Element Code: PDBRA06010

## Kept as California Rare Plant Rank 2.2 on April 11, 2012

Rare Plant Status Review: *Arabis aculeolata*Proposed retention as California Rare Plant Rank 2.2

Danny Slakey (CNPS), Aaron Sims (CNPS), and Roxanne Bittman (CNDDB)

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Arabis aculeolata is a perennial herb that was first included in the CNPS Inventory, Second Edition, in 1980, and is currently a rank 2.2 taxon. It was included in The Jepson Manual (1993) and was treated in the Flora of North America (FNA; available online at http://www.efloras.org/florataxon.aspx?flora\_id=1&taxon\_id=250094728) as an Oregon endemic, but is not included in *The Jepson Manual, Second Edition (TJM 2)*, due to evidence suggesting that it does not occur in California. Eight occurrences of A. aculeolata from Del Norte and Siskiyou counties are currently in the CNDDB, although their identity has long been considered questionable. The plants in many of those populations are intermediate between A. aculeolata and A. mcdonaldiana (CNPS 1B.1), a close relative. Arabis mcdonaldiana and Arabis aculeolata differ in many characteristics, but generally with a strong degree of overlap. Some examples of the differences include the wider, more numerous cauline leaves of A. aculeolata, as well as its longer fruiting pedicels, longer and wider petals, longer fruits, and more ovules per ovary when compared to A. mcdonaldiana (FNA). Also, A. aculeolata is hairier, with stems that are sparsely to densely hirsute and basal leaves that are pubescent or rarely subglabrate; Arabis mcdonaldiana usually has glabrous stems, and basal leaves that sometimes have trichomes terminating the leaf teeth (FNA). For the most part, the California plants in question are similar to A. aculeolata in terms of their hairiness, but more like A. mcdonaldiana in other characters, such as trichome shape and overall plant size (Rollins 1973, L. Vorobik pers. comm. (date unknown, but likely 1993 based on content), Imper 1983). However, W. Rolle, who is familiar with A. aculeolata from the field in Oregon, stated that at least one population of true Arabis aculeolata occurs in California, in the East Fork Illinois River Watershed (CNDDB EO#2; pers. comm. 2012); there is no voucher specimen associated with this occurrence, however.

Most of the California occurrences of *Arabis aculeolata* are not well-documented with herbarium vouchers, so botanists from the Six Rivers and Siskiyou National Forests plan to make more collections of the plants during the 2012 field season (W. Rolle, S. Carothers, J. McRae pers. comm. 2012). These data will help in better understanding the distribution and taxonomy of the plants treated as *Arabis aculeolata* in California, and will be used to update the known CNDDB occurrences. If the specimen data suggest that no true *Arabis aculeolata* occurs in California, its status will be re-evaluated by CNPS and CNDDB at that time.

## **Recommended Actions**

CNPS: Keep Arabis aculeolata in CNPS 2.2

CNDDB: Keep Arabis aculeolata in CNDDB G4 / S2

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## **Current CNPS Inventory Record**

Please see Online Inventory account at http://www.rareplants.cnps.org/detail/181.html

## **Literature Cited**

Imper, D. 1983. Report of the 1983 field inspection for MacDonald's rockcress (*Arabis macdonaldiana* ssp. *macdonaldiana*). Six Rivers National Forest.

Rollins. R.C. 1973. Purple-flowered *Arabis* of the Pacific Coast of North America. Contributions from the Gray Herbarium 204: 151-152.