

8. *Epidendrum zunigae* Hágsater, Karremans & Bogarín, *sp. nov.*

TYPE: COSTA RICA. Puntarenas: Osa, Sierpe, Mogos, alrededores de Quebrada Porvenir, ca. 3 km norte de Alto de Mogos, 8°46'36.5"N 83°21'23.6" W, 126 m, bosque muy húmedo tropical, epífitas bosque secundario, 30 marzo 2006, *D. Bogarín 2680, J. Zúñiga & Curso de Botánica Forestal-UCR* (holotype, JBL-spirit) (Fig. 8, 15-G).

Species *Epidendro guanacastensi* Ames & C. Schweinf. *similis*, floribus majoribus viridulis, labello acuto bicalloso, apice columnae purpurea, clinandrium albo differt.

Plant epiphytic, monopodial, pendent, branching herb. *Roots* basal, from the main stem, fleshy, filiform, thin. *Stems* terete, somewhat flexuous, incipiently branched near the base of the main stem. *Leaves* numerous, distributed throughout the stems; sheath tubular, minutely rugose; blades linear-lanceolate, acuminate, short mucronate, coriaceous, slightly carinate, those on the main stem ca. 12, similar in size. *Inflorescence* apical, produced from the main stem, and presumably from the secondary branches; peduncle reduced. *Floral bracts* longer than the ovary, amplexicaul, imbricating, ovate-oblong, rounded. *Flowers* 3, distichous, greenish, the lip creamy yellow, column green at base, the apical half purple, clinandrium-hood white. *Ovary* terete, smooth, thin. *Sepals* partly spreading, narrowly elliptic, acute, 5-veined, margin slightly revolute, entire. *Petals* partly spreading, linear-elliptic, acute, 5-veined, margin entire, spreading. *Lip* entire, cordiform, acute, spreading, slightly convex in natural position, margin entire, spreading; bicallose, the calli thickened at the base and ending in low keels, with a prominent median keel stretching from the base of the lip to the apex. *Column* somewhat arching upwards above the middle, short, internally provided with a pair of lateral thickenings at the height of the rostellum, and forming a narrow channel; clinandrium hood prominent, funnel-shaped, fleshy, margin entire; rostellum at the middle of the column, slit. *Anther* obovate, 4-celled.

DISTRIBUTION: Known only from the lowlands in front of the Osa Peninsula, near the Pacific coast of southern Costa Rica.

EPONYMY: named in honor of José Daniel Zúñiga Delgado, research assistant at Jardín Botánico Lankester, who participated in the type collection. He photographed and preserved flowers in alcohol thus permitting its classification.

HABITAT AND ECOLOGY: epiphytic in secondary tropical wet forest at 100-150 m of elevation in the southern Pacific lowlands in Peninsula de Osa. Flowering in cultivation in November.

Epidendrum zunigae belongs to the *Epidendrum ramosum* group, which is characterized by the monopodial, branching stems, the spike-like, distichous inflorescence, and to the *Epidendrum isomerum* subgroup, which has long, pendent plants, very narrow, acute leaves, and 1- (rarely 3-) flowered inflorescences. *Epidendrum zunigae* is recognized by the narrow, lanceolate leaves, the greenish flowers with sepals to 11 mm long, the creamy yellow lip, the apical half of the column marked with purple, with a white clinandrium, and the cordiform, acute lip, somewhat convex in natural position. It resembles *E. isomerum* Schltr., which has 3-11 x 0.1-0.3 cm leaves, a single-flowered inflorescence produced from short flowering branches, green to yellowish green flowers, with very narrow floral segments, sepals 15-16 mm long, the lip rhombic-triangular, acute, with a "V" shaped callus. It is also similar to *E. guanacastense* Ames & C. Schweinf., which has thicker stems, and a zigzag inflorescence with 2-3 flowers, sepals 8-10 mm long, a cordiform, rounded lip, and the callus "Y" shaped.

