

Washington Terr. and even W. Montana. A maritime form on San Clemente, off San Diego, *Nevin & Lyon*.

K. FOLIÓSA, GREENE, Bull. Calif. Acad. i. 205, extra-limital, on Guadalupe Island, is very near the foregoing, probably a stout maritime form of it.

== Fructiferous calyx shorter, of lanceolate and obscurely uncostate sepals, less surpassing and more or less connivent over the more acute-angled and hardly at all acuminate nutlets.

K. muriculáta, GRAY, l. c., is *Eritrichium muriculatum*, A. DC., & p. 194. *K. denticulata*, GREENE, Bull. Calif. Acad. i. 205. Plant commonly robust, with well-developed spikes in age apt to be sparsely flowered: calyx 2 lines long: nutlets usually a line long, deltoid-ovate in outline, sharply scabrous-muricate over the back, which is hardly convex except by a slight dorsal ridge, and with distinct and thickish but acutish lateral angles, these muricate-papillose like the back; ventral groove and its fork mostly closed. — Common in California, extending into Arizona, Nevada, and Oregon.

K. Jonésii, GRAY, l. c., 274. More slender and smaller than the preceding, a foot high, with more paniculate and lateral spikes: leaves narrowly linear, half-inch to inch long: fructiferous calyx hardly over a line long: nutlets of *K. muriculata*, but smaller and the angles perhaps less acute. — California, near Monterey Bay, *Jones*. Southern border of the State, in San Diego Co., *Orcutt*. May be only a form of the preceding.

K. micrómeres, GRAY, l. c. Slender and diffusely branched, less than a foot high: leaves a quarter to half inch long: spikes filiform, simple or occasionally in pairs: flowers minute: fructiferous calyx a line or half-line long: nutlets ovate-trigonous, acutish, rather shining, but muricate-scabrous on the back, lateral angles acute, and inner faces commonly concave; ventral groove abruptly dilated below. — *Eritrichium micromeres*, Gray, Proc. Am. Acad. xix. 90. *E. angustifolium*, Gray, Proc. Am. Acad. v. 165, not Torr. — California, near Santa Cruz, *Jones*, and Mokelumne Hill, *Rattan*. (Lower Calif., *Xantus*.)

+ + + + Acute-angled-fruited and bractless-spiked annuals, erect from a somewhat indurated root, linear-leaved: sepals lanceolate, sparsely or not at all hispid: fruiting spikes of the commonly 2-3-radiate cyme short and spreading, closely flowered: nutlets lanceolate-ovate in outline, tapering from near the broad base, either very smooth or with scattered papillæ, and with sharp lateral edges, the inner faces plane or slightly convex, attached by the whole length to the slender almost filiform gynobase by the ventral groove and its forked or areolate-dilated base. (Allied by the fruit to § *Pseudokrynitzkia*, but only annual.)

K. oxýgona, GRAY. Less than a foot high, freely branched from the base, papillose-hispidulous: leaves an inch or less long, less than a line wide: cymes naked-pedunculate, the fruiting spikes seldom over half-inch long: limb of corolla 2 lines in diameter: fructiferous calyx 2 lines long, hirsute with erect hairs and sparsely hispid with some spreading rigid bristles: nutlets fully a line long, obcompressed-trigonous, somewhat lucid, the back and commonly the ventral faces sprinkled with small papillæ; the slender groove divaricately forked and open or closed at base. — Proc. Am. Acad. xx. 277. *Eritrichium oxigonum*, Gray, Proc. Am. Acad. xix. 89. — S. E. California, on hills bordering the Mohave Desert, *Pringle*. The following was referred to this.

K. Mohavénsis, GREENE. Quite like (and probably not permanently distinct from) the preceding species: but calyx with hardly any hispid spreading bristles, and nutlets smooth and lucid. — Bull. Calif. Acad. i. 207. — S. E. California, on the Mohave Desert, *Mrs. Layne-Curran*.

K. Utahénsis. Paniculately branched, a foot or less high: stem and branches strigulose-pubescent or below merely hirsute: larger leaves 2 lines broad, papillose-hispidulous: cymes irregular: limb of corolla hardly over a line in diameter: fructiferous calyx only a line long, of more obtuse sepals, somewhat canescently silky-pubescent, not obviously hispid: nutlets smaller and thicker and of narrower outline than in the two preceding species, less acute-angled, somewhat lucid, the back sparsely beset with minute papillæ; ventral groove gradually widening downward to the open base. — St. George, S. W. Utah, *Palmer* (referred to under *K. holoptera* in Proc. Am. Acad. xx. 276, and as var. *submolle*, p. 394 of 1st ed.), and Yucca, Arizona, *Jones*.

+ + + + Bracteate-spiked (more or less) and mostly with nutlets acute-angled, small-flowered, the fructiferous calyx a line or less long.