

STUDIES IN BIGNONIACEAE 25: NEW SPECIES
AND COMBINATIONS IN SOUTH
AMERICAN BIGNONIACEAE¹

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ABSTRACT

Five new species of South American Bignoniaceae are described—*Anemopaegma granvillei* A. Gentry, *Arrabidaea ornithophila* A. Gentry, *Cuspidaria octoptera* A. Gentry, *Memora cristicalyx* A. Gentry, and *Tabebuia catarinensis* A. Gentry—and two new combinations—*Lundia virginalis* var. *nitidula* (DC.) A. Gentry and *Memora imperatoris-maximiliani* (Wawra) A. Gentry—are made.

***Anemopaegma granvillei* A. Gentry, sp. nov.**

Frutex scandens; sine pseudostipulis vel consociebus glandularum in nodis inter petiolos; folia 2-foliolata, foliolis oblongo-ellipticis, infra omnino puberulis; inflorescentia axillaris, racemosa, puberula; flores calyce cupulato, corolla lutea, tubo extus glabro, ovario ovoideo, minute lepidoto, ad basim non contracto; fructus ignotus.

Vine; branchlets finely but prominently striate, elenticellate, puberulous, without interpetiolar glandular fields; pseudostipules (only 1 seen) subulate, 4 mm by 1 mm. Leaves 2-foliolate, sometimes tendrillate (tendrill tip not seen); leaflets (ovate-)oblong-elliptic, shortly and obtusely acuminate, rounded or truncate at the base, 10–15 cm long, 4.5–6.5 cm wide, chartaceous, puberulous throughout beneath with rather scattered erect trichomes, above puberulous only along the main veins, the secondary veins looped and connecting several mm from the margins, not very prominent nor strongly ascending, drying olive, glossy above, dull below. Inflorescence a contracted axillary raceme, densely tannish puberulous; pedicels subtended by linear 2–3 mm long bracts. Flowers with the calyx cupular, asymmetrically truncate, 7–10 mm long, 7–8 mm wide, puberulous at the base and around the margin, with fields of plate-shaped glands in the upper half; corolla tube pale to lemon yellow, the lobes pale yellow, tubular-campanulate, ca. 5 cm long, the tube 3.5–4 cm long, the lobes ca. 1 cm long, the tube glabrous outside, the lobes glandular-lepidote with ciliate margins, large glands absent below the lobes; stamens didynamous; ovary (in bud) ovoid, longitudinally ridged, minutely lepidote, not contracted at the base; disc large, patelliform, 2 mm long, 3 mm wide. Fruit unknown.

TYPE: FRENCH GUIANA. Riviere Petite Ouaqui, végétation ripicole vers l'embouchure de la crique Carbet Brûlé, 27 July 1973, *de Granville 1935* (CAY, holotype and isotype; MO, fragments and photocopy).

The combination of glabrous corolla tube and puberulous leaves indicates affinity with *A. puberulum* (Seib.) Miranda which belongs to the *A. grandifolium* (Jacq.) Merrill & Sandw. complex. However, all species of this complex

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differ in having more prominently lenticellate branchlets and much more prominent and strongly ascending secondary venation. Inflorescence bracts of *A. puberulum* and its relatives are also smaller and less prominent, and leaves are relatively ovate, never as oblong as in the new species. Of the other pubescent-leaved *Anemopaegma* species, *A. villosum* A. Gentry, *A. rugosum* (Schlecht.) Sprague, *A. goyazense* K. Schum., and *A. velutinum* Mart. ex DC. have prominently lepidote corolla tubes. The former two also differ in possessing foliaceous pseudostipules, the latter two have more densely pubescent 3-foliolate leaves. Only two conspicuously pubescent-leaved species have glabrous corolla tubes—*A. hilarianum* Bureau & K. Schum. has more pubescent, smaller, ovate leaves and a paniculate inflorescence; *A. brevipes* S. Moore, which may be the closest relative of *A. granvillei*, has foliaceous pseudostipules, a shorter calyx and smaller leaflets which are much more densely puberulous beneath.

