

Added to California Rare Plant Rank 1B.1 on June 14, 2012

Rare Plant Status Review: *Monardella undulata* ssp. *arguelloensis*

Proposed New Add to California Rare Plant Rank 1B.1, G3T1 / S1

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Changes made to the original document appear in blue text.

Background

Monardella undulata ssp. *arguelloensis* is shrub in the Lamiaceae that is endemic to California. It was recently described by Elvin and Sanders (2009) and is included in *The Jepson Manual, Second Edition (TJM 2)*; available online at: http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=91106). *Monardella undulata* ssp. *arguelloensis* is closely related to *M. undulata* subspecies *undulata* and *crispa* in having similar leaf and bract morphologies, but is differentiated by its habit and larger stature (including the largest plants in the genus). Although similar in morphology, there have been no observed hybrids or introgressant plants between ssp. *arguelloensis* and ssp. *crispa* (Elvin and Sanders 2009). *Monardella undulata* ssp. *arguelloensis* flowers from May through September.

Monardella undulata ssp. *arguelloensis* grows in sandy soil on stabilized, coastal sand dunes, coastal bluff scrub, and coastal scrub from approximately 50 to 150 meters in elevation (Elvin and Sanders 2009).

Monardella undulata ssp. *arguelloensis* is a narrow endemic that is known only from one occurrence in the immediate vicinity of Point Arguello in western Santa Barbara County. The occurrence covers approximately 143 hectares (ca. 353 acres; determined using ESRI ArcGIS 9.3.1) of stabilized dunes; and although there are two areas with higher concentrations of plants, there are enough scattered individuals throughout the area to designate the populations as a single occurrence (M. Elvin pers. comm. 2012). The distribution of *M. undulata* ssp. *arguelloensis* includes CNDDDB (2012) occurrences of *M. frutescens* (EO's #12 and #23) and *M. crispa* (EO #9). These occurrences were determined prior to the description of ssp. *arguelloensis* and are to be deleted from the CNDDDB for these taxa and reassigned to *M. undulata* ssp. *arguelloensis*. Furthermore, *M. frutescens* and *M. crispa* are now treated as subspecies of *M. undulata* (ssp. *undulata* and ssp. *crispa*, respectively; Elvin and Sanders 2009), and are currently undergoing name changes and distribution refinements in the CNPS Inventory and CNDDDB. The ranks of these taxa, however, are not subject to change at this time.

The entire known distribution of *M. undulata* ssp. *arguelloensis* is within Vandenberg Air Force Base. It is threatened by military activities (*TJM 2*), however, the current level and severity of threats to this taxon is unknown. *Monardella undulata* ssp. *arguelloensis* is significantly threatened by competition from *Ehrharta calycina* (J. Chesnut and D. Wilken pers. comm. 2012). Inventorying and monitoring of *M. undulata* ssp.

arguelloensis should be carried out to determine the size and viability of populations and to assess threat impacts.

Based on the available information, CNPS and CNDDDB recommend that *M. undulata* ssp. *arguelloensis* be added to California Rare Plant Rank 1B.1 of the CNPS Inventory. If further information on population size and threats become available, it will be re-evaluated by CNPS and CNDDDB at that time.

Recommended Actions

CNPS: Add to CNPS 1B.1

CNDDDB: Add to CNDDDB G3T1 / 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

Monardella undulata Benth. ssp. *arguelloensis* Elvin & A.C. Sanders

Point Arguello monardella

Lamiaceae

Rank 1B.1

Santa Barbara

Point Arguello 171C (34120E6), Tranquillon Mtn. 171D (34120E5)

Coastal bluff scrub, coastal dunes (stabilized), coastal scrub / sandy; elevation 50-150 meters.

Perennial shrub. Blooms May-September.

Known only from vicinity of Pt. Arguello. Threatened by military activities [and non-native plants](#). See *Novon* 19(3):315-343 (2009) for original description.