

# THE IDENTITY OF HEUCHERA CYLINDRICA.

By CHARLES V. PIPER.

In the original description of *Heuchera cylindrica* Douglas,<sup>1</sup> the species is stated to occur "On the declivity of low hills, and on the steep banks of streams on the west side of the Rocky Mountains." This has always been puzzling from the fact that the plant accepted by all American botanists as *Heuchera cylindrica* occurs only in and west of the Cascade Mountains, and grows mainly in copses about low moist meadows. An examination of the Douglasian specimens at Kew and in the British Museum clears up the discrepancy. At Kew there are two sheets, one of which is labeled exactly as quoted by Hooker. The other sheet is of the same species, and with scarcely a doubt of the same collection, but is labeled merely *Heuchera cylindracea* [sic] Dougl. The plant is not at all the one taken by American botanists for *Heuchera cylindrica*, but is the one recently named *Heuchera columbiana* by Rydberg.<sup>2</sup> Another Douglasian sheet in the British Museum has two different species mounted upon it, but each is numbered and the label reads:

"In dry mountain woods near Kettle Falls. 1. *H. cylindracea*. 2. *Heuchera*."

This writing is in ink and is identified by Dr. A. B. Rendle as that of Sir W. J. Hooker. In the lower left-hand corner of the sheet written in pencil is the following: "*Heuchera cylindrica* Dougl. Flor. Bor. Am." Such pencil inscriptions in the same hand occur on many of the Douglas sheets in the British Museum, but the handwriting is not identified. Plant no. 2, unnamed, is a young specimen of the species that all American botanists have been calling *Heuchera cylindrica*, namely, Torrey and Gray,<sup>3</sup> Brewer and Watson,<sup>4</sup> Wheelock,<sup>5</sup> Howell,<sup>6</sup> Rydberg,<sup>7</sup> Rosendahl,<sup>8</sup> and Piper.<sup>9</sup>

As the plant called *Heuchera cylindrica* by American botanists is unnamed, it is here described as a new species.

<sup>1</sup> Hook. Fl. Bor. Amer. 1:236.

<sup>2</sup> N. Amer. Fl. 22:116. 1905.

<sup>3</sup> Fl. N. Amer. 1:580. 1840.

<sup>4</sup> Bot. Calif. 1:201. 1876.

<sup>5</sup> Bull. Torrey Club 17:202. 1890.

<sup>6</sup> Fl. Northw. Amer. 203. 1898.

<sup>7</sup> N. Amer. Fl. 22<sup>3</sup>:115. 1905.

<sup>8</sup> Bot. Jahrb. Engler 37<sup>2</sup>:80. 1905.

<sup>9</sup> Contr. U. S. Nat. Herb. 11:322. 1906.

***Heuchera chlorantha* sp. nov.**

Tufted from a stout branching caudex; leaves all basal, the blades 5 to 8 cm. broad, orbicular to reniform, deeply cordate, 7 to 9-lobed, the lobes broadly rounded or faintly lobed and dentate with broad cuspidate teeth, glabrous except on the veins beneath; petioles 5 to 15 cm. long, with spreading or somewhat retrorse, usually brownish hairs; flowering stems scapiform, 50 to 100 cm. high, villous, with spreading or somewhat retrorse brownish hairs, and usually bearing one or two fimbriate leaf rudiments; inflorescence a narrow dense panicle 5 to 10 cm. long, the short branches 3 to 7-flowered the axis hirsute and glandular; bracts ovate to lanceolate, the lower 3-cleft, fimbriate; calyx greenish, turbinate-campanulate, the lobes oblong, obtusish, the whole pruinose-puberulent, 7 to 8 mm., or in fruit 10 to 12 mm. long; petals minute or lacking.

Type in the U. S. National Herbarium, no. 690786, collected in Falcon Valley, Klickitat County, Washington, June 28, 1892, by W. N. Suxsdorf (no. 1739).

This species differs from all others in the group by its leaves being membranaceous instead of subcoriaceous and from all except *H. tenuifolia* in its greenish flowers, the remainder having cream-colored flowers.

The following additional specimens have been examined:

WASHINGTON: Sumas Prairie, 1858. *Lyall*; Kitsap County, July, 1895, *Piper*; Seattle, *Piper* 2515; Tacoma, *Flett* 123; Montesano, *Heller* 4067; Falcon Valley, *Suxsdorf* 1739 (type); Vancouver, *Piper* 4944; Upper Columbia, *Wilkes Exped.* 461 (this locality probably wrong, as many of the labels on Wilkes Expedition plants are undoubtedly misplaced).

OREGON: Cascade Mountains, *Cusick* 2675; Cascade Mountains, latitude 44°, *Newberry*; Farewell Bend, Crook County, *Leiberg* 481; Elk Creek, Jackson County, *Applegate* 2573; Lake of Woods, Klamath County, *Coville & Applegate*; Western Oregon, June, 1880, *Howell* 137; Silver Creek, *Hall* 161.

BRITISH COLUMBIA: Skidegate. Graham Island, Queen Charlotte Island, *Osgood* in 1890.

*Heuchera cylindrica* Dougl. (*H. columbiana* Rydb.) belongs to an exceedingly puzzling group of the genus. Rydberg, in the North American Flora, recognizes six species, mainly on the basis of leaf contour and pubescence. The characters assigned to the various species do not separate herbarium material into homogeneous units, and additional forms would require names if the scheme used were carried out fully. It would seem preferable to consider *Heuchera cylindrica* a polymorphous species with several intergrading subspecies. Typical examples of *Heuchera cylindrica* Dougl. are the following:

WASHINGTON: Loon Lake, July 20, 1897, *Winston*; Clark Springs, *Kreager* 71; Wenache Mountains, *Whited* 1134; Clark Springs, *Beattie & Chapman* 2019.

IDAHO: Near Lewiston, *Sandberg, Heller & McDougal* 161.

Just how the confusion as regards the identity of *Heuchera cylindrica* arose is difficult to say. In the Gray Herbarium is a specimen marked "Ex Hooker," which is not the true *H. cylindrica*, but the plant to which all American botanists have applied the name. Lindley<sup>1</sup> published a colored plate of *Heuchera cylindrica* from specimens grown in the garden of the London Horticultural Society, also stating that Douglas collected it "in dry mountain woods near the Kettle Falls." This plate evidently represents true *Heuchera cylindrica*, but modified by the conditions under which it was grown, so that it might easily be mistaken for the species here named *Heuchera chlorantha*.

<sup>1</sup> Edwards's Bot. Reg. 23: pl. 1924. 1837.