## Palm Letters from Mexico*

San Luis Potosí August 23, 1957

## Dear Hal:

We left home on the 13th, drove to Brownsville in three days, and came the remaining distance to San Luis in two more. The palms as ornaments get a more conspicuous shake at Brownsville than anywhere else along the route we took. Washingtonias of both species are more in evidence than any others. Next in numbers are species of Phoenix, most of which appear to be P. dactylifera (the fruit at Brownsville is seldom good). Next follow planted specimens of the native Sabal texana. Other planted kinds are few. We had dinner one evening with some of our Palm Society as-sociates-Mrs. Sulema Etchison, who is pioneering a planted collection of palms, and Mr. and Mrs. Wheelock, owners of the Tropical Nursery. Next day we visited together the old Rabb grove of Sabal texana about ten miles southeast of town and said to contain about 200 acres. The wild palms in an almost solid stand look for all the world like S. Palmetto in the same kind of stand in Florida, but not so the planted individuals in town. The latter all have had the leaf bases removed, and the trunks at once appear much stouter than in S. Palmetto. Both flowers and fruits are very sparse in the trees at this time of year. The few fruits seen are still green and from the ground look like medium-sized grapes-much larger of course than the fruits of S. Palmetto.

The only indigenous wild palms seen between the border and San Luis were sabals, presumably S. mexicana. From the border, we drove 138 miles without noting a single palm of any kind, and then at Jiménez saw the first sabalsabout a dozen. Farther south, they appeared sporadically but in increasing numbers and finally they made exten-

[^0]sive groves and forests. The last tall adults persisted to about 2500 feet elevation after leaving Ciudad Victoria. As we climbed up toward the plateau, I stopped by several streams and peered into the undergrowth in the hope of seeing Collinia or Chamaedorea plants, but nary a one. Alas, I could not follow your suggestion to take the side trip up to Jaumave from Ciudad Victoria, for a new road is now under construction and the route is absolutely impassable.

> Hotel Diligencias Veracruz, Ver. August 30, 1957

Stanley [Kiem] accompanied by a young friend [Bob See] about his age flew in to San Luis Potosí the night of the 24th and we took off on the 26th for Mexico City. [From Mexico the route led via Tehuacán to Orizaba thence to Puente Nacional and northwest to Jalapa before turning to Veracruz.]

One ornamental palm with palmate leaves much seen in Orizaba and elsewhere in the uplands [and prominent in some parks of Mexico City] has had us puzzled. Looking at two specimens through a barbed wire fence at San Luis, I thought I was seeing Coccothrinax. Not so, however, once I could get inside the fence. When Stanley came along, he thought the two must belong to Brahea, but as we saw more and more of these fan palms in other towns, I began to suspect Trachycarpus. Finally, when we got into the Jardín Lecuona at Banderilla (yesterday), there were a number of older specimens of the mysterious palm and there I concluded definitely that it is Trachycarpus. The eldest Lecuona sister calls it "Areca japonesa."

What we took to be Chamaedorea monostachys . . . was in fruit-plentiful and ripe. So we bought . . . about two kilos of this fruit. In the garden are two
specimens of Chamaedorea elatior (... "chamaedor" enrededera") one of which is looped about in quite impressive fashtion and is in fruit. The latter is still too green, but [the owners] promised to save it for me and send it when ripe. We bought some other Chamaedorea fruits of an undetermined species and that completed the haul from the garden.

But you are wondering about the Barranca de San Miguel near Fortin and also the Barranca de Texolo . . . . we spent about four hours in the former day before yesterday and over two hours in the latter yesterday. The abundance of bromeliads, orchids, aroids, and some other plants in both makes it quite a heaven for fanciers of those plants. Certainly I can't say that the palms were abundant, but we found, or thought we found, all the Chamaedorea species you had indicated for each of those barrancas. Unluckily the people thereabouts don't agree as to which species is Tepejilote and we have with us nothing descriptive of the palms, but we think and trust, that we have correctly identified it. The coffee-banana cultivation in those barrancas, I suppose, accounts for the scarcity of palms there. We took leaves and seed of all the Chamaedorea species found, but not one was in flower.

Driving down yesterday to the coastal plain from the region about Jalapa, we saw plenty of acrocomias, a fair number of scheeleas and, when finally approaching the seacoast, sabals. We did

Fig. 8. Chamaedorea monostachys ? growing in the Jardín Lecuona at Banderilla, Veracruz.

not stop to collect seed or take photos because we will get a crack at these palms later. We leave here for the trip south along the coast to the Isthmus either late this afternoon or tomorrow morning.

