSEX, ENGLAND

Box 43, Gamboa
Canal Zone
June 30, 1946

Dear Dr. Bailey:

Your very welcome note has been with me for some time, but pressure of collecting and getting settled again in Panama has prevented an earlier answer. I hope that your trip to Trinidad and Tobago was everything you had expected.

You will probably in the near future receive more Panama palms through Dr. Woodson, including several species not previously recorded. There seems to be no end to Panama Palms. In particular I believe you will be interested in a very fine thing resembling an *Oenocarpus*, from the high rainy forests of Chiriqui Province.

Have you any record of groves of wild *Roystoneas* on the Rio Meta in Trans-Andean Colombia? You will in due course receive some of the most miserable specimens you have ever laid eyes on, having been taken in great haste on a very trying trip, and carried for nearly two weeks in the bottom of a duffle bag while we fought high water and malaria. There are thousands of them, averaging eighty feet in height, being first found on the Rio Meta slightly below the town of Remolino.

You ask about the Palms shown on our Christmas card. So far as I know, they

are *Mauretia minor*, found in great quantity in the Trans-Andean llanos. Where excessive burning has eliminated everything else, they form narrow belts along the stream courses. The accompanying Kodachrome slide was taken near Villavicencio, in the Intendencia del Meta, Colombia, and shows also a number of specimens of *Maximiliana*. I sent a set of Kodachrome slides of about fifteen species of Llano Palms, taken in the same area, to Dr. Woodson. If you are interested in them, I am sure he would be glad to forward them to you.

Most sincere regards,


Paul Allen

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

Dec. 27, 1945

Mr. Paul H. Allen,
Balboa, Canal Zone.

Dear Mr. Allen:

It is good to have your Christmas card and to know that you are soon to be back in Panama to reopen the tropical station. I trust all will go well with you.

The picture on your card of the palms growing in the overflowed country is challenging to me. I suppose those palms are *Sabal mauritiformis*.

I am now off for a palming exploration on Trinidad and Tobago.

Cordially yours,

L. H. Bailey

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

March 30, 1943

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

Your letter of March 24th reached me yesterday. It made good time.

I have now completed the once-over of the Panama palms for Woodson's flora. I have 28 or 29 genera and upwards of 70 species. There are a good number of novelties amongst them.

I think your numbers 2534 and 2940 from Ooclé must be referred to *Euterpe panamensis*, Burr. I had written you that I should call one of these *Euterpe Allenii*. Burret apparently had material from a juvenile tree and he had no fruits. These collections of yours appear to differ only in their greater size, but what you say about the variation of the plants leads me to think that I can hardly run the risk at present of making a new species of them. Your name will appear in connection with other genera when my work is published. I am expecting to publish the novelties this summer, together with other palm material, in a fascicle of *Gentes Herbarum*.

I can understand how the collecting of palms has fascinated you. There must be a lot of unknown things yet in the Republic of Panama. Next week I expect to start on a palming trip in Texas and northern Mexico.

Cordially yours,

L. H. Bailey

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March 18, 1943

Mr. Paul H. Allen,
Balboa, Canal Zone.

Dear Mr. Allen:

It is good to have your prompt letter of March 14th. Your notes will be of real service to me. Although I may have fruits of those Bactrids either dry or in liquid, I could not be sure of their color.

I find I made a slip in saying to you that your 2740 is a *Jessenia* when I should have said *Prestoea*. I think it is the same species as Fairchild & Jobbins 2635 from the Madden Lake region. Your *Sabal* from the Perlas Islands is not the Colombian

S. mauritiæformis. I am calling it *Sabal Allenii*.

By the end of March I shall have spent three months on these Panama palms and hope to have the work completed. I expect to publish the new species in *Gentes Herbarum* in time to have them ready for Woodson's flora.

You did a good job of collecting on these palms, and your name will be preserved in the history of them.

Cordially yours,

L. H. Bailey

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

March 8, 1943

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

For two months I have been hard at work on the palms of Panama. I have been over the collections at Washington, at the Field Museum, together with all those you sent me and the specimens at the Missouri Botanical Garden. I think it will take me a month yet to finish the job. It is a difficult piece of work inasmuch as the palms of the Republic of Panama have never been worked up.

So far I have something more than twenty new species, many of them collected by yourself. You certainly got into an interesting bunch of them in Oocle. When the work is all done I shall send you a list of my determinations.

I wonder whether in your collections you have any fruits of your number 2567, which is I think an undescribed *Bactris*. I should also like to know the color of the fruit of your seashore *Bactris* numbers 2543, 2551, 2580, 2614.

