

EPIDENDRUM PACHYTEPALUM Hågsater & E.Santiago

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Type: COSTA RICA: Canaán to Chirripó via Los Angeles, above (north of) the Río Talari, 3100-3200 m, 21 August 1971, *William C. Burger 8253*. Holotype: F! (Illustration voucher).

Epidendro crescentilobo Ames simile sed floribus majoribus succesivis, labelli lobulo medio carnosus incrassatus apicem duas alas membranaceas ferenti, sepala petalaeque carnosae versus marginem apicalem, ovario triquetro, polliniorum paris interioribus magnitudine $\frac{3}{4}$ partibus polliniorum exteriorum magnitudinis aequanti, polliniis interioribus in pollinarii centro sitis, distinctum.

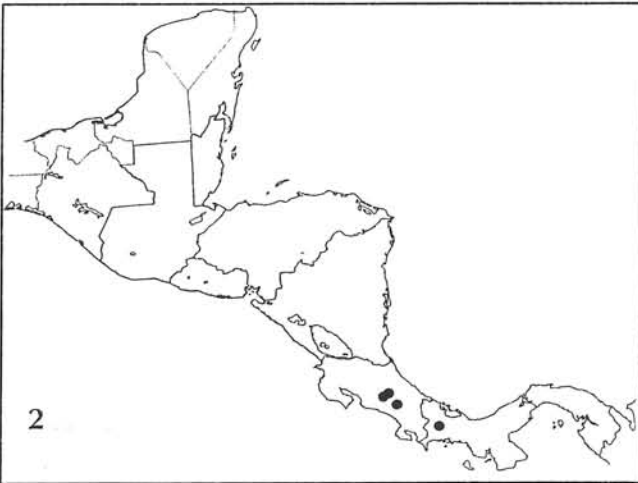
Hierba epífita y terrestre, simpodial, cespitosa, erecta; de 75-150 cm de alto. **Raíces** basales, carnosas, delgadas, blancas; 1.5-2.2 mm de grosor. **Tallos** sencillos, tipo caña, teretes, delgados, erectos, rectos, 75-150 x 0.16-0.26 cm; cubiertos en la base por vainas tubulares no foliares. **Hojas** 10-15, distribuidas casi a lo largo del tallo, alternas, subcoriáceas; vaina tubular, verrugosa; 10-33 x 1.6-2.6 mm; lámina lanceolada, acuminada, con una quilla dorsal diminuta, margen entero, lisa; 5-11 x 1-1.4 cm. **Bráctea** espátacea ausente. **Inflorescencia** apical, racemosa, laxa, secundiflora, todas las flores por encima del raquis, florece sólo una vez, 8-12.5 cm de largo; pedúnculo delgado, terete, 22 mm de largo, provisto en la base de una bráctea angostamente lanceolada, largamente acuminada, abrazadora, 18 mm de largo. **Bráctea** floral más cortas que el ovario, lineal lanceoladas, agudas, abrazadoras, 4-10 mm de largo. **Flores** 5-34, sucesivas, algunas apicales presentes aun en botón floral cuando el resto están abiertas, botones florales con quillas carnosas que terminan en tres picos, sépalos y pétalos color fucsia lavanda con callo naranja, los márgenes laterales apicales del clinandrio con una mancha morada visible cuando vista de frente; sin datos de fragancia. **Ovario** trimetro, delgado, no inflado, no ornamentado, 15-30 mm de largo. **Sépalos** libres, extendidos, oblongo-oblancoleados, obtusos, carnosos hacia el margen apical y por lo tanto carnosos aristados, 5-nervados, margen entero, 12-14 x 2.8-4 mm. **Pétalos** libres, extendidos, oblancoleados, unguiculados, subagudos, carnosos hacia el margen apical, 3-nervados, las nervaduras laterales ramificadas arriba, margen entero, 10-13 x 2-4 mm. **Labello** unido a la columna, trilobado, cuneado en la base, margen entero, 5 x 9 mm; el callo un cojín carnosos, alargado hasta cerca del istmo, bidentado en el ápice; lóbulos laterales oblongos, redondeados, oblicuamente bilobados, divaricados, ligeramente más angostos hacia el ápice, 3.5-4 x 1-3 mm; lóbulo medio carnosos, engrosado, elíptico-oblongo, obtuso, bialado cerca del ápice, las alas petaloideas, oblicuamente subcuadradas, algo bilobadas en el ápice, algo retrorsas, 3.0-4.0 x 4.0-4.5 mm. **Columna** recta, delgada, 12 mm de largo, incluyendo el clinandrio. **Clinandrio** muy prominente, sobrepasando el cuerpo de la columna y $1\frac{1}{2}$ veces el largo del cuerpo de la columna, margen eroso ondulado. **Antera** subovoidea, 4-locular, con una quilla lisa, flexuosa al frente. **Pollinios** 4, tipo ala de pájaro, desiguales, el par interior más pequeño, de las $\frac{3}{4}$ partes del largo de los exteriores, centrados. **Rostelo** transversal, sinuado. **Nectario** corto, sin traspasar el perianto, no inflado, no ornamentado. **Cápsula** no vista.

