

A New Species of *Crotalaria* (Leguminosae, Papilionoideae) from Southeastern Brazil

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ABSTRACT. *Crotalaria miottoae*, a new species of Leguminosae from southeastern Brazil, is described and illustrated. The new species is close to *Crotalaria vitellina* Ker Gawler, but differs in having larger wing petals, fruits, and seeds, in having terminal inflorescences, rarely leaf-opposed, and the leaflets usually rhombic or narrowly elliptic.

RESUMO. *Crotalaria miottoae*, uma nova espécie de Leguminosae no sudeste do Brasil é descrita e ilustrada. Esta espécie é relacionada à *Crotalaria vitellina* Ker Gawler, diferindo desta por possuir alas, frutos e sementes maiores, inflorescências terminais, raramente opositifólias e folíolos rômnicos ou estreitamente elípticos.

Key words: Brazil, *Crotalaria*, Leguminosae, Papilionoideae.

Crotalaria L. is a large legume genus of ca. 600 species distributed in the tropical and subtropical regions of the world mostly in Africa and Asia (Polhill, 1981, 1982), while 42 species have been recorded for Brazil. During a taxonomic revision of the Brazilian species of *Crotalaria*, an undescribed species came to our attention and is described herein as new.

Crotalaria miottoae A. S. Flores & A. M. G. Azevedo, sp. nov. TYPE: Brazil. Minas Gerais: Camanducaia, Monte Verde, estrada para Pedra Partida, 2 Jul. 2002, A. S. Flores 1036 & R. Schütz Rodrigues (holotype, UEC; isotypes, F, HBG, MO, SPF). Figure 1.

Haec species *C. vitellinae* ramis puberulis et bracteis persistentibus similis sed alis longioribus, leguminibus et seminibus majoribus, foliolis saepe rhombicis vel anguste ellipticis et inflorescentiis terminalibus raro oppositifoliis differt.

Erect shrub or subshrub, 1.5–2 m high; branches puberulous to finely pubescent with short, yellow or white trichomes. Internodal stem wings absent. Leaves digitately 3- to 4- or 5-foliolate, petiole 2.5–5.4 cm long, puberulous; leaflets usually rhombic

or narrowly elliptic, the apex acuminate or acute, base cuneate, 3–5.8(7.4) × 1–1.5(2.5) cm, discolorous, puberulous above, glabrous beneath; stipule 1–1.5 mm long, linear, usually persistent. Inflorescence a terminal or rarely leaf-opposed raceme, 7–15 cm long, 8- to 25(35)-flowered; peduncle 1.5–2.5 cm long; pedicel 7–9 mm long; bract 2–4 mm long, filiform, persistent; bracteole 1–2 mm long, filiform, inserted at the middle of the pedicel, persistent. Calyx 7–10 mm long, shorter than the corolla, the tube campanulate; lobes 5, twice as long as the tube, triangular to lanceolate, finely pubescent or glabrescent; corolla yellow; standard petal 1.2–1.8 × 1.1–1.7 cm, suborbicular; wing petal 1.3–1.8 cm long, obovate to oblong; keel 1.1–1.6 cm long, almost as long as the wing petals, dorsal margin rounded, the non-twisted beak short, the margins ciliate or glabrous. Stamens dimorphic with anthers alternately 5 long, basifixed and 5 smaller, dorsifixed; ovary 4–5 mm long, oblong, puberulous along the margin and glabrous at the center, stipitate; style curved, stigma pubescent. Legume 3.2–4.3 × 1.1–1.4 cm, broadly oblong or obovoid, puberulous or glabrous, stipitate, black at maturity, ca. 20-seeded; seeds 6–7 × 5–6 mm, oblique-cordiform, seed coat black, opaque.

Distribution and ecology. Southeastern Brazil, in Rio de Janeiro, Espírito Santo, and Minas Gerais states. *Crotalaria miottoae* grows in campo rupestre, along the margins of wet forest and inside montane forests at elevations of 1000–1900 m.

Phenology. Collected in flower and in fruit during most of the year.

The species is named in honor of Sílvia T. Sfoglia Miotto, Brazilian legume specialist, who has stimulated this work since the beginning.

According to the sectional classification proposed by Bisby and Polhill (1973), *Crotalaria miottoae* should be assigned to section *Chrysocalycinae* (Bentham) Baker f. due to its calyx subequally 5-lobed and 0.7 as long as the keel. It is closely related to *Crotalaria vitellina* Ker Gawler, both spe-

