## Rare Plant Status Review: Castilleja ambigua ssp. ambigua

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) December 10, 2008 New Addition to List 4.2

## Background

*Castilleja ambigua* ssp. *ambigua* is an annual herb in the Orobanchaceae (previously included in the Scrophulariaceae). *C. ambigua* ssp. *ambigua* is included in *The Jepson Manual* (1993) and will be included in *The Jepson Manual* (2<sup>nd</sup> Edition) (M. Wetherwax, pers. comm. 2008). *C. ambigua* ssp. *ambigua* is distinguished from other subspecies of *C. ambigua* based on its yellow bract tips. *The Jepson Manual* (1993) indicates that *C. ambigua* is, "highly variable and difficult; many local, +/-ecological forms; needs further study." *C. ambigua* ssp. *ambigua* flowers between March and August.

In California, *C. ambigua* ssp. *ambigua* grows in coastal bluff scrub, coastal scrub, coastal prairie, marshes, margins of vernal pools, and valley and foothill grassland habitats from 0 to 435 meters in elevation.

*C. ambigua* ssp. *ambigua* is known from an estimated 83 occurrences in Alameda, Contra Costa, Del Norte, Humboldt, Marin, Mendocino, Monterey, Napa, San Luis Obispo, San Mateo, Santa Cruz, and Sonoma counties. One additional historical collection with vague location information may be from San Francisco County. *C. ambigua* ssp. *ambigua* also occurs in Oregon, Washington, and British Colombia. NatureServe ranks *C. ambigua* ssp. *ambigua* as a G4T3T4 taxon.

The majority (59 out of 83) of the occurrences of *C. ambigua* ssp. *ambigua* are known only from historical collections that have not been documented for 30-147 years. Additionally, two additional collections that were documented relatively recently are likely to have been eliminated by development (J. Ruygt, pers. comm. 2007). Considering the amount of development that has occurred within the range of *C. ambigua* ssp. *ambigua* in the past couple of decades it is probably safe to assume that many historical occurrences of this taxon have been extirpated. Field surveys are needed to confirm if *C. ambigua* ssp. *ambigua* is still present at many locations. Additionally, suitable habitat within and beyond the known range of this taxon should be searched for new occurrences.

*C. ambigua* ssp. *ambigua* is threatened by coastal development. The land ownership at most of the occurrences of *C. ambigua ssp ambigua* is unknown.

Based on the available information, CNPS and CNDDB recommend that *C. ambigua ssp. ambigua* be added to List 4.2. If field work confirms that many of the historical occurrences of *C. ambigua* ssp. *ambigua* are extirpated, it may be appropriate to re-rank it to List 2. Conversely, if reviewers determine that *C*.

*ambigua* ssp. *ambigua* is too common for List 4, we will consider placing it on the Considered But Rejected (CBR) list.

## **Recommended Actions**

CNPS: Add to CNPS List 4.2 CNDDB: Add to CNDDB as G4T3T4 / S3

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

## **Draft CNPS Inventory Record**

Castilleja ambigua Hooker & Arnott ssp. ambigua johnny-nip Orobanchaceae List 4.2 Alameda, Contra Costa, Del Norte, Humboldt, Marin, Mendocino, Monterey, Napa, San Francisco?, San Luis Obispo, San Mateo, Santa Cruz, Sonoma; Oregon, Washington, British Colombia San Leandro (447B) 3712262, Burro Mtn (296D) 3512173, Monterey (366C) 3612158, Santa Cruz (387E) 3612281, Felton (408D) 3712211, Franklin Point (409A) 3712223, Pigeon Point (409B) 3712224, San Mateo (448D) 3712253, Montara Mtn (448C) 3712254, Oakland East (465C) 3712272, Oakland West (466D) 3712273, Point Bonita (467D) 3712275, Richmond (466A) 3712283, San Quentin (466B) 3712284, San Rafael (467A) 3712285, Mare Island (483D) 3812213, Novato (484D) 3812215, Inverness (485D) 3812217, Drakes Bay (485C) 3812218, Cuttings Wharf (483A) 3812223, Petaluma (484B) 3812226, Tomales (485B) 3812228, Glen Ellen (501D) 3812235, Two Rock (502D) 3812237, Valley Ford (502C) 3812238, Capell Valley (499B) 3812242, Yountville (500A) 3812243, Kenwood (501A) 3812245, Sebastopol (502A) 3812247, Camp Meeker (502B) 3812248, St. Helena (516C) 3812254, Mark West Springs (517C) 3812256, Healdsburg (518D) 3812257, Bodega Head (503D) 3812331, Duncan Mills (503A) 3812341, Plantation (520D) 3812353, Stewarts Point (520B) 3812364, Gualala (537D) 3812375, Saunders Reef (537C) 3812376, Point Arena (537B) 3812386, Mendocino (569D) 3912337, Fort Bragg (569A) 3912347, Fields Landing (654B) 4012462, Cannibal Island (655A) 4012463, Trinidad (689C) 4112412, Rodgers Peak (689A) 4112421, Lake Talawa (740C) 4112472 Coastal bluff scrub, coastal scrub, coastal prairie, marsh or swamp, valley and foothill grassland, vernal pools (margins); elevation 0-432 meters. Annual herb. Blooms March-August.

Threatened by coastal development.