# A NEW SPECIES OF CASTILLEJA (SCROPHULARIACEAE) FROM DURANGO, MEXICO

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## ABSTRACT

Castilleja chlorosceptron, sp. nov., is described from the Sierra Madre of western Durango. In its rhizomatous habit, scabrous stems, and evenly divided calyces with acute lobes, C. chlorosceptron is most similar and probably most closely related to C. durangensis. The new species differs from the latter particularly in its glabrous leaves with nonclasping bases and its much smaller flowers.

KEY WORDS: Castilleja, Scrophulariaceae, México

Two recent collections from western Durango, México, have brought to attention a previously undescribed species of Castilleja.

Castilleja chlorosceptron Nesom, sp. nov. TYPE: MEXICO. Durango: Mpio. Canelas, on the road to Topia and Canelas, 6 km E of Canelas, 30 km E of jct of this road with road to Topia (at Cuevacillas); 1770 m, W slope, eroded rounded ridges, reddish igneous soil, more or less barren beneath, with yellow pines and oak (Q. eduardii, Q. viminea, Q. scytophylla). Rare, in small patches particularly on knoll tops; 29 Jun 1992, R.W. Spellenberg 11059 with J. Bacon (HOLOTYPE: TEX!; Isotypes: CIIDIR,NMC).

Castillejae durangensi Nesom similis sed foliis ac bracteis glabris, foliis angustioribus basibus non amplectentibus, et floribus multo minoribus differt.

Herbaceous perennials arising from a system of slender (almost wiry), scale leaved rhizomes, apparently without a central axis. Stems erect, 5-15 cm tall, slender, eglandular, minutely but densely scabrous with deflexed hairs 0.05-0.10 mm long (to 0.5 mm in the upper inflorescence). Leaves densely crowded

and overlapping from bottom to top of the stem, on nodes ca. 1 mm apart, ascending, glabrous, 3 veined, entire, linear or becoming lanceolate upwards, 2-3 cm long, 1.5-2.5 mm wide, not at all basally clasping. Floral bracts mostly green, red at the very apex, glabrous, lanceolate, entire, 11-20 mm long, about equaling the associated calyces. Calyces greenish, slightly pink tinged, red only at the very apex, the upper 1/4 densely granular glandular, minutely hispidulous on the proximal portion, 12-13 mm long, the primary lobes 2-3 mm long, the secondary lobes 0.5-0.8 mm deep with acute tips. Corollas 15-16 mm long, the teeth of the lower lip narrowly oblong, ca. 1 mm long, the galea 2-3 mm long, "blushed reddish, flanges red," with a densely granular glandular dorsal surface without other hairs, exserted 3-5 mm from the calyx; stigma bilobed, 1.4-1.6 mm wide, yellow-green, prominently exserted. Mature fruit not seen.

Additional collection examined: MEXICO. Durango: Mpio. El Salto, 32 km W of El Salto, woods of oak, pine, and some Abies, 2300 m, 10 Jul 1982, Hernández M. 7844 (WIS).

The plants of Castilleja chlorosceptron (named for their primarily green, wandlike aspect) are herbaceous and diminutive in stature, with stems arising from slender rhizomes without a central axis, and they produce glabrous, crowded ascending, linear, entire, nonclasping leaves, minutely scabrous stems, lanceolate floral bracts, shallowly and evenly divided calyces, and small corollas. In its rhizomatous habit, minutely scabrous stems, crowded, narrow, entire leaves, and evenly divided calyces with acute lobes, C. chlorosceptron is most similar to and probably most closely related to C. durangensis Nesom, secondarily to C. aspera Eastw. (Nesom 1992), both members of the group centered around C. scorzoneraefolia Kunth and treated by Eastwood (1909) within Castilleja sect. Euchroma (Nutt.) Benth. The new species differs from C. durangensis in its much thinner rhizomes, glabrous leaves and bracts, leaves with nonclasping bases, and much smaller flowers (calyces 12-13 mm long vs. 18-22 mm long; corollas 15-16 mm long vs. 21-25 mm long), the galeas with only glandular hairs (vs. glandular as well as pilose, eglandular hairs).

Castilleja durangensis is represented by many collections from the area of El Salto in southwestern Durango (Nesom 1992), where it is endemic. Castilleja chlorosceptron is partially sympatric with C. durangensis, and although it has been collected only twice, it appears to have a significantly wider geographic distribution.

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Nesom:

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