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A NOMENCLATORIAL NOTE ON *CYPRIPEDIUM HUMBOLDTII* (ORCHIDACEAE: CYPRIPEDIOIDEAE)

FRANCO PUPULIN^{1,2} AND ROBERT L. DRESSLER¹

Abstract. The long-petaled slipper orchid of Central American has a complex nomenclatural history. Since the first publication of the name *Cypripedium humboldtii*, this plant has been treated under a number of different synonyms. Here we reconsider the oldest name, suggesting that Warszewicz validly published it, and that the name *Phragmipedium humboldtii* must be used for this taxon.

Resumen. La orquídea-zapatilla de pétalos largos de América Central tiene una historia nomenclatorial compleja. Desde la primera publicación del nombre *Cypripedium humboldtii*, esta planta ha sido tratada bajo un gran número de sinónimos diferentes. Aquí reconsideramos el nombre más viejo, sugiriendo que Warszewicz lo publicó válidamente y que para este taxon debe usarse el nombre *Phragmipedium humboldtii*.

Keywords: *Cypripedium humboldtii*, *Phragmipedium humboldtii*, nomenclature

The distinctiveness of the Central American long-petaled slipper orchid from its South American relative, *Phragmipedium caudatum* (Lindl.) Rolfe, was acknowledged early on by the great traveler and explorer, Josef Ritter von Rawicz Warszewicz (1812–1866), who made a large collection of plants in the Panamanian oak forests of Chiriquí between 1848 and 1849 (Reichenbach f., 1852; Ossenbach, 2009). The lip of the Mesoamerican taxon is partly reddish brown in coloration and the distal edge is actually a rounded fold, while in *P. caudatum* the lip is veined with green or dark brown and the fold is subquadrate-angular in section (Dressler, 2005; in prep.). With a few exceptions, modern authors have generally treated populations of long-tailed *Phragmipedium* from Central America, ranging from southern Mexico to western Panama, as a good species (e.g., Allen, 1940; Atwood and Dressler, 1998; Pridgeon et al., 1999; Pupulin, 2002; Dressler, 2003, 2005; Gruss, 2003; Braem and Ohlund, 2004a, 2004b; Braem et al., 2004; Ossenbach et al., 2007).

More complex than the specific affinities of this plant has been its nomenclatural history. The oldest name used to refer to what is known in Panamanian vernacular as the “Chinela,” was *Cypripedium humboldtii*, published in 1852 in an article by H.G. Reichenbach f. dealing with

a number of new orchid species collected by Warszewicz in Central America (Reichenbach f., 1852). Even though some authors (Braem et al., 2004) treat *C. humboldtii* as a *nomen nudum*, the name is validly published by means of a short, diagnostic description by Warszewicz (“*Bliithen stark gelb, rothnervig, Lippe purpurfleckig*,” Flowers dusky yellow, veined with red. Lip mottled with purple.) (Reichenbach f., 1852). The rationale of Braem and Ohlund (2004a, 2004b), who argued that Reichenbach f. (1852) never described or intended to describe *C. humboldtii*, because he considered it a synonym of *C. caudatum*, is likely correct. Reichenbach may not have recognized at first that the plant sent by Warszewicz from Chiriquí was distinct from the Peruvian species described by Lindley. This was not an impediment for him, however, to give specific recognition to the same entity some years later with the name *Selenipedium warszewiczii* Rehb.f. (Linden and Reichenbach f., 1860, Reichenbach f., 1873).

When Atwood and Dressler (1998) lectotypified *C. humboldtii*, in their treatment of the *Phragmipedium caudatum* complex from Central America, they ascribed the original description to Warszewicz ex Reichenbach *filius*. Such an authorship, however, makes the name invalid according to Art. 34.1. of the

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¹ Lankester Botanical Garden, University of Costa Rica. P.O. Box 302-7050 Cartago, Costa Rica

² Author for correspondence: franco.pupulin@ucr.ac.cr

ICBN (“A name is not validly published when it is not accepted by the author in the original publication”; but see Ex. 3; McNeill et al. 2006). This argument has been used to reject *C. humboldtii* as well as the combination in *Phragmipedium* based on this basionym (e.g., Braem and Ohlund, 2004a; 2004b; Christenson, 2006; Govaerts, 2011; Tropicos, 2011).

