

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Ipomopsis aggregata ssp. weberi* / Rabbit Ears Gilia, Weber's Scarlet Gilia

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A?	<p>Rabbit Ears Gilia is only known from the Sierra Madre Range in Carbon County on the Medicine Bow Forest as it occurs in Wyoming. It also occurs in north-central Colorado around the "Rabbit Ears" (Weber 2001) on the Routt National Forest.</p> <p>It is reported from "openings in coniferous forest" by Grant and Wilken (1986). Wyoming populations occur on south-facing slopes and ridges dominated by <i>Artemisia tridentata</i> or brushy <i>Amelanchier/Chrysothamnus/Purshia/Prunus</i> stands on gravelly, clay-loam soils at 7200-8300 feet.</p> <p>NOTE: It is a recently described taxon and a narrow endemic. In both Colorado and Wyoming, it exhibits secondary intergradaton with a neighoring red-flowered taxon, a case of hybridization. The monographers hypothesized that it is an ancient species that has been swamped out by <i>I. a. var aggregata</i> over much of its former range (Grant and Wilkens 1986).</p> <p>Confidence in Rank: High</p>	<ul style="list-style-type: none"> • Dorn 2001 • Fertig 1999 • Fertig et al. 1995 • Grant and Wilkens 1986 • Jankovsky-Jones et al. • Mills and Neighbours • Spackman et al. 1997 • University of Wyoming 1998 • USDA Forest Service Region 2 2001 • Weber and Wittmann 2001 • Welp et al. 2000
2 Distribution outside R2	AD	<p>This taxon is a regional endemic of south-central Wyoming and north-central Colorado. It is also reportedly disjunct in northern Idaho where there is one collecting station in a state park (Grant and Wilkens 1986). The authors assumed the latter to be part of its natural distribution; this warrants consultation with Idaho botanists.</p> <p>Confidence in Rank: Medium</p>	<ul style="list-style-type: none"> • Grant and Wilkens 1986 • NatureServe 2002
3 Dispersal Capability	D	<p>Not known.</p> <p>Confidence in Rank: High</p>	<ul style="list-style-type: none"> • -

ATTACHMENT SS2

Species: *Ipomopsis aggregata* ssp. *weberi* / Rabbit Ears Gilia, Weber's Scarlet Gilia

Criteria	Rank	Rationale	Literature Citations
4 Abundance in R2	AB	<p>It is known from a single confirmed location at Battle Mountain in Wyoming, last observed in 1994. A second report in 1994 needs to be vouchered. It is based on a photograph of "typical" <i>I. a.</i> var. <i>weberi</i> represented by a few white-flowered plants among a much larger cluster of <i>I. a.</i> var. <i>aggregata</i> and material that appeared intermediate between the two.</p> <p>The population at Battle Mountain was originally estimated at several thousand by Nancy Kasting in 1989. There were only about 20 plants (flowering and vegetative) observed in follow-up survey in 1994 after herbicide treatment. The results are thought to be a direct response to treatment rather than a cyclic population phenomena because there were large segments of the population where it was absent in 1994.</p> <p>It is ranked "S1" in Wyoming and "S2" in Colorado where additional abundance information is needed. It is not ranked in Idaho (see above). Status survey work and possibly monitoring are high priorities in Wyoming.</p> <p>Confidence in Rank: Low</p>	<ul style="list-style-type: none"> Fertig 1999 Wyoming Natural Diversity Database 2002
5 Population Trend in R2	AD	<p>The population appeared to drop sharply after 1991 spraying to control shrubs on Battle Mountain, as determined in a 1994 revisit.</p> <p>The second occurrence may be "genetically swamped" by the more widespread variety; vouchers are needed confirming the record and this preliminary assessment.</p> <p>Confidence in Rank: High</p>	<ul style="list-style-type: none"> Fertig 1999
6 Habitat Trend in R2	DA	<p>Not known. The habitat in Wyoming may be susceptible to fire suppression and the resulting shrub encroachment.</p> <p>Confidence in Rank: High</p>	<ul style="list-style-type: none"> -
7 Habitat Vulnerability or Modification	AB	<p>The species was probably impacted by herbicide spraying to control shrub encroachment and it may also be affected by grazing. All known occurrences in Wyoming are on Medicine Bow NF. It was impacted in the Battle Mountain Special Interest Area, near but apparently outside the Battle Mountain Research Natural Area.</p> <p>Confidence in Rank: Medium</p>	<ul style="list-style-type: none"> Fertig 1999