San Luis Potosí
September 23, 1957
In the last installment we were [located] in the Gran Hotel Diligencias in Veracruz and were contemplating the start of the trip on down the coast on the morrow. This plan, however, was set aside for one day in order that we might make a one-day side trip from Veracruz via Tierra Blanca, Ciudad Alemán, and Papaloapan to Tlacotalpan where the road comes to a definite end, and from whence the return trip to Veracruz must be made over the same road [or by launch down the river]-in all about 300 miles.

The most conspicuous native palms hereabouts [Veracruz-Tlacotalpan] are the coyoles - Scheelea Liebmannii - as they are also throughout the southern coastal plains of Veracruz. Occasional palmares or groves of them are seen from the highway, but mostly they now exist as numerous scattered individuals in all stages of growth. The taller trees, to 60 feet or more, are straight-trunked and have handsome crowns of pinnate leaves not unlike, from a distance, the crowns of the coconut palms. The similarity in this region is the more striking because the boles of the coconut palms, instead of being crooked or leaning, are remarkably straight. The foliage of the younger scheeleas, or at least those of moderate stature, appears to be much longer and more abundant than that of the taller and older trees. The boles seem to be self-cleaning after reaching a height of about 12 feet; and it seems certain that the palms of this genus grow much faster in the heavy moist soils of the region than they do in Florida. We saw no flowers but did see a fair number of trees in fruit, some of it already ripe
and yellow in color. We wanted to collect fruit, but the ground was flooded where stood lower trees with ripe fruit. Not being provided with rubber boots, we had to forego it.

Beside the road, however, in a buz-zard-ridden hamlet north of Ciudad Alemán, was a luscious bunch of yellow fruit hanging about 25 feet above the ground, and this bunch we finally obtained through the efforts of some local citizens. First we had to hire a general superintendent of operations who, in the course of time, supplied a long thinslatted pole and a small boy to climb it. Armed with a machete and a rope, the boy finally lowered the bunch to the ground, but not without directions and curses from the superintendent and shouted advice and encouragement from some twenty bystanders. Said superintendent and boy got 12 pesos and Doña Lupe, owner of the palm got 10. A loafer who seized the fruits and carried them 40 feet to the car claimed and got 2 pesos. The bunch weighed about 60 pounds. Besides the scheeleas a few trees of Sabal mexicana and of Acrocomia mexicana were visible from the highway. These two palms are intermittent here as elsewhere, and nowhere dominate the entire coast in the manner of the scheeleas.

Farther south, on the eastward approaches to Tlacotalpan and on the banks of the Río Papaloapan, we saw extensive groves of mango trees-some of them immense and most astonishingly symmetrical; and still farther along, oc-
casional Roystonea palms evidently not planted by human agency. Northbound for Veracruz once more, we were advised in Ciudad Alemán that many chamaedoreas were to be found near the vertidor of the new Alemán dam on the Río Tonto. This very large project, still under construction, is reached by an unpaved road leading west from the highway at a point about one-third of the way from Ciudad Alemán to Tierra Blanca. Once at the dam, a further distance of about 15 kilometers had to be covered to reach the vertidor or spillway, itself no mean piece of construction. The total distance was much greater than we had anticipated, and we arrived at the vertidor about twilight. Stanley and Bob scrambled about the steep hillsides till it got too dark to see, but I believe found no chamaedoreas in that poor light. This was where a very slender and tall fan palm, subsequently seen by us in other localities farther south, was first spotted on this trip-in this case by Stanley. This palmate-leaved palm, in Bailey's treatment of the genus Sabal, seems to answer to nothing but one or the other of the two so-called botan palms, S. Morrisiana or S. nematoclada, neither of which were reported by Bailey as native in Mexico. The dead persistent inflorescences are very conspicuous because they greatly exceed the leaves, and the topmost ones were sometimes nearly erect. The region about the vertidor is very wild and rugged. I doubt that it has ever been explored for lack of access roads hitherto; but it was dark, and we had to get back

Fig. 9. Scheelea Liebmannii about five miles east of Papaloapan on road to Tlacotalpan



Fig. 10. Scheelea Liebmannii 30 miles west of Cárdenas, Tabasco, which, to judge by Bob See's figure at base, must be nearly 100 feet tall.
to Veracruz which we reached about 10 p.m.
[Here followed some remarks deploring the limited time, inadequate vehicle for negotiating the unpaved high-centered roads, rains that made some localities inaccessible.]

