

# **The Collectors of Cuban Palms (Arecaceae)**

## **1. Humboldt and Bonpland, and Poeppig**

### **The Status of Their Collections**

# **Los Recolectores de Palmas Cubanas (Arecaceae)**

## **1. Humboldt y Bonpland, y Poeppig**

### **El Estado de Sus Colecciones**

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#### **Abstract**

Humboldt and Bonpland in 1801 and Poeppig in 1823 made the first five collections of palms in Cuba. Based on these collections, Kunth in 1816 and Martius in 1838 provided the first names and descriptions of Cuban palms. Here, the taxonomy, nomenclature, and status of these names and descriptions are reviewed and updated. The type locality of the *corojo* of Cuba is verified.

#### **Resumen**

Humboldt y Bonpland en 1801 y Poeppig en 1823 realizaron las primeras cinco colecciones de palmas en Cuba. Basándose en estas colecciones, Kunth en 1816 y Martius en 1838 proporcionaron los primeros nombres y descripciones de las palmas cubanas. En este artículo se revisa y actualiza la taxonomía, la nomenclatura y el estatus de estos nombres y descripciones. Se verifica la localidad tipo del *corojo* de Cuba.

#### **Introduction**

The Arecaceae family, commonly known as palms, is composed of flowering, woody, perennial plants with varying life habits. About 180 genera and 2,600 species comprise the family (Dransfield et al. 2008).

In Cuba, 15 genera and 99 infrageneric taxa are reported for the Arecaceae: 79 species; 10 infraspecific taxa; and 10 hybrids. Of the total, 86 infrageneric taxa are endemic (86.9 %), one of the highest rates among plant families in the country (Moya 2024).

Friedrich Wilhelm Heinrich Alexander von Humboldt (Berlin, Prussia [Germany] 14 September 1769 – Berlin, Prussia [Germany] 6 May 1859) was a German polymath, geographer, naturalist, explorer, and proponent of Romantic philosophy, and science (Wikipedia 2024).

Aimé Jacques Alexandre (Goujoud) Bonpland (La Rochelle, France 22 August 1773 – Paso de los Libres, Argentina 11 May 1858), was a French physician, biologist, botanist, and natural historian (Wikipedia 2024).

Humboldt and Bonpland carried out a Spanish American expedition from 1799 to 1804. They arrived in Havana, Cuba on December 19, 1800 and stayed in Cuba until March 15, 1801 (Méndez 2009). They visited the current provinces of La Habana, Mayabeque, and Sancti Spíritus. In the surroundings of Havana, between February and early March, they collected two species of palms, and a third on March 7 to 8 around Batabanó, Mayabeque. From there they traveled by sea from March 9 to 14 to the southwest of Trinidad, Sancti Spíritus, where they collected the fourth species. During the sea journey from Batabanó, they visited several keys in southern Cuba, but on the night of March 15 they left Trinidad (Humboldt 1836) to travel to Cartagena de Indias (Méndez 2009).

Eduard Friedrich Poeppig (Plauen, Germany, 16 July 1798 – Leipzig, Germany 4 September 1868) was a German naturalist, explorer, pteridologist, zoologist, ornithologist, botanist, university teacher, and mycologist (Wikipedia 2024).

Poeppig visited Cuba from 1822 to 1824. He arrived in Havana on July 1, 1822 and departed Cuba on May 22, 1824. In Matanzas he was on the “banks of the three rivers Rio Canimar, Yumury and San Juan, which flow into the Bay of Matanzas, also Laguna de Palos east of Matanzas, Limonar (Lemonal) and the Lomas de Caverna, Sumidero, mons Sabanasso, Cahoba [Caoba], S. Anna-Cavalleros [Santa Ana de Caballeros], S. Elena [Santa Elena], lagoons of las Piedras” (Urban 1896).

It is curious that the first five collections of Arecaceae in Cuba belonged to five different genera that had already been collected in other countries, *Acrocomia*, *Coccothrinax*, *Copernicia*, *Roystonea*, and *Sabal*.

