

Habenaria crucifera Rchb.f. & Warm. var. **brevidactyla** J. A. N. Batista & L. B. Bianchetti, **var. nov.** Type: Brazil. Distrito Federal: Taguatinga, Taguatinga Norte, área de proteção de manancial “Currais e Pedra”, Floresta Nacional, 2 Jan 2005 (fl), *J. A. N. Batista, K. Proite & C. P. Lombardi 1545* (holotype: BHCB; isotypes: AMES, CEN, SP). (Figs. 2, 4)

A varietate typica lobis lateralibus labelli brevibus, 2–4(–5.5) mm longis et calcari brevi, 4.5–5 mm longo differt.

Terrestrial herbs. *Stem* erect, 49–66 cm long, including the inflorescence, 1.5–2 mm wide. *Leaves* 7–10, appressed to the stem, largest at the center of the stem, linear, narrow, 3.5–9×0.3–0.5 cm. *Inflorescence* 7–8 cm long, few flowered, lax; bracts ovate, 7–18×5–7.5 mm, acuminate, about the same size as the ovary + pedicel. *Flowers* 8–10, small, greenish, becoming greenish-yellow

with age; ovary + pedicel 9–10 mm long, slightly arched. *Sepals* green, discretely mucronate, margin smooth; dorsal sepal concave, when flattened ovate, 4–5.5 × 3.5–5 mm; lateral sepals obliquely ovate-lanceolate, deflexed, 5–6.5 × 1.5–2 mm. *Petals* discretely bipartite, base whitish, turning light green towards the segments apices; posterior segment ovate-lanceolate, slightly falcate, 4–5.5 mm × (1–)1.5–1.8 mm, acute, connivent with the dorsal sepal; anterior segment reduced to a tooth-like projection, inserted at the base of the posterior segment, 0.5–1 mm long. *Lip* distinctly tripartite, base whitish, turning light green towards the segments apices; undivided basal part short, 1–1.5 × 1–1.5 mm; lateral segments erect or perpendicular to the median segment, linear-filiform, 2–4(–5.5) mm long, the base perpendicular or forming an obtuse angle with the median segment; median segment, geniculate, 5–7(–8) × 0.7–1 mm. *Spur* pending, totally or partially covered by the bracts, clavate, shorter than the ovary + pedicel, 4.5–5 mm long, green, base 0.7 mm wide, apex 1.2–1.7 mm wide. *Column* erect, 2.8–3 mm high; connective emarginate, green; auricles fleshy, verrucose, whitish, 0.7 × 1 mm. *Anther* 1–1.3 mm high, canals short, 0.8 mm long; hemipollinarium separated; viscidia 0.2 × 0.2 mm, 1.3 mm apart from one another; caudicles 1 mm long, pollinia 1 mm long. *Stigma lobes* 1.8 mm long, green, receptive surface convex, turned forwards, closely parallel, free part 1 mm long, apex 0.7–0.8 mm wide, truncate, inner margin thickened, space between the stigma lobes circular. *Rostellum* 2 mm long, green, midlobe triangular, fleshy, obtuse, completely placed between the anther loci, 1–1.2 mm long, 0.6–0.7 mm high, side-lobes parallel throughout, 0.8–1 × 0.4 mm.

Etymology.—From the Latin *brevi* (short) and the Greek *dactyl* (finger), referring to the short lateral segments of the lip, when compared to *H. crucifera* var. *crucifera*.

Distribution.—The new variety is known so far only from two localities in the Federal District: the ‘Reserva Ecológica do Guará’ and the ‘Área de proteção de manancial Currais e Pedra’. These two localities are ca. 11 km apart. In a published account of the Orchidaceae of the ‘Reserva Ecológica do Guará’ (Batista et al., 2005) and in a checklist

of the Orchidaceae of the Federal District (Batista & Bianchetti, 2003) *H. crucifera* var. *brevidactyla* was listed as *H. aff. aphylla* 1.

