

A NEW GOSSYPIUM FROM GUERRERO, MEXICO

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Gossypium laxum sp. nov. Arbor 4–6 m alta; truncus ca. 1 altus, cortice griseo-maculoso; rami graciles, patuli, pauci-punctati; laminae foliorum 3–5-lobatae, cordatae, 7–12 cm longae, glabratae ad supre, stellato-pubescentes infra; pedunculi 4–7 mm longi, glabri; bracteolae triangules, glabratae, persistentes, 2–3 mm longae; calyx cupulatus, 8–10 mm longus, punctatus; corolla 5–8 cm longa, tubiformis, erubescens, intra ad basim rubro-purpurea; capsulae 3–5 loculatae, ovatae, 25–35 mm longae; semina turbinata, 5–7 mm longa, fibris 6–8 mm longis obtecta.

Diffusely branched small tree 4–6 m tall with trunk less than 1 m high, 10–20 cm in diameter, bark mottled gray on trunk and older branches, brown on younger branches, these dotted with reddish-brown, circular lenticels ca. 0.5 mm in diameter; branches slender, flexuous, glabrate, the young stems stellate-pubescent; petioles stellate-pubescent, 3–6 cm long, punctate with reddish-black glands; leaf laminae 3–5 lobed, 7–12 cm long, 8–14 cm broad, glabrate above, sparingly stellate-pubescent below, foliar nectary absent to vestigial; flowers borne on much reduced, 1–2-jointed sympodia in axils of distal 2–3 nodes of branches; pedicels 4–7 mm long, glabrate; bracteoles triangular, glabrate, 2–3 mm long, each subtended by a vestigial nectary; calyx cupulate, glabrate, 8–10 mm long, punctate with reddish-black glands, the lobes reduced to aristate tips 1–2 mm long; corolla 5–8 cm long, tubular; petals imbricate, sparsely punctate with reddish-black glands, stellate-pubescent, pink with deep-red spot covering lower one-half within; androecium 2.5–3.0 cm long, proximal and distal filaments of about equal length, filaments and anthers reddish; capsules 4–5 locular, 25–35 mm long, ovate, acutely beaked, dotted with dark, slightly raised glands, the sutures lacking cilia along inner margins, seeds turbinate, 5–7 mm long, 2.5–3 mm in diameter, covered with fibers 6–8 mm long; seed coat dark-brown, smooth.

Holotype: 0.2 km from Mex. highway 95 on side road from Milpillas to Xochipala, Guerrero, Mexico, alt. 2200 feet, October 17, 1967, *Phillips 945*, (NCSU).

Representative specimens: 2.5–3.0 miles west of highway 95 on road to Cerro Teotepec, *Anderson & Laskowski 4466*, (MICH). Km 234 Carr. Acapulco, Cañon de Zopilote, cerca Venta Vieja, *Miranda 9254*, (MEXU). Cañon de Zopilote, *Miranda 3969*, (MEXU). Milpillas, at Km 236 on Iguala-Acapulco highway, alt. 2200 feet, *Fryxell 614*, (ARIZ, US). Near Xochipala, alt. 3000 feet, *Fryxell 617*, (F, MEXU).



FIG. 1. *Gossypium laxum*: A, vegetative branch, X $\frac{1}{8}$. B, calyx, X 1. C, capsule, X 1. D, seed (delinted), X 1. E, seed, X 2.

The type of *Gossypium laxum* was collected from a large population that extends ca. 20 km along Mex. Highway 95 from just north of its crossing of the Rio Balsas, south through Cañon de Zopilote. This distribution ranges from 2200 to 3000 feet in elevation.

Gossypium laxum is apparently more closely related to *G. aridum* (Rose & Standley) Skovsted and *G. lobatum* Gentry than to other taxa of the American diploid cottons, having the pink corolla and large, deep-red petal spot characteristic of these two species. *Gossypium laxum* is a small, open, tree 4–6 m in height, whereas, *G. aridum* (distributed along the Pacific slope from Sinaloa to the Istmo de Tehuantepec and also in Puebla) develops into a columnar tree 10–15 m in height and *G. lobatum* (Michoacan) is a spreading tree 8–12 m high. Other characteristics distinguishing *G. laxum* from *G. aridum* and *G. lobatum* are listed in Table 1.

TABLE 1. PRINCIPAL CHARACTERISTICS DISTINGUISHING GOSSYPIUM LAXUM FROM *G. ARIDUM* AND *G. LOBATUM*.

	<i>G. laxum</i>	<i>G. aridum</i>	<i>G. lobatum</i>
Leaves	3-5 lobed, glabrate above, stellate-pubescent below	entire, glabrate above, puberulent below	3-5 lobed, stellate-pubescent above and below
Foliar nectary	usually absent	usually present	present
Calyx	glabrate, lobes 1-2 mm long	stellate-pubescent, lobes 1-3 mm long	stellate-pubescent, lobes 8-10 mm long
Androecium	apical and proximal filaments subequal in length	apical filaments shorter than proximal	apical filaments shorter than proximal
Capsule	ovate, 3-5 locular, sutures lacking cilia	narrowly ovate, 3 locular, sutures ciliate	narrowly ovate, 3 locular sutures ciliate
Seed	turbinate, 1.5 times longer than broad	elongate, 3-4 times longer than broad	elongate, 4-5 times longer than broad

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NOTES AND NEWS

CORALLORHIZA MERTENSIANA BONG. IN MENDOCINO COUNTY.—On 4 May, 1970, a colony of thirteen plants of a *Corallorhiza* species was discovered in a pine woodland at Jughandle Creek at an altitude of 100 feet near Mendocino, Mendocino County, California. The species appears to agree with the description of *C. Mertensiana* Bong. in Munz, P. A., 1959, *A California flora*, pp. 1399-1400, Univ. Calif. Press, Berkeley, and also with the specimens deposited in UC. This locality represents a southward extension of the range of the species, its nearest locality being in Humboldt Co. (Munz, *ibid.*). It is also of interest that the species is growing at a far lower altitude than is usual. *C. Mertensiana* is usually a plant of montane coniferous forests at an altitude of 4000-5000 feet (Munz, *ibid.*). The occurrence of this species in this locality is problematical. One possible explanation is that the species is a relict one, which is able to maintain itself because of summer fogs in this coastal strip. The fogs would reduce incident radiation and so reduce ambient temperature (Visher, S. S., 1954, *Climatic atlas of the United States*, pp.10-13, p. 177 No. 431, p. 179 No. 438, p. 186 No. 459; Harvard Univ. Press, Cambridge). A further example of a normally montane plant found in this coastal strip is *Menyanthes trifoliata* L., which perhaps gives added support to this possible explanation of the distribution of *C. mertensiana* (H. G. Baker, personal communication). The problem requires further study. A specimen and photograph of the plant have been deposited in JEPS. I am indebted to L. R. Heckard and H. G. Baker for information on this species.—WILLIAM ELFYN HUGHES, Ty-Pella, Siliwen Road, Bangor, N. Wales, U.K.