*Acrocomia*, placed by Dransfield et al. (2008) in the subtribe *Bactridinae* of the *Cocose* tribe of the subfamily *Arecoideae*, currently comprises eight species, three acaulescent and five arboreal

(Vianna 2017, Vianna et al. 2017), distributed from Central America to South America (Lima et al. 2018). For Cuba, two species are reported, *Acrocomia aculeata* in Central and Eastern Cuba and the endemic *Acrocomia crispa* with a pan-Cuban distribution (Moya and Leiva 2000, Moya 2024).

*Coccothrinax*, placed by Dransfield et al. (2008) in the Cryosophileae tribe of the subfamily Coryphoideae, was found to be monophyletic (Roncal et al. 2008) with support for a clade that includes four other genera, *Hemithrinax*, *Leucothrinax*, *Thrinax*, and *Zombia*. Read (1975) noted that *Coccothrinax* differed from these three genera in its conspicuously open or longitudinally split leaf bases forming an inverted V. *Coccothrinax* is widely distributed in the Caribbean basin and comprises about 61 species (POWO 2024). Cuba is richest for *Coccothrinax*, with about 41 species and a total of 48 taxa, all of them endemic except *C. fragrans* (Moya 2020b, 2024).

*Copernicia*, considered by Dransfield et al. (2008) as an unplaced member of the tribe Trachycarpeae of the subfamily Coryphoideae, occurs in South America and the Caribbean (POWO 2024). It comprises 21 species, three in South America, two in Hispaniola, and 16 in Cuba, where several natural hybrids occur (Dahlgren and Glassman 1963). In Cuba, 15 species, two varieties, and nine natural hybrids, all endemic, are currently reported for *Copernicia* with a total 26 taxa (Moya 2024).

*Roystonea*, placed by Dransfield et al. (2008) in the Roystoneeae tribe of the subfamily Arecoideae, occurs from South Florida (U. S. A.) to México and Venezuela, including the Caribbean (POWO 2024), with 10 species (Zona 1996). Five species occur in Cuba, the widespread *Roystonea regia* and four local endemics of Guantanamo province (Moya 2019, 2024).

*Sabal*, placed by Dransfield et al. (2008) in the Sabaleae tribe of the subfamily Coryphoideae, occurs from Bermuda to southeastern Oklahoma (U. S. A.) and then south to Venezuela, including the Caribbean, with 17 accepted species (POWO 2024). In Cuba, four species are documented (Moya 2024).

Moya (2020) reported the four species of palms that Humboldt and Bonpland discovered and collected in 1801 in Cuba, according to the information provided in Kunth (1816).

The goals of this study are to discuss and update the taxonomy and nomenclature of the first palms named and described for Cuba, which are based on the two expeditions of three great scientists, two German and one French, during the first three decades of the 19th century.

## Materials and Methods

I examined the protologues, descriptions, combinations, and status changes for the five palms species collected before 1825, including Kunth (1816, 1841), Martius (1831–1853), Sprengel (1825), Gómez de la Maza (1893), Cook (1900), Beccari (1907, 1912), Burret (1933), and Moore (1958). Particular attention was paid to matters of nomenclature and the designation and disposition of type specimens.

Also, I consulted other taxonomic and nomenclatural works, including Dahlgren and Glassman (1963), Read (1975), Stauffer and Stauffer (2017), Dransfield et al. (2008), Roncal et al. (2008), Vianna (2017), Vianna et al. (2017), and Moya (2021, 2024).

The distribution is according to Moya and Leiva (2000), Lima et al. (2018), Moya (2020a, 2020b), Moya and Hernández (2023), and POWO (2024).

I found a total of 12 specimens associated with the five species in seven herbaria: BR, G, HAC, NY, and P, BH (Reveal and Nixon 2013), and F (Dahlgren and Glassman 1963) (acronyms from Thiers 2024).

Wikipedia provided biographical data of the three scientists, unless otherwise specified.

For typification of the names, I followed the recommendations of the International Code of Nomenclature for algae, fungi and plants (Turland et al. 2018); in some cases, I consulted Code specialists.