Your number 2740 from Oocle is a *Jessenia*. We should have stamens of it but there are none on my specimens. I wonder whether you have any duplicates that might show the stamens and let me have a staminate flower or two.

Undoubtedly there is much yet to be done in rounding up the palm flora of Panama. It is practically a terra incognita. Your collections will do much to straighten out the puzzles.

I am preparing this work for Woodson's new flora of Panama and hope to have the manuscript ready for delivery when he calls for it in summer.

Sincerely yours,

L. H. Bailey

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Address
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SAGE PLACE, ITHACA, N. Y.

July 7, 1942

Mr. Paul H. Allen,

Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

Your letter of June 15th has been on my table some time, waiting for the arrival of the specimens. Yesterday three bundles came and I assume this is all of them although you do not say how many packages were in the consignment. They will certainly be of great value when I come again to the Panama palms.

My main taxonomic effort is not the palms but *Rubus*, and I am now putting all my time on another fascicle in that genus.

I have more than 22,000 mounted sheets of *Rubus* specimens, and this means a tremendous task. It will be well toward the end of the year before I can get at the Panama palms again. I am accumulating a big stock of them.

I am interested in your comment on the unfruitfulness of your *Latantias*. I wonder whether you have both sexes of the same species.

Sincerely yours,

L. H. Bailey

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Address
BAILEY HORTORIUM
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April 25, 1942

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

Your letter of April 7th has been on my desk for some time. We have now received three parcels of pressed specimens representing it, and also a box containing the head of *Phytelephas* and the *Socratea* 2942. The head of *Phytelephas* came through in good condition. I have photographed it here but perhaps the photograph you are to send me will be better.

Dr. Cook made several new species of *Phytelephas* but I have never seen specimens of them, nor do I know how much the fruits and seeds may vary between different trees in a colony. It is a difficult group to study because of the inadequacy of herbarium material. What you have sent me is excellent. I hope you run across a staminate catkin before you are done with it.

All the material you are sending will be of great service in working up the palms of Panama.

Sincerely yours,

L. H. Bailey

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March 31, 1942

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

Your letter of March 12th says you are sending me "another lot of palm specimens". You do not say how many parcels were sent.

We have now received four parcels of flat specimina and one box containing fruits in good shape of 2580 and 2940. If any other specimens were in the consignment, they probably will be coming along soon.

We also have your letter of March 26th, and we shall look for the specimens you say are in preparation. It will be very important to have specimens of *Phytelephas*. I have nothing from the Zone and have never seen the genus there. Some years ago Dr. Cook made some new species from the Canal Zone but I have been unable to find the specimens in Washington. We may have difficulty in working out this genus, for complete specimens are rarely obtainable.

Sincerely yours,

L. H. Bailey

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March 12, 1942

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

After I posted my letter to you yesterday, the postman brought me your five bundles. Four of them represent dried specimens and the other one the material in glass comprising 2565, 2635, 2740, and 2720 together with a roll of film. The film we shall have printed immediately, and I suppose you will like it back again.

We have all the Panama material from the Missouri Botanical Garden, I have been over everything at Washington, and I hope shortly to go to the Field Museum in Chicago to study their set.

We must now have the best assembly of Panama palm material in existence, counting all these things. There is a good six months work ahead of me.

Cordially yours,

L. H. Bailey

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March 11, 1942

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

Your letter of March 1st is at hand. I am dropping you this note merely to say that no further packages have arrived from you. I suppose the boat service is now very irregular and that we should expect delays.

It appears that a new generic name *Lytandra* is proposed for your number 2379. Apparently we shall be faced with a confusion in nomenclature on this palm.

I have recently received another bundle of Panama palms from the Missouri Botanical Garden and a letter from Dr. Woodson that still others are on the way. I am quite overwhelmed with the abundance of Panama material, and yet so much of it is imperfect that additional material is likely to clear it up. Your collections of these palms have been particularly good.

Sincerely yours,

L. H. Bailey

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

Feb. 26, 1942

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

As I return from a palming trip in southern Florida, I find your letters of the 8th and the 19th together with three parcels. This letter is merely to acknowledge receipt. These parcels all have to do with *Astrocarium*. The *Euterpe* and other things you mention in your favor of the 19th are not yet arrived.

The four enlargements of *Astrocarium* are printed on the wrong paper. This is the common practice of commercial photographers who wish to show "contrast" or black and white. Undoubtedly your negatives have values that are not expressed in these prints. A different paper should be used so as to bring out the details rather than to make silhouettes.

