

Rare Plant Status Review: *Mentzelia puberula*
Proposed New Add to List 2.2
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Background

Mentzelia puberula is an herbaceous perennial in the Loasaceae. *M. puberula* was included as native to California in past floras (e.g. Munz 1959, Munz 1974). More recently, it was treated as a synonym of *M. oreophila* in the Jepson Manual (1993) and the Jepson Desert Manual (2004). Presently, Joshua Brokaw, John Schenk and Barry Prigge, once again, choose to recognize *M. puberula* as a distinct species, native to California and adjacent states (treatment available online at <http://ucjeps.berkeley.edu/tjm2/review/treatments/loasaceae.html>). According to John Schenk (pers. comm. 2009), "the confusion between *M. oreophila* and *M. puberula* is most likely due to the two species sharing a very recent common ancestor. They are nearly identical in floral, fruit, and seed structures (along with *M. polita* and *M. leucophylla*)...*M. puberula* has upper leaf bases that gradually (or sometimes broadly) taper. These upper leaves contrast with *M. oreophila*, which has leaf bases that are broad and clasp the stem." *M. puberula* flowers between March and May.

In California, *M. puberula* is known from approximately nine occurrences in the eastern Sonora Desert and southeastern Mojave Desert within Imperial, Riverside and San Bernardino counties. Additionally, herbarium collections from three locations may represent additional occurrences if their identification is verified as *M. puberula*. *M. puberula* is listed as a G4 taxon (apparently secure) by NatureServe. Outside of California, it occurs in Arizona, Nevada (where it is unranked, SNR) and northern Mexico. Suitable habitat within and beyond the known range of *M. puberula* in California should be searched for additional occurrences.

M. puberula typically grows in "sandy crevices in cliffs or rocky slopes" within Mojave and Sonoran Desert scrub habitats from approximately 90 to 1280 meters in elevation.

M. puberula is possibly threatened by renewable energy development projects.

Based on this information CNPS and CNDDDB recommend that *M. puberula* be added to CNPS List 2.2.

Recommended Actions

CNPS: Add to CNPS List 2.2

CNDDDB: Add to CNDDDB as G4 / S2

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

Mentzelia puberula J. Darl.

Darlington's blazing star

Loasaceae

List 2.2

Imperial, Riverside, San Bernardino; Arizona, Nevada

Mt Barrow (026B) 3311428, Coxcomb Mountains (078A) 3311583, Gene Wash (120C) 3411432, Dale Lake (100B) 3411526, Camp Rock Mine (155B) 3411666

SDScr, MDScr / sandy or rocky; elevation 90-1280 meters.

Herbaceous perennial. Blooms Mar-May.

Possibly threatened by renewable energy development.