Epiphytic and terrestrial, sympodial, caespitose, erect herb. **Roots** basal, fleshy, thick. **Stem** simple, cane-like, terete, thin, erect, straight. **Leaves** 10-15, distributed nearly throughout the stem, alternate, subcoriaceous; sheath tubular, verrucose; blade lanceolate, acuminate, smooth, margin entire. **Inflorescence** apical, racemose, lax-flowered, secund, all the flowers above the rachis, flowering only once; peduncle thin, terete, provided at the base with one narrowly lanceolate, long-acuminate bract. **Floral bracts** shorter than the ovary, linear-lanceolate, acuminate. **Flowers** 5-34, successive, some apical buds when the rest are fully open, resupinate, floral buds with fleshy keels that protrude at the apex into three fleshy tips, sepals and petals fuchsia colored, calli and base of lip orange, apical sides of clinandrium-hood with a pair of purple spots visible when seen from front. **Ovary** triquetrous, thin, smooth. **Sepals** free, spreading, oblong-oblancoleate, obtuse, 5-veined, fleshy towards the apical margin, thus fleshy aristate, the margin entire. **Petals** free, spreading, oblancoleate, unguiculate, subacute, fleshy towards the apical margin, 3-veined, the veins branching above, margin entire. **Lip** united to the column, 3-lobed, base cuneate, margin entire; 5 x 9 mm; the callus a fleshy cushion, elongate, nearly reaching the isthmus, apex bidentate, lateral lobes oblong, rounded, obliquely bilobed, divaricate, slightly narrower towards the apex; midlobe fleshy-thickened, elliptic-oblong, obtuse, with a pair of petaloid wings near the apex, obliquely subquadrate, apically bilobed, somewhat retrorse. **Column** straight, thin. **Clinandrium-hood** prominent, about $1\frac{1}{2}$ longer than the body of the column, margin erose-undulate, 4-celled, with a flexuous keel in front. **Pollinia** 4, bird-wing-type, unequal, the inner pair smaller, $\frac{3}{4}$ the size of the outer pair, centered. **Rostellum** transverse, sinuate. **Nectary** without penetrating the ovary, smooth.

OTHER SPECIMENS AND OTHER RECORDS: See appendix.

DISTRIBUTION AND ECOLOGY: Known from the summit of the Cordillera de Talamanca, Costa Rica and Chiriquí, in Panamá at 2200-3200 m in high montane oak forest; terrestrial and epiphytic. Flowering in February, June to October.

RECOGNITION: *Epidendrum pachytepalum* belongs to the Oerstedella Group which is characterized by the sympodial habit, mostly verrucose stems, and the rostellum which is transverse to the column instead of parallel, forming a wide, open sinus, and Aberrans Subgroup which has small, membranaceous flowers with a prominent clinandrium-hood, with unequal pollinia, the inner pair much smaller than the outer pair, and the pollinia very flat and translucent. The species is recognized



by the somewhat large flowers for the group, fuchsia colored, with base of lip and calli orange, and two purple spots on apical sides of clinandrium-hood visible when seen from front, the sepals and petals fleshy-thickened towards the apical margins, the inner pollinia about $\frac{3}{4}$ the size of the outer pair and centered, the fleshy midlobe has subquadrate wings near the apex. *Epidendrum atypicum* Hágsater has a simple midlobe of the lip, and very prominent clinandrium-hood nearly twice as long as the body of the column, the inner pollinia are only half as large as the outer pair, and located towards the apex of the pollinarium. It is closely related to *E. crescentilobum* Ames which has somewhat smaller flowers and a clearly 4-lobed lip, the midlobe membranaceous, not fleshy-thickened, the inner pollinia are located towards the thinner end of the outer, larger pair.

CONSERVATION STATUS: DD. Data deficient. Apparently common along the summit of the Cordillera de Talamanca, within the various National Parks.

ETYMOLOGY: From the Greek *παχύς*, thick, and *tepalum*, the sepals and petals, in reference to the unusual thickening of the sepals and petals, near the apical margins.