

Drosera graomogolensis (Droseraceae), a New Species from the Campos Rupestres of Minas Gerais, Brazil

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ABSTRACT. *Drosera graomogolensis* T. Silva sp. nov. is described from the region of Grão-Mogol, Minas Gerais, Brazil. The species is included in section *Drosera* and is related to *D. villosa* A. St. Hilaire. The morphological characters that distinguish it from other species in the section are discussed, together with details of habitat.

According to Silva (1994), the genus *Drosera* in Brazil has a short stem, 0.5–1.0 cm (rarely long); spatulate leaves (rarely linear), with stipules (rarely without); two to many flowers located on cyme inflorescences; a gynoeceium with 3 or 5 carpels, with 3 bipartite styles nearly to the base or 5 whole styles, and 5 or 6 lobed, two-lipped, clavate or fimbriate stigmas. The fruits are capsules with 3 or 5 valves, containing numerous seeds with reticulate or papillose testa.

In the course of floristic studies of the Brazilian “campos rupestres” (savanna-like vegetation that occurs at elevations over 600 m in the Brazilian states of Bahia, Goiás, and Minas Gerais), collections were made in the municipality of Grão-Mogol, in the northern part of the mountain range known as the “Cadeia do Espinhaço,” State of Minas Gerais. A study of the species in the genus *Drosera* for the Florula of Grão-Mogol confirmed one species to be distinct from all other known species in the genus in its vegetative and floral characteristics.

Drosera graomogolensis T. Silva, sp. nov. TYPE: Brazil. Minas Gerais: Grão-Mogol, Córrego da Bonita on the way up to the Morro Jambeiro, 7 Sep. 1990, T. R. S. Silva et al. CFCR 13506 (holotype, SPF; isotype, RB). Figure 1.

Herba 15.0–34.0 cm alta. Caules elongati, 3.0–7.0 cm longi. Folia rosulata, vinacea, matura pendentia, oblonga, 1.5–3.5 cm longa, 3.0–6.0 cm lata. Inflorescentiae 1–2, vinaceae, 14.0–31.0 cm longae; flores 10–16; pedunculi 13.5–18.5 cm longi; ovaria 3-carpellaria, ad 5.5 mm longa; styli 3, ad 4.0 mm longi, profunde 2-partiti; stigmata 6, 2–3-lobata. Fructus capsularis, valvis 3; semina obovoidea, reticulata.

Herb, 15.0–34.0 cm tall. Stems elongate, 3.0–7.0 cm long. Leaves wine-red, spreading with age,

forming a rosette, oblong, 1.5–3.5 cm long, 3.0–6.0 cm broad, villous on the upper $\frac{2}{3}$ of the upper surface, the glandular tentacles radially symmetrical, glabrous on the lower $\frac{1}{3}$, lower surface villous, the trichomes filamentous; stipules rectangular, membranaceous, 2.0–4.0 mm long, 1.5–2.0 mm broad, the laciniae 1.5–2.5 mm long. Inflorescences 1 or 2, wine-red, 14.0–31.0 cm long, bearing glandular trichomes, flowers 10–16; peduncles 13.5–18.5 cm long; bracts wine-red, linear, lower surfaces papillose with glandular trichomes, caducous; pedicels wine-red, 3.0–4.0 mm long; sepals wine-red, 4.0–6.0 mm long, united near the base, lower surfaces papillose, with glandular trichomes, laciniae oval, ca. 4.5 mm long, 1.5–2.0 mm broad, acute at the tips; petals unguiculate, 7.5–8.0 mm long; stamens ca. 4.0 mm long, anthers ca. 1.5 mm long; gynoeceium with 3 carpels, ca. 5.5 mm long, styles 3, ca. 4.0 mm long, bipartite nearly to the base; stigmas 6, 2–3-lobed. Fruits with 3 valves; seeds obovoid, testa reticulate.

Drosera graomogolensis is characterized by the elongate stems, the leaves that spread with age, the lobed stigma, and the obovoid seeds. The presence of spatulate leaves with petioles not distinct from the blade differentiates *D. graomogolensis* from *D. intermedia* Hayne, *D. cayennensis* Sagot ex Diels, *D. communis* A. St. Hilaire, *D. roraimae* (Klotsch ex Diels) Maguire & Laundon, *D. capillaris* Poirlet, and *D. brevifolia* Pursh, all of which possess evident petioles. *Drosera graminifolia* A. St. Hilaire has linear leaves, and *D. montana* A. St. Hilaire has leaves pressed close to the ground, a short stem, and inflorescences with up to 8 flowers. *Drosera sessilifolia* A. St. Hilaire belongs to section *Thelocalyx*, which is characterized by possessing a gynoeceium with 5 carpels and 5 styles with fimbriate stigmas.

