

9-12-2018

Typification of the Genus *Dicaryum* (Verbenaceae)

John J. Pipoly III

Broward County Parks & Recreation Division; Nova Southeastern University, jjpipoly@nova.edu

Jon M. Ricketson

Missouri Botanical Garden

Find out more information about [Nova Southeastern University](#) and the [Halmos College of Natural Sciences and Oceanography](#).

Follow this and additional works at: https://nsuworks.nova.edu/occ_facarticles



Part of the [Botany Commons](#)

NSUWorks Citation

John J. Pipoly III and Jon M. Ricketson. 2018. Typification of the Genus *Dicaryum* (Verbenaceae) .Novon , (3) : 268 -271.
https://nsuworks.nova.edu/occ_facarticles/943.

This Article is brought to you for free and open access by the Department of Marine and Environmental Sciences at NSUWorks. It has been accepted for inclusion in Marine & Environmental Sciences Faculty Articles by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.

Typification of the Genus *Dicaryum* (Verbenaceae)

John J. Pipoly III

Broward County Parks & Recreation Division, 950 NW 38th St., Oakland Park, Florida 33309, U.S.A.;
Nova Southeastern University, 8000 N Ocean Dr., Dania Beach, Florida 33004, U.S.A.
jppoly@broward.org; jppoly@nova.edu; jppoly@mobot.org

Jon M. Ricketson

Missouri Botanical Garden, 4344 Shaw Blvd., St. Louis, Missouri 63110, U.S.A.
jon.ricketson@mobot.org

ABSTRACT. The genus *Dicaryum* Willd. ex Roem. & Schult. was described in 1819 and does not have a type species. Two species were described, and one, *D. subdentatum* Willd. ex Roem. & Schult., is better selected as the type because the other species, *D. serrulatum* Willd. ex Roem. & Schult., is not a Verbenaceae but rather a Primulaceae-Myrsinoideae and belongs to *Geissanthus* Hook. f. Given the circumstances, we choose *D. subdentatum* as the type species of *Dicaryum*, which is a synonym of *Citharexylum ilicifolium* Kunth.

RESUMEN. El género *Dicaryum* Willd. ex Roem. & Schult. fue descrito en 1819 y no tiene especie tipo. Dos especies fueron descritas y una, *D. subdentatum* Willd. ex Roem. & Schult., se designa mejor como especie tipo porque la otra especie, *D. serrulatum* Willd. ex Roem. & Schult., pertenece a la familia Primulaceae subfamilia Myrsinoideae género *Geissanthus* Hook. f., en vez de la Verbenaceae. Dado esas circunstancias, se tipifica al género *Dicaryum* con la especie *D. subdentatum*, que es un sinónimo de *Citharexylum ilicifolium* Kunth.

Key words: *Citharexylum*, *Dicaryum*, *Geissanthus*, lectotypification, Primulaceae, Verbenaceae.

In preparation for our upcoming treatment of the Primulaceae-Myrsinoideae for the *Flora of Ecuador*, we feel it is necessary to make the following typification to resolve the status of *Dicaryum* Willd. ex Roem. & Schult.

The genus *Dicaryum* was described by Roemer and Schultes (1819) based on its 2-seeded drupe, 5-merous perianth, and corolla with stamens inserted in a pilose throat (corolla tube). Additionally, two species were described within the genus. *Dicaryum subdentatum* Willd. ex Roem. & Schult. is based on a Humboldt and Bonpland specimen from Ecuador, "In Pichincha" (Roemer & Schultes, 1819: 803). This species is undoubtedly a Verbenaceae based on the characters listed in the protologue, such as opposite, coriaceous,

opaque leaves with thick petioles, irregularly spiny margins, and a hard, sharply pointed apex (mucron). It is best placed in the genus *Citharexylum* L. (Verbenaceae), and specifically to be synonymized with *C. ilicifolium* Kunth. *Dicaryum serrulatum* Willd. ex Roem. & Schult. is based on a Humboldt and Bonpland specimen from Colombia, "In monte Quindiu [Quindio]" (Roemer & Schultes, 1819: 803). *Dicaryum serrulatum* has been transferred to *Geissanthus* Hook. f. (Primulaceae) as *G. serrulatus* (Willd. ex Roem. & Schult.) Mez.

