

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDGEN08010

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Gentianopsis barbellata* (Engelm.) H.H. Iltis
COMMON NAME: Bearded gentian, Perennial fringed gentian, Perennial fringed-gentian
SYNONYMS: *Gentiana barbellata* Engelm., *Gentianella barbellata* (Engelm.) J. Gillett
FAMILY: Gentianaceae

AUTHOR, PLACE OF PUBLICATION: *Gentianopsis barbellata* (Engelm.) H.H. Iltis, Sida 2: 136. 1965. *Gentiana barbellata* Engelm., Trans. Acad. Sci. St. Louis 2: 216. 1863.

TYPE LOCALITY: "On the alpine summit of Mount Flora, in the Snowy Range, Colorado." Parry 208, 1862.

TYPE SPECIMEN: HT: MO-2750196. Parry 208, 1862. IT: US.

TAXONOMIC UNIQUENESS: One of nine species in the genus *Gentianopsis*.

DESCRIPTION: Herbaceous perennial, that spreads by rhizomes, 5-17 cm (2-6.7 in) tall; stems glabrous, few to several in a cluster. Leaves mostly basal, these oblanceolate, long-petioled, up to 8.5 cm (3.3 in) long; cauline leaves 1-3 (4) cm long, reduced, oblanceolate to linear, sessile. The terminal flowers are solitary or paired, rarely 3, each sessile or short pedicellate and subtended by a pair of sessile leaf-like bracts. The calyx tube is 0.7-1.2 cm long, while the calyx lobe is 0.5-1 cm long, equaling or slightly shorter than the tube, and triangular with an attenuate apex. The narrowly funnellform corolla is deep blue and fragrant, with lobes 1.6-2.7 cm long, spatulate with fimbriate sides and entire to erose-dentate apices, the tube 1.2-1.8 cm long. The capsule is as long as the corolla tube; seeds are ovoid, papillose.

AIDS TO IDENTIFICATION: The only perennial fringed gentian, differentiated by pointed leaves just beneath the wedgewood blue flower.
(<http://www.rmrp.com/Reference/OnlineRefGG.htm>).

ILLUSTRATIONS: Color photo (Bob Skowron 2001, in <http://www.rmrp.com/>)
B&W drawing (Cronquist et al, 1984: p. 17)
Color photo of Holotype (MO-2750196, in http://mobot.mobot.org/cgi-bin/search_vast?onda=N13801149).

Color photo (Bob Skowron, 2004 in
<http://www.rmrp.com/Photo%20Pages/GG/Gentianopsis%20barbellata%20100DPI.htm>)

TOTAL RANGE: Ranges from Arizona and New Mexico, to Colorado, Utah and Wyoming.

RANGE WITHIN ARIZONA: San Francisco Peaks, Coconino County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial forb/herb

PHENOLOGY: Flowers August to September. Also reported to flower September to October (Mason, 1998). Fruiting from mid-September until snowfall.

BIOLOGY: Their fragrance is like sachets.

HABITAT: Covers wet rocky areas, meadows and open woods of the tundra, late in the season. Commonly found above timberline in Arizona among grass and rocks. In Utah, found in spruce-fir and alpine tundra communities, typically on limestone and often in meadows (Welsh et al, 1993).

ELEVATION: Elevation from 10,000 - 12,000 ft (3050-3658 m) in Arizona (McDougall, 1973). SEINet (accessed 2005) has collections for Arizona ranging from 8,700 - 12,000 ft (2652-3658 m). 7,869 – 12,131 ft (2400-3700 m) for the range.

EXPOSURE: SE- to S-facing slope.

SUBSTRATE: Shallow loam of volcanic soil in Arizona. Also found on limestone in Utah.

PLANT COMMUNITY: Above timberline in the artic-alpine region of San Francisco Peaks. Collected with *Potentilla*.

POPULATION HISTORY AND TRENDS: Unknown. “This species has been documented in approximately 70 locations in five states. Given the extensive county distributions in Colorado and Utah, it is likely that this species will be found in many additional locations. This species is not considered to be rare in Colorado.” (NatureServe 2001, 2005).

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:

LAND MANAGEMENT/OWNERSHIP: USFS – Coconino National Forest.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

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