These *Astrocariums* will need much study. One of them, probably 2111, is *A. glatum* not known heretofore in Panama, having been described by ~~Costa Rica~~ *Institute for Botanical Documentation*

I hope you will be able to obtain fruit of your number 2720.

In the big bundle containing number 2535 are two folders without numbers except that an envelope in one of them is 2735 and this number is not mentioned in your letter.

You speak of number 2635 but there are no specimens in these parcels under that number.

You speak of sending alcoholic material of the flowers. This has not arrived.

I expect to be at home for the next three or four weeks and shall reply promptly to the other material when it arrives. It is all good stuff and requires much study.

I have noted the commendation of your collecting in C. V. Morton's new paper on your *Gesneriaceae* things.

Cordially yours,

L. H. Bailey

BAILEY HORTORIUM
NEW YORK STATE COLLEGE OF AGRICULTURE
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2535
2720

L. H. BAILEY, *Director*
ETHEL ZOE BAILEY, *Curator*
ROST. T. CLAUSEN }
G. H. M. LAWRENCE } *Taxonomist*

Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

Jan. 26, 1942

Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

You may be interested to know that at last I have taken up the problem of the Panama palms. It is a difficult undertaking in view of the fact that the palms of the Republic have never been studied and because we cannot now consult type specimens abroad.

You have two new *Euterpes*. Your number 2534 from Cocle, and for which you prepared a Latin diagnosis, I call *Euterpe Allenii*. The other one, number 2635 from the Madden Lake area, collected by Fairchild and Jobbins, appears also to be undescribed. On your letter of the 26th of last August there is a notation in pencil to the effect that ~~the~~ photograph had been taken of this tree. If a picture is available of this and of *E. Allenii*, I should much like to have the privilege of using it inasmuch as I assume you wish me to name and describe these palms.

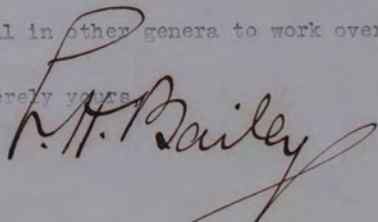
Among the lots from the Missouri Botanical Garden is your number 2112 from Quebrada Lopez, Canal Zone. This palm is *Welfia Georgii*, not heretofore reported from Panama. From the same locality is your number 2111 which is an *Astrocaryum* not reported from Panama. I do not know where this quebrada is in the Canal Zone and whether you are expecting to visit it again. We ought to have photographs of these things.

The fruiting cluster of *Welfia* is a striking object. The part that comes to me has been doubled up in a box and, therefore, does not show the long graceful angular strands of the inflorescence. If you ever see it again, perhaps you will try to get me full length strands and send them in that condition. Fruit is not mature on number 2112 and there are no flowers.

Undoubtedly I shall get together a fascicle of *Gentes Herbarum* to contain these novelties from Panama, and anything in the way of illustration would be specially useful.

I still have much Panama material in other genera to work over but it is all under way.

Sincerely yours,



BAILEY HORTORIUM
NEW YORK STATE COLLEGE OF AGRICULTURE
CORNELL UNIVERSITY
ITHACA, NEW YORK

L. H. BAILEY, *Director*
ETHEL ZOE BAILEY, *Curator*
ROBT. T. CLAUSEN }
G. H. M. LAWRENCE } *Taxonomists*

Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

Dec. 22, 1941

Mr. Paul H. Allen,
Box 1035,
Balboa, Canal Zone.

Dear Mr. Allen:

As I return from a palming trip in southern Mexico, I find the three bundles of Sabal from the Perlas Islands. You have made a very important discovery and I can understand the satisfaction you have in finding it and getting the material together. The specimens are excellent in every way. I congratulate you on them.

This appears to be Sabal mauritiaformis I collected once in the northern coastal area of Colombia. Of course I shall make very careful comparison before I give a positive opinion. I have not yet taken up my Panama palms inasmuch as am now deep in the preparation of another palm paper. However, I expect to get at the Panama lot within a month, and then I shall open the parcel you sent me some time ago and try to find out what it is. I have completed Rubus for the Panama flora but the palms are quite a different matter.

If the film is available from which your enlargement was made of the separate tree of your Sabal number 2604 perhaps you will loan it to me so that I may have another enlargement made. The enlargement you send me is on the wrong kind of paper as is usual with commercial photographers. I can see that it is a good negative and I can get more detail out of it.

Cordially yours,

L. H. Bailey

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Sept. 6, 1941

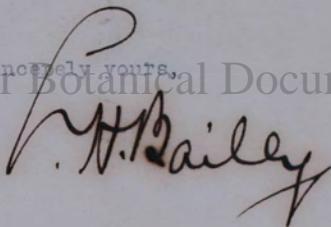
Mr. Paul H. Allen,
Box 1035, Balboa, Canal Zone.

