



6-30-1982

A species of *Cryptantha* (Boraginaceae) dedicated to the memory of F. Creutzfeldt

Stanley L. Welsh
Brigham Young University

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

Recommended Citation

Welsh, Stanley L. (1982) "A species of *Cryptantha* (Boraginaceae) dedicated to the memory of F. Creutzfeldt," *Great Basin Naturalist*. Vol. 42 : No. 2 , Article 4.
Available at: <https://scholarsarchive.byu.edu/gbn/vol42/iss2/4>

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, ellen_amatangelo@byu.edu.

A SPECIES OF *CRYPTANTHA* (BORAGINACEAE)
DEDICATED TO THE MEMORY OF F. CREUTZFELDT

Stanley L. Welsh¹

ABSTRACT.— Described as new is *Cryptantha creutzfeldtii* Welsh, named to honor the memory of F. Creutzfeldt, botanist with the Gunnison Expedition of 1853–54, who was killed along with Gunnison and other members of the party in an Indian ambush.

During preparation of a manuscript dealing with Utah plant types and their collectors and authors, it became apparent that one of our earliest botanists has not received the attention of the botanical public. That person is known simply as F. Creutzfeldt, and little information is known about him. He was the botanist with the ill-fated Gunnison expedition of 1853–54. That expedition was involved with exploration of a feasible route for a railroad from the Mississippi River to the Pacific Ocean (Beckwith 1854). Creutzfeldt died (on 26 October 1853) along with Gunnison and other members of the party in an Indian attack while they were camped along the Sevier River, near present-day Delta. Captain John Williams Gunnison was in command of the expedition, which had been split prior to the Indian attack. Lieutenant Edward Griffin Beckwith was in charge of a portion of the expedition that was working separately from Gunnison at the time of the disaster. Beckwith was named to succeed Gunnison. Creutzfeldt had collected types of *Eriogonum corymbosum* Benth. in DC. var. *divaricatum* T. & G. in Beckwith and *E. leptoclados* T. & G. in Beckwith in the vicinity of the Green River crossing. The specimens of those taxa are deposited at NY. Plant taxa have been named after both Gunnison and Beckwith, but none have been named in honor of the memory of the one person who gave more than anyone to the cause of plant collection in Utah—his life.

Therefore, it is with humility and a sense of gratitude that I name the following plant after F. Creutzfeldt, who passed to the west,

south of where this plant has existed undescribed since his time.

Cryptantha creutzfeldtii Welsh, sp. nov.

Similis *Cryptantha jonesiana* (Payson) Payson sed in foliis longioribus et acutis glabris supra et acutis vel obtusis staturis elatioribus et calycibus majoribus differt.

Perennial herbs, 0.7–2.3 dm tall; stems many, arising from a multicapital caudex and stout black-barked taproot, the caudex branches 2–12 cm long clothed by marcescent leaf bases; leaves narrowly spatulate to oblanceolate, acute to obtuse, 2–8 cm long, 0.2–0.9 cm wide, coarsely appressed setose-pustulate (appearing ashy gray on leaves of previous years) below, the petioles long-setose; inflorescence an interrupted thyrses, with few to several clusters below the terminal subcapitate one; calyx segments lance-linear in anthesis, 6–8 mm long, in fruit 9–13 mm long, densely long-setose with yellowish, ascending bristles; corolla white, the tube 8–11 mm long, campanulate in the throat; the fornicies low and broad, crests at base of tube lacking, the limb 10–13 mm wide; nutlets lanceolate, 4–5 mm long, muricate; scar narrow, open, without an elevated margin.

TYPE.— USA. Utah: Emery County, T21S, R6E, S22, ca 1.5 mi nw hwy 10, along dirt road at Muddy Creek historical marker, on slope S of canal, 6400 ft (1952 m), shadscale community, 14 May 1981, S. L. Welsh 20470 (Holotype BRY; isotypes NY, ISC, POM, CAS, MINN, COLO, RM, UT, UTC, UC, MO, and others).

¹Life Science Museum and Department of Botany and Range Science, Brigham Young University, Provo, Utah 84602.

Additional specimens: Utah, Carbon Co., T14S, R10E, S17-18, ca 1 mi W Price, ¼ mi S Castleview Hospital, Mancos Shale slope at ca 5500 ft (1678 m) elev., 19 May 1981, L. Arnold sn (BRY); NY, ISC, POM, CAS, MINN, COLO, RM, UT, UTC, UC, MO, RENO. Emery Co., T21S, R6E, S27, 5 mi SW of Muddy Creek, 3 mi N Emery, Bluegate Member, clay soil, 26 May 1979, E. Neese & S. White 7362 (BRY); Castle Dale, SE Buzzard Bench, 20 May 1976, J. Allan 762, (BRY); T22S, R6E, NE¼ S7, 1.7 mi due W Emery; 30 May 1979, S. White 15 (BRY); T21S, R6E, S28, 1.5 mi due N Emery, 7 June 1979, S. White & G. Moore 77 (BRY); T20S, R6E, S14, Ferron Canyon, 23 May 1980, N. D. Atwood 7518 (BRY); SW of Orangeville, below Buzzard Bench, 27 April 1979, J. Allan 947 (BRY).

The Creutzfeldt cryptantha is a near ally of *Cryptantha jonesiana* (Payson) Payson. Diagnostic features of the former include the acute to obtuse leaves that are glabrous above, the stature that averages taller at

maturity, the larger calyces, and the large nutlets. The two taxa are spatially and edaphically isolated, with *C. jonesiana* occupying portions of the Summerville and Moenkopi formations in the central portions of the San Rafael Swell, and *C. creutzfeldtii* occurring on the Blue Gate Member of the Mancos Shale Formation along the strike of that formation below the coal measures of the Mesa Verde Group of formations. Both flower in early springtime, and each is characterized by the broad corolla limbs, vesture of pustulate-based setae, and slender accrescent calyx lobes.

LITERATURE CITED

- HIGGINS, L. C. 1971. A revision of *Cryptantha* subgenus *Oreocarya*. *BYU Sci. Bull., Biol. Ser.* 13 (4).
- BECKWITH, E. C. 1855. Reports of explorations and surveys, to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean. House Rep. Exec. Doc., Vol. 2, No. 91.