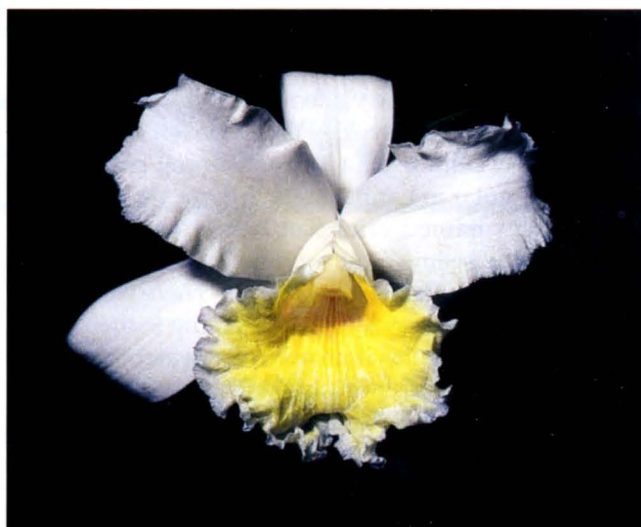




Sobralia kerryae, flower of type plant, photographed Nubes de Santa Elena, March 1995.



Sobralia "leucoxantha," of Paul Allen, from El Valle de Antón, Panama, photographed in cultivation 1996.

A NEW WHITE SOBRALIA FROM COSTA RICA

ROBERT L. DRESSLER

IDENTIFYING large-flowered sobralias is something of a nightmare. The smaller-flowered species are mostly distinctive and easy to identify, but the larger and more attractive species are hard to tell apart as herbarium specimens, and in many cases the names are thoroughly confused. As an example, the most-used name for white-flowered sobralias in Costa Rica is *Sobralia leucoxantha*. This species was described by H. G. Reichenbach in 1866, and his description is a bit vaguer than usual, even for Reichenbach. He describes the flowers as about equal to those of *S. fenzliana* (= *S. decora*), which is, at best, a medium-sized flower. The type specimen, Wendland's collection 1246, in the Reichenbach Herbarium in Vienna, shows a relatively small *Sobralia*, with the flower about the size of *S. decora*, with very narrow, strongly pleated leaves. I have not seen other plants that match the original of *S. leucoxantha*, but I would like to visit Desengaño (or "Disillusion"—which may be what I'll

find when I get there) to look for a living plant of the real *S. leucoxantha*.

In the northern lowlands of Costa Rica and in adjacent Nicaragua, there is a beautiful, large-flowered *Sobralia* with white sepals and petals and orange-yellow lip. This species was illustrated as *Sobralia leucoxantha* in the *Botanical Magazine* in 1889, so that name is usually used for this lovely *Sobralia*. The name *S. leucoxantha* has also been used for a quite different white-flowered *Sobralia* in the area of El Valle de Antón in Panama (Allen, 1958). Some have considered *S. leucoxantha* a synonym of *S. powellii*, but that Panamanian plant is quite distinct in both plant and flower.

The name *S. leucoxantha* has been used for several very different species. Most misapplications are used for plants that are much showier than the original *S. leucoxantha*, and I fear that some of them must be considered "new species," though I'm not quite ready to do that. The species that I will describe here is one of the



Sobralia powellii, Santa Rita Ridge area, prov. Colón, Panama, photographed about 1978-1980.



Sobralia "leucoxantha," of *Botanical Magazine*, Los Angeles Cloud Forest Reserve, prov. Alajuela, Costa Rica, June 1996

few attractive, white-flowered sobralias in Costa Rica that have not been confused with *S. leucoantha*.

In March of 1993, we visited the village of San Rafael de Platanos de Pejibaye de Pérez Zeledón with Alvaro Jiménez and Dora Emilia Mora. Naming places after saints is popular in Latin America: there are at least six other towns named after San Rafael in Costa Rica. Still, this one seems a bit too much, and we usually refer to it as "San Rafael de et cetera." There we met the Fallas family, who very kindly let us camp in their living room. Don Uriél Fallas is an avid bird watcher, and his son, José, is an orchid enthusiast with quite a nice collection of local species. José led us to Alto del Carmen, a cloud forest-covered hilltop at about 800 to 1,000 meters elevation overlooking the Pacific beaches. There we found a white-flowered *Sobralia* quite like the large plant that José had hanging outside their window. Unfortunately, we had no plant press, and trying to make a specimen of a *Sobralia* without a plant press is a waste of time; therefore, we photographed the flowers and left the plant with José. When I later studied the Costa Rican species of *Sobralia*, I realized that we had photographed an unnamed species and I resolved to go back for another plant.

We haven't returned to San Rafael yet, but in March of 1995, we visited Las Nubes de Santa Elena, at about 1,150 meters elevation on the other side of the dry San Isidro Valley. There, we found a single plant of the same sort in flower. In this case, after taking photos of the flower, I pressed part of the plant and preserved the

flower in alcohol. We have a piece of the plant growing in the greenhouse in Gainesville, Florida, and it has flowered several times, so that we have more material, though I would still like to go back to both Nubes de Santa Elena and San Rafael de et cetera.

I take great pleasure in naming this attractive species for my wife Kerry, who has faithfully followed me in field and greenhouse photographing orchids. She has carried her camera up and down hill in rain, mud, thorn scrub, and occasionally on decent trails, while being bitten by black flies, chiggers, ticks, mosquitoes, horse flies and (in Asia) leeches.

***Sobralia kerryae* Dressler, sp. nov.** Holotype: Costa Rica: prov. Puntarenas, Las Nubes de Santa Elena, WSW of San Isidro, cutover forest, elev. ca. 1,150 m; 22 March 1995; R. L. Dressler 6178 (MO).

