

Oncidium lacerum, an older and ignored name for *Cohniella stipitata* (Orchidaceae, Cymbideae, Oncidiinae)

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Cohniella lacera (Lindl.) Cetzal *comb. nova* is proposed here and *Cohniella stipitata* (Lindl.) Christenson is treated as its taxonomic synonym due to priority. *Oncidium stipitatum* Lindl. was incorrectly cited by various authors as validly published either in 1843 or 1844, when the correct date was 1846. In the meantime, *Oncidium lacerum* Lindl., previously considered one of its taxonomic synonyms, was described in 1844 and therefore has nomenclatural priority. I discuss the status and geographical distribution of *Cohniella lacera* comparing it with the morphologically similar species *Cohniella nuda* (Bateman ex Lindl.) Christenson. In addition, I include for each species a discussion of diagnostic characters, range of morphological variation, specimen citation, an illustration, and a distribution map. A key to distinguish the two species is also provided.

Introduction

Christenson (1999) reinstated *Cohniella* Pfitzer (Orchidaceae, Cymbideae, Oncidiinae) and included eight species formerly referred to *Oncidium* section *Cebolletae* (*sensu* Garay & Stacy 1974). At present, *Cohniella* encompasses 18 species that range from northern Mexico to southern Brazil and northern Argentina (Cetzal-Ix & Carnevali 2010). This genus is distinguished by relatively small and inconspicuous pseudobulbs, succulent, terete leaves, and *Oncidium*-like flowers (Carnevali *et al.* 2010).

Christenson (1999) and Carnevali *et al.* (2010) recognized *Cohniella stipitata* (Lindl.) Christenson, under which several authors have included *Oncidium lacerum* Lindl. and *O. stipitatum* Lindl. var. *platyonyx* Rchb. f. as taxonomic synonyms

(Table 1). However, *Oncidium lacerum* (Lindley 1844) has nomenclatural priority over *O. stipitatum* (Lindley 1846). Both species were first collected in Panama. Lindley described *O. lacerum* on page 30 of *Edwards's Botanical Register* volume 30, which was published in May 1844 (pages 27 and 35 are both dated “May 1844”, and presumably so are the ones in between). *Oncidium stipitatum* first appeared on page 172 of Bentham's *The Botany of the Voyage of H.M.S. Sulphur* (Bentham 1844–1846; Orchidaceae were explicitly attributed to “Dr. Lindley”). According to Stafleu and Cowan (1976: 176–177), the sixth part of this work (pages 145–195) was made available to the general public on 8 May 1846, which is regarded as the actual publication date.

Later, Lindley published an illustration of *Oncidium lacerum* (Lindley 1846: t. 27, dated

“May 1”) and subsequently, in his *Folia Orchidaceae* (Lindley 1855: 14), the same author for the first time referred *O. lacerum* to the synonymy of *O. stipitatum*. In this later treatment, Lindley omitted the date of publication of *O. stipitatum* (citing only the page, “Bot. Sulphur. p. 172”) but mistakenly cited the publication date of the illustration of *O. lacerum*, rather than the date of the actual protologue (i.e., 1846 rather than 1844).

Studies that followed also treated *O. lacerum* as a taxonomic synonym of *O. stipitatum* because authors considered the latter the oldest name (Table 1). Allen (1949) and subsequent authors incorrectly cited 1843 as the date of publication of *Oncidium stipitatum* (Table 1), which probably refers to the year of publication of the narrative of the journey by Sir Edward Belcher (Belcher 1843).

Nonetheless, both TROPICOS (<http://www.tropicos.org>) and the International Plant Name Index (<http://www.ipni.org>) list the correct dates of publication of *O. stipitatum* and *O. lacerum*. However, the former still accepts both *Oncidium stipitatum* or *Trichocentrum nudum* (Bateman ex Lindl.) subsp. *stipitatum* (Lindl.) Dressler &

N.H. Williams, treating *O. lacerum* as a taxonomic synonym in the latter case (see <http://www.tropicos.org>).

