



EPIDENDRUM INHIBITOSUM Karremans & Mel.Fernández

Plate 1443

THE GENUS EPIDENDRUM PART 10

ICONES ORCHIDACEARUM 14. 2013

***EPIDENDRUM INHIBITOSUM* Karremans et Mel.Fernández, sp. nov.**

Type: COSTA RICA: Puntarenas: Osa, Sierpe, unos 10 km de Bahía Drake, sobre el camino entre Bahía Drake y Rancho Quemado, entre potreros, bosque muy húmedo tropical, 8°41'34.0" N 83°34'36.1" W, 187 m, colectado 21 de marzo 2011, floreció en cultivo el 13 de febrero 2012, **Adam P. Karremans & Miriam Contreras 3769**. Holotype: CR!; Isotype JBL-Spirit, E0889! (Illustration voucher).

Epidendro singulifloro Schltr. simile, sed planta rubro-viride, floribus majoribus brunneo-viridis, corolla campanulato-inexpansa, labello costa pupurea instructo, callo albo, petalis ellipticis obtusis differt.

Epiphytic, pendent, sub-monopodial, branching, reddish green **herb**, to ca. 40 cm long. **Roots** basal, fleshy, filiform. **Stems** several born from a short creeping rhizome, pendent, branching, cane-like, terete, flexuous, producing a few long main stems, ca. 40 cm long, and several shorter secondary stems, branches, ca. 4-10 cm long, from the leaf axils of the main stems. **Leaves** of the main stems 9-16, similar, distributed throughout the stems, in mature stems the basal ones will have fallen off; 3-5 on the secondary stems, dissimilar, slightly recurved; sheathes 2.0-2.5 cm long, tubular, rugose; blades 6-7 x 1.2-1.4 cm, narrowly-ovate, obtuse, coriaceous. **Spathaceous bracts** lacking. **Inflorescence** apical, on both the main stems and the branches, racemose, distichous, congested, flowering only once; peduncle reduced, with 2 imbricating bracts 1.5-2.0 cm long, covering the peduncle and ovaries completely, obtuse, rugose. **Floral bracts** larger than the ovary, acute, 1.0-1.5 cm long. **Flowers** 2-3, simultaneous, the lip always towards the rachis, brownish-green, lip greenish with a white callus and purple rib to the middle, column whitish, suffused with purple; fragrance sweet, in the morning. **Ovary** 10-11 mm long, terete, slightly ventrally, glabrous. **Sepals** nearly closed, not spreading in natural position, free, glabrous, narrowly-ovate to lanceolate, obtuse, apiculate, 10-12 veined, bifurcating, margin entire; the dorsal sepal 18 x 3.5 mm; the lateral sepals 19 x 4 mm, oblique. **Petals** 17 x 3 mm, nearly closed, not spreading in natural position, free, glabrous, narrowly-elliptic to lanceolate, obtuse, apiculate, 9-veined, bifurcating, margin entire. **Lip** 17 x 8 mm, united to the column, sub-cordiform, elongate, narrowed in the middle, 3-lobed, base cordate, embracing the column without completely covering it, margin entire; callus Y-shaped, prolonged into a central rib extending to the apex of the lip; lateral lobes 3.4 x 6.5 mm, hemi-cordiform; mid-lobe 8.8 x 3.4 mm, triangular-lorate, acute. **Column** 4.5 x 2 mm, straight, sub-terete, with two apical, rounded wings. **Clinandrium-hood** short, apical margin erose. **Anther** narrowly ovate with a prominent central rib, 4-celled. **Pollinia** 4, obovoid, laterally compressed, caudicles granulose. **Rostellum** apical, slit. **Nectary** penetrating the ovary up to near the base. **Capsule** not seen.

OTHER SPECIMENS: None seen.

DISTRIBUTION AND ECOLOGY: Known only from the type, which was found along the road between Rancho Quemado and Bahía Drake in the heart of the Osa peninsula, in Costa Rica. It grows epiphytically in disturbed humid lowland forests, just below 200 m elevation. It flowers in cultivation from November to February.

RECOGNITION: *Epidendrum inhibitiosum* belongs to the Ramosum Group which is characterized by the monopodial, much branched stems, apical inflorescence, and distichous flowers; and Paranaense Subgroup which has pendent plants and large, spreading leaves, > 5 mm wide. The species is recognized by the terete, flexuous stems and reddish-green leaves, the flowers nearly closed, large, sepals 18-19 mm long, flowers pale brownish green, the lip with the callus white and mid-vein purple, column whitish, suffused with purple, margin of the lip entire. It is similar to *Epidendrum singuliflorum* Schltr. from southern Mexico and Guatemala which has smaller, concolor green to greenish brown flowers, spreading sepals 9-12 mm long, elliptic, obtuse petals. *Epidendrum sculptum* Rchb.f. which has green stems and flowers, the small flowers half open, sepals 9-15 mm long, flowers are concolor, green to yellowish green, and the lateral lobes of the lip have a generally erose margin. *Epidendrum isomerum* Schltr. has long stems, with long, narrow, acute to acuminate leaves (5-11 x 0.2-0.3 cm), a single flowered inflorescence, the flower partly open, sepals 14-16 mm long, and the lip is entire, rhombic-triangular. *Epidendrum zunigae* Hágsater, Karremans & Bogarín, which grows close by to *E. inhibitiosum*, has long, narrow, linear-lanceolate leaves (5-10 x 0.5-0.8 cm), small flowers, sepals 10-11 mm long, the lip is cordiform, acute, bicallose, the calli thickened at the base and ending in low ribs, the clinandrium is funnel-shaped.

CONSERVATION STATUS: DD. Data deficient. Apparently highly endemic.

ETYMOLOGY: The name comes from the Latin *inhibitio*, restraint, which alludes to the impossibility of the flowers to fully open because of their proximity to their neighbors. If neighboring flowers are removed, the remaining flower fully opens, therefore each flower inhibits its neighbors.

REFERENCES: Bogarín, D., A.P. Karremans & F. Pupulin, 2008, New species and records of Orchidaceae from Costa Rica. **Lankesteriana** 8(2): 53-74. Hágsater, E., A. P. Karremans & D. Bogarín, 2008, *Epidendrum zunigae* in E. Hágsater & L. Sánchez S. (eds.) **Icon. Orchid.** 11: pl. 1200. Hágsater, E., 1990, *Epidendrum singuliflorum* in E. Hágsater & G.A. Salazar (eds.) **Icon. Orchid.** 1: pl. 42. Sánchez, L. & E. Hágsater, 2010, *Epidendrum sculptum* in E. Hágsater & L. Sánchez S. (eds.) **Icon. Orchid.** 13: pl. 1383.

