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NOTES ON THE GENUS SARACHA.[1]

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The small plant genus *Saracha*, of the family Solanaceae, was originally founded by Ruiz and Pavon.[2] No species is described, but their plate illustrates *Saracha punctata* Ruiz & Pavon, the first species described in their later account of the genus.[3] By the rules, therefore, *S. punctata* should be considered as the generic type. Later, Miers[4] recognized that two genera were involved in the *Saracha* of Ruiz and Pavon, but erroneously applied the name to the other four species and gave *S. punctata* the new name *Poecilochroma*. This nomenclature has persisted until the present time, and Macbride[5] urges that it be continued by conserving the name *Saracha* Ruiz & Pavon, emend. Miers. This should perhaps be done, although since both genera are relatively unimportant, no great confusion would result from changes of name.

A rather large number of species of *Saracha* have been proposed, chiefly by Miers and Bitter. Because these have mostly been known from single collections, the identification of specimens has become a difficult matter. In fact, even the generic limits are none too sure. In Peru, especially, the genus verges on the one hand toward *Poecilochroma* and on the other to *Hebecladus*. In North America, however, it is easily recognized by the combination of axillary umbellate inflorescence, rotate corolla, and saucer-shaped accrescent calyx.

During the last nine years the author has worked intermittently on the genus, attempting to distinguish the described

[1] Published by permission of the Secretary of the Smithsonian Institution.
[2] Prodr. Fl. Peruv. 31. *pl. 34.* 1794.
[3] Fl. Peruv. 2:42. 1799.
[4] Hook, Lond. Journ. Bot. 7:354. 1848.
[5] Field Mus. Publ. Bot. 8:110. 1930.

species and to verify the work of Bitter[6] who proposed five sections, viz. *Macrosaracha*, *Adenosaracha*, *Psilandrosaracha*, *Heterosaracha*, and *Eusaracha*. One of the chief points stressed by him is the presence or absence of minute sclerotic grains among the seeds of the berry, but the value of this character is highly doubtful. The origin and significance of these grains are still unknown. In two specimens of *S. procumbens* otherwise identical they may be present in one and absent in the other. Thus it would seem that *Adenosaracha*, the section characterized by the presence of these grains, may not be maintained. *Saracha nitida* Bitt., the only species of the section *Psilandrosaracha*, is characterized by having the filaments and the annular glandular ring within the corolla completely glabrous. This distinction is certainly not a sectional character in this genus, and is in fact only doubtfully a good species character. *Saracha procumbens* var. *repando-dentata* Dunal is similarly glabrous, except for microscopic papillae. The section *Heterosaracha*, founded on *S. amphitricha* Bitt. which I have not seen, seems to rest on an equally insecure basis. On the other hand *Macrosaracha*, the species of which are confined to Peru and Bolivia, is well distinguished by its much larger, campanulate rather than rotate corollas. It is this section that shows the transition to *Poecilochroma* and *Hebecladus*.

Two species of North America are easily recognized: *Saracha antillana* Krug & Urban, of Jamaica and Hispaniola (of which *S. domingensis* Bitt. is a synonym), and *S. grandiflora* Rob. & Greenm., of Michoacan, Mexico. The latter is apparently either very rare or of restricted distribution, for it is thus far known only from the type specimen. Most of the others are, I believe, forms of the widespread and common *Saracha procumbens* (Cav.) R. & P., which is, after all, not so variable as the number of described species would indicate. The Mexican and Central American plants have usually been named *Saracha jaltomata* Schlecht. Some of the other synonyms are: *Atropa Rothii* Poir., *Saracha allogona* (Bernh.) Schlecht., *S. umbellata* Dons, *S. edulis* (Schlecht.) Thellung, *S. glabrata* Miers, *S. laxa* Miers, *S. diffusa* Miers, *S. Miersii* Dunal, *S. conspersa* Miers, and *S. chihuahuensis* Bitt. *Saracha procumbens* reaches the

[6]George Bitter, Zur Gliederung der Gattung *Saracha* und zur Kenntnis einiger ihrer bemerkenswerten Arten. Repert Sp. Nov. Fedde, vols. 17–20.

United States in southern Arizona, but the form described from there (*S. sessilis* Greene) does not differ in any important respect from Mexican material. The following variety may be recognized:

Saracha procumbens var. **pilosula** Morton, var. nov.

A var. typica caulibus foliisque ubique molliter pilosulis, foliis basi longe decurrentibus, petiolo fere nullo differt.

Type in the U. S. National Herbarium, no. 1,207,342, collected at Orizaba, Veracruz, Mexico, altitude 1660 meters, Aug. 10, 1924, by George L. Fisher (no. 257). A duplicate type is at the Field Museum.

The new species described below brings the total of North American species to four. A good many more are found in Andean South America, but not so many as are described. The material at my disposal from the latter region is not adequate for a comprehensive treatment of the genus. It seems likely, however, that at least *S. contorta* R. & P. and *S. caracasana* Bitt. are synonyms of *S. procumbens.*

My study of this genus has been much facilitated by the loan of specimens from the Gray Herbarium of Harvard University, the Field Museum of Natural History, the New York Botanical Garden, and the Missouri Botanical Garden. I have also been greatly aided by the photographs of the types of species described by Miers, kindly made for me at Kew by Dr. William R. Maxon.

Saracha confinis Morton, sp. nov.

Herba perennis depressa, basi ramosa, radice fusiformi, caulibus vix ramosis, usque ad 17 cm. longis, puberulis; folia parva rhombea, usque ad 2 cm. longa et 1.3 cm. lata, basi angustata, petiolo subnullo, apice acuta, ubique puberula, pilis hyalinis flaccidis septatis eglandulosis; inflorescentia axillaris umbellata biflora, pedunculo communi usque ad 12 mm. longo, puberulo, pedicellis 10–20 mm. longis, puberulis; calyx 4 mm. longus, pilosulus, rotatus, accrescens, demum fere 10 mm. longus; corolla rotata, ca. 6.5 mm. longa, virescenti-alba; filamenta aequalia, ca. 3 mm. longa, 1 mm. supra basin corollae inserta, deorsum perspicue pilosa; ovarium et stylus glabri; bacca (immatura) ca. 9 mm. diam.

Type in the U. S. National Herbarium, no. 1,586,075, collected on a roadside bank at Santa Elena, above Tecpam, Dept. Chimaltenango, Guatemala, altitude about 2500 meters, July 18, 1933, by Alexander F. Skutch (no. 447).

Saracha confinis differs from its nearest relative, *S. procumbens*, in its very much smaller size (the stems being less than 20 cm. in length), its minute rhombic leaves, and its two-flowered umbels. The filaments are much more strongly pubescent than is usual in *S. procumbens.*