***Arrabidaea ornithophila* A. Gentry, sp. nov.—FIG. 1.**

Frutex scandens; interdum consociabus glandularum in nodis inter petioles; folia trifoliolata, foliolis elliptico-oblongis; inflorescentia floribus in panícula terminali dispositis; calyx tubulosus, bilabiatus, puberulus; corolla rosea, tubulosa; stamina subexserta, thecis pendulis; ovarium oblongum, lepidotum; discus annulatum pulvinatus; capsula linearis.

Liana; branchlets terete, puberulous, with or without inconspicuous interpetiolar glandular fields; pseudostipules lacking. Leaves 3-foliolate (sometimes simple in part); leaflets elliptic-oblong, rounded to acuminate at the apex, rounded at the base, 7–21 cm long, 4–10 cm wide, chartaceous, above minutely lepidote, otherwise glabrous or with a few inconspicuous trichomes along the main vein, below densely puberulous, drying dark above, light gray below; petiolules 1–4 cm long; petioles 2.5–6 cm long, lepidote and puberulous. Inflorescence a terminal panicle, its branchlets densely puberulous with short glandular trichomes and longer nonglandular trichomes. Flowers with the calyx tubular, bilabiate, 10–13 mm long, 5–7 mm wide, the lobes almost 2 mm long, densely pubescent with conspicuously reddish glandular and eglandular trichomes; corolla cherry red, tubular, 2.3–2.5 cm long, 0.4–0.5 cm wide at the mouth of the tube, the tube 1.9–2.1 cm long, the lobes 2–3 mm long, densely puberulous outside, inside very densely pilose with exceedingly long (several mm) tangled trichomes in the upper part of the tube, these completely filling the throat, less densely pilose with shorter trichomes below, villous at the level of stamen insertion; stamens didynamous, inserted 3–4 mm from the base of the corolla tube, subexserted, the anther thecae subparallel, 3 mm long (including connective), joined for the upper 1.4–2 mm, slightly divergent basally, the connective extended 1.4 mm beyond the point of attachment, the filaments 1.6–1.8 cm long, the staminode 4 mm long; pistil ca. 2 cm long, the ovary oblong, tapering slightly towards the top, 2 mm long, 0.8 mm wide, densely glandular lepidote; disc pulvinate, 1 mm long, 2–2.5 mm wide. Fruit linear, compressed, the apex and base subacute, ca. 20 cm long, drying dark.

TYPE: BRAZIL. PARA: Distrito Acará, Thomé Assú, Pão Vermelho, 50 m, border woods in sun, vine climbing small trees, cherry red flower, occasional, 3 Aug. 1931, Y. Mexia 6041 (MO, holotype; NY, US, isotypes).



FIGURE 1. *Arrabidaea ornithophila* A. Gentry.—A. Inflorescence; $\times \frac{3}{5}$.—B. Leaves; $\times \frac{3}{5}$. [After *Mexia* 6041 (MO).]

Additional collections examined: BRAZIL. MARANHÃO: Km 374 Belém-Brasília, cipo sobre árvores, flores vermelhas, 26 Aug. 1960, *Oliveira 1046* (IAN). AMAPA: Santa Patricia, margem esquerda do Rio Jarí, 160 m, 13 Mar. 1970, *Silva 2971* (IAN). PARA: Km 32, Belém-Brasília highway, liana, corolla red, 27 Aug. 1964, *Prance & Silva 58902* (NY). Km. 289–293, Belém-Brasília, cipo sobre árvores, flores vermelhas em forma de tubo, frutos em vagem compridos e chatos, 31 July 1960, *Oliveira 945* (IAN). Estrada Belém-Brasília, cipo, flores vermelhas, vistosas ornamental, May 1960, *Froes 34938* (IAN). Rodovia Belém-Brasília, km 92, flores vermelhas, 21 Aug. 1959, *Kuhlmann & Jimbo 78* (IAN). Km 167–173 da Estrada Belém-Brasília, flores vermelhas em cachos, 25 Apr. 1960, *Oliveira 549* (IAN). Km 243–239 da Rodovia Belém-Brasília, 8 July 1960, *Oliveira 878* (IAN). Region do Rio Jarí, estrada de Monte Dourado ao Mungaba, 27 June 1968, *Oliveira 4681* (IAN, NY); 2 July 1968, *Oliveira 4739* (IAN, NY); 10 June 1968, *Silva 2149* (IAN). Rio Jarí, Planalto de Monte Dourado, 16 June 1968, *Oliveira 4548* (IAN, NY); 2 Oct. 1968, *Silva 1084* (NY). Rio Jarí, serra de Monte Dourado, 140 m, 10 Nov. 1967, *Oliveira 3604* (IAN, NY); 13 Nov. 1967, *Oliveira 3524* (IAN); 18 June 1970, *Silva 3227* (IAN).

