



*Hoffmannseggella locatellii*  
am Standort / in habitat

# A new Species of *Hoffmannseggella* from Minas Gerais

Francisco MIRANDA

**Note:** There are two present schools of thinking regarding the “Brazilian Laelias”, one considering them as part of the genus *Cattleya* (following Kew’s Orchid Checklist of Selected Plant Families) and other considering them as pertaining to separate genera. In my point of view both are basically correct when plants are grouped the same way, either at genus level or below it. Using one of the other is a matter of personal decision, and I happen to prefer the approach of considering them as separate genera. With the constant discovery of new species, many genera are growing and most big ones are being separated into several. Good examples are *Maxillaria*, *Pleurothallis*, *Oncidium*... In this respect alone, lumping so many different groups into *Cattleya* seems counterproductive in the main present scheme of things in the *Orchidaceae*. I explained my position in detail in 2008 when I did a presentation on *Hoffmannseggella* at the 19th World Orchid Conference in Miami so it doesn’t seem fit to do it again here.

The genus *Hoffmannseggella* comprises dozens of species, which occur in the Brazilian eastern states of Bahia, Espírito Santo, Rio de Janeiro and especially Minas Gerais. These plants are usually found and quite frequently abundant on mountain ranges not so close to the coast and at elevation. They are commonly known as “rupicolous laelias” and have very interesting distribution patterns. Although several of the species have a fairly wide-

spread distribution considering the genus, and can be found throughout several mountain ranges, many of them have a very localized occurrence. *Hoffmannseggella locatellii*, here described, seem to follow the latter pattern.

Rupicolous, medium-sized in the genus. Roots to 0.2 cm. in diameter. Pseudobulbs formed by 3–4 internodes, elliptic-cylindrical, abruptly



*Hoffmannseggella locatellii*  
Blüte / inflorescence

thickened at their base, progressively attenuated to the apex, slightly flattened laterally and thus with elliptical section, medium-green sometimes pigmented in medium redish-purple to their tops, up to 5.5 cm. in length and 2.0 cm. in diameter at the base, covered with tight sheaths that dry out and fragment at the end of their development. Leaves elliptic-lanceolate to linear-lanceolate, strongly leathery, somewhat boat-shaped, erect to slightly reflexed, slightly transversely rugose, medium-green to dark-green sometimes with irregular purple pigmentation on the external face, up to 11.5 cm. long and 3.0 cm. wide. Flower sheaths well developed, slightly leathery and strongly flattened, linear-oblongate, dried at the time of flowering, up to 6.5 cm. long and 0.7 cm. wide. Inflorescences with flowers opening in short succession, with up to 6 flowers loosely distributed on the top two fifths to one fourths, greenish-red at the base and mostly reddish where exposed to sunlight, with node below the height of the leaves, erect, with rachis up to 22 cm. long and 0.22 cm. in diameter. Flower bracts tightened to the pedicels, triangular, greenish-red, up to 0.45 cm. long. Pedicels cylindrical, slightly curved, yellow-orange at the basal half but darker and brownish on the portion with the ovary and greenish closer to the flowers, up to 3.2 cm. long and 0.12 cm. in diameter on the base, slightly thickened at the portion including the ovary and 0.3 at the column base. Sepals uniform medium yellow-orange, linear-lanceolate, erect-patent, flat to slightly reflexed, at first forming an equilateral triangle but the laterals slightly falcate, the dorsals up to 2.3 cm. long and 0.5 cm. wide, the laterals up to 2.0 cm. long and 0.55 cm. wide. Petals with the same coloration, tenuously linear-oblongate, erect-patent, slightly falcate, flat to slightly reflexed, up to 2.3 cm. long and 0.5 cm. wide. Labellum with the same coloration, sublanceolate when distended, strongly trilobed with lateral lobes falcate and frontal lobe deeply incised, in natural position forming tube curved down and backwards that envelops completely the column and hide it in frontal view, opening frontally in subtriangular shape with margins slightly

