

574-087

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

NEW FLOWERING PLANTS OF THE PACIFIC COAST.

BY C. V. PIPER.

Collectors continue to find undescribed plants in all the Pacific Coast States. The new species here described are based on specimens recently collected or else long in the United States National Herbarium. The new *Iris* is particularly noteworthy.

***Iris gormanii*, n. sp.**

Rootstocks slender; base of old plants covered with dead leaves of previous seasons; stems slender, 1-flowered, 30-40 cm. high, each bearing two or three leaves; leaves pale green, linear, 2-4 mm. wide, strongly veined, the earliest short, some of the later ones exceeding the stems; cauline-leaves scarious-margined, the upper exceeding the stem; bracts three, 8-10 cm. long, scarious margined, none exceeding the flower; flowers short-peduncled, cream color to pale yellow; perianth tube above the ovary short, 4 mm. long; sepals ascending, spatulate-oblancoelate, not bearded or crested, thin, 3-3.5 cm. long; petals erect, spatulate-oblancoelate, 2.5 cm. long; capsule oblong, obtusely 3-angled, sharp-beaked, 2-2.5 cm. long, straw-color when mature; seeds globose, brown, the outer coat much wrinkled.

Scoggin's Creek, east slope of Coast Mountains, Washington County, Oregon, *M. W. Gorman*, June 25 and August 13, 1922. Only about 5 per cent of the plants produced fruit in 1922.

***Iris tenuis* Watson Proc. Am. Acad. 17:380. 1882.**

This was found in 1881 by Prof. L. F. Henderson on Eagle Creek, a branch of Clackamas River, Oregon, in Clackamas County, about 40 miles east of Portland, but no later collections seem to exist. Mr. M. W. Gorman has recently visited the type locality and finds the plant abundant in patches along Eagle Creek. His specimens are quite like those of the type collection.

***Arabis elata*, n. sp.**

Biennial, erect, 1 m. high, leafy below, a few ascending branches above; stem purplish, terete, densely and finely stellate-canescens below, glabrous or nearly so above; basal leaves thickish, entire, oblancoelate, acutish, 1-nerved, narrowed at base and petiolate, 2-3 cm. long, densely and finely

stellate-canescens on both sides; cauline leaves oblanceolate, similarly canescent, sessile, conspicuously auriculate at base, 3–4 cm. long; racemes in fruit 30–50 cm. long, the divaricate pedicels 5–7 mm. long, 10–15 mm. apart; pods linear, glabrous, curved upwards, 2–3 cm. long, 1 mm. wide, the valves 1-nerved nearly the whole length; stigma white, sessile; seeds orange, much compressed, narrowly wing-margined.

Along Emigrant Creek near its junction with Silvie's River, Harney County, Oregon, June 23, 1912, *M. E. Peck* No. 5539. Nearest to *A. tri-chopoda* Greene.

***Cardamine oregana*, n. sp.**

A slender glabrous perennial rooting at the nodes and tuberiferous; stems slender, weak, terete, branching, procumbent, 30–40 cm. long; leaves simple or trifoliolate, glabrous, thin, the blade of the basal ones suborbicular or sinuately pentagonal, 3-nerved from the base, about 1 cm. long, the slender petiole 3–4 times as long; upper leaves very similar but with one, rarely two, pair of rounded to elliptic leaflets close to the terminal one; flowering branches erect or ascending 10–15 cm. long; racemes 2–7 flowered; petals white, 5 mm. long; sepals oblong, pale, thin-edged, 2 mm. long; pods ascending, linear, glabrous, 16–20 mm. long, each tipped with a stout style 1.5 mm. long, the pedicel less than half as long as the pod; seeds about 20, oblong, compressed, dull, dark brown, 1 mm. long.

Near Little Meadows of the Des Chutes River, Oregon, alt. 1500 meters, *J. B. Leiber* 2614, August 25, 1896; type sheet 280753 in U. S. National Herbarium. Allied to *C. occidentalis* (Wats.) Schulz but differing in the fewer leaflets and longer style.

***Astragalus* (§*Homalobus*) *peckii*, n. sp.**

Perennial from a vertical root, branched from the base, leafy, the whole herbage minutely cinereous pubescent; branches erect or ascending, slender, terete, pubescent, the internodes 5–20 mm. long; leaves pinnate with 3 to 5 pairs of leaflets; stipules scarious, united for half their length, triangular, acute, ciliate; lateral leaflets oblong, acutish, puberulent on both sides, mostly folded, 2–5 mm. long, very shortly petiolulate; terminal leaflet rudimentary or not at all developed, the tip of the rachis sharp and often bent; inflorescence axillary, shorter than the leaves, about 6-flowered; corolla ochroleucous, 6–7 mm. long; calyx puberulent with white somewhat appressed hairs, the tube campanulate, 2 mm. long, equalled by the slender subulate lobes, these more or less curved; pods sessile, oblong-linear, compressed, minutely white puberulent, 5–7 mm. long, tipped with the recurved slender style.

