

== Lobes of fructiferous calyx very narrowly linear, twice or thrice the length of the nutlets, armed with remarkably long and straight spreading bristles: appendages in throat of corolla evident.

**E. angustifolium, Torr.** Hispid with spreading bristles, a span high, diffuse: leaves narrowly linear: spikes often geminate, dense and slender: corolla barely a line long and with a small limb: calyx-lobes almost filiform in age, seldom over a line long, beset with divaricate bristles of the same length: nutlets half a line long, ovate-triangular, with minutely granulate surface, all four maturing, little longer than the conical-subulate gynobase, to which they are attached by a narrow grooved scar with somewhat broader base. — Pacif. R. Rep. v. 363, & Bot. Mex. Bound. 141. — South-eastern California and Western Arizona. (Lower Calif.)

**E. barbigerum.** Hispid and hirsute, stouter, a span to a foot high, freely branching: leaves broader: spikes solitary or paniculate, elongating; the flowers at length rather sparse and less secund: limb of the corolla sometimes 3 lines in diameter: calyx-lobes linear-attenuate, in fruit 3 or 4 lines long, thickly beset with long shaggy bristles (of  $1\frac{1}{2}$  to 2 lines length), which are sometimes accompanied with long white-villous hairs: nutlet commonly by abortion solitary, and a line or more in length, surpassing the style, ovate-trigonus and somewhat acuminate, mucicate-papillose, attached by the lower half and more to the subulate-columnar gynobase, the scar dilated at base (infertile ovary-lobes remaining on the gynobase, attached for almost their whole length). — S. California, from Santa Barbara Co. to S. Utah and Arizona, *Parry, Palmer, Smart, Rothrock, &c.* Has been confounded in imperfect specimens with the preceding and some of the following.

=== Lobes of the fructiferous calyx less attenuated, and the bristles less elongated: appendages of the throat of the corolla conspicuous: all four nutlets usually maturing.

**E. leiocarpum, Watson.** Roughish-hirsute or hispid, with mostly ascending hairs, a span to a foot high, usually branching freely: spikes when elongated becoming rather loosely-flowered: limb of corolla 2 lines or less in diameter: fructiferous calyx-lobes seldom over 2 lines long, from narrowly lanceolate to narrow-linear: nutlets ovate and oblong-ovate, very smooth and shining, a line or less long, somewhat surpassing the persistent style, attached from the middle downward to the subulate gynobase by a very slender scar which is divergently bifurcate at the very base. — Bot. King, 244; Gray, l. c. — *Echinopspermum leiocarpum*, Fisch. & Meyer, Ind. Sem. Petrop. 1835, 36. *Krynitzkia leiocarpa*, Fisch. & Meyer, Ind. Sem. Petrop. 1841, 52; A.D.C. l. c. *Myosotis flaccida*, Dougl. in Hook. Fl. ii. 82. — California to borders of British Columbia, and east to New Mexico and Saskatchewan. A wide-spread and also variable species.

**E. muriculatum, A.D.C.** Stouter, leafy, more hirsute-hispid with spreading hairs, a foot or two high: spikes often geminate or collected in a 3-5-radiate pedunculate cyme: limb of corolla 2 or 3 lines in diameter: calyx-lobes lanceolate, in fruit only  $1\frac{1}{2}$  to 2 lines long and seldom twice the length of the nutlets: these ovate-triangular, obtuse, a line long, not equalling the style, dull or nearly so, mucicate-papillose on the back and sometimes on the inner faces also, attached to the subulate gynobase for two-thirds of their length by a grooved scar which widens downward and is transversely dilated at base. — Prodr. ix. 132. *Myosotis muricata*, Hook. & Arn. Bot. Beech. 369. — California, *Douglas* (specimen, in flower only, wrongly referred, in Proc. Am. Acad. x. 59, to *E. canescens*), *Brewer, Palmer* (in fruit, San Buenaventura and back of San Simeon Bay), *Coulter, Xantus, &c.*

**Var. ambiguum.** Fruit of *E. muriculatum*, or usually sparsely and more minutely muciculate, equally dull, equalling and usually somewhat surpassing the persistent style, yet occasionally shorter: in whole habit, sparse spikes, and generally the longer and narrower calyx-lobes agreeing with *E. leiocarpum*, of which there is also a form with lanceolate and shorter calyx-lobes. — *E. muriculatum*, Torr. Bot. Wilkes Exp. xvii. 416, t. 13; Gray, l. c., mainly. *E. angustifolium*, Watson, Bot. King, 241, not Torr., at least not the original plant. — California and Nevada to Washington Terr.

++ Gynobase broader, pyramidal or conical: nutlets with a correspondingly broader scar (*E. Texanum* excepted): corolla small or minute (the limb only a line or two in diameter): calyx very hispid with yellowish or fulvous bristles: rough-hispid annuals, with spikes loose in fruit, and mostly leafy-bracteate at base.

== Nutlets all fertile and alike, small: midrib of calyx-lobes not thickened.

**E. pusillum, Torr. & Gray.** Low (2 or 3 inches high) and slender: linear leaves mainly clustered at the root: flowers rather crowded in small spikes: calyx-lobes ovate-