Habitat, ecology, and phenology.—The new variety occurs in seasonally humid grasslands (*campo limpo estacionalmente úmido*), over gray soil, associated with *murundus* at about 1000 m. This is a common habitat for many *Habenaria* taxa, including *H. crucifera* var. *crucifera*, *H. alpestris*, *H. ayangannensis* Renz, *H. guillemirii* Rchb.f., *H. heringeri*, *H. imbricata* Lindl., *H. juruensis*, *H. subfiliformis* Cogn., *H. pungens* Cogn., *H. secundiflora* and other terrestrial orchids such as *Cleistes tenuis* Rchb.f., *Cyanaeorchis minor* Schltr., *Cyrtopodium fowliei* L.C.Menezes, *C. parviflorum* Lindl., *Galeandra paraguayensis* Cogn., *Liparis bifolia* Cogn., *Lyroglossa grisebachii* and *Platythelys paranaensis* (Kraenzl.) Garay. Vegetative and reproductive growth is associated with the availability of water during the rainy season and flowering time occurs from the beginning to the peak of the rainy season, from November to early January (Table I). The bloom appears to be strictly related to brushfires which occur during the dry season. All known collections and observations of the variety were made in previously burned areas.

Conservation status.—In the two localities where the variety is known the population is composed of a few individuals restricted to a small area. About no more than ten specimens in flower were observed in each collection made by the authors. Using the World Conservation Union Red List Categories and Criteria (IUCN, 2001) the new taxon can be tentatively classified as Endangered EN (criteria B1ab(iii) + 2ab(iii); D).

Additional specimens examined. BRAZIL. Distrito Federal: Guará, Reserva Ecológica do Guará, 5 Nov 1989 (fl), Batista 11 (CEN), 24 Nov 1996 (fl), Batista 636 (CEN), Miranda 10 (UB).

Despite the high similarity with *H. crucifera* var. *crucifera*, the new variety can be easily distinguished by the shorter lateral segments of the lip (2–4(–5.5) mm long vs. (6–)7.5–10(–12) mm long in *H. crucifera* var. *crucifera*) and the shorter spur (4.5–5 mm long vs. 6–10 mm long). Additionally, the flowers of the variety are usually slightly smaller (dorsal