Here I formally propose *Cohniella lacera* as a new combination and refer *Oncidium stipitatum* to its synonymy. The preference for this generic circumscription is discussed in detail in Carnevali *et al.* (2010) and Cetzel-Ix and Carnevali (2010).

Material and methods

I prepared the discussions of the diagnostic characters, variation range, and geographical distribution based on the analysis of the external morphology and label data of ca. 60 specimens from the following herbaria: AMES, BM, CICY, EAP, F, FLAS, HUA, K, MEXU, MO, NY, P, RENZ, S, SEL, US, VEN, and W (acronyms according to Holmgren *et al.* 1990). I also examined the relevant iconography and fresh material of known provenance. To produce drawings, I captured images of flowers at several resolutions (600–1200 dpi) using an Epson Expression

Table 1. Publication date considered by various authors to *Oncidium lacerum* and *O. stipitatum*.

Author	Considered names	Year	Accepted name
Lindley 1844	<i>Oncidium lacerum</i>	1844	<i>Oncidium lacerum</i>
Bentham 1846	<i>Oncidium stipitatum</i>	1846	<i>Oncidium stipitatum</i>
Lindley 1846	<i>Oncidium lacerum</i>	1844	<i>Oncidium lacerum</i>
Lindley 1855	<i>Oncidium stipitatum</i>	–	<i>Oncidium stipitatum</i>
	<i>Oncidium lacerum</i>	1846	
Reichenbach 1863	<i>Oncidium stipitatum</i>	–	<i>Oncidium stipitatum</i>
	<i>Oncidium lacerum</i>	1846	
Hemsley 1884	<i>Oncidium stipitatum</i>	–	<i>Oncidium stipitatum</i>
	<i>Oncidium lacerum</i>	1846	
Kränzlin 1922	<i>Oncidium stipitatum</i>	1844	<i>Oncidium stipitatum</i>
	<i>Oncidium lacerum</i>	1844	
Allen 1949	<i>Oncidium stipitatum</i>	1843	<i>Oncidium stipitatum</i>
	<i>Oncidium lacerum</i>	1844	
Williams 1956	<i>Oncidium stipitatum</i>	1843	<i>Oncidium stipitatum</i>
	<i>Oncidium lacerum</i>	1844	
Garay & Stacy 1974	<i>Oncidium stipitatum</i>	–	<i>Oncidium stipitatum</i>
	<i>Oncidium lacerum</i>	–	
Croat 1978	<i>Oncidium stipitatum</i>	1846	<i>Oncidium stipitatum</i>
Königer & Pongratz 1997	<i>Oncidium stipitatum</i>	1843	<i>Stilifolium stipitata</i>
	<i>Oncidium lacerum</i>	1844	
Christenson 1999	<i>Oncidium stipitatum</i>	1843	<i>Cohniella stipitata</i>
Williams <i>et al.</i> 2001	<i>Oncidium stipitatum</i>	1843	<i>Trichocentrum stipitata</i>
Dressler & Williams 2003	<i>Oncidium stipitatum</i>	1843	<i>T. nudum</i> subsp. <i>stipitata</i>
Carnevali <i>et al.</i> 2010	<i>Oncidium stipitatum</i>	1843	<i>Cohniella stipitata</i>
	<i>Oncidium lacerum</i>	1844	

