

Rare Plant Status Review: *Plagiobothrys nitens*
Proposed New Add to List 2.1
Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDDB)
June 30, 2009

Background

Plagiobothrys nitens is an annual herb in the Boraginaceae. *P. nitens* is not recognized in recent floras, but it will be included as native to California in the *Jepson Manual*, 2nd Edition (Ron Kelley, pers. comm. 2009). *P. nitens* is distinguished from other *Plagiobothrys* based on nutlet characteristics and reduced flower size. In his original description of *Allocarya nitens*, one old name for *P. nitens*, E.L. Greene noted that it is, "a very strongly marked species by its smooth and polished nutlets" (*Pittonia* 3: 108 (1896-1898). More recently, *Allocarya nitens* was considered a synonym of *P. scouleri* in *Intermountain Flora* (Vol. 4). *P. nitens* flowers in June to early July.

In California, *P. nitens* grows in moist alkali meadow habitat near springs from 1510 to 1600 meters in elevation. Associated species found growing with *P. nitens* include *Triglochin maritima*, *Plagiobothrys salsus*, *Juncus balticus*, *Spartina gracilis*, and *Distichlis spicata* (Ron Kelley & Jim Andre, pers. comm. 2009),

In California, *P. nitens* is known from two occurrences in Deep Springs Valley in eastern Inyo County, which were first observed and vouchered by Victor Duran in 1932, and later visited (in the early 1970s) by Mary DeDecker. Both occurrences were recently "rediscovered" and vouchered by Ron Kelley, Jim Andre and Tasha La Doux in June, 2009. The larger of the two occurrences was approximately 0.2 ha in size with an estimated 2,000-5,000 plants. *P. nitens* is more common in Nevada and Utah. *P. nitens* is currently not ranked by NatureServe. Suitable habitat in eastern Inyo County should be searched for additional occurrences of this species.

The land ownership at the California occurrences of *P. nitens* is unknown. Threats to both occurrences at Deep Canyon Valley are both historic and present in the form of moderate livestock grazing/trampling and hydrological alternation (observed June 2009). In addition, the very low areal extent of the occurrences increases their vulnerability to stochastic events. Consequently, we recommend a threat ranking of .1 for *P. nitens*.

Based on the available information we recommend that *P. nitens* be added to CNPS List 2.1.

Recommended Actions

CNPS: Add to CNPS List 2.1
CNDDDB: Add to CNDDDB as GNR, S1

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

Draft CNPS Inventory Record

Plagiobothrys nitens (Greene) I.M. Johnston.

shiny-nutlet popcorn-flower

Boraginaceae

List 2.1

Inyo

Soldier Pass (411C) 3711738, Deep Springs Lake (412D) 3711831

Meadows / Alkaline. 1510-1600 meters.

Annual herb. Blooms June-July.

Threatened by grazing, trampling, and hydrological alteration. See Pittonia 3: 108 (1896-1898) for original description.