

**FIRST RECORD OF *CASTILLEJA PECKIANA* (OROBANCHACEAE)
FOR CALIFORNIA**

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ABSTRACT

A recent collection of *Castilleja peckiana* Pennell from Modoc County, California, is documented and illustrated. While the species is known from the directly adjacent Lake Co., Oregon, this collection represents the first verified occurrence for this species in the state of California.

Castilleja peckiana Pennell is an uncommon species of moderate elevations (1000-2600 m) in sagebrush-juniper associations and open ponderosa pine or Douglas-fir communities, primarily in eastern Oregon (Baker, Crook, Deschutes, Grant, Harney, Lake, Malheur, Morrow, Union, Wallowa, and Wheeler cos.), as well as in northern Elko Co., Nevada (Holmgren 1984), and more recently documented occurrences in Adams and Owyhee counties in Idaho (Egger et al. 2019). While documented populations of *C. peckiana* approach the California border in the vicinity of Summer Lake in adjacent Lake Co., Oregon, about 95 kilometers north of the border (Oregon Plant Atlas 2020, IRHN 2020), there are no previous records of its presence in California (Wetherwax et al. 2012, 2020; CCH1 2020; CCH2 2020).

California. Modoc Co.: Modoc Plateau, Devil’s Garden area, along Road 47N99 along the SE side of Bird Spring Ridge, 5.1 air-km NW of Blue Mountain, T47N, R9E, SW¼ of SW¼ of sec. 36, Pothole Valley 7.5' quad; 41.869444, -120.891111 WGS84, 1544 m, 11 Jun 2018, *Janeway 12627* (CHSC, WTU). Figures 1, 2.

This population is located about 15 kilometers south of the Oregon border and about 110 kilometers south of the nearest known populations and represents the first verified occurrence for this species in the state of California.

The collection documented here was originally identified as *Castilleja chromosa* A. Nels., but that species can be distinguished from *C. peckiana* with the following couplet.

- 1. Stems usually 1.5-3.5 dm tall, rarely branched above, with conspicuous, hispid pubescence; leaves with 0-3 pairs of lateral lobes; bracts with 1–3 pairs of lateral lobes with +/- rounded apices
..... **Castilleja chromosa**
- 1. Stems 3-5 dm tall, often branched above, with relatively inconspicuous, +/- cinerous puberulence; leaves with 0-1 pair of lateral lobes; bracts with 1(–2) pairs of lateral lobes with +/- acute apices
..... **Castilleja peckiana**

Images of the holotype of *Castilleja peckiana* (Fig. 3) and of typical plants in the field (Figs. 4-6) are presented below.

ACKNOWLEDGEMENTS

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Figure 1. *Castilleja peckiana*, Devil's Garden area, Modoc Plateau, Modoc Co., California, 11 June 2018, Janeway 12627, CHSC.



Figure 2. *Castilleja peckiana*, Devil's Garden area, Modoc Plateau, Modoc Co., California, 11 June 2018, Janeway 12627, CHSC. Details of two inflorescences and lower stem.

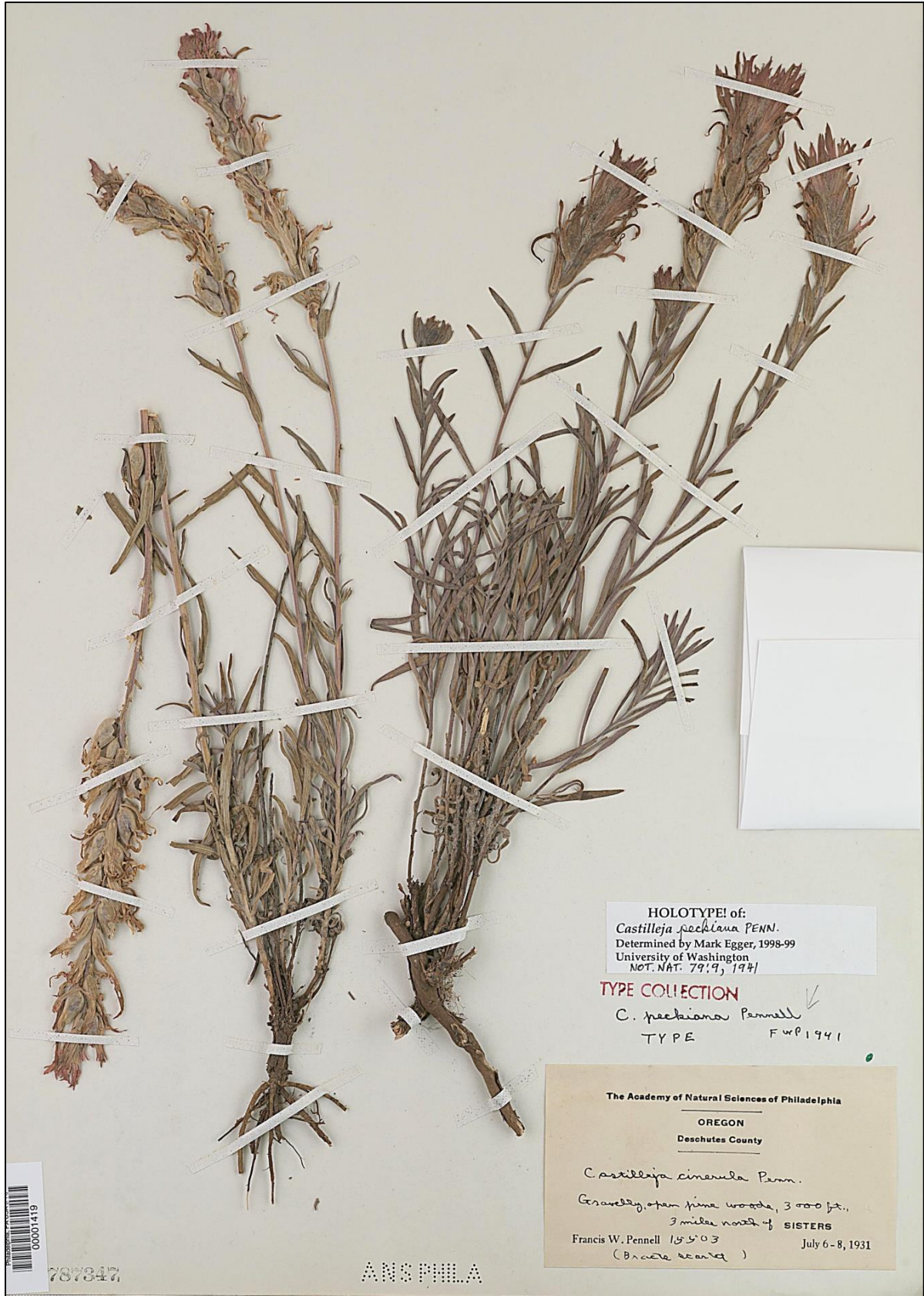


Figure 3. Holotype of *Castilleja peckiana*, Deschutes Co., Oregon, F.W. Pennell 15503 (PH).



Figure 4. *Castilleja peckiana*, 6-7 mi SE of Page Springs along Steens Mountain Loop Road, Harney County, Oregon, 10 Jul 1994, Egger 651 (WTU). Photo by J.M. Egger.



Figure 5. *Castilleja peckiana*, Steens Mountain Loop Road below Fish Lake, Harney Co., Oregon, 10 July 1994 (no collection). Photo by J.M. Egger.



Figure 6. *Castilleja peckiana*, ca. 13 mi. SE of Page Springs along Steens Mountain Loop Road, Harney Co., Oregon, 1 July 1985, Egger 131 (WTU). Photo by J.M. Egger.