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WANDERSONG (RUBIACEAE), A NEW GENUS FROM THE GREATER ANTILLES

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ABSTRACT

A revision of *Chione* DC. (Rubiaceae) has excluded two species, *C. exserta* (DC.) Urb. and *C. seminervis* Urb. & Ekman, from the genus on the basis of morphology. The designation *Colleteria* D.W. Taylor was proposed to house these species, but it was invalidly published. The new genus **Wandersong** D.W. Taylor is here erected to accommodate these two species. The new combinations **Wandersong exserta** (DC.) D.W. Taylor and **Wandersong seminervis** (Urb. & Ekman) D.W. Taylor are here effected under this new generic name. The new genus name *Wandersong* D.W. Taylor honors two Andersons, Dr. Gregory J. Anderson and Dr. William R. Anderson, for their outstanding and influential achievements in the field of botany. The name *Wandersong* is constructed with the surname Anderson shared between the first initials of these two botanists.

RESUMEN

Una revisión taxonómica de *Chione* DC. (Rubiaceae) ha excluido dos especies, *C. exserta* (DC.) Urb. y *C. seminervis* Urb. & Ekman, del género debido a su morfología. Se propuso la designación *Colleteria* D.W. Taylor para acomodar estas especies, pero su publicación fue inválida. Aquí se erige el nuevo género **Wandersong** D.W. Taylor para acomodar estas dos especies. Aquí también se efectúan las nuevas combinaciones **Wandersong exserta** (DC.) D.W. Taylor y **Wandersong seminervis** (Urb. & Ekman) D.W. Taylor. El nombre del nuevo género, *Wandersong* D.W. Taylor, honra a dos botánicos con el apellido de Anderson, Dr. Gregory J. Anderson y Dr. William R. Anderson, por sus logros tan sobresalientes y sus investigaciones sumamente influyentes en el campo profesional de la Botánica. El nombre *Wandersong* está construido con el apellido Anderson compartido entre las primeras iniciales de los nombres de estos dos botánicos.

KEY WORDS: Wandersong D.W. Taylor, Wandersong exserta (DC.) D.W. Taylor, Wandersong seminervis (Urb. & Ekman) D.W. Taylor, Colleteria D.W. Taylor, Colleteria exserta (DC.) D.W. Taylor, Colleteria exminervis (Urb. & Ekman) D.W. Taylor, Chione exserta (DC.) Urb., Chione seminervis Urb. & Ekman, Dr. William R. Anderson, Dr. Gregory J. Anderson.

During a taxonomic revision of the genus *Chione* DC. (Rubiaceae), two species, *C. exserta* (DC.) Urb. and *C. seminervis* Urb. & Ekman, were found to be morphologically outside the circumscription of the genus, and were not referable to any existing genus (Taylor 2003a). The designation *Colleteria* D.W. Taylor was proposed to house these two species (Taylor 2003b), but inadvertently used a morphological term, which is not permitted (Article 20.2 of the International Code of Nomenclature for algae, fungi, and plants (Melbourne Code); International Association for Plant Taxonomy website; http://www.iapt-taxon.org/nomen/main. php?page=art20; website accessed June 4, 2014). The term "colleteria" is the plural of "colleterium," a technical entomological term for "an accessory glandular structure of oviduct which manufactures and secretes viscid material used to cement eggs together" (Gordh & Headrick 2011). Thus, the designation *Colleteria* was not validly published under Art. 32.1. A new genus name, *Wandersong* D.W. Taylor, is here published to accommodate *Chione exserta* and *Chione seminervis*. The new combinations *Wandersong exserta* (DC.) D.W. Taylor and *Wandersong seminervis* (Urb. & Ekman) D.W. Taylor are here effected under this new generic name.

The new genus name *Wandersong* D.W. Taylor honors two Andersons, Dr. Gregory J. Anderson and Dr. William R. Anderson, for their outstanding and influential achievements in the field of botany. The name *Wandersong* is constructed with the surname Anderson shared between the first initials of these two botanists. The author wishes to honor these two botanists specifically because of their extraordinary mentorship, first in their roles as his undergraduate and Ph.D. advisors, respectively, at the University of Connecticut and the University

of Michigan, and then later as professional colleagues. Both of these Andersons, through their great dedication, generosity, and insight, have been instrumental in shaping the author's career as a botanist.

