



A new species and a new natural hybrid of *Laelia* (Orchidaceae) from Oaxaca, Mexico

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Abstract

A new species, *Laelia halbingeriana*, and a new natural hybrid, *Laelia ×oaxacana*, both from the Sierra Madre Oriental in northern Oaxaca, Mexico, are described and illustrated. *Laelia halbingeriana* is similar to *L. superbiens*, from Chiapas through Nicaragua, differing in the proportionately shorter, stouter pseudobulbs, low, entire, distally white keels of the labelum and obscurely bilobed anther. *Laelia ×oaxacana* is applied to a hybrid swarm between *L. halbingeriana* and sympatric *L. anceps*. The hybrid can be distinguished from *L. halbingeriana* by the distichous (vs. spiral) raceme and the spreading petals oriented vertically (vs. distinctly arcuate and oriented horizontally), and from *L. anceps* in the stouter plants with two-leaved pseudobulbs and the proportionately narrower, waved sepals and petals.

Key words: endemism, extinction risk, *Laelia anceps*, *Laelia halbingeriana*, *Laelia ×oaxacana*, *Laelia superbiens*

Introduction

As currently delimited, the genus *Laelia* Lindley (1831: 115), including *Schomburgkia* Lindley (1838: t. 10), encompasses about 25 species of Neotropical epiphytic orchids with its main centre of diversity in Mexico (Soto 2005). The laelias, as they are colloquially referred to, constitute some of the most conspicuous elements of the epiphytic orchid flora of many Mexican forests. Some species, such as *L. anceps* Lindley (1836: t. 1751), are widely cultivated in Mexico and abroad and this and other native laelias have been used locally as ornament or in religious ceremonies from pre-Columbian times to this day (Soto 1993; Halbinger & Soto 1997; Hágsater *et al.* 2005).

The taxonomy of the Mexican laelias was revised by Halbinger & Soto (1997), who recognized eleven species, several infraspecific taxa and a few natural hybrids. Regarding the plants of the state of Oaxaca assigned by them to *L. superbiens* Lindley (1840: 46), a species otherwise known only from the Mexican state of Chiapas and from Guatemala, Honduras and Nicaragua, Halbinger & Soto (1997: 148) noted that they “are very distinct, apparently they have a strong introgression from *L. anceps*.” Those authors returned to the issue in their discussion on natural hybrids of *Laelia*, stating that there seemed to be a series of intermediates between *L. anceps* and plants “closer to *L. superbiens*” in northern Oaxaca and that “typical” or “pure” forms of *L. superbiens* have never been found there.

In the course of the last decade, and as part of our field and herbarium studies aimed at producing an orchid flora of the Tehuacán-Cuicatlán region of Oaxaca and adjacent Puebla (G.A. Salazar, unpubl. data), we have had the opportunity to study a number of specimens of *Laelia* from northern Oaxaca and our observations allowed us to corroborate the existence of both an entity similar to, but consistently distinguishable from, *L. superbiens*, and a series of natural hybrids between the former entity and sympatric *L. anceps*. The entity similar to *L. superbiens* has been referred to in published works as “*Laelia halbingeriana* Salazar & Soto Arenas” (Salazar *et al.* 2006; Soto *et al.* 2007), but it has not yet been formally described. Below we describe the new species and its natural hybrid with *L. anceps*.

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