Next day, September 2nd, we started south from Veracruz with San Andrés Tuxtla as the goal for that night. A short distance south of the city we began to see scattered trees of Acrocomia mexicana, a palm that we had seen before at elevations as high as 2500 feet. This palm pops up sporadically in the most unexpected places. Perhaps it is the most widely distributed of any Mexican palm, unless exceeded by Sabal mexicana; but its distribution is singularly scattered and erratic. Here the palms were growing within a few hundred feet of the open Gulf of Mexico and here we stopped to collect some fruits not yet quite ripe. South of Alvarado, the scheeleas, acrocomias and sabals were fairly abundant on both sides of the road and we saw occasional roystoneas that may or may not be native. We also saw Astrocaryum and Desmoncus from the moving car. We passed through a torrential rain in this area. One entire village was flooded about a foot deep, water entering all the houses and jacales. In a ravine north of Santiago Tuxtla there were a few Bactris palms from which Stanley got seed and two Chamaedorea species which we had previously seen. Nowhere, incidentally, did we see plants of Chamaedorea actually in flower, even though a number had their green spadices and some had green or mature fruit. We could do nothing more in these beautiful hills near the Tuxtlas because of the late hour. Too bad, because you had indicated we might find Reinhardtia gracilis var. gracilior.

On September 3rd, we left San Andrés Tuxtla with Coatzacoalcos next overnight objective. About 19 miles south of San Andrés, on hillsides above the road, we saw many plants of Astrocaryum (Hexopetion), Chamaedorea
elatior, C. Tepejilote, and C. oblongata (?)-more Astrocaryum mexicanum than any others and these to about 15 feet overall. Approaching Coatzacoalcos we saw the roystoneas you had mentioned in the swampy lowlands and all the way to the river. Heading for the river, one sees beside Roystonea, clumps of Paurotis, much Desmoncus, some Bactris too and even Scheeléa.

We crossed the Coatzacoalcos River and headed for Tabasco on the 4th. On the south side are various new dirt roads near the oilfields, no signs of course anywhere. This fouled us up pretty badly for a while, though finally a Mexican steered us through La Venta field and in time we emerged on the main road to Villahermosa. This road is brand-new and still under construction. When finished, it will be a fine artery all the way to Villahermosa and is called Paralela 18 because it approximately follows $18^{\circ}$ North Latitude. It has been "open" for adventurous travelers for about a year, but actually has been negotiated chiefly if not entirely by trucks and busses. For this reason-its newness-the roadside forest has not yet been cut down as pretty much everywhere else in Mexico. We went as far as Cárdenas, where we spent the night,
and did not continue all the way to Villahermosa because of two more intervening ferries with steep muddy approaches that sounded too ominous. This part of Tabasco has not yet been [much] explored for plants because, up till now, it has been virtually inaccessible; thus we were, in all likelihood, the first residents of the United States to have seen the native Roystonea growing nine miles west of Cárdenas, or even to know of its existence. In fact, Stanley spotted a double-headed Roystonea by moonlight and next day won from me $\$ 1$ Mexican when he proved in daylight that he had not seen a mirage.
From the roadside in this same Roystonea area may be seen Scheelea, Paurotis, Sabal mexicana, Bactris, Desmoncus, and also the botan fan palms if that's what they are. Some 23 miles west of Cárdenas, we met Astrocaryum and thickets of Bactris all along the road. At 52.1 miles west of Cárdenas, in a ravine below a big-bridged culvert, we found shade palms more numerous than anywhere else; many slender tallgrowing palms with pinnate leaves trisectionally divided which we naturally took to be a Geonoma. Most of these were young plants or not fully grown and without fruit, but one tall individual

Fig. 11. Scheelea Liebmannii and the slender Sabal near the boundary of Veracruz and Oaxaca on the trans-isthmus highway.



Fig. 12. Geonoma 30 feet high in ravine 52.1 miles west of Cárdenas, Tabasco.
had ripe fruit 20 feet above the ground, and to get this fruit Stanley had to cut down the palm with his dull machete. He paced off the palm at 30 feet overall! At this same spot were many Chamaedorea palms with oblong pinnae and orange fruit [probably Eleutheropetalum Sartori], much Bactris and Desmoncus, long-petioled Sabal dwarfed by deep shade, and all associated here with beautiful large tree ferns, heliconias with orange and red flower scapes, monsteras, philodendrons, numerous fern species, under big hardwood trees. Strangely, the usual overburden of bromeliads and orchids was missing.

Next on the docket was crossing the Isthmus of Tehuantepec from Coatzacoalcos to Salina Cruz. The trans-isthmus road is mostly unpaved and in bad condition. On the way we turned up but one palm not seen by us before, viz., Chamaedorea geonomiformis or what we believed to be that species [but probably Eleutheropetalum Ernesti-Augustii which appears along parts of this highway] quite numerous in a ravine together with other Chamaedorea species seen before, Desmoncus, Bactris, shadedwarfed Sabal, plus the usual tree ferns and other luxuriant plants. Nowadays one sees few palms from a moving car on the isthmus road, the adjoining land having been all cut over. We stayed in Tehuantepec and next day drove to Tuxtla Gutiérrez. No good forest remains along the roadsides anywhere except in an occasional steep barranca too rough for planting, and even here a certain amount of lumbering has been done. Professor Hernandex X. had told us that the richest palm region in Mexico lies here in Chiapas some two days on foot beyond Niltepec [Oaxaca]; but alas, we had neither the time nor the equipment to make it in there-two days in and two days out. Very much the same thing applied to all of Chiapas that came within our ken: the forests and the palms are doubtless there, but way back, at no convenient distance from the road and our base, the car itself. At


Fig. 13. The slender botan (Sabal) on the trans-isthmus highway.