ATTACHMENT SS2

Species: <i>Ipomopsis aggregata ssp. weberi</i> / Rabbit Ears Gilia, Weber's Scarlet Gilia			
Criteria	Rank	Rationale	Literature Citations
8 Life History and Demographics	D	<p>Rabbit Ears Gilia is a short-lived herbaceous perennial that forms basal rosettes of leaves, followed by flowering, fruiting and dying in their second to sixth year.</p> <p>It produces white flowers. In general, the red-flowered varieties of the species are frequently visited by hummingbirds, which are effective pollinators (Waser 1983) and has been the subject of various pollination studies (cited in Real 1983). Grant and Grant (1968) also note that the presence of suites of hummingbird-pollinated species may determine the effectiveness of hummingbird pollination for an individual species. However, the white flowers of this species are likely to have other pollen vectors.</p> <p>Additional information on the species, including life history stages, population structure, longevity, mortality, pollination biology, and seed biology, are not available.</p> <p>Confidence in Rank: High</p>	<ul style="list-style-type: none"> • Fertig 1999 • Grant and Grant 1968 • Grant and Wilken 1986 • Waser 1983
Initial Evaluator(s): Bonnie Heidel and Scott Laursen			Date: 3-27-02

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)¹ to occur:

¹ Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

ATTACHMENT SS2

<u>Colorado NF/NG</u>	Known	Likely	<u>Kansas NF/NG</u>	Known	Likely	<u>Nebraska NF/NG</u>	Known	Likely	<u>South Dakota NF/NG</u>	Known	Likely	<u>Wyoming NF/NG</u>	Known	Likely
Arapaho-Roosevelt NF			Cimmaron NG			Samuel R. McKelvie NF			Black Hills NF			Shoshone NF		
White River NF						Halsey NF			Buffalo Gap NG			Bighorn NF		
Routt NF	X					Nebraska NF			Ft. Pierre NG			Black Hills NF		
Grand Mesa, Uncompahgre, Gunnison NF						Ogalala NG						Medicine Bow NF	X	
San Juan NF												Thunder Basin NG		
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG														

Literature cited

Dorn, R.D. 2001. Vascular Plants of Wyoming, second edition. Mountain West Publishing, Cheyenne, WY.

Fertig, W. 1999. State Species Abstract: *Ipomopsis aggregat* var. *weberi*. Wyoming Natural Diversity Database. Available on the internet at www.uwyo.edu/wyndd

Fertig, W., C. Refsdal, and J. Whipple. 1994. Wyoming Rare Plant Field Guide. Wyoming Rare Plant Technical Committee, Cheyenne Wyoming.

Grant, K.A. and V. Grant. 1968. Hummingbirds and their Flowers. Columbia University Press, New York, NY.

Grant, V. and D. H. Wilken. 1986. Taxonomoy of the *Ipomopsis aggregata* group (Polemoniaceae). Bot. Gaz. 147(3): 359-371.

Jankovsky-Jones, M., G. Jones, and W. Fertig. 1995. Ecological evaluation of the potential Battle Mountain Research Natural Area within the Medicine Bow National Forest, Carbon County, Wyoming. Unpublished report prepared by the Wyoming Natural Diversity Database, Laramie.

Mills, S. and M. Neighbours. 1995. Intensive data gathering project (fine-filter analysis) for occurrences of rare, threatened, endangered and sensitive species in sections M331H and M331I, north central highlands and northern parks and ranges, in Wyoming. Unpublished report prepared for Medicine Bow National Forest by the Wyoming Natural Diversity Database, Laramie, WY.

NatureServe. 2002. Explorer – an encyclopedia of life. Plant and animal data posted at www.natureserveexplorer.org, Arlington, VA.

Spackman, S., B. Jennings, J. Coles, C. Dawson, M. Minton, A. Kratz, and C. Spurrier. 1997. Colorado Rare Plant Field Guide. Prepared for the Bureau of Land Management, US Forest Service, and US Fish and Wildlife Service by the Colorado Natural Heritage Program, Ft. Collins, CO.

University of Wyoming – Rocky Mountain Herbarium. 1998. Atlas of the Flora of Wyoming. Posted electronically through 1998 at: <http://www.esb.utexas.edu/tchumley/wyomap/> and unposted accession information at the Rocky Mountain Herbarium through 2001.

ATTACHMENT SS2

Waser, N. M. 1983. The adaptive nature of floral traits: ideas and evidence. In: L. Real, ed. Pollination Biology. Academic Press, Orlando, FL.

Welp, L., W.F. Fertig, G.P. Jones, G.P. Beauvais, and S.M. Ogle. 2000. Fine filter analysis of the Bighorn, Medicine Bow, and Shoshone National Forests in Wyoming. Wyoming Natural Diversity Database, Laramie, WY.

USDA Forest Service – Region 2. 2001. “Wyoming plant species” evaluation list and criteria provided to Wyoming Natural Diversity Database. Denver, CO.

Weber, W.A. and R.C. Wittman. 2001. Colorado Flora – Eastern Slope, third edition. University Press of Colorado.

Wyoming Natural Diversity Database. 2002. Ongoing documentation of sensitive species distribution, biology, status, and references for the state of Wyoming. University of Wyoming, Laramie.