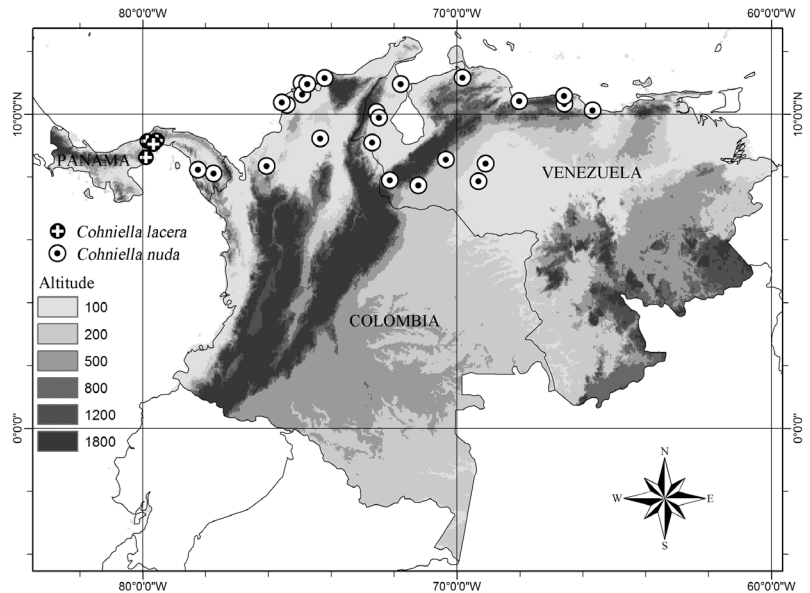


Fig. 1. Distribution of *Cohniella lacera* and *C. nuda*.

1640 XL scanner and used them as templates in Canvas X (ACD Systems Inc.). The distribution map was prepared by plotting the locality data on a DIVA-GIS base map ([see http://www.diva-gis.org/](http://www.diva-gis.org/)) using ArcView 3.2 (ESRI Inc.).

Results and discussion

Cohniella lacera is relatively easy to distinguish from *C. nuda* by the morphological characteristics discussed below and their disjunct geographical distributions (Fig. 1). Dressler and Williams (2003) indicated that although the two species were very different, they showed a degree of geographical overlap on the Pearl Archipelago at 50 kilometers from Panamá City, and therefore they preferred to treat them as subspecies under the generic name *Trichocentrum* (i.e., *T. nudum* subsp. *stipitatum*). However, these authors did not cite specimens that support their argument, and none could be found among the ones I examined. The two species are morphologically very distinct, and are here accepted at the rank of species.

***Cohniella lacera* (Lindl.) Cetzal, comb. nova** (Fig. 2)

Oncidium lacerum Lindl., Bot. Reg. 30. Misc. 38. 1844. —

TYPE: Panama. Without precise locality, ex Hort. Loddiges (holotype K-Lindl.! photograph seen).

Oncidium stipitatum Lindl., Bot. Voy. Sulphur 172. 1846, syn. nov. — *Stilifolium stipitatum* (Lindl.) Königer & Pongratz, Arcula 7: 189. 1997. — *Cohniella stipitata* (Lindl.) Christenson, Lindleyana 14: 177. 1999. — *Trichocentrum stipitatum* (Bateman ex Lindl.) M.W. Chase & N.H. Williams, Lindleyana 16: 138. 2001. — *Trichocentrum nudum* (Bateman ex Lindl.) M.W. Chase & N.H. Williams subsp. *stipitatum* (Lindl.) Dressler & N.H. Williams, Selbyana 24: 45. 2003 (21 Oct. 2003). — TYPE: Panama. Island of Taboga, 30 Jan.–11 Feb. 1837, G. W. Barclay 958 (holotype BM! photograph seen).

Oncidium stipitatum Lindl. var. *platyonyx* Rehb. f., Gard. Chron. N.S. 9: 788. 1878, syn. nov. — TYPE: Panama. Without precise locality, ex Hort. W. Bull. (holotype W-Reichenbach 27554! flowers in envelope in the upper left, photograph seen).

DISTRIBUTION: Endemic to Panama. Known mainly from the Canal zone, from the provinces of Colón and Panamá. This species grows in tropical rain forest, premontane wet forest and tropical deciduous forest at elevations of 0–300 m. Dressler (1993) and Mora de Retana (1999) cited this species from Costa Rica, however the herbarium material used as reference corresponds to *Cohniella nuda* and it came from Panama (Carnevali *et al.* 2010).

