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MAXILLARIA SCULLIANA (ORCHIDACEAE), A NEW SPECIES FROM COLOMBIA

JOHN T. ATWOOD

Missouri Botanical Gardens, Marie Selby Botanical Gardens.
Mailing address: P.O. Box 566, Woodstock, VT 05091.
E-mail: msbgatwood@aol.com

ABSTRACT. A new species of *Maxillaria* Ruiz & Pavon (Orchidaceae) from Colombia is described and illustrated. It is here hypothesized to belong to the Ornithidium clade (including segregate genus, Neourbania Alliance) of *Maxillaria,* probably related to *M. histrionica* (Rchb.f.) L.O. Williams. Only a single specimen has been located.

Key words: *Maxillaria,* Orchidaceae, Orchid

INTRODUCTION

Most species of *Maxillaria* lack major economic significance; hence the genus is largely ignored by botanists in favor of horticulturally more interesting ones. This is especially true of those species of *Maxillaria* that produce elongate rhizomes requiring a large growing space. Among these orchids, new species are to be expected, as they are among the least important horticulturally. The previously undescribed subject of this article is a member of the group sometimes referred to as the Neourbania Alliance that includes *Maxillaria adendrobium,* but oddly it is the largest flowered and attractive member with sepals exceeding 2 cm. Typical of the group, it has roots of broad diameter (greater than 1 mm) and long pedicellate ovaries subtended by a minute floral bract. The lip has a large plate-like callus at the base as with *M. multicaulis* (Poepp. & Endl.) C.Schweinf.

Only a single specimen of the species has been seen, with developing fruit indicating that anthesis was long past when collected. Although the column is broadened with the post-pollinated flowers, the persistent perianth parts allow for description of this orchid. More plants are expected in the wild, although some species of *Maxillaria* are extremely low-density epiphytes or very rare.

Most species of *Maxillaria* are ignored by horticultural collectors, and one might expect them to be common in nature, if collection pressure has not significantly impacted populations. Some, however, have been proven rare despite lack of exploitation. *Maxillaria suaveolens* Barringer from Costa Rica is known by a single collection made more than 50 years ago, this despite the large plants supporting appropriately large flowers noted to be fragrant. The lack of rediscovery of this expectedly conspicuous orchid suggests that it may be extinct in the degraded forests where it was collected. Similarly, *Maxillaria haberi* J.T. Atwood has been seen few times as single isolated plants indicating populations of very low densities. *Maxillari insolita* Dressler has been seen but once in Panama at the type locality; but oddly enough, it has been photographed in Ecuador indicating a much broader range but low population density. One can say little about the range of these extremely rare orchids. Hopefully someone will rediscover the following one.

NEW SPECIES

Maxillaria sculliana *J.T. Atwood,* sp. nov. TYPE: Colombia: Dept. Chocó, Mpio. San José del Palmar, Cerro del Torrá, NE slope above the heliport, 1875–1905 m, 6 Jan. 1984, *Silverstone-Sopkin et al. 1575* (MO!).

Ex affinitate *Maxillariae histrionicae* (Rchb.f.) L.O. Williams sed surculis adultis indeterminatis sine pseudobulbis floribusque grandioribus differt.

Plant to 2 m tall according to collectors, epiphytic, the adults functionally monopodial, juveniles unknown; roots thick, to ca. 3 mm in diameter, grayish-brown; stems unbranched in the present specimen, ca. 1.5 cm in diameter, concealed by the sheaths of distichous leaves. ***Leaves*** thin, conduplicate; sheaths with hyaline margins; blades articulate, to 20 × 2.5–3 cm, dark green above, silver-tinted (glaucous?) below, acute, with central keel and several raised veins below. ***Inflorescences*** 2 or more per leaf sheath; scapes ca. 10 cm long mostly concealed by remote tubular bracts; young ovary length unknown in present fruiting specimen, subtended by a floral bract ca. 1 mm long. ***Flower*** apparently spidery, with elongate floral parts. ***Sepals*** 20–25 × 4–5 mm, lanceolate, acute and attenuate, with basal margin revolute, apical