Dry ground, McKenzie Pass, 10 miles northwest of Tumalo, Crook County, Oregon, *M. E. Peck* 9768, August 3, 1920.

***Godetia brevistyla*, n. sp.**

Strigulose throughout with white hairs; stems slender, erect, simple or branched from near the base, 20–30 cm. high; leaves sessile, linear, acute and apiculate, 1–3 cm. long; buds erect, narrowly ovoid, acuminate; sepals

at length separate nearly to the base, reflexed, 4 mm. long; petals purple, about 1 cm. long; stigmas ovate, purple, as long as the style, both together 2 mm. long; stamens unequal, the shorter 2 mm., the longer 4 mm. long; ovary densely strigulose, 8-ribbed; capsules sessile, somewhat 4-sided, abruptly short-beaked, 10-14 mm. long.

Olympic Mountains, Clallam County, Washington, A. D. E. Elmer No. 2567, June, 1900. All of Elmer's plants were thus labelled as to locality, but the one here discussed was probably collected either at Port Angeles or at the mouth of the Elwha River, as it clearly is not an alpine plant.

It is the only species with very short style and stigmas excepting *G. romanzovii* (Ledeb.) Spach for which it was mistaken in "The Flora of the Northwest Coast." *G. romanzovii* as represented by a garden specimen in the Gray Herbarium has lanceolate petiolate nearly glabrous leaves, sepals 7 mm. long, petals 1.5 cm. long, stamens 10 mm. long, the filaments equaling the anther, and the style and stigma relatively shorter than in our plant.

Lappula venusta, n. sp.

Perennial from a loosely branched crown, the branches of which are covered by the old leaf bases; stems erect, simple to the inflorescence, terete, sparsely hirsute with somewhat reflexed pustulate-based hairs; leaves numerous, the basal ones spatulate-oblancoate, obtusish, 6-12 cm. long, the petioles margined; median leaves sessile, linear-oblong to oblanceolate, 4-6 cm. long; upper leaves sessile, broadest at base, the uppermost partly clasping; all green and hispid on both faces; inflorescence loosely cymose in age, the bracteate branches raceme-like 10-15 cm. long; bracts lanceolate to linear gradually reduced upwards; rachis slender, strigillose; pedicels recurved, 15-20 mm. long in fruit, strigillose; calyx-lobes linear, acute, strigillose, 4 mm. long; corolla white, 2 cm. broad, the lobes orbicular-obovate; appendages yellow, oblong, broadest above, emarginate, minutely and evenly roughened; anthers oblong, yellow, not reaching the appendages; nutlets trigonous, 6 mm. long, nearly as broad; marginal bristles united for about half their length, all glochidiate; dorsal surface convex, sparsely muriculate and with about 10 short glochidiate bristles; ventral surface smooth; the lanceolate scar central.

Between Tumwater and Drury, Chelan County, Washington, May 18 and June 9, 1920, I. C. Otis, No. 895.

A very handsome species probably nearest to *L. cinerea* Piper.

Allocarya coralllicarpa, n. sp.

Annual, slender, much branched from near the base, the branches erect or ascending, 10-50 cm. high; stems strigillose; leaves linear, obtuse or acutish, 2-5 cm. long, sparsely strigillose above, densely so beneath, the hairs mostly pustulate; racemes bractless, 5-10 cm. long, rather loosely flowered, the lower internodes 3 to 5 times as long as the fruiting calyces; pedicels shorter than the calyces; calyx not accrescent, the lanceolate acute somewhat spreading lobes densely hispid with pale hairs, 3 mm. long in fruit; corolla rotate, 5 mm. broad; nutlets ovoid, plump, obtuse, dull, pale

or at length reddish-brown, 1.5 mm. long, the dorsum convex, keeled for two-thirds its length, evenly covered with an intricate convolute anastomosing network of pale rather prominent ridges, the relatively small interspaces granulate; venter keeled from the scar to apex, the surface sculptured as on the dorsal surface; scar ovate, almost basal, rather small, surrounded by a conspicuous ridge; epidermal cells conical, unicellular.

In moist open spaces, Grant's Pass, Oregon, *C. V. Piper*, June 2, 1921 (type); same place in depauperate specimens, *M. E. Peck* 2956, June 24, 1909; Medford, Oregon, *C. V. Piper*, June 1, 1921.

Nearest *A. scouleri* (Hook. & Arn.) Greene but stems more slender, racemes looser, flowers smaller, and nutlets more coarsely sculptured with uninterrupted ridges.

Allocarya aculeolata, n. sp.