DIAGNOSTIC FEATURES: *Cohniella lacera* is morphologically similar to *C. nuda*, but is easily distinguished by the proportionally longer and

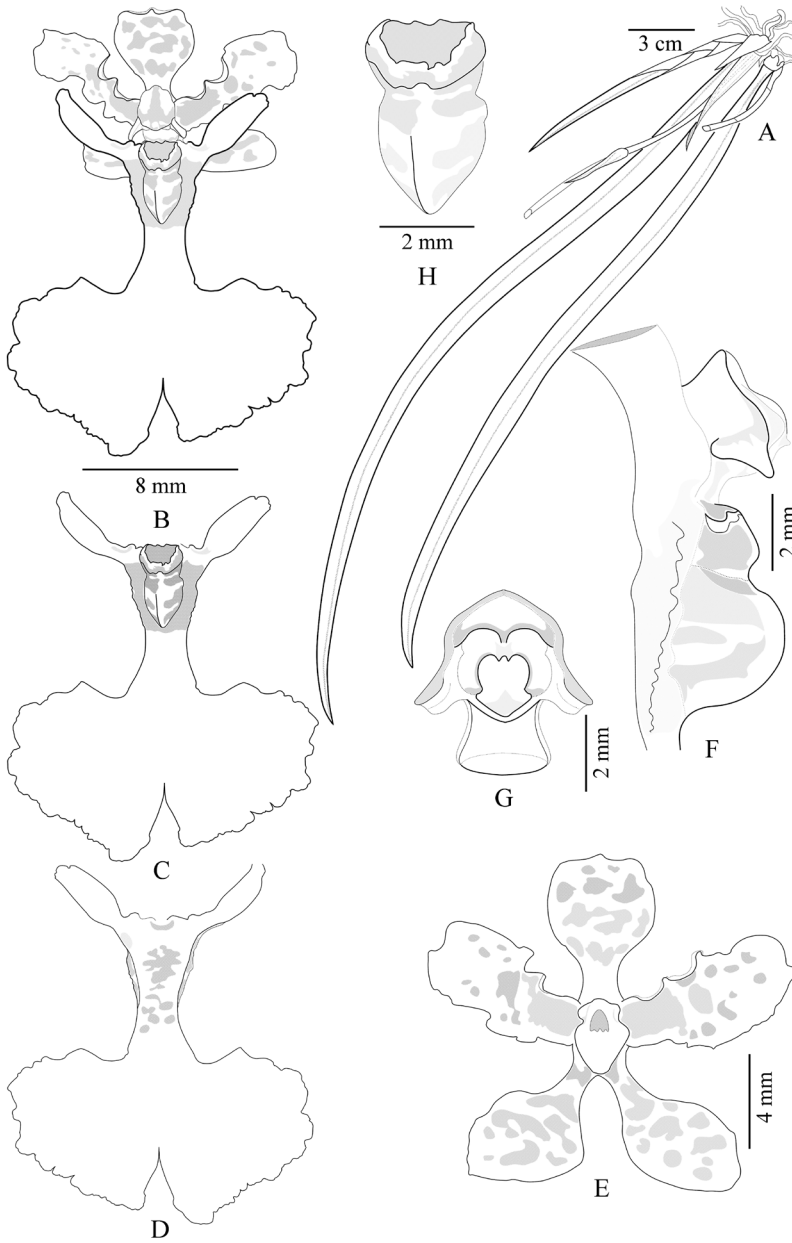


Fig. 2. *Cohniella lacera* (based on Carnevali 7311, CICY). — **A:** Habit. — **B:** Flower. — **C:** Labellum. — **D:** Labellum, back view. — **E:** Sepals and petals. — **G:** Column. — **H:** Callus. — **F:** Callus and column, lateral view. Scale: 8 mm for **B–D**.

narrower isthmus of the labellum, and the truncate, rounded to subcordate base of the central lobe of the labellum that has lacerated margins. Furthermore, the wings of the column in *C. lacera* are small but visible, subtriangular to narrowly subtriangular or subquadrate, while in *C. nuda* the column wings are almost absent, reduced to two narrow flaps of columnar tissue at each side of the stigmatic surface. Another notable feature in *C. lacera* is the callus of label-

lum that is composed in its proximal part of a semicircular platform, and distally with a simple hemispherical central tooth that occupies almost the whole width of the disk of the labellum.