## Results

The four species of palms that Kunth (1816) described from the collections of Humboldt and Bonpland (**Fig. 1**) and Poeppig in Cuba, were effectively and validly published (Turland et al. 2018: Art. 29-31, 43-45), but without stating where the specimens were deposited. Stauffer and Stauffer (2017, p. 9) determined that “The specimens associated with Humboldt’s largest part of the herbarium were studied by Kunth and therefore formed the main basis for the preparation of *Nova Genera*; these specimens are now stored in P-Bonpl.” Also, they considered that Kunth only had the specimens of P-Bonpl available for the descriptions, which is why they are considered holotypes; if other specimens are at P, they are isotypes.



1. Map of Cuba showing the route of Humboldt and Bonpland from La Habana to Trinidad. Modified from Méndez (2009).

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2. *Acrocomia crisper* is frequently a gregarious palm, as here near Rafael Freyre, Holguín Province. © 2016 D. R. Hodel.

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### Verification of the type locality of *Acrocomia crispa* by León and Shafer

Humboldt (1827) did not specifically refer to the type locality of *Acrocomia crispa* (**Fig. 2**), only noting it among the five species of palms as “the *Cocos crispa*” (p. 56) and referring to its general distribution “...the *Cocos crispa* of the northern coast” (p. 294). Kunth (1816) provided a slightly more specific location, “*Crescit in insula Cubae inter Havanam et Regla.*” Stauffer and Stauffer (2017), when designating a neotype for *A. crispa*, noted that they did not find type material at P, which, if present, might have identified the type locality.

Morales (1866, p. 61) not only doubted Kunth's description of *Cocos crispa*, but also Bonpland and Humboldt's collection, when he wrote, “The description is imperfect, very scarce, and of dubious justification; He made it with reference to a single individual who perhaps existed, according to his own quote, between Havana and Regla, a place where there were never ‘*corojales*’.”

However, on the afternoon of February 11, 1912, the French-Cuban botanist Brother León invited the American botanist J. A. Shafer on an excursion to ‘Loma de la Jata, Guanabacoa’. On their return to Havana they skirted to the south of Havana Bay, along the old Havana to Guanabacoa road (Fig. H-G), which also reached Regla. Shafer (1912) verified the town of the type of *Acrocomia crispa* when he wrote “. . ., by way of the old Havana-Regla road, on which is supposed to be the type locality of the mysterious *Cocos crispus* [*crispa*], and my previous opinion of its being based of plants of *Acrocomia* was confirmed by the presence near the road of several specimens of that plant.” The old road from Havana to Guanabacoa also linked Regla with Havana and is likely where Humboldt and Bonpland collected their “*Cocos crispa*” (**Fig. 3**). Therefore, the type collection is confirmed for the current municipality of Regla.

***Acrocomia crispa*** (Kunth) C. F. Baker ex Becc., *Pomona Coll. J. Econ. Bot.* 2: 364. 1912.

(**Fig. 2**).

≡ *Cocos crispa* Kunth, *Nov. Gen. Sp.* 1: 302. 1816.

≡ *Astrocaryum crispum* (Kunth) M. Gómez, *Noc. Bot. Sist.*: 50. 1893.