The three nomenclatural changes proposed here are therefore:

1. Wandersong D.W. Taylor, gen. nov. Type: Wandersong exserta (DC.) D.W. Taylor.

A full description and diagnosis of this new genus is found under the designation *Colleteria* D.W. Taylor (2003b:203).

The genus *Wandersong* D.W. Taylor can be diagnosed by a combination of characters, some of which are: colleters present consistently on adaxial face of stipules and often on adaxial face of calyx, corolla lobes imbricate in bud, anthers inserted at or below middle of corolla tube, fruit with two pyrenes, the pyrenes adaxially concave, abaxially convex and ridged, with marginal germination slits extending from apex to middle, each pyrene with one locule, ovules solitary and pendulous in locules. *Chione* is distinguished from *Wandersong* by many vegetative and reproductive features (see Taylor 2003a and 2003b), including the absence of colleters and each fruit having a single, sclerenchymatized pyrene enclosing two locules. The fruit type of *Wandersong*, including pyrene architecture, is similar to that reported for some members of the Psychotrieae (Taylor 1989, 1996; Andersson 2002), but *Wandersong* is distinct in having apical placentation.

Wandersong exserta (DC.) D.W. Taylor, comb. nov. Basionym: Psychotria exserta DC., Prodr. 4:517. 1830. Chione exserta (DC.) Urb., Symb. antill. 8:675. 1921. Colleteria exserta (DC.) D.W. Taylor, Syst. & Geogr. Pl. 73(2):204. 2003, nom. inval. Type: DO-MINICAN REPUBLIC: Santo Domingo, Bertero s.n. (HOLOTYPE: G-DC, not seen, microfiche, photo: MO).

Taylor (2003b) has written a detailed description of this species, under the designation *Colleteria exserta* (DC.) D.W. Taylor.

3. Wandersong seminervis (Urb. & Ekman) D.W. Taylor, comb. nov. Basionym: Chione seminervis Urb. & Ekman, Ark. Bot. 20A(5):59. 1926. Colleteria seminervis (Urb. & Ekman) D.W. Taylor, Syst. & Geogr. Pl. 73(2):206. 2003, nom. inval. Type: HAITI. Massif de la Selle: Nouvelle Touraine, high ridge towards Morne La Visite, (Pétionville, Roberjat), in forest on eruptive, ca. 1700 m, Ekman H1537 (Lectotype, here designated because holotype at B destroyed: S; Isotypes: F, G, GH, S, US).

Taylor (2003b) has written a detailed description of this species, under the designation *Colleteria seminervis* (Urb. & Ekman) D.W. Taylor.

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REFERENCES

Andersson, L. 2002. Relationships and generic circumscriptions in the *Psychotria* complex (Rubiaceae, Psychotrieae). Syst. & Geogr. Pl. 72:167–202.

GORDH, G. & D. HEADRICK. 2011. A dictionary of entomology, 2nd edition, p. 333. CABI, Cambridge, Massachusetts, U.S.A. INTERNATIONAL CODE OF NOMENCLATURE FOR ALGAE, FUNGI, AND PLANTS (MELBOURNE CODE). 2012. Available at the International Association for Plant Taxonomy website; http://www.iapttaxon.org/nomen/main.php?page=art20. Accessed June 4, 2014.

TAYLOR, C.M. 1989. Revision of *Palicourea* (Rubiaceae) in Mexico and Central America. Syst. Bot. Monogr. 26:1–102.

Taylor, C.M. 1996. Overview of the Psychotrieae (Rubiaceae) in the Neotropics. In: E. Robbrecht, C. Puff & E. Smets, eds. Second international Rubiaceae conference proceedings. Opera Bot. Belg. 7:261–270.

Taylor, D.W. 2003a. A taxonomic revision of the genus Chione (Rubiaceae). Syst. & Geogr. Pl. 73(2):171–198.

Taylor, D.W. 2003b. Colleteria (Rubiaceae), a new genus from the Caribbean. Syst. & Geogr. Pl. 73(2):199-208.