

**EPIDENDRUM RAFAEL-LUCASII** Hágster

Text on the reverse side

Plate 179

ICONES ORCHIDACEARUM 2. 1993

*EPIDENDRUM RAFAEL-LUCASII* Hágster, sp. nov.

Holotype: PANAMA: Sin localidad, preparado de material cultivado 15 abril 1983, R. L. Dressler sub E. Hágster 6293, AMO! (illustration voucher.)

*Epidendro mirabilis* Ames & C. Schweinf. simile, sed floribus minoribus, viridi-flavis, labello cordiformi vel triangulari.

Hierba epífita, colgante, con crecimiento sucesivo lateral, sin tallo principal. Raíces de la base de la planta, carnosas, delgadas, 1.5-3 mm de grosor. Tallo recto, delgado, terete, producido de un entrenudo intermedio del tallo anterior, 12-28 cm de largo. Hojas 9-11, distribuidas a lo largo del tallo; vaina tubular, terete, cubriendo totalmente el entrenudo correspondiente del tallo, verde con puntos pardo oscuro, 17-30 x 6-8 mm; lámina elíptica a lanceolada, emarginada, con un mucrón en el seno, subcoriácea, 3-12 x 1.6-3.6 cm. Inflorescencia terminal, florece una sola vez, distica, corta, recta, hasta 6 cm de largo; pedúnculo en ocasiones con 1-2 brácteas basales semejantes a las brácteas florales, conduplicadas, membranáceas, de 14-23 x 8-11 mm; raquis en zig-zag. Brácteas florales prominentes, conduplicadas, color verde con puntos pardos, tornándose pardo oscuro durante la floración, más o menos tan largas como el ovario, 21-33 x 8-13 mm. Flores 2-4, sucesivas, con fragancia diurna débil que recuerda la del limón, color amarillo-verdoso, sépalos exteriormente punteados de pardo. Ovario terete, no inflado, recto, 24-30 mm de largo. Sépalo dorsal extendido, elíptico, subcoriáceo, obtuso, dorsalmente carinado cerca del ápice, plurinervado, 17-20 x 4-5 mm. Sépalos laterales similares al dorsal, entreabiertos, rectos. Pétalos entreabiertos, angostamente oblanceolados, obtusos, subcoriáceos, 16 x 5 mm. Labelo unido a la columna, entero, triangular a cordiforme, los lados abrazando la columna ligeramente, subcoriáceo, 10-11 x 9-11 mm; callo en forma de "T", prolongándose en una quilla central roma y prominente. Columna recta, gruesa, 10 mm de largo. Clinandrio corto, irregular. Antera trapezoide, cóncava, 4-loacular. Polinios 4, obovoides, lateralmente comprimidos; caudiculas suaves y granulosas; viscidio semiliquido. Rostelo apical, hendido. Lóbulos laterales del estigma prominentes, de 1/3 del largo de la cavidad estigmática. Nectario muy profundo, penetrando 3/4 del ovario, angosto, no ornamentado. Cápsula no vista.

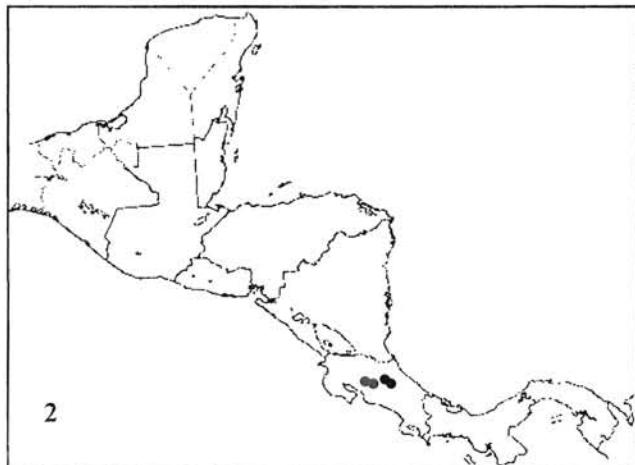
Epiphytic, pendent herb. Stems produced from a middle internode of the previous stem. Leaves distributed throughout the stem; sheath tubular, dotted with brown; blade elliptic to lanceolate, emarginate, mucronate. Inflorescence terminal, flowers only once, short, distichous; peduncle sometimes with 1-2 bracts similar to the floral bracts; rachis zigzag. Floral bracts prominent, conduplicate, about as long as the ovary, dotted with brown, turning brown during flowering. Flowers 2-4, successive but all may be open at the same time, greenish-yellow, with weak diurnal lemon-like fragrance. Ovary terete, not inflated. Sepals elliptic, obtuse, many-veined. Petals narrowly oblanceolate, obtuse. Lip united to the column, entire, triangular to cordiform, the sides partially embracing the column; callus T-shaped, prolonged into a prominent central keel. Column straight, thick. Clinandrium short, margin irregular. Anther trapezoid, concave, 4-celled. Pollinia 4, obovoid, laterally compressed, caudicles soft and granulose, viscidium semiliquid. Rostellum apical, slit. Lateral stigma lobes prominent, of about 1/3 of the length of the stigmatic cavity. Nectary deep, penetrating 3/4 of the ovary, not ornamented.

OTHER SPECIMENS: COSTA RICA: Endres 541, W! Alajuela: Brenes 866, NY! Gómez et al. 20966, CR! Lent sub Rodriguez 1212, USJ! Steven 13803, AMO! F! 14249, AMO! CR! F! Todzia & Campos s.n., CR! without collector or collection number, USJ(26155)! Limón: Standley 37423, AMES! 37481, AMES! San José: Todzia 2033, CR!

OTHER RECORDS: COSTA RICA: Alajuela: Lent sub Rodriguez 1212 (xerox and slide of the illustration No. 698 by Rafael Lucas Rodríguez), AMO!

DISTRIBUTION AND ECOLOGY: Costa Rica and Panama. Epiphyte, in lower mountain rain forest, mainly from 600 to 1000 m altitude. Flowering from June to September (probably throughout the year).

RECOGNITION: *Epidendrum rafael-lucasii* is recognized by the pendent plants with the stems produced from the middle of a previous stem, and the 2-4 flowered raceme with greenish-yellow, lemon-scented flowers and prominent distichous bracts. *Epidendrum mirabile* is similar but has larger, very showy purple flowers. *Epidendrum mora-retanae* Hágster has a long, conspicuous main stem and small branches from which the raceme with imbricating bracts and white flowers is produced. *Epidendrum acuñae* Dressler also has a main stem with small flowering branches, fleshy leaves and a raceme of two greenish-brown flowers.



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CONSERVATION STATUS: Unknown. The species appears to be conserved in various national parks.

ETYMOLOGY: This species is dedicated to Rafael Lucas Rodríguez, Costarican botanist who prepared a large collection of illustrations of orchids of Costa Rica, a selection of which was published by the University of Costa Rica in 1986 as "Géneros de Orquídeas de Costa Rica".

REFERENCES: Rodríguez, R.L., D.E. Mora, M.E. Barahona and N.H. Williams. 1986. Géneros de Orquídeas de Costa Rica. Editorial Universidad de Costa Rica. San José. 334 pp.

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