

Rare Plant Status Review: *Cuscuta californica* var. *apiculata*

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Information in blue text has been added based on reviewer comments

Background

Cuscuta californica var. *apiculata* is an annual parasitic vine in the Convolvulaceae. This species was once known in California from only a single occurrence collected along the Colorado River in San Bernardino County in the early 1850's. It was then collected in 1945 in a somewhat disjunct location near Cathedral City in Riverside County. Recently, in 2003, another occurrence was found along the Colorado River in San Bernardino County by Sarah De Groot and J. Mark Porter. *C. californica* var. *apiculata* is also known from southern Nevada and northeastern Baja California.

C. californica var. *apiculata* is distinguished from the other varieties of *C. californica* by its granulate corolla and ovoid-pointed ovary. While there are quite a few specimens of *C. californica* on the Consortium of CA Herbaria website that have not been identified to variety, *C. californica* var. *apiculata* appears to be restricted in California to the eastern Sonoran Desert near the Colorado River below 500 meters in elevation. Range-wide, *C. californica* var. *apiculata* occurs on various hosts in sandy desert areas.

The authors of the *Cuscuta* treatment in the new edition of *The Jepson Manual* will continue to recognize this variety, as was done in the 1993 edition of *The Jepson Manual*. The authors recommend a NatureServe T status of T1T2, which means that the variety is critically imperiled to imperiled (SIDA 22(1): 177-195 (2006)) throughout its range.

C. californica var. *apiculata* was first described in 1859 based on a collection by J.M. Bigelow collected on *Dalea spinosa* ("smoke tree") on the Colorado River in 1854. This variety has only been documented twice since the original collection- once in 1945 in Riverside County and again more recently in 2003 in San Bernardino County. Due to its rarity within California, *C. californica* var. *apiculata* requires review for inclusion in both the CNPS Inventory and the CNDDDB.

Based on reviewer's comments it appears that currently there is a large uncertainty as to the rarity status of this species. The Jepson Manual treatment author Mihai Costea believes this species to be quite rare (T rank of T1T2) in California. However, botanists with experience in the region seem to think it to be more common than collections suggest. There is also a question as to how distinct this species is from var. *californica* as many specimens seem to be intermediate between var. *californica* and var. *apiculata*.

We therefore have revised our recommendation and now suggest a ranking of List 3 until further information comes forward on the species true distribution and rarity.

Recommended Actions

CNPS: Add to CNPS List ~~2-2~~ 3

CNDDDB: Add to CNDDDB as G5T~~3?~~ / ~~S1-2~~ 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

Cuscuta californica Hook & Arn. var. *apiculata* Engelm.

Convolvulaceae

"pointed dodder"

List ~~2-2~~ 3

Riverside, San Bernardino; Baja California, Nevada

082C (Cathedral City/3311674), 120C (Gene Wash/3411432), 124B? (Sheep Camp Spring/3411542), 124C? (Milligan/3411532), 149C? (Old Woman Statue/3411552), 151C (Amboy/3411556), 197C? (Mt. Manchester/3511416), 172B? (Needles NW/3411486), 201B? (Marl Mountains/3511526), 202A? (Indian Spring/3511527), 226C? (Cow Cove/3511536), 227D? (Granite Spring/3511537)

Mojavean desert scrub, Sonoran desert scrub / sandy

Annual vine (parasitic), blooms February ~~March~~-August

Move to List 2? Location and rarity information needed. See *Trans. Acad. St. Louis* 1: 499 (1859) for original description and *SIDA* 22(1): 177-195 (2006) for taxonomic treatment.