

**Added to California Rare Plant Rank 2B.1 of the CNPS Inventory on
October 5, 2016**

Rare Plant Status Review: *Abutilon abutiloides*
Proposed Addition to California Rare Plant Rank 2B.1, G5 / S1
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Changes made to the original document are in blue text.

Background

Abutilon abutiloides (Jacq.) Garcke ex Hochr. is a perennial herb in the Malvaceae previously known only from outside of California in Arizona, Texas, Sonora Mexico and Baja California. It was recently discovered on the edge of Little Blair Valley in San Diego County, California, by Larry Hendrickson in November of 2003, and is not included in *The Jepson Manual, Second Edition* (Hill 2012). Hendrickson's collection was originally identified as *Abutilon palmeri*, but was re-determined by Dr. Jon Rebman in 2014. *Abutilon abutiloides* is often confused with *A. palmeri* and *A. berlandieri*. The main identifying characteristics of *A. abutiloides* in comparison to *A. palmeri* are leaf blades that are roughly pubescent with styles containing eight to ten branches (versus leaf blades that are softly tomentose with styles containing ten to twelve branches in *A. palmeri*). It mostly differs from *A. berlandieri* in having stems without glandular hairs, reticulately scabridulous seeds, and a basally truncate calyx (versus stems with glandular and stellate hairs intermixed, uniformly puberulent seeds, and a basally cuneate calyx in *A. berlandieri*). *Abutilon berlandieri* is also not known from California (Hanes 2015). *Abutilon abutiloides* is actually more similar to *A. californicum* than it is to *A. palmeri* (J. Rebman pers. comm. 2016), but *A. californicum* is not known from California.

In the *Flora of North America* it is noted that *A. abutiloides* occurs in open arid habitats below 1,000 meters, and has a year-round flowering period (Hanes 2015). In California *A. abutiloides* was discovered in decomposed granite on a boulder slope throughout Sonoran desert scrub, with the following associated species: *Bebbia juncea* var. *aspera*, *Ditaxis lanceolata*, *Echinocereus engelmannii*, *Encelia farinosa*, *Eriogonum wrightii* var. *nodosum*, *Nicotiana obtusifolia*, and *Viguiera parishii*. It is known to flower in August and November, and occurs at an approximate elevation of 855 to 900 meters in California (Hendrickson 105, SD159941; Consortium of California Herbaria 2016).

Abutilon abutiloides is known only from one record in California from "northern edge of Little Blair Valley, near the end of eastern spur road..." within the Anza-Borrego Desert State Park (Hendrickson 105). After the re-determination of Larry Hendrickson's collection, he visited the location in August of 2014 where he found approximately eight plants, and again in October of 2015 where he found none, potentially due to drought conditions. Hendrickson (pers. comm. 2016) hypothesizes that there is a possibility the species was brought into the area via livestock from Arizona or Baja California because Little Blair Valley, where the plant is found, was heavily grazed before it was acquired

by the Anza-Borrego State Park in 1933. It appears that the native status of *A. abutiloides* in California can neither be refuted nor supported at this time without further documentation, and we prefer to err on the side of caution and consider it native and rare unless significant evidence suggests otherwise in the future.

Abutilon abutiloides is ranked as a G5 taxon by NatureServe and is unranked (SNR) by NatureServe in Arizona and Texas.

Threats to *A. abutiloides* are unknown; while Little Blair Valley is used for remote camping and recreation it is unlikely that there would be any immediate human or vehicle impacts due to the rough terrain (Hendrickson per. comm. 2016).

Based on the available information, CNPS and CNDDDB recommend adding *Abutilon abutiloides* to California Rare Plant Rank 2B.1 of the CNPS Inventory. Although no current threats are known, we propose a threat rank of .1 based on our knowledge of only a single occurrence in California, and the potential threat of a stochastic event or other unforeseen risk that could be detrimental to the sole occurrence. If knowledge on the distribution, threats, and rarity status of *A. abutiloides* changes in the future, we will re-evaluate its status at that time.

Recommended Actions

CNPS: Add *Abutilon abutiloides* to CRPR 2B.1

CNDDDB: Add *Abutilon abutiloides* to G5 / S1

Draft CNPS Inventory Record

Abutilon abutiloides (Jacq.) Garcke ex Hochr.

shrubby Indian mallow

Malvaceae

CRPR 2B.1

San Diego

Arizona, Texas; Baja California, Sonora Mexico

Earthquake Valley (032C) 3311614

Sonoran desert scrub; rocky, granitic; 855-900m.

Perennial herb. Blooms August, November

First collected in California by L. Hendrickson in 2003; identification confirmed by J.

Rebman in 2014. Similar to *A. palmeri* in California; distinguished in having roughly pubescent leaf blades (vs. softly tomentose) and styles that contain 8-10 branches (vs.

10-12). See *Annuaire du Conservatoire et Jardin Botaniques de Genève* 6:22 (1902) for original description.

Literature Cited

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