ADDITIONS TO THE ORCHID FLORA OF CERRO MARAHUACA

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The collections obtained by Dr. Julian A. Steyermark, in October, 1983 from Cerro Marahuaca, Territorio Federal Amazonas of Venezuela, resulted in a number of species new to this mountain, as well as for the Territorio Federal Amazonas, and, in addition, a species new to science, the description of which follows.

SCAPHYGLOTTIS MICHELANGELIORUM Carnevali & Steyermark, sp. nov. (figure 1)

Herba epiphytica, pro genero parva 7 cm alta. Rhizoma abbreviatum. Pseudobulbi fusiformes vel subcylindrici stipitati 2-4.5 cm longi, apice bifoliati. Folia lineari-oblonga, apice bilobata 3.5-4.5 cm longa 0.3-0.35 cm lata. Inflorescentia uniflora solitaria, pedunculo fere nullo. Ovarii pedicellus 0.4 cm longus, ovario vaginis 3-4 scariosis imbricatis obtecto. Flores parvi purpurei. Sepala trinervula. Sepalum dorsale anguste obovato-ellipticum obtusum 0.38 cm longum 0.17 cm latum. Sepala lateralia similia sed valde obliqua et leviter breviora[+]. Petala uninervada spathulata obtusa acutiusculaque 0.32 cm longa 0.15 cm lata. Labellum obovatum truncatum leviter emarginatum paullo panduratum, basi callis duobus rotundatis 0.35 cm longis 0.15 cm latis munitum, ad pedem columnae continuum. Columna subteres alis tenuibus membranaceis continuis instructa, pedi brevi 0.32 cm longa. Pollinia 4.

[+] cum pede columnae prominentiam exiguam formantia.

Small epiphytic herb 7 cm tall. Rhizome short, pseudobulbs cylindrical to subfusiform, erect, 2-4.5 cm long when mature, apparently not overlapping, 1-2-foliate apically, basally shortly stipitate. Leaves coriaceous, subopposite, erect-spreading, linear-oblong to linear, 3.5-4.5 cm long, 0.3-0.35 cm wide, bilobed at the apex with a minute mucro in the depression of the sinus. Inflorescence 1-flowered, solitary (possibly also fasciculate), arising from the apices of the secondary stems. Peduncle nearly absent, 0.1 cm long. Peduncle and ovary pedicellate, covered with 3-4 scarious, imbricate, oblong to oblong-obovate,

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acuminate sheaths 0.5 cm long, 0.2 cm wide. Ovary pedicellate, subterete, tricostate, 0.4 cm long. Flowers small for the genus, purple, slightly open, erect-spreading. Dorsal sepal trinerved, narrowly obovate-elliptic, obtuse, 0.38 cm long, 0.17 cm wide. Lateral sepals 3-nerved, obovate-elliptic, oblique, obtuse to acutish, 0.32 cm long, 0.16 cm wide, with a relatively conspicuous protuberance at the base. Petals 1-nerved, narrowly obovate-elliptic, oblique, obtuse to acutish at the apex, 0.37 cm long, 0.12 cm wide. Lip in general aspect obovate, rounded, emarginate and minutely apiculate, attenuate basally, slightly geniculate in natural position, slightly pandurate at the middle, 3.2 mm long, 1.5 mm wide, lateral margins raised in natural position; disk with 2 semihemispherical shallow ridges in the basal half. Column thin, slightly incurved, with 2 slender membranous wings 2 mm long along the length. Pollinia 4.

Type collection: VENEZUELA: Territorio Federal Amazonas: faldas del Cerro Marahuaca, alt. 1550 m, 13-14 oct 1983, Julian A. Steyermark 129650 (VEN, holotype).