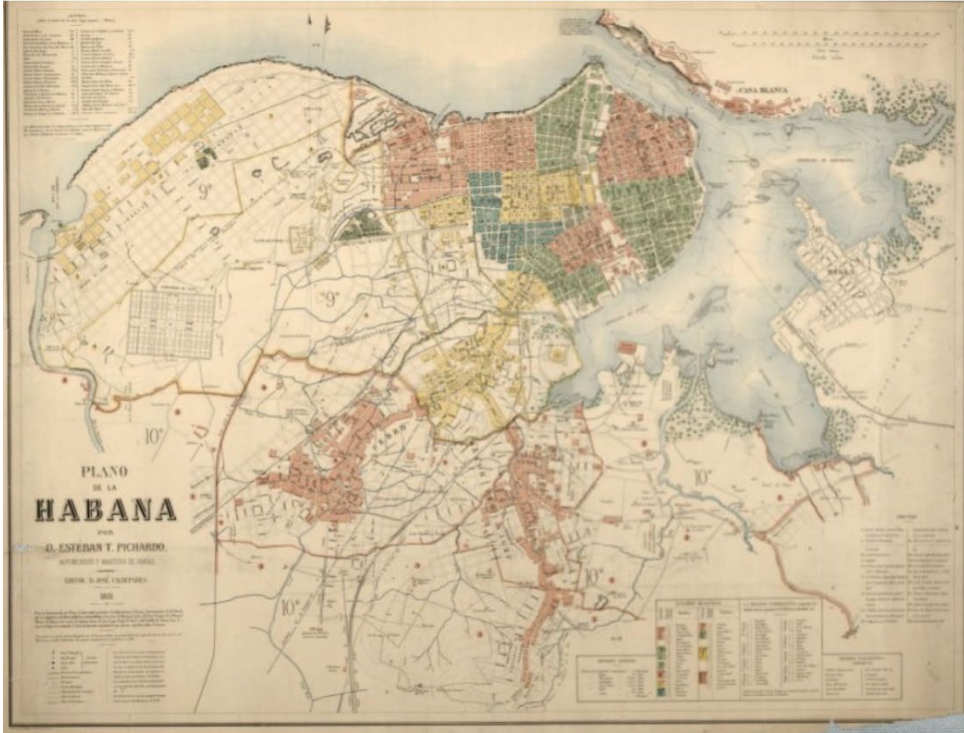
≡ *Gastrococos crispa* (Kunth) H. E. Moore, *Principes* 11: 121. 1968. [Cuba].

= *Acrocomia armentalis* (Morales) L. H. Bailey & E. Z. Bailey, *Hort. Sec.* 22. 1941.

≡ *Gastrococos armentalis* Morales, *Repert. Fis.-Nat. Isla Cuba* 1: 57. 1866.

**Type.** CUBA. [La Habana province, Regla municipality], “*Crescit in insula Cubae inter Havanam et Regla,*” [Feb. 1801], (holotype *Bonpland and Humboldt s.n.*, P and P-Bonpl., not found; neotype,





3. Maps of Havana. The red circles indicate the connection of Regla with Havana on the Havana to Guanabacoa road since the beginning of the 19th century. Pichardo (1881) noted that it had been discontinued.

designated by Stauffer and Stauffer 2017: 18. Villa Clara province, Santa Clara municipality, Santa Clara, serpentine hill “La Lanza” west of Manajanabo, 3 Aug. 1915, fr., *León and Gustave 5292*, NY 1662973; isoneotype HAC ex LS 4140!).

**Geographical Distribution.** CUBA. Provinces Artemisa (Artemisa, Candelaria), Camagüey (Camagüey, Jimagüayú, Najasa, Nuevitas, Sierra de Cubitas), Ciego de Ávila (Baraguá), Cienfuegos (Abreus, Aguada de Pasajeros, Cienfuegos, Cruces, Cumanayagua, Palmira, Rodas, Santa Isabel de las Lajas), Granma (Guisa, Pílon), Holguín (Báguanos, Cacocum, Calixto García, Cueto, Gibara, Holguín, Rafael Freyre), La Habana (Arroyo Naranjo, Boyeros, La Lisa, Marianao, Playa, Regla, Santiago de las Vegas), Las Tunas (Manatí, Puerto Padre), Matanzas (Ciénaga de Zapata, Jagüey Grande, Limonar, Martí, Matanzas), Mayabeque (Melena del Sur, Nueva Paz), Pinar del Río (Viñales), Villa Clara (Caibarién, Camajuaní, Corralillo, Remedios, Santa Clara, Santo Domingo), Sancti Spíritus (Cabaiguán, Fomento, Jatibonico, Sancti Spíritus, Trinidad, Yaguajay), Santiago de Cuba (Santiago de Cuba), municipio Isla de la Juventud.

