

THE IDENTITY AND TYPIIFICATION OF
VALLIERA TRIPLINERVIS (SALICACEAE)

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ABSTRACT

The genus *Valliera* is reduced to synonymy under *Neosprucea*. Its sole species, *V. triplinervis*, is considered to be conspecific with *N. grandiflora*. A lectotype is designated for the former species name.

KEY WORDS: *Neosprucea*, Salicaceae, South America, *Valliera*

RESUMEN

El género *Valliera* se reduce a sinonimia bajo *Neosprucea*. Su única especie, *V. triplinervis*, se considera conespecífica con *N. grandifolia*. Se designa un lectotipo para el nombre de la especie anterior.

PALABRAS CLAVES: *Neosprucea*, Salicaceae, South America, *Valliera*

The monotypic genus *Valliera* Ruiz & Pav. was published posthumously in the fifth volume of the *Flora Peruviana, et Chilensis* (Ruiz & Pavon 1958, 1959), the original 19th century manuscript resurrected by Alvarez López who also provided brief introductory notes. The authors of the generic name were not explicit about its family placement; they included it in “Polyandria Monogynia” and inserted it between descriptions of species of Marcgraviaceae and Muntingiaceae. Original material (MA [MA815601], see JSTOR-Plants 2018; P [P06822531], see MNHN 2018) is annotated “Muntingia accedens,” which indicates that Ruiz and Pavon recognized a similarity to *Muntingia* L. (Muntingiaceae).

Valliera was assigned to Tiliaceae in *Index Kewensis* (Taylor 1966), and this is where it is placed in several other indices (Farr et al. 1979; IPNI 2018). Its placement in Malvaceae (Tropicos 2018) apparently is based on the acceptance of a broader circumscription of Malvaceae that includes Tiliaceae (e.g., Angiosperm Phylogeny Group 2016). Airy Shaw in Willis (1966, 1973) was less certain about where the genus belonged and wrote “Tiliaceae? Flacourtiaceae?” Hinsley (2018), without explanation, included *Valliera* as a synonym of *Pterospermum* Schreb. (Malvaceae), which is improbable given that *Pterospermum* is an Old World genus, not a South American one, and the floral characters of the two genera are fundamentally different (e.g., 5- versus 1-carpellate ovary, etc.). Johansson (2018) considered *Valliera* a nomen dubium. Similarly, the Plant List (2018) regarded the name of the sole species, *V. triplinervis* Ruiz & Pav., to be unresolved.

Identity of *Valliera*

Examination of the protologue and images of original material in Madrid (JSTOR-Plants 2018, sub *Valliera*) and Paris (MNHN 2018, sub *Neosprucea grandiflora*), as well as a color illustration by expedition artist Xavier Cortés y Alcoser (JSTOR-Plants 2018, sub *Valliera*; Tafalla 1989b, t. 57) convinces us that *Valliera* is a synonym of *Neosprucea* Sleumer (Salicaceae). A number of genera in Salicaceae (or former Flacourtiaceae sensu Lemke 1988), including *Neosprucea*, are easily accommodated in the Linnaean “Polyandria Monogynia.” *Valliera*, like *Neosprucea*, has large, showy flowers, poricidal anther dehiscence, parietal placentation, and acrodromous leaf venation more or less reminiscent of Melastomataceae. In addition, both genera have 4–5 sepals; 4–5 petals; numerous stamens dehiscent by oblique extrorse pores at the apex; and a gynoeceum comprised of a single, superior spherical to ovoid ovary with a simple style. Several species of *Neosprucea* also have the filamentous staminodes and creamy-white to white corolla of *Valliera*.

