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Coccothrinax yunquensis

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ABSTRACT

The species discussed in this article is just an example of what sometimes happens in the world of plant taxonomy. A species is described, then rejected, then restored. Someone talks about "taxonomic dirty laundry." The usual trend is to reduce many of the old species described to forms or varieties as intraspecific diversity. Behind the controversy, the biggest problem is often that the plant is almost unknown. In this paper I briefly relate the taxonomic story of a Cuban *Coccothrinax* from its institution as a "sp. nov." to its eventual annihilation and then I tell the wonderful experience I had of going to visit it in the "flesh" in Cuba.

In 1980 Attila Borhidi, a Hungarian taxonomist and geographer, and Onaney Muñiz, a Cuban botanist, described seven new Cuban species of the genus *Coccothrinax*. A few years later a comprehensive and very technical key, "Catàlogo de las palmas de Cuba," was published by the same authors.

One of the seven new palms was *Coccothrinax yunquensis* Borhidi et Muñiz. The new *Coccothrinax* was found "in saxosis calcareis humidis cacuminis monti Yunque de Baracoa, 500 m alt. s.m. . . .", i.e., on humid calcareous rocky precipices of El Yunque; a flat-topped mountain located in the "Oriente" region of southeastern Cuba. The observation at the end of its formal description reports that it is closely related to *C. salvatoris* Leòn and annotates all the differences (see Table 1).

In 1995 a new brick-sized book appeared; *A Field Guide to the Palms of the Americas*. The authors, A Henderson, G. Galeano, and R. Bernal, fighting against the "taxonomic dirty laundry" of the past, refused hundreds of old palm names and, in the genus *Coccothrinax*, accepted only 14 specific names out of the 49 validly published existing names. *C. yunquensis* Borhidi et Muñiz was not within the group of the lucky 14; it had been actually put as part of synonymy of *C. salvatoris* because in 1991 two Northern American taxonomists, Nauman and Saunders, suggested that the two plants were very, very similar from a cladistic point of view (but not identical!).

Last summer, when the new book was being distributed, I was wandering with a friend of mine in South Cuba to collect palm seeds for the botanical garden of Rome. Ignoring the work of Nauman and Saunders and having not yet seen the new book, for me the small palm of El Yunque was still a fascinating endemic, valid species and, being around there, I decided to go for it with the key of Borhidi and Muñiz in my backpack.

El Yunque lies a few kilometers away from the warm beach of Baracoa, a very beautiful Caribbean town, which was formerly the capital of Cuba. As the area is protected by a mountain chain, it is very humid and almost hurricane-free, and the mountain is surrounded by an unbelievably thick and intriguing Caribbean rain forest.

The driveable road ends at the bottom of the mountain in a pleasant camping site for Cubans on vacation, playing loud "salsa" and roasting pork. After a picturesque crossing of nearby river with the water to our waists and cameras on our heads, we started to hike through the winding path leading upwards. The lowest slopes are sustainably cultivated with cocoa and bananas by the few natives who live there. The much steeper upper part of the mountain is totally intact.

It rained during most of the time that we took to get to the top with our local guide Antonio (one of the cocoa growers). During the astonishing walk I could appreciate some marvelous specimens of *Prestoea montana* and *Calyptronoma plumeriana*, the latter with a huge mass of cherry-red roots coming out of the base of the trunk because of the high humidity.

After almost four hours we arrived at the edge and when the thick fog allowed me to give a close look, I realized that the top of the flat-topped El Yunque was not flat at all; it is a mix of very dangerous sculptured sharp coral rock, covered by fascinating bromeliads and surrounded by mist and vertical cliffs. It is almost impossible to get around there without time and experience.

