

PTILORIA.

Rafinesque, Atl. Journ. 145 (1832). *Stephanomeria*, Nutt. Trans. Am. Phil. Soc. vii. 427 (1841).

1. P. PAUCIFLORA, Raf. l. c. (1832). *Prenanthes ? pauciflora*, Torr. Ann. Lyc. N. Y. ii. 210 (1828). *Stephanomeria runcinata*, Nutt. l. c. (1841), in part? From Nebraska to Texas, and westward to the Rocky Mountains, and perhaps beyond them, into Utah, Nevada, etc. Named *Prenanthes runcinata* by Dr. James in 1825, but without description; and Nuttall's employment of this specific name appears to have been made without any reference to Dr. James' use of it, and his plant may be different, obtained as it was from a point to the westward of the Rocky Mountains.

2. P. TENUIFOLIA, Raf. l. c. (1832). *Prenanthes ? tenuifolia*, Torr. l. c. (1828). *Lygodesmia minor*, Hook. Fl. Bor.-Am. i. 205. t. 103 A (1833). *Stephanomeria minor*, Nutt. Trans. Am. Phil. Soc. vii. 427 (1841). A species of our northern borders only, as I judge; well marked in habit, the herbaceous stems being slender, reedy and flexible, usually bearing but few heads, and well clothed with long slender almost grassy leaves. None of the more southerly plants commonly referred to it share these peculiarities.

3. P. MYRIOCLADA. *Stephanomeria myrioclada*, Eaton, Bot. King Exp. 198. t. 20. Desert regions of the interior of Nevada.

4. P. WRIGHTII. *Stephanomeria Wrightii*, Gray, Proc. Am. Acad. xix. 62 (1883). Western Texas; perhaps extending to New Mexico and Arizona.

5. P. VIRGATA. *Stephanomeria virgata*, Benth. Bot. Sulph. 32 (1844). The herbage of this common species of the Cali-

fornian seaboard is deep green and entirely glabrous; but the leaves, dying away in summer before the flowering begins, are wanting in herbarium specimens, and so the following has long been confused with it.

6. *P. CANESCENS*. Tall and stout, but parted above into slender paniculate branches, the stem and leaves tomentulose: heads few and scattered, about twice as large as in the last: achenes larger, less tuberculate, pappus longer and of fewer bristles.

This replaces *P. virgata* in the interior of middle California, where it is very common. But it also occurs at Alameda, on San Francisco Bay; and in Napa Valley, where it was collected by the writer in 1874, and at that time referred by Dr. Gray to "*S. paniculata*" rather than to *virgata*. The pubescence, and the sparse, not virgately disposed heads at once distinguish it.

7. *P. TOMENTOSA*. *Stephanomeria tomentosa*, Greene, Bull. Calif. Acad. ii. 152 (1886). Here again the inflorescence is even more strictly and densely virgate than in *P. virgata*, and the achenes and pappus are as in that species; but the herbage is white-tomentose. Habitat, Santa Cruz Island, where it has been found only by the writer.

8. *P. PLEUROCARPA*. Tall and stout, virgate-paniculate, glabrous and glaucous: heads small, few-flowered: achenes very light-colored (buff rather than brown), fusiform, rugose-tuberculate between the salient rib-like angles; pappus-bristles numerous, distinct, plumose to the base, bright white, very soft, deciduous.

The only specimen known to me is of my own collecting, near Redding, Shasta Co., Calif., Sept. 1889; but the species may be common enough in those northerly foothills. I mistook it for *P. virgata*; but the character of the achenes is very peculiar. In the related species, the angles are elevated between as many deep and usually closed grooves.

In this the grooves are wanting, and the prominent rib-like elevations take just their places, the intervening parts being plane or somewhat rugose, not angularly raised. The promptly and completely deciduous pappus is another peculiarity.

9. *P. PANICULATA*. *Stephanomeria paniculata*, Nutt. Trans. Am. Phil. Soc. vii. 428 (1841). Plains of the interior, in Idaho, eastern Oregon, etc. And a plant so named by Dr. Gray was collected by myself in extreme northern California in 1876 (No. 963). But this, though otherwise agreeing perfectly with Nuttall's description, has scabro-puberulent achenes; and specimens matching that in every respect, save that the branches of the panicle are more virgate, were collected on Santa Cruz Island. These last are called, but erroneously, "*S. virgata*" in my list of the vegetation of the island.

10. *P. CORONARIA*. *Stephanomeria coronaria*, Greene, Bull. Calif. Acad. i. 194 (1885). Santa Lucia Mountains, Calif. Also sent from Monterey Co. by Mr. Hickman. Upon my description of this, Dr. Gray remarked: "by the character seems too near *S. exigua*."¹ But that species has pappus-bristles plumose only above the middle, while in *coronaria* the plume continues down to the top of the short paleaceous dilatation, at which point the plumose part breaks, and falls away, leaving a permanent short crown upon the achene. Nothing at all like this is seen in *P. exigua*.

11. *P. EXIGUA*. *Stephanomeria exigua*, Nutt. Trans. Am. Phil. Soc. l. c. Common in the vast half-desert territories of the Great Interior Basin. Perhaps in southeastern California; but all the Californian specimens look different, and may belong to *P. coronaria* or be of a species awaiting recognition.

¹ Syn. Fl. Supplem. 454.