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A NEW PLEUROTHALLIS FROM COSTA RICA

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THE species described below is in part characterized by the non-resupinate flowers; the connate lateral sepals being directed toward the apex of the leaf. In the collector's notes there is nothing to warrant the explanation that this condition is the result of the stems and leaves having been drooping or pendent, but it is probable that the leaves hung downward or were strongly deflexed, in which case the flowers would become non-resupinate.

Pleurothallis fantastica is without close alllies in the Central American flora. In habit it suggests P.Tonduziana Schltr., but in floral structure is quite distinct; furthermore, the secondary stems are less markedly ancipitous or winged below the triangular-lanceolate leaf-blade. The adnate peduncle, the conspicuously three-lobed labellum with a more or less prominent cushion-like callus on the disc at the base of the middle-lobe, and the leaves being penninerved near the base constitute the more important distinguishing characters. The column is of the type characteristic of Pleurothallis as originally defined by Robert Brown, in that the stigmas are confluent along the frontal margin of the androclinium as in P.ruscifolia (Jacq.) R. Br. (Cf. Bot. Mus. Leafl. Harv.

EXPLANATION OF THE ILLUSTRATION

PLEUROTHALLIS FANTASTICA Ames. Plant, one half of natural size, drawn from the type. 1, flower, much enlarged. 2, leaf and inflorescence, natural size. 3, labellum, enlarged, lateral lobes deflexed. 4, labellum and column (anther removed), enlarged. 5, column (anther removed) showing the triangular rostellum overhanging the stigmatic orifice. 6, pollinia, very much enlarged. Floral analyses drawn from material preserved in alcohol.

Drawn in August 1936 by Blanche Ames



Pleurothallis fantastica Ames sp. nov.

Radices fibratae, albidae, glabrae. Caules secundarii congesti, valde elongati, graciles, paucivaginati, superne leviter ancipiti, monophylli. Vaginae tubulatae, valde adpressae. Folium triangulari-lanceolatum, prope basim penninervium, usque ad apicem angustatum, apice mucronatum. Pedunculi abbreviati quam folium multo breviores, folio adnati. Pedicelli fasciculati. Flores succedanei. Sepala lateralia in laminam ellipticam connata. Sepalum dorsale anguste ellipticum. Petala late lanceolata, trinervia. Labellum carnosum, trilobatum; lobi laterales semiorbiculares, plus minusve erecti; lobus medius quadratus, papillosus, prope basim callo ornatus. Columna generis. Pollinia duo.

Roots fibrous, whitish, smooth, about 1 mm. thick. Secondary stems 10-20 cm. long, about 1 mm. in diameter, crowded on a creeping rhizome, ascending, slender below, becoming slightly ancipitous above, but not so conspicuously so as in the closely related P. Tonduziana, clothed with several closely appressed, cylindrical sheaths, monophyllous. Leaves 10–17 cm. long, 1.5–2.5 cm. wide near the base, coriaceous, tapering gradually to an acute, mucronate tip, penninerved for the length of the adnate peduncle, the basal margins more or less involute. Peduncle about 2 cm. long, completely adnate to the leaf, bearing at the free end an ample sheath which is about 6 mm. long and from which one to three or more nonresupinate flowers emerge in succession, only one flower, rarely two, being expanded simultaneously. Pedicels fasciculate, about 3 mm. long, smooth. Ovary 3.5 mm. long, jointed to the pedicel. Lateral sepals connate, forming an elliptical lamina with eight nerves, 5 mm. long, about 4 mm. wide. Upper sepal 5-6 mm. long, 3 mm. wide,

narrowly elliptical, obtuse or subacute, 3–5-nerved. Petals 5–6 mm. long, 2 mm. wide, broadly lanceolate, minutely glandulose, obtuse, 3-nerved. Labellum fleshy, adnate below to the base of the column and emerging just above its base, 2 mm. long, about 3 mm. wide, conspicuously fleshy, three-lobed with the lateral lobes semi-orbicular, about 2.5 mm. long, about 1 mm. wide, minutely glandulose, obliquely erect and more or less appressed to the column; middle lobe 1 mm. long and about 1 mm. wide, quadrate, retuse, distinctly glandulose, purplish, 3-nerved with a bilobed or retuse callus at the base. Column about 3 mm. long, narrowed toward the middle, conspicuously dilated above, minutely glandulose; rostellum broadly triangular. Pollinia two, slenderly pyriform.

Costa Rica: Province of San José, in the vicinity of El General. Epiphyte on trees by a river at 830 meters altitude. Flowers yellow. January 1936. Alexander F. Skutch 2391. (Type in Herb. Ames No. 43650). In the dried flowers examined the sepals and petals were yellow, the labellum purplish.