

Mendocino coast paintbrush

(*Castilleja mendocinensis*)



ENDANGERED



Flower (left), habit (center), and habitat (right) of Mendocino coast paintbrush. Photos by ODA staff (left, right) and Ed Cope (Center). If downloading images from this website, please credit the photographer.

Family

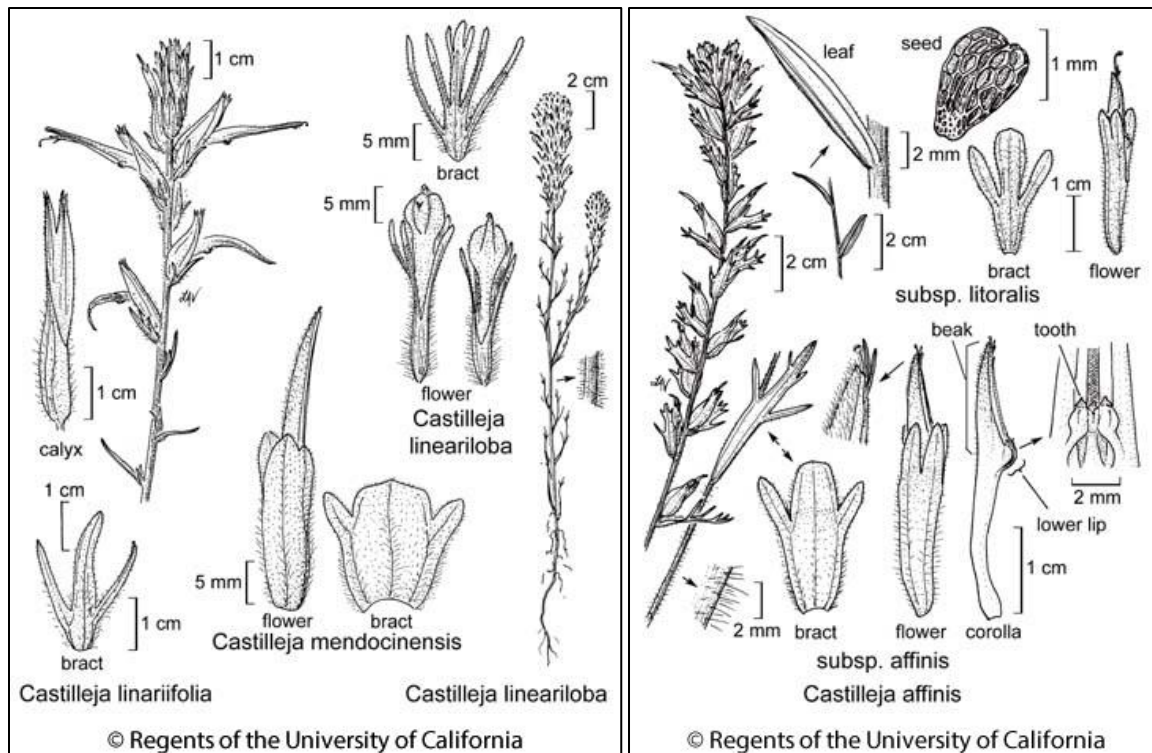
Orobanchaceae

Plant description

Mendocino coast paintbrush is a tap rooted perennial herb with few to many, decumbent to ascending branching stems arising 17-65 cm from a woody caudex. Generally covered with shaggy-bristly, non-glandular hairs that give the plant a gray-green hue. The somewhat fleshy leaves are 5-20 mm long, oblong to rounded, cupped, with 0-3 truncate-rounded lobes. Inflorescences are 5-20 cm long, with widely wedge shaped to widely obovate bracts, 15-20 mm wide, bright red to orange-red distally, and 0-3 lobes with truncate-rounded tips. Calyces, shaggy-hairy (some hairs may be glandular) and colored similarly to bracts, are 20-31 mm long with abaxial and adaxial clefts about 50% (8-12 mm) of calyx length and deeper than the lateral clefts of 10-15% (2-6 mm). Straight or slightly curved corollas are 30-45 mm long, with a 18-20 mm tube, and 15-25 mm exerted beak that is adaxially green or green-yellow and shaggy-puberulent; deep green lower lip is about 2 mm long.

Distinguishing characteristics

In Oregon, *Castilleja mendocinensis* occurs alongside *C. litoralis* (syn: *C. affinis* ssp. *litoralis*), and introgressive hybridization may be occurring. While *C. mendocinensis* has fleshy, rounded leaves and bracts with 0 to 3 erect lobes and a wide central lobe, *C. litoralis* has non-fleshy, oblong leaves and bracts with 0 to 5 ascending lobes. Hybrid individuals tend to express traits of both species, making identification difficult in the field.



Botanical illustrations from Jepson eFlora; ucjeps.berkeley.edu/eflora/

When to survey

Surveys should occur when the species is flowering, from May through August.

Habitat

Castilleja mendocinensis is typically found on the edges of coastal bluffs and headlands, and on flat tops and around the edges of sandstone bluffs in coastal shrub vegetation. It commonly grows near *Lupinus littoralis*, *Trifolium wormskioldii*, *Fragaria chiloensis*, *Lasthenia ornduffii*, *Empetrum nigrum*, and *Picea sitchensis*, among others.

Range

Castilleja mendocinensis ranges from Curry County, Oregon, south to Mendocino County, California.

Oregon counties

Curry

Federal status

Species of concern

Threats

Genetic swamping through introgressive hybridization with *Castilleja littoralis* is a threat that can result in the loss of the pure *C. mendocinensis* genotype, and due to the number of sites where both species occur and the likelihood of hybridization, could ultimately restrict and reduce the range of *C. mendocinensis*. *Castilleja mendocinensis* is further threatened by limited habitat (occurring on the very edge of coastal

bluffs) that could be reduced by woody encroachment, saltwater exposure, potentially other non-native vegetation, erosion from extreme wind, rain, and recreational traffic. Small population size is a concern as it can reduce genetic diversity and reproductive success. Climate change also has the potential to decrease survivability of the species.

References

California Natural Diversity Database (CNDDDB). 2022. Element Occurrence Reports for *Castilleja mendocinensis*. Unpublished cumulative data current to July 31, 2022. California Department of Fish and Wildlife. Sacramento, CA.

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Oregon Biodiversity Information Center (ORBIC). 2023. Element Occurrence Reports for *Castilleja mendocinensis*. Unpublished cumulative data current to September 7, 2023. Institute for Natural Resources, Portland State University, Portland, OR.

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