The closest relatives of this very distinct, presumably hummingbird-pollinated, species are *Arrabidaea trailii* Sprague and *Fridericia speciosa* Mart. *Arrabidaea trailii* has a similar (but smaller) tubular red corolla with sub-exserted (but much smaller and with a minute connective) anthers and gray-drying (but never simple) leaves with densely puberulous undersurfaces. The calyx of *A. trailii* is smaller, subtruncate, and evenly 5-denticulate. The flower and calyx of *A. ornithophila* are even more similar to those of *Fridericia speciosa* except that the calyx of *Fridericia* is somewhat inflated and conspicuously 5-ridged. The anthers of *Fridericia* are included and the thecae divergent. The new species is so clearly intermediate between *Arrabidaea trailii* and *F. speciosa* that its existence seriously weakens the case for retention of monotypic *Fridericia* as a distinct genus.

Cuspidaria octoptera A. Gentry, sp. nov.

Frutex scandens; ramuli teretes, sine pseudostipulis, consociibus glandularum in nodis inter petiolos; folia 3-foliolata vel 2-foliolata, interdum cum cirrho, foliolis ovatis vel ellipticis, infra sparsim puberulis saltem nervisequentibus; inflorescentia paniculata, bracteata; flores calyce cupulato, 5-denticulato, corolla tubulo-infundibuliformi, extus puberula, intus fere glabra, staminibus didynamis, antherarum thecis reflexis, ovario oblongo, dense lepidoto; capsula anguste oblonga, subtetragona, alis octo longitudinalibus.

Vine; branchlets terete, glabrous or subpuberulous, when older with scattered, pale, round lenticels, the interpetiolar glandular fields divided, the two halves separated by a nonglandular medial strip; pseudostipules lacking. Leaves 3-foliolate or 2-foliolate with a (presumably simple) tendril or tendril scar, never simple even at the base of branchlets; leaflets ovate to elliptic, acuminate, the base rounded, 3–8 cm long, 1.2–4 cm wide, chartaceous, the main veins plane or prominulous above, slightly raised below, somewhat puberulous along the midvein above, sparsely puberulous or pilose along the main veins below and sometimes scattered subpuberulous on the lower surface, the margins noticeably ciliate, drying brownish olive; petiolules 0.3–1.6 cm long; petioles 1.3–3.5 cm long, varyingly puberulous. Inflorescence a terminal panicle, lepidote and puberulous, bracts and bracteoles linear, to 2 mm long. Flowers with the calyx cupular, puberulous, ca. 2 mm long (with teeth), 2–3 mm wide, 5-denticulate, the teeth 0.5 mm long, extended as ribs on the outside of the calyx; corolla magenta, tubular-infundibuliform, 2.6–3 cm long, 0.9–1.3 cm wide at the mouth

of the tube, the tube 1.8–2 cm long, the lobes ca. 0.5 cm long, puberulous outside and on the lobes inside, the tube mostly glabrous inside, slightly glandular pubescent at the level of stamen insertion; stamens didynamous, inserted 5–6 mm above the base of the corolla, the anther thecae divaricate, pilose, reflexed forward from near the base, ca. 1.5 mm long, the blunt pilose connective extended 0.3–0.4 mm; pistil 1.6–1.7 cm long, the ovary oblong, densely lepidote, 1.5 mm long, 1 mm wide; disc small, pulvinate, 0.3 mm long, 1 mm wide. Capsule linear-oblong, basically subtetragonal, 4–30 cm long, 1.3–2.3 cm wide including the 8 thin longitudinal wings, each wing 3–8 mm wide, glabrous, drying dark brown; seeds thin, bialate, ca. 1 cm long, ca. 3 cm wide, the wings brownish-hyaline, not sharply demarcated from the seed body.

