

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDPGN084R1

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Eriogonum pharnaceoides* var. *cervinum*
COMMON NAME: Deer Lodge Wild Buckwheat, Wire-stem Buckwheat
SYNONYMS: none
FAMILY: Polygonaceae

AUTHOR, PLACE OF PUBLICATION: Reveal, James Lauritz. Great Basin
Naturalist 34(3): 246. 1974.

TYPE LOCALITY: Utah: Washington County, foothills of Pinto on the N slope of the
Pine Valley Mountains.

TYPE SPECIMEN: Rancho Santa Ana Botanic Garden, RSA 5107 (Isotype). D.
Atwood and L.C. Higgins, #5895. August 18, 1973.

TAXONOMIC UNIQUENESS: *Eriogonum* (wild buckwheat) is a very large genus with
over 450 recognized species and varieties in North America. The Arizona Flora (Kearney and
Peebles 1960) lists 57 species within the State. *Eriogonum pharnaceoides* var. *cervinum* is the
second variety of *E. pharnaceoides*, and both occur in Arizona.

DESCRIPTION: **Herbs**, erect or spreading, annual, 1-5 dm, villous, greenish, yellowish
green, or reddish. **Stems:** caudex absent; aerial flowering stems erect or nearly so, solid, not
fistulose, 0.1-0.8 dm, villous. **Leaves** basal and cauline; basal: petiole 0.1-0.5(-1) cm, blade
linear-lanceolate to linear-oblancheolate, 1-4 × 0.1-0.4 cm, white-lanate abaxially, villous and
greenish to yellowish green adaxially, margins plane or revolute; cauline sessile, blade linear,
0.5-2.5 × 0.05-0.3 cm, tomentose abaxially, thinly villous or glabrous and greenish adaxially.
Inflorescences cymose, open, 5-25 × 3-40 cm; branches villous; bracts 3-8, semi-leaflike, 5-
15 × 0.3-1.5(-2) mm. **Peduncles** erect or nearly so, straight, slender, (1-)2-5(-7) cm, sparsely
villous or glabrous. **Invluces** campanulate, 1-2 × 2-3 mm, villous; teeth 5, mostly erect to
spreading, 1-3 mm. **Flowers** 1-3 mm; perianth yellow, glabrous; tepals dimorphic, those of
outer whorl oblong-ovate, 2-saccate-dilated proximally, those of inner whorl linear-oblong;
stamens mostly included, 1-1.5 mm; filaments mostly pilose proximally. **Achenes** brown to
blackish, lenticular, 1.8-2 mm, glabrous (Flora of North America 2015).

AIDS TO IDENTIFICATION: The variety *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, although the measurements overlap (Reveal 1974).

ILLUSTRATIONS:

Photos and Herbarium Mounts:

<http://swbiodiversity.org/seinet/taxa/index.php?taxon=Eriogonum%20pharnaceoides%20var.%20cervinum>.

TOTAL RANGE: NW Arizona, SE Nevada, and extreme SW Utah.

RANGE WITHIN ARIZONA: The defined distribution in Arizona is Mohave County, the Arizona Strip, in the vicinity of Mount Trumbull. Moreover, according to the Flora of North America (2015), “it is totally disjunct from the typical variety” (*E.p.* var. *pharnaceoides*). However, nine of the fifteen known collection sites are found beyond the Arizona Strip of Mohave County, ranging from Oak Creek Canyon, across the Mogollon Rim to Luna Lake (and include Yavapai, Coconino, Gila Navajo, Apache and Greenlee Counties). These collections definitely overlap with the typical variety. It must be concluded that either *E.p. cervinum* extends beyond Mohave County and overlaps with *E.p. pharnaceoides*, or that the collections across the Mogollon Rim have been misidentified.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Erect herbaceous annual.

PHENOLOGY: Flowering: July – September

BIOLOGY:

HABITAT: Sandy or gravelly slopes in sagebrush and mountain mahogany communities, oak, pinyon-juniper and montane conifer woodlands (Flora of North America 2015).

ELEVATION: (4600-) 5900 – 7545 feet (1400 – 2300m) per Flora of North America 2015. Utah Rare Plants (2015) extends this range to 8700 feet (2650m).

EXPOSURE: Not specified except for two collection sites: SW facing and north facing.

SUBSTRATE: Sandy or gravelly slopes. Rocky, gravelly basaltic loam, sandy clay loam and fine grain sand were noted at some collection sites.

PLANT COMMUNITY: Sagebrush and Mountain Mahogany; oak, pinyon-juniper and montane conifer woodlands.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. *Eriogonum pharnaceoides* var. *cervinum* was first described in 1974. The description was based on two specimens from Nevada, four from Utah, and one from Arizona. Currently in Arizona, there are 15 mapped occurrences, but a significant number of these along the Mogollon Rim may be questionable identifications (see Range within Arizona, and Suggested Projects). Flora of North America (2015) states that the variety is rare to infrequent in its limited range. Several collections sites, however, recorded the plant as common or occasional.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.

STATE STATUS: None.

OTHER STATUS: None.

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None specified. Some collections occur in wilderness areas which may offer some level of protection.

SUGGESTED PROJECTS: Verify identifications of specimens collected in Arizona beyond the Arizona Strip, Mohave County. At least one of the collections noted white flowers, which would suggest that the plant was *E.p. pharnaceoides* (typic variety) rather than *E.p. cervinum*. The Arizona Game and Fish Heritage Data Management Program has brought this question to the attention of several herbaria.

LAND MANAGEMENT/OWNERSHIP: USDI Bureau of Land Management – Arizona Strip Field Office; USDA Forest Service – Coconino, Apache-Sitgreaves and Tonto National Forests; USDI Bureau of Indian Affairs – White Mountain Apache Reservation; Arizona State Trust Land and a private land holding.

SOURCES OF FURTHER INFORMATION

REFERENCES:

Flora of North American (eFloras.org), accessed 10/19/2015,
http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250060459.

JStor| Global Plants, accessed 10/19/2015,
<http://plants.jstor.org/stable/10.5555/al.ap.specimen.s-g-7021>.

Kearney, Thomas H. and Robert H. Peebles, 1951 with Supplement 1960. Arizona Flora. University of California Press, Berkeley. p. 230-243.

NatureServe Explorer, an Online Encyclopedia of Life,

<http://explorer.natureserve.org/index.htm>.

Reveal, James L. 1974. Two new varieties of *Eriogonum* (Polygonaceae) from the Intermountain region. *The Great Basin Naturalist* 34(3): 245-246.

Tropicos, accessed 10/19/2015, <http://www.tropicos.org/Name/26000690>.

Utah Rare Plant Guide, accessed 10/20/2015, http://www.utahrareplants.org/rpg_species.html.

Welsh, Stanley L., N. Duane Atwood, Sherel Goodrich and Larry C. Higgins, eds. 1993. 2nd Ed., revised. *A Utah Flora*. Brigham Young University, Provo, UT. p. 548.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

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