Element Code: ?

Added to CNPS Inventory on April 27, 2011

Rare Plant Status Review: *Boechera rubicundula*Proposed New Add to Rank 1B.2 1, G1 / S1
Aaron Sims (CNPS) and Roxanne Bittman (CNDDB)
March 23, 2011

Changes to original document appear in blue text.

Background

Boechera rubicundula is a perennial herb in the Brassicaceae known only from one occurrence in Santa Clara County, California. It is included in the Flora of North America (Volume 7), and will be included in The Jepson Manual, Second Edition (available online at:

http://ucjeps.berkeley.edu/tjm2/review/treatments/brassicaceae_all.html#81761). Boechera rubicundula was originally described as Arabis arcuata var. rubicundula by Jepson (1936). It was later considered a synonym of Arabis sparsiflora var. arcuata by Rollins (1941, 1993), which is now treated as Boechera arcuata (Windham and Al-Shehbaz 2007). Due to the evidence of well-formed seed production from the type specimen of B. rubicundula, its taxonomic similarities with both B. arcuata and B. breweri var. breweri (with the latter being the only other member of the genus found near the type locality of B. rubicundula), Windham and Al-Shehbaz (2007) "hypothesize that B. rubicundula is a reproductively competent, apomictic hybrid containing genomes from B. arcuata and B. breweri'. Boechera rubicundula differs from B. arcuata by having spatulate to oblanceolate basal leaves, shorter fruiting pedicels with spreading trichomes, and shorter fruits; and differs from B. breweri var. breweri by having taller stems with at least some 3-rayed trichomes, and slightly descending to horizontal fruiting pedicels with a predominance of 2-rayed trichomes. Boechera rubicundula flowers from April to May.

Boechera rubicundula occurs along rocky mountain slopes in the immediate vicinity of Mount Day, Santa Clara County. It is known to occur at an approximate elevation of 1200 meters.

Boechera rubicundula is known only from the type locality on Mt. Day, from 1908 (J. R. Smith s.n. JEPS2730). Future surveys for *B. rubicundula* within the vicinity of Mount Day and the Mount Hamilton Range should be conducted in attempts to update this historic record, in addition to potentially discovering new occurrences.

Threats to B. rubicundula are unknown, however with only one known occurrence it should be considered for conservation concern.

Element Code: ?

Recommended Actions

CNPS: Add to CNPS 1B.2 1 CNDDB: Add to CNDDB G1 / 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

Boechera rubicundula (Jeps.) Windham & Al-Shehbaz

Mount Day rockcress

Synonym(s): Arabis arcuata var. rubicundula

Brassicaceae

Rank 1B.21

Santa Clara

Mt. Day (426B) 3712146

Chaparral/rocky slopes; elevation 1200 meters.

Perennial herb. Blooms Apr-May.

Known from only one occurrence on Mt. Day. Similar to *B. arcuata* and *B. breweri* var. *breweri*. See *Fl. Calif.* 2:69 (1936) for original description and *Harvard Papers in Botany* 11(2):257-274 (2007) for taxonomic treatment.