Drosera graomogolensis is similar to *D. villosa* A. St. Hilaire, but the latter has short stems, a bilabiate stigma, and fusiform seeds (Fig. 2), while the leaves are pressed close to the ground. *Drosera graomogolensis* is placed in subgenus *Drosera* sect. *Drosera* (Diels, 1906).

Drosera graomogolensis is found in sizable pop-

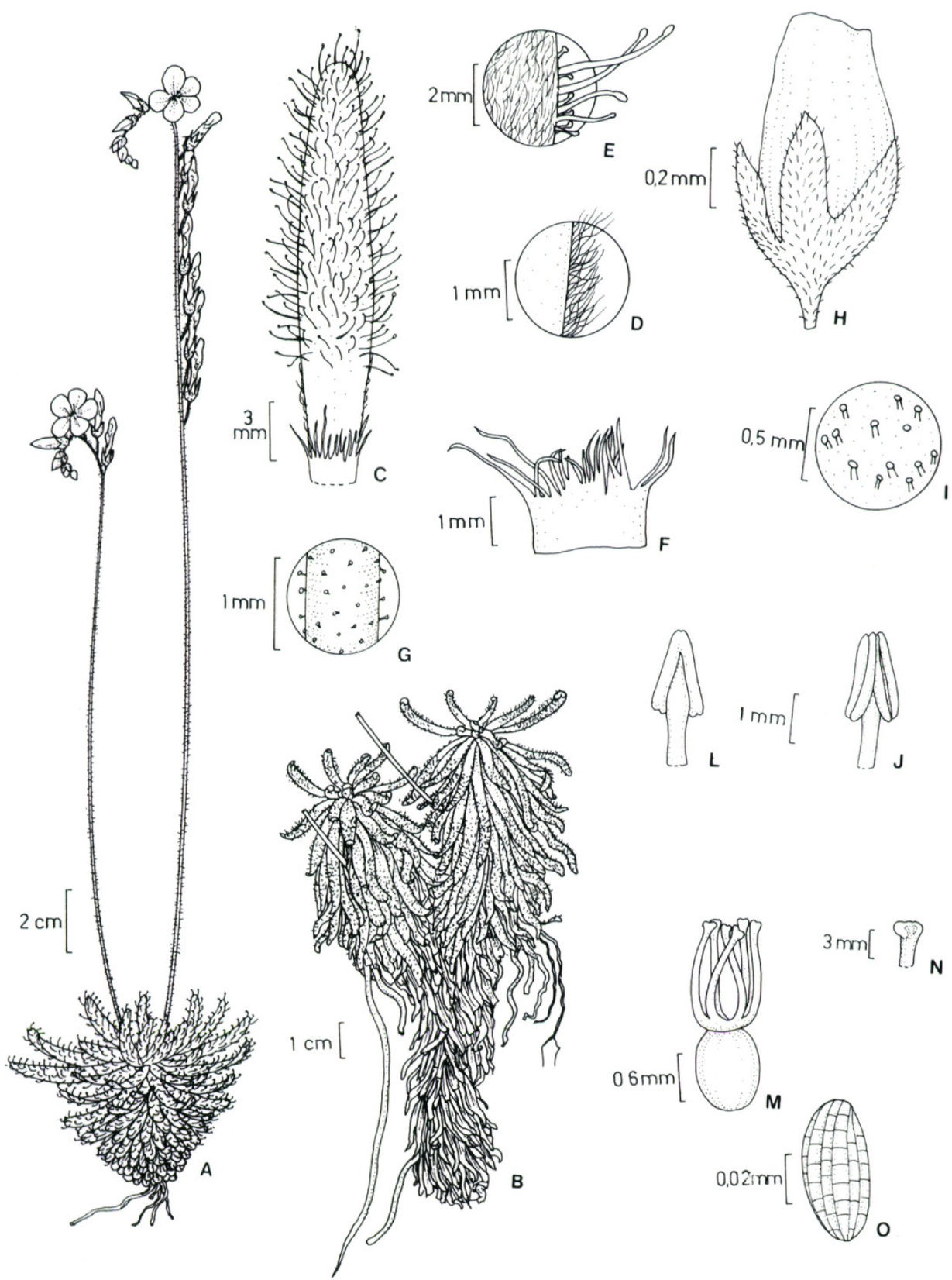


Figure 1. *Drosera graomogolensis* T. Silva. —A. Habit. —B. Habit with peduncles from previous flowering stage. —C. Leaf, upper surface. —D. Leaf, upper surface (detail). —E. Leaf, lower surface (detail). —F. Stipule. —G. Peduncle, with detail of vestiture. —H. Flower bud. —I. Sepal, with detail of vestiture. —J. Stamen, dorsal surface. —K. Stamen, ventral surface. —L. Gynoecium. —M. Stigma. —N. Seed. A, C–O based on *Cavalcanti et al. CFCR 8510* (SPF); B based on a specimen of the garden at the Universidade de São Paulo, Departamento de Botânica.

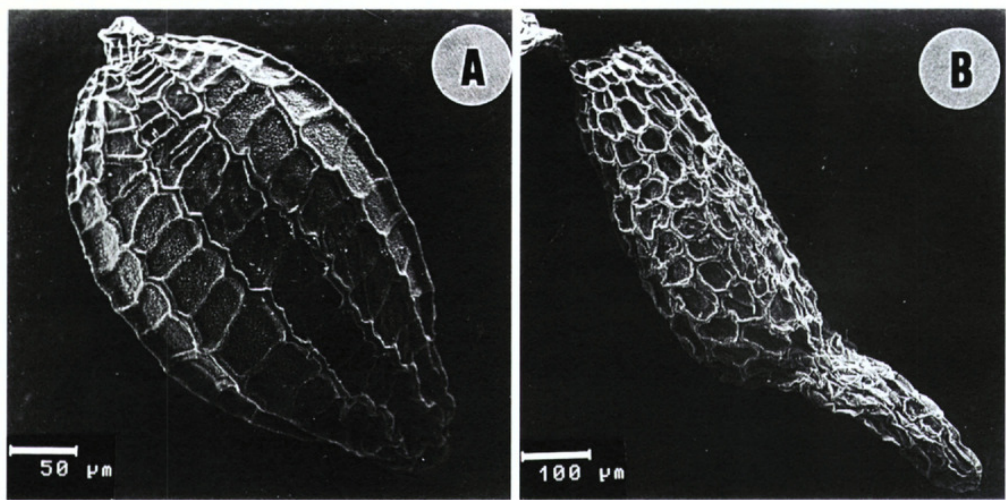


Figure 2. Micrographs of seeds (SEM). —A. *D. graomogolensis* T. Silva (Cavalcanti et al. CFCR 8510, SPF). —B. *D. villosa* A. St. Hilaire (Lopes 54, SPF).

