

however, is less extreme. Plants from this latter area tend to have the trichomes borne on the calyx-ribs weakly differentiated and somewhat coarser and less appressed than those borne on the other parts of the calyx.

In my monograph of the genus the present plant was included in *C. Hendersonii*. Subsequent study, however, has shown my former concept of *C. Hendersonii* to be complex and that, most certainly, forms with smooth and forms with roughened nutlets were improperly associated under one species. The names *C. grandiflora* and *C. Milobakeri* cover most of the smooth-fruited plants formerly referred to *C. Hendersonii* (Nels.) Piper. There remains, however, two other smooth-fruited plants, the poorly understood *C. incana* Greene from the southern Sierras (Tulare Co.) and *C. trifurca* Eastw., of Siskiyou County. These are probably distinct. I know them, however, only from the type-collections.

***Cryptantha crymophila*, sp. nov.**

Herba perennis; caulibus pluribus 1.5–3 dm. altis erectis simplicibus minute villosis et hirsutis; foliis griseis cum pilis minutis villosis plus minusve vestitis et cum setis 2–3 mm. longis e basi minuta pustulata orientibus obsitis, in facie inferiore (et non rariter secus marginem folii) setis ascendentibus vel erectis (alibi adpressis) donatis; foliis inferioribus elongatis 7–9 cm. longis spathulato-oblongatis in tertia parte superiore latioribus 7–9 mm. latis deinde basim versus gradatim attenuatis apice obtusis; foliis caulinis superioribus oblongo-ligularibus vel ligularibus 4–5 cm. longis 4–5 mm. latis acutis cymulas infimas valde reductas suffulcientibus et eas conspicue (saepe 3–5-plo) superantibus; cymis glomeratis supra medium caulis gestis, inferioribus reductis inconspicuis distantibus deinde sursum gradatim majoribus, supremis maximis (rhachibus cymarum maturum 5–15 mm. longis) 3–7-floris congestis partem principalem inflorescentiae fructiferae 2–3 cm. crassam formantibus; corolla alba ca. 8 mm. longa, limbo ad 5 mm. diametro; calyce ad anthesin ca. 5 mm. longo, lobis lineari-oblongis apice altitudinem appendicularum faucium corollae attingentibus; calyce fructifero accrescente 13–15 mm. longo, lobis subaequalibus elongatis quam nuculis ad 3-plo longioribus basim versus ca. 2 mm. latis deinde apicem versus gradatim attenuatis in margine et costa inconspicua setas sparsas 2–4 mm. longas pungentes gerentibus alibi sparse inconspicueque villosis (pilis 0.4–1 mm. longis), basi calycis maturi rotunda 1–2 mm. longe pedicellata; nuculis 4 in ambitu ovatis 4.5–5 mm. longis et 3 mm. latis, margine 0.25 mm. late alatis, basi rotundis, apice obtusiusculis, dorso irregulariter rugosis (rugis prominentibus interruptis plus minusve trans-

versis), ventre laevibus, sulco anguste aperto subulato a basi fere apicem corporis veri nuculae attingente; gynobasi subulata nuculis subaequilonga; stigmatate apicem nuculae fere ad 1 mm. superante.

CALIFORNIA: Red Peak, Alpine Co., July 28, 1939, *R. F. Hoover 4193* (TYPE, Gray Herb.).

This very well marked species is most closely related to *C. nubigena* (Greene) Payson, of the southern Sierras. It differs from its relative in its taller habit of growth, its less firm more elongate leaves, its very large more elongate fruiting calyces, and its much larger ovate (rather than oblong) definitely winged-margined more prominently rugose nutlets. The type was collected on Red Peak which lies about seven miles west-northwest of Sonora Pass. Payson reports *C. nubigena* from Sonora Pass, and I have seen a coarse form of the species (*Sharsmith 2902*) from Leavitt Peak, a few miles south of the Pass. *Cryptantha nubigena*, like various other alpine plants of the southern Sierras, may reach its northern limit at Sonora Pass. The new species is perhaps a more northerly ranging plant which reaches its southern limit near the same floristic boundary.

According to Mr. Hoover, *Cryptantha crymophila* grows in loose rocks about the summit of Red Peak (about 9950 ft.) down to about 9500 ft. altitude. Associated species include *Lupinus meionanthus*, *Senecio canus* and *Erigeron compositus*. Red Peak is composed of dark, fine-grained rock said to be of volcanic origin. Some scattered shrubs of *Pinus albicaulis* grow up to the very summit. Mr. Hoover writes me that he collected the present species on the adjacent Bald Peak in 1936. The material, however, was in early flowering condition.

Cryptantha capitata (Eastw.), comb. nov.

Oreocarya capitata Eastwood, Leaflets West. Bot. 1: 9 (1937).

This relative of *C. confertiflora* (Greene) Payson remains known only from the localities in the Grand Canyon where it was originally found by Miss Eastwood.

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