VARIATION RANGE: *Cohniella lacera* is a very homogeneous taxon, variable only in the shape of the central lobe of labellum, the base of which ranges from truncate to subcordate. Furthermore, the margins of the central lobe of labellum vary in its degree of laceration. For example, the type

of *C. lacera* features a central lobe deeply lacerated; while type of *C. stipitata* features a central lobe slightly lacerated. The type of *Oncidium stipitatum* var. *platyonyx* features dentate margins of the isthmus at each side of the callus. However, this feature is variable and present in all specimens examined, and here is not recognized at even the rank of variety.

ADDITIONAL SPECIMENS EXAMINED: **Panama.** Without precise locality, flowered in cultivation in the New York Bot. Gard., Conservatory, 2 Feb. 1917, *Nash 44955* (NY); Without precise locality, flowered in cultivation in the Columbia (Sic), Zenia, 18 Feb. 1919, *Harper 918* (NY); Without precise locality and date, *Sinclair s.n.* (K); Without precise locality, *Whitten 3518* (FLAS); Cercanías de Chilibre, 35 m, 15 Feb. 2005, *Carnevali 7025* (CICY); Chagres River, about 3 miles above Gamboa Bridge along river bank, 50–100 m, 9°08'32"N, 79°40'49"W, 7 Feb. 1973, *von Chong & Steiner 2299* (MO); Canal Zone, Barro Colorado Island, 23 Feb. 1944, *Zetek 5117* (EAP); Canal Zone, Vicinity of former town Empire, Culebra cut and vicinity, 80 m, 27 Feb. 1935, *Hunter & Allen 784* (F, P, US); Vicinity and Pacora (Sic), 25 m, 17 Feb. 1942, *Allen 2933* (SEL); Along an old trail above the Reservoir, 1 to 3 miles from Gorgona, 40–150 m, 10 Feb. 1911, *Maxon 4756* (US); Prov. de Panamá, 10 Apr. 1947, *Allen 4457* (F); Barro Colorado Island, Canal Zone, Feb. 1932, *Woodworth & Vestal 529a* (F); Swamp between El Jagua Hunting Club on R. Jagua and El Congor Hill, 2 m, 10 Feb. 1935, *Hunter & Allen 472* (BM); Along road to R. Pocora, about 50 m, 7 Mar. 1935, *Allen 819* (AMES, BM, MO); Colón: Forest along Río Boqueron above Peluca Hydrographic Station, 90 m, 22 Feb. 1935, *Hunter & Allen 654* (AMES, BM, MO).

***Cohniella nuda* (Bateman ex Lindl.) Christenson (Fig. 3)**

Lindleyana 14: 177. 1999. — *Oncidium nudum* Bateman ex Lindl., Edwards's Bot. Reg. 23: t. 1994. 1837. — *Stilifolium nudum* (Bateman ex Lindl.) Königer & Pongratz, Arcula 7: 189. 1997. — *Trichocentrum nudum* (Bateman ex Lindl.) M.W. Chase & N.H. Williams, Lindleyana 16: 138. 2001. — TYPE: Venezuela. Distrito Capital: Caracas, 1837, ex Hort. Bateman (holotype: K-Lindl! photograph seen).

Oncidium ebrachiatum Ames & C. Schweinf., Sched. Orch. 2: 75. 1923. — TYPE: Panama. Canal and vicinity, 4 Apr. 1908, R. S. Williams 975 (holotype: AMES!; isotype: NY! photograph seen).

DISTRIBUTION: Known from eastern Panama, northern Colombia, and Venezuela. This species grows as an epiphyte close to rivers in tropical deciduous forest at elevations of 0–1000 m.

Diagnostic features: *Cohniella nuda* features a labellum with a compound callus, composed

in its proximal part of a semicircular platform, and distally of a single, slightly raised central keel flanked by longitudinal depressions. It is also distinguished by its minute column wings, often virtually absent. In addition, the labellum is characterized by a long, narrow isthmus and relatively small lateral lobes, extended and retrorse. The leaves of this species are usually rigid and pendulous. The inflorescences are usually shorter than the leaves and densely flowered.

