

## THE GENUS JUSSIEUA L. (OENOTHERACEAE) IN SURINAME

by

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Of the family *Oenotheraceae* the genus *Jussieua* is the only one occurring in Suriname. The peculiar *Oocarpon torulosum* (Arn.) Urb., which has been recorded from Amazonian Peru, Brazil, British and French Guiana, Cuba and Santo Domingo, has up till now not been collected in the colony, but on account of its presence in the neighbouring countries it is there also to be expected.

As for the name of the only Suriname genus, it was spelled by LINNAEUS in *Genera Plantarum*, ed. I (1737), p. 126, *Jussieua* but afterwards in his *Flora Zeylanica* (1747), p. 75, changed in *Jussiaea*.

In the *Species Plantarum* (1753), p. 388, also this second spelling is found. In the 5th edition of the *Genera Plantarum* (1754), p. 183, the starting point for the nomenclature of the generic names, also the spelling *Jussiaea* was used. Yet, as the genus was named in honour of the brothers DE JUSSIEU, I hold myself entitled to use the spelling *Jussieua* and to consider *Jussiaea* as an orthographic variant.

Two subdivisions of the genus have been published. The first one is by MICHELI; it is based on the shape of the seed and on the presence or absence of a coat, formed by the endocarp. The second is by SMALL, who divided the genus into two sections: *Diffusae*, diffuse, creeping or floating plants; and *Erectae*, erect plants with more or less branched stems. As the subdivision of MICHELI is sharp and, in my opinion, quite serviceable and as SMALL's subdivision, on the contrary, is rather vague, I gave preference to the former and have used it in my revision of the Surinamian *Jussieuas* for PULLE's *Flora of Suriname*, Vol. III. 2.

Of the section *Oligospermum* Mich., characterized by the presence round the ripe seed of a thick, prismatic to shoe-shaped, corky coat, formed by the endocarp, 3 species occur in Suriname: *J. limifolia* Vahl, *J. leptocarpa* Nutt., and *J. affinis* DC. The section to which these species belong, is recognizable only when perfectly ripe seeds are available, for otherwise the coat round the seed has not yet

developed and without this coat the seeds resemble those of the section *Eujussieua*.

*Jussieua aluligera* Miq. has been considered by MICHELI and PULLE as a synonym of *J. leptocarpa* Nutt. (*J. pilosa* H.B.K.). MIQUEL's type specimen however is quite glabrous and later on several other collectors also collected glabrous specimens, and as *J. leptocarpa* is distinctly villose, these specimens represent in my opinion a distinct variety of *J. leptocarpa*. For this variety I propose here the new combination *J. leptocarpa* Nutt., var. *aluligera* (Miq.) Jonk. Presumably *J. variabilis* Mey., *J. pilosa* H.B.K., var.  $\beta$  Mich. in Mart., Flor. Bras. XIII. 2 (1877), p. 164, and *J. leptocarpa* Nutt., var.  $\beta$  Urban in Symb. Antill. IV (1910), p. 467, are to be regarded as synonyms.

Of *J. affinis* DC. I describe here a new variety; whereas *J. affinis* is densely hirsute, this also is a glabrous plant, but it is characterized moreover by its peculiar 2- to 13-flowered, axillary, peduncled inflorescences (see fig. 1). This variety has been collected only once.

***Jussieua affinis* DC., var. *multiflora* Jonk.**

Caulis erectus, robustus, glaber, fere 1,5 m longus. Folia ovata, acuta vel acuminata, glabra, usque ad 13,5 cm longa et 4,5 cm lata, petiolo 0,5—2,5 cm longo. Inflorescentia axillaris, pedunculata, floribus 2—13; pedunculi crassi, conici, 2—9 mm longi. Flores subsessiles, pro parte steriles. Sepala et hypanthium glabra. Capsula sessilis vel brevissime pedicellata. Pedicellus usque ad 4 mm longus (Vide fig. 1). Surinamo, ad fluv. Litani legit VERSTEEG n. 344 fl. et fr. 4-XI-1903. Typus in herbario Rheno-Trajectino (Utrecht),

The section *Macrocarpon* Mich. is characterized by seeds, provided with a groove, which separates it from the very conspicuous raphe; the latter simulating an empty cell attached to the seed. It is represented in Suriname by two species: *J. suffruticosa* L. and *J. octonervia* Lam.; the second is new for the colony. This species has often been united with *J. suffruticosa* but Micheli definitely separated the two species. In his opinion *J. octonervia* is a very polymorphous species of which the Brazilian representatives differ from *J. suffruticosa* by the leaves being hirsute and ovate to lanceolate-ovate and not (sub)glabrous or sparsely pilose and narrowly lanceolate. Moreover the capsule is hirsute, narrowed toward the base and longer than the leaves, whereas in *J. suffruticosa* it is almost glabrous, scarcely narrowed toward the base and shorter than the leaves. The form with sessile flowers, which is rather abundant in Brazil, and has been figured in Flora Brasiliensis XIII. 2,

