



6-30-1971

Description of a new species of *Dalea* (Leguminosae) from Utah

Stanley L. Welsh
Brigham Young University

Follow this and additional works at: <https://scholarsarchive.byu.edu/gbn>

Recommended Citation

Welsh, Stanley L. (1971) "Description of a new species of *Dalea* (Leguminosae) from Utah," *Great Basin Naturalist*: Vol. 31 : No. 2 , Article 10.

Available at: <https://scholarsarchive.byu.edu/gbn/vol31/iss2/10>

This Article is brought to you for free and open access by the Western North American Naturalist Publications at BYU ScholarsArchive. It has been accepted for inclusion in Great Basin Naturalist by an authorized editor of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu.

DESCRIPTION OF A NEW SPECIES OF *DALEA*
(LEGUMINOSAE) FROM UTAH

Stanley L. Welsh¹

During the spring of 1966, a collection of plants taken in San Juan County, Utah, yielded an unusual white-flowered specimen of *Dalea*. The specimen belongs to that section of *Dalea* traditionally ascribed to the genus *Petalostemon*, and after casual investigation it was identified as *Petalostemon flavescens* and filed in the general herbarium at Brigham Young University (BRY). A careful review of the species of *Dalea* and *Petalostemon* demonstrated that the *Dalea* specimen was distinguishable from both *Petalostemon flavescens* Wats. and *P. occidentale* (Heller) Fern., the only other white-flowered species known from Utah, on the basis of thicker spikes and larger flowers. Indeed, the specimen indicated quite another line of relationship, i.e., with *Petalostemon ornatum* Dougl. ex Hook. (including *P. searlsiae* Gray). In Utah, *P. ornatum* is known only from west of the Colorado River, and, additionally, it has pink flowers which average smaller, and has more slender spikes.

In 1970, two visits were made to the site of the original discovery. Additional specimens were collected, and the extent of the population was investigated. The population occurs on sandstone bedrock and to a lesser extent on dune sands. It grows along the Halls Crossing road for a distance of about 10 miles, beginning at a point about 2 miles west of the junction of the Wilson Mesa road. Its occurrence along a north-south line was observed to be at least one-half mile. A new highway is being constructed through the apparent center of the population.

The species is named in honor of the journey of the heroic Hole-in-the-Rock pioneers who passed nearby in late February of 1880.

Dalea epica Welsh, sp. nov.

Fig. 1

A *D. flavescenti* differt spicis longioribus et latioribus et floribus magnioribus, et a *D. ornatis* differt spicis longioribus et latioribus et floribus magnioribus et albis.

Caudex ligneus valde, ramificans subterraneus aliquantus; caules a aliquot ad numerosus (20) 25-35 (42) cm longus, strigulosus; stipulae lanci-subulatae, 2-4 mm longae, persistentes; folia 1.5-3.8 cm longa; foliola 5, 5-19 mm longa 2-7 (9) mm lata, plicata vel plana, strigulosa, glandulosi-punctata; a oblanceolata ad elliptica, acuta; pedunculus 1.4-9 (12) cm longus; spica (2) 2.5-9 (14) cm longa, 1.2-1.8 cm lata (ubi complanata), subcylindrica; bractae 4-6 (7) mm longae, lanci-aristatae, villosae; flores 7.5-11 mm longi, subsessiles;

¹Department of Botany and Range Science, Brigham Young University, Provo, Utah.



Fig. 1. *Dalea epica* Welsh sp. nov.

calyx 5-7 mm longus, dentes 2.7-4 mm longus, tubus 3 mm longus; petala alba, calyx excedens; pistilla 12.5 mm longa, stylus 9 mm longus; fructus immaturus, 3.5-4 mm longus, 1.5-2 mm latus, pilosus.

Utah: San Juan Co., Plateau, ca 10 miles east of Halls Crossing, in sandy soil, in Blackbrush community, on Kayenta Formation, S. L. Welsh 5205, 30 April 1966 (Holotype, BRY, Isotype NY). Navajo blow sand and bedrock, with blackbrush, sagebrush, cryptantha, and hymenopappus, ca 2 miles west of road to Wilson Mesa, on Halls Crossing road, S. L. Welsh 9818, 16 May 1970 (BRY); do, S. L. Welsh and N. D. Atwood 9990, 6 June 1970 (BRY); do, S. L. Welsh and N. D. Atwood 9994, 6 June 1970 (BRY).