Element Code: PDLAM180N0

Deleted from California Rare Plant Rank 4.2 in the CNPS Inventory on December 31, 2013

Rare Plant Status Review: *Monardella undulata*Proposed Deletion from California Rare Plant Rank 4.2, G3 / S3.2 Aaron E. Sims (CNPS) and Roxanne Bittman (CNDDB)

November 21, 2013

Background

Monardella undulata Benth. is an annual herb in the Lamiaceae that is currently a California Rare Plant Rank (CRPR) 4.2 taxon in the CNPS Inventory (2013; available online at http://www.rareplants.cnps.org/detail/643.html). Based on Elvin and Sanders (2009), M. undulata is now delineated into three subspecies, all of which are included in the CNPS Inventory (2013): subsp. arguelloensis (CRPR 1B.1), subsp. crispa (CRPR 1B.2, synonym M. crispa), and subsp. undulata (CRPR 1B.2, synonyms M. frutescens and M. undulata var. frutescens). Additionally, what is still included in the CNPS Inventory as M. undulata at the species level is currently representative of two newly described taxa, M. sinuata subsp. nigrescens and subsp. sinuata, which are concurrently being proposed for addition to the CNPS Inventory at this time.

The sheets with the type specimen of *M. undulata* contain more than one taxon, and the original description includes characters that apply to two different perennial species (Elvin and Sanders 2009). In his original description of *M. undulata*, Bentham (1834) described a plant that has a perennial or suffrutescent base or trunk, and refers to some characters that correspond with *M. crispa*, such as having procumbent basal stems (Elvin and Sanders 2009). These perennials have been delineated into the three subspecies of *Monardella undulata* noted above. However, *M. undulata* has also long been applied, in part, to an annual plant with undulate leaf margins from the central coast of California (Elvin and Sanders 2009). Even though it is well known to California botanists, the annual plant with undulate leaf margins had not been described prior to Elvin and Sanders (2009), who have recently designated it as *M. sinuata*.

Based on the available information, CNPS and CNDDB recommend deleting *Monardella undulata* from the CNPS Inventory. It will be treated as "Considered But Rejected" as previously including both perennial and annual plants, which are now recognized as *M. undulata* s.s. and *M. sinuata*.

Recommended Actions

CNPS: Delete from CRPR 4.2 CNDDB: Delete from G3 / S3.2

Current CNPS Inventory Record

Monardella undulata Benth. curly-leaved monardella Lamiaceae

Element Code: PDLAM180N0

CRPR 4.2

Monterey, Marin, Santa Barbara, Santa Cruz, San Francisco, San Luis Obispo, San Mateo, Sonoma

Los Alamos (170A) 34120F3, Lompoc (170B) 34120F4, Surf (171A)

34120F5, Guadalupe (196A) 34120H5, Davenport (408C) 37122A2, Felton (408D) 37122A1, San Francisco South (448B) 37122F4, Tomales (485B) 38122B8, Drakes

Bay (485C) 38122A8

Coastal dunes, closed-cone coniferous forest, cha

Coastal dunes, closed-cone coniferous forest, chaparral, coastal dunes, coastal prairie, coastal scrub, lower montane coniferous forest (ponderosa pine sandhills) / sandy. Elevation 0-305 meters.

Annual herb. Blooms May-September.

In review. Threatened by coastal development, sand mining, and non-native plants.

Revised CNPS Inventory Record

Considered But Rejected: Previously included perennial and annual plants which are now described as *M. undulata* s.s. and *M. sinuata*.

Literature Cited

Bentham, G. 1834. *Monardella*. Pp. 331-333 in Labiatarum Genera et Species. James Ridgeway and Sons, London.

California Native Plant Society (CNPS). 2013. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available online at: http://www.rareplants.cnps.org.

Elvin, M.A. and A.C. Sanders. 2009. Nomenclatural changes for *Monardella* (Lamiaceae) in California. Novon 19(3): 315-345.