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Added to California Rare Plant Rank 1B.1 on December 6, 2011

Rare Plant Status Review: *Monardella australis* ssp. *jokerstii*Proposed New Add to California Rare Plant Rank 1B.1, G4T1 / S1
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October 31, 2011

Changes made to the original document appear in blue text.

Background

Monardella australis ssp. jokerstii is a perennial rhizomatous herb in the Lamiaceae that is endemic to the southeastern San Gabriel Mountains of San Bernardino County. It was recently described in 2009 by Mark Elvin and Andy Sanders, and will be included in The Jepson Manual, Second Edition (TJM 2; available online at: http://ucjeps.berkeley.edu/tjm2/review/treatments/lamiaceae_all.html#91089). The specific epithet is in reference to James Jokerst, who originally identified the uniqueness of this taxon by annotating a specimen of it collected by I. M. Johnston (5118, GH) in 1993 (Elvin and Sanders 2009). Monardella australis ssp. jokerstii is distinguished from other Monardella taxa based on floral and leaf characteristics. It is most similar to, and intergrades with M. australis ssp. australis and ssp. cinerea (TJM 2), but differs from former in having prominent serrations on the leaves (up to 2 mm), as well as having branched stems with multiple, compacted cymose flower clusters (Elvin and Sanders 2009). It differs from ssp. cinerea in having longer leaves and a taller, erect habit. Monardella australis ssp. jokerstii is known to flower from July through September (Elvin and Sanders 2009).

Monardella australis ssp. jokerstii grows on steep scree or talus slopes between breccia, and on secondary alluvial benches along drainages and washes on canyon bottoms (Elvin and Sanders 2009, *TJM 2*). It occurs in lower montane coniferous forest and chaparral habitats at an approximate elevation of 1350 to 1750 meters (*TJM 2*). However, one collection (*Lyman Benson 15036*, POM294193) was made at approximately 160 meters (Elvin and Sanders 2009).

Monardella australis ssp. jokerstii is known only from 4 occurrences over a very small geographic range, with only a small number of individuals found in each population (M. Elvin pers. comm. 2010). It is restricted to the southeastern San Gabriel Mountains in the vicinity of Cucamonga Peak and the western portion of Lytle Creek (Elvin and Sanders 2009). The site of the 1992 collection in Lytle Creek (R. G. Swinney 1932, RSA583845, UCR78785) was recently surveyed by Elvin and Sanders, but M. australis ssp. jokerstii was not relocated; and is therefore possibly extirpated from this area (Mark Elvin pers. comm. 2010).

Of the 4 known occurrences, only 2 have been documented in the past 20 years (occurrences that have not been "seen" in the past 20 years are considered historic by the CNDDB), with the other 2 occurrences represented solely by herbarium specimens

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that are over 50 years old. One historic collection along the Santa Ana River (*Lyman Bensen 15036*, POM294193) was "presumably washed down from the mountains above" (Elvin and Sanders 2009). Suitable habitat within and beyond the known range of *M. australis* ssp. *jokerstii* should be searched for additional occurrences. *Monardella australis* ssp. *jokerstii* is possibly threatened by stochastic events, altered fire regime, land slides, recreational activities, and road maintenance. It may also be threatened by energy development and mining.

Based on the available information, CNPS and CNDDB recommend that *Monardella australis* ssp. *jokerstii* be added to California Rare Plant Rank 1B.1 of the CNPS Inventory.

Recommended Actions

CNPS: Add to CNPS 1B.1

CNDDB: Add to CNDDB G4T1 / S1

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

Monardella australis Abrams ssp. jokerstii Elvin & A.C. Sanders Jokerst's monardella

Lamiaceae

Rank 1B.1

San Bernardino

Cucamonga Peak (108A) 3411726, Prado Dam (087B)? 3311786, Telegraph Peak (134D)(?) 34117C5

Lower montane coniferous forest, chaparral / steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes; elevation (160) 1350-1750 meters.

Perennial rhizomatous herb. Blooms July-September.

Known only from the San Gabriel Mtns. Possibly threatened by stochastic events, erosion, alteration of fire regimes, recreational activities, and road maintenance. Potentially threatened by energy development and mining. Intergrades with sspp. *cinerea* and *australis*. See *Novon* 19(3):315-343 (2009) for original description.