undulate, lateral lobes decurrent and with margins sometimes overlapping and front lobe reflexed and with undulate margins, in the interior with 4 low, fleshy, verrucose and parallel keels that originate but are barely visible at the base of the labellum, the two internal ones more pronounced and raised at 2/3 of the length from the base to the incision with the front lobe, much more visible and extending to almost two thirds into the front lobe, the 2 external ones much lower and less pronounced, much shorter and starting to raise closer to the incision with the front lobe and ending just into it, up to 1.5 cm. long and 1.2 cm. wide. Column reddish-yellow, subcylindrical, progressively widening to the apex, gibbous at the apex, linear to very slightly falcate, subtriangular in section, with inferior face flattened and depressed in a cavity delimited by the lateral ridges and rostellum, with 2 short side extensions covering the sides of the anther to more than half of it, up to 0.65 cm. long and 0.22 cm. wide at the base and 0.28 cm. at its widest point near the apex; anther with 4 subdivided cavities, whitish, with 8 bright yellow pollinia, 4 larger and 4 smaller; stigmatic cavity deep, subtriangular, separated from the anther by rostellum thickened into a protruding, fleshy at the apex and flexible membrane, up to 0.15 cm. long and 0.16 cm. wide. Fruits with pronounced crests at the junction of the carpels and much less pronounced to nearly smooth at their median portions, medium-green, up to 6.0 cm. long and 2.0 cm. in transverse section.

**Etimology:** Name honoring Marcus V. LOCATELLI, geologist and naturalist who discovered the plants from this interesting species in nature.

**Type:** Brasil, Minas Gerais, near Araponga, around 1,500 meters elevation, coll. Marcus V. LOCATELLI s/n, 5 July 2014 (Holotype: **BHCB**).

**Mat. Exam.:** Minas Gerais, near Araponga, 1,500 meters elevation, coll. Marcus V. LOCATELLI s/n, 5 July 2014, **BHCB**.

*Hoffmannseggella locatellii* has yellow flowers, and shares this feature with about half of the species in the genus. However, it doesn't follow the



*Hoffmannseggella locatellii*  
Samenskapseln · seedpods

expected distribution range of those species. In Minas Gerais, the yellow-flowered species in the genus tend to be part of one of two different and distinct groups. The southernmost group, also known as the "crispata" group, includes a few species and its distribution is around and to the south of Minas Gerais' state capital city of Belo Horizonte. The northernmost group has its distribution on the region of Diamantina and includes a larger number of species. Species in each group share several traits especially flower morphology, so it is easy to identify the region where a particular species come from. That is, until the description of *Hoffmannseggella vasconcelosiana* recently and now *Hfglla. Locatellii*. Those two species are very interesting for several reasons. The first is their distribution, *Hoffmannseggella locatellii* occurs to the east of the Belo Horizonte group and *Hfglla. vasconcelosiana* to the east of the Diamantina group. They are also separated both





*Hoffmannseggella locatellii*  
Bulben / bulbs

geographically and morphologically from those groups, and being closely related but occurring so far away from each other is very unusual among the yellow-flowered species in the genus. Besides, there are no citations of anything occurring between the range of those two species.

Those two species are indeed closely related, not so much by their plants that are very distinct from each other, but mainly by their inflorescences and flowers. Species from both the Belo Horizonte and Diamantina groups tend to have flowers clustered at the top of the inflorescences, something that can be easily seen on the species with tall inflorescences but not so much on the small species with short inflorescences in the Diamantina group. Both *Hoffmannseggella locatellii* and *Hffgla. vasconcelosiana*, however, have fairly tall inflorescences and flowers are loosely distributed on them. Flowers from *Hoffmannseggella locatellii* are larger though, and segments tend to be wider contributing to a more substantial flower overall. The petals of *Hoffmannseggella locatellii* are also more lanceolate whereas in *Hffgla. vasconcelosiana* they are narrower and linear. Flower color is essentially the same for both species, and this bright yellow with a hint of orange set them

