

## A NEW SPECIES OF *CAMPYLOCENTRUM* (ORCHIDACEAE: ANGRAECINAE) FROM COLOMBIA

MARTA KOLANOWSKA<sup>1,4</sup>, OSCAR ALEJANDRO PÉREZ ESCOBAR<sup>2</sup> & EDICSON PARRA SÁNCHEZ<sup>3</sup>

<sup>1</sup> Department of Plant Taxonomy and Nature Conservation, University of Gdańsk, al. Legionów 9, 80-441 Gdańsk, Poland

<sup>2</sup> Cll 2 sur No 9-11 Bugalagrande, Valle del Cauca, Colombia

<sup>3</sup> Facultad de Ciencias Agropecuarias, Universidad Nacional de Colombia-Sede Palmira, Valle del Cauca, Colombia

<sup>4</sup> Author for correspondence: martakolanowska@wp.pl

**ABSTRACT.** *Campylocentrum palominoi*, a new species from the western Cordillera of the Andes, department of Valle del Cauca (Colombia), is described and illustrated. This species is similar to *C. brenesii*, from which it differs mainly by the subequal, ovate, obtuse lobes of the 3-veined lip, absence of papillae at the middle lobe and the saccate spur which is widened towards the apex.

**RESUMEN.** Se describe e ilustra a *Campylocentrum palominoi*, una nueva especie de la Cordillera occidental de los Andes, departamento del Valle del Cauca (Colombia). Esta especie es similar a *C. brenesii*, de la cual difiere principalmente por los lóbulos laterales del labelo obtusos, ovados, subiguales, lóbulo medio sin papilas en la lámina y por el nectario sacciforme, angosto en la base y ancho en el ápice.

**KEY WORDS:** Orchidaceae, Angreecinae, *Campylocentrum palominoi*, Colombia, new species

*Campylocentrum* includes about 60 species of epiphytic plants, ranging from Florida, Mexico, and the West Indies to Brazil (Dressler 1993, Bogarín & Pupulin 2009, 2010). Eleven species have been reported from Colombia (Ortiz V. & Uribe V. 2009).

Species of the genus *Campylocentrum* are characterized by the absence of pseudobulbs, the lateral inflorescences are produced along the stem opposite to the leaves or from the centers of abbreviated, acaulescent, condensed stems in leafless species. The flowers are small, distichously arranged on the scape with the sepals and petals subequal and free. The lip is characterized by having a spur made up by labellar tissues and the column is very short, without a foot (Williams & Allen 1980). Species of *Campylocentrum* grow in the wet forests from near the sea level up to about 2000 m of elevation (Bogarín & Pupulin 2009).

During the field work conducted in Colombia in the area of Alto Dapa (department of Valle del Cauca, municipality of Yumbo), a distinctive species of *Campylocentrum* was found and it is described here as new:

*Campylocentrum palominoi* M. Kolanowska, O. Pérez & E. Parra, *sp. nov.*

**TYPE:** Colombia. Department of Valle del Cauca, Alto Dapa, about 2000 m, 27 Dec. 2010, *M. Kolanowska & O. Pérez 238* (holotype: UGDA). FIG. 1.

*Haec species Campylocentrum brenesii* Schltr. *similis est sed labelli lobis subequalibus ovatis obtusis, medii lobi papillis absentibus et calcari versus apicem dilatato differt.*

Epiphytic, monopodial herbs up to 8 cm long. *Roots* developed from the internodes of the stem, white, fleshy, thickened, 1 mm diameter. *Stems* 4-8 cm long, foliaceous. *Leaves* 4-10 × 3-5 mm, distichous, coriaceous, articulated to the sheathing bases, the blade broadly-lanceolate to ovate, the apex obtuse, margins shortly ciliate. *Inflorescences* few, lateral, from the leaf axils, racemes minutely ciliate, 1.0-3.2 cm long, 10-20-flowered. *Flowers* small, 3-4 mm in length, distichous, white to greenish cream, tubular. *Floral bracts* less than half long of the ovary, margin erose. *Ovary* 1.5-2 mm long, pubescent, hairs short, rounded

