1974

A New Species of *Dichelostemma* (Liliaceae) from California

Lee W. Lenz

Rancho Santa Ana Botanic Garden

Follow this and additional works at: <https://scholarship.claremont.edu/aliso>

Part of the [Botany Commons](#)

Recommended Citation

Lenz, Lee W. (1974) "A New Species of *Dichelostemma* (Liliaceae) from California," *Aliso: A Journal of Systematic and Floristic Botany*. Vol. 8: Iss. 2, Article 4.

Available at: <https://scholarship.claremont.edu/aliso/vol8/iss2/4>

A NEW SPECIES OF *DICHELOSTEMMA* (LILIACEAE) FROM CALIFORNIA

LEE W. LENZ

*Rancho Santa Ana Botanic Garden
Claremont, California 91711*

During the course of a taxonomic study of the *Brodiaea* complex a previously undetected species of *Dichelostemma* was discovered associated with vernal pools in Amador, Merced and Sacramento counties.

***Dichelostemma lacuna-vernalis* sp. nov.**

Fig. 1

Herba perennis ex cormo; cormi ca. 1 cm diam., non profunde positus, propagulos productentes; scapus minus quam 2 dm altus, gracilis, glaber, usque ad 6 ex cormo singuli exoriens; folia subulata, tenuia, complanata vel concava, non carinata, sine impressivenius, usque ad 2 dm longa et basi 1.5 cm lata, 2 vel plures ex cormo singuli productentes; folia ad marginem ciliata; bracteae ca. 6 mm latae, 7 mm longae, ovatae, acuminatae, violaceae; inflorescentia cum 1-3 floribus; pedicelli usque ad 3 mm longi; perianthium violaceum; tubus campanulatus, ca. 3 mm longus; segmentia perianthii expansa, non rotata, ca. 1 cm longa, 7 mm lata; stamina 6; filamenta staminum segmentis externis perianthii opposita ca. 2 mm longa antheras ca. 2 mm longas habentia; filamenta staminum segmentis internis perianthii opposita ca. 1 mm longa antheras ca. 3.5 mm longas habentia; appendices tubi staminalis brevis ca. 1 mm latae, 5 mm longae.

Perennial herb from a corm; corms ca. 1 cm in diam, not deeply seated, bearing offsets; scape usually less than 2 dm tall, slender, smooth, up to 6 arising from a single corm; leaves subulate, thin, flat to concave, not keeled, no vein impressions, 2 dm long and 1.5 cm broad at base, 2 or more produced by each corm; leaves at margins ciliated; bracts about 6 mm wide, 7 mm long, ovata, acuminate, usually purple; inflorescence with 1-3 flowers; pedicels up to 3 mm long; perianth lavender; tube campanulate, ca. 3 mm long; segments of the perianth spreading, not rotate, ca. 1 cm long, 7 mm wide; stamens 6; filaments of the stamens opposite to the outer segments of the perianth ca. 2 mm long, having anthers ca. 2 mm long; filaments of the stamens opposite to the inner segments of the perianth ca. 1 mm long, having anthers ca. 3.5 mm long; appendages of the short staminal tube ca. 1 mm wide, 5 mm long.

Holotype.—California: Sacramento Co. End of Walnut St., Orangevale. Grassy meadow area with vernal pools, 12 April, 1967, L. W. Lenz 24671A.

Fig. 1. *Dichelostemma lacuna-vernalis*.

Other collections.—California: Amador Co. Grassy vernal pool area ca. 5 mi from Ione-Jackson junction, hwy 140 near Mariposa Co. line, el. 350 ft, 12 May, 1967, L. W. Lenz 24710; Sacramento Co. Bald spot 0.5 mi S Phoenix airport, 12 May, 1965, L. W. Lenz 24617.

Etymology.—*lacuna*, Latin, a place where water collects, a pool or pond; *vernalis*, Latin, of, or belonging to spring, hence vernal pool.

This little vernal pool species is very distinct and may be distinguished from *Dichelostemma pulchellum* (Salisb.) Heller in the following ways: (1) leaves broad at the base, flat to concave, thin and with no evidence of a keel or nerve impressions; (2) by the 1-3-flowered inflorescences; (3) the short scapes and the fact that there may be as many as six arising from a single corm; and (4) by the very small bracts. I believe that this species is hybridizing with *D. pulchellum*, and intermediates between the two species are common. The two species occupy different habitats but may be found growing within a few hundred feet of one another, and the intermediates are usually found in more or less intermediate habitats. Under uniform cultural conditions, *D. lacuna-vernalis* blooms earlier than *D. pulchellum* and forms believed to be intermediates are intermediate in blooming dates.

I wish to express my appreciation to Les Hannibal of Fair Oaks who first called my attention to these pools and suggested that I might find them of interest.