apart from most of the other yellow-flowered species in the genus. The lip in *Hoffmannseggella locatellii* is mostly pure yellow whereas in *Hffgla. vasconcelosiana* shows well-marked red veins on the outside of the sidelobes and also on the interior at the keels area. The two central longitudinal keels in *Hoffmannseggella locatellii* are also much closer to each other and extend further into the front lobe than in *Hffgla. vasconcelosiana*. The sidelobes in *Hoffmannseggella locatellii* are wider and more substantial, frequently overlapping; the frontlobe isthmus is short to almost absent while it is longer and narrower in *Hoffmannseggella vasconcelosiana*. Flowering season is essentially the opposite, *Hoffmannseggella locatellii* flowering in July-August whereas *Hffgla. vasconcelosiana* flowers mainly in January-February. No other species in the genus looks like even closely related, with the exception of maybe *Hoffmannseggella mixta*, which also occurs very far from both, in Espírito Santo state. *Hoffmannseggella locatellii* occurs at about 1500 meters elevation, on open sloping ledges with some protection among velozias, bromeliads and grasses.

# *Dendrobium carmindae*

## A Spectacular New *Dendrobium* (Orchidaceae) Species from Northern Mindanao, Philippines

Miguel David DE LEON, Jim COOTES & Ronny BOOS

One never ceases to be amazed at the number of orchid species, which are still to be found on the southern Philippine island of Mindanao. In late 2014, two German orchid-lovers went to one of the higher mountains in northern Mindanao and found members of the genera *Adenoccos* and *Porrhachis*, both of these genera were not previously recorded from the Philippines. A visit to the same area in early 2015 revealed new species in the genera *Dendrobium*, *Dendrochilum* and *Epicriantes*. Recent explorations to this same region by the first author have revealed two species of *Bulbophyllum*, previously thought to be endemic to Borneo, *Bulbophyllum apheles* J.J. VERMEULEN (1991), and *B. breimerianum* J.J. VERMEULEN & A. VOGEL (2007).

*Dendrobium carmindae* sp. nov., M. DE LEON, J. COOTES and R. BOOS

**Section:** *Formosae* (BENTH. & HOOK.F.) HOOK.F.

**Type:** Philippines: northern Mindanao, alt. ca. 800–880 m, November 15, 2015, M.D. DE LEON s.n. (holotype **CMU009836**).

**Growth habit:** epiphytic, upright, sympodial. Stems: forming clumps, with the most mature stems being leafless. Leafy stems have leaves on the upper half to upper two thirds of the stems. Stems pseudobulbous, 20–60 cm long by 0.9–1.1 cm in diameter. Internodes: from 1.5–3 cm long. Leaves: narrowly lanceolate to elliptic; alternate and overlapping basally; prominently one-veined centrally; somewhat leathery; glabrous; from 6–13 cm long by 1.5–3.5 cm wide. Inflorescences: to 5 cm long, arising from near the top of the stems; bearing up to 10 flowers, 4.3–4.7 cm wide by 4.4–4.8 cm high. Flower colour: sepals and petals are pure white; labellum is bright green basally; apically reddish-purple; there are 6 to 7 red-

dish-purple longitudinal stripes. Column is white with two small purple blotches on the sides. Anther cap is purplish. Underside of column is reddish-purple, whilst the entrance to the mentum is dull green. Dorsal sepal: narrowly triangular, recurving in the apical one-third; 2.5–2.6 cm long by 0.8–1 cm wide; there is a prominent, slightly wavy keel running adaxially the length of the dorsal sepal, confluent to the base of the pedicel and ovary. At its highest point the keel is 3.5 mm tall. Petals: obovate, 2.7–3.0 cm long by 1.8–2.1 cm wide; edges wavy; at the base of the petals are wart-like papillae of varying heights; this aggregate of papillae form a step or a shoe over the column and projects 1.5 mm anteriorly towards the anther.