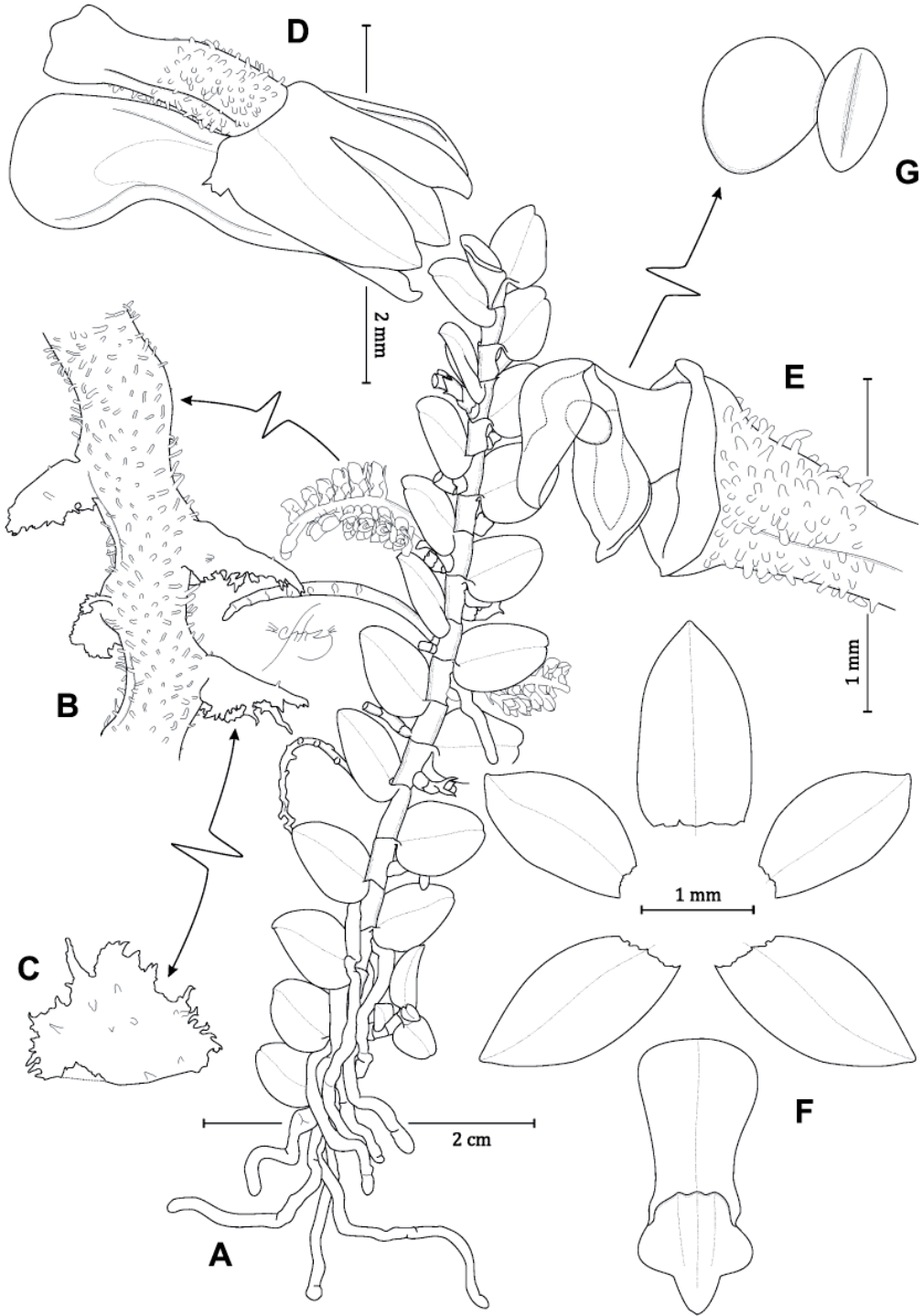


FIGURE 1. 1. *Campylocentum palominoi* M. Kolanowska, O. Pérez & E. Parra. A – Habit. B – Details of rachis and floral bracts. C – Floral bract surface. D – Flower (side view). E – Column and ovary. F – Dissected perianth. G – Pollinia. Drawn by O. Pérez & M. Kolanowska from the holotype.

