

**Added to CNPS Inventory on July 11, 2012****Rare Plant Status Review: *Sidalcea celata*  
Proposed New Add to Rank 3, G2G3 / S2S3**

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**Background**

*Sidalcea celata* is a perennial herb in the Malvaceae family that is endemic to northern California. It was included in *The Jepson Manual, Second Edition* (*TJM 2*, available online at [http://ucjeps.berkeley.edu/cgi-bin/get\\_IJM.pl?tid=91700](http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=91700)), but was treated as a synonym of *Sidalcea malviflora* ssp. *asprella* in *The Jepson Manual* (1993; *S. malviflora* ssp. *asprella* is currently *S. asprella* in *TJM 2*). The *Flora of North America* treatment for Malvaceae is not yet available. *Sidalcea* 'malvaeflora' var. *celata* was first described by Jepson (1936) and was elevated to a subspecies by Hitchcock (1957). Hill (2009) resurrected this taxon following its exclusion from *TJM* (1993) and elevated it to the rank of species. Hill's (2009) treatment was based on morphological analyses of the type specimens of *S. celata* and other specimens of *S. celata* and *S. asprella*.

Hitchcock (1957) noted that *S. malviflora* ssp. *celata* is more similar to the Sierran ssp. *asprella* than it is to the coastal ssp. *malviflora*. He also noted that it is very similar to *Sidalcea robusta*, a rare plant that occurs south of *Sidalcea celata* in Butte County. *Sidalcea robusta* has a short, soft puberulence on the lower stems, compared to the bristles or stellate hairs on the lower stems of *S. celata* (Hitchcock 1957, *TJM 2*). *Sidalcea celata* has no rhizomes, in contrast to the rhizomatous *Sidalcea asprella* (both varieties *asprella* and *nana*) which has stellate stem base hairs but never bristles. Also, both varieties of *S. asprella* have leaf lobes that are toothed, while the leaf lobes of *S. celata* are entire (*TJM 2*). A new taxon, *Sidalcea gigantea*, was recently segregated from *S. celata* (Clifton et al. 2009). *Sidalcea gigantea* and *S. celata* may be difficult to tell apart from herbarium specimens, but the hollow stem bases, large size (1.5-2 meters), and clonal rhizomatous habit of *Sidalcea gigantea* should separate them easily in the field (*TJM 2*, Clifton et al. 2009, S. Hill pers. comm. 2012). Also, *Sidalcea gigantea* occurs farther east, in the northern Sierra Nevada and Cascade Ranges. Genetic analyses involving *Sidalcea celata* are not available, as Andreasen and Baldwin (2003a, 2003b) did not include *Sidalcea celata* in their genetic studies on the evolution and phylogeny of the genus *Sidalcea*. However, members of the *Sidalcea asprella* clade and the *Sidalcea glaucescens* clade (the former is a subset of the latter) have been suspected of intergrading extensively (Andreasen and Baldwin 2003b). Based on morphology, *S. celata* would likely be within the *S. asprella* clade. Members of these clades show minimal genetic divergence, suggesting either hybridization events or incomplete lineage sorting (Andreasen and Baldwin 2003b). *Sidalcea celata* blooms from April to August (Consortium of California Herbaria [CCH] 2012).

*Sidalcea celata* occurs in cismontane woodlands, many of which are dominated by oaks. It sometimes occurs on serpentine soils (Hill 2009, *TJM 2*). It grows at elevations from 135 to 1525 meters (CCH 2012).

*Sidalcea celata* is known from about 17 occurrences. They are located within the northern Central Valley and extend into the Inner North Coast Ranges and Cascade Ranges (TJM 2). *Janeway 548* is identified as *Sidalcea malviflora* ssp. *celata* (CCH 2012), but occurs outside of its known range, in the Klamath Ranges near the Oregon border (Siskiyou County). Specimens listed as *S. malviflora* ssp. *celata* in the CCH (2012) from Butte County (*Castro and Toren 1520*) are likely *Sidalcea gigantea*, while a specimen from Santa Cruz County (*Morgan UCSC5412*) is certainly in error. Hitchcock (1957) noted specimens from Siskiyou County (*Howell 14929, Eastwood 10805*), Amador County (*Ownbey & Meyer 2227*), El Dorado County (*Robbins 1068*), and Trinity County (*Balls 13860*) that resemble *Sidalcea celata*, but were placed in *Sidalcea asprella* mostly because of range; none of these specimens are currently treated as *Sidalcea celata* (CCH 2012). Fourteen of the seventeen known occurrences of *Sidalcea celata* are historical (occurrences not seen in the past 20 years are considered historical by the CNDDDB). About half of the known occurrences, mostly those from the northern Central Valley, are likely on private land, while many populations farther north and at higher elevations are found on U.S. Forest Service lands.

Threats to *Sidalcea celata* are not currently known. Given the fact that as many as half of the known populations may be on private land, threats to *Sidalcea celata* could be moderate.

Based on the available information, CNPS and CNDDDB recommend that *Sidalcea celata* be added to California Rare Plant Rank 3. Uncertainty about the distribution of this species, as well as the difficulty in identifying herbarium material, prevents a thorough understanding of this plant's overall abundance and distribution (K. Andreasen pers. comm. 2012). More work needs to be done in order to understand the full distribution of the species, and *S. celata* should be included in future genetic studies. If more information on *S. celata* becomes available in the future, CNPS and CNDDDB will re-evaluate its status at that time.

### Recommended Actions

CNPS: Add to CNPS 3

CNDDDB: Add to CNDDDB G2G3 / 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

*Sidalcea celata* (Jeps.) S.R. Hill

Redding checkerbloom

Malvaceae

Rank 3

Shasta, Siskiyou, Tehama

Bartle (697D) 4112137, Enterprise (647D) 4012253, Hagaman Gulch (654D) 4012157, Oak Run (646A) 4012261, Olinda (629B) 4012244, Ono (630A) 4012245, Polar Bear Mtn. (738A) 4112385, Project City (647A) 4012263, Red Bluff East (610B) 4012222, Rosewood (630D) 4012235, Shasta Dam (647B) 4012264, Viola (644C) 4012156

Cismontane woodland / sometimes serpentinite; elevation 135 – 1525 meters.

Perennial herb. Blooms April – August.

Move to List 1B? Some plants from AMA, ELD, SIS, and TRI cos. resemble *S. celata*, but are outside of known range; needs further study. Herbarium material is difficult to identify; needs field surveys. Similar to *S. asprella*, *S. gigantea*, and *S. robusta*. A synonym of *S. malviflora* ssp. *asprella* in *TJM* (1993). See *Flora of California* 2(1):492-493 (1936) by W.L. Jepson for original description and *Madroño* 56(2):285-292 (2009) for taxonomic treatment.