

LECTOTYPIFICATION OF PERUVIAN CAMPANULACEAE
NAMES ASSOCIATED WITH COLLECTIONS
MADE BY AUGUSTO WEBERBAUER

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Abstract. We designate lectotypes for thirteen Peruvian *Centropogon* and *Siphocampylus* (Campanulaceae: Lobelioideae) names associated with type collections made by Augusto Weberbauer.

Keywords: *Centropogon*, lectotype, Lobelioideae, Peru, *Siphocampylus*

Augusto Weberbauer (1871–1948) was an explorer and botanist who made many important contributions to the understanding of the flora and phytogeography of Peru (Weberbauer, 1911, 1936, 1945). He amassed more than 8,000 specimens over the course of 35 years of active collecting in the early twentieth century (Velarde, 1968, 1969; León, 2002; Luteyn et al., 2008). His principal set of specimens was deposited at Berlin-Dahlem (B), and from there, duplicates were sent to other major European and American herbaria, including F, GH, K, NY, and US (Velarde, 1968; León, 2002). In addition, a few hundred of his specimens remained in Peru, where they are currently housed in the Weberbauer Herbarium (MOL) at the Universidad Nacional Agraria La Molina in Lima (Velarde, 1968; Luteyn et al., 2008). More than twenty percent of the specimens Weberbauer collected were recognized as new to science. Most of these new species were described from collections at Berlin (Luteyn et al., 2008). Unfortunately, many of these type specimens were destroyed during World War II. While many of the associated names have since been lectotyped (León et al., 2006; Luteyn et al., 2008; Burke and Michelangeli, 2013), the majority likely still require treatment.

Here, we designate lectotypes for thirteen names associated with type collections made by Weberbauer in *Siphocampylus* Pohl and *Centropogon* C. Presl (Campanulaceae: Lobelioideae), genera included in the centropogonid clade (Lagomarsino et al., 2014). Many specimens cited herein can be viewed on the JSTOR Global Plants website (<https://plants.jstor.org/>). Where possible, we designate specimens at MOL as lectotypes as they are in good condition and have the most complete label information available, sometimes including detailed descriptions of the plant and/or locality; specimens outside of Peru typically have a truncated version of this information. We place the names that we treat into two groups. The first comprises names erected by A. Zahlbruckner (1906), who did not designate herbaria in his original species descriptions. The second comprises names erected by Franz Elfried Wimmer (1924, 1929, 1935, 1943, 1953, 1968), who sometimes designated holotypes in his protologues, though frequently listed a series of syntypes. Some of these holotypes and syntypes were destroyed during the bombing of Berlin. We choose lectotypes for these names. We note that the majority of Weberbauer type specimens of Campanulaceae are extant, likely because they had been loaned to F. E. Wimmer, who was based in Vienna, Austria (W).

LECTOTYPIFICATION OF TAXA DESCRIBED BY A. ZAHLBRUCKNER (1906)

Centropogon grandicephalus Zahlbr. Bot. Jahrb. Syst. 37(4): 454. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Amazonas: Östl. von Chachapoyas: zwischen den Tambos Admirantes und Incatambo, 1800–1900 m, 31 July 1904 (fl), A. Weberbauer 4461. Lectotype (designated here): A. Weberbauer 4461 (B [10 0244141-barcode, digital image], negative of B sheet: F 30218).

Centropogon macrocarpus Zahlbr. Bot. Jahrb. Syst. 37(4): 452. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Huánuco: Provincia Huamalíes, Berge südwestlich von Monzon, gesträuch stellenweise unterbrochen durch moor und grassteppe, 3400–3500 m, 1906 (fl), A. Weberbauer 3344. Lectotype (designated here): A. Weberbauer 3344 (G [00236661-barcode, digital image]).

We acknowledge the following herbaria and their staff for access to relevant collections: A, GH, MO, MOL, NY, and USM. A visit to MOL was supported by an NSF Doctoral Dissertation Improvement Grant (DEB-1210401) and Arnold Arboretum's Deland Award for Student Research to LPL. We would additionally like to thank Kanchi Gandhi for nomenclatural advice and the staff of the Harvard University Herbaria Botany Libraries for helping to locate necessary literature. Images of many type specimens were accessed via JSTOR Global Plants (<https://plants.jstor.org/>), for which the authors are grateful.

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Homotypic synonym: *Burmeistera macrocarpa* E.Wimm. Repert. Spec. Nov. Regni Veg. 30: 41. 1932.

Centropogon pulcher Zahlbr. Bot. Jahrb. Syst. 37(4): 451. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Junín: Provincia Tarma, cerros al Oeste de Huacapistana, monte bajo compuesto de arbustos, 14 January 1903 (fl), 2000 m, A. *Weberbauer 2164* Lectotype (designated here): A. *Weberbauer 2164* (MOL [00209]; Isolectotypes: B-2 sheets [10 0244119, 10 0244121-barcode, digital image], G [006035, digital image], negative of B sheet: F 30221).

This name was invalidly lectotypified in the unpublished dissertation thesis of Bruce A. Stein (1987). While he had intended to designate a Berlin specimen with a photo negative available at F (30221) as the lectotype, we instead chose the MOL specimen as it is more complete and has been verified.