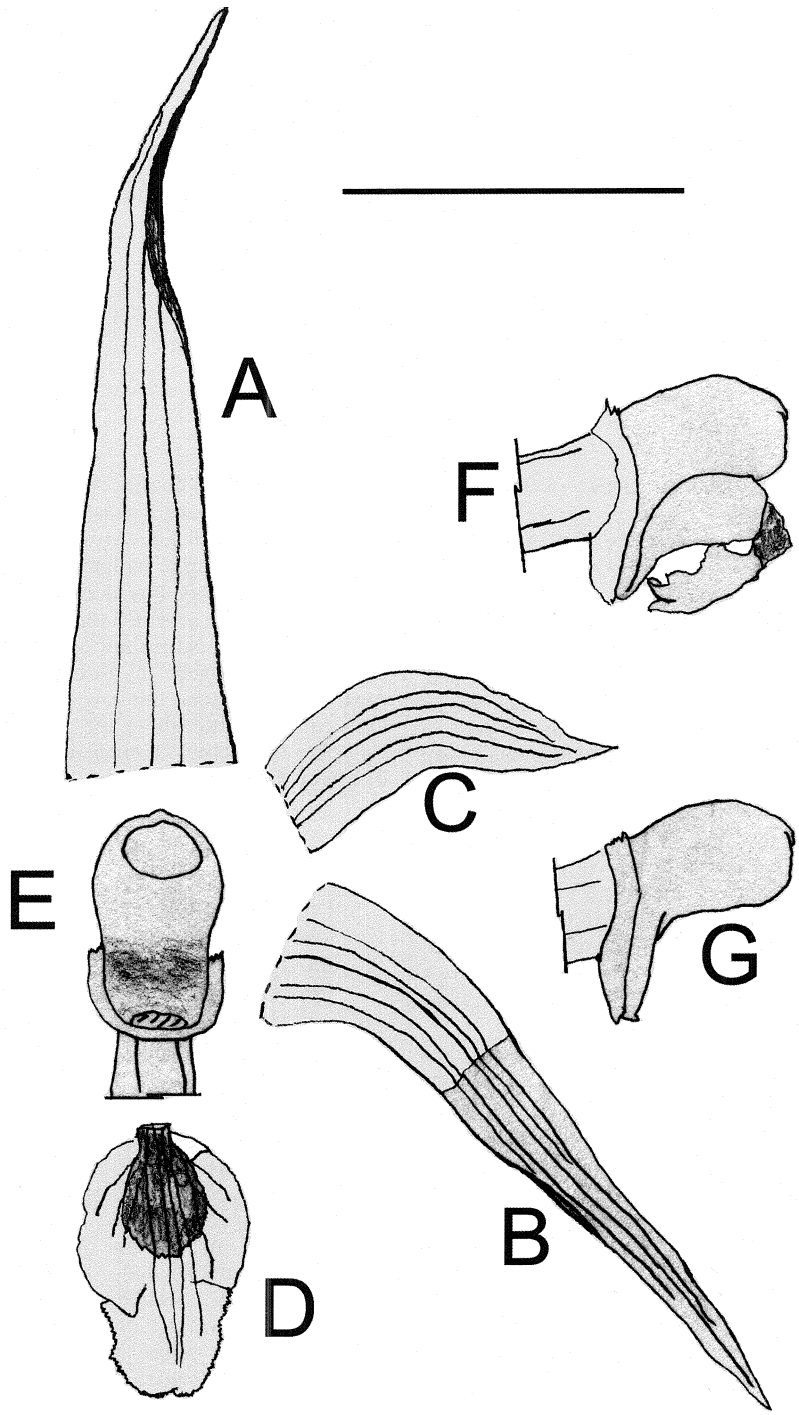

FIGURE 1. Dissected flower of *Maxillaria sculliana* persisting on fruit. **A.** Dorsal sepal. **B.** Lateral sepal. **C.** Petal. **D.** Lip. **E.** Column at post-pollination, frontal view. **F.** Column and lip. **G.** Column at post-pollination, lateral view. Scale bar: 10 mm.

margin involute, the apex (at least of the dorsal) probably recurved; dorsal recurved apically; lateral sepals obliquely bent downwards near the base. ***Petals*** ca. 11 × 3.5 mm, lanceolate, downflexed and recurved, apically thickened, acute; apical margin involute. ***Lip*** ca. 5.5 mm long in natural position, 7.5 × 5 mm when spread, hinged to the column foot; hypochile with lateral lobes somewhat clasping the column; epichile (midlobe) ovate, sharply reflexed and with serrulate margins; callus obovate on the lower half, serrulate in front (aged?). ***Column*** without anther 5 mm long, stout in aged flowers; foot ca. 3.5 mm. ***Capsules*** ca. 3 cm long (developing) with pedicel 1.5–2 cm and persistent perianth.

Etymology. Named in honor of Robert M. Scully, Jr., whose life-long love of orchids has inspired countless thousands of orchidists.

Known only by the holotype collected in a *Clusia*-dominated primary cloud forest of Chocó, Colombia. Fruiting material collected in January.

Maxillaria sculliana should be easy to distinguish from similar species by the tall pseudobulb-less canes, large-diameter roots, rather long leaves, long peduncles, and appropriately large flowers. Its closest relative may be *M. histrionica,* but that species has much smaller flowers and distinctly sympodial growth pattern with each adult renewal shoot terminated by a pseudobulb. The appearance is very similar to that of *M. aurea* (Poepp. & Endl.) L.O.Williams, but the flower is much larger which is evident even in fruit. Flowers analyzed: 2 from the holotype, persistent on developing fruits.

