

Merrill
order

PLANTÆ BAKERIANÆ

By EDWARD L. GREENE

AND OTHERS.

VOLUME III.

FASCICLE I.

INDEX OF GENERA.

	PAGE		PAGE
Abronia.....	32	Hymenopappus.....	30
Aconitum.....	5	Lappula.....	21
Agastache.....	22	Lithospermum.....	21
Allionia.....	33	Lupinus.....	35
Allocarya.....	21	Mentha.....	22
Apocynum.....	16	Mertensia.....	17, 21
Arabis.....	8	Monardella.....	22
Arnica.....	25	Oreocarya.....	20
Artemisia.....	31	Pentstemon.....	23
Asclepias.....	16	Plantago.....	32
Batrachium.....	3	Polygonum.....	13
Caltha.....	4	Psilostrophe.....	29
Castilleia.....	22	Ranunculus.....	1
Cryptanthe.....	21	Rumex.....	15
Cyrtorhyncha.....	3	Salvia.....	22
Delphinium.....	4	Scutellaria.....	22
Draba.....	5	Senecio.....	24
Dracocephalum.....	22	Stachys.....	22
Erigeron.....	31	Tetranneuris.....	29
Eriogonum.....	15	Thelypodium.....	9
Eritrichium.....	21	Thermopsis.....	34
Helianthus.....	28	Viola.....	9

Price, Fifty Cents.

ASCLEPIAS HALLII, Gray. Excellent specimens of a plant that is rare; obtained at Gunnison, 25 July, n. 595.

APOCYNUM AMBIGENS. Intermediate between *A. androsæmifolium* of the East and *A. pumilum* of the Pacific slope; smaller than the former, more erect and more copiously floriferous, the corollas larger but still campanulate; follicles much shorter and thicker.

In the Black Cañon, 20 June, n. 202; also at Rogers', 14 Aug., n. 799. The plant is frequent in several parts of Colorado, and has passed for *A. androsæmifolium*; but both this and *A. pumilum* are better accepted as fair geographical subspecies.

APOCYNUM CANNABINUM, Linn. In moist ground on Deer Run, 10 June, n. 80.

APOCYNUM LIVIDUM. Several feet high, with the pale and glaucescent hue of *A. cannabinum*, but the oblong-ovate mucronate leaves much larger and more spreading: inflorescence consisting, as in that species, of terminal and naked cymes, but flowers few, large and nodding, of a pale flesh-color; sepals thin and whitish, triangular-lanceolate, erect, half as long as the corolla, this campanulate, rather deeply cleft and with spreading or recurved segments.

Common on railway embankments in Black Cañon, 8 July. The plant recalls the Californian *A. floribundum*, but differs in having few and large flowers rather than almost innumerable small ones.

ASPERIFOLIÆ.

MERTENSIA CONGESTA. Tufted stems a foot high or less, stout and rather succulent, ascending; whole herbage of a

light and rather vivid green and, to the unaided eye seeming glabrous: leaves many and ample, from elongated-ovate to broadly oblong, obtuse, or some even retuse, the cauline sessile, the radical short-petioled, all 2 to 3 inches long, minutely and sparsely strigose above, glabrous beneath: flowers many, mostly in a single condensed terminal cluster, those of the few subterminal branches similarly crowded, the pedicels very short: calyx deeply cleft into ovate acute or broadly lanceolate segments, these strongly hirsute-ciliate and, in maturity, traversed by a very prominent light-colored midvein: corolla deep-blue, about 4 lines long, the cylindric tube and campanulate limb about equal: nutlets acutely ovate, brown when mature and indistinctly sinuate-rugulose.

On Poverty Ridge, near Cimarron, 13 June, in open parks, n. 129; also at Cerro Summit, a smaller plant, n. 62.

MERTENSIA LATERIFLORA. Stems tufted, rather strict and very leafy, a foot high or more, the whole plant canescently silky-strigulose: leaves almost crowded on the stem from base to summit, oblong-linear, acutish, about 3 inches long: short cymose flower-clusters in all the axils from near the middle of the stem, on pedicels of about an inch long, the lower not equalling, the uppermost little surpassing the leaves: calyx small, completely divided into short-lanceolate scarcely acute segments, these strongly appressed-villous and ciliate: corolla of a light-blue, small, hardly 4 lines long, the limb only distinctly shorter than the tube.

Said to be common at 9,000 feet, above Carson, where it forms large clusters, in flower 2 July, n. 334. Species certainly resembling *M. linearis*, but a much larger plant than that, and with smaller flowers, the pubescence, however, being totally different. The inflorescence is peculiarly long, narrow and secund.

MERTENSIA CYNOGLOSSOIDES. Stems depressed, $1\frac{1}{2}$ feet long, sparsely and very amply leafy, the herbage delicate in texture and of a vivid green: lowest leaves oblong, obtuse, 4 or 5 inches long, on slender petioles of equal length, the cauline ovate-lanceolate, acutish, sessile by a subcordate-clasping base, these also 3 or 4 inches long and spreading, all very thin, glabrous beneath, sparsely but strongly scabrous above and scabrous-ciliolate: racemes few and sparse, long-peduncled, the upper part of the peduncle and the pedicels sparsely setose-hispid: sepals small, lanceolate and ovate-lanceolate, obtusish, hispid-ciliolate, otherwise glabrous: corolla light-blue, almost funnelform, the short and rather broad tube quite exceeded in length by the campanulate limb into which it gradually passes: nutlets white (perhaps immature), ovate, incurved at summit, turgidly and very irregularly rugose.