TYPE: BRAZIL. Without locality, *Nadeaud s.n.* (P, holotype; MO, P, isotypes).

Additional collections examined: BRAZIL. RIO DE JANEIRO: Rio Parahyba, 29 Nov. 1880, *Netto et al. s.n.* (R-23675, MO). Baixada Fluminense, Pilar, 30 Dec. 1939, *Lutz 1565* (R-127371, MO). Without locality, *Glaziou 3769* (F). SÃO PAULO: Without locality, *Weir 516* (BM, mixed with flowering material of *Arrabidaea florida* DC.).

This overlooked species is closely related to *C. convoluta* (Vell.) A. Gentry [*C. pterocarpa* (Cham.) DC.] and Sandwith (in herb.) has identified flowering material (*Lutz 1565*) with that species, which differs most conspicuously in a merely 4-winged fruit and a larger much more deeply divided calyx with teeth 2.5–4 mm long. Vegetatively the two are extremely similar but *C. octoptera* differs in having uniformly 2-parted interpetiolar glandular fields (these may be 2-parted, undivided, or absent in *C. convoluta*), typically darker-drying leaves with noticeably ciliate leaflet margins (the leaflet margins of *C. convoluta* are pubescent only in var. *pubescens* Mello which has the whole leaf undersurface pilose), and in the complete absence of simple leaves at the base of vegetative shoots. *Cuspidaria convoluta* ranges from northern Argentina and adjacent Paraguay north to the states of Minas Gerais and Rio de Janeiro in Brazil where it overlaps with *C. octoptera*. However, the two species are probably ecologically separated since all altitudinal records for *C. convoluta* are from above 500 m while *C. octoptera* is apparently restricted to the coastal lowlands.

***Lundia virginalis* DC. var. *nitidula* (DC.) A. Gentry, comb. nov.**

L. nitidula DC., Prodr. 9: 181. 1845. SYNTYPES: Brazil, Minas Gerais, *Martius s.n.* (M, fragment G-DC). Brazil, Sebastianopolitana, *Martius s.n.* (M).

Bignonia nitidula Mart. ex DC., Prodr. 9: 181. 1845, nom. nud., pro syn.

De Candolle (1845) was the first to systematically treat *Lundia*. His specific concepts have proven overly narrow and four of his nine species are now generally regarded as conspecific. Bureau (1868) united *L. hebantha* DC. with *L. virginalis* DC. but maintained *L. nitidula* as specifically distinct. Baillon (1888) was the first to unite these two concurrently published species of de Candolle which differ only in calyx length. Since Baillon adopted *L. virginalis*, that name takes precedence for the species. Later Bureau & Schumann (1896–1897) likewise concluded that *L. virginalis* and *L. nitidula* were conspecific but

chose to unite them under *L. nitidula*, treating the short-calyxed form as *L. nitidula* var. *virginalis* (DC.) Bureau & K. Schum. Since the name for the combined taxon must be *L. virginalis* under Article 57 of the *International Code of Botanical Nomenclature*, the new combination proposed above is needed if the long-calyxed plant is to be recognized at varietal rank. An additional problem in this complex is posed by the existence of a second short-calyxed form which differs in more greenish-drying calyx and leaves, shorter, broader corolla, and white (not magenta) flower color. This has been separated as *L. glazioviana* Kränzl. but was considered a variant of *L. virginalis* by Bureau and Schumann and Sandwith (in herb.).

