

Added to 1B.3 of the CNPS Inventory on January 3, 2013

**Rare Plant Status Review: *Monardella hypoleuca* ssp. *hypoleuca*
Proposed New Add to Rank 1B.3, G4T2T3 / S2S3**

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Changes made to the original document appear in blue text.

Background

Monardella hypoleuca ssp. *hypoleuca* is a perennial, rhizomatous herb in the Lamiaceae that is endemic to California. It is included in *The Jepson Manual* (1993) and *The Jepson Manual, Second Edition (TJM 2)*; available online at: http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=51604); the Lamiaceae treatment in the *Flora of North America* is not yet available. The circumscription of *Monardella hypoleuca* ssp. *hypoleuca* has recently been altered with the removal of Santa Ana Mountain populations, which are now treated as newly described *Monardella hypoleuca* ssp. *intermedia* (Elvin and Sanders 2009); a taxon that was recently added to California Rare Plant Rank 1B.3 (available online at <http://www.rareplants.cnps.org/detail/3625.html>). *Monardella hypoleuca* ssp. *hypoleuca* is similar to subspecies *intermedia* in having relatively glabrous upper leaf surfaces and sparse pubescence on the stem, but differs in having wider (7-19 mm vs. 3-9 mm) leaves that are narrowly ovate (vs. lance-linear to lanceolate), and in having lavender (vs. white) flowers (Elvin and Sanders 2009, *TJM 2*). *Monardella hypoleuca* ssp. *intermedia* and ssp. *lanata* are very closely related, whereas ssp. *hypoleuca* may be best treated as a distinct species based on its discrete range and lack of introgression, but at this point the treatment authors are being conservative (Elvin and Sanders 2009). *Monardella hypoleuca* ssp. *hypoleuca* intergrades with *M. villosa* ssp. *obispoensis* in areas of overlap (*TJM 2*). It is mostly known to flower from May to August (Consortium of California Herbaria, CCH, 2012), but has been documented to flower as early as April to as late as September (Munz 1974, CCH 2012), and has even been documented to flower as late as December in Santa Barbara County (Smith 1998).

Monardella hypoleuca ssp. *hypoleuca* occurs on dry slopes of chaparral and cismontane woodland (Munz 1974, Hickman 1993, Smith 1998, CCH 2012, *TJM 2*) at an approximate elevation of 50 to 1525 meters (CCH 2012); a record in the CCH (2012) documented from 30 meters (*Theodore Payne RSA20924*) is actually closer to around 50 meters (A. Sanders pers. comm. 2012).

Monardella hypoleuca ssp. *hypoleuca* is known from approximately ~~30~~ 32 occurrences in the western Transverse Ranges of the Santa Monica, Santa Ynez, and Sierra Madre Mountains of Los Angeles, Santa Barbara, and Ventura counties. There are some herbarium records of *M. hypoleuca* ssp. *hypoleuca* from Orange, Riverside, and San Diego counties (CCH 2012); however, all occurrences from Orange and Riverside counties are subspecies *intermedia*, and those from San Diego County are either subspecies' *intermedia* or *lanata* (A. Sanders pers. comm. 2012). A single record from

San Bernardino County (*J. G. Lemmon UC1523366*) is out of range for *M. hypoleuca* ssp. *hypoleuca* and is likely a misidentification.

Of the ~~30~~ 32 known occurrences of *M. hypoleuca* ssp. *hypoleuca*, ~~22~~ 23 are historical (occurrences not 'seen' in the past 20 years are considered historical by the CNDDDB), and 17 are from herbarium records that are over 50 years old. However, since most current data ~~is~~ are from herbarium records, with relatively old dates, ~~there is the possibility that the likelihood of the plants are still being extant at most some of the recorded sites is high.~~ *Monardella hypoleuca* ssp. *hypoleuca* is known from a relatively small geographic range, however, it does not appear to have highly restricted site requirements and therefore more occurrences are likely to be discovered with additional field surveys.

Monardella hypoleuca ssp. *hypoleuca* is currently ranked G4T3T4 (the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies) and not State ranked (SNR) by NatureServe (2012). However, this T-rank reflects the circumscription of the taxon prior to the description of ssp. *intermedia*, as ssp. *intermedia* is currently not included in the NatureServe Explorer database.

Threats to *M. hypoleuca* ssp. *hypoleuca* are relatively unknown. ~~The occurrence from Nordhoff Ridge, Ventura County, could have been impacted by trail maintenance, particularly since no one would have paid attention to it previously (D. Magney pers. comm. 2012).~~ Due to hiking and other recreational activities in its known range, *M. hypoleuca* ssp. *hypoleuca* is possibly threatened by trail maintenance ~~in other areas, as well as~~ foot traffic, and/or recreational activities; however, further documentation is needed before making this determination.

Based on the available information, CNPS and CNDDDB recommend adding *M. hypoleuca* ssp. *hypoleuca* to California Rare Plant Rank 1B.3 of the CNPS Inventory. Similar to the rarity status of *M. hypoleuca* ssp. *intermedia*, ssp. *hypoleuca* is somewhat of a borderline between Rank 1B and 4; most of its occurrences are from herbarium records only, and additional occurrences are likely to show up with more focused surveys. Nevertheless, its current low number of occurrences, high number of historical occurrences, and the unknown site quality/viability of its occurrences depicts the status of a California Rare Plant Rank 1B taxon at this time. If current records are later found to be an under-representation of its actual distribution and frequency, CNPS and CNDDDB will re-evaluate its status at that time.

Recommended Actions

CNPS: Add to CNPS Rank 1B.3

CNDDDB: Add to CNDDDB G4T2T3 / S2S3

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 hypoleuca A. Gray ssp. *hypoleuca*

~~thick-leaf~~ **white-veined** monardella

Lamiaceae

Rank 1B.3

Los Angeles, Santa Barbara, Ventura

Malibu Beach (112C) 3411816, Topanga (112D) 3411815, Triunfo Pass (113C) 3411818, Ojai (140B) 3411942, Lion Canyon (165C) 3411952, Matilija (141A) 3411943, White Ledge Peak (141B) 3411944, Ventura (141D) 3411933, Carpinteria (142A) 3411945, Santa Barbara (142B) 3411946, Point Conception (145B) 3412044, Little Pine Mtn. (167C) 3411956, Lake Cachuma (168C) 3411958, San Marcos Pass (168D) 3411957, Santa Ynez (169D) 3412051, Santa Rosa Hills (170D) 3412053

Chaparral, cismontane woodland; elevation 50 – 1525 meters

Perennial rhizomatous herb. Blooms (April) May – August (September – December)

Known only from the Santa Monica, Santa Ynez, and Sierra Madre Mtns. Many occurrences historical; need field surveys. **Possibly threatened by trail maintenance.**

Previously included plants from Santa Ana and Palomar Mtns., which are now described as *M. hypoleuca* ssp. *intermedia*; a rare taxon. Intergrades with *M. villosa* ssp. *obispoensis* in areas of overlap. See *Synoptical Flora of North America* 2(1):356-357 (1878) for original description and *Novon* 19:315-343 (2009) for revised circumscription.