

flowers. — Nutt. in Fras. Cat. & Gen. ii. 127; Benth. & Hook. Gen. ii. 522; Gray, Proc. Am. Acad. ix. 215, Bot. Calif. i. 437, & Proc. Am. Acad. xix. 71. *Troximon* & *Macrorhynchus* (Less.), DC., Torr. & Gray, Fl. ii. 489, 491.

§ 1. EUTRÓXIMON. Akenes more or less linear, beakless, or tapering gradually into a short and thickish beak, on which the nerves or ribs of the body are prolonged to the apex: pappus rigidulous: perennial from a strong caudex.

* No beak to the akene, its moderately short contracted summit of the same texture as the body and equally 10-costate: involucre bracts somewhat equal, all tapering to a slender acumination, the outer from an oblong or ovate-lanceolate base, glabrous: corolla yellow: root perennial.

T. alpestre, GRAY. Dwarf from an elongated rootstock or caudex, glabrous: leaves diverse (2 or 3 inches long), narrowly spatulate or lanceolate and pinnately lobed or incised, or parted into narrow linear divisions: scape 2 or 3 inches high, weak: involucre campanulate, 7 or 8 lines high; the bracts in about 2 series: akenes $2\frac{1}{2}$ lines long, equalled by the slender uniform pappus-bristles. — Proc. Am. Acad. xix. 70, 71. — On Mount Paddo, Washington Terr., *Suksdorf*, 1880. Summit of Cascade Mountains, Oregon, *L. F. Henderson*.

T. cuspidatum, PURSH. Glaucous, tomentulose when young, a span or two or the scape at length a foot high from a thickened caudex: leaves entire, elongated linear-lanceolate and upwardly linear-attenuate, thickish, often nervose, mostly tomentulose-ciliate (2 to 5 lines wide): involucre about inch high; its bracts in 2 or 3 series: akenes 3 or 4 lines long when mature, rather shorter than the unequal rigidulous pappus. — Fl. ii. 472; Torr. & Gray, l. c.; Gray, Man. 277, & Proc. Am. Acad. ix. 215. *T. marginatum*, Nutt. l. c. — Prairies of W. Illinois and Wisconsin to Dakota; first coll. by *Nuttall* and *Bradbury*. Stronger pappus-bristles gradually and slightly widened toward the base.

* * Akenes with apex tapering gradually into a rather stout and nerved beak which is shorter than the body. — § *Nothotroximon*, Gray, Bot. Calif. l. c., partly.

T. barbellulatum, GREENE in herb. Slender, not glaucous: leaves linear-lanceolate, lacinate-pinnatifid into a few short and narrow lobes, or some entire: involucre narrow, over half-inch high, rather few-flowered; its 10 to 12 bracts nearly equal, lanceolate, acuminate, glabrous: flowers yellow: akenes with the beak (of fully half the length of the fusiform body) 3 lines long, about the length of the soft distinctly barbellulate pappus. — Castle Lake, near Mount Shasta, California, *C. H. Dwinelle*, from *Greene*.

T. glaucum, NUTT. Usually a foot or two high, rather stout, pale or glaucous, either glabrous or with loose pubescence: leaves linear to lanceolate, from entire to sparingly dentate or sometimes lacinate, 4 to 12 inches long: involucre commonly an inch high and many-flowered; its bracts lanceolate or broader; outer series shorter, often pubescent, or even villous: akenes with the beak 5 or 6 lines long, longer than the pappus, the copious and rather rigid bristles of which are (as in most species) only denticulate-scabrous. — Nutt. in Fras. Cat. & Gen. ii. 128; Pursh, l. c.; Sims, Bot. Mag. t. 1667; Torr. & Gray, l. c. *Macrorhynchus glaucus*, Eaton, Bot. King Exp. 204. — Grassy plains, Saskatchewan and Dakota to Brit. Columbia, and mountains of Utah and Colorado; first coll. by *Nuttall* and *Bradbury*.

Var. parviflorum. A small and slender form: leaves only 2 to 6 inches long: scape a span to a foot high: head smaller and narrower. — *T. parviflorum*, Nutt. Trans. Am. Phil. Soc. vii. 434. *Macrorhynchus cynthioides*, Hook Lond. Jour. Bot. vi. 256? — Plains of Nebraska and Wyoming to the mountains of New Mexico.

Var. laciniatum, GRAY, Bot. Calif. l. c. Dwarf (a span or two high), with the small heads of the preceding variety, varying to larger, glabrous or glabrate, when young often cinereous-pubescent throughout: rays sometimes purplish externally or in fading: leaves mostly of lanceolate outline and lacinate-pinnatifid. — Mountains of Colorado and New Mexico to the higher Sierra Nevada, California. Larger forms pass into the next.

Var. dasycepalum, TORR. & GRAY. Commonly robust, with large and broad heads; the involucre inch broad as well as high, and from villous to cinereous-pubescent, sometimes early glabrate: receptacle not rarely bearing a few chaffy bracts among the flowers: leaves from elongated-lanceolate to oblong-spatulate (the broadest even inch and a half wide), from entire to lacinate or rarely pinnatifid: scape from a span to 2 feet high. — *Amмоgeton scorzoneraefolium*, Schrad. Ind. Sem. Hort. Gœtt. 1833; DC. Prodr. vii. 98. *Troximon glaucum*, Richards. App. Frankl. Jour.; Hook. Bot. Mag. 3462. *T. pumilum*, Nutt.