Rare Plant Status Review: *Nemacladus secundiflorus* var. *robbinsii* Proposed New Add to List 1B.2, G3T2T3 S2S3

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Changes made since the first version of this status review appear in blue.

Background

Nemacladus secundiflorus var. robbinsii is a California endemic, herbaceous annual in the Campanulaceae. *N. secundiflorus* var. robbinsii will be included in *The Jepson Manual*, 2nd Edition. There are no varieties for *N. secundiflorus* recognized in *The Jepson Manual* (1993), but since then Nancy Morin has done extensive work on the genus. As a result, Morin describes a new variety, *N. secundiflorus* var. robbinsii, in the *Journal of the Botanical Research Institute of Texas* 2(1):397-400 (2008). Previously, in his description of *N. secundiflorus*, Guy Thomas Robbins, "noted an unusual population from San Benito County but concluded it was not different enough to warrant recognition." However, recent studies of "fresh material and additional populations indicates that the flowers of these plants consistently differ from typical *secundiflorus* in being much smaller and in having a narrower corolla tube" (Morin 2008).

N. secundiflorus var. *robbinsii* occurs on dry, sandy to gravelly flats and slopes from 350 to 1700 meters in elevation. According to Nancy Morin (pers. comm. 2010), both varieties of *N. secundiflorus*, "occur on what seem to be little desert outposts. In the midst of chaparral or grassland on "normal" soil, there will be a little area (sometimes only 8' x 8') of pure white sand, or at most sand and small-diameter gravel, and that is where these plants are."

N. secundiflorus var. *robbinsii* is known from approximately 46 14 occurrences from 7 counties (Los Angeles, Monterey, San Benito, San Luis Obispo, Santa Barbara, Tulare, and Ventura) in the South Coast Ranges, Western Transverse Ranges, and the Southern High Sierra Nevada. It is known from San Benito County in the north to Los Angeles County in the south, and as far east as Tulare County.

About a third of the known occurrences indicate that *N. secundiflorus* var. *robbinsii* is found along roadsides. These occurrences could be threatened by road widening and maintenance. The population size, population trends, area of occupancy, and land ownership at occurrences of *N. secundiflorus* var. *robbinsii* are not well known.

N. secundiflorus var. *robbinsii* occurs over a relatively large geographic area (it is known from 6-10 quads in 7 counties). All of the 16 14 known occurrences were last seen over 20 years ago (occurrences that have not been "seen" in the past 20 years are considered historic by the CNDDB) and 11 9 occurrences have not been seen for more than 50 years ago.

List 1B typically contains plants known from 50 or fewer viable occurrences that are ranked as either good or excellent by CNDDB. List 4 typically includes plants with greater than 50 viable occurrences.

Based on the current information and the available data CNPS and CNDDB recommend that *N. secundiflorus* var. *robbinsii* be added to CNPS List 1B.2, G3T2T3 S2S3.

Recommended Actions

CNPS: Add to CNPS List 1B.2

CNDDB: Add to CNDDB as G3T2T3 S2S3

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, choose the appropriate CNPS List and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Nemacladus secundiflorus G.T. Robbins var. robbinsii Morin Robbins' nemacladus Campanulaceae List 1B.2

Bickmore Canyon 363C (36121E2), Big Pine Mtn. 167B (34119F6), Caldwell Mesa? 220A (35120B3), Frazier Mtn.? 189C (34118G8), Lebec? 189D (34118G7), Lockwood Valley 165A (34119F1), Reyes Peak 166A (34119F3), Tar Spring Ridge? 220B (35120B4), Tierra Redonda Mountain 294C (35120G8), Valyermo 135A (34117D7) Specific habitat types not well-defined; elevation 350-1700 meters.

Herbaceous annual. Blooms Apr-Jun.

Possibly threatened by road maintenance and widening. See *J. Bot. Res. Inst. Texas* 2(1):399 (2008) for original description.