scar going to the base and occupying about a third the face, and open. This plant is readily mistaken for K. fulvocanescens but the broad and short calyx and lobes separate it. Aurum Nevada No. 6692, June 20 1893 at 7300° alt. on slopes. Also Muncy Nevada No. 6713, Vermilion Utah June 4, 1901, also

Monroe Utah and Marysvale. The latter at 9000° alt.

Krynitzkia fulvocanescens var. Idahoensis n. var. Racemes few flowered and loose. Pedicels 2-4" long. Calyx lobes linear, 4-5" long, apparently not opening when ripe. Nutlets finely and deeply petinate-rugose but not transversely rugose, dorsal groove not at all bordered by white ridge. Corolla not longer than the calyx. Inflorescence yellow. No. 6474, near Weiser Idaho April 28 1900. These short-flowered forms are so often found alongside of the normal ones that one must assume that there is a genetic connection between them. There are many forms in western Utah and Nevada that approach this form.

Krynitzkia mixta n sp. This may be one of the multitudinous forms of K. barbigera. 1-2° high. Whole plant strigose with slender very long and ascending white hairs. Base of calyx densely white-hairy and shaggy as well as sparsely setose with slender setæ from a small and pustulate base. Plants paniculately branched from the base, annual, erect. Spikes dense and scorpioid in age, the fruits contiguous, spreading. Flowers very narrow, with scarcely any limb, 11/2" long. Fruiting calyx 4-6"long, with ovate base and short and spreading tips closely constricted below, linear, green above. Seeds usually 2, deltoid, with an acuminate tip, shining, 1" long, coarsely muricate, truncate below, scar deltoid, excavated, groove open to tip, attached half way up, forks of scar as long as the attachment in the groove. -Mescal Mts. Arizona May 24 1890. This is the type. I also refer here material from the Needles Cal. May 3 1884. St. George Utah, No. 5106 April 26 1894, Silver Reef Utah May 3 1894, Hackberry Arizona April 25 1903, No. 3832 May 6 1884, Meadow Valley Wash Nevada April 28 1904. One nutlet is apparently firmly attached to the gynobase.

Krynitzkia decipiens n. sp. (Cryptanthe). This seems to be intermediate between dumetorum and angustifolia, and closely approaches intermedia. Slender annual with filiform bractless spikes 3-8' long in twos or threes. Leaves linear, papillose, 1-2' long. Flowers not over 1" long and minute. It has the calyx of K. oxycarya, 1½-2" long, lobes filiform, green,