

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PMLIL021V0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Allium plummerae* Watson

COMMON NAME: Plummer Onion, Tanner's Canyon Onion

SYNONYMS:

FAMILY: Liliaceae

AUTHOR, PLACE OF PUBLICATION: S. Watson. Proc. Amer. Acad. Arts Sci. 18: 195.
1883.

TYPE LOCALITY: USA: Arizona: near Fort Huachuca.

TYPE SPECIMEN: HT: GH-29801. J.G. Lemmon 2893, Jul 1882.

TAXONOMIC UNIQUENESS: “*A. plummerae* combines in one species the growth habit of *A. cernuum* and the technical characters of the *A. geyeri* alliance. It is apparently much more closely related to the latter [*A. geyeri*] although this relationship is evident only after close examination” (Ownbey, 1947). Species *plummerae* is 1 of 104 in the genus *Allium*. Based on a study conducted by Ownbey (1947), the genus *Allium* is represented in Arizona by thirteen species, two of which each include two recognizable geographical varieties.

DESCRIPTION: Perennial bulbs usually 1 of a cluster, sometimes short-rhizomatous basally, elongate, to 5 x 1-1.5 cm; Outer coat enclosing 1 or more bulbs, gray or brown, reticulate, cells very coarse-meshed, fibrous; inner coats whitish, cells vertically elongate and regular or obscure. Leaves persistent, green at anthesis, 3-6, sheathing; blade solid, flat, broadly channeled, 25-50 cm x 3-7 mm, shorter than flowering stalk, margins entire or minutely denticulate. The scape is persistent, solitary, erect, terete or 4-angled, 30-50 cm x 1-3.5 mm. Umbel persistent, erect, loose, 10-25-flowered, hemispheric-globose, bulbils unknown; spathe bracts persistent, 2-3, 3-5-veined, lanceolate, equal, apex long-acuminate; flowering stalk 30-50 cm (12-20 in) tall (Niehaus 1984, reports 10-30 cm), with 10-25 branches at the tip. Flowers stellate, 5-10 mm; tepals spreading or reflexed, white or pink, lanceolate, equal, withering in fruit and exposing capsules, margins entire, apex acute, midrib becoming noticeably thickened. Stamens equaling tepals to exerted; anthers purple; pollen light yellow; ovary conspicuously crested; processes 6, central, usually connate in pairs across septa, erect, flattened, to 2 mm, margins lacerate, usually well developed in fruit. The style is linear, equaling stamens; stigma capitate, unlobed or obscurely lobed; pedicel 15-25 mm, elongating in fruit. Seed coat shining; cells each with minute, central papilla. (FNA 1993+).

AIDS TO IDENTIFICATION:

ILLUSTRATIONS: Color photos (Mark McDonough 2000, in http://www.plantbuzz.com/Allium/Gallery/amer/amer_gal2.htm). Color photo accessed 5/14/2003 in (http://www.ibiblio.org/pbs/pbswiki/files/allium/Allium_plummerae_flws1.jpg). Black and white drawings (Niehaus 1984: pp. 17, 275) Color photo (Hesselberg, in Rickett 1970: Plate 7)

TOTAL RANGE: Southeastern Arizona and adjacent northern Mexico. Collections (MBG) in 1947 and 1948 from Catron and Otero counties, New Mexico.

RANGE WITHIN ARIZONA: Chiricahua and Huachuca Mountains, and Leslie Canyon in Cochise County, and Baboquivari Mountains in Pima County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Herbaceous perennial.

PHENOLOGY: Flowers from June – August, occasionally to October.

BIOLOGY:

HABITAT: Wet meadows, stream banks, and rocky slopes, in mountains.

ELEVATION: 4,800 - 9,000 ft. (1464-2745 m). FNA (1993+) reports elevation from 5,246-9,180 ft. (1600-2800 m).

EXPOSURE: Shade. Collected on E, N and NE-facing slopes.

SUBSTRATE: Rocky, limestone slopes, cliffs and boulders. Collected in canyon of easily broken brown schist. (SEINet accessed 2005).

PLANT COMMUNITY: Mixed coniferous forest; Quercus-Cercocarpus and Quercus-Pinus associations. In Leslie Canyon: grassland, higher desert type shrubs and low annuals. Associated species include: *Acer negundo* (box-elder), *Aralia racemosa* (American spikenard), *Draba* (whitlow-grass), *Eriogonum jamesii* (James wild buckwheat), *Fraxinus velutina* (velvet ash), *Geranium richardsonii* (Richardson geranium), *Hackelia ursina* (Chihuahuan stickseed), *Heuchera sanguinea* (coral-bells), *H. versicolor* (= *H. rubescens* var. *versicolor*, San Diego County alumroot), *Holodiscus dumosus* (glandular oceanspray), *Mimulus cardinalis* (scarlet monkey-flower), *Muhlenbergia pauciflora* (new-flowered muhly), *Oxalis violacea* (violet wood-sorrel), *Panicum virgatum* (old switch panic grass),

Penstemon pinifolius (Arizona beardtongue), *Philadelphus microphyllus* (little-leaf mock-orange), *Pinus ponderosa* (ponderosa pine), *P. strobiformis* (Southwestern white pine), *Populus tremuloides* (quaking aspen), *Prunus virginiana* (choke-cherry), *Pseudotsuga menziesii* (Douglas-fir), *Ptelea* (hoptree), *Quercus rugosa* (net-leaf oak), *Rubus neomexicanus* (New Mexico blackberry), *R. parviflorus* (thimbleberry), *Salix lasiolepis* (arroyo willow), *Salvia* (sage), *Sedum cockerellii* (Cockerell's stonecrop), and *Viguiera triloba* (Gray's zaluzania). With ferns, crucifer, saxifrage (*Saxifraga*), and Spruce (*Picea*), Fir (*Abies*), Douglas-fir in Chiricahua Mountains.

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: Salvage Restricted (ARS, ANPL 1999)
[Salvage Restricted (ARS, ANPL 1993)]
OTHER STATUS: None

MANAGEMENT FACTORS: Commonly grown in private and commercial landscapes.

CONSERVATION MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: BIA – Tohono O'odham Nation; DOD – Fort Huachuca Military Reservation; FWS – Leslie Canyon National Wildlife Refuge; USFS – Coronado National Forest; Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

Revised: 1992-12-07 (DBI)
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