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NEW SPECIES OF THE GENUS *LEPANTHES* SW. FROM HISPANIOLA (ORCHIDACEAE)

CARLYLE A. LUER

Senior Curator, Herbarium, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299, USA. Corresponding address: 3222 Old Oak Drive, Sarasota, FL 34239-5019, USA.

ABSTRACT. Seventeen new species of *Lepanthes* from the Dominican Republic and Haiti are described from collections by Donald D. Dod. *Lepanthes* Sw. is the largest in numbers of species of all genera of orchids known from the island of Hispaniola. The 17 collections by Dod, published in preparation for the Flora of the Greater Antilles, are *Lepanthes anisoloba, L. apiculata, L. austinae, L. boomerang, L. braccata, L. decussata, L. dondodii, L. excavata, L. incurva, L. longiloba, L. magnipetala, L. microdonta, L. miniflora, L. politilabia, L. pteroglossa, L. semperflorens,* and *L. truncatipetala.*

Key words: Orchidaceae, Hispaniola, Haiti, Dominican Republic, *Lepanthes*

INTRODUCTION

Seventeen collections by Donald D. Dod are published here in preparation for the Flora of the Greater Antilles. *Lepanthes* Sw. is the largest in numbers of species of all genera of orchids known from the island of Hispaniola. The first species from the island attributed to *Lepanthes* was *L. serrulata* by Cogniaux in 1910, but it was later realized to belong to *Lepanthopsis* Ames. The first species of *Lepanthes* to be described from Hispaniola was *L. tenuis* by Schlechter in 1913 from a collection by Fuertes. Urban added three more in 1917. A few scattered collections were described prior to the Dod collections that began after his arrival in 1965. Hespenheide and Dod (1989, 1990, 1993) described 28 of Dod's collections in a series of three articles.

The following 17 collections by Dod are *Lepanthes anisoloba, L. apiculata, L. austinae, L. boomerang, L. braccata, L. decussata, L. dondodii, L. excavata, L. incurva, L. longiloba, L. magnipetala, L. microdonta, L. miniflora, L. politilabia, L. pteroglossa, L. semperflorens,* and *L. truncatipetala.*

NEW SPECIES

Lepanthes anisoloba Dod ex Luer, sp. nov. TYPE: Dominican Republic: obtained from D.D. Dod as "inaequalis," cultivated by P. Jesup in Bristol, CT, 26 Apr. 1987, C. Luer 12867 (Holotype: MO). FIGURE 1.

Planta parva racemo congesto folio ovato acuto breviore, sepalis ovatis acutis, petalis transverse bilobis, lobo superiore triangulari quam lobo inferiore rotundo ter majori, labelli laminis ovatis cum appendice crassa pubescenti distinguitur.

Plant small, epiphytic, caespitose; roots slender. ***Ramicauls*** erect, slender, 2.5–6.5 cm long, enclosed by 8–12 tubular, lepanthiform sheaths with microscopically ciliate ostia. ***Leaf*** erect, coriaceous, elliptical-ovate, acute, 20–25 mm long, 10–12 mm wide, the base cuneate into a petiole ca. 1 mm long. ***Inflorescence*** a congested, distichous, successively many-flowered raceme up to 13 mm long, borne on top of the leaf by a filiform peduncle 3–4 mm long; floral bracts echinate, 0.75 mm long; pedicels 0.75–1 mm long; ovary 1 mm long; sepals entire, glabrous, pale rosy tan, subcarinate, narrowly ovate-triangular, acute, the dorsal sepal 2.5 mm long, 2 mm wide, 3-veined, connate to the lateral sepals for 0.5 mm, the lateral sepals oblique, 2.5 mm long, 1.25 mm wide, 2-veined, connate 1 mm; petals orange, microscopically pubescent, transversely bilobed, 0.75 mm long, 2.5 mm wide, the lobes opposite, the upper lobe triangular, acute, slightly everted, 2 mm long, the lower lobe broadly rounded, 0.5 mm long; lip rose, microscopically cellular, bilaminate, the blades ovate, shallowly concave, obtuse at the ends, 1.5 mm long, flanking the column, the connectives and body oblong, connate to the base of the column, the sinus notched, with a short, ovoid, pubescent appendix; column stout, 1 mm long, the anther and stigma apical.

Etymology. From the Greek *anisolobos,* "unequally lobed," referring to the lobes of the petals.

This species is known only from a collection by Dod that was cultivated by Jesup under the name "inaequalis," probably alluding to the lobes of the petals. It is characterized by the small habit with a dense raceme borne on top of an ovate, acute leaf. The sepals are ovate and acute with the laterals connate below the middle. The petals are transversely lobed, with the upper,