Centropogon weberbaueri Zahlbr. Bot. Jahrb. Syst. 37(4): 453. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Huánuco: Provincia Huamalíes, Berge südwestlich von Monzon, 3400–3500 m, 11 July 1903 (fl), A. *Weberbauer 3347*. Lectotype (designated here): A. *Weberbauer 3347* (B [10 0244102-barcode, digital image]); Isolectotype: B [10 0244103-barcode, digital image], negative of B sheet: F 30230).

Siphocampylus floribundus Zahlbr. Bot. Jahrb. Syst. 37(4): 460. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Huánuco: Provincia Huamalíes, cerros al Sudoeste de Monzon, monte bajo tupido, siempreverde compuesto de arbustos y escasos arbolitos, predominando el follaje rígido, 2400–2500 m, s.d. (fl), A. *Weberbauer 3421*. Lectotype (designated here): A. *Weberbauer 3421* (MOL [00206]).

Siphocampylus macropodoides Zahlbr. Bot. Jahrb. Syst. 37(4): 458. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Áncash: Provincia Huaylas, Abajo de la Had. Cajamba, estepa de gramíneas con arbustos esparcidos, 3500 m, 30 May 1903 (fl), A. *Weberbauer 3201*. Lectotype (designated here): A. *Weberbauer 3201*

LECTOTYPIFICATION OF TAXA DESCRIBED BY WIMMER (1929, 1935) BASED ON WEBERBAUER COLLECTIONS

Siphocampylus albus E.Wimm. Repert. Spec. Nov. Regni Veg. 26: 17, pl. 72, fig. 15. 1929.

TYPE: PERU. Departamento Piura: Provincia Ayavaca, Ayavaca, 2700–2800 m, 1909–1914 (fl), A. *Weberbauer 6383* (Holotype: B, most likely destroyed; Lectotype (designated here): A. *Weberbauer 6383* (F [628514, digital image]; Isolectotype: GH [00033376-barcode]).

Siphocampylus citrinus E.Wimm. Repert. Spec. Nov. Regni Veg. 38: 75. 1935.

TYPE: PERU. Departamento Cuzco: Provincia Quispicanchi, Marcapata valley, Chaupichaca, mixed formation, 1700 m, 19–20 February (fl), A. *Weberbauer 7829*. Lectotype (designated here): A. *Weberbauer 7829* (F [605331, digital image]; Isolectotypes: (US [1496787, digital image]; K [000329901-barcode, digital image]).

Wimmer noted three collections of the type in the

(MOL [00205]; Isolectotype: B [10 024258-barcode, digital image]).

Siphocampylus sanguineus Zahlbr. Bot. Jahrb. Syst. 37(4): 456. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Amazonas: Provincia Chachapoyas, vertientes Orientales del valle del Marañón, encima de Balsas, monte bajo, siempreverde, compuesto de arbustos y pequeños árboles, predominando el follaje rígido, 3200 m, s.d. (fl), A. *Weberbauer 4285*. Lectotype (designated here): A. *Weberbauer 4285* (MOL [00204]; Isolectotypes: B [10 0242553-barcode, digital image], G [00237858-barcode, digital image], negative of B sheet: F 30245).

Siphocampylus superbus Zahlbr. Bot. Jahrb. Syst. 37(4): 455. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Cajamarca: Hualgayoc, 3600 m, 11 May 1904 (fl), A. *Weberbauer 3983*. Lectotype (designated here): A. *Weberbauer 3983* (B [10 0242547-barcode, digital image]; Isolectotype: B [10 0242548-barcode, digital image], negative of B sheet: F 30212).

Siphocampylus tortuosus Zahlbr. Bot. Jahrb. Syst. 37(4): 459. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Loreto: Moyobamba, 1500 m, 28 August 1904 (fl), A. *Weberbauer 4646*. Lectotype (designated here): A. *Weberbauer 4646* (B [10 0242546-barcode, digital image]; Isolectotype: B [10 0242545-barcode, digital image], negative of B sheet: F 30247).

Siphocampylus weberbaueri Zahlbr.–Bot. Jahrb. Syst. 37(4): 456. 1906 [24 Apr 1906].

TYPE: PERU. Departamento Cajamarca: Provincia Hualgayoc, encima de la Hacienda La Tahona, estepa de gramíneas con arbustos esparcidos, 3100–3300 m, 04 May 1904 (fl),), A. *Weberbauer 4019*. Lectotype (designated here): A. *Weberbauer 4019* (MOL [00203]; Isolectotypes: B-2 sheets [10 0242533, 10 0242534 -barcode, digital image], G [00237944, digital image], negative of B sheet: F 30213).

prologue (“Herb. Field, Wien, Berl.” i.e., F, W, B), of which only the one from F appears to be extant; it is here selected as the lectotype.

Siphocampylus nobilis E.Wimm. Repert. Spec. Nov. Regni Veg. 26: 12, pl. 72, fig. 23. 1929.

TYPE: PERU. Departamento Cajamarca: Provincia Jaen, above Shumaya, 2200–2300 m, 07 May 1912 (fl), A. *Weberbauer 6291*. Lectotype (designated here): A. *Weberbauer 6291* (F [548771, digital image]; Isolectotypes: GH, NY-2 sheets [00547290, 00547291-barcode, digital image], US [1496196, digital image]).

Wimmer noted two collections of the type in the prologue (“Hb. Berol. et Vid.” i.e., B and W), which the authors were not able to locate, and are presumed destroyed. We have chosen the specimen at F as the lectotype as it is in the best condition.

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