Lateral sepals: narrowly triangular, recurving in the apical half; 2.7–3.0 cm long by 1.8–2.1 cm wide; there is a prominent wavy keel running adaxially the length of the lateral sepals, confluent to the base of the pedicel and ovary. At its highest point the keel is

3.5 mm tall. Labellum: trilobed; side lobes spreading, 1.5–1.8 cm long by 3–5 mm high, inner surface puberulous; mid lobe rectangular, edges wavy, entire to slightly erose, slightly recurved and apex apiculate, 1.2–1.8 cm long by 1.0–1.3 cm wide; overall, when flattened the labellum is 3.6 cm long by 1.7–1.8 cm wide, basally puberulous. Spur: 1.8–2.4 cm long (when measured from the tip to where the two lateral sepals meet), 4.0–5.0 mm wide basally, tubular and gradually narrowing to be 1.0 mm in diameter at the apex. Pedicel and Ovary: 3.9–4.0 cm long, triangular with 3 prominent keels 3.5 mm, highest at the base of the sepals, and runs throughout the length of the pedicel; triskelion in cross-section. Column: short, inner surface minutely papillose, 5.0 mm long by 6.0 mm wide; column wings stout and obtuse; stigma concave, rectangular, obtuse. Anther Cap: papillose to ciliate, apex emarginate, 2.0 mm high by 3.5 mm wide. Pollinia: four, 2.0 mm long by 1.0 mm wide.

**Habitat and Distribution:** An isolated population of the species thrives in an open forest 800 to 880 metres elevation in northern Mindanao. The plants grow as epiphytes 4 to 10 meters above ground under partial shade or bright sun with 70–80% humidity and good air flow. Daytime temperatures are typically 25–35°C while night time temperatures drop to 18–25°C.

*Dendrobium carmindae* M. DE LEON, J. COOTES & R. BOOS

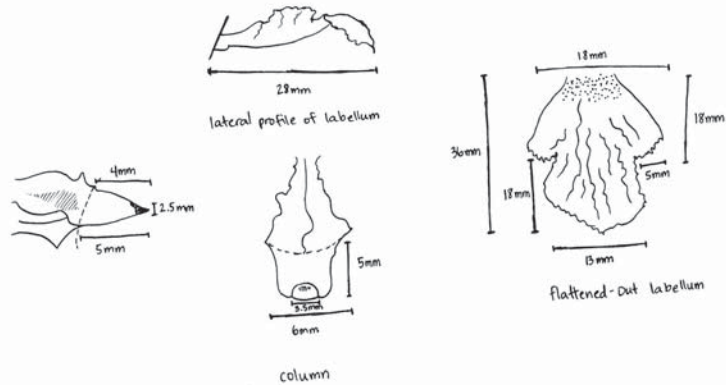
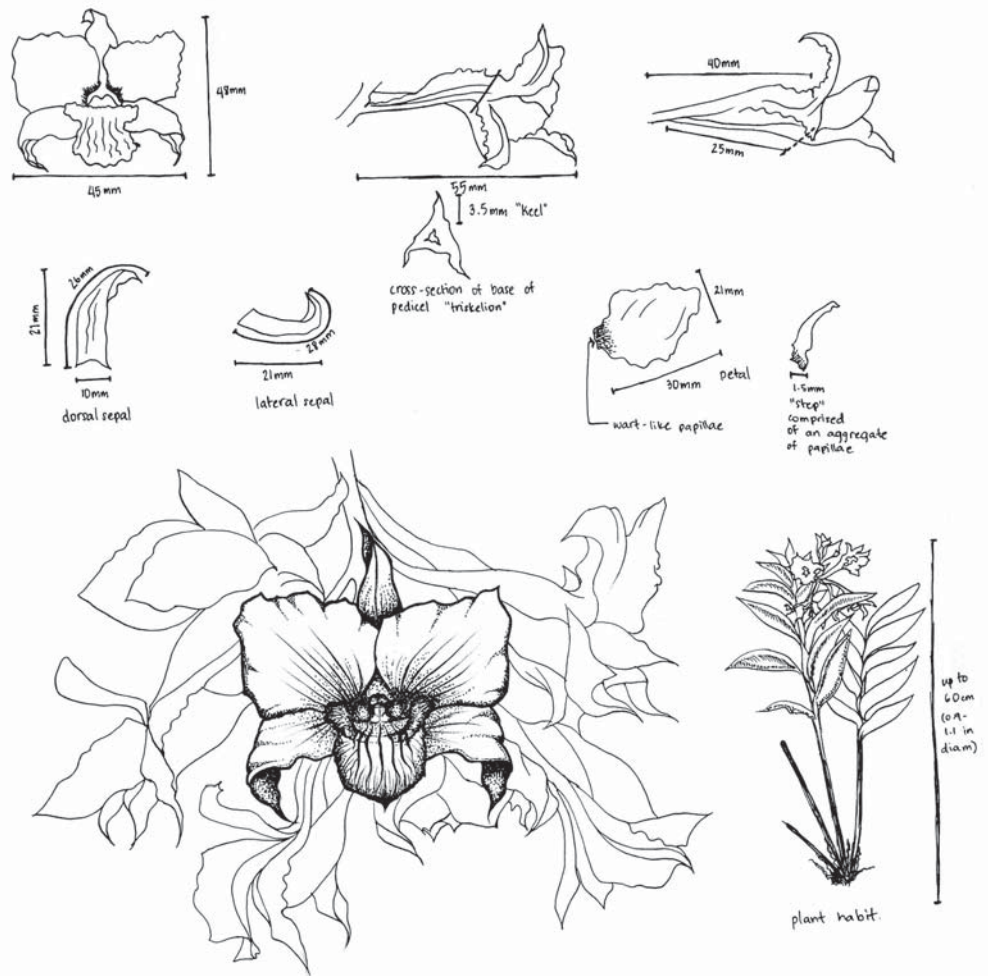




