

Added to California Rare Plant Rank 2B.3 of the CNPS Inventory on May 15, 2014

**Rare Plant Status Review: *Jaffueliobryum wrightii*
Addition to California Rare Plant Rank 2B.3, G4G5 / S2?**

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Background

Jaffueliobryum wrightii 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 or (916) 324-3816.

Jaffueliobryum wrightii is a moss in the Grimmiaceae known from North America, South America, and Asia; and occurs in the Mojave and Colorado deserts, and eastern Sierra Nevada of California. It was first collected in California in 1964 by L. C. Wheeler, from the White Mountains, Inyo County. *Jaffueliobryum wrightii* is very similar to *J. rauli*, and the two species were treated as one for much of their taxonomic history (Spence 2007). It is distinguished from *J. rauli* in having distal lamina that are broadly acute-rounded (versus acute to acuminate distal lamina), leaves that are not keeled (versus distinctly keeled leaves), and in having proximal stem leaves that are mostly appressed (versus proximal stem leaves that are mostly spreading in *J. rauli*). The capsules of *J. wrightii* mature in spring to summer depending on elevation (Spence 2007).

Jaffueliobryum wrightii occurs in dry, calcareous rock crevices in openings of pinyon and juniper woodland, alpine scrub, and creosote bush scrub. It is known from an approximate elevation of 160 to 2,500 meters in California.

Jaffueliobryum wrightii is currently known from eleven occurrences, from Tulare, Inyo, Riverside, and San Bernardino counties. All of its occurrences are on federal lands; two are from Mojave National Preserve, five are from Bureau of Land Management, two are from Joshua Tree National Park, and the remaining two are from Sequoia and Inyo National Forests. All but one of the occurrences (*Wheeler 8511*) are recent (occurrences not 'seen' in the past twenty years are considered historical by the CNDDDB). Additional surveys for *J. wrightii* should occur throughout preferred habitat in southern California, as it has probably been overlooked due to its very small size and xeric substrate requirements (Harpel 1999).

Jaffueliobryum wrightii is ranked S2 in Alberta and S1 in Ontario, Canada, S2 in Wisconsin and unranked by NatureServe (2013) in other states.

Threats to *J. wrightii* in California are currently unknown, but may be minimal since all of its known occurrences are on protected federal lands.

Actions

CNPS: Added to 2B.3

CNDDDB: Added to G4G5 / S2?

CNPS Inventory Record

Jaffueliobryum wrightii (Sullivant) Thériot

Wright's jaffueliobryum moss

Grimmiaceae

CRPR 2B.3

Arizona, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, Oklahoma, South Dakota, Texas, Wisconsin, Wyoming; South America, Sonora, Mexico

Inyo, Riverside, San Bernardino, Tulare

Buzzard Spring (079D) 3311575, Vidal NW (096B) 3411426, Cadiz Valley SE (099D)

3411513, Dale Lake (100B) 3411526, Dale Lake (100B) 3411526, Stepladder

Mountains SW (148C) 3411458, Stepladder Mountains (148D) 3411457, Soda Lake

North (203A) 3511621, Clark Mtn. (249D) 3511555, Saddle Peak Hills (252A) 3511663,

Hockett Peak (307B) 3611824, Westgard Pass (412C) 3711832

Alpine dwarf scrub, pinyon and juniper woodland, Mojavean desert scrub / dry openings, rock crevices, carbonate; elevation 160 to 2,500 meters.

Moss

Similar to *J. raii*. See *Memoirs of the New York Botanical Garden* 45:691-708 (1987) for taxonomic treatment.

Literature Cited

Harpel, J.A. 1999. Noteworthy collections: California; *Jaffueliobryum raii*. *Madroño* 46(4): 215-216.

NatureServe. 2013. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Website <http://www.natureserve.org/explorer> [accessed 25 January 2013].

Spence, J.R. 2007. *Jaffueliobryum wrightii*. Pp. (online) in *Flora of North America North* Editorial Committee (eds.), *Flora of North America North of Mexico*, Vol. 27: Bryophytes: Mosses, Part 1. Oxford University Press.