

***Sobralia quinata*** Dressler, *sp. nov.*

TYPE: COSTARICA Cartago: Turrialba, Moravia de Chirripó, Quebrada Tsipirí, 9°48'N 83°23'W, 1090 m, on steep slope along the Quebrada, lower montane rain forest, primary vegetation, 26 Apr. 2002, *F. Pupulin, H. Montealegre, M. Bonilla & J. C. Cervantes 3644* (holotype, USJ). FIG. 1

Similis *Sobraliae* nutanti Dressler, sed planta et flore parvioribus, labello ovato-pandurato quinque carinis ornato, alis columnae brevissimis.

*Herb* terrestrial or epiphytic, caespitose, roots 3-5 mm in diameter, stems 42-50 cm x 2-3 mm. *Leaves* 17-25 x 0.9-2.1 cm, lanceolate, acuminate. *Inflorescence* terminal, floral bracts *ca.* 18 x 5-6 mm, lance-ovate, subacute, bract cluster gradually elongating to about 4 cm, ovary and pedicel about 17 mm. Sepals and petals pale green, blade of lip white with

magenta spots, outer keels with magenta margins. *Sepals* 25-26 x 6.4-7 mm, narrowly elliptic, apiculate. *Petals* 25-27 x 6-6.5 mm, narrowly elliptic, apiculate. *Lip ca.* 25 x 13 mm, ovate-pandurate, basally clasping column, shallowly 3-lobed, with 5 keels, these reaching 15-18 mm from base, outer keels *ca.* 12 x 1 mm, undulate, inner keels *ca.* 14 x 1.5 mm, all ending in slightly higher lobules, lateral lobes *ca.* 2-2.5 x 6-7 mm, low, rounded, isthmus *ca.* 9 mm wide, midlobe subcuadrate, undulate, shallowly retuse and apiculate, *ca.* 11 mm wide. *Column ca.* 10 mm long, wings toothlike, *ca.* 0.8-1 mm. *Capsule* 7-7.5 x 0.8-1 cm.

OTHER SPECIMENS SEEN Costa Rica. Alajuela: San Ramón, Reserva Forestal, a orillas de río dentro del bosque, 18 feb. 1983, *Carvajal 353* (MO, SEL) 1400 m, 17 nov. 2002, *J. F. Morales 8873* (INB); San José: Cantón de Vázquez de Coronado, Parque Nac. Braulio Carrillo, along trail from S.J.-Limón Hwy to Rio Hondura, Bajo La Hondura; about 5 km below tunnel, in secondary forest, 10°04'10"N 83°59'20"W, 1250 m., 18 Dec. 1990, *S. Ingram, K. Ferrell 813* (INB, SEL); La Hondura, 15 Mar. 1924, *P. C. Standley 37573* (AMES).

In *Sobralia quinata* the lip is distinctly 5-keeled, and the keels reach well beyond the lateral lobes. *Sobralia lancea* and *S. pardalina* have the lip more markedly pandurate, with the apical portion more or less hastate, and apparently have only 2 keels that reach only to the isthmus. I have seen little good material of the South American species, and the features given in the key below are from the the treatment in the Flora of Ecuador (Garay 1978). While *S. quinata* has only five keels, the outer keels

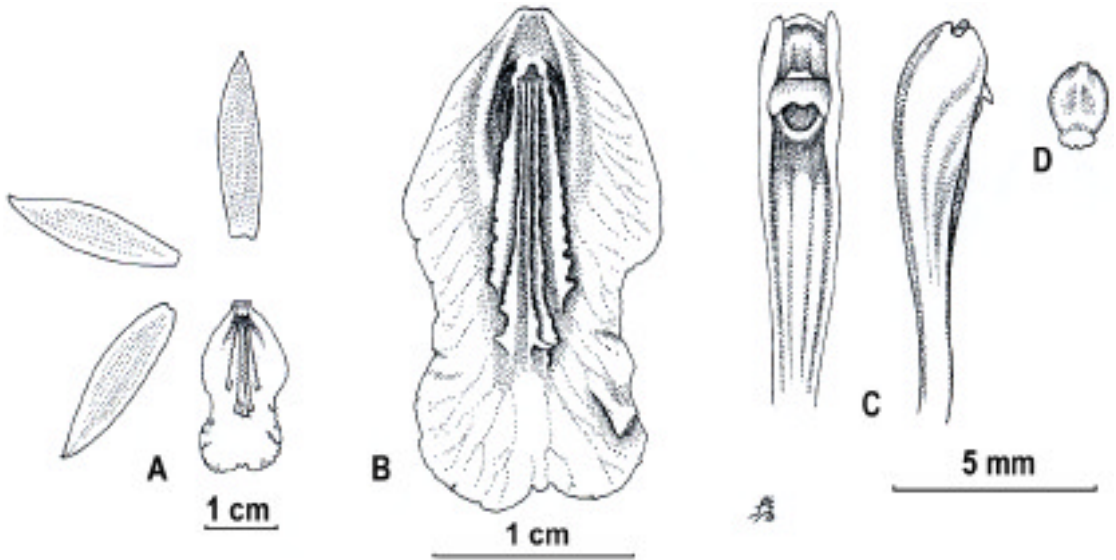


Fig. 1. *Sobralia quinata* Dressler. A - floral parts, flattened. B - Lip, flattened. C - Column ventral and lateral views. D - Anther. Drawn from type specimen.

are higher throughout, and the three lower keels have higher distal lobes, suggesting a close relationship with the larger *S. nutans*, which has 7 keels. *Sobralia*

*quinata* also resembles *S. nutans* in that the flowers are pendent and face the stem. The epithet *quinata* refers to the presence of five keels on the lip.

REVISED KEY TO THE SPECIES OF *SOBRALIA* SECTION *GLOBOSAE*

1. Lip ovate, subovate or shallowly pandurate, with 5-7 keels, these much longer than lateral lobes ..... 2
2. Lip with 7 keels, 2 outer keels on each side prominent, dentate throughout, 3 inner keels low basally, with prominent, erect apical lobules ..... *Sobralia nutans* [Panamá]
2. Lip with 5 keels ..... 3
3. Lip with outer keels undulate, inner keels lower but with distal lobules; lip ovate-pandurate ..... *Sobralia quinata* [Costa Rica]
3. Lip with 5 low keels, these distally dentate; lip distally shallowly 3-lobed ..... *Sobralia candida* [Venezuela, Colombia, Ecuador, Peru, Bolivia]
1. Lip clearly pandurate, keels about half length of lip; outer keels undulate, inner keels lower and shorter (if present) ..... 4
4. Lip with a V-shaped basal callus; leaves thin, membranous ..... *Sobralia pardalina* [Colombia, Ecuador]
4. Lip without basal callus; leaves subcoriaceous ..... *Sobralia lancea* [Colombia, Ecuador]