

vada and California; Truckee Pass, *Watson*, a larger-flowered form. Sierra Valley, *Lenmon*, a smaller-flowered form and with some fruit. Connects *Plagiobothrys* with the following section.

§ 3. **KRYNÍTZKIA**, Gray. Nutlets ventrally attached from next the base to the middle or to the apex to the pyramidal or columnar or subulate gynobase; the scar mostly sulcate or slightly excavated: seed from amphitropous to nearly anatropous, commonly pendulous: corolla (except in the last species) white: calyx 5-parted, closed in fruit. — *Krynitzkia*, Fisch. & Meyer, Ind. Sem. Petrop. 1841, 52. § *Krynitzkia* & § *Piptocalyx*, Gray, l. c.

* (EUKRYNÍTZKIA.) Nutlets without acute lateral angles or margins, the sides more commonly rounded: corolla mostly small; the tube not surpassing the mostly setose-hispid calyx: anthers oval: root annual.

+ Calyx early circumscissile; the 5-cleft upper portion falling away, leaving a membranaceous somewhat crenate-margined base persistent around the fruit: corolla with naked and open throat: anthers mucronate: flowers all leafy-bracteate and sessile. — *Piptocalyx*, Torr.

E. circumscissum, Gray. Depressed-spreading, very much branched from the annual root, an inch to a span high, whitish-hispid throughout: narrow linear leaves (a quarter to half inch long) and very small flowers crowded, especially on the upper part of the branches: nutlets oblong-ovate, smooth or minutely punctulate-scabrous, attached by a narrow groove (with transverse basal bifurcation) for nearly the whole length to the pyramidal-subulate gynobase. — Proc. Am. Acad. x. 58, & Bot. Calif. i. 527. *Lithospermum circumscissum*, Hook. & Arn. Bot. Beech. 370. *Piptocalyx circumscissus*, Torr. in Wilkes Exp. xvii. 414, t. 12. — Desert plains, E. California to Utah, Wyoming, and Washington Terr.

+ + Calyx neither circumscissile nor disarticulating from the axis in age; the lobes linear-oblong, obtuse, nearly nerveless; the bristles short and even, not setose or pungent: corolla with minute if any appendages at the throat: nutlets attached for the whole length to a slender columnar gynobase by a groove which does not bifurcate nor sensibly enlarge at base: flowers all leafy-bracteate, short-pedicelled: style at length thickened!

E. micránthum, Torr. Hirsute-canescens, slender, 2 to 5 inches high, at length diffusely much branched: leaves linear, only 2 to 4 lines long: flowers in the forks, and much crowded in short leafy spikes, about equalling the upper bracts: corolla barely a line high, and its lobes one to two-thirds of a line long, obscurely appendaged at the throat: nutlets oblong-ovate, acute or acuminate, smooth and shining or dull and punctulate-scabrous (half to two-thirds of a line long): style becoming thicker than the gynobase, or even pyramidal. — Bot. Mex. Bound. 141; *Watson*, Bot. King, 244. — Dry plains, western border of Texas through Utah and Arizona to E. California, where larger flowered specimens connect with

Var. lépidum. Less slender and more hirsute: corolla larger, its expanded limb 2 or 3 lines in diameter; the appendages or folds in the throat very manifest: nutlets nearly a line long, punctulate-scabrous. — California, in San Diego Co., *D. Cleveland*.

+ + + Calyx not circumscissile, 5-parted, conspicuously and often pungently hispid with large stiff bristles, and the lobes usually with a stout midnerve; the whole calyx (or short pedicel) in several species inclined to disarticulate at maturity and to form a sort of bur, loosely enclosing the nutlets: inflorescence scorpioid-spicate, without or partly with bracts.

+ + Gynobase slender and narrow: nutlets with narrow grooved scar, or continued into a groove above the attachment and so running the whole length of the ventral face: spikes when developed mainly bractless: leaves in all linear.

= Lobes of the fructiferous calyx very narrow; the strong bristles below reflexed and partly uncinatate: appendages in the throat of the small corolla obsolete or wanting: only one nutlet usually maturing.

E. oxycáryum, Gray. Somewhat canescently strigulose-pubescent or above hirsute, slender, 6 to 20 inches high: leaves narrow: spikes dense in age, but slender, becoming strict, and with the sessile fruiting calyx appressed: this at most 2 lines long, thickly beset toward the base with stout reflexed bristles (of a line or less in length), the tips of some of them curving: nutlet ovate-acuminate or ovate-lanceolate, very smooth and shining, fully a line long, much surpassing the subulate gynobase and style, affixed to the latter only by the lower half or third of the narrow ventral groove. — Proc. Am. Acad. x. 58, & Bot. Calif. i. 526. *Myosotis flaccida*, Hook. & Arn. Bot. Beech. 369, ex Benth., not Dougl. *Krynitzkia leiocarpa*, Benth. Pl. Hartw. (no. 1872), 326, not Fisch. & Meyer. — Common in W. California. (Not seen from Oregon.)