VARIATION RANGE: Despite its relatively limited distribution, *C. nuda* is extremely variable in the size and morphology of the flowers: they range from 13 mm to 18 mm in diameter. Furthermore, the shape of the central lobe of the labellum varies from elliptic to oblong or transversely rhombic; the apical emargination varies from inconspicuous or not visible due to the overlapping lobes. Moreover, the basal lobes of the labellum range from patent to erect-patent and somewhat reflexed.

ADDITIONAL SPECIMENS EXAMINED: **Panama.** Without precise locality, *Wentzel 1120* (BR); Chiriqui: halfway between Progreso and Puerto Armuelles, 16 Feb. 1973, *Croat 21878* (MEXU); Darien: Torti, área cercana al Darien, 50 m, Apr. 2002, *Carnevali 7283* (CICY); Patiño, southern Darien, on cliffs along the beach, 13 Feb. 1912, *Pittier 5704* (US). **Colombia.** Atlántico: Barranquilla and vicinity, Feb. 1934, *Elias 1182* (US); Puerto Colombia, 10–60 m, 10 Abr. 1906, *Maxon 3843* (NY); Sabana larga, Cabecera municipal, vía destapada, detrás del seguro (por la torre 95), 10 Feb. 2000, *López et al. 4729* (HUA); Cartagena: Tierra Bomba, Feb. 1826, *Billberg 189* (S, 2-sheets). Córdoba: Morrocoquiel, on Río Sinu, 11 Mar. 1918, *Pennell 4693* (NY). Magdalena: near La Paz, 200 m, 15 Jun. 1944, *Haught 3933* (US). **Venezuela.** Apure: Dto. Muñoz, Caño Setenta, 5 Mar. 1978, *Davidse et al. 14864* (VEN); Barinas: 10 km de El Corozo hacia Bolivia, 200 m, 4 Feb. 1967, *Rutkis & Foldats 88* (VEN); Cerca de Suripá, 6 Feb. 1967, *Rutkis & Foldats 103* (VEN); Dto. Sousa, El Regalo, 12 Feb. 1981, *Stergios & Ortega 2500* (VEN); Carabobo: S de Borburata, 920 m, 7 Feb. 1975, *C. 111421* (VEN); Distrito Capital: Parque Nacional El Ávila, Qda. Maripérez-Cortafuego, 12 Mar. 1976, *Manara s.n.* (VEN). Falcón: 6 Jan. 1948, *Renz 4609* (RENZ); 20 May 1948, *Renz 4684* (RENZ); Miranda: Guareñas, 1846, *Funck & Schlim 481* (K-Lindl.); along Quebrada Chaguarama, 6 km SE of Cúpira, 50–150 m, 5 Mar. 1980, *Liesner & González 9217* (NY); Guinand Estate (Cárdenas), Siquire Valley, 500 m, 19–24 Mar. 1913, *Pittier 5980* (NY); Táchira: 3 Mar. 1951, *Renz 6636.2* (RENZ); Zulia: Sep. 1946, *Renz 4203.1, 4203.2, 4203.3* (RENZ); Sep. 1946, *Renz 4204.1, 4204.2, 4204.3* (RENZ); Dto. Mara, 10 Feb. 1947, *Renz 4206.2* (RENZ); 23 Jan. 1951, *Renz 6603.1, 6603.2* (RENZ); 27 Jan. 1954, *Renz 8176* (RENZ); Orillas del río Kunana, unos 4.5 Km. al W de La Sierra y unos 15 Km. al