**Biogeographical distribution.** Province CUBA, Western Cuba subprovince: sectors Pinaricum (Geronense, Pinarense); Central Cuba subprovince: sectors Havanicum (Casildense, Güinense, Jarucoense), Camagüeyicum (Camagüeyense, Cautoense, Claraense, Guaimarense, Holguínense, Sagüense); Eastern Cuba subprovince: sectors: Maestricum (Guantanamense, Pilonense).

**Notes.**

The original collection locality is verified and its current municipality is confirmed. The year of collection is updated according to Humboldt (1827) and the month according to Kunth (1816). Stauffer and Stauffer (2017) did not locate the type material at P; the specimen at HAC is added as an isoneotype.

***Coccothrinax miraguama* (Kunth) Becc.,** *Webbia* 2: 295. 1907 ‘*miraguano*’. (Fig. 4).

≡ *Corypha miraguama* Kunth, *Nov. Gen. Sp.* [H.B.K.] 1: 298. 1816.

≡ *Copernicia miraguama* (Kunth) Kunth, *Enum. Pl.* 3: 244. 1841.

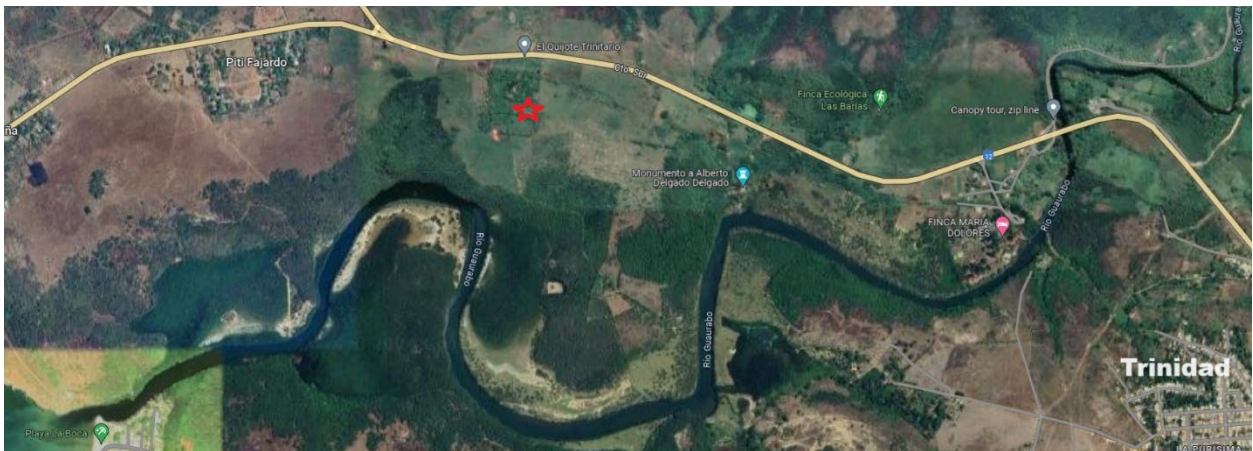
≡ *Thrinax miraguama* (Kunth) Mart. *Hist. Nat. Palm.* 3: 320. 1853. ‘*miraguano*’.

**Type:** CUBA. [Sancti Spíritus province, municipio Trinidad municipality], “*Crescit in maritimis Insulæ Cubæ inter urbem la Trinidad, Puerto Casilda et ostia fluminis Guaurabo*”, [14 Mar. 1801], *Bonpland and Humboldt 1356* (holotype, specified by Stauffer and Stauffer 2017: 18, [P-Bonpl.] P 000669605; isotype P 00725687).





4. *Coccothirnx miraguama* is near the west bank of the Guaurabo River, and in the background is Heights of Trinidad. © 2017 C.E. Moya. *Serie Moya 1733*.



5. Red star shows location of *Coccothirnx miraguama* on west bank of the Guaurabo River, eastern Trinidad, in Figure 4. Modified from Google Earth image.





