

GILIA DEBILIS Wats., var. **Larseni** (Gray), comb. nov. *G. Larseni* Gray, Proc. Am. Acad. xi. 84 (1876). *Collomia debilis* (Wats.) Greene, var. *Larseni* (Gray) Brand, Pflanzenreich, iv. Fam. 250, 52 (1907).

Brand's treatment of this variety — distinguished from the typical form only by the tendency of the leaves to be parted pedately several times — is certainly justifiable. But in accordance with the view as expressed in Bot. Gaz. lxi. 34 (1916) and Contrib. Gray Herb. xlix. 54 (1917) that the genus *Collomia* cannot be maintained distinct from *Gilia* the above new combination becomes necessary. There is another member of this group of plants to which my attention has been called by a specimen secured by John Murdoch, Jr. (his no. 2667) in the Sierra National Forest of Madera County, California, which, in accordance with my interpretation of the genus *Gilia* must be known as

Gilia Rawsoniana (Greene), comb. nov. *Collomia Rawsoniana* Greene, Pitt. i. 221 (1888).

Gilia effusa (Gray), comb. nov. *Loeselia effusa* Gray, Proc. Am. Acad. xi. 86 (1876). *G. Dunnii* Kellogg, Pacif. Rural Press (May 31, 1879).

To my mind Gray's definition of the genus *Loeselia*, Syn. Fl. ii. pt. 1. Suppl. 412 (1886), is preferable to Brand's, Pflanzenreich, iv. Fam. 250. 172 (1907). So constituted it is a homogeneous group in aspect as well as in character. The inclusion in *Gilia* of the above species (and its three allies, *G. Harvardi*, *G. tenuifolia* and *G. guttata*) disturbs in no fundamental way the definition of *Gilia* since these plants are aberrant only because of the more or less bilabiate corolla. Their inclusion in *Loeselia*, on the other hand, destroys the now perfect homogeneity of that group, since, in all respects save for the bilabiate corollas, they are good *Gilias*.

GILIA GRANDIFLORA (Dougl.) Gray, var. **axillaris** (A. Nels.) Nels. & Macbr., in herb. *Collomia grandiflora* Dougl., var. *axillaris* A. Nels, Bot. Gaz. lii. 270 (1911).

Gilia biflora (Ruiz & Pavon), comb. nov. *Phlox biflora* Ruiz & Pavon, Fl. Per. ii. 17 (1799). *Collomia biflora* (Ruiz & Pavon) Brand, Engl. Bot. Jahrb. xxxvi. 72 (1905).

This species entirely replaces in western South America the closely related *G. linearis* (Nutt.) Gray of western North America.

Cryptantha echinosepala, spec. nov., mediocriter robusta 1-2 dm. alta plus minusve cum pilis patentibus hispida stricta vel

plerumque a basi ipsa laxe ramosa; foliis caulinis inferioribus oblongis vel oblanceolatis circa 2 cm. longis 2-3 mm. latis apice subobtusis basi plus minusve attenuatis utrinque subadpresse papilloso-hispidis, superioribus similibus sed brevioribus; cymis saepius 2-3-radiatis, spicis post anthesin laxifloris; calycis fructiferi laciniis lineari-lanceolatis, tribus circa 3 mm. longis solum mediocriter setoso-hispidis, duabus circa 4 mm. longis et dense setoso-hispidis, pilis fulvescentibus; nuculis (3-4) subtrigonis circa 1 mm. longis minute muriculatis saepius uno longiore, sulco ventrali albedo fere ad apicem dilatato. — LOWER CALIFORNIA: Magdalena Island, March, 1917, *Orcutt*, no. 15 (TYPE, Gray Herb.); Santa Agueda, March 4-6, 1890, *Palmer*, no. 242; La Paz, Jan. 20-Feb. 5, 1890, *Palmer*, no. 26.

When studying the Palmer specimens in 1915 I referred them very doubtfully to *C. angustifolia* (Torr.) Greene but because of the immaturity of the specimen from La Paz and because the Santa Agueda plants were found in "an old garden" I hesitated to base a new species on this material. With Mr. Orcutt's excellent specimen before me, however, it is obvious that the plant is quite distinct from *C. angustifolia* to which species it bears nearest relation, as is shown by the heteromorphous asperulous nutlets. The diagnostic character of *C. echinosepala* is found in the calyx; two of the sepals are inordinately bristly, much more so and longer than the only slightly bristly other three. It may be noticed that the open ventral groove of the nutlets is not abruptly dilated at the base as in *C. angustifolia*.

