

A NEW SPECIES OF *MAXILLARIA* (ORCHIDACEAE) FROM COSTA RICA

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Barringer, Kerry A. (Department of Botany, Field Museum of Natural History, Chicago, IL 60605-2496). A new species of *Maxillaria* (Orchidaceae) from Costa Rica. *Brittonia* 37: 44–46, 1985. — *Maxillaria suaveolens* Barringer from the Golfo Dolce region of Costa Rica is described and illustrated.

There are 82 species of *Maxillaria* Ruiz & Pavón found in Costa Rica, making it one of the largest genera of orchids in the country. Most species are found in the wet lowland forests or in the lower portions of the wet montane forests. The species can be divided into three artificial groups based on habit, but a reliable infrageneric key or classification has not been made. The first group is made up of species with caespitose habit and spidery flowers borne on stalks from the base of the pseudobulbs. This comprises the traditional concept of *Maxillaria* and is represented in Costa Rica by species such as *M. reichenheimiana* Lindl. and *M. brunescens* Reichb. f. The second group is caulescent, with flowers borne on stalks from young shoots and with pseudobulbs that are often inconspicuous or hidden by the bases of leaves. This group includes the synonymous genera *Camaridium* Lindl. and *Ornithidium* Reichb. f. The majority of Costa Rican species fall into this group which can be represented by species such as *M. camaridii* Reichb. f., *M. wercklei* (Schltr.) L. O. Williams, and *M. fulgens* (Schltr.) L. O. Williams. The third group includes species which are caespitose, lack pseudobulbs, and have fan-like clusters of leaves. This small group can be characterized by *M. valenzuelana* (A. Rich.) Nash.

Maxillaria suaveolens, a member of the second group, was discovered while compiling a synonymized checklist of Costa Rican orchids (Barringer & Christenson, in prep.).

Maxillaria suaveolens Barringer, sp. nov. (Fig. 1)

Maxillariae camaridii Reichb. f. affinis sed pseudobulbis unifoliatis anguste ellipticis, foliis anguste obovatis, sepalis et petalis majoribus obovatis, labii callo ligulato, lobis lateralibus majoribus loboque medio lanceolato serrulato acuto puberulo diversa.

Epiphyte; stems elongate, terete, pendulous, with narrowly elliptic, ancipitous, rugulose, monophyllous pseudobulbs, 3.4–4.2 cm long, 1–1.5 cm wide, the upper internodes of the stem shorter than the pseudobulbs, stem and pseudobulbs often covered with the persistent, dried bases of cataphylls and leaves. Leaves subcoriaceous, narrowly obovate to narrowly elliptic, 17–20 cm long, 3–4 cm wide, articulated 4 cm above the base, the apex unequally retuse to emarginate. Inflorescences short, 1-flowered scapes borne in the axils of cataphylls on flushes of new growth, the cataphylls conduplicate, 3–4 cm long, 2 cm wide, articulate 2.5–3 cm above the base, the apex emarginate, recurved, the scapes 4–6 cm long, covered by 4–5 scarious, lanceolate, acute bracts. Flower large, fragrant; sepals white, obovate, 4–4.5 cm long, 2–2.3 cm wide, membranous, the base narrowed, the apex obtuse; petals white, obovate, 3.7–4 cm long, 1.7–2 cm wide, membranous, the base narrowed, the apex obtuse, slightly acuminate; lip clear yellow, 3-lobed, 2–2.5 cm long, to 1.3 cm wide when spread, contracted at the base and articulated with the column foot, the disk with a convex, liguliform, efrimbriate callus, the lateral lobes erect, round, 4 mm long, the midlobe pendent, lanceolate



FIG. 1. *Maxillaria suaveolens*. A. Habit. B. Lip. C. Flower.

to ovate, 6 mm long, 5–6 mm wide at the base, acute, serrulate, densely pubescent, slightly caniculate, slightly thick; column 1 cm long, slightly curved, semiterete, slightly winged toward the apex.

TYPE: COSTA RICA. PUNTARENAS. Esquinas forest between the Rio Esquinas and Palmar, 100 ft alt., 30 Sep 1949, *P. H. Allen 5323* (HOLOTYPE: F!; ISOTYPE: fragment and sketch—AMES!, photo—F!).

This species is closely related to *M. camaridii* Reichb. f., a common lowland species found from Guatemala to Brazil. *Maxillaria suaveolens* and *M. camaridii* share characters of elongate stems, relatively emarginate leaves and cataphylls, and relatively large, white, fragrant flowers with a yellow lip that are borne on young shoots. *Maxillaria suaveolens* can be distinguished by its smaller pseudobulbs and larger leaves, its larger flowers, and the lanceolate, serrulate, pubescent midlobe of the lip. Also, the lip of *M. suaveolens* has a convex, glabrous callus while the callus of *M. camaridii* is concave and fimbriate.

Allen reports that the flowers have the fragrance of narcissus. He says that the flowers last for about three days but are fully open only on the first day. Plants were found in the tops of large trees.

The species is known only from the type collection but is to be expected in the lowland of Golfo Dolce and, perhaps, in adjacent Panama. This area has been developed since the type was collected, but forested areas remain.

The holotype was originally at the Escuela Agricola Panamericana in Tegucigalpa, Honduras but was transferred to the Field Museum in 1968 along with many of Allen's Costa Rican collections duplicated at Tegucigalpa.

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