GYPSOPHILIC SPECIES FROM NUEVO LEON, MEXICO

Guy L. Nesom

Department of Botany, University of Texas, Austin, Texas 78713 U.S.A.

ABSTRACT

Leucophyllum alejandrae, sp. nov., is described from a gypseous area in southcentral Nuevo León. It produces linear, concolorous leaves with stipitate glandular hairs protruding through the dense, close, greenish silver eglandular vestiture of branched hairs. It is apparently most closely related to another locally endemic gypsophile, L. hintoniorum, which has similar vestiture.

KEY WORDS: Leucophyllum, Scrophulariaceae, México

Leucophyllum alejandrae Nesom, sp. nov. TYPE: MEXICO. Nuevo León: Mpio. Galeana, S of San Antonio de Texas, scattered on gypsum hillside, 1675 m, 19 Aug 1992, Hinton et al. 22321 (HOLOTYPE: TEX; Isotypes: ENCB,GH,MEXU,NY, and US, to be distributed).

Leucophyllo hintoniorum Nesom similis praesertim foliis concoloris ac vestimento glanduloso sed corollis minoribus foliis brevioribus anguste linearibusque differt.

Alternately branched, nonthorny shrubs ca. 0.6 m tall. Silvery vestiture completely obscuring the stem, leaf, and calyx surfaces, of a dense layer of relatively uniform dendritic trichomes on short stipes (less than 0.1 mm high) or estipitate; young organs densely invested with prominent stipitate glands on uniseriate stipes 0.2-0.4 mm long and extending above the dendritic vestiture. Leaves alternate, densely crowded along the stem, entire, epetiolate, linear or slightly broadened near the apex, 15-21 mm long, 2-3 mm wide, often strongly folded along the midvein. Flowers on densely invested pedicels 1-2 mm long; calyces 5-6 mm long, the lobes lanceolate, cut to within 0.5 mm of the base, 1.0-1.2 mm wide, sparsely glandular inside but without dendritic

hairs; corollas purple, with yellow spots on the lower tube, 13-15 mm long, tube broadly ampliate, to 5-6 mm wide at the throat (pressed), sparsely pilose on inside floor with crinkled hairs, sparsely stipitate glandular on the outside, the lobes obovate, subequal, ca. 6 mm long and wide, emarginate, eciliate, nearly glabrous inside; stamens 4, anthers and filaments glabrous; styles sparsely pilose; ovaries sparsely glandular. Capsules oblong 4-5 mm long, sparsely pilose glandular. Known only from the type collection.

The new species is named for Dra. Alejandra Hinton, physician and lovely wife of George Hinton (the second). She provides a strong motive force, and anchor, for the family.

Leucophyllum alejandrae shares with L. hintoniorum Nesom a silvery green vestiture, densely and evenly developed on both sides of the leaf, of short stipitate, dendritic trichomes with stipitate glandular trichomes extending above the basal layer. Together with L. flyrii B.L. Turner, these are the only species in the genus with a glandular vestiture, and they almost certainly are closely interrelated (additional comments in Nesom 1991). All three are relatively narrow endemics. The new species is distinguished from L. hintoniorum by its shorter corollas (13-15 mm long vs. 15-18 mm) and shorter, linear leaves 15-21 mm long and more or less evenly 2-3 mm wide, compared to those of the latter, which are obovate-oblanceolate, 20-35 mm long, and 5-11 mm wide in the distal portion at the broadest point. Leucophyllum hintoniorum is known from two collection sites in addition to its type locality, including one very near the type locality of L. alejandrae, and the two species appear to be genetically isolated.

Additional localities for Leucophyllum hintoniorum: Nuevo Léon: Mpio. Aramberri, near San Francisco, gypsum hillside, 1740 m, 13 May 1992, Hinton et al. 21961 (TEX) and 21973 (TEX); Mpio. Zaragoza, Zaragoza to El Salitre, gypsum hillside, 1420 m, 17 Oct 1992, Hinton et al. 22567 (TEX).

Besides Leucophyllum alejandrae, the only other linear leaved or relatively narrow leaved species in the genus are L. pringlei (Greenm.) Standl. and L. revolutum Rzed. (Henrickson & Flyr 1985). The former is a species of Oaxaca and Puebla with leaves glabrous except for sessile glands; the latter occurs in Tamaulipas and San Luis Potosí and produces eglandular, bicolorous, oblance-olate leaves with distinctly revolute margins.

ACKNOWLEDGMENTS

I thank Billie Turner and T.P. Ramamoorthy for their comments and review of the manuscript.

LITERATURE CITED

Henrickson, J. & L.D. Flyr. 1985. Systematics of Leucophyllum and Eremogeton (Scrophulariaceae). Sida 11:107-172.

Nesom, G.L. 1991. A new species of Leucophyllum (Scrophulariaceae) from Nuevo Léon, México. Phytologia 71:337-339.



Nesom, Guy L. 1993. "Leucophyllum alejandrae (Scrophulariaceae), a new gypsophilic species from Nuevo Leon, Mexico." *Phytologia* 74, 293–295. https://doi.org/10.5962/bhl.part.25892.

View This Item Online: https://www.biodiversitylibrary.org/item/47107

DOI: https://doi.org/10.5962/bhl.part.25892

Permalink: https://www.biodiversitylibrary.org/partpdf/25892

Holding Institution

New York Botanical Garden, LuEsther T. Mertz Library

Sponsored by

The LuEsther T Mertz Library, the New York Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Phytologia

License: http://creativecommons.org/licenses/by-nc-sa/3.0/

Rights: https://biodiversitylibrary.org/permissions

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.