

PROCEEDINGS  
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BIOLOGICAL SOCIETY OF WASHINGTON

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NEW AMERICAN SPECIES OF *CHAMAECRISTA*.\*

BY CHARLES LOUIS POLLARD.

***Chamaecrista mirabilis.***

Plant fruticose, erect, branching, 4-5 dm. high, quite glabrous, the branches slender and wiry; leaves on the main stem 12-18-foliolate, those on the lateral twigs only 4-12-foliolate; leaflets linear, 4-5 mm. long, finely cuspidate, the midvein only slightly excentric, the surface apparently entirely glabrous; petiolar glands 2, or rarely 1 or 3, situated just below the lowermost pair of leaflets; both glands small, discoid, borne on very slender styles, that of the basal gland being from 5 to 7 mm. in length; stipules linear-acuminate, striate, persistent; flowers not observed; legumes borne on pedicels surpassing the leaves, linear in outline, nearly straight, glabrate, 12-15 seeded, dehiscent with elastic valves at maturity.

Type in herbarium New York Botanical Garden, collected at Rio Piedras, Porto Rico, by Mr. and Mrs. A. A. Heller, February 27, 1899 (No. 642). The plant is remarkable for the presence of one and sometimes two, supernumerary glands, situated above the normal petiolar gland found throughout the *Chamaecristae* verae. It is a member of the *nictitans* series, of slightly shrubby habit, or lower stature than *C. aeschinomene*, and with neither the pubescence nor the gland of that species.

***Chamaecrista bellula.***

Plant slender, erect, 3-4 dm. high, the branches ascending; stems and rachises puberulent; leaves 5-10-foliolate, the leaflets linear-elliptical,

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glabrous, 6-10 mm. long, of thin texture, minutely apiculate, the midvein rather excentric, not prominent; petiolar gland crateriform, subsessile; stipules linear, acuminate, membranaceous, striate; peduncles 1-flowered, almost always bibracteolate, supra-axillary; flower 2 cm. broad; sepals linear, attenuate, nearly equalling the obovate petals; legume 6-7 cm. long, linear, puberulent; seeds ovoid, compressed, oblique.

Type in the United States National Herbarium, collected by Prof. S. M. Tracy at St. Vincent, Florida, September 9, 1899 (No. 6,326). A very graceful species, perhaps approaching *C. Mississippiensis* in the small size of its leaflets, but distinguished by its erect habit, its uniform pubescence, its leaflets, which are only half as many as those of *C. Mississippiensis*, and also by the fact that it is annual and herbaceous.

### **Chamaecrista brachiata.**

Plant 1 m. high or less, woody at base, with tough, freely branching glabrate stems; stipules lanceolate, acuminate, striate, and strongly persistent; leaves 10-14-foliolate, with a very depressed discoid petiolar gland; leaflets linear, glabrous on both surfaces, the midvein somewhat excentric, the obtuse apex tipped with a slender cusp; flower large, 3 cm. in diameter, the broad yellow petals considerably exceeding the lanceolate scarious sepals, legume linear, 6-7 cm. long, quite glabrous when mature; seeds quadrate, oblong, compressed on both sides.

Type, No. 330,115, in the United States National Herbarium, collected by Charles L. Pollard and G. N. Collins at Miami, Dade County, Florida, April 4-7, 1898 (No. 245). The plant grows entirely in open barrens or scrubs, often forming bushes of considerable size; it is associated with no other *Chamaecrista*. The same species has been collected by A. Fredholm in Duval County, September 11, 1893, showing that the blooming period extends throughout the season. It differs from *C. fasciculata*, the only other large-flowered species in south Florida, in being fruticose, in the much more numerous and narrowly linear leaflets, and also in having a discoid rather than oblong, petiolar gland. The corolla is clear lemon-yellow, with no suggestion of orange, and the petals considerably exceed the sepals.

### **Chamaecrista littoralis.**

Plant tall, erect, diffusely branching, the branchlets and younger shoots finely puberulent; stipules persistent, lanceolate, sharply attenuate, 3-5-nerved, the margin usually hispidulous; leaves oblong or oblong-lanceolate in general outline, 1-4 cm. long, both surfaces sparsely puberulent; leaflets 6-12 pairs, elliptical, prominently cuspidate, 5-8 mm. long; midvein more or less excentric; petiolar gland cupuliform, practically sessile; flowers about 2-2.5 cm. in width, on slender solitary peduncles 1-1.5 cm. long; petals exceeding the linear-lanceolate scarious

sepals; legume densely pubescent, not at all falcate, 4-5 cm. long; seeds quadrate, compressed, dark brown.

Type, No. 371,572 in the United States National Herbarium, collected by Prof. S. M. Tracy and Prof. F. E. Lloyd on Breton Island, La., August 17, 1900 (No. 198). I consider that No. 155 of the same collectors from Biloxi, Miss., September 4, 1900, No. 3,953, S. M. Tracy, Biloxi August 30, 1897, and No. 1,423 of my first distribution of Mississippi plants (Biloxi, September 15, 1896) are all referable to this species. The last cited specimen was distributed as *Cassia depressa* Pollard, a species with which *littoralis* has heretofore been confused. The type of *depressa*, (which Professor Greene has now identified with the *Cassia chamaecristoides* of Colladon) is a plant of low spreading habit, exhibiting little or no pubescence, with scattered, very narrow leaflets, and much compressed glands. *C. littoralis* varies somewhat in the number of its leaflets, but they are always compact or crowded, and never scattered on the rachis. It is, moreover, a distinctly maritime species, the numerous stations from which I have material being all situated on the coast or on outlying islands in the Gulf of Mexico. The prominently apiculate leaflets serve to distinguish it from *C. fasciculata* and *C. depressa*.

### **Chamaecrista tracyi.**

Plant erect, herbaceous, freely branching, the branches inclined to be lax and spreading; stems and foliage densely clothed with a slightly glandular pubescence; leaves 4-9-foliolate, 2-3 cm. long, the leaflets oblong or elliptical, very small (5-8 mm. long); petiolar gland cupuliform, sessile near the base of the rachis; stipules setaceous; flowers solitary, on slender axillary or supra-axillary peduncles as long as the leaves or longer, upcurved in fruit; corolla 1-1.5 cm. wide; sepals narrowly linear, acuminate, about equaling the petals; legumes pubescent 4 cm. long, rather markedly rostrate; mature seeds not observed.

Type in the United States National Herbarium, collected by Prof. S. M. Tracy at Koshlaw, Miss., September 15, 1898. In appearance this plant forms a link between the large-flowered and the small-flowered sections of the genus: it is chiefly conspicuous, however, for the long-pedunculate flowers approaching in size those of certain West Indian species, but not at all like any species within our own borders. The cupuliform gland, moreover, resembles the gland found in members of the sub-genus *Nictitella*. The leaflets are very small, and quite constant in dimensions.

In dedicating this species, in many respects the most interesting in the genus, to Professor Tracy, I wish to record my very great obligations to him and to Prof. F. S. Earle, now of the New York Botanical Garden, for the material they have so generously placed at my disposal from time to time.