

## CANDOLLEODENDRON, A NEW GENUS OF THE LEGUMINOSAE (CAESALPINIOIDEAE)

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When I studied the type of *Swartzia brachystachya* A. P. DC. in the DeCandolle Herbarium in 1953, I doubted that the species could be left in the genus to which it had been assigned by DeCandolle, but I was reluctant to make that decision with no other material available for study. Then, two Froes collections were received in materials borrowed from the Instituto Agronômico do Norte at Belém, Brazil; there is no doubt whatever that DeCandolle's type and these Brazilian collections are in all respects conspecific.

I have chosen the name for the new genus to commemorate one of the most perceptive pioneers in the study of tropical legumes, Aug. Pyrame DeCandolle.

**Candolleodendron** Cowan, gen. nov.

A *Swartzia* antheris basifixis uniformibus, stigma unilaterale stylo saepe curvato ad apicem differt; a *Zollernia* alabastris globosis vel late ovalibus, petalo uno, foliis pinnatis, stigma unilaterale differt.

TYPE SPECIES: *Candolleodendron brachystachyum* (A. P. DC.) Cowan.

**Candolleodendron brachystachyum** (A. P. DeCandolle) Cowan, comb. nov. *Swartzia brachystachya* A. P. DeCandolle, Prod. 2: 423. 1825: Mem. Leg. 408. May 1826.

Tree 3-7 m. tall, the branchlets glabrous and nitid, the stipules minute, triangular, ca. 0.4 mm. long and wide; leaves glabrous, pinnate, the petioles 4-6.5 cm. long, terete, the rachis terete, slender, 7.5-10 cm. long; leaflets 2-jugate, strongly discolored, much paler beneath, elliptic, the base acute, the apex acute to subacuminate, the venation plane above but salient beneath, the primary vein-branches strongly ascending; inflorescence 8-9 cm. long, ramuligerous, the axis sparingly strigulose, the bracts persistent, triangular, ca. 0.4 mm. long and wide, minutely strigulose and ciliolate sparingly, the bracteoles lacking; pedicels 8-11