***Memora imperatoris-maximiliani* (Wawra) A. Gentry, comb. nov.**

Bignonia imperatoris-maximiliani Wawra, Bot. Ergeb. Reise Maximilian Bras. 73, tab. 10. 1866. TYPE: Brazil, Bahia, *Wawra & Maly 156* (W).

Pleonotoma imperatoris-maximiliani (Wawra) Bureau & K. Schum. in Mart., Fl. Bras. 8(2): 279. 1897.

In reviewing this species, then known only from the fragmentary type and Wawra's illustration, Sandwith (1959) noted its probable affinity with *Memora* rather than *Pleonotoma* but refrained from proposing the necessary combination. Salient characters of the plant include the 5-denticulate calyx, open panicle inflorescence, red corolla with both tube and lobes glabrous outside, plate-shaped glands at base of the lobes, triternate leaves with rather large leaflets, and especially the terete branchlets. The latter two characters alone almost mandate placement in *Memora*; all other features are also consistent with this placement.

Memora imperatoris-maximiliani is unusual in *Memora* because of its red flowers but *M. magnifica* (Mart. ex DC.) Bureau has bright orange or red orange flowers and several *Memora* species have yellow orange flowers. The combination of conspicuously 5-denticulate but otherwise truncate calyces and very minutely bracteate inflorescences are matched in *Memora* only by *M. campicola* Pilger which has a very different inflorescence, yellow flowers, and multiple compound leaves with small pubescent leaflets and *M. biternata* A. Samp. which has sessile leaflets and corolla lobes pubescent outside. Both of these species have the thick-foliaceous pseudostipules characteristic of most *Memora* species.

A recent collection apparently attributable to *M. imperatoris-maximiliani* is now available. This is A. Lima 57-2799 (IAN) from Nazaré da Mata, Pernambuco, and permits amplification of Wawra's description. The most noteworthy additional characteristic is the presence of conspicuous subulate pseudostipules 3–5 mm long (cf. *M. cristicalyx* below). The leaflets of this collection are entire to serrulate and it has the distinctly panicle inflorescence figured by Wawra. Field notes on the Lima collection describe the flowers as "róseo nos lobos (variando de róseo a lilaz bem claro) e amarelo no tubo; cálice esverd."

***Memora cristicalyx* A. Gentry, sp. nov.**

Memora acutiloba Bureau, Bull. Soc. Bot. France, Mem. 58 (3f): 523. 1911, nom. nud.

Habitus ignotus; ramuli teretes, glabri, sine consociibus glandularum in nodis inter peti-
oles; folia biternata, foliolis anguste ovatis, plerumque serratis; inflorescentia anguste paniculata,

axillaris, plus minusve glabrata; flores calyce campanulato, 5-denticulato dentibus extensis in cristis, glabro, corolla tubulo-infundibuliformi, tubo extus glabro, lobis puberulis, ovario cylindrico dense lepidoto; fructus ignotus.

Habit unknown; branchlets terete, finely striate, glabrous, drying dark with numerous round whitish lenticels, the nodes without interpetiolar glandular fields, with a raised ridge connecting opposite petioles; pseudostipules prominent, linear-subulate, 4–10 mm long. Leaves biternate, the tendril tip not seen; leaflets narrowly ovate, acute to acuminate, basally rounded, usually conspicuously serrate, chartaceous, 2.5–9 cm long, 1.3–4.2 cm wide, mostly glabrate, inconspicuously scattered-lepidote, minutely subpuberulous at the base of the midvein above and below, drying blackish above, dark olive with reddish black midvein below; petiole and petiolules adaxially grooved, subpuberulous. Inflorescence a racemose axillary panicle, the lateral branches subsessile to 1.5 cm long, glabrate to subpuberulous, terminated by a pair of several mm long thinly subulate bracts, these subtending a cluster of 1 to 8 flowers on ebracteolate pedicels up to 2.5 cm long. Flowers with the calyx campanulate, subtruncate, 5-denticulate, the 0.5 mm long teeth extended as raised lateral ridges to the base of the calyx, 6–7 mm long, 5–6 mm wide, glabrous; corolla probably yellow (drying blackish yellow in type), tubular-infundibuliform, ca. 3 cm long, ca. 1 cm wide at the mouth of the tube, the tube ca. 2.5 cm long, the lobes ca. 1 cm long, the tube glabrous and the lobes puberulous outside, the lobes puberulous inside, the tube glabrous inside except at the level of stamen insertion; stamens didynamous, the filaments ca. 1.5 cm long, the anther thecae 3 mm long, somewhat divergent; ovary cylindrical, 2 mm long, 1 mm wide, densely minutely lepidote; disc annular-pulvinate, 0.6 mm long, 1.5 mm wide. Fruit unknown.