This small species is characterized by having the lip continuous with the column, imbricate bracts covering the pedicellate ovary, and the semihemispherical ridges in the basal part of the disk of the lip. Because of its lip continuous with the column (not articulate with it), it is related to Scaphyglottis bicornis (Lindl.)Garay (Scaphyglottis aurea (Rchb.f.) Foldats), but that species has larger flowers with differently shaped perianth segments and a much more geniculate lip. Scaphyglottis bicornis was placed in the genus Tetragamestus Rchb.f. and our new species would fall there if that genus were considered valid. The separation of Tetragamestus from Scaphyglottis Poepp. & Endl., based on the absence of a columnar foot in Tetragamestus, does not appear to be a signicant character, since it has apparently evolved independently several times within the Scaphyglottis complex. The type species of the genus Tetragamestus, T. modestus Rchb.f., does not appear to have close affinity with T. aureus, but is closely related to the other species typical of the genus Scaphyglottis. On the other hand, T. aureus shows a real affinity with the genus Hexisea Lindl. because of the character of the geniculate lip continuous with the column, and particularly with H. geniculata Ames & C. Schweinf. of Central America, and constitutes an intermediate stage between Hexisea and Scaphyglottis. Our species is much closer to the classic concept of Scaphyglottis

and for this reason it is placed here in this genus.

Scaphyglottis michelangeliorum somewhat resembles S. bradeorum Schltr. of Costa Rica, but that species has larger flowers with a slightly 3-lobed lip, and is a more robust taxon. Also, S. michelangeliorum approaches S. prolifera Cogn. which has a different lip without ridges and only slightly oblique lateral sepals.

The species is dedicated to Armando and Fabian Michelangeli of the Terramar Foundation, through whose efforts in organizing the expedition to Cerro Marahuaca, it was possible to collect this orchid.

The orchid collections obtained from Cerro Marahuaca during October, 1983, also yielded other interesting records. Two of them, Pterichis acuminata Schltr. (Steyermark 129565) and Epidendrum klotzscheanum Rchb.f. (Steyermark 129474), merit special comments from the phytogeographical viewpoint. The first mentioned species belongs to a genus considered restricted to the high Andes, including the páramos. This is the first record for the genus outside of the Andes and Coastal mountains of Venezuela. The second species mentioned is likewise characteristic of cloud forests and subpáramos of the Andes and only exceptionally found in the Venezuelan Coastal mountains in stations above 2000 meters.

These two records illustrate the at present unexplainable botanical connection existing between the flora of the high Andes and that of Pantepui without supporting geological data. Numerous examples of this connection are known in various families of plants, but in the Orchidaceae, such species may be mentioned as Encyclia pamplonense (Rchb.f.) Carnevali, Epidendrum attenuatum Lindl., E. imthurnii Ridl., E. schlimii, Maxillaria alticola C. Schweinf., M. aurea (P. & E.) L.O. Wms., M. grandiflora (H.B.K.) Lindl., Otoglossum arminii (Rchb.f.) Garay & Dunst., Pleurothallis moritzii Rchb.f., and P. samacensis Ames.

Additional records of orchids found on the expedition to Cerro Marahuaca in October, 1983, which further substantiate this Andean-Guayana Highland connection, include the following:

MYOXANTHUS SPECIOSUS (Luer) Luer

Steyermark 129453. This species, cited as Pleurothallis exasperata Lindl. in the Flora de Venezuela by Foldats, is known from the summits of sandstone table mountains, the Venezuelan Coastal Cordillera above 1800 meters altitude, and from the Ecuadorian Andes. The collection cited here constitutes the first record for Territorio Federal Amazonas.

EPIDENDRUM PACHYPHYTON Garay
Steyermark 129603. This species, originally described from the departments of Antioquia and Risaralda of the Colombian Andes, was later collected from Cerro Jaua and Cerro Venamo of Estado Bolívar, Venezuela Guayana. The present record is the first one obtained from a table mountain of the Territorio Federal Amazonas.

ONCIDIUM SANCTI-PAULI Kränzl.
Steyermark 129620. Described from the Colombian Andes, it was later found on Cerro Venamo of the Venezuelan Guayana in the southeastern portion of Estado Bolívar. This is the first record of the species for the Territorio Federal Amazonas.

BRACHIONIDIUM PARVUM Rolfe (figure 2)
Steyermark 129512. This species was described originally from material collected in the Antilles. In Venezuela it was later collected on Cerro Duida, adjacent to Cerro Marahuaca. Now, as would be expected, it has been found on one of the talus forested slopes of Cerro Marahuaca at an altitude of 1500 meters. Since this taxon has not been previously illustrated either in the Flora de Venezuela by Foldats or in Venezuela Orchids Illustrated by Garay and Dunsterville, we provide here an excellent drawing executed by the eminent artist, Bruno José Manara.