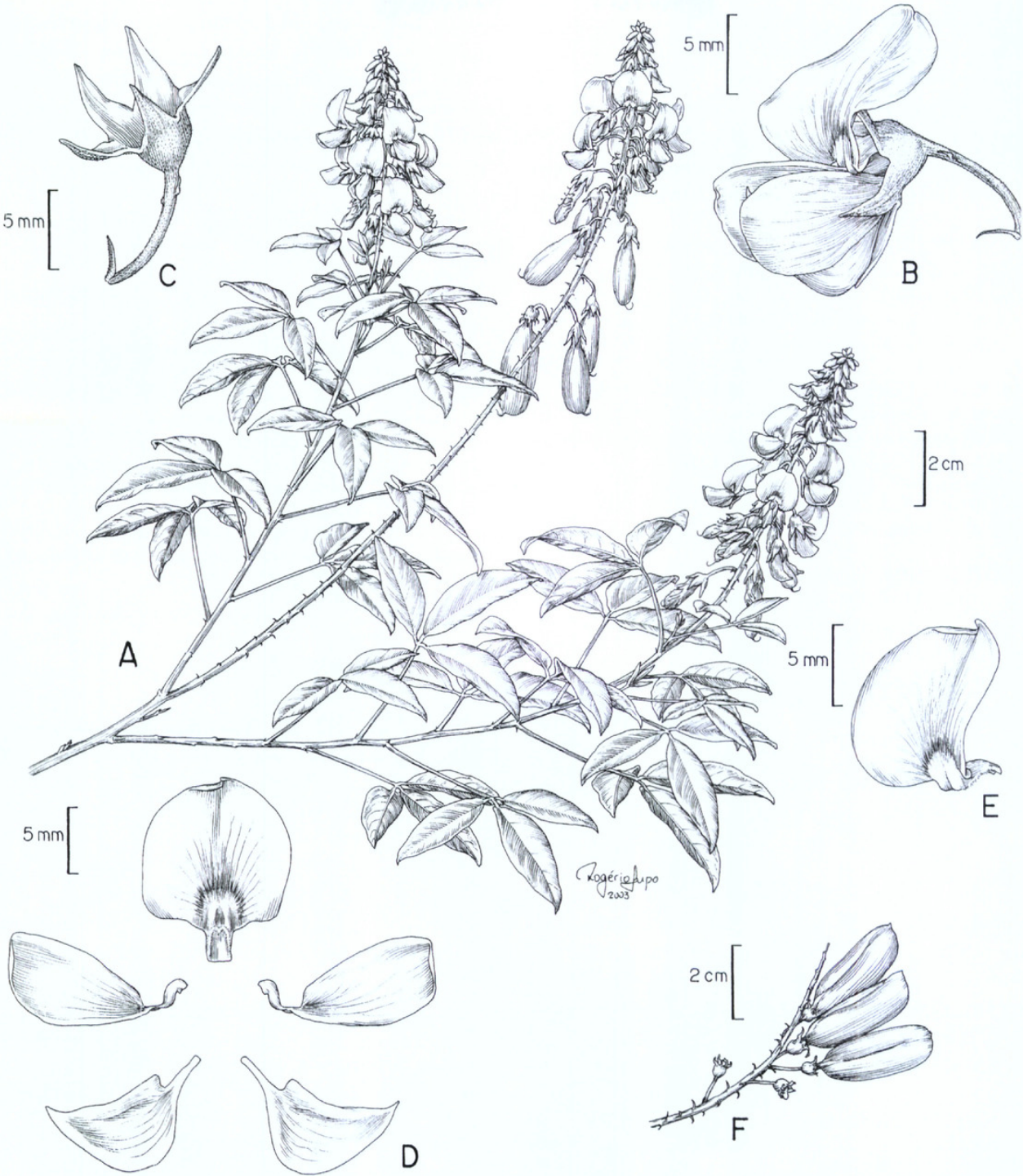


Figure 1. *Crotalaria miottoae* A. S. Flores & A. M. G. Azevedo. —A. Fertile branches. —B. Flower. —C. Calyx. —D. Details of corolla: standard petal, wings, and keel. —E. Alternative view of standard petal. —F. Part of infructescence with mature fruits. (Drawn from the holotype.)

cies having puberulous to finely pubescent branches and persistent bracts. However, *C. vitellina* has smaller wing petals (0.9–1.3 cm long), legumes $1.6\text{--}3.2 \times 0.6\text{--}0.9$ cm, subcylindrical or oblong-ellipsoid, brown at maturity, seeds 4×4 mm, brown and elliptic, oblong, or obovate leaflets. *Crotalaria miottoae* also differs in having terminal inflorescences, which are absent in *C. vitellina*. *Crotalaria laeta* Martius ex Benth, proposed as a

variety of *C. vitellina* by Windler and Skinner (1982), is considered a distinct species by Flores (unpublished thesis). *Crotalaria laeta* differs from both species in having the wing petal smaller than the keel. In addition, it differs from *C. miottoae* in having a smaller wing petal (7–8 mm long), keel (9–11 mm long), fruits ($1.2\text{--}1.8 \times 0.4\text{--}0.7$ cm), and seeds (3×3 mm). *Crotalaria miottoae* resembles vegetatively *C. micans* Link and has similar fruits,

but *C. micans* has a keel that is lanate toward the upper margin with a slightly incurved beak and caducous bracts and bracteoles.

Some specimens of *Crotalaria miottoae* that occur in Rio de Janeiro and Espírito Santo states have leaves digitately 3-, 4- or 5-foliolate and more dense pubescence in branches, ovaries, and legumes.

Paratypes. BRAZIL. **Espírito Santo:** Domingos Martins, Pedra Azul, BR 262 km 86, A. S. Flores 1074, R. Schütz Rodrigues & V. F. Mansano (UEC). **Minas Gerais:** Camanducaia, Monte Verde, A. S. Flores 619, R. Schütz Rodrigues, L. D. Meireles & R. Belinello (UEC); Serra do Cipó, km 135, ca. 150 km N of Belo Horizonte, H. S. Irwin, H. Maxwell & D. C. Wasshausen 20534 (F, UB). **Rio de Janeiro:** Nova Friburgo, Pico Nova Caledônia, H. C. de Lima 2527, P. E. Berry, J. F. Baumgratz & J. C. Gomes (F, INPA, RB); Serra dos Órgãos, D. R. Hunt 6474 (SP, UB); Teresópolis, Serra dos Órgãos, ca. 5 km SW of city of Teresópolis, G. Eiten & L. T. Eiten 7174 (SP, UB).

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