Element Code: PDSCR0D403 Added to List 1B.1 on 03-04-2010

## Rare Plant Status Review: Castilleja ambigua ssp. insalutata Proposed New Add to List 1B. 1

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) January 25, 2010

## Background

Castilleja ambigua ssp. insalutata is an annual herb in the Orobanchaceae endemic to California. *C. ambigua* ssp. insalutata is included in the Jepson Manual (1993) and will be included in the Jepson Manual, 2<sup>nd</sup> Edition (Margriet Wetherwax, pers. comm. 2009). *C. ambigua* ssp. insalutata is distinguished from other subspecies of *C. ambigua* based on the rose or purplish color of its bracts and its branching pattern. The original description of the taxon by Jepson also states that its "leaves and bracts are broader and shorter." *C. ambigua* ssp. insalutata flowers between May and August.

C. ambigua ssp. insalutata is found growing in openings in coastal bluff scrub and coastal prairie habitats from approximately 0 to 100 meters in elevation. More detailed habitat information about this taxon is needed.

C. ambigua ssp. insalutata is known from approximately 10 occurrences near the coast in Monterey and San Luis Obispo counties. The location of the type specimen (Pacific Grove, Monterey County) has not been documented since 1941 and is possibly extirpated. Additionally, 6 other occurrences have not been documented from between 27 and 65 years (these occurrences will be considered "historic" by the CNDDB-meaning they have not been documented in the past 20 years). Field surveys are urgently needed to determine the current status and threats to all know occurrences of C. ambigua ssp. insalutata. Field work is also needed to accurately map occurrences of this taxon. Additionally, suitable habitat in Monterey and San Luis Obispo counties should be searched for new occurrences of C. ambigua ssp. insalutata.

C. ambigua ssp. insalutata occurs in areas of Monterey County that are threatened by development. One herbarium specimen label (from 1951) indicates that C. ambigua ssp. insalutata grows on a "road margin, disturbed area, along golf course." Another herbarium label (from 1979) indicates that C. ambigua ssp. insalutata occurs with "weedy grasses." Consequently, C. ambigua ssp. insalutata is possibly threatened by non-native plants. The land ownership of most occurrences of this taxon is unknown.

*C. ambigua* ssp. *insalutata* was evaluated as a proposed new addition to List 1B in 1999. At that time, questions were raised about the difficulty in identifying *C. ambigua* ssp. *insalutata* from *C. ambigua* with similar bract color and branching patterns occurring outside of Monterey and San Luis Obispo Counties. This called into question the geographic basis for separating infraspecific taxa of *C. ambigua*. As a result, at that time we decided to postpone making a decision on the proposed addition of *C. ambigua* ssp. *insalutata*. We recently completed a

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status review *C. ambigua* ssp. *ambigua* and subsequently added it to List 4.2. During the review of *C. ambigua* ssp. *ambigua* several individuals stated that *C. ambigua* ssp. *insalutata* is a "rarer" taxon and should be considered for inclusion in the CNPS Inventory. The available information on *C. ambigua* ssp. *insalutata* indicates that it is, indeed a rare taxon. We hope that this status review will generate some useful discussion on the identification, distribution, conservation status of subspecies of *C. ambigua*.

Based on this current information CNPS and CNDDB recommend that *C. ambigua* ssp. *insalutata* be added to CNPS List 1B.1.

## **Recommended Actions**

CNPS: Add to CNPS List 1B.1

CNDDB: Add to CNDDB as G4T2 / S2

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 Hook. & Arn. ssp. insalutata (Jeps.) T.I. Chuang & Heckard Orobanchaceae

List 1B.1

Monterey, San Luis Obispo

Monterey (366C) 3612158, Salinas (365B) 3612166, Piedras Blancas (272A) 3512163

Coastal bluff scrub, coastal prairie; elevation 0-100 meters.

Annual herb. Blooms May-August.

Threatened by development. Possibly threatened by non-native plants. See *Manual of the Flowering Plants of California* (Jepson 1925) for original description and *Systematic Botany* 16:4 (1991) for revised nomenclature.