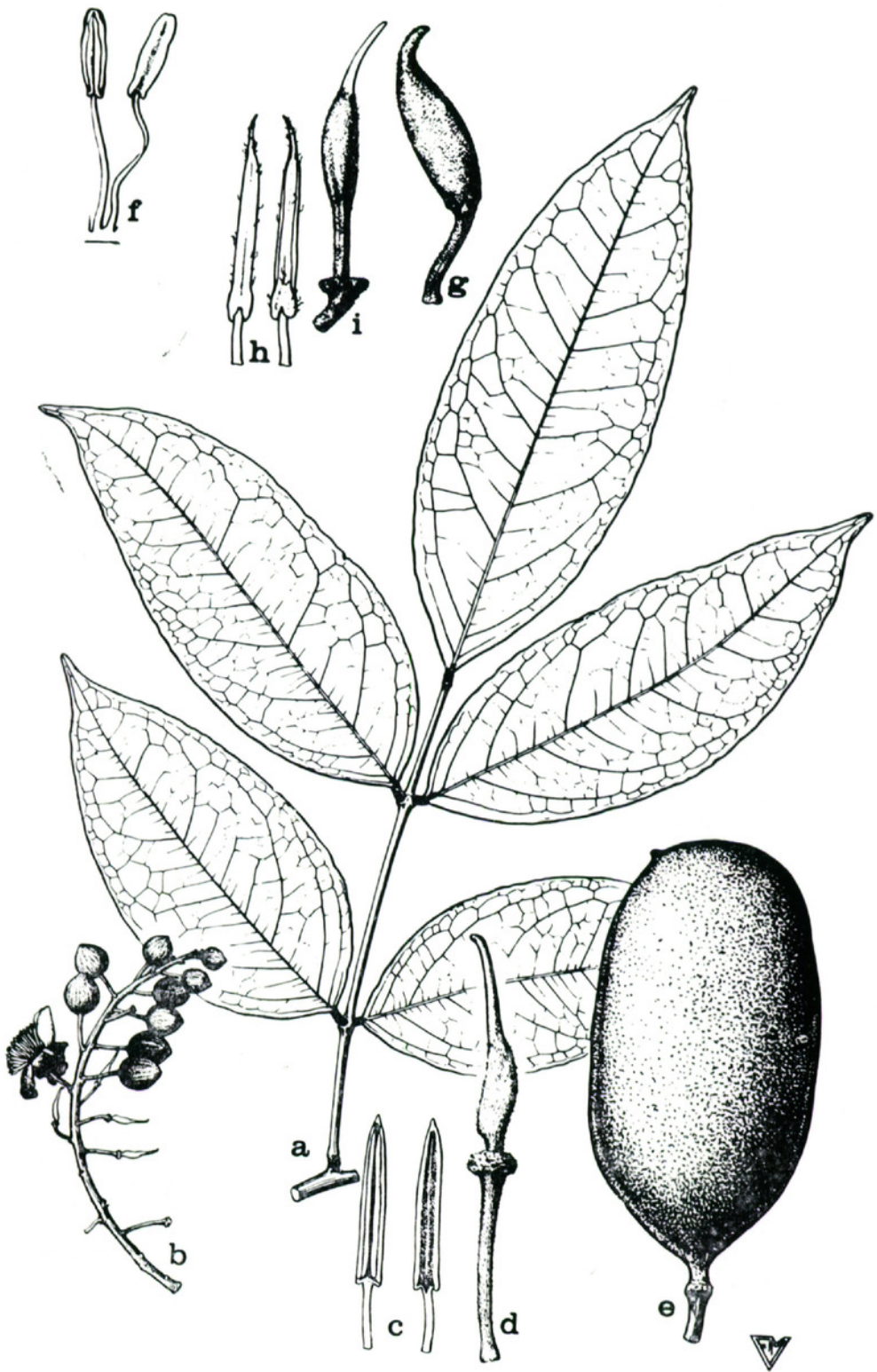


Figure 1. — a-e, *Candolleodendron brachystachyum* (a-d from Froes 32364, e from Froes 32975): a, leaf,  $\times \frac{1}{2}$ ; b, inflorescence,  $\times \frac{1}{2}$ ; c, inner and outer faces of stamens,  $\times 4$ ; d, gynoecium,  $\times 4$ ; e, fruit,  $\times 1$ . f, stamens of *Bocoa* sp.,  $\times 4$ . g-i, *Zollernia* sp., g, bud,  $\times 3$ ; h, stamens,  $\times 4$ ; i, gynoecium,  $\times 4$ .



mm. long, slender, sparingly strigulose, the buds globose to broadly oval in outline, sparingly strigulose, 9-11 mm. long and wide; calyx entire in the bud but opening in about four more or less equal segments, glabrous within, sparingly strigulose and irregularly striate externally, the striae brownish-red and longitudinally oriented; petal one, yellow, glabrous, the claw ca. 1.5 mm. long, the blade oval, concave, ca. 15 mm. long and 10 mm. wide; stamens numerous, uniform, glabrous, the filaments 1-2 mm. long, ligulate, the anthers basifixed, linear-lanceolate, acute to subacuminate, 5-6 mm. long, 0.6-0.8 mm. wide; gynoecium excepting the style sericeous, the stigma unilateral, obliquely oriented relative to the style, truncate, the style slightly uncinatate or merely curved apically, 3.5-4.5 mm. long, glabrous, the ovary narrowly oblong, 3.5-4.5 mm. long, 1-1.5 mm. wide, the gynophore 0.4-0.8 mm. long; fruit (mature) oblong to oblong-oval, elliptic in cross-section, ca. 5.5 cm. long, 2.5-3 cm. wide, glabrous but finely tessellate (drying?) and distinctly verruculose (sublente), the carpophore ca. 2.5-3 mm. long, minutely strigulose; seeds not seen.

TYPE: *J. B. Patris* s. n. (holotype G-DC), "Cayenne."

Distribution: Lowland soils above level of seasonal inundation in French Guiana and along the lower reaches of tributaries of the Amazon River near its mouth.

Additional specimens examined:

BRAZIL: Pará: Municip. Porto do Móz: Left bank of Rio Xingú at Souzel, *Froes 32354* (IAN); Portel, Rio Tapacú, vicinity of the Rio Anapú, *Froes 32975* (IAN).

Earlier, in the course of my review of *Swartzia* and related genera, I had questioned the supposed near relationship of *Zollernia*, as well as that of several other presumed relatives. The new genus combines characteristics of *Swartzia*, *Zollernia*, and *Bocoa*; the latter shares with the new genus a common aspect of the leaves but there are obviously more characters in common with the other two relatives. The buds and petals of *Candolleodendron* are much like those of *Swartzia* but the basifixed, linear-lanceolate anthers and the form of the gynoecium are much more suggestive of *Zollernia*. Unlike either relative, *Candolleodendron* has



the style apex abruptly hooked or curved, with the stigmatic surface unilaterally disposed.

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OBSERVATIONS REGARDING THE OCCURRENCE  
AND RELATIONSHIPS OF *RUELLIA LORENTZIANA*  
(*ACANTHACEAE*) IN SOUTHERN FLORIDA<sup>1</sup>

For a number of years taxonomists interested in the flora of southern Florida have been aware of a *Ruellia* not described in Small's manual of the Flora of Southeastern United States. Thus far the plant is known only as a naturalized weed on the grounds of the University of Florida Subtropical Experiment Station and immediate environs in Homestead, but it appears to be spreading aggressively into neighboring fields, particularly those disturbed by agriculture. Identification of these plants proved difficult, and transplants were grown in the experimental garden of the University of South Florida in order that individuals could be observed over a period of time. Vigorous plants yielding abundant fertile seeds were produced (fig. 1). They were compared with transplants of other species of *Ruellia* and proved to be distinctly unlike any other taxon from eastern United States, but similar to transplants of *R. occidentalis* (A. Gray) Tharp & Barkley (*R. nudiflora* Urban var. *occidentalis* Leonard) from Texas. Preliminary crossing attempts indicated that the unknown plants were intersterile with eastern United States taxa such as *R. caroliniensis* (J. F. Gmel.) Steud. and *R. succulenta* Small, but cross compatible with *R. occidentalis*.

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