

**Added to California Rare Plant Rank 4.2 of the CNPS Inventory on June 10, 2014**

**Rare Plant Status Review: *Plagiobryoides vinosula***

**Addition to California Rare Plant Rank 4.2, G3 / S2**

Aaron E. Sims (CNPS), Danny Slakey (CNPS), and Roxanne Bittman (CNDDDB)  
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**Background**

*Plagiobryoides vinosula* is one of 29 bryophytes that are being added to the CNPS Inventory and CNDDDB based on decisions made at one to three California Bryophyte Working Group (CBWG) meetings held on January 18, 2010, January 28, 2013, and January 30, 2014. The CBWG is a committee of bryology experts that are familiar with the taxonomic, rarity, and/or conservation status of bryophytes in California. If you are interested in joining and/or learning more about this group, please contact the first author at [asims@cnps.org](mailto:asims@cnps.org) or (916) 324-3816.

*Plagiobryoides vinosula* is a bright green moss in the Bryaceae that is known mostly from Mexico, with a scattered distribution throughout the western United States. *Plagiobryoides vinosula* is the only species in the genus that is known from California. “[It] has been synonymized with *P. cellularis*, but differs in its bright green elongate stems, leaves that are somewhat contorted when dry, typically shorter distal laminal cells, rhizoidal tubers and capsule with a short hypophysis [a distinctly swollen and often stomatous sterile base of a capsule where it joins the seta (Malcolm and Malcolm 2006)]” (Spence 2009). The capsules of *P. vinosula* mature from June to September (Spence 2009).

*Plagiobryoides vinosula* is usually found on moist granitic rocks or granitic soils, but has been found on damp clay in northern California, in Butte and Lake Counties. It was recently found in hot springs in Colorado and Wyoming, but is not known from hot springs in California. In California, *P. vinosula* usually occurs along intermittent streams and seeps and occupies a variety of habitats, including: cismontane and riparian woodlands, Mojavean desert scrub, and pinyon and juniper woodland. *Plagiobryoides vinosula* has been found mixed with *Scleropodium obtusifolium* in Monterey County, *Gemmabryum violaceum* in Tulare County, and *Didymodon tophaceus* in Inyo County. It is known from an approximate elevation of 30 to 1735 meters in California.

*Plagiobryoides vinosula* is known from approximately 15 occurrences across nine counties in California. All of its occurrences are recent (occurrences not seen in the past twenty years are considered historical by the CNDDDB), and all but two of the occurrences are known from protected federal lands. Four occurrences are from Bureau of Land Management lands, one occurrence is from Los Padres National Forest (NF), one is from Sequoia NF, one is from Cleveland NF, three are from Death Valley National Preserve, three are from Mojave National Preserve, one is from Los Angeles Department of Water and Power, and one is from an unknown land ownership. Additional occurrences of *P. vinosula* in California are likely to show up; it is always sterile when found and many people don't like collecting sterile plants (CBWG 2013).

*Plagiobryoides vinosula* is ranked S1 in Wyoming by NatureServe (2014), and is unranked (SNR) in other states.

*Plagiobryoides vinosula* is potentially threatened by hydrological alterations throughout its range. In addition to hydrological alterations, the occurrence of *P. vinosula* in Lake County has a motorcycle trail right next to it, and occurrences in Inyo County are threatened by grazing and trampling (CBWG 2013).

*Plagiobryoides vinosula* was originally recommended for addition to CRPR 2B.1 by the CBWG in 2013, when known only from single occurrences in Lake, Inyo, and San Bernardino counties. Since that time, however, it has been documented from twelve additional occurrences in six additional counties. The majority of its occurrences are also known from protected federal lands, and additional occurrences are expected to be discovered. We are therefore adding it to CRPR 4.2 instead of 2B.1 at this time. If additional information regarding the distribution and/or threats to *P. vinosula* becomes available in the future, we will re-evaluate its status at that time.

### Actions

CNPS: Added to 4.2

CNDDDB: Added to G3 / S2

### CNPS Inventory Record

*Plagiobryoides vinosula* (Cardot) J.R. Spence

wine-colored tufa moss

Bryaceae

CRPR 4.2

Arizona, Colorado, Nevada, New Mexico, Utah, Wyoming

Butte, Fresno, Inyo, Kern, Lake, Monterey, San Bernardino, San Diego, Tulare  
 Morena Reservoir (009A) 3211665, Bighorn Basin (176C) 3411576, Pinto Valley (200A)  
 3511523, Mid Hills (200B) 3511524, Cinco (236D) 3511831, Trona West (280C)  
 3511774, White Dome (283C) 3511872, Junipero Serra Peak (319B) 3612124,  
 Emigrant Canyon (325B) 3611742, Ubehebe Crater (389C) 3711714, Millerton Lake  
 East (398D) 3711915, Last Chance Mtn. (410C) 3711736, Rovana (414A) 3711845,  
 Wilbur Springs (547C) 3912214, Biggs (560B) 3912146

Cismontane woodland, meadows and seeps, Mojavean desert scrub, pinyon and  
 juniper woodland, riparian woodland / usually granitic rock or granitic soil along seeps  
 and streams, sometimes clay; elevation 30 to 1735 meters  
 moss

Threatened by grazing, trampling, and vehicles. Potentially threatened by hydrological  
 alterations. See *Revue Bryologique* 38(1):6-7 (1911) for original description, and  
*Phytologia* 91(3):499 (2009) for revised nomenclature.

### Literature Cited

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Spence, J.R. 2009. *Plagiobryoides*. Pp. (online) in Flora of North America Editorial Committee (eds.), Bryophyte Flora of North America, Provisional Publication. Missouri Botanical Garden. Website <http://www.mobot.org/plantscience/bfna/V2/BryaPlagiobryoides.htm> [accessed 5 June 2014].