Dear Mr. Allen:

Your letter of August 26th and the parcel of palms collected by Graham Fairchild are at hand. This will give me additional material for working over for my palms of Panama when I come actively at that job later in the year.

I am glad of the material and shall then give you my opinion on it.

Sincerely yours,



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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

Aug. 15, 1941

Mr. Paul H. Allen,
Box 1035,
Balboa, Canal Zone.

Dear Mr. Allen:

It has been a pleasure to examine your specimens of *Euterpe* number 2534, particularly as I am not able yet to match it. It cannot be *Plectis* because that plant has "seed deeply ruminated".

I have given some attention to *Euterpe* and have a fairly large collection. I am under engagement to write the palms of Panama for Wiggins's forthcoming flora. This will require some weeks of investigation, and your palm will be taken up with a good lot of other unnamed material in my possession. In modern time the *Euterpes* have been worked mostly by Burret of Germany, but it is now of course impossible to correspond with him and to have specimens compared with his types at Berlin-Dahlem. There are duplicates of some of his material at the National Herbarium in Washington, and these I shall consult. Probably some time this winter I shall be obliged to take up my study of the palms of Panama and this one of yours will be included with the others.

I regret I cannot give you a determination offhand, but of course you will understand the circumstances. Anything else in the way of palms of Panama will help me in my work.

I now have funds for the publication of my *Acroscia* paper and I hope to get it out in October.

Sincerely yours,

L. H. Bailey

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

July 11, 1941

Mr. Paul H. Allen,
Box 1035,
Balboa, Canal Zone.

Dear Mr. Allen:

It is good to know that you have found something of interest in the palm papers. I have another one all written on the *Acrocomias* and had expected to publish it some time ago but lack of funds has prevented. I hope now to issue it some time this autumn. It will interest you in Panama.

I am particularly interested in your account of the palms of the Perlas Islands. I have never seen anything from that territory in the way of palms. I shall be surprised if your *Sabal* turns out to be *mauritiaeformis*. Ripe fruit is necessary and also pictures of the trees to show the general habit and the "hang" of the leaves. As much of a leaf as possible should be sent. From northern Colombia I brought home an entire leaf cut up and folded into its appropriate parts for the herbarium. My *Sabal* paper is now exhausted and I hope to be able yet to publish a complete revision. I have a number of new species.

I have long anticipated the problem of *Astrocaryum* and have practically a full set of pictures and specimens of mature nuts of the species. It is a most troublesome genus.

I hope you will send me specimens of that *Euterpe* or *Plectis*.

Sincerely yours,

L. H. Bailey

Balboa, C.Z.
July 7, 1941.

Dr. L. H. Bailey, Director,
Bailey Herbarium,
Cornell University,
Ithaca, N.Y.

Dear Dr. Bailey:

I shall be eternally grateful to you for the generous sending of copies of the *Gentes Herbarum* papers. They are simply wonderful, and are altogether indispensable to anyone trying to work on the Palms. You may be sure that they will be well cared for, and used to death!

I have just returned from a brief collecting trip into the Perlas Islands in Panama Bay. Much of the material collected is pretty routine, but I was much interested to find that the common thatch, used throughout the islands visited was of a species of Sabal. All persons talked with reported it under the name of "Palma de Guagara", and agreed on the fact that it occurs on the islands only on Fodge Gonzalez. We went there, and the local inhabitants guided us inland to uncult areas of timber, where the palms occur in considerable quantity. I made specimens, although only to be had in very young flower. It seems to be *Sabal mauriticeiformis*, Griseb. & Wendl., and a very handsome thing it is indeed. The trunks are much of the diameter and superficial appearance of *Coccothrinax*, rising in straight shafts fully fifty and sixty feet to the base of the leaf crown. I hope to be able to return later, and get specimens in fruit.

The palms here are proving very interesting, as you will see by the following list, all of which I hesitate to tackle descriptions of as yet, due to lack of something or other, or lack of decent literature.

Astrocaryum? (Smooth trunks, pinnae fused into confluent
blocks, and ERECT spikes of VERY SPINY fruit.)

Welfia, a giant highland species, with flowers in hexagonal
pits.

Bactris, a very slender, spineless, or nearly spineless single
stemmed species, with bifid, undivided leaves.

Bactris, common to sea beaches and Panama Bay islands, with
bogy like, YELLOW fruits.

Bactris, highland species, with small dense clumps, globose
berry like fruits, and almost HIRSUITE foliage.

