

Added to CNPS Inventory on March 17, 2011**Rare Plant Status Review: *Thysanocarpus rigidus*****Proposed New Add to Rank ~~1B-4~~ 2, G1G2 / S1S2**

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Changes made to the original document appear in blue text.

Background

Thysanocarpus rigidus is an annual herb in the Brassicaceae that is known from four counties in southern California. It was newly recognized by Alexander et al. (2010), who provide substantial molecular and morphological evidence in their treatment of it as a distinct species. *Thysanocarpus rigidus* is treated as *Thysanocarpus laciniatus* var. *rigidus* in Munz (1959), *The Flora of North America* (Vol. 7), and *The Jepson Manual*, 2nd Edition (TJM2, available online at: http://ucjeps.berkeley.edu/tjm2/review/treatments/brassicaceae_all.html#67155). Under the description of *Thysanocarpus* in TJM2, it is noted that the revised taxonomy of *T. rigidus* was too late for full treatment. It is unknown as to whether it was incorporated into the text that recently went to UC Press. *Thysanocarpus rigidus* can be difficult to distinguish from *T. laciniatus* due to the latter's occasional branched and purplish appearance which is similar to *T. rigidus*. In these cases, the stiff, straight, horizontal to slightly ascending pedicels of *T. rigidus* allows for proper identification (Alexander et al. 2010). *Thysanocarpus rigidus* flowers from February to May.

Thysanocarpus rigidus occurs along dry, rocky slopes and ridges of oak and pine woodland in arid mountain ranges of southern California. It grows at an approximate elevation of 600 to 2,200 meters.

Thysanocarpus rigidus is known only from 6 occurrences in California, with one out of state occurrence in Municipio Ensanada, Baja California. It occurs in Los Angeles, Riverside, San Bernardino, and San Diego Counties, and the type locality is "near Laguna Camp, Laguna Mts.", San Diego Co. from 1925 (Munz POM82645). Only two occurrences of *T. rigidus* are less than 35 years old, with its last documented occurrence in February of 2005 "...along CA 74 near rim of Deep Canyon" (Windham DUKE!, MO!, NMC!, UT!). Although *T. rigidus* is poorly represented in herbarium collections, all specimens were collected in May or in earlier months when there is little else that is likely to be in flower. Therefore, "poor sampling of these habitats at this time of year may account for the paucity of specimens" (Alexander et al. 2010), and more surveys should be conducted in order to update existing records and determine potential new populations.

The 1923 occurrence of *T. rigidus* from north of Claremont is possibly threatened if not potentially extirpated from development. Additionally, the "Laguna Camp" (and possibly other occurrences) may be threatened by non-native annual

grasses. More information is needed on the habitat specificities of this species in order to effectively assess other possible threats.

Based on the available information, CNPS and CNDDDB recommend that *Thysanocarpus rigidus* be added to CNPS 1B.4 2.

Recommended Actions

CNPS: Add to CNPS rank 1B.4 2

CNDDDB: Add to CNDDDB G1G2 / S1S2

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

Thysanocarpus rigidus (Munz) P.J. Alexander & Windham

rigid fringedpod

Brassicaceae

Rank 1B.4 2

Los Angeles, Riverside, San Bernardino, San Diego; Baja California

Rancho Mirage (065B) 3311664, Monument Peak (019B) 3211684

Pinyon and juniper woodland/dry rocky slopes; elevation 600-2200 meters.

Annual herb. Blooms Feb-May.

Known from fewer than 10 occurrences in CA and from one occurrence in BA.

Possibly threatened by development and non-native plants. Similar to *T.*

laciniatus. See *Bulletin of the Southern California Academy of Sciences* 31:62 (1932) for original description and *Systematic Botany* 35(3):559-577 (2010) for taxonomic treatment.