Jaimehintonia (Amaryllidaceae: Allieae), a New Genus from Northeastern Mexico

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

ABSTRACT. A new genus and species, *Jaimehintonia gypsophila*, from gypseous soils of Nuevo Leon, Mexico, is described and illustrated. It belongs to the tribe Allieae of the family Amaryllidaceae, where it is most closely related to *Androstephium* and associated genera. It differs from most of these in having, in combination, coarsely tunicate bulbs, purple to pink perianths, and a well-developed hypanthium to which the gynoecium is not fused.

Continuing identification and curation of gypsophilic plants from Nuevo Leon, Mexico, has revealed the following novelty.

Jaimehintonia gypsophila B. Turner, gen. et sp. nov. TYPE: Mexico. Nuevo Leon: along highway 68, 15 mi. S of Ascension and 3.5 mi. NW of La Escondida, ca. 97 mi. N of Matehuala, steep exposed gypsum hill adjacent to the road, "associated with ferns, *Dalea* and *Agave*," 24 Sep. 1973, *James L. Reveal 3426*, with *N. D. Atwood* (holotype, TEX). Figure 1.

Herba bulbi tunicis grosse fibrosis. Folia basalia paene teretia 12–15 cm longa. Scapus 25–30 cm longus, umbellam apicalem florum 3–6 ferens, umbella bracteis 3–6 scariosis lineari-lanceolatis 3–5 mm longisque subtenta. Pedicelli 3–4 cm longi ad summum articulati. Hypanthium roseum vel purpurascens anguste tubulare in 10 mm basali, versus apicem gradatim dilatatum; tepala 6 expansa elliptica vel elliptici-oblanceolata 1-nervata 10–12 mm longa 3–4 mm lataque. Ovarium glabrum stipitatum hypanthio non adnatum.

Bulb turbinate with very coarse fibrous coat, ca. 3 cm long × 2 cm wide, not deeply buried, perhaps only 2–3 cm below the soil surface. Leaves 12–15 cm long, 1.0–1.5 mm wide, terete or somewhat 4-sided in cross section (dried), glabrous, the angles adorned with minute clear pustulate cells, these arranged in lines. Scapes naked, terete, 25–30 cm long, glabrous, except for very scattered minute recurved callosities. Flowers 3–6 to an inflorescence, arranged in an apical umbel, the base of the umbel subtended by 3–6 linear-lanceolate scarious bracts 3–5 mm long. Pedicels 3–4 cm long. Hypanthium reportedly "purple to pink or rarely white," tubular below for about 10 mm, then gradually flaring to the apex, the hypanthium or fused portion 16–20 mm long, 4–6 mm wide at the top, the tepals elliptic to elliptic-oblanceolate, somewhat spreading, 10–12 mm long, 3–4 mm wide, 1-nervate, the apices obtuse to rounded. Stamens 6, the filaments ca. 8 mm long, united below into a short scarious tube ca. 1 mm long; anthers basifixed, yellow, ca. 2.1 mm long. Ovary glabrous, elliptic, ca. 4 mm long, 2 mm wide, borne on a free stipe 8–12 mm long; style somewhat longer than the filaments, the stigma ± capitate. Capsule ellipsoid, 8–10 mm high, 3–4 mm wide, 3-valvate, each carpel containing ca. 16 seeds. Seeds irregularly quadrate, black, the surfaces finely muricate (40×).

This remarkable plant was first called to my attention by the Hinton collection cited below. I struggled for an identification of the specimen, which lacked below-ground parts. In a search through sundry genera housed in the collection at LL, TEX, I came upon another collection of the taxon by James Reveal among the unidentified materials of the Liliaceae, one that had a tunica-covered bulb and well-preserved flowers.

Superficially, the two specimens are similar to *Androstephium coeruleum* (Scheele) Torrey, having pedicels jointed at the summit, the perianth segments united into a distinct hypanthial tube, and the stipitate ovary not fused with the hypanthium. They lack, however, the prominent corolla tube or corona of that species. They appear closely related to *Androstephium* and cohorts, keying to this group in Moore's (1953) synoptical key to the American genera of the Allieae; among these (*Androstephium*, *Bloomeria*, *Brodiaea*, *Dichelastemma*, *Muilla*, *Triteleia*, *Triteleiopsis*), I could find no satisfactory genus in which to position the present novelty. The species of this group appear to be apportioned among genera (as currently accepted) distinguished by rather small differences. Such also appears to be true for the Allieae in general. Without a comprehensive study of the tribe, however, and the identification of groups that perhaps are more natural, the new species described here cannot be placed to genus. Its recognition as a monotypic genus is in keeping with current classificatory trends.