Since Roemer and Schultes did not specify a type for *Dicaryum*, and the genus is essentially based on species belonging to two different families, it is necessary to typify the genus to clarify the status of this name. The selection of *D. subdentatum* as the type of the genus would avoid nomenclatural disruption. Since *Citharexylum* has priority over *Dicaryum*, and *C. ilicifolium* has priority over *D. subdentatum*, the latter name can simply become a synonym of *C. ilicifolium*. The selection of *D. serrulatum* as the type of *Dicaryum* would give it priority over *Geissanthus* (described in Hooker, 1876), a name in current use for a group of over fifty species. This would be a confusing and unnecessary set of nomenclatural changes that would cause instability instead of resolution.

Dicaryum subdentatum is therefore designated herein as the type of *Dicaryum*.

VERBENACEAE

***Citharexylum* L.**, Sp. Pl. 2: 625. 1753. TYPE: *Citharexylum spinosum* L.

Dicaryum Willd. ex Roem. & Schult., Syst. Veg., ed. 15 bis (Roemer & Schultes) 4: 802. 1819, syn. nov. TYPE (here designated): *Dicaryum subdentatum* Willd. ex Roem. & Schult.

***Citharexylum ilicifolium* Kunth**, Nov. Gen. Sp. (quarto ed.) 2: 256. 1818. TYPE: Ecuador. "Río



Figure 1. Holotype of *Dicaryum subdentatum* Willd. ex Roem. & Schult. [= *Citharexylum ilicifolium* Kunth]. Image used with the permission of the Curators Herbarium B (2017a).

Chambo," 1802, W. von Humboldt & A. Bonpland 3195 (lectotype, designated by O'Leary & Moroni [2017: 4], P [P00670102] image!; isolectotype, P [P00689422] image!)

Dicaryum subdentatum Willd. ex Roem. & Schultes, Syst. Veg., ed. 15 bis (Roemer & Schultes) 4: 802–803. 1819, syn. nov. TYPE: Ecuador. Pichincha: in Pichincha, 4 May 1802 (fl.), A. von Humboldt & A. Bonpland s.n. (holotype, B-W image!; isotype, HAL image!). Figure 1.



Figure 2. Holotype of *Dicaryum serrulatum* Willd. ex Roem. & Schult. [= *Geissanthus serrulatus* (Willd. ex Roem. & Schult.) Mez]. Image used with the permission of the Curators Herbarium B (2017b).

PRIMULACEAE

Geissanthus serrulatus (Willd. ex Roem. & Schult.)
Mez, Pflanzenr. (Engler) IV. 236[Heft 9]: 238.
1902. Basionym: *Dicaryum serrulatum* Willd. ex

Roem. & Schult., Syst. Veg., ed. 15 bis (Roemer & Schultes) 4: 803. 1819. TYPE: Colombia. In monte Quindiu [Quindio], s.d. (fl.), A. von Humboldt & A. Bonpland s.n. (holotype, B-W image! [microfiche no. 4600]; isotype, P image!). Figure 2.

Acknowledgments. The Botanic Garden and Botanical Museum Berlin is thanked for permission to use scanned specimen images.

Literature Cited

- Curators Herbarium B. 2017a. Digital specimen image at the Herbarium Berolinense. [Dataset]. Version: 17 May 2018. Data Publisher: Botanic Garden and Botanical Museum Berlin. <<http://herbarium.bgbm.org/object/BW04599010>>.
- Curators Herbarium B. 2017b. Digital specimen image at the Herbarium Berolinense. [Dataset]. Version: 17 May 2018. Data Publisher: Botanic Garden and Botanical Museum Berlin. <<http://herbarium.bgbm.org/object/BW04600010>>.
- Hooker, J. D. 1876. Myrsineae. Pp. 639–650 in G. Bentham & J. D. Hooker, *Genera Plantarum*, ad exemplaria imprimis in Herbariis Kewensibus servata definita, Vol. 2(2). William Pamplin, London.
- O’Leary, N. & P. Moroni. 2017. A contribution towards resolving the nomenclature of *Citharexylum* (Verbenaceae): Typification of names linked to South American taxa. *Nordic J. Bot.* 36(4): e01674. doi: 10.1111/njb.01674.
- Roemer, J. J. & J. A. Schultes. 1819. *Caroli a Linné equitis Systema vegetabilium secundum classes ordines genera species. Cum characteribus, differentiis et synonymiis, editio nova, speciebus inde ab editione XV. detectis aucta et locupletata*, Vol. 4. J. G. Cottae, Stuttgart.