

and DeCandolle's genus *Miltitzia* should be restored. The latter genus is represented in the Rocky Mountain region by this and the two following species.

***Miltitzia salina* (A. Nels.) Rydb.**

*Emmenanthe salina* A. Nels. Bull. Torrey Club 25: 381. 1898.

***Miltitzia scopulina* (A. Nels.) Rydb.**

*Emmenanthe scopulina* A. Nels. Bull. Torrey Club 25: 380. 1898.

***Phacelia orbicularis* Rydb. sp. nov.**

Biennial or annual; stems 1-2 dm. high, glandular-villous, often tinged with red, branched; leaves petioled; blades suborbicular in outline, crenately lobed, 1.5-2.5 cm. long, hirsute as well as glandular; racemes many-flowered; calyx-lobes oblong or oblanceolate, obtuse, 3 mm. long; corolla purplish, 6 mm. long, campanulate-funnelform; lobes crenulate; filaments about twice as long as the corolla; seeds faveolate, crenately lobed on the margins and the median ridge.

This is related to *P. integrifolia*, but the plant is smaller and the leaf-blades shorter and broader.

UTAH: Marvin Laccelite, 1894, *M. E. Jones* 5663 (type, in U. S. Nat. Herb.).

*Phacelia crenulata* Torr., *P. bicolor* Torr., *P. affinis* A. Gray, *P. glechomaefolia* A. Gray, *P. hispida* A. Gray, *P. humilis* T. & G., *P. demissa* A. Gray, *P. Palmeri* Torr. (not *P. Palmeri* Vasey & Rose), *P. pinetorum* Jones, and *P. pusilla* Torr. have been collected in Utah; *P. glandulifera* Piper and *P. ramosissima* Dougl., in Idaho. I cannot distinguish *P. luteopurpurea* A. Nels. from *P. glandulifera* Piper. *Capnorea incana* Greene, *C. nana* (Lindl.) Raf., *C. nervosa* Greene, and *C. Watsoniana* Greene have been collected in Idaho; the first one also in Montana and the last one in Wyoming; *Emmenanthe penduliflora* Benth. and *Eriodictyon angustifolium* Nutt. in Utah.

BORAGINACEAE

***Gruvelia setosa* (A. Gray) Rydb.**

*Pectocarya setosa* A. Gray, Proc. Am. Acad. 12: 81. 1877.

I think that the genus *Gruvelia* A. DC. should be restored, being quite distinct from *Pectocarya*. The only other species is *G. pusilla* A. DC., the type of the genus.



Professor Nelson both in the original diagnosis\* and in Coulter & Nelson's New Manual† described *Lappula erecta* as having the marginal prickles in a single row, but a duplicate of the type in the Columbia University herbarium and all specimens distributed as *Lappula erecta* by Professor Nelson himself in the herbarium of the New York Botanical Garden have a double row of marginal prickles, the prickles of the outer row being somewhat smaller than those of the inner.

***Oreocarya pustulosa* Rydb. sp. nov.**

Perennial, branched at the base; stems 3–5 dm. high, glabrous or nearly so throughout, lower leaves linear-oblongate, the upper linear or linear-lanceolate, 3–10 cm. long, green, glabrous beneath, sparingly hairy above; the hairs short and at least in age with conspicuous pustulate bases; flowers paniculate; branches racemose, not secund; pedicels 1–2 mm. long; sepals triangular-lanceolate, acute; corolla white; tube not exceeding the calyx; limb 5–6 mm. broad; lobes orbicular; fruit depressed-globose; nutlets smooth, nearly white, mottled with light brown, more or less separated from each other on the margins, often not all maturing.

This is related to *Oreocarya multicaulis* (Torr.) Greene, *O. suffruticosa* (Torr.) Greene and the Mexican *O. Palmeri* Greene. It differs from the first two in the glabrous stem, green leaves, and light nutlets, and from *O. Palmeri* in broader leaves and different habit. It grows in canyons at an altitude of 1,700–2,000 m.

UTAH: Hammond Canyon, Elk Mountains, July 31, 1911, Rydberg & Garrett 9320 (type, in herb. N. Y. Bot. Gard.); also same locality, Aug. 9, 1911, 9569; Dry Wash, southwest of Abajo Mountains, August 10, 9590.

***Oreocarya Macounii* Eastw. sp. nov.**

Biennial or perennial with a slender tap-root; stem slender, 1–2 dm. high, sparingly hirsute; leaves narrowly linear or narrowly linear-oblongate, sparingly hirsute; inflorescence racemiform with short branches; corolla white, 5 mm. long, 4 mm. wide; nutlets ovate, obtuse, 2 mm. long, acutely margined, rounded on the back and coarsely muricate.

SASKATCHEWAN: Moose Mountain Creek, July 6, 1880, John

\* Bull. Torrey Club 27: 268. 1900.

† 412. 1909.



*Macoun*; also a specimen from Hooker's herbarium without date, probably collected by Richardson, at Carlton House. (Both in herb. Columbia University.)

*Cryptanthe flexuosa* A. Nelson is, I think, the same as *C. calycosa* (A. Gray) Rydb., and *C. muriculata montana* A. Nels. should be referred to *C. ambigua* (A. Gray) Greene, and *C. Hillmani* A. Nels. to *C. Watsoni* (A. Gray) Greene. *C. flaccida* (A. Gray) Greene has been collected in Idaho; *C. recurvata* Coville, in Utah and Colorado.

*Mertensia coriacea* A. Nels. is the same as *M. lanceolata* Pursh. Professor Nelson gives the range of *M. lanceolata* as Colorado and Wyoming. The type came from western Montana. *M. perplexa* is not the same as *M. coriacea*, as stated by Professor Nelson, but belongs to the *M. alpina* group with subsessile anthers.

*Anchusa officinalis* L. and *Asperugo procumbens* L. have been collected in Colorado; *Plagiobotrys arizonicus* (Gray) Greene in Utah; *P. tenellus* A. Gray in Idaho; *Cynoglossum officinale* L. in Wyoming and Montana; *Eremocarya muricata* Rydb. in Utah; *Lithospermum arvense* L. in Utah; *Mertensia brachycalyx* Piper in Idaho; *M. pulchella* Piper, *M. nutans* Howell, and *M. longiflora* Greene in Idaho and Montana; *Amsinckia hispidissima* Suksd., *A. retrorsa* Suksd. and *A. micrantha* Suksd. have been collected in Idaho.

*Pectocarya miser* A. Nels. I can not distinguish from *P. penicillata* (H. & A.) A. DC. *Eddyia hispidissima* Torrey has been collected in Utah.

#### VERBENACEAE

*Verbena remota* Benth. was collected in southeastern Utah in 1911 by Professor Garrett and myself. *Verbena bipinnatifida* Nutt. is very rare in the region and *V. canadensis* (L.) Britton does not occur at all. The range given in Coulter & Nelson's New Manual is erroneous. The group is represented in the Rocky Mountains by *V. ambrosifolia* Rydb., *V. Gooddingii* Briq., and *V. ciliata* Benth.

#### LAMIACEAE

*Lamium amplexicaule* L. has been collected in Colorado; *Micromeria Douglasii* Benth. and *Trichostoma oblongum* Benth., in Idaho.