Alford (2008) recognized nine species of *Neosprucea* in his revision of the genus. *Valliera triplinervis* best matches *N. grandiflora* (Spruce ex Benth.) Sleumer. Both have coarsely toothed, elliptic, adaxially glabrous leaves, creamy-white to white corolla with narrowly ovate to lanceolate petals, numerous staminodes, and long filaments relative to the anthers. The illustration of *V. triplinervis* accompanying the original description depicts a glabrous anther (Ruiz & Pavon 1958, t. 438 a3), which is discordant with the hirsute anthers of *N. grandiflora* (see Alford 2008, fig. 8 G). Nonetheless, the leaf venation, staminodes, and lack of pronounced petiolar pulvini of *V. triplinervis* match *N. grandiflora* and do not match the two species, *N. montana* Cuatrec. and *N. sararensis* Cuatrec., that have glabrous anthers, pronounced petiolar pulvini, and lack staminodes. Likewise, the flowers of *V. triplinervis* are identical to those of the type of *Banara grandiflora* Spruce ex Benth. (\equiv *N. grandiflora*). We can only assume that Xavier Cortés y Alcoser overlooked the hairs on the anthers of *V. triplinervis* when he prepared his plate.

Nomenclature

Neosprucea Sleumer, Notizbl. Bot. Gart. Berlin-Dahlem 14:47. 1938. *Spruceanthus* Sleumer, Notizbl. Bot. Gart. Berlin-Dahlem 13:362. 1936, non *Spruceanthus* Verd., Ann. Bryol., Suppl. 4:151. 1934. TYPE: *Neosprucea grandiflora* (Spruce ex Benth.) Sleumer.

Valliera Ruiz & Pav., Anales Inst. Bot. A.J. Cavanilles 16:397. 1958 [1959], **syn. nov.** TYPE: *Valliera triplinervis* Ruiz & Pav.

Neosprucea grandiflora (Spruce ex Benth.) Sleumer, Notizbl. Bot. Gart. Berlin-Dahlem 14:47. 1938. *Banara grandiflora* Spruce ex Benth., J. Proc. Linn. Soc., Bot. 5(Suppl. 2):93. 1861. *Hasseltia grandiflora* (Spruce ex Benth.) Sleumer, Notizbl. Bot. Gart. Berlin-Dahlem 11:960. 1933 [1934]. *Spruceanthus grandiflorus* (Spruce ex Benth.) Sleumer, Notizbl. Bot. Gart. Berlin-Dahlem 13:363. 1936. TYPE: PERU. Prope Tarapoto, 1855–6, *Spruce 4897* (HOLOTYPE: K [K000591627]; ISOTYPES: B [B 10 0243741], BM [BM000616674], BR [BR0000006411268], E [E00296683], F [F0041328F], G [G00364307]!, GH [GH00066409], GOET [GOET003826], K [K000591628]!, KW [image], LD [LD1420080], NY [NY00097838], P [P02428321]!, TCD [TCD0005441], W [W-Rchb. 1889-0158703]!).

Neosprucea sucumbiensis Cuatrec., Trop. Woods 101:23. 1955. TYPE: COLOMBIA. Putumayo: Río San Miquel en el afluyente izquierda Quebrada de la Hormiga, 12 Dec 1940, *Cuatrecasas 11147* (HOLOTYPE: US [US00114692]!; ISOTYPES: COL [COL000002935]!, L [L0011149]!).

Valliera triplinervis Ruiz & Pav., Anales Inst. Bot. A.J. Cavanilles 16:399, t. 438, fig. a. 1958 [1959], **syn. nov.** TYPE: ECUADOR. “in Pozuelo, ad margines fluminis Provinciae Huayaquil,” 1800, *Ruiz & Pavón s.n.* (LECTOTYPE, **here designated**: MA [MA815601]; possible ISOLECTOTYPE: P [P06822531]).

We attribute the lectotype collection to H. Ruiz and J. Pavon even though evidence indicates that J. Tafalla Navascués collected the specimen. It is included as “Genus Novum Muntingie accd. Trinerva” in Tafalla’s *Flora Huayaquilensis* (Tafalla 1989a, p. 104; 1989b, t. 57), yet another posthumous publication emanating from the expedition of Ruiz and Pavon.

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