Herba epiphytica. Caulis teres, vaginis arctis dense furfuraceis inclusus. Folia disticha, ovata, acuminata, subtus furfuracea. Flos singulus, terminalis, bracteis inbricantibus vestitus. Sepala elliptica vel ovato-elliptica, acuta. Petala late elliptica. Labellum in circuitu subquadratum.

Epiphytic, stems 60-100 cm; sheaths verruculose, scurfy, leaves narrowly ovate, acuminate, 21-22 × 6.4-7.4 cm, minutely scurfy, esp. on reverse; inflorescence terminal, elliptic bract cluster ca. 6.5 cm long, densely short-scurfy; flowers successive, sepals greenish cream, greenish without, petals and lip white, lip with lemon yellow within throat and orange near base; sepals elliptic or ovate-elliptic, acute, 6.6-7.5 × 2.1-2.5 cm; petals broadly elliptic or ovate-elliptic, 6.7-7.4 × 2.7-3 cm, broadly acute; lip cuneate, quadrate-oblong, retuse, 6.5-6.8 ×

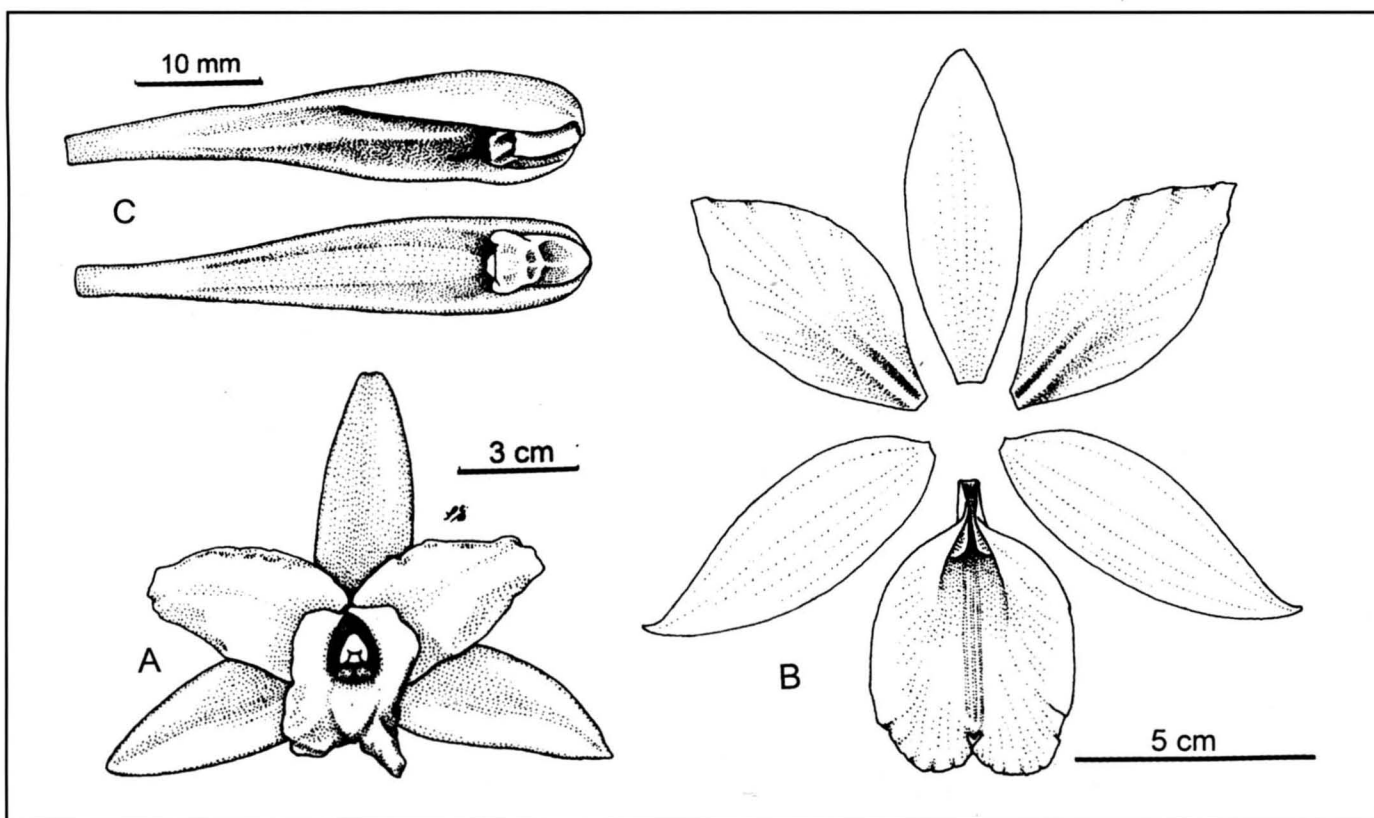


Figure 1. *Sobralia kerryae*. a. Front view of flower. b. Flower parts spread out. c. Two views of column.

4.3-5 cm, weakly 3-lobed with undulate margin distally, basal calli ca. 12 mm long, basally united (forming a "V"), lip with 3 low keels to middle of blade; column 3-3.5 cm, clavate, distally ca. 6 mm deep and wide.

Sobralia kerryae is distinctive in having rather large and nearly pure white flowers. Superficially, it reminds one of *S. macrophylla*, with greenish sepals, white flowers with little yellow within and rather narrow petals. *Sobralia macrophylla*, however, has a very different sort of inflorescence, with short, broad floral bracts, like the inflorescences of *S. lindleyana* or *S. doremiliae* (see Figure 4, Dressler, 1995). *Sobralia kerryae* does have yellow within the throat with some orange at the very base, but the spreading blade of the lip is quite white. Another distinctive feature is that the basal calli are united into a V-shaped structure.

Acknowledgments

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