**Comparison:** *Dendrobium carmindae* is most closely related to *D. dearei* RCHB.F., but differs by the plants being generally smaller, not reaching the large dimensions of *D. dearei* (20–60 cm vs 30–150 cm tall), and by the floral morphology and colouration of the flowers, in particular the labellum which is conspicuously reddish-purple in the apical half, with six to seven reddish-purple basal stripes. Morphologically in *D. carmindae* the labellum possesses larger, spreading side lobes, puberulous on the inner surface and on the base of the labellum, a shorter mid-lobe, longer spur and entire and wavy margin. In comparison *D. dearei* has flowers that are white and light green with a few faint purple lines at the base of the labellum, very short almost inconspicuous rounded sidelobes, glabrous inner surfaces, margins are usually dentate, and shorter spur (1.0–1.4 cm long).

**Etymology:** This beautiful species is named after the first author's aunt, Carminda DE LEON-REGALA – a concert pianist and an exceptionally beautiful, elegant and gracious woman.

**Discussion:** *Dendrobium carmindae*, together with *D. dearei* RCHB.F., *D. parthenium* RCHB.F., *D. sanderae* ROLFE and its varieties, *D. schuetzei* ROL-



DENDROBIUM CARMINDAE sp. nov.  
(M. DE LEON, C. OOTES, R. BOOS)

\*DRAWN AFTER LIVING SPECIMENS AND MACRO PHOTOGRAPHS

FE and *D. surigaense* (QUISUMBING) H.P. WOOD, are members of a small group of species centred in the Philippines (*D. parthenium* also occurs in Borneo). These species characteristically lack the black hairs on the stem sheaths present in other members of *Dendrobium* sect. *Formosae*. Instead of the black hairs common in other members of section *Formosae*, the Philippine species have small pitted marks on the new growths, which, at a casual glance, resemble hairs. This group of species are amongst some of the most beautiful species in the Philippines, all of which are commonly grown in cultivation. *Dendrobium car-*

*mindae* is a welcome addition to the group, for possible breeding because of the very colourful labellum, where other species characteristically have predominantly white flowers including the whole or much of the labellum. It is hoped that this new species will become freely available, in the horticultural trade, via the means of in vitro propagation, rather than from over-collection of the wild plants.