TYPE: BRAZIL. CEARÁ: Without data, *Fr. Allemão & M. de Cysneiros 1045* (R-127332, holotype; MO, isotype).

Additional collection examined: BRAZIL. Without data, *Glaziou 11232* (P, 2 sheets).

This species is related to *M. imperatoris-maximilianii* (see above) but is otherwise remarkably isolated. Biternate leaves and terete stem mandate placement in *Memora* where it is the only species with serrate leaflets. Ridged calyces, rather reminiscent of *Clytostoma pterocalyx* Sprague, are unique in *Memora* and similar long subulate pseudostipules are found only in *M. imperatoris-maximilianii*. *Memora imperatoris-maximilianii* differs in an unridged glandular calyx, the corolla lobes glabrous outside and with plate-shaped glands at their bases, entire to subentire leaflets and a more open inflorescence. It is possible that additional collections from poorly known and apparently Bignoniaceae-rich northeastern Brazil will show that this and *M. imperatoris-maximilianii* represent opposite extremes of a variable population but the available evidence suggests specific separation.

The Paris specimens have been annotated by Bureau as "*Memora acutiloba* Bur., n. sp." and that nomen nudum was used in Glaziou's "Liste des plantes du Brésil central recueillies en 1861–1895." I prefer the more descriptive epithet "cristicalyx."

Tabebuia catarinensis A. Gentry, sp. nov.

Frutex ad 3 m altus; folia palmatim (6-)7-foliolata, foliolis oblongo-ellipticis vel obovatis, serratis, glabrescentibus; inflorescentia paniculata, aliquantum congesta, ramis dense stellato-rufescentibus; flores calyce tubulo-campanulato, piloso, corolla lutea, extus glabra, intus fauce puberula, ovario ovoideo, dense lepidoto; capsula anguste oblonga, tomentosa trichomatibus barbatis, irreguliter rugulosa.

Shrub 0.5–3 m tall; twigs terete, striate, minutely and glabrescently stellate-tomentose. Leaves palmately (6-)7-foliolate; leaflets oblong-elliptic to obovate, acute or very briefly acuminate, the base rounded, conspicuously and evenly serrate, the terminal leaflet to 11 cm long and 5 cm wide, the lateral leaflets progressively smaller, chartaceous, when young sparsely stellate-pubescent along the main veins above and below, almost completely glabrescent at maturity, drying blackish or dark olive above and below; petiolules to 4 cm long; petioles 5–13 cm long, glabrescently stellate-tomentose. Inflorescence a several- to many-flowered, short terminal panicle, its branches densely rufescent with stellate, barbate and simple trichomes to 1 mm long, the bracts minute, subulate, to 3 mm long. Flowers with the calyx tubular-campanulate, irregularly 3–5-lobed, 12–20 mm long, 8–12 mm wide, pilose with reddish mostly barbate trichomes to 1 mm long; corolla yellow, tubular-infundibuliform, 5–7 cm long, 1.4–2.2 cm wide at the mouth of the tube, the tube 3.5–5 cm long, the lobes 1–2 cm long, drying dark brown with blackish venation, glabrous, the tube glabrous outside, inside pubescent with rather short (0.5–0.8 mm long) stiff erect trichomes descending from sinuses of the corolla lobes to above the level of stamen insertion, more or less glabrous at and below stamen insertion; stamens didynamous, inserted ca. 10 mm above the base of the corolla tube, the filaments 1.7–2.2 cm long, the staminode ca. 6 mm long, the anther thecae widely divergent, 3 mm long; pistil 3.2–3.4 cm long, the ovary ovoid, ca. 2 mm long, 1.3–1.5 mm wide, densely lepidote, drying blackish, the ovules ca. 4-seriate in each locule; disc shortly cylindrical, 1 mm long, 2 mm wide. Capsule linear-oblong, 5–9 cm long, 1.5–1.8 cm wide, densely reddish-brown tomentose with mostly barbate trichomes ca. 0.5 mm long, the surface finely and irregularly rugulose, not regularly striate; seeds (very immature) bialate, the wings hyaline membranaceous.