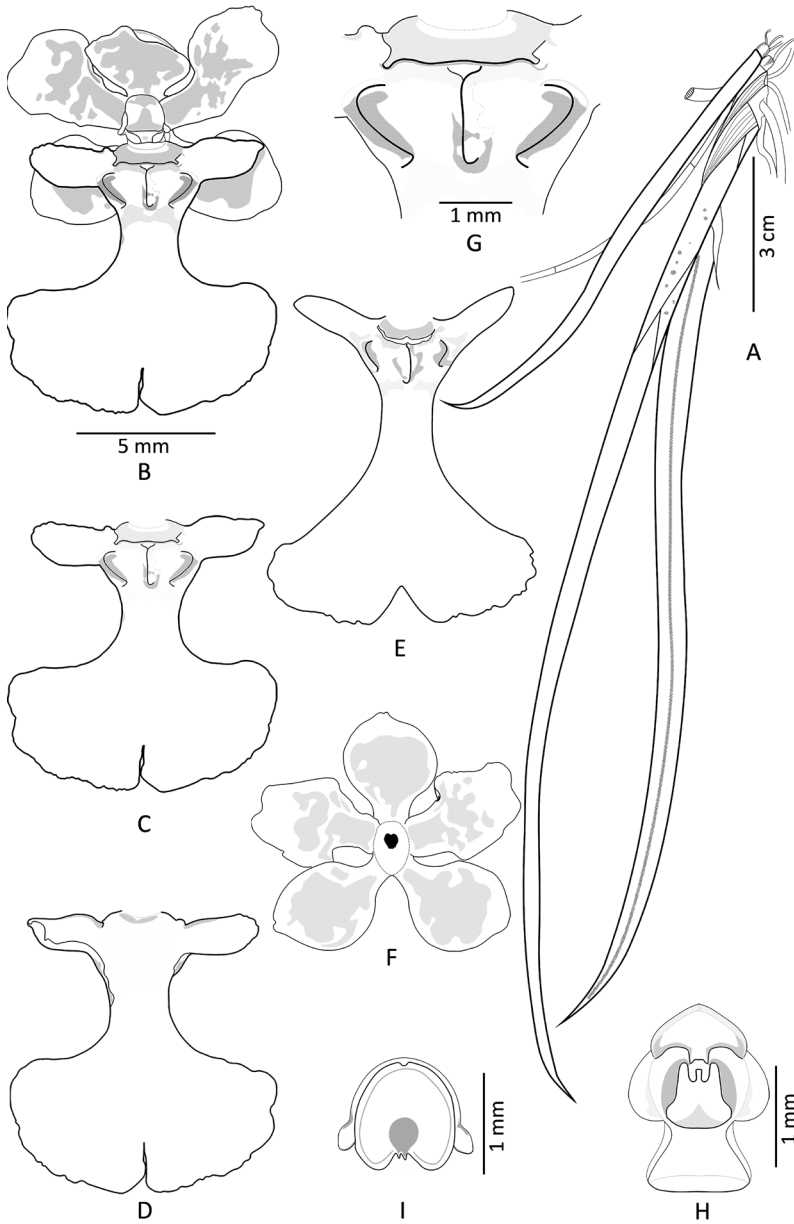


Fig. 3. *Cohniella nuda* (based on Carnevali 7283, CICY). — **A:** Habit. — **B:** Flower. — **C and E:** Labellum. — **D:** Labellum, back view. — **F:** Sepals and petals. — **G:** Callus. — **H:** Column. — **I:** Clinandrium. Scale: 5 mm for B–F.

W de Machiques, 300–400 m, 5 Feb. 2008, *Carnevali* 7283 (CICY); 2 km al S del Río Catatumbo, 9°06'N, 72°42'W, 27 Mar. 1982, *Liesner & González* 13224 (VEN).

Key for distinguishing *Cohniella lacera* from *C. nuda*

1. Column wings present, subtriangular; callus composed proximally of a semicircular platform, and distally of a single hemispherical central tooth that occupies almost the whole width of the disk callus of the labellum; plants endemic to the central portion of Panama *C. lacera*

1. Column wings absent or almost; callus composed proximally of a semicircular platform, and distally of a single, slightly raised central keel flanked by longitudinal depressions; plants from the eastern portion of Panama, and northern Colombia, and Venezuela *C. nuda*

