

donation to the Palm Society in recognition of the fine work being done by Nat De Leon through the Seed Bank. He leaves his wife, Juanita, a well-known ceramist, a daughter and two sons, as well as his mother and two sisters.

LUCITA H. WAIT

LETTERS

One of our members, a high-school student in Dallas, Texas, writes:

"We had a severe winter in this part of the country, as you probably know. It was 8°F. in Dallas, but colder toward the west, north and east. Shreveport, La. had 3°F., New Orleans 14°, El Paso, Texas -4°, and San Antonio, Texas 10°F. I have been in all of these cities except San Antonio and have seen palms growing in every one of them. In Shreveport there are *Washingtonia*, *Butia capitata* and a few others. I have seen palms in Shreveport up to 15 feet and higher. Some say there are a few *washingtonias* 20-30 feet high. I have also seen date palms in Shreveport less than 10 feet high. Some friends of ours had one at least 8 feet high on the south side of their house. It was killed outright.

I have seen fan palms in Monroe, La., 15-20 feet high.

Almost all of the *washingtonias* in Dallas survived, at least 90%, possibly more. There are a few *sabal* palms here, probably *Sabal texana*, but at least 50% were killed.

I haven't been in El Paso in at least seven years, but I saw a few *washingtonias* there 5-10 feet high at least, some probably higher. At Columbus and Deming, New Mexico I saw a few *washingtonias* averaging 5-7 feet in height. I have been told that the winter temperature there often reaches 10-15°F., and has been known to reach -7° at Columbus, where I saw two *washingtonias* 5-10 feet high. Columbus and Deming are ap-

proximately 4000 feet in elevation and at approximately the same latitude as El Paso, which is approximately 3700 feet.

I hope this letter is considered for publication in PRINCIPES to stimulate interest in growing palms in colder areas.

Sincerely,

JOHN F. SHINE

To me . . . hardiness is a relative concept. Royals may be thought of as being slightly harder than coconuts; *Chamaerops* is enormously harder than *Phoenixophorium* (*Stevensonia*). Between the latter two genera one may envision a continuum of species, arranged in order of hardiness. From such a compilation a collector may ascertain that, if *Arecastrum* is marginal in his locale, *Livistona chinensis* is a good bet, but *Archontophoenix Alexandrae* is a bad risk. This is a rather obvious example, but it should demonstrate my point.

How to devise such a continuum? I would suggest that first a list of the commonest species be made and ranked in order of their hardiness. Then let Society members in various climates place the less ubiquitous species at first in relation to the common ones and later, as more accurate comparisons are made, in relation to one another. No doubt there would be disagreements and discrepancies arising from seedling variation, differences in nurture, observer sentiments, etc., but there seems to be little doubt that such a list, albeit imperfect, would be of great benefit to those of us in marginal zones.

JOHN E. SWISHER

PALM ODDITIES

No doubt many have seen palm stems that curve into interesting and attractive shapes and angles. The coconut, for example, frequently assumes a graceful curve over the beach. Many palms curve



67. Spiralling *Coccothrinax argentata*, Bahamas. Photograph by R. W. Read.

gracefully when planted in groups or clusters of three or more individuals. The trunks will tend to grow out away from their neighbors toward the greatest source of light. *Ptychosperma elegans* does this effectively as does the coconut most frequently. Another species of *Ptychosperma*, known as the "Rakii" palm at the Fairchild Tropical Garden,

does not curve away from its neighbor. Instead, a group of these slender palms will grow straight up with their heads in a mass. Who can explain the ways of palms?

People often ask why the coconut palm always leans. The coconut does not *always* lean, but so many do that we rarely see a straight one. The coconut palm usually leans to grow toward the greatest light source. Thus, coconuts growing along the coasts of tropical islands lean out over the water in order to be in full sun away from the shade of other trees. In plantations, however, they often grow erect. This mode of growth is controlled by hormonal processes which cannot easily be explained here.

One of the most difficult things to explain is the manner in which some palm stems form a spiral. A *Livistona decipiens* in Florida has a semi-spiralled trunk and I have seen others in various collections. But I had never seen one quite as distinct as the one pictured in Fig. 67. This *Coccothrinax argentata*, or silver thatch palm, was found while vacationing on Paradise Island (Hog Island) in the Bahamas near Nassau. No, it wasn't a vine that did it, but are there any other suggestions? Hormones?

ROBERT W. READ

Some Corrected Epithets for Palm Species

The editor realized with shame, while preparing manuscript for the index to the current volume of *PRINCIPES*, that he had been guilty of a *lapsus* in using the epithet *pembana* for a new species of *Chrysalidocarpus* (*Principes* 6: 109). The generic name *Chrysalidocarpus* is masculine in gender, the epithet must agree, and the name should be corrected to *Chrysalidocarpus pemanus*.

A further confession relates to new combinations published in *Gentes Herbarum* 8: 462-470, 1956, wherein epithets in feminine form were transferred without change to *Clinostigma* and *Ptychosperma*, both neuter in gender. The following names, therefore, are correct: *Clinostigma carolinense* ("carolinensis," p. 462); *C. ponapense* ("ponapensis," p. 463); *C. Savoryanum* ("Savoryana," p. 465); *Ptychosperma Ledermannianum* ("Ledermanniana," p. 469); *P. palauense* ("palauensis," p. 470).

H. E. MOORE, JR.