ulations in the municipality of Grão-Mogol, State of Minas Gerais; it grows on damp or dry sandy soils, between rocks, at the flooded edges of streams, or on open ground at greater heights. It has been found in flower and fruit in the months of February, June, September, and November.

Paratypes. BRAZIL. **Minas Gerais:** Grão-Mogol, estrada de Grão-Mogol-Cristália, 15 Apr. 1981, *I. Cordeiro et al.* CFCR 933 (PMA, SPF); 16 km oeste da cidade, 17 fev. 1968, *H. S. Irwin et al.* 23452 (UB), ago. 1960, *Mendes Magalhães* 18340 (UB); Jambeiro à 7 km de Grão-

Mogol, 5 nov. 1985, *T. B. Cavalcanti et al.* CFCR 8510 (SPF); Alto do Morro Jambeiro, flanco da descida para o Córrego Escurinha, 6 sep. 1990, *T. R. S. Silva et al.* CFCR 13478 (SPF).

Literature Cited

Diels, L. 1906. *Drosera*. In: A. Engler, *Das Pflanzenreich* 4. 112: 61–128.
Silva, T. R. S. 1994. Estudos Taxonômicos de *Drosera* L. (Droseraceae) do Brasil. Dissertação de Mestrado. Instituto de Biociências, Universidade de São Paulo, São Paulo.



Silva, T R Dos S. 1997. "Drosera graomogolensis (Droseraceae), a new species from the campos repestres of Minas Gerais, Brazil." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 7, 85–87.

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