## Rare Plant Status Review: *Physaria Iudoviciana*Proposed New Add to List 2.2

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## Background

Physaria ludoviciana is an herbaceous perennial in the Brassicaceae. It was recently collected for the first time in California by Arnold Tiehm in May of 2004. The first record of *P. ludoviciana* in California is reported as a "noteworthy collection" in *Madroño* 54(2):203 (2007). *P. ludoviciana* will be included as native to California in *The Flora of North America* (Steve O'Kane, pers. comm. 2008) and *The Jepson Manual*, 2<sup>nd</sup> Edition (Ihsan Al-Shehbaz, pers. comm. 2009). *P. ludoviciana* is distinguished from other species of *Physaria* based on fruit and leaf characteristics. *P. ludoviciana* flowers between May and June.

In California, *P. ludoviciana* is found, "growing with *Artemisia tridentata* in areas of compacted silty sand" (Tiehm 2007) within Great Basin scrub habitat at approximately 2130 meters in elevation.

In California, *P. ludoviciana* is known from a single occurrence in the Anchorite Hills of eastern Mono County. The occurrence of this species in California represents a significant, "range extension of about 240 km SW from Eureka County, Nevada. Searches in adjacent Mineral County Nevada have been unsuccessful" (Tiehm 2007). *P. ludoviciana* occurs in Arizona, Colorado, Montana, Nevada, Utah, several states in the Mid-Western U.S., and adjacent states in southern Canada. It is ranked as a G5 taxon by NatureServe, is stateranked as S1 in Minnesota, Wisconsin, Illinois, Kansas, and is listed as "possibly extirpated" in Iowa. Suitable habitat in the vicinity of the California occurrence should be searched for additional occurrences. The population size at the California occurrence is unknown.

The California occurrence of *P. ludoviciana* is located on land managed by the Inyo National Forest. Although there are no known threats to this population, its vulnerability to stochastic events lead us to recommend a .2 threat ranking for *P. ludoviciana*.

Based on this information CNPS and CNDDB recommend that *Physaria ludoviciana* be added to CNPS List 2.2.

## **Recommended Actions**

CNPS: Add to CNPS List 2.2

CNDDB: Add to CNDDB as G5 / S1

Element Code: PDBRA1N110 Added to CNPS List 2.2 on 2009-04-23

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, and provide any edits/comments. If responding No, please provide supporting information.

## **Draft CNPS Inventory Record**

Physaria Iudoviciana (Nutt.) O'Kane & Al-Shehbaz silver bladderpod
Brassicaceae
List 2.2
Mono
Cedar Hill (469A) 3811827
Great Basin scrub. 2130 meters
Perennial herb. Blooms May-June.
See Madroño 54(2):203 (2007) for first California record.