

EPIDENDRUM AENIGMATICUM Hágsater & Dodson

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Type: ECUADOR: El Oro: Cushcapa, SW de Santa Isabel, 2000 m, 25 November 2004, *Alex Hirtz, Eduardo Sánchez, Willy & Jackie Coeck 9067*. Holotype: QCA! Isotypes: AMO! USM!

Epidendro tenquendamae F.C.Lehm. & Kraenzl. simile sed foliis latioribus, segmentis floralibus proportione latioribus, callis et carina centrali longioribus, lobuli medii basem attingentibus, recedit.

Hierba cespitosa, simpodial, de 40-65 cm de alto. **Raíces** basales, carnosas, gruesas, 3.0-5.8 mm de grosor. **Tallos** sencillos, tipo caña, teretes en la base y ancipitosos hacia el ápice, delgados, ligeramente sinuosos, verde claro, 22-32 x 0.4-0.95 cm. **Hojas** 6, distribuidas en la mitad superior del tallo, alternas, articuladas, subcoriáceas; vainas tubulares, estriadas, escariosas cuando secas, las 2-3 inferiores no foliosas; lámina, oblongo elíptica, obtusa, con una quilla dorsal prominente, margen entero, 9.5-15 x 1.5-2.1 cm. **Brácteas espataceas** 1 o 2, tubulares en la mitad basal, conduplicadas en la mitad apical, agudas a acuminadas, ancipitosas, escariosas con el tiempo, 6.5-9.5 x 0.6-0.9 cm. **Inflorescencia** apical, florece una sola vez, racemosa, arqueado nutante, multiflora, densa, los botones florales abriendo del ápice hacia la base de la inflorescencia, 21 cm de largo; pedúnculo, recto, delgado, lateralmente aplanado, oculto casi en su totalidad por las brácteas espataceas, 5.0-9.5 cm de largo. **Brácteas florales** linear triangulares, acuminadas, abrazadoras, casi del doble del largo del ovario, gradualmente más cortas, 4-11 mm de largo. **Flores** 26-60, abriendo de manera sucesiva del ápice hacia la base de la inflorescencia, y llegando a estar abiertas en su totalidad de manera simultánea, el labelo siempre orientado hacia la raquis, sépalos y pétalos verdosos en la superficie dorsal, pardo anaranjados en la superficie ventral, labelo pardo anaranjado, columna blanca; fragancia diurna, dulce, tenue. **Ovario** terete, delgado, no inflado, no ornamentado, 5.0-7.3 mm de largo. **Sépalos** entreabiertos, libres, ovado elípticos, agudos, margen entero, carnosos, 3-nervados, 5.4-6.0 x 2.2-3.0 mm; los **laterales** ligeramente oblicuos, con una quilla dorsal prominente en el ápice, 6.8-7.5 x 2.8-3.0 mm. **Pétalos** extendidos, libres, linear oblanceolados, agudos, carnosos, margen entero, 1-nervados, 3.6-4.0 x 0.5-0.7 mm. **Labelo** unido a la columna, trilobado, carnoso, base cordada, margen entero, 3.6 x 3.5 mm; bicalloso, los callos delgados, carnosos, alargados hasta la base del lóbulo medio; con una quilla intercallosa, gruesa y corta; lóbulos laterales transversalmente ovado elípticos, erectos en posición natural, 1.5 x 1.9 mm; lóbulo medio triangular, agudo, corto y ancho, 1.7 x 1.2 mm. **Columna** recta, corta, gruesa, con un par de lobos laterales redondeados, 3.0 mm de largo. **Clinandrio** reducido, margen entero. **Antera** subreniforme, con una quilla roma al frente, 4-locular. **Polinios** 4, obovoídes, lateralmente comprimidos, subiguales, caudículas suaves y granuladas, más cortas que los polinios; viscidio semilíquido transparente. **Rostelo** apical, hendido. **Lóbulos laterales del estigma** muy pequeños, menos de 1/4 del largo de la cavidad estigmática. **Nectario** poco profundo, apenas penetrando el ovario, liso. **Capsula** no vista.

