

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

EIGHT NEW SPECIES OF NORTH AMERICAN
PLANTS.*

BY CHARLES LOUIS POLLARD.

Lupinus psoraleoides n. sp.

Perennial, 1-1½ dm. high, subcaulescent, with a multicipital caudex and slender woody root; whole plant densely villous with long white hairs; leaves long-petioled, the blades 5-7-foliolate; leaflets oblanceolate, somewhat acute at the apex, 2-3 cm. long; spike very densely flowered, almost sessile, scarcely surpassing the foliage; flowers violet purple, 1 cm. long, subtended by narrowly linear scarious bracts; calyx one-half the length of the corolla, markedly bilabiate, the teeth acute; standard suberect, shorter than the keel; legume oblong, 1½ cm. long, tipped with the slender persistent style; seeds few, apparently nearly orbicular.

Type in the U. S. National Herbarium, No. 201,582, collected in open gravelly soil at Gunnison, Colorado, by Elam Bartholomew, August 30, 1899 (No. 2680). In aspect the plant suggests certain species of *Psoralea*; its marked peculiarities are the slender nearly sessile spike, the small standard and the long villous pubescence.

Viola amorphophylla n. sp.

Plant acaulescent, about 1 dm. high, from a stout, vertical rootstock, absolutely glabrous throughout and semisucculent; blades of the leaves elliptical or oblong-elliptical, the margins entire or sometimes obscurely crenate near the very obtuse apex, rarely with a small lobe or incision near the rounded or slightly tapering base; petioles narrowly margined, equalling the blades or shorter; stipules scarious, elongated-linear; scapes surpassing the foliage; flower purple, about 2½ cm. broad; sepals

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ovate-lanceolate, acute, auriculate at base; petals oblong, bearded, the spur short and blunt; capsule prismatic, one-third longer than the calyx; apetalous flowers borne on evidently erect scapes.

Type in the U. S. National Herbarium, No. 209,214, collected at Tryon, North Carolina, May 5, 1897, and communicated by Mr. C. D. Beadle, Curator of the Biltmore Herbarium. A violet with very peculiar and anomalous foliage, showing affinities to the *Sagittatae*, but distinguished from all the species of that group by its oddly shaped leaves, large flowers and broad sepals.

Viola pruinosa. n. sp.

Plant low (about 1 dm. high), sending up numerous branching stems from a very short and thick rootstock; leaves slender-petioled, pinnately decomposed, the ultimate divisions oblong-linear, 5-7 mm. long; under surface of the dull green foliage densely clothed with short and stiff, white, pruinose pubescence, so that the plant appears glaucous; petioles, especially those of the basal leaves, with broadly sheathing scarious margins; flowers solitary in the axils, borne on slender peduncles, rather small (1-1½ cm. broad); sepals linear, very short; petals narrowly oblong, beardless, bright yellow with purple veinings, the two uppermost petals often entirely overcast with purple; spur wanting; capsule not observed.

Type in the U. S. National Herbarium, No. 342,196, collected by John B. Leiberger in Bear Valley, California, at an altitude of 2200 meters, April 17, 1898 (No. 3307). Related to *V. Douglasii*, but at once distinguishable on account of the small flowers and the peculiar frosted appearance of the foliage.

Gentiana citrina n. sp.

Annual: stem simple, strict, 2-4 dm. high; leaves about six pairs, oblong or ovate-oblong, sessile or slightly clasping; inflorescence narrowly paniculate, the branches 1-5-flowered, each cluster subtended by a pair of foliaceous bracts; flower 1½-2 cm. long, yellow; calyx campanulate; the ovate-lanceolate, somewhat unequal lobes longer than its tube; corolla tubular-campanulate, with 4 or rarely 5 erect ovate lobes, one-fourth the length of the tube, quite destitute of sinus-appendages; throat crowned with a copious fringe of setae; capsule sessile.

Type in U. S. National Herbarium, No. 22,087, collected by C. G. Pringle in the valley of Toluca, State of Mexico, August 18, 1892 (No. 4196) and distributed as *G. Wrightii* A. Gray, from which it differs in certain important particulars. In his description of *Wrightii* Dr. Gray emphasizes the fact that the leaves nearly equal the internodes; the calyx lobes are said to have scabrous margins and the corolla is campanulate-funnel-form with lobes fully one-third the length of the tube. I have also examined the type of *G. Wrightii*, which was collected in southern Arizona, and find little in common between the two species except the characters of the subgenus to which both belong. Mr. Pringle's No. 4237, also from Toluca, collected at an altitude of 11,000 feet, is evidently a depauperate alpine form of *G. citrina*.

Gentiana connectens n. sp.

