

*meria*, supplemented by the single exterior bristle of *Malacothrix*. Geographical range somewhat limited north and south, but extending from central California to Utah.

P. NUTANS.—*Scorzonella*, Geyer in Hook. Lond. Journ. vi. 523; *Ptilophora*, Gray, Pl. Fendl. 112; *Calais*, Gray, Pac. R. Rep. iv. 112; *Stephanomeria intermedia*, Kellogg, Proc. Cal. Acad. v. 39; *Microseris nutans*, Gray, l. c. excl. var. *major*.

British Columbia and Montana to the high Sierras of northern and middle California.

P. MAJOR.—*Ptilophora*, Gray, Pl. Fendl. l. c.; *Calais*, Gray, Pac. R. Rep. l. c.; *Microseris major*, Gray, l. c. excl. var. *laciniata*. Utah and Idaho.

P. GRACILOBA.—*Calais graciloba*, Kellogg, Proc. Cal. Acad. l. c.; *Microseris major*, var. *laciniata*, Gray, l. c.

Still known only from Mendocino County, California; the specimens too young, yet by their pubescence and other characteristics, clearly enough representing a distinct species.

#### NOTHOCALAIS.

Involucre oblong-campanulate; bracts in two series, narrowly lanceolate, membranaceous, with thinner, somewhat hyaline margins, nearly equal, none calyculate. Receptacle flat, alveolate. Akenes fusiform, contracted or rostrate-attenuate at summit, 10-striate-ribbed. Pappus very white and soft, of 10--30, scabrous-margined, narrow, unequal paleæ, with or without some capillary bristles.—*Microseris* § *Nothocalais*, Gray, Syn. Fl. ii. 420, with *Troximon cuspidatum*, Pursh, added. Perennials with linear-attenuate, undulate or crisped radical leaves marked by white-tomentulose margins, and monocephalous, scapose peduncles. Habitat from Northern California to British Columbia and eastward to the Great Lakes, on dry, open rocky places.

N. SUKSDORFII.—Akene slender, 5 lines long, rostrate-at-



tenuate, only half occupied by the seed: paleæ 10—12, very narrow and nearly equal, strictly linear-attenuate, a half inch long: involucre villous-tomentose or glabrate: scapose peduncles exceeding the radical leaves.

Western part of Klickitat County, Washington Territory, April and May, 1882, W. N. Suksdorf.

*N. TROXIMOIDES*.—Akene fusiform, scarcely 4 lines long, merely contracted summit, nearly filled by the seed: paleæ 20—25, lanceolate below, very unequal, a half inch long: involucre and peduncles as in the last.—*Microseris troximoides*, Gray, Proc. Am. Acad. ix. 211; Bot. Cal. l. c.: Syn. Fl. l. c.

Northern California to Oregon and Idaho.

*N. CUSPIDATA*.—Akene little contracted, 3 lines long, filled by the seed: pappus of 40—50 unequal, very narrow, setose paleæ and scabrous bristles: leaves all radical, longer than the flowering scapes: involucre glabrous.—*Troximon* Pursh, Fl. ii. 742; Torr. & Gray, Fl. ii. 489; Gray, Syn. Fl. ii. 437: *T. marginatum*, Nutt. Gen. ii. 127.

On bleak, stony hills and fertile prairies, from Dakota and Colorado to Wisconsin and Illinois. Scarcely distinguishable from its far Western congeners except by the pappus. The undulate-crisped, white-hairy margins of the grassy leaves of this giving it an aspect so strikingly unlike the general appearance of the other species of his genus *Troximon*, were points not overlooked by that well traveled and most keenly observant botanist, Mr. Nuttall. That he noticed the peculiarity and was impressed by it is evinced by his effort to invest the species with a new specific name, *marginatum*, more appropriate than Pursh's *cuspidatum*, which was given to it in reference to the acuminate rather than cuspidate bracts, and has, therefore, no fitness, but which must needs be retained in deference to its priority. The name *marginatum* would, indeed, be equally and in the same way, applicable to each of the three known species of *Nothocalais*.