The *Coccothrinax* was right there, at the end of the path, in front of the metal plaque left by

an expedition of geographers in 1978, maybe the same one that brought the new *Coccothrinax* to the light of formal knowledge. It was smiling in the mist, loaded with bromeliads and with its silvery leaves and its creamy blooms. The plants, almost saxicolous, were growing on the most exposed outcrops of coral rock, where just such very specialized plants could thrive. At 500 m of elevation, the top of El Yunque could host a tall cloud forest like the one with *Prestoea* found slightly below, but the rock, calcareous and porous, retains very little moisture and the wind limits the height of the forest. The frequent rains and the usual fog encourage development of a curious vegetation, and a difficult walk of less than a 100 meters allowed me to enjoy an intriguing flora, which ranges from creeping *Selenicereus* sp. through a lot of colorful bromeliads and tillandsias to orchids and *Melastomataceae*.

The day spent in El Yunque was one of the least fruitful for my expedition. All the plants were happily blooming, but none of them offered a seed to my avid hands. I could anyway bring back lots of good pictures and good memories and some dried samples, now stored in the Herbarium of the University of La Laguna (TFC), Canary Islands, which showed a much smaller leaf size (see Table 1 footnote), similar to that of *C. salvatoris*.

Also Borhidi, who collected the holotype on November 26th 1978, could not get any seed as the Latin description of the *C. yunquensis* ends with the eloquent sentence "Fructus maturus non visus." As far as I know there are no cultivated specimens of this "poorly known" palm and growing *C. yunquensis* and *C. salvatoris* side by side could ultimately reveal if the characters that make the two descriptions different are a mere result of environmental influence or something that comes from DNA.

If a man shares 98% of its genes with a chimpanzee, then I suppose that a *C. yunquensis* will share 99.99999% of its genes with the *C. salvatoris*. I hope that the need of palm collectors to have that minimal percentage of DNA in their gardens, will not threaten those slender "yuraguanos" (Cuban name for small *Coccothrinax*). I wrote this article to spread the knowledge of what is left of the once extended Caribbean rain forests, not to create a demand for a new "palm product."

The story of *C. yunquensis* could be that of any number of other palms that come from the top, the base, or a particular slope of a particular mountain and have been described as endemics

Table 1. Differences in taxonomic characters of C. yunquensis *Borhidi et Muñiz and* C. salvatoris *Leòn and comparison with data obtained from my* C. yunquensis *material collected in August 1995.**

	C. salvatoris	*C. yunquensis*	*"My" yunquensis* CMR#2.20
Central leaflets	30–40 cm long and 6 cm wide	40–50 cm long and up to 4.5 cm wide	26–28 cm long and 3.9–4.5 cm wide†
Glanduliform spots on the underside of the leaf	big and pale	small and dark, opaque	small and dark: 0.05–0.1 mm in diameter
Sheath fibers	4–9 mm wide	3–4 mm wide	3.5 mm wide
Tips of free sheath fibers	obtuse	acute	acute
Partial inflorescences	bigger	shorter	—
Flower pedicels	well-developed 1–2.5 mm long	up to 1 mm long–almost subsessile fls.	0.6 to 1 mm (almost subsessile fls.)
Stamens	7–9	6–7	6–7
Filaments	connate up to half	fused until the bottom, forming a dome	fused until the bottom

* Data of *C. salvatoris* and *C. yunquensis* are from the works of Borhidi and Muñiz (1981 and 1982) "My *yunquensis*" has my field No. CMR #2.20 at the Herbarium of Universidad de La Laguna (TFC).

† The leaves collected by me in 1995 are much smaller than those of Borhidi in 1978. Leaf size in palms may vary due to age or to the rain received during leaf development. Was it due to an exceptionally dry 1994 or to a very humid 1978? The smaller size of "my" leaves would put *C. yunquensis* one step closer to *C. salvatoris*.

but afterwards cancelled as synonyms, buried, and labelled on their tombs as "poorly known."

LITERATURE CITED

MUÑIZ, O. AND A. BORHIDI. 1981. Palmas Nuevas del Género *Coccothrinax* en Cuba. Acta Bot. Hung. 27: 439–452.