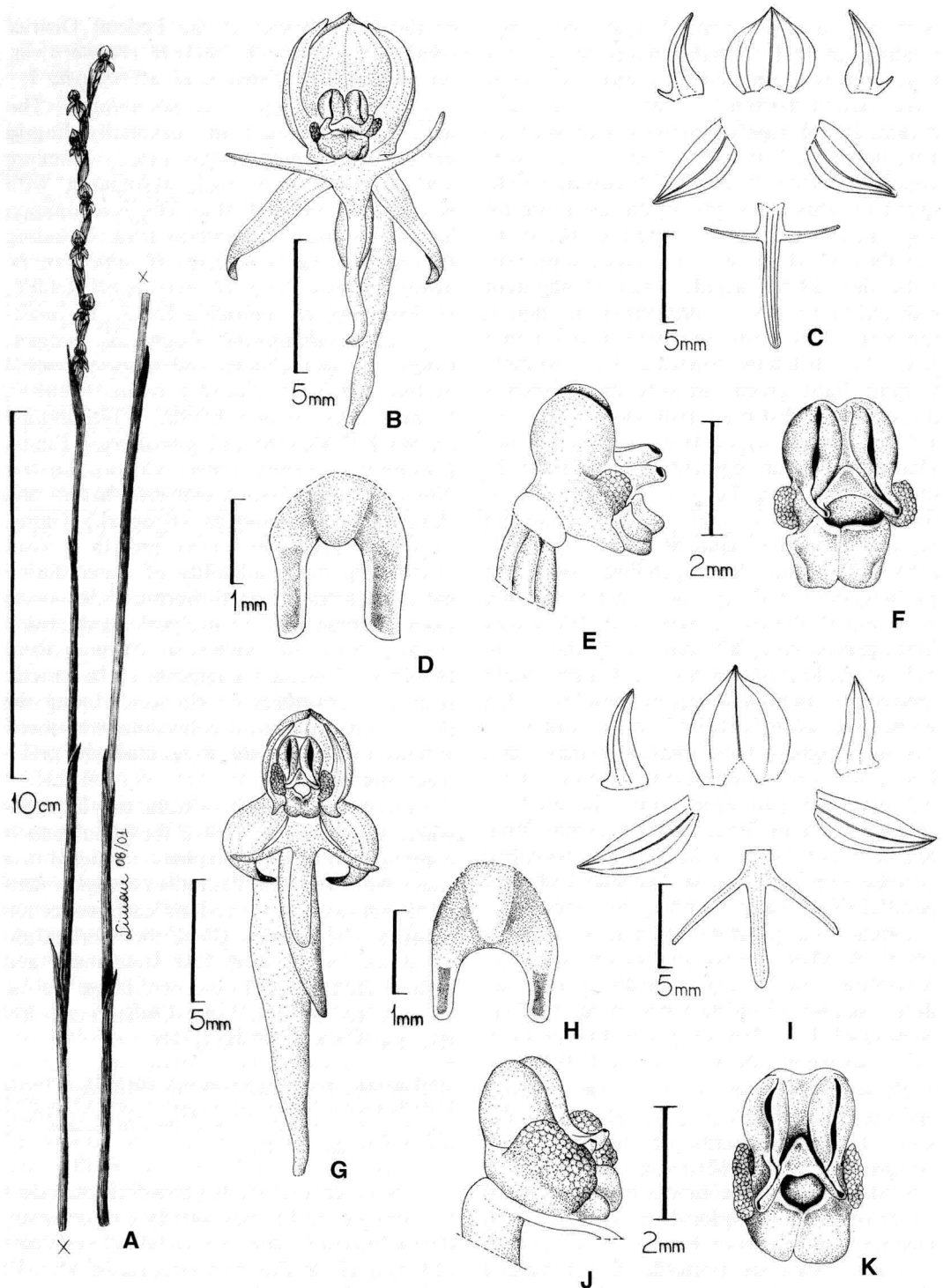


FIG. 4. *Habenaria guaraensis* and *H. crucifera* var. *brevitactyla*. A. *Habenaria guaraensis*, habit (Heringer 10803, UB). B–F. *Habenaria crucifera* var. *brevitactyla* (Batista 011, CEN). B. Flower, front view. C. Perianth. D. Rostellum, upper view. E. Column, lateral view. F. Column, front view. G–K. *Habenaria guaraensis* (Batista 136, CEN). G. Flower, front view. H. Rostellum, upper view. I. Perianth. J. Column, lateral view. K. Column, front view.

sepal 4–5.5×3.5–5 mm vs. 5–6(–7)×4–5.5 mm), the petals have a broader base and are somewhat triangular and less falcate, and the apex of the anterior segment of the petal is acute (vs. usually truncate in *H. crucifera* var. *crucifera*) (Fig. 1 and Table II). Since *H. crucifera* var. *brevidactyla* forms homogeneous populations and the distinctive characters are stable and not found in the range of variation of *H. crucifera* var. *crucifera*, we considered it quite distinct to be recognized as a variety. In defining the taxonomic rank of *H. crucifera* var. *brevidactyla*, we followed Stace (1989), who defined a variety as “a population of one or several biotypes, forming more or less distinct local facies of a species.”