TYPE: BRAZIL. SANTA CATARINA: Monte Crista, Garuva, campo, 750 m, arbusto 2 m, flores amarela, 21 Oct. 1966, *Klein & Ravenna 6834* (K).

Additional collections examined: BRAZIL. SANTA CATARINA: Monte Crista, Garuva, 750 m, campo, arbusto 2 m, fruto imaturo marron, 21 Oct. 1966, *Klein & Ravenna 6828* (K); matinha, flor amarela, arbusto 3 m, 21 Oct. 1966, *Klein & Ravenna 6843* (K); 900 m, campo, arbusto 0–5 m, flores amarela, 2 Sep. 1960, *Reitz & Klein 9790* (K). Morro do Campo Alegre, São Francisco do Sul, 1,200 m, campo, arbusto 1 m, flores amarela, 3 Sep. 1960, *Reitz & Klein 9766* (K); sterile, 24 Mar. 1961, *Reitz & Klein s.n.* (K). PARANÁ: Mun. Campina Grande do Sul, Pico Caratua, 1,950 m, arbusto do topo do morro, flor amarela, 5 Oct. 1967, *Hatschbach 17325* (MO).

This species is superficially most similar to *T. bureauvii* Sandw. endemic to the vicinity of Rio de Janeiro. That species differs in being a tree to 12 m tall and in having a very shortly stellate-rufescent calyx with black-drying plate-shaped glands, a fewer-flowered, more finely tomentose inflorescence, a sparsely papillose-puberulous corolla throat, a longer (ca. 4 mm long) ovary, narrower

leaflets, and longer, smooth-surfaced glabrous fruit. The new species was supposed by Sandwith & Hunt (1974) to be a form of *T. chrysotricha* (Mart. ex DC.) Standley. A hybrid origin from that species and *T. alba* (Cham.) Sandw. was also suggested as the new species is intermediate in most respects between these two species, both of which occur in Santa Catarina. *Tabebuia catarinensis* is ecologically distinct from lowland *T. chrysotricha* (below 800 m) but not from *T. alba*. Its flowers and inflorescence are identical to those of *T. alba* of which it could be a glabrescent-leaved derivative. However, the shrubby habit, shorter rough-surfaced (not striate) fruit, and uniformity of the strikingly different glabrate, rather than densely canescent, leaves support specific recognition. Hatschbach (personal communication) reports that the new species can be rather common locally at high altitudes in the Serra do Mar.

LITERATURE CITED

- BAILLON, H. 1888. (1891). Histoire des Plantes. Vol. 10. L. Hachette et Cie, Paris.
- BUREAU, E. 1868. Révision des genres *Tynanthus* et *Lundia*. Adansonia 8: 270–294.
- & K. SCHUMANN. 1896–1897. Bignoniaceae. In K. F. P. von Martius, Flora Brasiliensis. Vol. 8(2): 1–434. Leipzig.
- CANDOLLE, A. P. DE. 1845. Prodromus Systematis Naturalis Regni Vegetabilis. Vol. 9. Treutel et Würtz, Paris.
- SANDWITH, N. Y. 1959. Contributions to the Flora of Tropical America LXV. Studies in Bignoniaceae XXIV. Kew Bull. 1958: 427–443.
- & D. HUNT. 1974. Bignoniaceae. In P. R. Reitz, Flora Illustrada Catarinense. Fasc. BIGN. Itajaí, Sta. Catarina, Brazil.