

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

Plant Abstract

Element Code: PDRAN01030

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Aconitum infectum* Greene

COMMON NAME: Arizona Monkshood

SYNONYMS: *Aconitum columbianum* Nutt. *columbianum*, *A. arizonicum* Greene

FAMILY: Ranunculaceae

AUTHOR, PLACE OF PUBLICATION: Greene, Repert. Spec. Nov. Regni. Veg. 7: 5. 1909.

TYPE LOCALITY: Humphrey's Peak of San Francisco Mountain, Arizona, USA. 2743 to 3658 m (9000 – 12000 ft).

TYPE SPECIMEN: HT: GH-38065. D.T. MacDougal 396, 7 Aug 1898. IT: US-334491. LT: NY-353146.

TAXONOMIC UNIQUENESS: Species *infectum*, is 1 of 13 in the genus *Aconitum*.

Aconitum is phylogenetically most closely related to *Delphinium* Linnaeus as evidenced by similarities in Karyotype, production of diterpene alkaloids, and in floral morphology.

Worldwide, *Aconitum* is notorious for complex patterns of morphologic intergradation that blur the lines between taxa. Aconites from different regions may be morphologically distinct but connected by a series of intermediate races. (Bink and Woods 1997).

DESCRIPTION: A herbaceous perennial with tuberous roots; stems up to 1.5 m (4.9 ft) tall, stout, glabrous below, pubescent and often viscid in the inflorescence. Leaf blades 5-15 cm (2-6 in) wide, palmately cleft into 3 to 5 divisions, the divisions cleft and toothed, subglabrous to finely pubescent, the petioles as long as the blades or shorter; deeply incised leaves on long stalks. A spike of showy, purple-blue flowers in a rather loose, terminal raceme. Flowers are 3-4 cm (1.2-1.6 in) long, bilaterally symmetric, the upper sepal being shaped like a hood or helmet, 10-25 mm long and 5-8 mm wide with a slender beak 6-8 mm long; with four other sepals below. The petals are small, the upper two concealed in the upper sepal, the others varying in numbers and sometimes lacking. Pistils usually 3; follicles 10-20 mm long; seeds 3-4 mm long.

AIDS TO IDENTIFICATION: *Aconitum* species are showy plants with a general resemblance (leaves) to larkspur (*Delphinium*), but different in the structure of the large, normally dark-blue or violet flowers.

ILLUSTRATIONS:

TOTAL RANGE: San Francisco Peaks, Coconino County, Arizona.

RANGE WITHIN ARIZONA: See "Total Range."

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial herb.

PHENOLOGY: Flowers in July and August.

BIOLOGY: All parts of *Aconitum* contain aconitine and other alkaloids. It is thought the plants are most toxic in the preflowering stage.

HABITAT: A poisonous plant that prefers moist soil in subalpine spruce-fir forest.

ELEVATION: 9,508 – 10,984 feet (2900-3350 m).

EXPOSURE:

SUBSTRATE:

PLANT COMMUNITY: Subalpine spruce-fir forest.

POPULATION HISTORY AND 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:

LAND MANAGEMENT/OWNERSHIP: USFS – Coconino National Forest.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

The genus *Aconitum* is from the Greek *akoniton*, leopard's-bane, wolfsbane; possibly from the name Aconis, and ancient city of Bithynia in Asia Minor.

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