———. 1982. Catàlogo de las palmas de Cuba. Acta Bot. Hung. 28: 309–345.

———. 1983. Adiciones al catàlogo de las palmas de Cuba. Acta Bot. Hung. 31: 225–230.

HERNANDEZ, E. 1985. Las palmas en el Jardìn Botànico Nacional (La Habana). Revista del J.B.N., Cuba 7: 9–18.

NAUMAN, C. AND R. SANDERS. 1991. Preliminary classificatory studies in *Coccothrinax*. Selbyana 12: 91–101.

HENDERSON, A. N., G. GALEANO, AND R. BERNAL. 1995. Field guide to the palms of the Americas. Princeton University Press, Princeton, New Jersey, USA

CHAPTER NEWS AND EVENTS (*Continued from p. 203*)

Southern California Chapter Meetings

The Southern California Chapter of the IPS met on September 21 at Ventura College, Ventura. The day began with a sale by the Friends of the Ventura College Palm Garden at the growing area. There are about 400 palms representing 200 species growing on the Ventura College campus. The meeting featured tours of Pauleen Sullivan's Baylor Avenue apartments (after the sale) and of her home and personal garden (after the meeting). Pauleen's Baylor apartments are easily recognizable by the *Roystonea* and *Veitchia* in the driveway. An educational program with a panel of palm experts answering preselected questions took place in the open area next to Guthrie Hall on the west side of the campus.

The November 16 meeting will begin at noon at the Topanga Canyon (Malibu area) estate of Leland Lai and will feature the fourth annual Concoction Auction. Leland has aggressively planted palms for the past three years, including the relocation of the principal portion of the Dick Palmer collection from Pasadena. Leland will give a brief presentation explaining how he developed the collection, advocating the therapeutic value of plants, landscaping, and a garden from his own perspective.

Townsville Palm & Cycad Symposium

A Palm & Cycad Symposium will be held in Townsville, Queensland, Australia, on October 11–13. This event is jointly organized by the Palm & Cycad Societies of Australia (PACSOA), the North Queensland Palm Society (NQPS), and The Friends of the Palmetum. It will be held at Tumbetin Lodge, The Palmetum; Douglas; and at Brothers Leagues Club, Hervey's Range Road, Thuringowa.

The program will feature lectures by international palm and cycad specialists, tours of The Palmetum and selected private palm and cycad gardens, and the Annual Palmetum Plant Sale. Associated social events include an afternoon tea Saturday afternoon, a banquet and lecture by Don Hodel on Saturday night, and a BBQ at Lorraine and Frank Tooth's residence on Sunday, followed by additional lectures by Michael Ferrero and Don Hodel. Other lecturers include Dr. Roy Osborne, David Jones, and John Dowe.

Late registration is A$85 per person including all above events. Registration inquiries should be addressed to Joe Schmidt [61-(077)-891578], general inquiries to Lorraine Tooth [61-(018)-771470], and Townsville accommodation inquiries to Jill Whaley [61-(077)-745866] or Kerry Robertson [61-(077)-251350.

More News from the North Queensland Palm Society

The North Queensland Palm Society met on June 3 for a presentation on Tassel Ferns by Owen Rawlins—covering propagation through to the end result. There were a number of plants available for sale.

The Queen's Birthday Weekend Palm celebration was held on June 8–9. This included a number of visitors from Cairns, Mackay, and Rockhampton. The events began on Saturday with an afternoon visit to the home and garden of Jessie Roberts in Kirwan. Many nice palms, ferns, and cycads

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1. The flat-topped mountain, El Yunque, Cuba, with its cloud cap. 2. Cloud forest at the summit of El Yunque, habitat of *Coccothrinax yunquensis*. 3. *Coccothrinax yunquensis* growing in the mist. 4. Specimen of *Coccothrinax yunquensis* ready for the plant press. 5. Inflorescence of *Coccothrinax yunquensis*.