(I have wondered if this last might be the *B. Villesa*, Wendl. in Hemslay.)

Aiphanes, a slender, highland species. So far completely sterile.

Euterpe, agreeing precisely with *Flectis Oweniana* Cook.
(As I understand it, Burrett has reviewed this *Euterpe* situation, and agrees that the Genus as at present understood may include species with both plain and ruminant albumen. That should make this species *Euterpe oweniana* according to the rules shouldn't it?)

The situation in regard to the *Astrocaryum* is particularly annoying. Barbosa Rodrigues, as you know, proposed three subgenera, excluding *Drudes* fourth, on the grounds that the species formerly included therein had been removed and placed in other genera. Rodrigues key is based on floral characters, and admits of the grouping of species with pendant, compound inflorescences, and ~~and the fruit with saccobary~~ erect, simple inflorescences and spiny fruits. What happens here under such a system is that there are such differences as the following, lumped side by side in the same genus. For example;

Astrocaryum Standleyanum Bailey, Trunk spiny, leaf bases and rachis spiny, leaves pinnate, divided, spathes tenuous, weathering away rapidly, spadix compound, pendant, with smooth fruit, peduncle spiny, rachis and rachillae smooth.

Astrocaryum ? Trunk entirely smooth, except for persistent bits of leaf bases, leaf bases and rachis spiny, leaves pinnate, but with pinnae fused into broad blocks, spathes intensely spiny, persistent, spadices seemingly either entirely made up of staminate or pistillate flowers (this last is a guess) Spadix erect, unbranched with very spiny fruits, which are irregularly dehiscent on maturity. Peduncle smooth, rachis and fruits spiny.

It looks to me that the genus is badly in need of revision.

I didn't really start to burden you with ALL my palm troubles, but meant this simply as a thank you note for the very welcome lot of papers. A thousand heartfelt thanks.

Most sincerely yours,

Paul H. Allen

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

June 4, 1941

Mr. Paul H. Allen,
Box 1035,
Balboa, Canal Zone.

Dear Mr. Allen:

Some time ago we sent you all the issues we could spare of the fascicles of *Gentes Herbarum* for which you asked. There is no charge. Some of the fascicles in Volume I are no longer available for distribution.

I am glad of your note about the native *Acrocomia* of Panama. I shall insert some sentences from it when I publish it as a new species. The *Acrocomia* paper has been held up for several reasons but I hope to publish it before the autumn.

Sincerely yours,

L. H. Bailey

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Address
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SAGE PLACE, ITHACA, N. Y.

Sept. 25, 1940

Mr. Paul H. Allen,
Box 1035,
Balboa, Canal Zone.

CARD MADE

Dear Mr. Allen:

Yesterday the two bundles of *Acrocomia* reached us, in good condition. This is excellent material and I thank you heartily for having taken so much pains.

All the covers in one parcel were labelled 2213. I assume this is the native species that holds the boots on the trunks. I assume it to be *A. insularis* Perret. but scientific identification must await my new study of all my material. My monograph has been written once but I am going over the whole thing again with much new material.

The other bundle has no numbers or indications but I assume it is the introduced species growing at Summit.

Last week we received a small box of *Acrocomia* fruits from Summit but without indication of sender or trees from which they came. We are holding this until correspondence discloses its identity.

Sincerely yours,

J. H. Bailey

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Address
BAILEY HORTORIUM
SAGE PLACE, ITHACA, N. Y.

Aug. 8, 1940

Mr. Paul H. Allen,
Box 1035,
Balboa, Canal Zone.

Dear Mr. Allen:

Your specimens of *Bactris* number 2150 are at hand. I am particularly glad to have this material inasmuch as I am to write up the palms late this year for the forthcoming flora of Panama to be prepared by the Missouri Botanic Garden.

I have on my table two bundles of palms from Panama not yet opened. I shall put yours with that material for study altogether when the time comes. Dr. Woodson and others from St. Louis are at present somewhere in Panama collecting, and probably I shall receive additional material. Anything you send me will be of real service in rounding up the palms of the Republic.

Be sure always to send me the spathes and any other parts that are likely to be omitted from ordinary specimens. When the spathes are long and heavy, as in *Acrocomia*, they may be cut up into lengths 14 or 15 inches long.

I am still puzzled about the native palm on the Pacific side of the country commonly known as *Acrocomia vinifera*. I do not know whether you take photographs, but in *Acrocomia* it is important to know whether the trunk at bearing age is still covered with the "boots" formed by the bases of old petioles or whether it is habitually bare of everything except spines.

Sincerely yours,

L. H. Bailey