

FIGURE 6. Distribution map of *Sobralia geminata* in Costa Rica.

Tapanti Refuge, but has observed no self-pollinating in the species in that area.

Now that we know *S. geminata*, we find plants of this species nearly everywhere we go in central Costa Rica. Indeed, we are rather tired of seeing them.

***Sobralia sotoana* Dressler & Bogarín, sp. nov.**

TYPE: PANAMA. Veraguas, collected near road north of Santa Fé de Veraguas, flowered in culture in Jardín Botánico Lankester, pressed from cultivation, 8 August 2009, R.L. Dressler 7168 (holotype: CR; isotype: JBL-spirit). FIG. 7, 8D.

Species *Sobralia aspera* Dressler & Pupulin similis, labello interius intense aurantiaco, callis basalibus farinosis differt.

Roots to 5 cm in diameter. *Stems* 33-75 cm, ca. 3 mm in diameter basally, 2 mm distally, sheaths slightly scurfy. *Leaves* elliptic or lance-elliptic, long acuminate, 15.0-23.5 x 2.2-5 cm. *Inflorescence* 3-5.0 x 0.5 cm, outer bract acuminate, inflorescence usually horizontal or nodding; subtending foliar bracts acuminate, 15-16 x 1.4-1.7 cm. *Ovary* sessile, 13-17 mm. *Sepaline tube* 12-15 mm. *Dorsal sepal* 3.3-4.5 x 1-1.6 cm, elliptic or lanceolate, subobtusate. *Lateral sepals* elliptic-lanceolate, tapering, 3.2-4.5 x 1.1-1.5 cm. *Petals* obovate, subobtusate, 3.1-3.5 x 1.2-1.3 cm.

Lip oblong-obovate, 4-4.2 x 2.8-3.1 cm, without keels; basal calli ca. 6 mm; column clavate, markedly thicker below stigma, 23-24 cm x 0.5 mm laterally x 4-4.5 mm dorsoventrally.

DISTRIBUTION: only known from Panama.

EPONYMY: In honor of Miguel Angel Soto Arenas, to whom this issue of Lankesteriana is dedicated.

When we visited Finca Dracula (Cerro Punta, Panama) in 2006, there were two relatively small *Sobralias* flowering. The staff at Finca Dracula referred to one as “Veraguas” and the other “Santa Fe,” but the city of Santa Fe is in Veraguas province, so these terms seemed a bit unclear. Erick Olmos explained that both species were found in the same area, near a lake north of Santa Fe, on the road that may eventually reach Calovébora, on the Caribbean coast. In any case, “Veraguas” proved to be indistinguishable from *Sobralia aspera*, earlier described from Costa Rica (Dressler & Pupulin 2008), while the other is clearly a distinct species. Further, the Costa Rican and the Panamanian plants of *S. aspera* flower on the same days, thus supporting their specific identity. Both of these resemble *Sobralia leucoxantha*, *S. macra*, *S. kruskayae* and *S. tricolor*, while *Sobralia* “Santa Fe” is clearly distinct from the other species just mentioned. The plant had produced very few flowers in the first year in Costa Rica, but in 2009 it has been quite floriferous.

Sobralia sotoana resembles *S. aspera* vegetatively, though the plant is a bit smaller. The upper stems are weakly but distinctly zig-zag, and the inflorescences much more markedly nodding, or reflexed, so the flowers are somewhat pendant. The flowers are a bit smaller and the lips are intense orange within with a narrow white margin.

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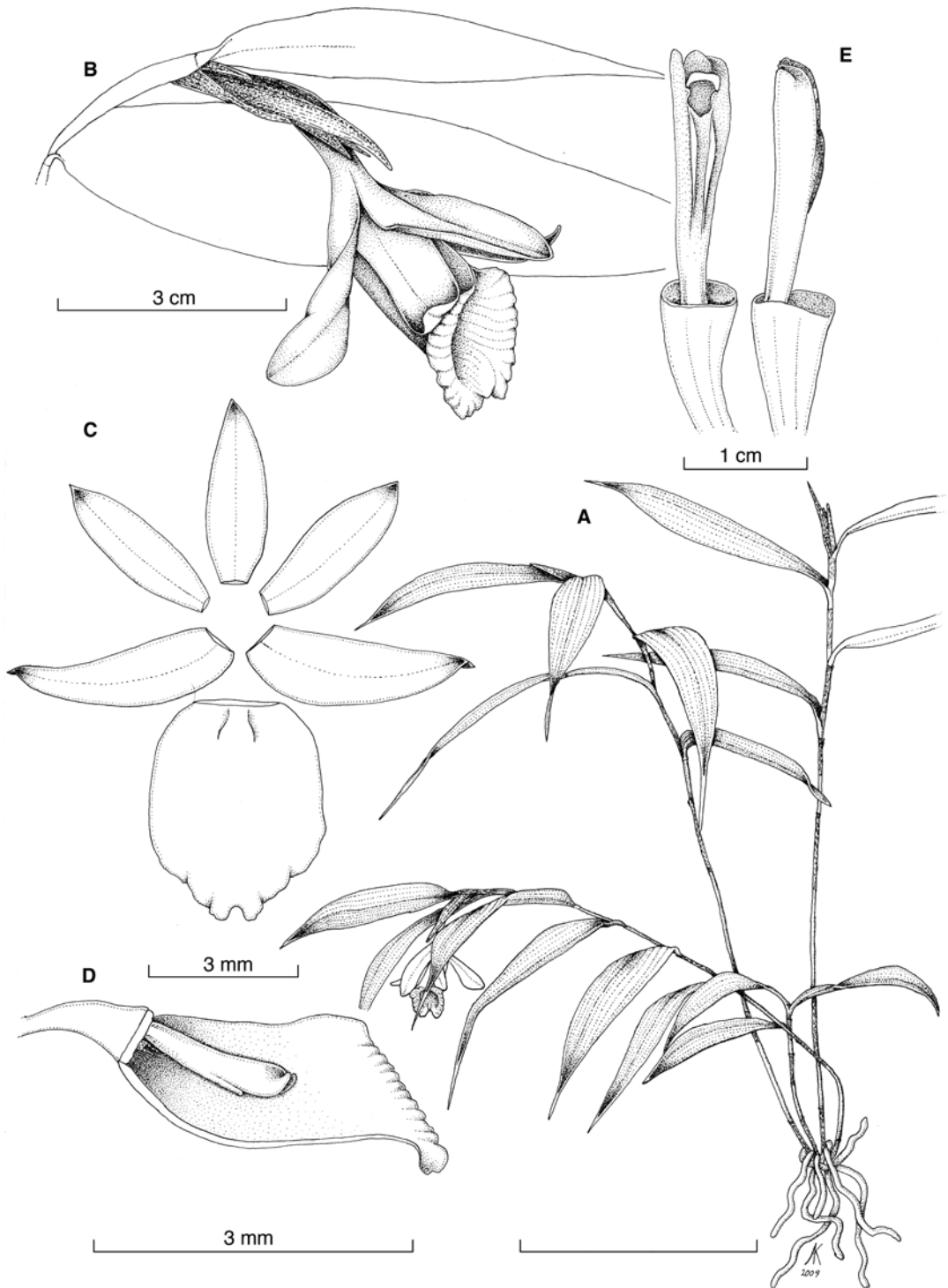


FIGURE 7. *Sobralia sotoana* Dressler & Bogarín. A — Habit. B — Flower. C — Dissected perianth. D — Column and lip, side view. E — Column, frontal and side views. Drawing by A. Karremans from the holotype.