

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

Plant Abstract

Element Code: PDROS1B2X2

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Potentilla rhyolitica* var. *rhyolitica*

COMMON NAME: Huachuca Cinquefoil

SYNONYMS:

FAMILY: Rosaceae

AUTHOR, PLACE OF PUBLICATION: Ertter, Barbara Jean. Jour. Bot. Res Inst.
Texas 1(1): 51. 2007

TYPE LOCALITY: Arizona (Cochise Co.): Huachuca Mountains: Millers Canyon

TYPE SPECIMEN: Rocky Mountain Herbarium, Univ. Wyoming, RM 4790
(paratype). L.N. Goodding (#110). June 8, 1909.

TAXONOMIC UNIQUENESS: There are 157 recognized species, subspecies and varieties of *Potentilla* in the U.S. and Canada. Arizona has 23 species, 14 varieties and three subspecies. *Potentilla rhyolitica* has two recognized varieties: *P.r.* var. *rhyolitica* and *P.r.* var. *chiricahuensis*. The former occurs in the Santa Rita and Huachuca Mountain ranges, while the latter is only found in the Chiricahua Mountains.

DESCRIPTION: **Stems:** 0.3-2 dm long. **Leaves:** long hairs of petiole +/- 1(-2) mm long; leaflets (moderately to) densely sericeous, gray-green. **Flowers:** 2-10; filaments 1.5-2.5 mm long; styles 5-15, 2-2.5 mm long. **Achenes** +/- 1.5 mm long, smooth to lightly ribbed (Ertter 2007).

AIDS TO IDENTIFICATION: The two varieties of *P. rhyolitica* are geographically distinct (var. *rhyolitica* in the Santa Rita and Huachuca Mountains; var. *chiricahuensis* in the Chiricahua Mountains). Variety *chiricahuensis* also differs from the *rhyolitica* in being less densely hairy, with somewhat longer and coarser hairs and larger achenes. *P.r. rhyolitica* also prefers to grow in crevices in rock outcrops.

ILLUSTRATIONS:

Herbarium Mounts:

<http://swbiodiversity.org/seinet/taxa/index.php?taxon=Potentilla%20rhyolitica%20var.%20rhyolitica>.

TOTAL RANGE: Arizona.

RANGE WITHIN ARIZONA: Santa Rita Mountains in Santa Cruz County, and Huachuca Mountains in Cochise County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial forb.

PHENOLOGY: Flowers: April to June.

BIOLOGY:

HABITAT: Endemic to the summit areas of the Santa Rita and Huachuca Mountains in southeastern Arizona. Forms dense tufts in crevices of rhyolitic and quartzitic outcrops in open pine forests. Dry rocky places, usually clinging to rocks.

ELEVATION: 8450 – 9400 feet (2575-2865m), based on Arizona collections.

EXPOSURE: Collected from slopes facing all directions.

SUBSTRATE: Rhyolite and Quartzite.

PLANT COMMUNITY: Open pine and mixed conifer forests. *Pinus flexilis*, *P. ponderosa*, *Pseudotsuga*, *Quercus*, *Holodiscus*.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. The species is known only from two collections in the Santa Rita Mountains (1937 and 1986) from the same locality, and two collections from the Huachuca Mountains (1909 and 1991 for one collection, and 1955, 1976, 1992 and 1993 for the other). While there is no information on plant abundance or population trends, the species does seem to be persistent based on the multiple collection dates over many decades.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.

STATE STATUS: None.

OTHER STATUS: None.

MANAGEMENT FACTORS: This variety warrants conservation attention due to its rather localized distribution along well used trails in popular hiking areas.

PROTECTIVE MEASURES TAKEN: None. Occurrence in Wilderness Areas affords some protection.

SUGGESTED PROJECTS: Re-visit the known locations to determine if the plant is still extant. Survey similar sites in the Huachuca and Santa Rita Mountains, and possibly other nearby Sky Island ranges, to determine if the range is wider than currently documented. Collect notes on relative abundance.

LAND MANAGEMENT/OWNERSHIP: All known collection sites occur on USDA Forest Service lands in Coronado National Forest, and in either Mount Wrightson or Miller Peak Wilderness Areas.

SOURCES OF FURTHER INFORMATION

REFERENCES:

Ertter, Barbara. 2007. Lectotypifications and new taxa in *Potentilla* Sect. *Subviscosae* (Rosaceae) in Arizona. Jour. Bot. Res. Inst. Texas. 1(1): 47-57.
JStor| Global Plants, accessed 7/17/2015,
<http://plants.jstor.org/stable/10.5555/al.ap.specimen.rm0004790>.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

Revised: 2015-07-17 (BDT)

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