

Added to CNPS Inventory on June 1, 2011

Rare Plant Status Review: *Chenopodium littoreum*

Proposed New Add to Rank 1B.2, G2 / S2

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Changes made to original document appear in blue text.

Background

Chenopodium littoreum is an annual herb in the Chenopodiaceae that is endemic to the south-central coast of California. It will be included in *The Jepson Manual, Second Edition* (available online at:

http://ucjeps.berkeley.edu/tjm2/review/treatments/chenopodiaceae_all.html#91892).

Chenopodium littoreum was originally identified as *C. carnosulum* var. *patagonicum*, which is native to South America (Benet-Pierce and Simpson 2010, Hickman 1993, Munz 1968). It differs from *C. carnosulum* by having 5 stamens, horizontal seeds, and entire, mostly non-lobed leaves that are narrowly elliptic, lanceolate, or widely lanceolate, with a cuneate base and mucronate apex. The specific epithet, *littoreum*, translates from Latin to “of the seashore,” in reference to its coastal distribution (Benet-Pierce and Simpson 2010). *Chenopodium littoreum* appears to flower from late April to late August.

Chenopodium littoreum occurs along coastal dunes in central California (San Luis Obispo and Santa Barbara counties) and is known from one collection in southern California (Los Angeles County). It inhabits a narrow coastal strip at an approximate elevation of 10 to 30 meters.

Chenopodium littoreum is known only from ~~eleven~~ **approximately fifteen** occurrences, with the majority (~~eight~~ **eleven**) of its occurrences from Morro Bay, Los Osos, Oceano, and Guadalupe-Nipomo dunes of San Luis Obispo County. The remaining known occurrences of *C. littoreum* are from Vandenberg Air Force Base of Santa Barbara County, in addition to one record from May of 1904 at Playa del Rey, Los Angeles County (*Grant s.n.* DS91772). All but one of the known collections of *C. carnosulum* var. *patagonicum* in California have been annotated to *C. littoreum* (Nuri Benet-Pierce pers. comm. 2011, Benet-Pierce and Simpson 2010). ~~The single remaining~~ **A** record of *C. carnosulum* var. *patagonicum* from California (*Dean Wm. Taylor 15891* JEPS96748) was collected at a vernal pool 4 miles south of Cordelia in Solano County. This record is likely a misidentification due to the differences in habitat and range of where it was collected compared to *C. littoreum* (Dean Wm. Taylor pers. comm. 2011). **Another potential record of *C. littoreum* from a high elevation at Sierra de San Pedro Martir in Baja California (*J. Rebman* SD191480) is likely actually *C. desiccatum* or another taxon, but is still pending further study (Nuri Benet-Pierce pers. comm. 2011). This record has not been counted as an additional occurrence since it has not been properly identified and is well outside of the known elevation and geographic range of *C. littoreum*.**

Chenopodium littoreum is possibly threatened by non-native plants throughout its known range, and possibly threatened by recreational activities and off-highway vehicles in the Oceano dunes. The historic record of *C. littoreum* from Playa del Rey in southern California is possibly extirpated and should be surveyed for. Other historic records, particularly those from the Oceano dunes (*Hoover 9857, Condit s.n., Hoffman 420*), should be looked for as well.

Recommended Actions

CNPS: Add to CNPS 1B.2

CNDDDB: Add to CNDDDB G2 / S2

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

Chenopodium littoreum (Benet-Pierce & M.G. Simpson)

coastal goosefoot

Chenopodiaceae

Rank 1B.2

Los Angeles, San Luis Obispo, Santa Barbara

Venice (090B) 3311884, Oceano (221D) 3512015, Morro Bay South (247D) 3512037,

Casmalia (196D) 3412075, Surf (171A) 3412065

Coastal dunes (CoDns); elevation 10-30 meters.

Annual herb. Blooms Apr-Aug.

Known from fewer than ~~45~~ 20 occurrences. Possibly threatened by recreational activities, vehicles, and non-native plants. Previously identified as *C. carnosulum* var. *patagonicum*. See *Madroño* 57(1):64-72 (2010) for original description.