

**HYBANTHUS PENNELLII (VIOLACEAE) RAISED TO SPECIFIC RANK:  
A GYPSOPHILE FROM NUEVO LEÓN, MEXICO**

**BILLIE L. TURNER**  
Plant Resources Center  
The University of Texas  
Austin, TX 78712

**ABSTRACT**

*Hybanthus potosinus* var. *pennellii* is elevated to specific rank as *Hybanthus pennellii* (C.V. Morton) B.L. Turner, comb. et stat. nov. It is a localized gypsophilic endemic of Nuevo León, most closely related to *H. potosinus* of San Luis Potosí, but amply distinct. Its relationship to the latter is briefly discussed and a map showing their distribution is provided.

**KEY WORDS:** *Hybanthus*, *H. pennellii*, *H. potosinus*, gypsophile, Nuevo León, Mexico

Routine identification of Mexican plants from Nuevo León has brought to focus the following gypsophile, previously identified as *Hybanthus potosinus* var. *pennellii* Morton, herein elevated to specific rank. Morton, in his original publication, gave only a brief description of his novelty, noting that it differed “from the typical variety in its acutish leaves, acuminate calyx lobes, and somewhat larger flowers, the labellum being 10 mm. long and 6 mm broad.” Because of his limited description of var. *pennellii*, I provide the following more inclusive description, this based upon the two Hinton sheets cited below.

**HYBANTHUS PENNELLII** (C.V. Morton) B.L. Turner, comb. et stat. nov. Based upon *Hybanthus potosinus* C.V. Morton var. *pennellii* C.V. Morton, Contr. U.S. Natl. Herb. 29: 80. 1944. **TYPE:** MEXICO. Nuevo León. Mpio. Galeana, Alamar, Pab[il]llo, 2-3 Jul 1934, F.W. Pennell 17231 (holotype: US digital image!).

**Perennial herbs**, 10–30 cm high. **Stems** simple, arising from slender rhizomes, beset with stiff spreading hairs ca 1 mm long. **Leaves** (at mid-stem) 3–5 cm long, 1.5–2.8 cm wide; petioles 1–3 mm long; blades elliptic to broadly obovate, appressed-pilose on both surfaces, mainly along the venation, margins weakly dentate to serrulate, the apices acute to obtuse. **Stipules** lanceolate, ca 3 mm long. **Flowers** axillary, the pedicels mostly 10–15 mm long. **Calyx** lobes lanceolate, ca 3 mm long, pubescent like the stems. **Petals** 5, the laterals purple, ca 3 mm long, their apices acute, reflexed; labellum ca 10 mm long, claw ca 4 mm long, the blades flabellate, ca 6 mm long, 7 mm wide, purplish-white, sparingly pubescent apically. **Capsules** ellipsoid, ca 5 mm long, 2.5 mm wide, glabrous; seeds 5–6, globose, glabrous, ca 1.5 mm across.

**SPECIMENS EXAMINED.** MEXICO. Nuevo León. Mpio. Galeana: La Poza to Rio de José, 1690 m, gypsum hillside, 25 Jul 1995, *Hinton et al.* 25372 (TEX); E of Pablillo, 2108 m, gypsum hillside, 30 Oct 2009, *Hinton et al.* 29053 (TEX).

The following key distinguishes the two taxa concerned:

- 1. Leaves (at mid-stem) 2.0–2.5 cm long; stipules ca 1.2 mm long; pedicels mostly ca 5 mm long; labellum ca 7 mm long; San Luis Potosí ..... *Hybanthus potosinus*
- 1. Leaves (at mid-stem) 3–5 cm long; stipules ca 3 mm long; pedicels mostly 10–15 mm long; labellum ca 10 mm long; Nuevo León ..... *Hybanthus pennellii*

Pennell (1886-1952), an expert on the family Scrophulariaceae, made his first collections in Mexico during the year 1934 (Camp 1952), obtaining *Hybanthus pennellii* from the vicinity of Pabillio, perhaps unaware of its gypseous substrate (this not recorded on his collection label). To my knowledge, there have been only two additional collections of the taxon, both by the Hinton and both from near the type locality. Distribution of the two taxa is shown in Fig. 1. The specific locality for the type of *H. potosinus* was obtained from Sanchez (1969).

