MAXILLARIA CEDRALENSIS, A NEW SPECIES FROM THE HIGHLANDS OF COSTA RICA

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ABSTRACT. *Maxillaria cedralensis* J. T. Atwood & D. E. Mora is described from the mid to upper elevations of Costa Rica. This is the third species of the *M. cucullata* Lindl. complex known in Costa Rica. A key to species is provided.

Of the taxonomically difficult groups in Maxillaria, the Maxillaria cucullata Lindl. complex is among the most perplexing in Central America. Although living plants are usually easily distinguished, apparent occasional hybridization can complicate the identification of herbarium specimens. We have identified three species of the complex in Costa Rica. One is M. punctostriata Rchb.f. distinguished by its more or less orange flowers with lines of minute maroon dots, a lip with ligulate and rounded callus, and a terete ovary. A smaller flowered species occurs in southern Costa Rica and adjacent western Panama with greenish flowers suffused with purple (rather than maroon-dotted), a lip with rather truncate and trapezoid callus, and a trigonous ovary. This appears to be M. obscura Rchb.f., described from 'Colombia' when present-day Chiriquí province of Panama was part of that country.

The proposed new species comes from above 1800 m elevation in mountains south of San José, and is difficult to distinguish from other members of the complex when pressed and dried. In life, however, the cream flower color, recurved margins of the floral segments and spotted lip immediately set it apart. Despite several names available in the complex, none apply to plants with flower colors observed in this species, therefore we do not hesitate to describe it as new.

Maxillaria cedralensis J.T.Atwood & D.E. Mora, sp. nov. Figure 1.

TYPE: COSTA RICA. Prov. San José, Cedral, 2000 m elev., Apr 1990, D. E. Mora B-35 (Holotype: USJ31579).

Species affinis *Maxillariae cucullatae* Lindl., sed colore florum eburneo labelloque purpureo-maculato distinguitur.

Plant cespitose forming large clumps, <30 cm tall. Stems approximate, roots to 1 mm in

diameter. Pseudobulbs ovate, laterally compressed, $5-7 \times 2.5-4$ cm, subtended by inarticulate, triangular, non-foliaceous bracts. Leaves narrowly elliptic, to $45 \times 2.5-4$ cm, apex bluntly acute. Inflorescences 8-10 cm, slightly fractiflex; ovary with pedicel 1.5-2 cm long, exceeded by the acute floral bract. Flowers creamy white, the petals spotted with maroon near the base of the tepals; lip cream, spotted with maroon; column spotted with maroon on the ventral side. Sepals elliptic, acute, with revolute margins, $3.\overline{5} \times 1.3$ cm. **Petals** elliptic-lanceolate, acute, margins revolute, about 3×0.9 cm. Lip 3-lobate, 1.5×0.8 cm when spread; lateral lobes embracing the column, truncate to somewhat emarginate apically; midlobe about \(\frac{1}{2} \) lip length, recurved; callus 2-keeled, canaliculate, exceeding the lateral lobes in front. Column arcuate, 1.25 cm long including the operculum; foot very short; pollinia 4, supported on a short stipe and viscidium.

ETYMOLOGY: Named for the type locality.

We first saw this species several years ago as a single plant in the collection of Sra. Ileana de Terán. Maxillaria cedralensis is now known from more than one living collection and the plants have a different aspect than other members of the complex. It is unique in the M. cucullata complex with its large leaves, cream-colored flowers and spotted lip with rather narrow midlobe. Among Costa Rican members of the complex, Maxillaria cedralensis is also unique in having tepals with revolute margins. The plant from which the accompanying photograph was taken flowered in the collection of Lucia Jimenez who exhibited the magnificent plant at the March, 1995 orchid show of the Costa Rican Orchid Society. Following is a key to species of the M. cucullata complex recognized for Costa Rica.

1.	Flowers	cream with	maroon-spotted lip	
			Maxillaria	cedralensis



FIGURE 1. Maxillaria cedralensis J. T. Atwood & D. E. Mora flowering at the Costa Rican Orchid exhibition March, 1995. Photo: Kerry Dressler.

- 1. Flowers otherwise.
 - 2. Flowers orangish with lines of maroon dots, ovary terete Maxillaria punctostriata
 - 2. Flowers greenish suffused with purple, ovary trigonous Maxillaria obscura

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