

A NEW PLEUROTHALLIS FROM MEXICO

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OCCASIONALLY an orchid appears which has one or more of its parts so modified or formed that it is difficult or impossible to understand the reason for its structure. *Pleurothallis calyptrorsepala* is one of those orchids. The dorsal sepal is provided at its apex with a perfect little calyptra, — what possible function this calyptra may perform and why it developed there is not at all clear. Most modified organs in the orchids were apparently developed to assist in the primary function of the flower, — that of effecting pollination and the subsequent production of seed so that the species would continue to exist. It is difficult to see how the calyptriform dorsal sepal of *Pleurothallis calyptrorsepala* could assist in pollination, because of its position.

Pleurothallis calyptrorsepala L. O. Williams sp. nov.

Herbae erectae, epiphyticae, usque ad 5 cm. longae. Folia oblanceolata vel obovata obtusa, petiolata. Pedunculus quam folia longior. Inflorescencia pauci- vel pluriflora. Sepalum dorsale anguste oblongum, apice calyptriforme vel saccatum, trinerivium. Sepala lateralia usque ad supra medium connata, apice leviter cucullata, obtusa. Petala oblongo-oblanceolata, obtusa, uninervia. Labellum trilobatum; lobi laterales erecti, carnosi; lobus medius suborbicularis. Columna gracilis, leviter arcuata, apice lobata et alata.

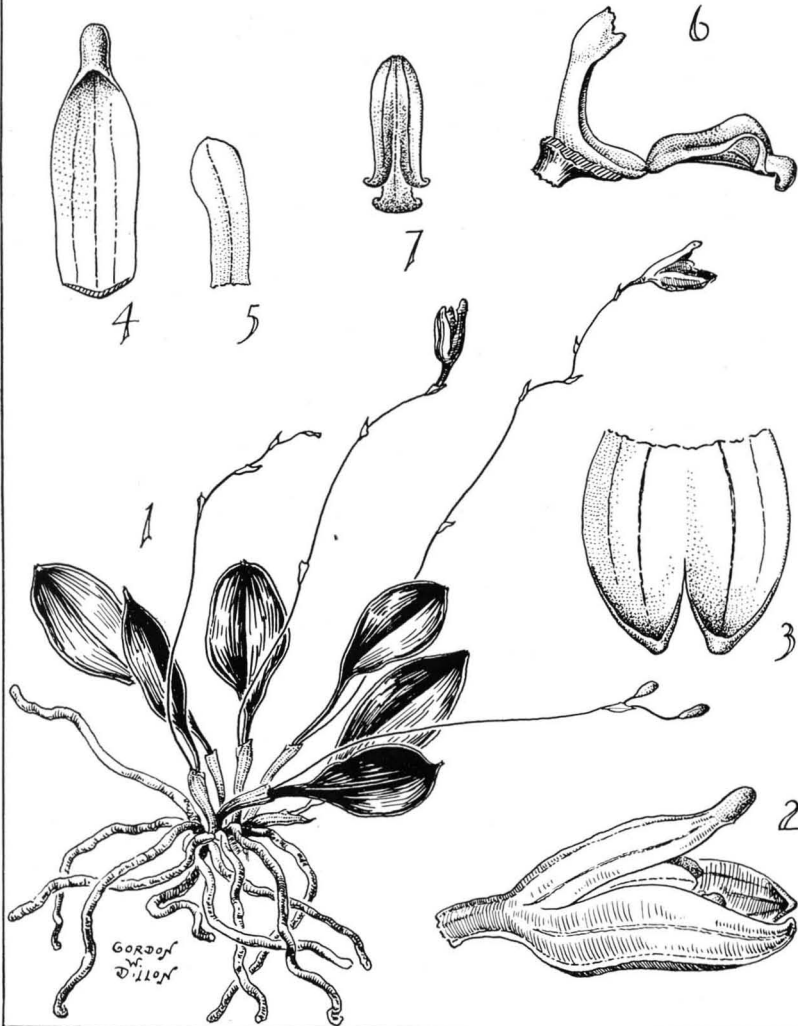
Small caespitose, epiphytic herbs with short secondary stems. Secondary stems slender, short, about 5 mm. or less long, covered hyaline sheaths. Leaves oblanceolate to obovate, obtuse, marginate, petiolate; the blade 6–11 mm. long and 4–6 mm. broad; the petiole slender, 2–7 mm. long. Peduncle several times longer than the subtending leaf. Inflorescence a few-flowered raceme. Flowers small, dull purple. Dorsal sepal narrowly oblong, about 3.5 mm. long and 1.5 mm. broad, apex calyptriform or saccate, 3-nerved. Lateral sepals 1-nerved, connate more than half their length, each sepal narrowly ovate or together rotund in outline and about 3 mm. long and 2.5 mm. broad, apices slightly cucullate, obtuse. Petals oblong-oblanceolate, obtuse, about 2 mm. long and 0.5 mm. broad, 1-nerved. Lip 3-lobed, navicular, about 1.7 mm. long and 0.4 mm. broad; the lateral lobes erect, very thick; the mid-lobe nearly round. Column slender, slightly arcuate, about 2 mm. long, 3–5-lobed and winged at the apex.

MEXICO: on tree trunks in very humid forests, shore of Lake Tzisco, east of Comitán, state of Chiapas, longitude $91^{\circ} 35'$ west, latitude $16^{\circ} 06'$ north, at 1350 meters altitude, flowers dull purple, March 12, 1936, *Nagel 5493* (TYPE in Herb. Ames).

Pleurothallis calyptrorsepala is similar to *P. Grobyi* in general aspect but not closely allied to that species or to any other known in Central America. The peculiar calyptriform apex of the dorsal sepal seems to be shared by no other species so far as I am aware. The lip is not like that of any Mexican species nor any other species which I have dissected.

PLEUROTHALLIS

calyptrorsepala L. Wms.



EXPLANATION OF THE PLATE

FIGURE 1, habit, $\times 2$. FIG. 2, flower from the side, $\times 10$. FIG. 3, lateral sepals, $\times 10$. FIG. 4, dorsal sepal showing calyptriform apex, $\times 10$. FIG. 5, petal, $\times 10$. FIG. 6, column and lip from the side, $\times 10$. FIG. 7, lip from above, $\times 10$.