

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

Plant Abstract

Element Code: PDCON0A141

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Ipomoea plummerae* var. *cuneifolia* (A. Gray) J. F. Macbr.
COMMON NAME: Huachuca Mountain morning glory, Huachuca Mountain morning-glory
SYNONYMS: *Ipomoea cuneifolia* Gray, non Meisn., *Ipomoea egregia* House, *Ipomoea plummerae* Gray var. *egregia* (House) Soreng & Spellern., *Ipomoea minuta* fo. *adiantifolia* (Ooststr.) O'Donnell, *Ipomoea plummerae* fo. *adiantifolia*, Ooststr., *Ipomoea plummerae* fo. *rhubifolia* Ooststr.
FAMILY: Convolvulaceae

AUTHOR, PLACE OF PUBLICATION: J.F. Macbride, Field Mus. Nat. Hist., Bot. Ser. 11(1): 4. 1931. *Ipomoea cuneifolia* A. Gray, Proc. Amer. Acad. Arts Sci. 19: 90. 1883.

TYPE LOCALITY: Protologue – USA: Arizona, Lemmon 2839 (F, GH, US)

TYPE SPECIMEN: HT: GH. J.G. Lemmon 2837, Sep 1882, USA: Arizona: Huachuca Mts.: Tanner Canyon. IT: CAS, F, NY, US.

TAXONOMIC UNIQUENESS: The genus *Ipomoea* contains approximately 500 species worldwide, located in tropic and warm temperate areas (Hickman 1993); 65 species in North America (USDA, NRCS 2002). In Arizona, 14 species of *Ipomoea* are recognized by Austin (1998). Variety *cuneifolia* is 1 of 2 varieties in the species *plummerae*.

DESCRIPTION: *Ipomoea plummerae*: Herbaceous glabrous perennial with globose or elongate, tuberous roots. Stems are erect to procumbent, ascending, not twining or only slightly at tips. The leaves are orbicular in outline, 1-3 cm long, glabrous, palmately dissected to rarely cuneate-obovate, with the apex laciniate-dentate, the base cordate, and the lobes acute; petioles are 2-5 mm long. The inflorescence is 1-flowered. Peduncles are 1.5-2.5 cm long, and erect or reflexed in fruit; bracts caducous. Sepals are unequal, with the outer sepals 5-8 mm long and 2-3 mm wide, oblong, obtuse to acute, mucronate, and muricate at least along the midrib. The inner sepals are 7-9(-10) mm long, 3-4 mm wide, broadly ovate, acute to acuminate, and muricate on the midrib or glabrous. The corollas are broadly funnelform, 2.5-3 cm long, purple, glabrous, the limb 1.8-2.2 cm wide; stamens are 8-10 mm long, included, with 1.5 mm long anthers. The ovary is void, 1 mm long, 2-locular, green, and glabrous; styles are 13-14 mm long and white. Fruits globose, 5-6- mm wide, the apiculum to 5 mm long. Seeds number 1-4, are 2-2.5 mm long, ovoid, black to dark brown, and finely tomentose (Austin 1998).

Ipomoea cuneifolia: Tuber, peduncles, flowers, and habit of the preceding; leaves simple, cuneate, laciniate-dentate at the broad apex, tapering into a short petiole, coriaceous in texture, nervose (Gray 1886).

AIDS TO IDENTIFICATION:

ILLUSTRATIONS: Color photo of Isolectotype (Lemmon 2837, in NYBG at http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail_list?this_id=3461521)

TOTAL RANGE: Higher slopes in mountains of southern Arizona and New Mexico, as well as the Bolivian Andes.

RANGE WITHIN ARIZONA: From the White Mountains of Apache County, the Chiricahua and Huachuca mountains of Cochise County, and the Patagonia and Santa Rita mountains of Santa Cruz County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Herbaceous perennial.

PHENOLOGY: Flowers from August-September.

BIOLOGY:

HABITAT: Open rocky to gravelly slopes, in openings of pine forests or oak-manzanita scrub; wet open areas.

ELEVATION: 4,500 to 9,000 ft. (1,372 - 2,745 m); 5,800-7,800 feet (1740-2340 m) in Arizona.

EXPOSURE:

SUBSTRATE: Rocky and gravelly slopes.

PLANT COMMUNITY: Madrean Montane Grassland. In Arizona, associated species may include: *Carex geophila* (a sedge), *Leibnitzia lyrata* (woodland sunbonnets), *Dactylis glomerata* (orchard grass), *Juncus* (rush), *Juniperus deppeana* (Alligator juniper), *Poa fendleriana* (muttongrass), *Pseudocymopterus montanus* (mountain parsley), *Quercus arizonica* (Arizona oak), *Quercus hypoleucoides* (silver-leaf oak), *Rhus trilobata* (sumac), and *Tradescantia* sp. (spiderwort).

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: Forest Service Sensitive (USDA, FS Region 3 1999)

MANAGEMENT FACTORS:

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Genetic studies to answer taxonomic questions.

LAND MANAGEMENT/OWNERSHIP: USFS - Coronado and Apache-Sitgreaves National Forests.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

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Yatskievych, G. and C.T. Mason. 1984. A taxonomic study of *Ipomoea tenuiloba* Torrey (Convolvulaceae), with notes on related species. Madrono Vol. 31(2): 102.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

Ipomoea plummerae was named by A. Gray, for Sara Allen Plummer, the wife of J.G. Lemmon, a botanist.

According to the USDA NRCS (1999), *Ipomoea plummerae* is a prohibited noxious weed, as is *Ipomoea plummerae* var. *cuneifolia*.

“*Ipomoea plummerae* var. *cuneifolia* has been found to grow only within populations of var. *plummerae* and apparently maintains itself through a high degree of inbreeding” (Yatskievych and Mason 1984).

“There is considerable morphological overlap between *I. tenuiloba* and *I. plummerae*, and that further taxonomic analysis of this ‘close-knit species complex’ is needed to clarify our understanding of their relationships” (Yatskievych and Mason 1984).

Revised: 1999-11-09 (RHB)
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