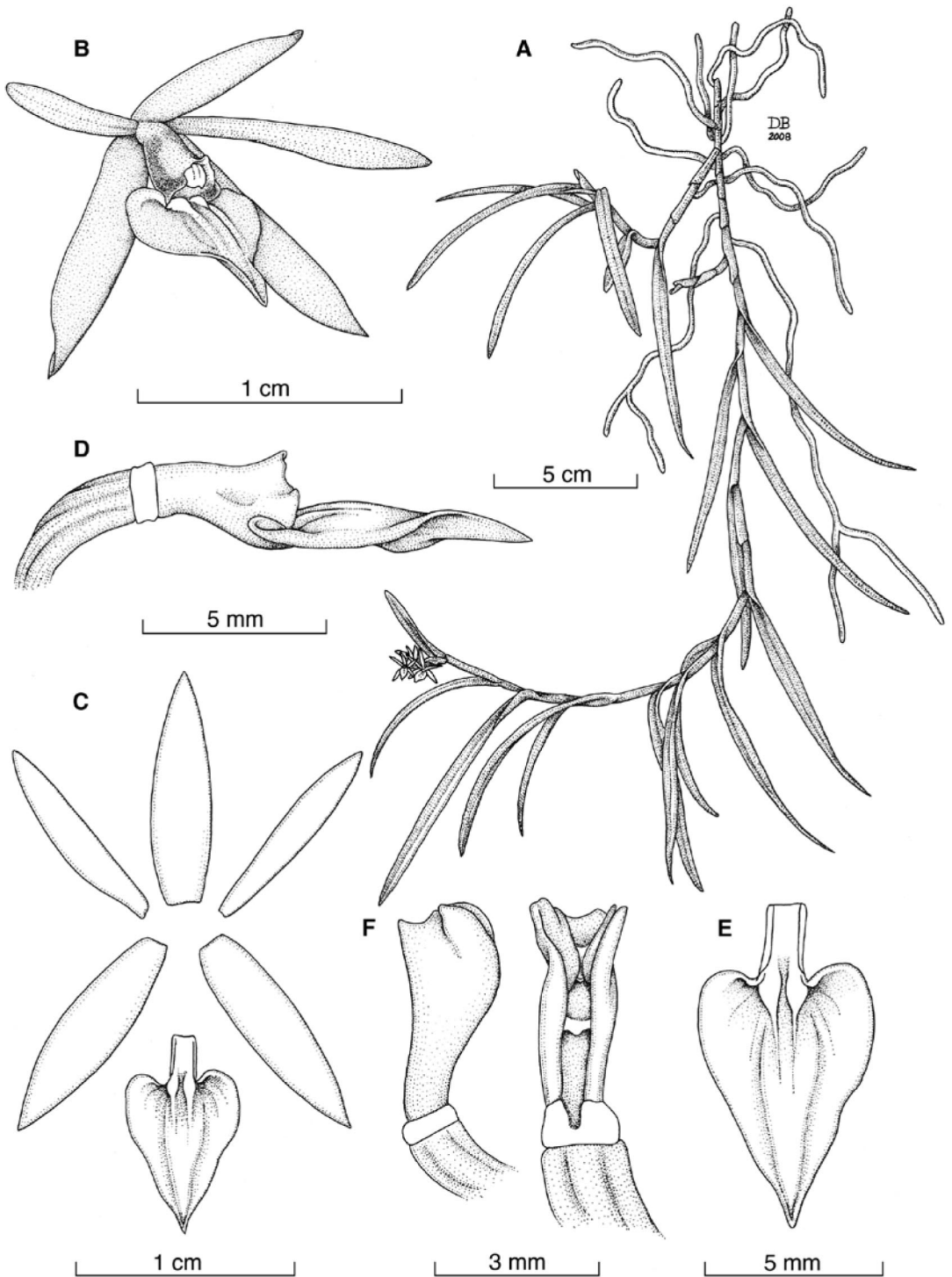


FIGURE 8. *Epidendrum zunigae* Hágsater, Karremans & Bogarín. A. Habit. B. Flower in natural position. C. Dissected perianth. D. Column and lip, lateral view. E. Lip. F. Column, lateral and frontal view. Drawn by D. Bogarín from the holotype.