Caespitose, sympodial **herb.** **Roots** basal, fleshy, thick. **Stems** simple, cane-like, terete below, ancipitose above, thin, slightly flexuous, light green. **Leaves** 6, distributed throughout the apical half of the stem, alternate, articulate, subcoriaceous; sheaths tubular, striated, scarios when dry, the lower 2-3 non-foliaceous; blade oblong-elliptic, obtuse, with a prominent dorsal keel, margin entire. **Spathaceous bracts** 1 or 2, the basal half tubular, conduplicate above, acute to acuminate, ancipitose, becoming scarios with time. **Inflorescence** apical, flowering only once, racemose, arching-nutant, densely many-flowered; peduncle, thin, laterally compressed, straight, nearly totally hidden within the spathaceous bracts. **Floral bracts** linear-triangular, acuminate, nearly twice as long as the ovary to progressively shorter. **Flowers** 26-60, rapidly opening in succession from the apex towards the base of the raceme, finally simultaneous, the lip always oriented towards the rachis, sepals and petals greenish dorsally, brown-orange ventrally, lip brown-orange, column white; diurnal fragrance sweet, tenuous. **Ovary** terete, thin, smooth. **Sepals** partly spreading, free, ovate-elliptic, acute, margin entire, fleshy, 3-veined; **lateral sepals** slightly oblique, with a prominent dorsal keel at the apex. **Petals** spreading, free, linear-oblanceolate, acute, fleshy, margin entire, 1-veined. **Lip** united to the column, 3-lobed, fleshy, base cordate, margin entire; the calli thin, fleshy, reaching the base of the midlobe, with a thick, short mid-keel; lateral lobes transversely ovate-elliptic, erect in natural position; midlobe triangular, acute, short, wide. **Column** straight, short, thick, ending in a pair of rounded lobes. **Clinandrium-hood** reduced, margin entire. **Anther** subreniform, with a low, rounded keel in front, 4-celled. **Pollinia** 4, obovoid, laterally compressed, subequal, caudicles soft and granulate, shorter than the pollinia; viscidium semi-liquid, transparent. **Rostellum** apical, slit. **Nectary** shallow, barely penetrating the ovary, smooth.

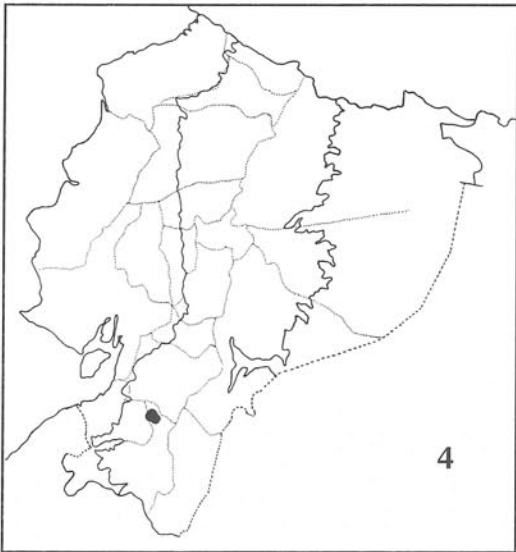
OTHER SPECIMENS: Presumably **ECUADOR:** **Azuay:** Purchased at Expo Bogotá '92, X 1992, cultivated at Colomboquideas, Medellín, then taken to Mexico City, 25 III 1996, pressed 12 VII 1996, Hágsater 11547, AMO! (Illustration voucher) Ibid. Hágsater 11563; pressed 12 IX 1997, MO! QCA! Ibid. pressed 3 X 1997, AMO! COL! QCNE! El Oro: Cushcapa, SW de Santa Isabel, 2000 m, 25 IX 2004, Hirtz 9064, AMO!

OTHER RECORDS: **ECUADOR:** **Loja:** Río Jubones, SW de Santa Isabel, 25 IX 2004, Sánchez s.n., digital photographs, AMO! (corresponds to A. Hirtz, E. Sánchez, W. & J. Coeck 9064.)

DISTRIBUTION AND ECOLOGY: Apparently endemic to southwestern Ecuador, on the Pacific slope of the Andes southeast of Cuenca. For nearly 10 years it had been an enigma as to where the plants cultivated at Colomboquideas could have originated. None of the specimens studied in the herbaria in Bogotá corresponded to this entity. Recently Dr. Eduardo Sánchez and Alex Hirtz collected a couple of plants along the Río Jubones, in the valley of Yunguilla in the province of Loja in southern Ecuador. In the early 90's a number of orchid species from southern Ecuador turned up in Medellín and Bogotá as *materos* were traveling to Ecuador to get prime saleable material for the Colombian amateurs who were eager to get species other than the local fare. It appears that is how these plants ended up in cultivation in Medellín.

RECOGNITION: *Epidendrum aenigmaticum* belongs to the Alpicolum Group and Subgroup which is characterized by the simple, cane-like stems, long, narrow 1-2 spathaceous bracts, fox-tail-like inflorescence and numerous flowers with fleshy lip, triangular midlobe and roundish lateral lobes. The new species is recognized by the small flowers, ochre-orange colored inside, the lateral sepals 6.8-7.5 mm long, the transversely ovate-elliptic lateral lobes of the lip are upright, with the margin entire, and the midlobe is short and wide. It is similar to *E. tenquendamae* F.Lehm. & Kraenzl. which has narrower linear-lanceolate leaves, the flowers somewhat larger and proportionately narrower, sepals 7-8 mm long, linear-lanceolate, 6 mm petals, and the callus of the lip somewhat shorter. *Epidendrum cornutum* Lindl. is larger and proportionately narrower overall, the lateral sepals are 9-10.5 mm long, and the midlobe of the lip nearly 4 mm long. Many other species in this group have the margin of the lateral lobes of the lip erose with the forward corner fimbriate.

ETYMOLOGY: From the Greek αινιγμα, enigma, in reference to the undiscovered origin of this species, now apparently clarified.



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