A New Species of Copernicia from Cuba

B. E. DAHLGREN and S. F. GLASSMAN

During the past two years we have undertaken a revision of *Copernicia*. This project is an outgrowth of the senior author's field work in Brazil and Cuba of the past 25 years. The following new species is being published to clarify one of the many problems now being studied in this genus.

Copernicia Leoniana Dahlgren & Glassman, sp. nov.

Tree 4-5 m. tall. Trunk about 15 cm. in diameter. Petiole 20-30 cm. long, apex 4-5 cm. wide, margins armed with robust spines; ligule 1-12 cm, long. Leaf blade cuneiform at base, margins armed with spreading spines; blade segments 60-65 in number, central one 110-120 cm. long, green on both surfaces, with conspicuous red stegmata. Spadices up to 2.80 m. long; lower spathes glabrous, upper ones more or less pilose. Flowering branches 1-1.5 cm. long, 0.4-1 cm. wide, all of the spathelets more or less pilose. Flowers 4-5.5 mm. long, densely clustered, bracteoles ovate, densely pilose, 2-4 mm. long; calvx pilose on the outside, corolla tomentose on the outside, lobes triangular-elongate; stamen ring 3-lobed; ovary sculptured above, glabrous. Fruit subglobose, 16 x 14 mm. in diameter, seed 10 x 9 mm.

Palma 4-5 m. (fide León) alta. Caudex circa 15 cm. (fide León) in diameter Petiolus 20-30 cm. longus, apice 4-5 cm. latus, margine spinis robustis armatus; ligula 1-12 cm. longa. Lamina cuneata, margine spinulis dispersis armata; segmenta laminae 60-65, centralia 110-120 cm. longa, utrinque viridia, glabra, cum punctis conspicuis rubris notata. Spadices usque ad 2.80 m. longa; spathae inferiores glabrae, superiores plus min-

usve pilosae. Ramuli floriferi 1-1.5 cm. longi, 0.4-1 cm. lati, omnibus spathellis plus minusve pilosis. Flores 4-5.5 mm. longi, dense glomerati, bracteolis ovatis, copiose pilosis, 2-4 mm. longis; calyx extus pilosus, corolla extus tomentosa, lobis elongato-triangularibus; staminium annulus 3-lobatus; ovarium supra exsculptum, glabrum. Fructus (fide León) subglobosus, 16 x 14 mm. in diam., semen 10 x 9 mm.

Specimens examined: SANTA Trinidad. CLARA: Potrero Manatí, March 19, 1856-1860, Wright 3969a (TYPE, A-2 sheets, inflorescence in flower and young fruit, and leaf; isotypes, A, F, GH, NY); near Macio Bay, near Casilda, Trinidad, June 27, 1931, León 14922 (A, MT, NY) February 2, 1949, Dahlgren & Cutler 49/069 (F); Finca Molina, Trinidad, March 1, 1951, Dahlgren & Macbride 51/052 (F); Florecita, railroad stop north of Anton Recio, January 23, 1949. Dahlgren & Cutler 49/017 (F); CAMAGUEY: savanna north of Cromo, Camaguey, February 8, 1949, Dahlgren & Cutler 49/ 041 (F); Finca Santa Rosa, April 1, 1950, Dahlgren 50/016 (F); Sabana de Juan Grande, Finca Buena Vista de Eduardo Saldibar, February 7, 1952, Dahlgren & G. Moore 52/028 (F); La Carbonera, January 24, 1953, Dahlgren 53/ 003, 53/004, 53/005 (F); west of Caobillas, Finca de Luiz Gomez, Dahlgren & G. Moore 54/010 (F).

This species has long spiny petioles, inflorescence branches 0.4-1 cm. in diameter, flowers 4-5.5 mm. long, and floral bracts 2-4 mm. long; whereas *C. macroglossa* Wendl. ex. Becc. has no petiole or only a very short one, inflorescence branches 0.8-2 cm. in diameter, flowers

5-8 mm. long, and floral bracts 5-7 mm. long.

León apparently intended to publish

this species as new; instead he published both C. Burretiana León and C. Torreana León as synonyms of C. macroglossa



Fig. 54. Copernicia Leoniana. A mature tree at La Carbonera, Province of Camaguey, Cuba. (Dahlgren 53/004).

(Rev. Soc. Geogr. Cuba IV, 2: 10-12. 1931; Mem. Soc. Cubana Hist. Nat. 10, 4; 208-209. 1936). We are describing this species in honor of Brother León, late Director of the Colegio de la Salle in Hayana.

The writers are most grateful to Dr. Francis Drouet of the Chicago Natural

History Museum without whose help this paper could not have been written. We would also like to thank the curators of the various herbaria (indicated here by the abbreviations proposed by Lanjouw and Stafleu, *Index Herbariorum*, Part I, Ed. 3, 1956) for the privilege of studying the specimens cited here.

Helminthosporium Leafspot of Palms*

A. P. MARTINEZ

State Plant Board, Gainesville, Florida

The royal palm grower has become alarmed at the destruction that is being wrought by a fungus on palms of all ages. The most critical period is from the seedling stage to five years of age. The primary symptoms of infection are oval to irregular slightly sunken spots with tan centers and definite light green to yellowish-green margins. The fungus, under ideal conditions, sporulates readily on these spots and the spores are disseminated by wind and water to form new infections. These spots may coalesce to form large necrotic areas. At this stage secondary fungi invade the affected plant parts and hasten breakdown of the tissue. The condition prevails until all the foliage is killed and only the stem and leaf rachis remain.

The fungus, Helminthosporium, has been recovered consistently in culture. Experimental inoculations have revealed that it is capable of causing primary infection on healthy foliage of seedling palms. The cardinal temperatures for fungus growth are: maximum—96.8°F.; optimum—82.4°F.; minimum—46.4°F.

This malady on palms is not new to Florida. The University of Florida

*Presented at the Palm Conference, Fairchild Tropical Garden, April 18, 1958.

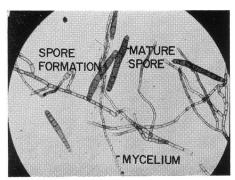


Fig. 55. *Helminthosporium* sp. enlarged 330 times.

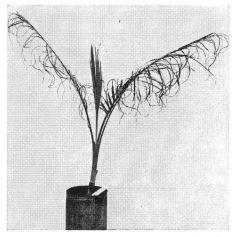


Fig. 56. Typical curling or shredding of the leaflets is shown on this seedling royal palm. The new leaf is normal.