

(1887). *E. hispidum* Buckley, Proc. Acad. Philad. 1861, pg. 462 (1861). *E. falcatum* Hieron. [Sertum Sanjuan.] Bol. Acad. Nac. Cient. Cordoba iv. 64 (1882). *C. falcata* Johnston, Contr. Gray Herb. lxxviii. 54 (1923). *K. mexicana* Brandg. Zoe v. 182 (1904). *C. argentinica* Brand in Fedde, Repert. xx. 318 (1924).

ARGENTINA. CATAMARCA: sand, El Suncho, Dec. 26, 1916, *Jørgensen 1810* (G). LA RIOJA: Cuesta de la Puerta de Piedra, Sierra Velasco, Jan. 8-11, 1879, *Hieronymus & Niederlein 16* (G, fragment of TYPES of *E. falcatum* and *C. argentinica*). JUJUY: La Guaiaca, Feb. 1916, *Hauman* (G).

I have been quite unable to separate the Argentine plant from the better known one of Mexico. The matter of leaf-breadth which Brand gives as separating them is hopelessly inadequate. The habit, flowers and the fruiting structures agree surprisingly and I doubt if there are characters that will separate the Mexican from the Argentine material.

It seems that *C. argentinica* Brand and *E. falcatum* Hieron. are clearly synonymous. The first collection cited by Brand and apparently that which he considers the type of his *C. argentinica* is *Hieronymus & Niederlein 16* from the Sierra Velasco in La Rioja. The type is in the Berlin herbarium. The specimen of this same collection in the herbarium of the University of Cordoba, Argentina, must be considered the type of *E. falcatum*, for as Dr. C. C. Hosseus, *in lit.*, has emphasized to me Hieronymus definitely stated in publishing his species that he had used the material from the Sierra Velasco in drawing up his description since the other collection (that made by Echegaray at Leoncito in San Juan), which he referred to the species, was imperfect. Brand used the name *C. falcata*, apparently for a different species, but for which one I do not know.

6. **C. diplotricha** (Ph.) Reiche. Annual, 1-1.5 dm. tall; stems several, erect, frequently somewhat decumbent at base, appressed-hispid and sparsely hirsute with short pallid hairs; leaves linear or spatulate-linear, 1-2 cm. long, 1.5-3 mm. broad, appressed short-hispid, somewhat pustulate, reduced up the stem but extending through the inflorescence as bracts; spikes solitary or rarely geminate, bracted, 1-4 cm. long, very numerous, congested; fruiting calyx ovate, ca. 2.5 mm. long, very hispid, sessile; mature calyx-lobes lanceolate, erect or loosely connivent; corolla white, inconspicuous, tubular, ca. 0.8 mm. broad; fruit 4-ovulate; nutlets usually 4, homomorphous with apparently a slight emphasis on the abaxial one, lucid, triangular, dark with light-colored tuberculations or wrinkles, 1-1.5 mm. long, readily deciduous, crowded and closely juxtaposed with no open sinus between the individual nutlets, apex acute and slightly recurving, base trun-

cate, sides sharply margined, back usually convex; groove open or closed above but below expanded broadly into a shallow open triangular areola; gynobase subulate, about equalling length of nutlets; style clearly surpassing the nutlets.—Anal. Univ. Chile cxxi. 821 (1908) and Fl. Chile v. 226 (1910). *Eritrichium diplotrichum* Pl. Cat. Pl. Itin. Tarapaca 57 (1891). *E. diplotrichum*, var. *humilis* Ph. l. c. *C. diplotricha*, var. *humilis* Reiche, l. c. *E. axillare* Ph. l. c. *C. axillaris* Reiche, l. c. *C. modesta* Brand in Fedde, Repert. xx. 48 (1924).

ARGENTINA. LOS ANDES: between Antofagasta and Calalaste, 3600 m. alt., Jan. 1885, *F. Philippi* (MS, TYPE of *E. diplotrichum*; G, photo); Breas, Jan. 1885, *F. Philippi* (MS, TYPE of *E. diplotrichum*, var. *humilis*; G, photo.); between Breas and Salar, Jan. 1885, *F. Philippi* (MS, TYPE of *E. axillare*; G, photo.). LA RIOJA: Tambillos, 1600 m. alt., *Hosseus 1711* (G, part of TYPE of *C. modesta*).

Most related to *C. albida* but clearly different, particularly as to fruit. Both Brand and Reiche have placed the species in the section *Eucryptantha*, accrediting it with cleistogamic flowers. I have searched for closed-flowers but have been quite unable to find any. The corollas are small and tubular, however, and perhaps might be mistaken for cleistogamic ones if not examined under high magnification.

7. *C. parviflora* (Ph.) Reiche. Slender annual, 3–20 cm. tall; stems commonly one, usually loosely branched from near base, very leafy, more or less abundantly appressed chalky-hispid and frequently also somewhat spreading short-hirsute; leaves linear, 5–40(–50) mm. long, 1–2 mm. broad, appressed-hispid or spreading short-hirsute, somewhat pustulate beneath, weakly reduced up the stem and in plants beginning to fruit somewhat obscuring the spikes; spikes solitary or geminate, 1–5(–7) cm. long, numerous, bractless except for a leafy bract at base; fruiting calyx ovate or oblong-ovate, 1.5–2 mm. long, sessile, readily deciduous; mature calyx-lobes lanceolate or lance-oblong, connivent, densely short-hirsute; corolla minute, subtubular, 0.3–0.5 mm. broad, white; fruit 4-ovulate; nutlets usually 4, heteromorphous, ovate or triangular-ovate, dark with pale tuberculations or broad murications, apex acute, base rounded, back convex, edges sharply margined, groove usually closed above but below dilated into a shallow triangular areola; odd-nutlet abaxial, largest and most persistent, ca. 1 mm. long; consimilar nutlets 0.6–0.8 mm. long, readily deciduous; gynobase ca. $\frac{2}{3}$ height of odd-nutlet; style much surpassing odd nutlet, a little shorter than the gynobase.—Anal. Univ. Chile cxxi. 821 (1908) and Fl. Chile v. 226 (1910). *Eritrichum parviflorum* Ph. Fl. Atac. 39 (1860) and Viage Des. Atac. 10 and 213 (1860). *E. microphyllum* Ph. Cat. Pl. Itin. Tarapaca 57 (1891). *C. micro-*