

ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDBOROV0V0

Data Sensitivity: No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Plagiobothrys pringlei* Greene  
**COMMON NAME:** Pringle popcorn-flower, popcorn flower  
**SYNONYMS:** *Echidiocarya arizonica* A. Gray  
**FAMILY:** Boraginaceae

**AUTHOR, PLACE OF PUBLICATION:** *Echidiocarya arizonica*, A. Gray. Proc. Amer. Acad. Arts 11: 89. 1876. *Plagiobothrys pringlei*, Greene. Pittonia 1: 21. 1887.

**TYPE LOCALITY:** Mesa Verde, Arizona, USA.

**TYPE SPECIMEN:** HT: GH-92805. C. Smart, date?

**TAXONOMIC UNIQUENESS:** Species *pringlei* is 1 of 42 in the genus *Plagiobothrys*, and 1 of 7 species in this genus found in the state.

**DESCRIPTION:** Herbaceous annual with several to many branched stems from near the base; prostrate or decumbent too nearly erect; slender, 10-40 cm (4-16 in) long, spreading setose. Leaves numerous below, less so above, narrowly oblanceolate, 2-4 cm long, 2-5 mm broad, rounded or obtuse to nearly acute at apex; appressed strigose or canescent to conspicuously setose. floral bracts lanceolate to narrowly oblong, 1-2 cm long; spikes elongating in age, bractless near the apices, calyx segments lance-linear, about 3 mm long in fruit, hirsute. Flowers white, with an inconspicuous 2-3 mm broad corolla. Nutlets 4, the lowermost commonly joined in pairs, the upper separate, ovate, the apex acute, 1.8-2 mm long, dorsal keel evident above fading to rather distinct tuberculations below, dorsal surface rugulose with short ridges also conspicuously tuberculate; scar elevated on a prominent stipe at least 1.3 mm long and usually as long as the nutlet, ventral keel evident; style shorter than the stipe of nutlet.

**AIDS TO IDENTIFICATION:** The most remarkable characteristic of this plant is the long-stiped nutlets, unique among the borages. This species is very closely related to *P. collinus* var. *fulvescens*, which it resembles in most details, except that the former has stalked nutlets and slightly longer calyx segments. (Higgins, 1974).

**ILLUSTRATIONS:** Color photo (ASU 58787, in SEINet accessed 2004)

**TOTAL RANGE:** Central Arizona to northern Sonora, Mexico.

**RANGE WITHIN ARIZONA:** Cochise, Maricopa, Pima, Pinal, and Santa Cruz counties. Some Maricopa County populations may be extirpated due to urbanization, including those in Paradise Valley, North Scottsdale, and Cave Creek.

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Annual forb/herb.

**PHENOLOGY:** February to April.

**BIOLOGY:**

**HABITAT:** *Larrea* belt on arid plains, and sandy mesas and hillsides. Gravelly slopes in desertscrub and desert grassland.

**ELEVATION:** Up to 4,500 feet (1,371 m). In Arizona, collected (SEINet, accessed 2004) at elevations from 1,200 - 4,500 feet (366-1373 m).

**EXPOSURE:** NW-facing slope (ARIZ collection *in* SEINet).

**SUBSTRATE:** Gravelly slopes, coarse gravelly loam, sandy flats.

**PLANT COMMUNITY:** Sonoran Desert; Semi-desert grasslands and desertscrub; creosote bush flats. Associated species include: *Acacia* sp., *Larrea tridentata* (Creosote bush), *Phacelia arizonica* (Arizona phacelia), *Plagiobothrys arizonicus* (Arizona popcorn-flower), *Prosopis velutina* (Velvet mesquite), and annual and perennial grasses. (SEINet accessed 2004).

### **POPULATION HISTORY AND TRENDS:**

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None

**STATE STATUS:** None

**OTHER STATUS:** None

**MANAGEMENT FACTORS:** Threats includes urbanization, and livestock grazing.

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** Surveys to determine this plants current distribution and population status need to be performed.

**LAND MANAGEMENT/OWNERSHIP:** USFS – Tonto National Forest; State Land Department; Private.

## **SOURCES OF FURTHER INFORMATION**

### **REFERENCES:**

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### **MAJOR KNOWLEDGEABLE INDIVIDUALS:**

**ADDITIONAL INFORMATION:**

**Revised:** 2004-11-26 (AMS)  
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