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EXPLANATION OF FIGURE 1.

A- Habit.
B- Flower, natural position.
C- Lip and column, without anther.
D- Lip and tepals, flattened.

EXPLANATION OF FIGURE 2.

A- Habit and flower.
B- Lip, two views.
C- Lip and column.
D- Lip and tepals, flattened.

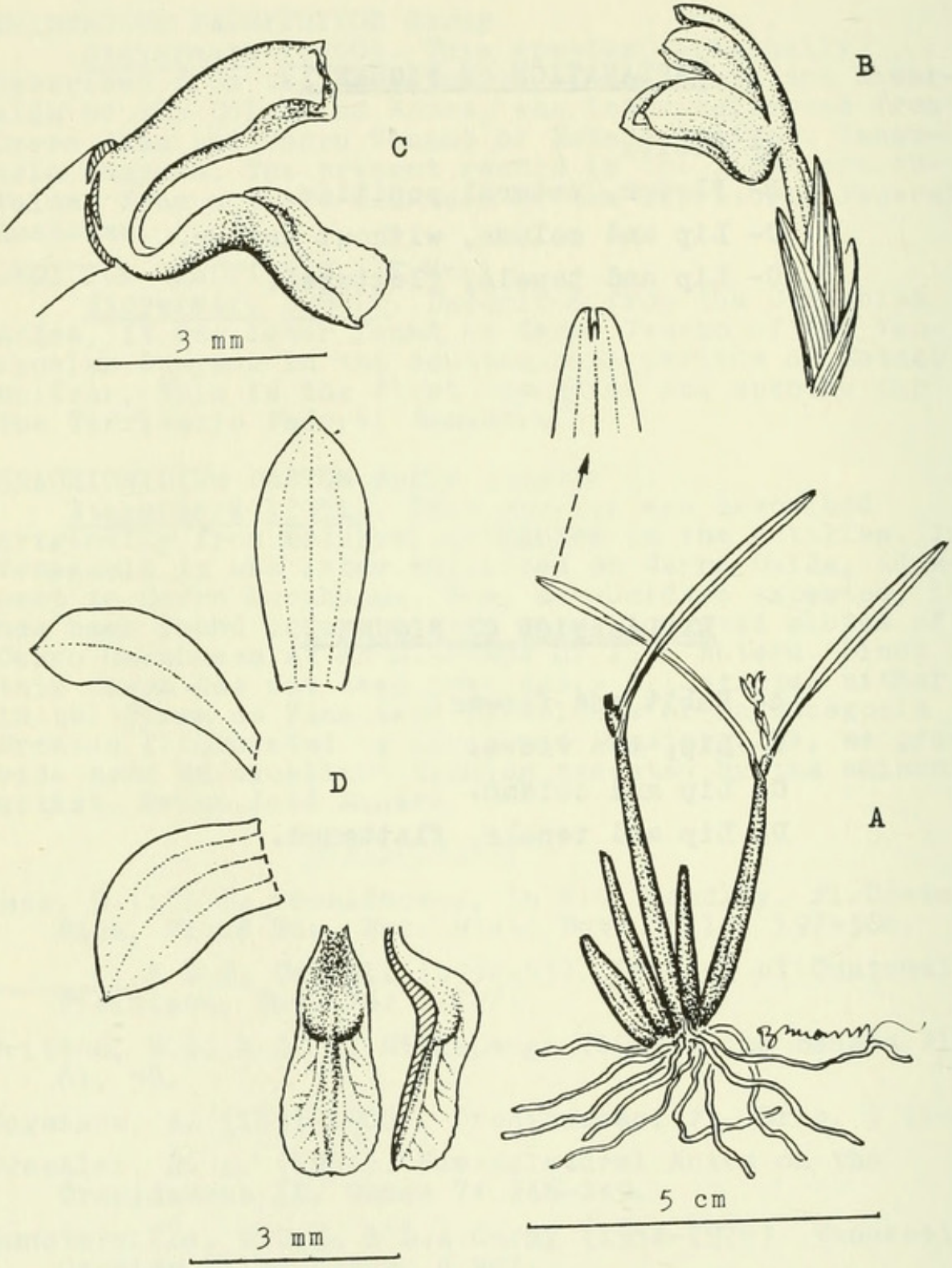

Figure 1

SCAPHYGLOTTIS MICHELANGELIORUM

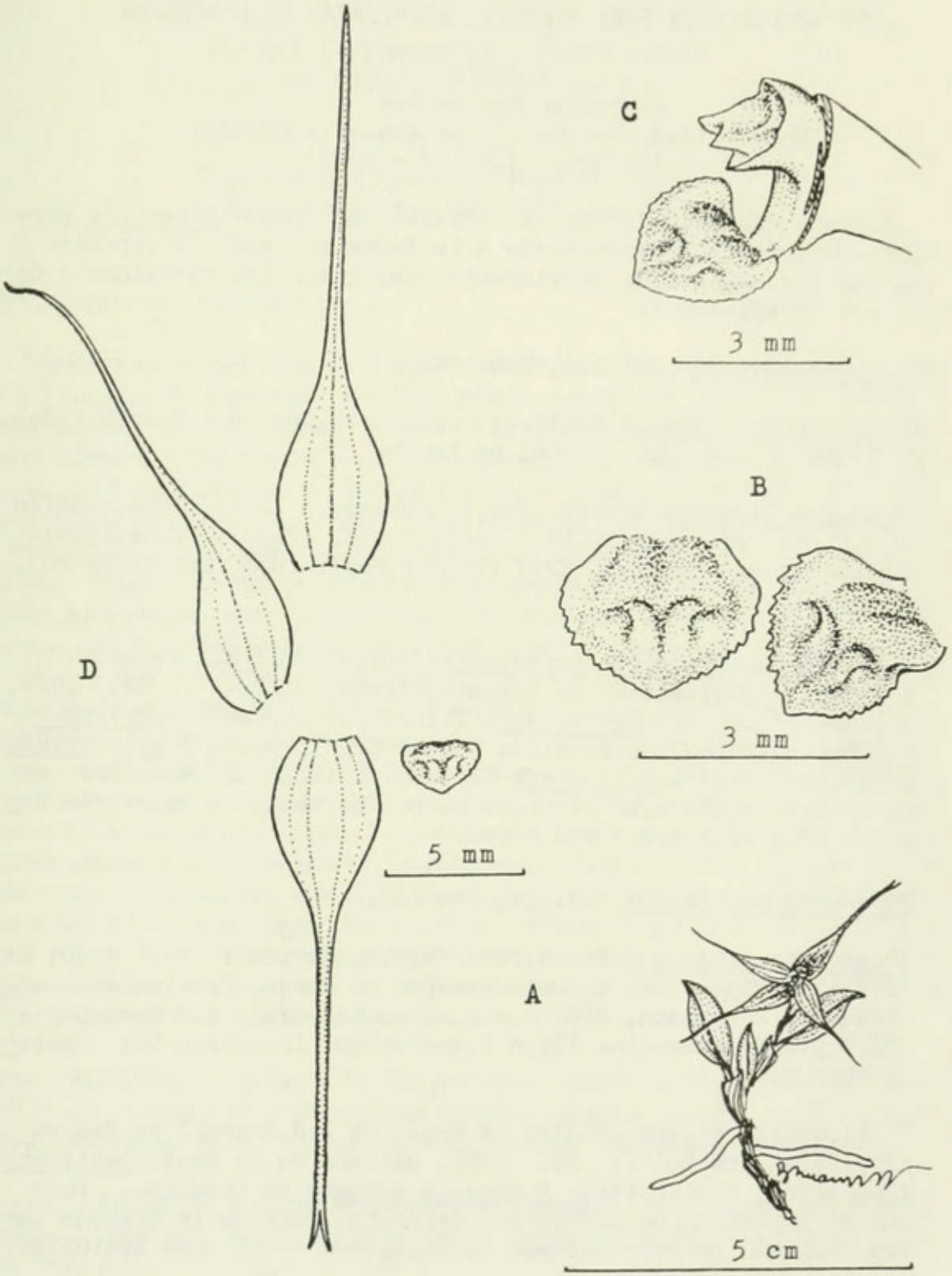

Figure 2
BRACHIONIDIUM PARVUM