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# Dracula-Hybriden

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*Dracula bertha-crater*

*Masdevallia coccinea alba* x  
*Dracula chimaera*



*Masdevallia ignea* x *Dracula vampira*

*Dracuvallia Smiler* (*Dracula*  
*gigas* x *Masdevallia uniflora*)



*Masdevallia welischii* x  
*Dracula cyrano*



*Dracula gigas* x *Dracula hirtzii*



*Dracula roezlii* 'Cow Hollow' x  
*Dracula hirtzii* 'Pui Y'



*Dracula Raven*  
'Empress'







*Dracula Raven 'Lenore' FCC*



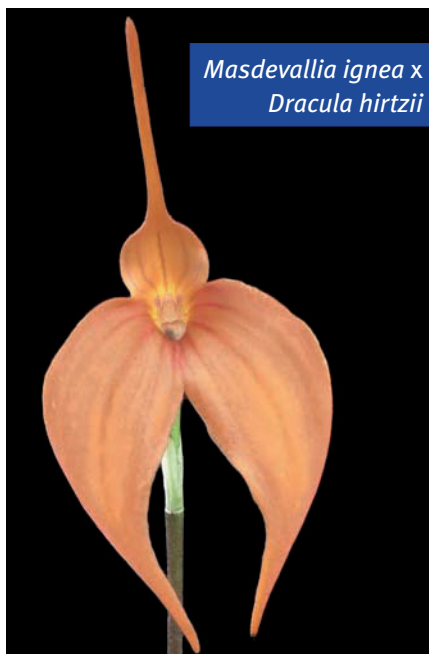
*Dracula Don Quixote 'Impossible Dream'*



*Dracula Quasimodo 'Gargoyle' AM-AOS*



*Dracula Jester (platycrater x lotax)*



*Masdevallia ignea x Dracula hirtzii*



*Dracuvallia Blue Boy 'Cow Hollow' AM-AOS*

Zusätzlich zu den *Dracula*-Hybriden, die durch die Verwendung von *Dracula*-Arten als Elternteile entstehen, können auch weitere *Pleurothallidinae* dazu verwendet werden, intergenerische Hybriden zu züchten. So sind zum Beispiel verschiedene Kreuzungen von *Dracula* mit *Masdevallia* durchgeführt worden, die inzwischen geblüht haben; sie bilden die Hybridgattung *Dracuvallia*. Einige Ergebnisse dieser Kreuzung sind schön anzusehen, z.B. *Dracuvallia Blue Boy* „Cow Hollow“. Gerardus STAAL ist eine Kreuzung zwischen *Dracula* und *Porroglossum* gelungen. Die Sämlinge sind inzwischen aus der Flasche, haben aber noch nicht geblüht.

Aus Erfahrungen mit diesen Kreuzungen weiß man, dass einige dieser primären Gattungshybriden lediglich als

weiblicher Kreuzungspartner taugen, weil sie keine Pollinien ausbilden. Eine neue Generation von Hybriden ist durch das Kreuzen von *Dracuvallia* mit *Masdevallia* entstanden. Auch hier wachsen die Sämlinge im Gemeinschaftstopf heran.

Wegen der unterschiedlichen Chromosomenanzahl (bei der *Vampira*-Sektion von *Dracula* gibt es 36 Chromosomen und bei der *Coccinea*-Sektion von *Masdevallia* 44 Chromosomen) könnte die Zahl der Kreuzungsgenerationen begrenzt sein. Zweifelsohne können wir Überraschungen beim Überwinden der Grenzen von *Dracula* x *Dracula* zu *Dracula* mit anderen Gattungen – also intergenerischer Züchtung – erwarten. Wünschenswerte Merkmale wie Farbe, Streifen, Wärmetoleranz, Form, aufrecht stehende Blütenstiele, Größe

und Substanz dürften dann bald verbessert werden. Wir sagen jetzt schon voraus, dass einige dieser Hybriden erstaunlich sein werden. Hier sind einige bereits existierende Hybriden abgebildet.

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