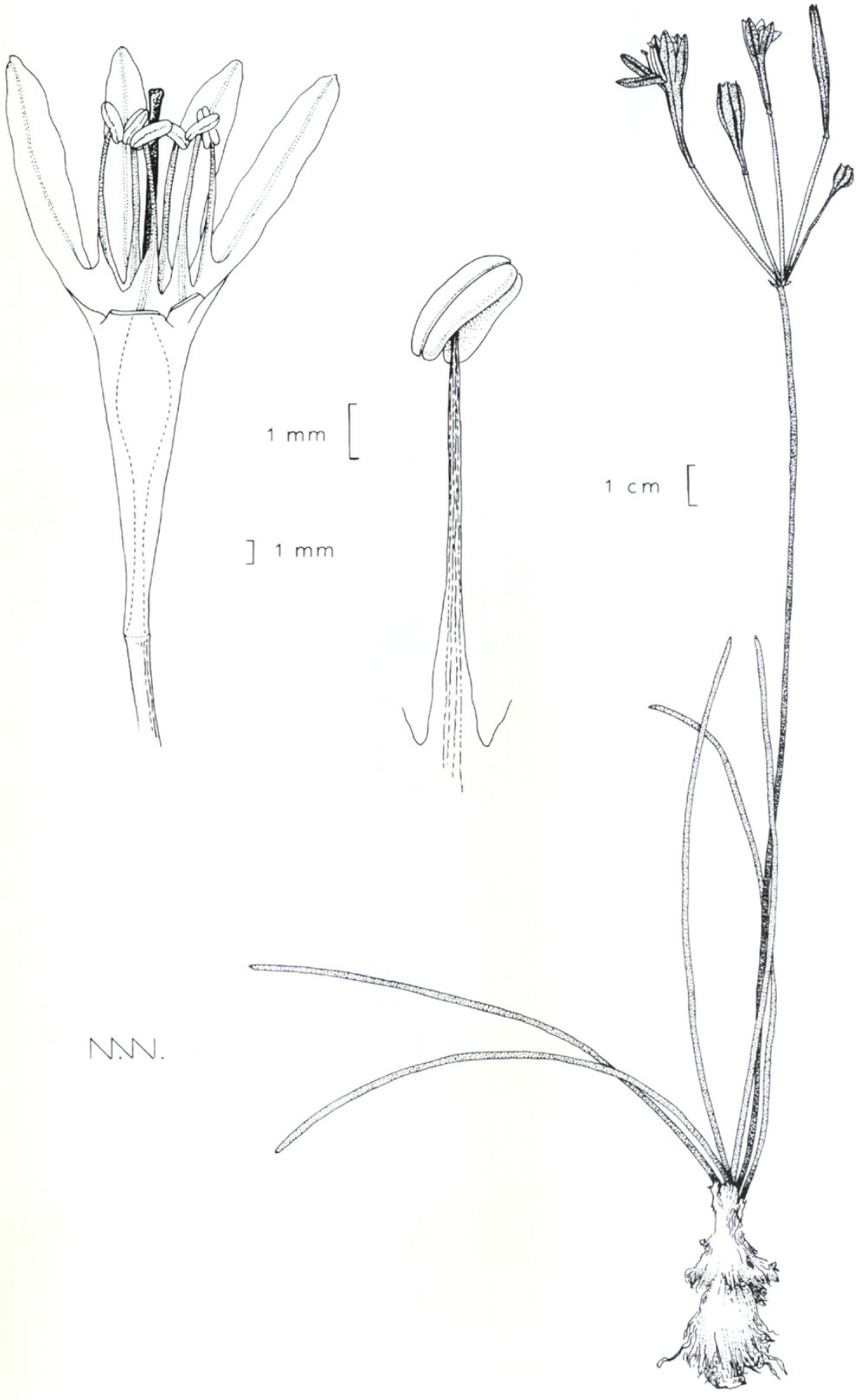

Figure 1. *Jaimehintonia gypsophila*, from the holotype.

Jaimehintonia is similar to the recently described *Milla mortoniana* H. E. Moore (1953), having the blue (or purplish on drying) perianth and remarkably similar umbellate inflorescence, but it lacks the androecial and gynoecial features of that species (cf. Moore's illustration, 110 B).

I take pleasure in naming the genus for Jaime Hinton, son of the late George B. Hinton, whose early collections from the Pacific slopes of Mexico are well known (Hinton & Rzedowski, 1972). Jaime is a Mexican citizen and, along with his wife, son George, and grandson, now resides on the western lower slopes of Cerro Potosi near the village of San Rafael on his "Rancho Aquillilla." The most remarkable attribute of Jaime, in my opinion (as opposed to most nonacademic people of my acquaintance), is his exceptional dedication to things botanical. He revealed to me once (following a question put to him regarding this matter) that one of the happiest periods of his life had to be the several years he spent enduring the rugged terrain and difficult conditions collecting plants with his father, mostly in western Mexico and Guerrero. Proof of that has been his continued zeal in pursuing similar fieldwork in the mountainous terrain of northeastern Mexico with his son George; more recently, both have been joined by the latter's son, making this a four-generation operation, all of their collection numbers having been extended from those of George the elder, hence the collector's notation, *G. B. Hinton et al.*

Paratype. MEXICO. NUEVO LEON: Mpio. Aramberri, gypsum hillsides, Aramberri, 1,145 m, 1 Sep. 1990, *G. B. Hinton et al. 20560* (TEX).

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