6. Here is *Copernicia hospita* in Camagüey Province. © 2018 D. R. Hodel.





**7.** *Copernicia hospita* makes an impressive presence at the type locality in the Lomas de Santa Ana, Matanzas Province, 12 June 2021. © 2021 Yasiel Hernández Rivero. *Serie Moya 2101*.

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**Geographical Distribution.** CUBA. Camagüey (Camagüey, Céspedes, Esmeralda, Florida, Guáimaro, Jimaguayú, Minas, Najasa, Sierra de Cubitas), Ciego de Ávila, Cienfuegos, Matanzas, Sancti Spíritus (La Sierpe, Sancti Spíritus, Trinidad) (**Fig. 5**), Villa Clara.

**Biogeographical Distribution.** Province CUBA, Central Cuba subprovince: sectors Havanicum (Cascajalense, Güinense), Trinidadicum (Spirituense, Trinidadense), Camagüeyicum (Camagüeyense, Claraense, Gibarense, Guaimarense, Holguínense, Sagüense).

**Notes.**

The date of collection is updated according to Humboldt (1827, p. 329).

***Copernicia hospita*** Mart., Hist. Nat. Palm. 3: 243. 1838. (Figs. 6–7).

**Type.** CUBA. Matanzas province, Jovellanos municipality, “*Crescit in Cubae australis campis montosis aridis copiose*” [Lomas de Santa Ana], 1823, *Poeppig s.n* (lectotype, [first step], Dahlgren and Glassman 1963: 135, BR, [second step], designated by Moya 2021: 13, (icon, Table 50. A, Figs. V. 1, 2, 3 and 4, in Martius 1824 [1831–1853]; isolectotypes: BH 000280999 [photo BR], BR 0000005639854, F [photo, n.v.]).

**Geographical Distribution.** CUBA. Provinces Camagüey (**Fig. 6**) (Camagüey, Florida, Minas, Nuevitas, Sierra de Cubitas, Esmeralda, Jimaguayú), Ciego de Ávila (Baraguá, Florencia), Cienfuegos (Abreus, Cienfuegos, Rodas), Matanzas (Jovellanos) (**Fig. 7**), Sancti Spíritus (Cabaiguán, Fomento, Jatibonico, La Sierpe, Sancti Spíritus, Trinidad, Yaguajay), Villa Clara (Corralillo, Placetas, Santo Domingo).

**Biogeographical Distribution.** Province CUBA, Central Cuba subprovince: sectors Havanicum (Casildense, Jarucoense, Güinense), Camagüeyacum (Camagüeyense, Claraense, Guaimareense, Sagüense), Trinidadicum (Spirituense, Trinidadicum).

**Notes.**

The year of collection is updated according to BR 5639854. After 198 years, Moya (2021) identified the type locality as Lomas de Santa Ana in the Jovellanos municipality of the Matanzas Province.

In Figure 5 in the analysis of the illustration in Martius (1838 [1831–1853]), Martius wrote “*ICON. EXPL. Tab. 50. A. Fig. V. 1. Ramulus floridus, magnitudine duplo auctus. 2. Flos, corolla aperta, magnitudine decies aucta. 3. Pistillum et 4. Ídem, apertum, magnitudine aucta,*” which translated means: 1. the distal partial inflorescences branches have the rachillae double their actual size; 2. the open floral corolla is 10 times its actual size; 3. pistil; 4. the pistil in actual size. The figures (icon) in Table 50 are from *plantillustrations.org* (2021).

***Roystonea regia*** (Kunth) O. F. Cook, Science, 12(300): 479. 1900. (**Fig. 8**).

≡ *Oreodoxa regia* Kunth, Nov. Gen. Sp. [H.B.K.] 1: 305 (ed. qu.). 1816, nom. cons.

≡ *Oenocarpus regius* (Kunth) Spreng., Syst. Veg. 2: 140. 1825.





8. *Roystonea regia* is a handsome, common, and gregarious palm throughout Cuba, as here at Arroyo Blanco, Sancti Spíritus Province. © 2016 D. R. Hodel.