Annual, not succulent, much branched from the base, the slender branches decumbent to ascending, 10 to 30 cm. long, the whole herbage strigillose; leaves linear, 1 to 3 cm. long, strigillose on both surfaces, pustulate beneath; racemes many-flowered, 5-15 cm. long, with few leafy bracts, the internodes mostly 2 to 3 times as long as the fruiting calyces; pedicels much shorter than the calyces; calyx lobes not accrescent, lanceolate, setulose, erect or somewhat spreading, 2 to 2.5 mm. long; corolla minute; nutlets narrowly ovoid, brownish, acutish, 1.5 mm. long, the dorsum convex, keeled above the middle, marked above the base with four nearly continuous transverse ridges, granulate basally and between the ridges, covered with simple hyaline bristles each with short barbs at the tip; venter keeled from scar to apex, obliquely rugulose and minutely bristly; scar ovate, small, nearly basal.

In dried mud holes on a ridge ten miles east of Chico, Calif., May 27, 1921, *C. V. Piper* No. 5020. Near *A. penicillata* Greene but nutlets smaller and narrower and the scar nearly basal.

Allocarya lamprocarpa, n. sp.

Annual, simple or few-branched from the base, the slender branches erect or ascending, 10 to 20 cm. high, sparsely strigillose; leaves linear, 1 to 2 cm. long, obtusish, glabrous or nearly so above, pustulate-strigulose beneath; racemes leafy-bracteate near the base, 5-15 cm. long, the internodes 2 to 4 times as long as the fruiting calyces; calyx not accrescent, setulose, the lanceolate nearly erect lobes 2 mm. long; corolla minute; nutlets broadly ovoid, abruptly narrowed toward the apex, dark grayish, shiny, 1.5 mm. long, 1 mm. wide, the dorsum keeled its whole length but rather faintly basally, coarsely and rather evenly tuberculate or obscurely rugulose with short or roundish low elevations, these less conspicuous basally, not at all granulate; venter obliquely and coarsely rugulose with short ridges, not granulate, the fully exposed keel lying in a narrow groove which is deepest basally; scar broadly ovate, flange margined, lying in a broad shallow depression.

In moist places in an old road, Grant's Pass, Oregon, June 2, 1921, *C. V.*

Piper No. 5023. This species is very unlike in its nutlets from any other of the *sulcata* group.

***Cryptantha scabrella*, n. sp.**

Annual, erect, loosely branched, 20–50 cm. high; stems slender, terete, puberulent with hairs of two kinds, long spreading and short appressed; branches erect or ascending; leaves linear, acute or acutish, pustulate-hirsutulous on both sides, 1–3 cm. long; inflorescence once-forked with a solitary flower in the fork, the branches spicate, loose in fruit, the internodes $2\frac{1}{8}$ times as long as the calyx; calyx-lobes lanceolate, setose with somewhat spreading bristles, 3–5 mm. long; corolla rotate, white, 6 mm. broad; mature nutlets 2–4, rarely 1, dark brown, dull, ovoid, constricted above and acutish, 2.5 mm. long, the margins rounded, the back convex, flattened and without median ridge, the ventral groove forked at base but closed, the whole surface densely and evenly scabrous with sharp points.

In dry open woods on hills, Grant's Pass, Oregon, June 2, 1921, C. V. *Piper* No. 5043.

***Valeriana seminuda*, n. sp.**

Stems rather stout, erect, terete, somewhat sulcate toward the base, glabrous or near the nodes sparsely puberulent, 70–90 cm. high, 4-jointed below the inflorescence; leaves rather thin, glabrous except the ciliate margins; basal leaves simple or with one or two lateral segments, spatulate, obtuse or acutish, entire or nearly so, the blade about 3 cm. long, exceeding the margined petiole; lower cauline leaves 6–10 cm. long, each with 5–7 divisions, the terminal one lance-oblong, acute at each end, entire or obscurely dentate, 4–5 cm. long, the lateral ones oblong, obtuse to acute, mostly 2 cm. long; middle cauline leaves sessile, 6 cm. long, with 5 segments, the terminal one lanceolate, sinuately dentate, acute at each end, the lateral ones narrowly lanceolate; bracts linear acute, the lowermost 2 cm. long; inflorescence of 5 cymose clusters, the terminal largest, 3 cm. broad, the lateral ones 1.5 cm. broad, the lower pair on slender naked peduncles 12 cm. long; bractlets subulate, acute, thin; flowers perfect; corolla nearly white, funnelform, gibbous at base, 3 mm. long; stamens much extruded; fruit ovoid, compressed, finely white-pubescent; pappus plumose, inrolled.

About half way between Mineral King and Farewell Gap, Sierra Nevada Mts., Tulare Co., California, August 5, 1891, *Coville & Funston* No. 1486. Type in the U. S. National Herbarium.