at the apex. *Sepals* subequal, narrowly-ovate to broadly elliptic, the apex obtuse, 1-veined. *Dorsal sepal* 1.8-2.0 × 1.0-1.2 mm. *Lateral sepals* 1.3-1.6 mm long × 0.8-0.9 mm wide. *Petals* 1.2-1.5 × 0.8-1.0 mm, narrowly-ovate to broadly elliptic, slightly shorter than dorsal sepal, the apex obtuse, 1-veined. *Lip* 3-lobed; the lobes subequal, ovate, obtuse; the middle lobe about 0.35 × 0.5 mm, slightly larger than the lateral lobes, 3-veined, smooth, without a hairy callous; extended at the base into a curved, saccate, clavate, 3-lobuled spur, narrow at the base and wider at the apex; spur about 1.5 × 1-1.2 mm, obtuse. *Column* about 0.5 mm long, without a foot. *Pollinia* 2, ovoid. *Capsule* 4-5 mm long, ellipsoid.

PARATYPES: Colombia. Valle del Cauca: Municipio de Yumbo. DAPA, 18°C aprox. 2000 m, aprox. 29 Jun 2009, Oscar Pérez, Edicson Parra & José Campo 201 (VALLE!); Alto Dapa, about 1980 m alt, 18 Dec 2010. O. Pérez & M. Kolanowska 213 (UGDA!).

DISTRIBUTION AND ECOLOGY: Known only from Western Cordillera in Colombia, in the municipality of Yumbo. Populations, each of 1-5 individuals are found in the cloud forest at about 1980-2000 m of elevation in open areas, on tree trunks and fences. Some individuals have been reported growing on trees of *Guettarda* sp. (Rubiaceae) in open, disturbed areas.

#### LITERATURE CITED

- Bogarín D. & Pupulin F. 2009. The genus *Campylocentrum* (Orchidaceae: Angraecinae) in Costa Rica: some critical questions and a few answers. In: Pridgeon A. M. & Suarez J. P. (eds.) Proceedings of the Second Scientific Conference on Andean Orchids. Universidad Técnica Particular de Loja, Loja, Ecuador: 32-45.
- Bogarín D & Pupulin F. 2010. The genus *Campylocentrum* (Orchidaceae: Angraecinae) in Costa Rica: a revision. *Harv. Pap. Bot.* 15(2): 353-414.
- Dressler R. 1993. Field Guide to the Orchids of Costa Rica and Panama. Cornell University Press, New York: 292-294.
- Ortiz Valdivieso, P. & C. Uribe Vélez. 2009. Galería de Orquídeas de Colombia (CD edition). Asociación Bogotana de Orquideología, Bogotá.
- Williams L. O. & Allen P. H. 1980. Orchids of Panama. *Monogr. Syst. Bot. Missouri Bot. Gard.* 4: 578-579.

EPONYMY: Named in honor of Carlos Fernando Palomino, a conservation enthusiast of the Sopo forests biodiversity (department of Cundinamarca, Colombia).

*Campylocentrum palominoi* is similar to *C. brenesii* Schltr. from which it differs by subequal, ovate, obtuse lobes of the lip, the absence of papillae at the middle lobe and a saccate spur which is widened towards the apex. *C. brenesii* is a variable species, especially within the size of the tepals, spur length and the shape of the lateral lobes of the lip (Bogarín and Pupulin 2010). However, the presence of hairy callous on the acute, triangular middle lobe and cylindric spur are the constant characters which differs it from *C. palominoi*.

ACKNOWLEDGMENTS. The authors wish to thank the curators and staff of the herbaria AMO, COL, CUVC, JAUM, K, MO and VALLE for access to their collections. We are grateful to Dr. Guy Chiron for translating the diagnosis of the new species. The research described here has been supported by the grant from the Polish Ministry of Science and Higher Education (project no. N N304 043939).