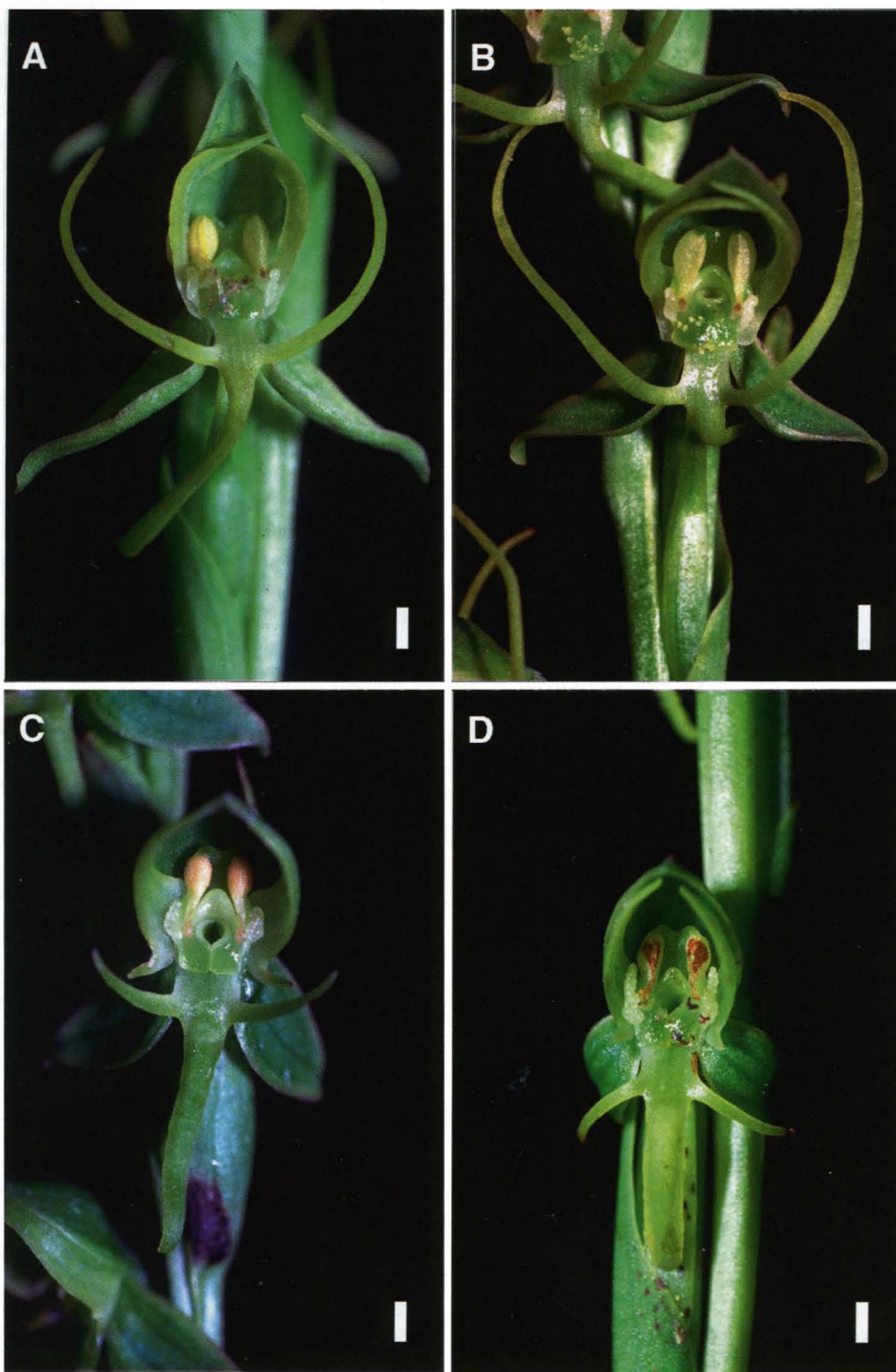


FIG. 2. Flowers from live specimens. *Habenaria crucifera* var. *crucifera*. A. From Poço Azul, Chapada da Contagem, Federal District. B. From Três Barras stream, Brasília National Park, Federal District. *H. crucifera* var. *brevidactyla*. C. From 'Reserva Ecológica do Guará', Federal District. *H. guaraensis*. D. From 'Reserva Ecológica do Guará', Federal District. Scale bars=1 mm.