On moist ledges in the Black Cañon, 20 June, n. 191. A remarkably distinct species.

MERTENSIA MURICULATA. Of the size of the last, nearly, and like it almost prostrate, but of firm texture and glaucescent: lowest leaves elliptical, the blade 3 or 4 inches long, the petiole shorter; cauline ovate and lance-ovate, $1\frac{1}{2}$ to $2\frac{1}{2}$ inches long, sessile and partly clasping, all finely dotted above with white pustules developing centrally a low, stout white scabrous point, the margin scabrous-ciliolate with short pustulate hairs: flower-clusters in all the leaf-axils, long-peduncled, somewhat crowded, not obviously racemose: sepals very short, deltoid-ovate to shortly triangular-lanceolate, obtuse, setulose on the back and strongly hispid-ciliate: corolla short and funnelform: nutlets ovate, straight and erect, lightly rugulose and minutely tuberculate.

Habitat of the last, and manifestly allied to it, though its firm texture, peculiar pustulate roughness, as well as the

differences in inflorescence, calyx and achene, preclude the confusing of them. It is Mr. Bakers' n. 193.¹

OREOCARYA HORRIDULA. Low multicapitous perennial, the not stout rather loosely leafy and floriferous stems 4 to 7 inches high, the whole plant strongly setose-hispid: obovate obtuse upper end of the leaf tapering spatulately to a rather long and narrow petiolar base: racemose short branches of the loose and short inflorescence linear-bracted, but the bracts barely equalling the calyx; this in fruit $\frac{1}{2}$ inch long, its linear and narrow segments covered with hispid hairs; corolla white, rather more than $\frac{1}{2}$ inch long, with narrow tube and small spreading limb: nutlets (only one, usually) narrowly ovate, erect and straight, sharply

¹ The characters of two northwestern *Mertensias* may here be given:

M. SYMPHYTOIDES. Stout, erect, barely a foot high, leafy to the summit and even throughout the broad cymose-panicled inflorescence with large elliptic-lanceolate acute leaves, these of a bright green and appearing glabrous, but sparsely somewhat tuberculate-scabrous, especially on the margin and the lower face: leafy cyme rather lax; calyx rather small, deeply cleft, the segments ovate-trigonous, acute, glabrous except as to the margin, this very shortly and almost obscurely scabrous-serrulate: corolla $\frac{1}{2}$ inch long, quite tubular, the upper portion quite cylindrical and little shorter than the proper tube: nutlets rather coarsely low-tuberculate.—Known to me only from Emigrant Springs, in the lava beds of Modoc Co., California, where it was collected by Mrs. R. M. Austin, 20 June, 1894.

M. STENOLOBA. Size of the preceding, quite as leafy, but the leaves oblong-lanceolate, acute, thin and quite glaucous, sparsely scabrous, most so marginally: inflorescence as in most species: calyx parted into narrowly lanceolate-acuminate long segments, their margins sparsely setose ciliolate: full grown nutlets scarcely half as long as the calyx and sinuate-rugose.—Based Mr. Flodman's n. 752 from the Bridger Mountains, Montana (as to the specimens in my set), and named by Mr. Rydberg "*M. lanceolata*, DC." But it can have no intimate connection with Pursh's type on which the species was founded; for that has a "short calyx," while here that organ is rather extremely elongated.

margined, the oack showing a few irregular rugæ and some interspersed tuberculation.

Deer Run, 11 June, on a dry bank; n. 133.

OREOCARYA NITIDA. Multicipitous, slightly woody at base, the stoutish stems a foot high, copiously leafy at base, the leaves 2 to 4 inches long, oblanceolate, acute, tapering to a long petiolar basal portion, this again dilated at the insertion, both faces equally silvery-silky or satiny, without other pubescence: flowers copious, in a loose open thyrsus of close racemes: calyx in fruit $\frac{1}{2}$ inch long, the segments narrowly linear except at the broad base, clothed throughout with a dense white villous tomentum and some interspersed setose-hispid hairs; corolla $\frac{1}{2}$ inch long or more, with very narrow tube abruptly widening to form a short throat, the proper limb three lines broad, the color of the whole apparently white: nutlets (mostly solitary) large, ovate, straight and erect, dark-brownish, closely covered with a minute whitish almost muricate tuberculation.

In dry stony ground at Deer Run, 11 June, n. 95. A species noteworthy by the whiteness and softness of its almost satiny indument.

Other Asperifoliæ of the collection are *Cryptanthe Fendleri*, Greene, n. 780; *C. crassisepala*, Greene, n. 75; *Allocarya scopulorum*, Greene, nn. 152, 938; *Lappula occidentalis*, Greene, n. 327; *L. ursina*, Greene, n. 471, the species a rare one, but the specimens too young; *Lithospermum Torreyi*, Nutt., or possibly a new species closely allied to it, n. 127; *Oreocarya multicaulis*, Greene, n. 455; *Eritrichium aretioides*, Rydb., n. 845; *Mertensia ciliata*, Don, nn. 189, 403, 486; *M. pratensis*, Heller, nn. 391, 773; *M. Bakeri*, Greene, nn. 293, 497.