#### ACKNOWLEDGEMENTS

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#### LITERATURE CITED

- Camp, W.H. 1952. Francis Whittier Pennell. Taxon 1: 83.  
 Morton, C.V. 1944. The genus *Hybanthus* in Continental North America. Contr. U. S. Natl. Herb. 29: 74-82.  
 Sanchez, M.S. 1969. Las colecciones botanicas de C.A. Purpus en Mexico. Univ. Calif. Publ. Bot. 51: 1-36.

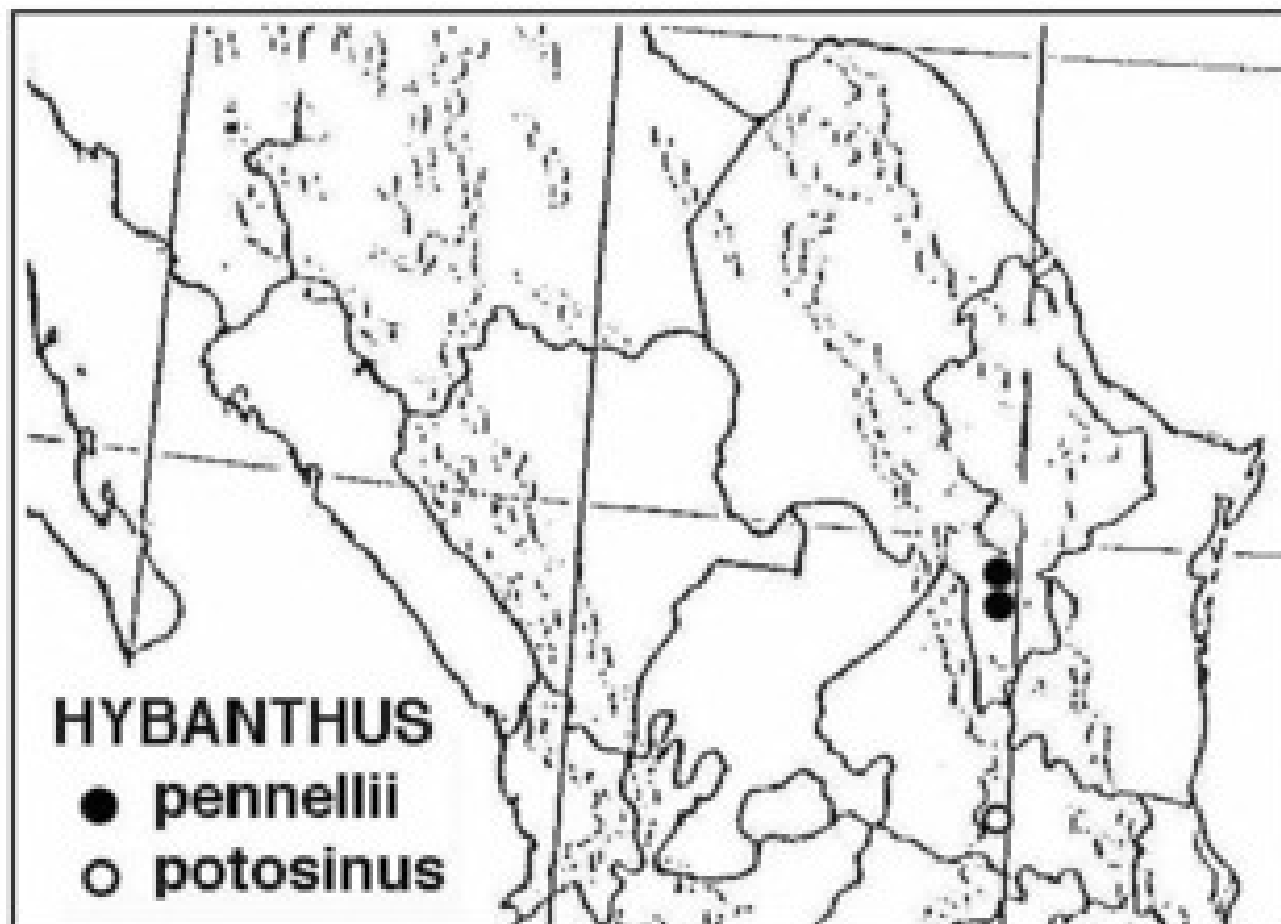


Figure 1. Distribution of *Hybanthus pennellii* and *H. potosinus*.



Turner, B. L. 2010. "Hybanthus pennellii (Violaceae) raised to specific rank: A gypsophile from Nuevo León, Mexico." *Phytoneuron* 2010-47, 1-2.

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