Stem slender, rather lax, 4-6 dm. high, with scattered branches; leaves oblanceolate, the uppermost smaller, linear-lanceolate; flowers 1-3 at the ends of the branches, borne on slender filiform pedicels of twice or even thrice their length; calyx narrowly campanulate, 1 cm. long, its tube very short, its lobes linear-acuminate; corolla twice the length of the calyx, violet-purple, with 5 erect ovate-lanceolate lobes destitute of sinus-plaits; throat crowned with numerous filiform setae; anthers versatile; ovary markedly stipitate; stigmas 2, coherent at base; capsule with numerous oblong brown seeds.

Type in U. S. National Herbarium, No. 22,045, collected by Thomas Bridges in California (No. 166a). No more specific locality than this appears on any of Bridges' labels. The name assigned to this gentain refers to the fact that it combines certain characters of the two main subgeneric groups; thus it possesses the crown of setae, stipitate ovary and absence of corolla-glands indicative of *Gentianella*; but the lobes of the corolla are five in number, as in *Pneumonanthe*, which it also suggests in habit.

Gentiana decora n. sp.

Stem simple, or with one or two short branches above, 3 dm. or more high, sparsely and minutely puberulent; leaves lanceolate or the lower oblanceolate, tapering to base and apex, slightly petioled, the margins not ciliate; flowers sessile, in a terminal bracted cluster of five or more, a few often scattered in the upper axils; calyx-tube cylindrical, puberulent, 8-10 mm. long, more than twice the length of the widely separated narrowly linear and ciliate-margined lobes; corolla campanulate-funnel-form, 2½-3 cm. long, bright blue with darker stripes, within paler and the stripes more conspicuous; lobes of the corolla ovate, slightly mucronate, scarcely twice the length of the unequally bidentate sinus-appendages; seeds and other floral characters as in *G. Elliottii*.

Type in the herbarium of Columbia University, collected by Mr. A. M. Huger near Waynesville, N. C., September and October, 1896. Specimens of this and other southern gentians were very kindly sent to me for determination by Dr. John K. Small. The species is very nearly related to *G. Elliottii*, but differs in the more acute corolla-lobes, the absence of fimbriation on the sinus-plaits of the corolla, and the short, narrow calyx-lobes.

Chrysopsis latisquamea n. sp.

Perennial by offshoots, erect, 4-5 dm. high, the foliage and lower portion of the stem clothed with a loose white arachnoid tomentum; basal leaves rosulate, oblanceolate or spatulate, obtuse, the margins entire; stem leaves sessile, linear or linear-oblong, the upper becoming small and bract-like; inflorescence cymose, the branches glandular-pubescent, each terminated by a single large head 1½ cm. high; involucre broadly

campanulate; bracts ovate-lanceolate, more or less herbaceous, glandular, the innermost longest; rays bright yellow, linear, 1 cm. long; papus copious, yellowish-white, the outer series of bristles very short and capillary, the inner minutely setulose; achene 2 mm. long, fusiform, slightly compressed, villous, with 8-10 salient longitudinal ribs: receptacle strongly alveolate.

Type in U. S. National Herbarium, collected by Miss Marie Meislahn at Clarcona, Florida, (No. 150), and communicated by Mr. A. J. Pieters, who has kindly placed in my hands for determination a large collection of Florida plants. This *Chrysopsis* differs from *C. pilosa* (Walt.) Britton (*C. gossypina* Nutt.) to which it is most nearly related, by the broad involueral bracts and many-ribbed achenes. Its involucre is so strikingly peculiar for his genus that were it not for the similarity of other structural characters the plant might be considered a distinct generic type.

Solidago Maxoni n. sp.

Slender, erect, $\frac{1}{2}$ -1 m. high, the stem striate-grooved and glandular-pubescent, particularly above; leaves 5-7 cm. in length, thin, 1-nerved, slightly glandular-pubescent above, pale and glabrous beneath, the margins entire or exhibiting an occasional serration, lanceolate in outline, acute or acuminate at apex, tapering at base to a short margined petiole; lowermost leaves similar in shape, but slender-petioled; uppermost smaller and linear-lanceolate; inflorescence thyrsoid-paniculate, elongated, 2-3 dm. long, the branches numerous, each bearing from 3 to 12 slender-pedicelled heads, the pedicels and branchlets densely strigose-pubescent; heads small (5-7 mm. high) the involucre campanulate, with numerous loosely imbricated herbaceous or somewhat scarious obtuse and ciliate-margined bracts; rays about one-half the length of the inner bracts; achene linear, laterally compressed, glabrous.

Type in the U. S. National Herbarium, No. 357,109, collected on Bald Knob, Salt Pond Mountain, Virginia, by Charles L. Pollard and William R. Maxon, August 25, 1899 (No. 71). This *Solidago* is related to *S. monticola*, of which typical specimens were secured from the same region. The marked glandular pubescence, nearly entire leaves and different type of inflorescence are characters which have warranted its separation. I have taken pleasure in naming it for my companion and associate, Mr. Maxon.