

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDLAM1U125

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Scutellaria potosina* var. *kaibabensis*

COMMON NAME:

SYNONYMS:

FAMILY: Lamiaceae

AUTHOR, PLACE OF PUBLICATION: S. L. Rhodes and T.J. Ayers, Jour. of Botanical Research Institute of Texas 4(1): 20-24. 2010.

TYPE LOCALITY: Arizona: Coconino County. East rim of the Kaibab Plateau, North Canyon Trail #4. 7014 feet.

TYPE SPECIMEN: ASC (SN). Rhodes 98-11 (Holotype).

TAXONOMIC UNIQUENESS: *Scutellaria* is a large genus with over 200 species worldwide. Turner (1994) recognized 26 geomorphological taxa (19 species and 9 varieties) of *Scutellaria* section *Resinosa*, which is a group of xeric or subxeric, mostly tap-rooted species of Mexico and the closely adjacent U.S. One of the 7 species restricted to the United States is *S. potosina*, which had three varieties defined in 1994: *S.p.* var. *platyphylla*, var. *tessellata*, and var. *grahamiana*. In 2010, an additional variety, *S.p.* var. *kaibabensis*, was described by Rhodes and Ayer.

DESCRIPTION: Perennial, rhizomatous herbs, 12-16 cm high. Stems simple, erect or ascending from a woody caudex, yellow-green, with scattered sessile glands, hirtellous to glabrous, hairs eglandular, retorse; older stems persistent. Leaves sessile to subsessile, elliptic to obovate, 9-15 mm long, 5-7 mm wide, ca. 2x as long as wide, margins entire, apex rounded, adaxial surface glabrous except for dense sessile glands, abaxial surface with few scattered short (<10µm) hairs in addition to sessile glands. Flowers axillary in upper stem leaves; calyx densely glandular; corolla 9-13mm long, tube diameter at throat 3.9-6.0 mm, outer surface with sessile glands and short gland-tipped hairs, limb deep violet-blue, throat white with purple spots. Mericarps 1.0-1.5 mm long, black, with an obscure apical callosity on some papillae. Rhodes and Ayer, 2010.

AIDS TO IDENTIFICATION: *S. potosina* var. *kaibabsensis* is endemic to the eastern edge of the Kaibab Plateau in northern Arizona, and occurs further northwest than any other known population in section *Resinosa*, and 250 miles north of the nearest populations of *S. potosina*. *S.p.* var. *grahamiana* is found only in southwestern Graham County, and var. *tessellata* is

found only in Pima, Cochise and Santa Cruz counties of southern Arizona. Variety *kaibabensis* is densely clothed with sessile glands, but is otherwise glabrous or possesses just a few short hairs. The lack of glandular hairs is similar to var. *grahamiana*, but the number and density of sessile glands, and stem architecture can easily separate the two. Variety *grahamiana* also exhibits no mericarps. Rhodes and Ayers, 2010.

ILLUSTRATIONS:

Herbarium Mounts: [http://swbiodiversity.org/seinet/taxa/index.php?taxon=Scutellaria potosina var. kaibabensis](http://swbiodiversity.org/seinet/taxa/index.php?taxon=Scutellaria_potosina_var.kaibabensis).

See also: S.L. Rhodes and T.J. Ayers, 2010, for both photos and line drawing.

TOTAL RANGE: *S. potosina* var. *kaibabsensis* is endemic to the eastern edge of the Kaibab Plateau in northern Arizona.

RANGE WITHIN ARIZONA: Known and described from four collection sites on the eastern edge of the Kaibab Plateau, covering about 100 square miles.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial, rhizomatous herb.

PHENOLOGY: Flowers: May to August.

BIOLOGY:

HABITAT: Dry, sandy soil, often associated with ephemeral drainages.

ELEVATION: Based on eight AZ collections: 4080-8550 feet (1244-2607 m).

EXPOSURE: Found mostly in canyon bottoms and from one ridgetop: probably open exposure.

SUBSTRATE: Variable: reported on red shales and chipped limestone soils, and from sandy and dry drainageways.

PLANT COMMUNITY: Found in multiple plant communities: Ponderosa Pine-White Fir; pinyon-juniper; and interior chaparral. Associated species noted at collection sites include: *Artemisia tridentate*, *Purshia stansburiana*, *Fallugia patadoxa*, *Shepherdia rotundifolia*, *Brickellia longiflora*, *Arctostaphylos*, *Juniperus*, *Sporobolus*, *Quercus gambelii*, *Clematis pseudoalpina*, *Robinia neomexicana*, *Opuntia engelmannii*, *Oenothera caespitosa*, *Pinus edulis*, *Pinus ponderosa*, *Pseudostuga*, *Abies*.

POPULATION HISTORY AND TRENDS: Unknown. Eight collections made from four sites between 1993 and 2008.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: None.

MANAGEMENT FACTORS: Unknown.

PROTECTIVE MEASURES TAKEN: Two sites are under USFS jurisdiction; two sites are under USNPS jurisdiction.

SUGGESTED PROJECTS: Monitor existing collection sites to gather population and trend data; expand surveys to ascertain distribution range information.

LAND MANAGEMENT/OWNERSHIP: US Forest Service; US National Park Service.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Rhodes, S.L. and T.J. Ayers. 2010. Two new taxa of *Scutellaria* Section *Resinosa* (Lamiaceae) from Northern Arizona. J. Botanical Research Institute of Texas 4(1):19-26.
Tropicos, <http://www.tropicos.org/Name/100363526>, accessed 5/13/2013.
Turner, Billie L. 1994. A taxonomic overview of *Scutellaria*, Section *Resinosa* (Lamiaceae). Phytologia 76(5): 345-382.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

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