1276. Palma real — très commune dans l'Isle de Cuba, près de la Havane, Regla, ojo de agua, Guanavacoa... La même culture dans les Indes de Caracas (jus de tout à Barcelone et au Mexique. Bonpland ne l'a trouvée sauvage qu'à dans l'Amérique méridionale qu'à Curiepe entre le Cap. Codera et Caracas. Palma fol. pinnatis caud. inermi fastigiatis, toujours plus gros vers le milieu, trois jeux de feuilles au sommet. Spadix monog. spathe univerralis; 1 phylle... spadix ramosus, ramis alternis albis compressis ad axillam subgeniculatis. Cal. 1 phylle viridis tripartitus, laciniis concavis acutis. Corolla 1 petala profunde 3 lobata ~~ph~~ petalis lanceolatis acutis concavis albis. Stam 6. anth. lanceolata filamentis basi dilatatis [les filaments se forment très tard et les anthères ne naissent pendant longtemps subsessiles] Semen ovatum subtriangulaire obtusum. Stigma et styl. 0. Drupa ovata 4 linearis [semblable à la noix de Cofee] jeune rouge, mure bleu obscur. Calyce cineta persistente. Nuc. ovata glabra. Nucleus solidus albus. Drupa succulenta. le cadon la margent ciliée très acce. aucun genre 1 y rapporte. Tous les Palmes fol. pinnatis de Tuffien font monoecia ou dioecia...

A

### B 3. OREODOXA REGIA. †

O. caudice medio incrassato; frondibus pinnatis.

Palma real incolarum.

Crescit frequentissime in insula Cuba prope Havana, Regla, Ojo de Agua et Guanavacoa. Floret Majo.

CAUDEX septem- aut novemorgyalis, medio incrassatus, inermis. FRONDES paucæ, pinnatæ. SPATHA monophylla. SPADIX ramosus; ramis alternis, albis, compressis, ad axillam subgeniculatis; ramulis floribus densissime obsitis, spicæformibus, tri- aut quadripollicaribus. FLORES omnes hermaphroditæ. CALYX duplex; exterior minimus, planiusculus, tripartitus; laciniis subrotundo-ovatis, acutis, concavis, viridibus; interior tripartitus; laciniis oblongis, acutiusculis, concavis, striatis, candidis. STAMINA sæpissime sex, interdum septem aut octo. FILAMENTA basi calycis interioris inserta, inferne dilatata. ANTHERÆ oblongo-lineares. OVARIUM ovatum, subtriangulum. STYLUM et STIGMA non vidi. DRUPA succulenta, ovata, quatuor lineas longa, immatura rubra, matura nigro-cærulea, calyce persistente cincta; nucis ovata, glabra. SEMEN album.

Fructus sapore acri a subis eduntur.

Nam eadem ac Palma real de Caracas, quæ a Caracasanis et Cumanensibus ob formositatem speciei colitur, quamque Bonplandius in convalli Curiepensi, inter Promontorium Codera et urbem Caracas, sponte sua nascentem reperit.

Structura calycis et staminum prorsus ut in Cocoe nucifera. An genus novum constituens?

Genus Oreodoxæ generi Martinezie proximum eique forte aptius associandum.

9. Original descriptions of the Cuban royal Palm (*Oreodoxa regia* Kunth): A. Entry 1276 in the "Journal Botanique" (MS1332) [© Bibliothèque Centrale, Muséum National d'Histoire Naturelle, Paris]; B. Entry in *Nova genera* 1: 305. 1816. © Stauffer and Stauffer (2017).

= *Palma elata* W. Bartram, Travels Carolina: iv, 115. 1791.

≡ *Roystonea elata* (W. Bartram) F. Harper, Proc. Biol. Soc. Wash. 59: 29. 1946, nomen rejec. [U. S. A.]

= *Roystonea floridana* O. F. Cook, Bull. Torrey Bot. Club 28: 554. 1901. [U. S. A.].

= *Euterpe jenmanii* C. H. Wright, Bull. Misc. Inform. Kew 1906 (6): 203. 1906.