Cryptantha quentinensis, spec. nov., undique adpresse strigilosa mediocriter a basi ipsa diffuse ramosa circa 1.5 dm. alta; ramis gracilibus foliosissimis; foliis caulinis linearibus sursum gradatim reductis inferioribus circa 2 cm. longis vix 0.5 mm. latis; spicis plerumque terminalibus, fructiferis mediocriter laxifloris; calycis fructiferi laciniis linearibus circa 3 mm. longis adpresse villosa-hispidis, pilis nonnullis longioribus firmissimis subadpressis intermixtis; corollae limbo circa 5 mm. lato; nuculis (4) vix 2 mm. longis acutis subnitidulis plus minusve obscure muriculatis, angulis lateralibus rotundatis, sulco ventrali tenui basi divaricato-furcato plerumque clauso. — LOWER CALIFORNIA: San Quentin, 1889, *Palmer*, no. 695 (TYPE, Gray Herb.).

This species belongs to the group typified by *C. oxygona* (Gray) Greene and indeed is seemingly most nearly related to that plant of southern California. It may be distinguished at once, however, by the very rounded angles of the nutlets. The nutlets of *C. oxygona* are acutely margined. As pointed out in Contrib. Gray Herb.

xlviii. 48 (1916) *C. oxygona* has apparently a very restricted range and *C. quentinensis* may likewise be local in its distribution.

CRYPTANTHA BARBIGERA (Gray) Greene, var. **Fergusonae**, var. nov., corollae limbo 5–6 mm. lato; nuculis formae typicae similibus sed sulco fere ad apicem dilatato. — CALIFORNIA: Palm Springs, April 1, 1917, *Margaret C. Ferguson*, no. 42 (TYPE, Gray Herb.; co-type, Wellesley College Herb.).

The specimens of this species secured by Dr. Ferguson of the department of botany of Wellesley have been the means of calling to my attention the existence of two well marked forms. The typical form has small narrow inconspicuous flowers and the groove of the nutlets is dilated but a short distance above the base. The specimens secured by Parry & Palmer cited in the Syn. Fl. ii. pt. 1. 194 (1878), belong here although the expression “limb of the corolla sometimes 3 lines in diameter” in the description of *Eritrichium barbigerum* indicates that Dr. Gray saw material of the large-flowered form proposed above as a variety. Besides the much larger flowers the groove of the nutlets is dilated much higher up.

C. INTERMEDIA (Gray) Greene exhibits the same sort of variation. In the vicinity of Los Angeles I have seen large- and small-flowered plants growing together that were otherwise indistinguishable. Since the first material sent to Dr. Gray by Nevin, upon whose specimens the species was largely based, consisted of the inconspicuously flowered state it may be regarded as the typical form. Recently Mr. I. M. Johnston of Upland, California, has kindly furnished me with a large series of specimens of both forms and I take pleasure in connecting his name with this *Cryptantha* which is more common in many places than true *C. intermedia* itself. An analagous variation occurs also for *C. Torreyana* (Gray) Greene, which has been designated var. *grandiflora* (Rydb.) Nels. & Macbr.

C. INTERMEDIA (Gray) Greene, var. **Johnstonii**, var. nov., corollae limbo 5–6 mm. lato. — CALIFORNIA: dry rocky ground, Claremont, Los Angeles Co., May 15, 1918, *I. M. Johnston*, 1938 (TYPE, Gray Herb.).

PEDICULARIS CANADENSIS L., var. **fluviatilis** (Heller), comb. nov. *P. fluviatilis* Heller, Minn. Bot. Stud. ii. 33 (1898).

Heller, when proposing his species, l. c. 34, wrote that it “seems to be closely related to the common eastern *P. Canadensis*.” But

CONTRIBUTIONS FROM THE GRAY HERBARIUM
OF HARVARD UNIVERSITY

NEW SERIES.—No. LVI

I. Further new or otherwise interesting Liliaceae	1
II. A Revision of <i>Mirabilis</i> , Subgenus <i>Hesperonia</i>	20
III. A Revision of <i>Mentzelia</i> , Section <i>Trachy- phytum</i>	24
IV. Certain North American Umbelliferae	28
V. Reclassified or new Compositae, chiefly North American <i>Helenieae</i>	36
VI. Various American Spermatophytes, new or transferred	50

By J. FRANCIS MACBRIDE

HARVARD UNIVERSITY PRESS
CAMBRIDGE, MASS., U. S. A.
DECEMBER, 1918