Concerning the text of 1852 in which the name *C. humboldtii* appears for the first time, it is necessary to separate the authorship of the publication, which is by Reichenbach *filius*, from that of the taxon, which is ascribed to Warszewicz. Reichenbach *filius* himself confirmed such a view, repeatedly citing the name of the species as “*C. humboldti* Wzw.” (i.e., Reichenbach f., 1854, Linden and Reichenbach f., 1860). According to art. 46.2. of the ICBN, “a name of a new taxon must be attributed to the author or authors to whom both the name and the validating description or diagnosis were ascribed, even when authorship of the publication is different” (see in particular ex. 4, and Art. 31.4., Ex. 3; McNeill et al., 2006). In Reichenbach *filius*’s text for 1852, both the name of the species and the diagnosis, which was published in double quotes, were ascribed to Warszewicz; a footnote on the first page of the article confirms this ascription (“*Die mit „ „ bezeichneten ergänzenden Notizen danke ich Hr. De Warszewicz*”; Reichenbach f., 1852: 689). As the name of *C. humboldtii* must be attributed solely to Warszewicz, the acceptance or otherwise of the name by Reichenbach *filius* is not relevant for valid publication. Dr. K. Gandhi (pers. comm., 2010) kindly confirmed such an interpretation.

The name *Selenipedium warszewiczii*, upon which Christenson (2006) based the combination *Phragmipedium warszewiczii* (Rchb.f.) Christenson, does not have priority over the validly published *Cypripedium humboldtii*, which must therefore be considered the oldest legitimate name for the Mesoamerican species of long-petaled *Phragmipedium*.

Article 33.5. of the ICBN establishes that “for names published on or after 1 January 1953, errors in the citation of the basionym or replaced synonym, including incorrect author citation [italics are ours] but not omissions, do not preclude valid publication of a new combination, new generic name with a basionym, or *nomen*

novum.” As the wrong citation of the authorship by Atwood and Dressler (1998) may be treated as a simple bibliographic error to be corrected, the name *Phragmipedium humboldtii* (Warsz.) J.T. Atwood & Dressler was validly published.

TAXONOMY

Phragmipedium humboldtii (Warsz.) J.T. Atwood & Dressler, *Selbyana* 19(2): 246. 1998 (publ. 1999).

Basionym: *Cypripedium humboldtii* Warsz., *Bot. Zeitung* (Berlin) 10(40): 691. 1852. TYPE: PANAMA. In *Quercubus montium Chiriqui* (Lectotype, selected by Atwood & Dressler [1998]: “Mai Juni Juli [1848–1851] / Cordill. Chiriqui,” *J. Warszewicz* 41 (W *Rchb Orch* 15682).

Synonyms: *Phragmipedium popowii* Braem, Ohlund & Quéné, *Richardiana* 4(4): 185. 2004, *nom. illeg.* TYPE: PANAMA. *J. Warszewicz* 41 (Holotype: W *Rchb Orch* 15682).

Phragmipedium exstaminodium Castaño, Hágsater & E. Aguirre subsp. *warszewiczii* Dressler, *Orchid Digest* 69(2): 89. 2005. Type: PANAMA. Bocas del Toro: Cerro Colorado, along road between Río San Felix and mining exploration camp, 7 ml W of Chame, along trail through Guaymi village, 8°35'N 81°50'W, 1500 m, 8 July 1988, *T. Croat* 69170 (Holotype: MO 4272449).

Cypripedium caudatum var. *roseum* hort. ex Delchevalerie, *Rev. Hort.* 39: 133. 1867. *Selenipedium warszewiczii* Rchb.f., *Xenia Orchid.* 2: 189. 1873, avowed substitute [according to Art. 7.3. of ICBN: “A new name published as an avowed substitute (replacement name, *nomen novum*) for an older name is typified by the type of the older name” (McNeill et al. 2006)]. *Phragmipedium warszewiczii* (Rchb.f.) Christenson, *J. Orchideenfr.* 13(2): 142. 2006.

Type: Without locality. “Nous l’avons vue en fleur chez M. Guibert, amateur distingué, à Passy,” not conserved.

Phragmipedium warszewiczianum hort. *et sensu* Pridgeon et al. (1999), *non* Garay (1979) *nec* Braem (2004), *excl. syn.*

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