Tuxtla we went to see Dr. Miranda's botanic garden which contains as yet few palms indeed; and then we took the long, steep, rocky road up to the crest of the Sumidero. Stanley and Bob scrambled about the clifflike hillsides for a couple of hours, but the only palm loot consisted of small Chamaedorea plants-a half dozen maybe-which were, in all probability, C. glaucifolia. We drove on to San Cristobal de las Casas. Palm yield zero, but this part had now become simply a tourist trip. Next day, back in Tuxtla Gutiérrez, time was about up for Stanley and Bob, so from here they flew out on the return journey to Florida.
[Dent then returned to San Luis Potoss in more of a hurry than he had expected due to unexpected dental difficulties and thence back to Florida himself.]

One palm remains to be mentioned. On the way to Mexico City, 55 to 60 miles north of Oaxaca, scrubby clumps of a fan palm, presumably Brahea [Brahea dulcis], without emergent trunks were evident on dry forbidding hillsides. After 5 miles of patches, they disappeared and did not reappear till after mile 121 north of Oaxaca. Here they are distributed along the road on both

Fig. 14. Brahea dulcis on dry limestone hills west of the Pan American highway 121 miles north of Oaxaca.

sides for about 15 miles, perhaps a different species [still Brahea dulcis]. These last have many emergent trunks, the latter sometimes creeping or much curved at the base, then erect to 12 or even 20 feet. I counted as many as 14 young stems in a clump. The foliage is stiff, bluish green; the petioles are armed; the trunks ringed where not burned. No flowers or fruits were seen. The elevation is about 2100 feet and the bare rock supports typically xerophytic growth of opuntias, yuccas, and
the like. In some gullies and barrancas, the palms and yuccas of about the same height seem almost to alternate; younger clumps resemble Serenoa in habit.

These braheas were the only wild palms seen in the more than 600 miles of road between Oaxaca and San Luis Potosí. This testifies to the aridity of this huge area. I had hoped to visit the lowlands on the west coast, especially in Guerrero and Nayarit-but toothlessly, nothing doing. Thus endeth the palm account.

Dent Smiṭh

## EDITOR'S CORNER (Cont.)

writes " . . . However, considering the remarkable character of this palm, I do not believe the article quite did justice to it. The main criticism is that there should have been a reproduction of the cross-section of the fruit and of the grapelike cluster of fruit given as a line drawing in Revue Horticole (1917). Also the remarkable appearance of this palm when the paddle leaves are not frayed into segments should have been shown . . . You overlooked or did not mention ... . references which would have been of interest to readers, viz.: Revue Horticole 96: 139, 1924; Brown, F. B. H., Flora of Southeastern Polynesia 1: 119, 1931 . . Mr. James E. Smith of Oakland Park, Fla., had several seeds . . . in cans when I was there last summer."

The reference to Brown's work, which appeared as Bernice P. Bishop Museum Bulletin 84, touched a sore point. I had consulted this fine account in the past, yet completely neglected it when writing in haste. The reference to a further article in Revue Horticole, illustrated with a handsome habit photograph, was new to me but has since been added to my reference cards.

Worst of all, the photograph purporting to be Pelagodoxa Henryana in Tahiti is probably not that species at all but

Verschaffeltia splendida. My own color transparencies were not suitable for black and white reproduction so the photograph taken by Capt. Johnston was used. Quite by accident, I recently came across a photograph of Verschaffeltia taken in the Royal Botanic Gardens, Port-of-Spain, Trinidad, by Dr. Bailey in 1922 and another published in David Fairchild's Garden Islands of the Great East (p. 160A). These are so similar to the "Pelagodoxa Henryana" published in principes that little doubt remains. Thus the mention of prop roots for Pelagodoxa in the description should be deleted.

Pelagodoxa deserves further careful study which has not been possible in the intervening weeks. It will be the subject of another note when it is possible to print authenticated photographs.

The Executive Secretary has also forwarded a letter from our youngest member, Mr. Arthur Scarpa, 15, of East Boston, Mass., which contains this encouraging report:
"My collection of palms has been growing steadily since I joined The Palm Society (October 21, 1957). I have seven Chamaedorea elegans, one Cocos nucifera, one Phoenix pusilla, twenty-five Phoenix canariensis, one Sabal Palmetto, one Roystonea regia, one Chrysalidocarpus lutescens."


[^0]:    *Extracts from letters addressed to the Editor by Dent Smith with editorial interpolations bracketed.