≡ *Roystonea jenmanii* (C. H. Wright) Burret, Bot. Jahrb. Syst. 63: 76. 1929. [Guyana, cultivated].

= *Euterpe ventricosa* C. H. Wright, Bull. Misc. Inform. Kew 1906(6): 203. 1906.

≡ *Roystonea ventricosa* (C. H. Wright) Bailey, Gentes Herbarum 8: 133. 1949. [Guyana, cultivated].

= *Roystonea regia* var. *hondurensis* P. H. Allen, Ceiba 3: 17. 1952. [Honduras].

**Type.** CUBA. La Habana province, “*Crescit frequentissime in insula Cuba prope Havana, Regla, Ojo de Agua et Guanavacoa*”, fl., [Feb.-Mar. 1801], *Bonpland and Humboldt 1276* (holotype, specified by Stauffer and Stauffer, 2017: 20 (P-Bonpl. P 00669609; isotypes: P 00725181, G 00422005 [frag. ex P])).

**Geographical Distribution.** U. S. A. (Florida: Collier, Dade counties), México (Campeche, Tabasco, Veracruz, Yucatán), Belice, Honduras (Atlántida, Cortés), Cuba, Bahamas (Little Inagua), Caimán Is. (Gran Caimán) (Zona 1996). CUBA. All provinces.

**Biogeographical Distribution.** CUBA. All provinces.

**Notes.**

The date of collection is updated according to Kunth (1816) and the specimen G 422005 is added as an isotype.

Stauffer and Stauffer (2017) published the unpublished manuscript (MS 1332), third volume of the Journal Botanique, referring to ‘Palma real’, and containing the original description (**Fig. 9**), which they annotated, “This palm was collected under the collection number 1276 near Havana, and its description helps us understanding the extent to which representatives of the palm family were important for the two explorers. The handwriting indicates that this entry can be unequivocally attributed to Humboldt, whereas the name for the species proposed in a side note





**10.** *Sabal maritima* occurs near San Francisco de Porcayo, Camagüey, Province. © 2018 D. R. Hodel.

(*Oreodoxa regia* Kunth) corresponds to Bonpland's handwriting." According to article 46.4 of the Code, the previous description is not validly published.

***Sabal maritima*** (Kunth) Burret, Repert. Spec. Nov. Regni Veg. 32: 101. 1933. (Fig. 10).

≡ *Corypha maritima* Kunth, Nov. Gen. Sp. 1: 298. 1816.

≡ *Copernicia maritima* (Kunth) Kunth, Enum. Pl. 3: 244. 1841. [Cuba].

= *Sabal florida* Becc., Webbia 2: 46. 1907. [Cuba].

= *Sabal jamaicensis* Becc., Repert. Spec. Nov. Regni Veg. 6: 94. 1908. [Jamaica].

**Type.** CUBA. [Mayabeque province, Batabanó municipality], "*Crescit in littore australi Insulae Cuba prope pagum Batabano*", [7-8 Mar. 1801], *Bonpland and Humboldt 1355* (lectotype, designated by Stauffer and Stauffer 2017: 18, P 00725626 [frag.]; isolectotype: HAC! [photo P]).

**Geographical Distribution.** CUBA and Jamaica (Zona 1990). The distribution for Cuba is under review.

**Biogeographical Distribution.** Under review.

#### **Notes.**

Stauffer and Stauffer (2017) explained that they ". . . could not find any original material associated to this palm at P-Bonpl.," for that reason they considered that "this material was never available to Kunth and his description of the palm in *Nova genera* was most probably based on the original field notes noted down in the "Journal Botanique." Therefore, the latter cannot be considered as the holotype of the species and is designated the lectotype."

The date of collection is updated according to Humboldt (1827, pp. 292, 295), and photo of material at P in HAC is added as an isolectotype.

### **Acknowledgements**

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the review of the collections; to my friend Olivia Rivero for coordinating transportation from Varadero; and to colleague Yasiel Hernández Rivero who managed to rediscover the typical locality and send me his excellent photos. I thank an anonymous reviewer for checking the manuscript. All have my sincere thanks.

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