

-State Species Abstract-  
-Wyoming Natural Diversity Database-

*ASTRAGALUS BISULCATUS* VAR  
*HAYDENIANUS*  
HAYDEN'S MILKVETCH  
Family: Fabaceae

Status:

US Fish & Wildlife Service: None.  
Agency Status: None.

Heritage Rank:

Global: G5T4? State: S1  
WYNDD Plant List: Regional endemic  
Medium Wyoming Significance

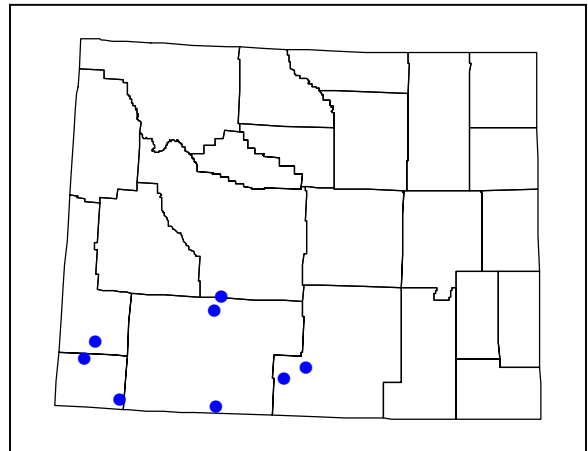
Description: Hayden's milkvetch is a usually selenium-smelling, hairy, perennial herb with a superficial rootcrown. The 15-70 cm tall stems are simple or few branched, and leafy. The lower portion of the stem is often hollow. The stipules are 2.5 to 12 mm long and sheathing all the way around the stem, at least toward the base of the plant. The leaves are 3-12 cm long and erect, with 13-35 oval, oblong, or lance-elliptic leaflets that are 5-35 mm long. The inflorescences are densely 20-80 flowered. The 8-11 mm long flowers are nodding on pedicels 1-3.5 mm long. The petals are white to dull yellow, with a purplish-veined banner and spotted keel-tip. The mature pods are less than 10 mm long, pendulous, stipitate, and prominently cross "rippled" (Barneby 1989, Dorn 2001.)

Similar Species: *Astragalus bisulcatus* var. *major* has flowers 10-18 mm long and mature fruits that lack prominent "ripples" on the fruit wall. *A. bisulcatus* var. *bisulcatus* has purplish flowers over 13 mm long and lacks prominent ripple-like raised veins on the fruit wall.

Flowering/Fruiting Period: Flowering and fruiting occur from June-July.

Distribution: Hayden's milkvetch is known from Utah, Colorado, New Mexico, and Arizona. In Wyoming, it is known from the Washakie and Great Divide Basins in Carbon, Fremont, and Sweetwater counties and possibly the Overthrust Belt in Lincoln and Uinta counties.

Habitat: Barneby (1989) reports this species from "clay banks, knolls, valley floors, and shale barrens in the sagebrush and juniper belts". In Wyoming, *A. b.* var. *haydenianus* is found primarily on clay or sandy soils on rims, upper slopes, and draws associated with sandstone rock outcrops or springs at 6600-7660 feet.



Wyoming distribution of *Astragalus bisulcatus* var. *haydenianus*

Occurrences in Wyoming: Known from 3 confirmed occurrences in Wyoming, one of which is historical (1897). Recently reported from five additional locations by Refsdal (1996) and Welp (1997). The identity of these specimens still needs to be confirmed.

Abundance: Unknown.

Trends: Unknown.

Protection status: Known populations are all found on public lands managed for multiple

use. One occurrence is within the Honeycomb Buttes Wilderness Study Area.

Threats: Not known.

Managed Areas: Occurs on lands managed by the BLM Lander, Kemmerer, Rawlins, and Rock Springs Field Offices.

References:

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Fertig, W., L. Welp, and S. Markow. 1998. The status of rare plants in southwest Wyoming. Report prepared for the Bureau of Land Management by the Wyoming Natural Diversity Database, Laramie, WY.

Refsdal, C.H. 1996. A general floristic inventory of southwest Wyoming and adjacent northeast Utah, 1994-1995. Unpublished report prepared for the Bureau of Land Management Wyoming State Office, Bureau of Land Management Vernal Supervisor's Office, US Fish and Wildlife Service, and US Forest Service Region 4 by the University of Wyoming, Rocky Mountain Herbarium, Laramie, WY.

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Updated: 11-10-01