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References

- Allen, P. H. 1949: Orchidaceae. — *Ann. Missouri Bot. Garden* 36(2): 133–245 & 247–257.
- Belcher, E. B. 1843: *Narrative of a voyage around the world performed in Her Majesty's Ship Sulphur during the years 1836–1842*, vol. 1. — Henry Colburn Publisher, London.
- Bentham, G. 1846: *The botany of the voyage of H.M.S. Sulphur*. — Smith, Elder & Co., London.
- Carnevali, G., Cetzal-Ix, W., Balam-Narváez, R. & Romero-González, G. A. 2010: A synopsis of *Cohniella* (Orchidaceae, Oncidiinae). — *Brittonia* 62: 153–177.
- Cetzal-Ix, W. & Carnevali, G. 2010: A revision of *Cohniella* Pfitzer (Orchidaceae) in Mexico. — *J. Torrey Bot. Soc.* 137: 180–213.
- Cetzal-Ix, W. & Carnevali, G. 2011: A new species of *Cohniella* (Orchidaceae, Cymbideae, Oncidiinae) from Amazonian Venezuela. — *Novon* 21: 178–181.
- Christenson, E. A. 1999: The return of *Cohniella* (Orchidaceae: Oncidiinae). — *Lindleyana* 14: 176–177.
- Croat, T. B. 1978: *Flora of Barro Colorado Island*. — Stanford University Press, Stanford, California.
- Dressler, R. L. 1993: *A field guide to the orchids of Costa Rica and Panama*. — Cornell University Press, Ithaca, New York.
- Dressler, R. L. & Williams, N. H. 2003: New combinations in Mesoamerican Oncidiinae (Orchidaceae). — *Selbyana* 24: 44–25.
- Garay, L. A. & Stacy, J. E. 1974: Synopsis of the genus *Oncidium*. — *Bradea* 1: 398–428.
- Hemsley, W. B. 1884: Botany. — In: Godman, F. D. & Salvin, O. (eds.), *Biologia Centrali-Americana*, vol. 3: 1–711. Porter R. H. and Dulau & Co., London.
- Holmgren, P. K., Holmgren, N. H. & Barnett, L. C. 1990: *Index herbariorum*, Part I: The herbaria of the world, 8th ed. — *Regnum Vegetabile* 120: 1–693.
- Kränzlin, F. 1922: Orchidaceae-Monandrae Tribus Oncidieae-Odontoglosseae, Pars II. — In: Engler, A. (ed.), *Das Pflanzenreich* 80: 1–344. Verlag von Wilhelm Engelmann, Leipzig.
- Königer, W. & Pongratz, D. 1997: *Stilifolium*: a new name for the section *Cebolletae* of the genus *Oncidium* as a new genus in subtribe Oncidiinae. — *Arcula* 7: 186–190.
- Lindley, J. 1844: *Oncidium lacerum*. — *Edwards's Bot. Reg.* 30: 30.
- Lindley, J. 1846: *Oncidium lacerum*. — *Edwards's Bot. Reg.* 32: 27.
- Lindley, J. 1855: *Oncidium*. — In: Lindley, J., *Folia Orchidaceae*: 1–61. J. Matthews, London.
- Mora de Retana, D. E. 1999: *Oncidium*. — *Fieldiana Botany* 40: 1–182.
- Reichenbach, H. G. 1863: *Oncidium* section *Teretifolia*. — *Ann. Bot. Syst.* 6: 719–721.
- Stafleu, F. A. & Cowan, R. S. 1976. *Taxonomic literature. A selective guide to botanical publications and collections with dates, commentaries and types*, vol. I, 2nd ed. — Bohn, Scheltema & Holkema, Utrecht.
- Williams, L. O. 1956: An enumeration of the Orchidaceae of Central America, British Honduras, and Panama. — *Ceiba* 2: 193–254.
- Williams, N. H., Chase, M. W., Fulcher, T. & Whitten, W. M. 2001: Molecular systematics of the Oncidiinae based on evidence from four DNA sequence regions: expanded circumscriptions of *Cyrtorchilum*, *Erycina*, *Otoglossum*, *Trichocentrum*, and a new genus (Orchidaceae). — *Lindleyana* 16: 113–139.