Two new varieties of *Eriogonum* (Polygonaceae) from the Intermountain region

James L. Reveal

*University of Maryland, College Park and Smithsonian Institution, Washington, D.C.*

Follow this and additional works at: [https://scholarsarchive.byu.edu/gbn](https://scholarsarchive.byu.edu/gbn)

**Recommended Citation**


Available at: [https://scholarsarchive.byu.edu/gbn/vol34/iss3/12](https://scholarsarchive.byu.edu/gbn/vol34/iss3/12)

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.
TWO NEW VARIETIES OF ERIOGONUM (POLYGONACEAE) FROM THE INTERMOUNTAIN REGION

James L. Reveal

Abstract.—Two new variants of Eriogonum are proposed: E. brevicaule var. atwoodii from near Fredonia, Mohave Co., Arizona and E. pharnaceoides var. cervinum from southwestern Utah and adjacent northern Arizona and southeastern Nevada.

After a detailed review of the genus Eriogonum (Polygonaceae) for the state of Utah was published (Reveal, 1973a, b), material representing two undescribed varieties was discovered, and these are hereby proposed as new.

Eriogonum thompsonae S. Wats. var. atwoodii Reveal, var. nov. A var. thompsonae floribus albis et a var. albifloro folis linearis differt. Typus: ARIZONA: Mohave Co.: Along Arizona Highway 389, 4.3 miles west of the junction of U.S. Highway 89A at Fredonia, on rolling reddish clay hills, associated with Atriplex, Ephedra, Stanleya, and Eriogonum mortonianum, at about 4700 feet elevation, 15 August 1973, Reveal & Reveal 321. Holotypus, US! Isotypi, 15 duplicates to be distributed from US.

Low spreading herbaceous perennials (1) 1.5-3 dm high and 2-5 dm across; leaves sheathing up the stems 1-3 cm, linear, 3-8 (10) cm long including the petiole, 2-4 (6) mm wide, thinly to moderately tomentose below, usually glabrous above, infrequently glabrous on both surfaces, the margin inrolled or at least thickened, the nearly indistinguishable petiole about 1/5 the length of the leaf-blade; stems erect, 5-10 (12) cm long, glabrous; inflorescences open, cymose, (5) 8-15 cm long, glabrous; involucres turbinate, 2.5-4 mm long, 1.5-2 mm wide, glabrous, the 5 acute teeth 0.3-0.5 mm long; flowers white, 3-3.5 mm long, glabrous, the tepals oblong; achenes light brown, 2.5-3 mm long.


This variety differs from typical var. thompsonae in having white flowers. The var. thompsonae occurs nearby on the steep slopes near Kanab westward to beyond Pipe Springs, but neither Atwood nor I found var. thompsonae in the vicinity of var. atwoodii. The var. albiflorum Reveal is similar in that it too has white flowers, but var. atwoodii differs from it (and var. thompsonae as well) in having long, narrowly linear leaves. The discovery of var. atwoodii confirms the seemingly close association I have assumed Eriogonum thompsonae has had with the more northerly E. brevicaule Nutt. and the more easterly E. lonchophyllum Torr. & Gray, both of which generally have narrow leaf-blades.

The variant is named for N. Duane Atwood, a former fellow

1Department of Botany, University of Maryland, College Park 20742, and National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560. Research supported by National Science Foundation Grant GB 22645.

245
graduate student at Brigham Young University, and an outstanding plant collector.


Erect herbaceous annuals 1-3 dm high; leaves basal and cauline, the basal ones linear-lanceolate to linear-oblong-lanceolate, 1-3 (4) cm long, 1-2.5 (4) mm wide, lanate below, villous and greenish above, the petiole 1-3 (5) mm long, the cauline ones linear, 0.5-2 (2.5) cm long, 0.5-2 (3) mm wide, tomentose to lanate below, thinly villous to infrequently glabrous above, sessile or on petioles less than 2 mm long; stems erect, villous, leafy; inflorescences open, 0.5-2.5 dm long and up to 2 dm wide, the branches villous throughout; peduncles slender, erect or nearly so, (1) 2-5 cm long, villous to glabrous; involucres campanulate, the tube 1-2 mm long with 5 ± erect, lanceolate lobes 1-2 (3) mm long, villous; flowers yellow, 1-3 mm long, glabrous, the tepals dimorphic, those of the outer whorl oblong-ovate with a large saccate base on each side of the truncate to cordate base, those of the inner whorl linear-oblong and erect, usually far exceeding the length of the outer tepals; achenes brown, 1.8-2.3 mm long.


The var. **cervinum** differs from var. **pharnaceoides** in having yellow instead of white flowers and occupying a geographical area north and west of the typical variant. The flowers of var. **cervinum** are also a bit smaller, but the measurements overlap.

As I indicated before (Reveal, 1973a), the problem with this variety has been the paucity of material for critical evaluation and use as a type. In 1973, Atwood and Larry C. Higgins obtained specimens of this variant for me, and they succeed rather well. In addition, a visit to the Grand Canyon National Park resulted in the discovery of var. **cervinum** in northern Arizona, and thus the known range can be expanded to include this state for the variety.

**Literature Cited**