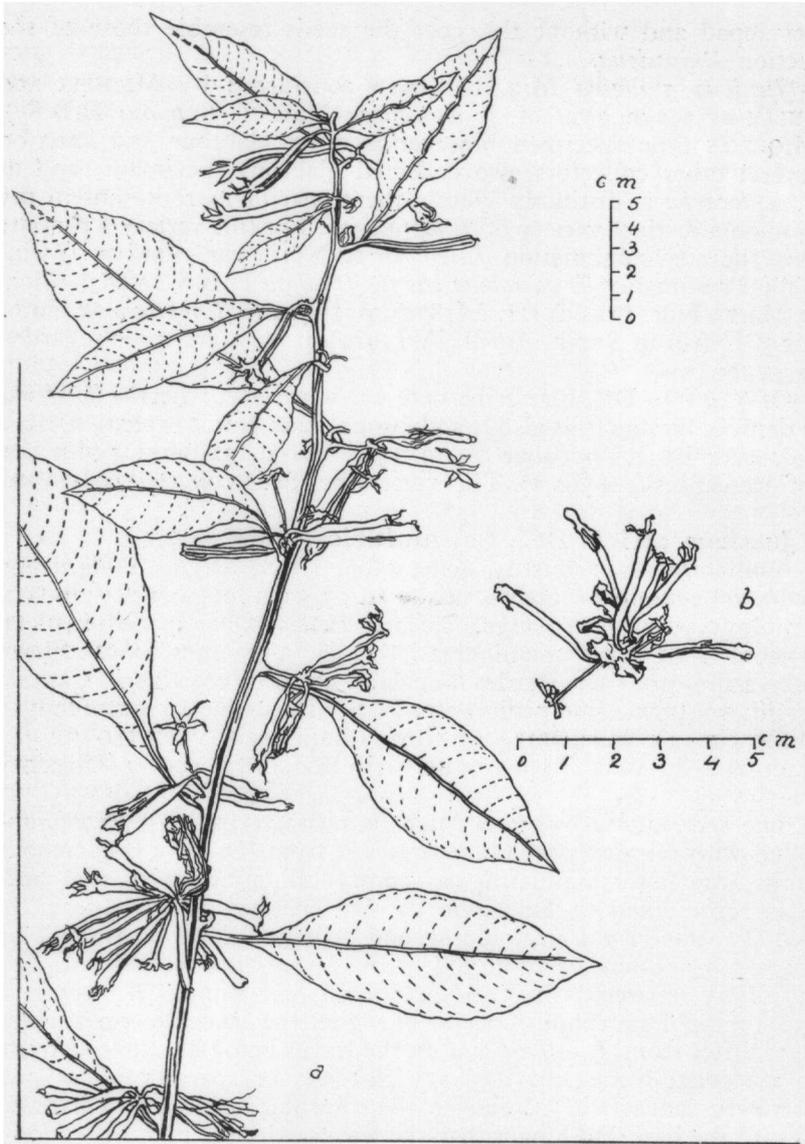


Fig. 1. *Jussieua affinis* DC., var. *multiflora* Jonk. —  
*a.* plant; *b.* inflorescence.

tab. 35, is identical with our Surinamian specimen. I completely agree with MICHELI, notwithstanding the opinion of several later authors, in considering this a distinct species, certainly not conspecific with *J. suffruticosa*. According to MICHELI in Arch. Sc. Phys. Nat. L (1874), p. 146, the description and drawing given by DE LAMARCK has been made from a glabrous form, which occurs in the Antilles, and with which the Brazilian form is to be united. At any rate the Brazilian and Surinamian specimens belong to a species, differing from *J. suffruticosa*. On the authority of MICHELI l.c. it is united by me in the Flora of Suriname with *J. octonervia* Lam.

Of the section *Eujussieua* Mich., characterized by naked, ovoid to oblong seeds, provided with a prominent, filiform, adnate raphe, 7 species occur in Suriname. New to the flora is *J. elegans* Camb. This species is described by former authors (CAMBESSEDES, HOOKER, MICHELI) as 4-merous. The Suriname specimens, however, though undoubtedly belonging to this species, are 5-merous. Perhaps the flowers of all the species of the sect. *Eujussieua* are as a rule 4-merous and in some species occasionally 5-merous (*J. tomentosa*, *J. Larouetteana*, *J. elegans*, *J. peruviana*).

Among the material of *J. nervosa* Poir. I observed several specimens showing a quite different habit: the leaves are linear to linear-lanceolate, whereas the leaves of the true *J. nervosa* are lanceolate or ovate-lanceolate. Moreover, after dissecting the flowers, these specimens proved to differ by a longer style and shorter disc.

The specimens proved to belong to *J. rigida* Miq., a quite distinct species and though afterwards always confused with *J. nervosa*, by no means conspecific with the latter. MICHELI subsequently described this species under the name of *J. lithospermifolia* from Brazil, but as the name proposed by MIQUEL is older, the name *J. lithospermifolia* should be removed.