

Cohniella croizatii Cetzal & Carnevali, sp. nov.

TYPE: Venezuela. Amazonas: Mpio. Alto Orinoco, 1951, *L. Croizat 984* (holotype, NY; isotype, CICY [fragm.]). Figure 1.

Species haec *Cohniellae cebolletae* (Jacq.) Christenson similis, sed ab ea callo minore tridentato e dentibus lateralibus margine proximaliter paucе serrato-dentatis et apicali lateraliter compresso dentes laterales subaequante constante differt.

Epiphytic erect herbs; rhizome short, thin, brittle; roots ca. 2 mm thick, white; pseudobulbs ca. 8 × 9 mm, subspherical to broadly ovoid. Apically 1-leaved, green, totally enclosed by 3 imbricate sheaths, 30–70 × 5–10 mm, eventually deciduous; leaves terete, thickly fleshy-coriaceous, 23–37.2 cm × 4–6 mm, dark green; inflorescences solitary from the base of the pseudobulbs, 63–123 cm, a 10- to 15-flowered raceme or panicle with 3 to 4 long branches, each of these 3.6–10 cm, the branches 3- to 4-flowered; peduncle and rachis dark green with brownish spots; peduncle ± erect, 2–4 mm thick, terete, with 8 to 13 remotely bracted internodes, the basal and apical bracts equally long, oblanceolate, acuminate, tubular; floral bracts 2–3 mm, narrowly elliptic, acuminate. Flowers resupinate, with perianth segments widely opening, the petals and sepals somewhat reflexed; ovary with pedicel 15–20 mm, of which ca. 4–7 mm correspond to the ovary, this structure 0.4–0.8 mm thick; sepals basally clawed for about 1/3 their total length, flat or somewhat reflexed, dorsal sepal 6.5–7 × 4–5 mm, in general outline obovate, apically obtuse and minutely apiculate, concave in the upper half, the claw ca. 2 × 1 mm; lateral sepals partially fused at the very base, then free, similar to dorsal sepal, 8–9 × 4–5 mm; petals 7–8 × 3–4 mm, oblong, somewhat oblique, the apex subacute, somewhat reflexed in natural position; labellum deeply 3-lobed, 9–13 mm from the base to the apex of the central lobe, 12–15 mm wide across the apices of the lateral lobes, the lateral lobes in the same plane as the central lobe and ± perpendicular to it; central lobe (6–) 9–12 × (11–)17–21 mm, transversely elliptic or subreniform in outline, apically rounded, deeply emarginate, (2–)3–4 mm, basally produced into a short isthmus, ca. 2.5 × 3 mm; lateral lobes 5–6 × 3–5 mm, ± oblong to orbicular, obliquely obtuse; disc short, ca. 4 × 4 mm; callus with 3 large apical teeth, similarly sized, emerging directly from the labellum disk, the 2 lateral teeth separated by a narrow channel and marginally serrate to dentate on the proximal half, ca. 2.8 × 0.6 mm, the central tooth is laterally compressed, ± equally sized to the lateral teeth, ca. 2 × 0.6 mm;

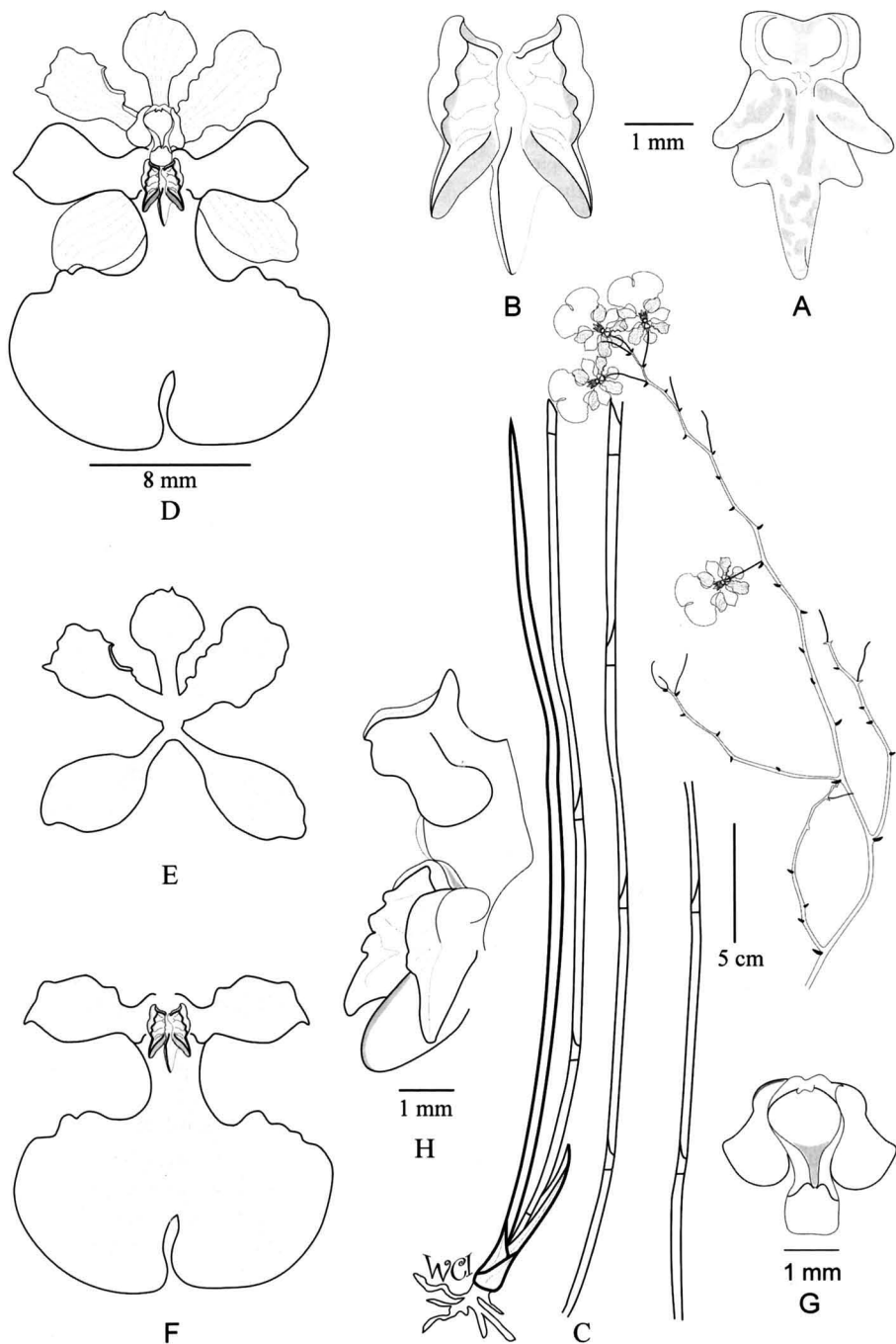


Figure 1. —A. A complex callus of *Cohniella cebolleta* (Jacq.) Christenson, based on *G. Carnevali* 7222 (CICY). B–H. *Cohniella croizatii* Cetzal & Carnevali. —B. A simpler callus. —C. Habit with inflorescence. —D. Intact flower. —E. Sepals (above) and petals (below). —F. Labellum. —G. Column. —H. Lateral view of the callus and column. B–H based on the type *L. Croizat* 984 (NY).

column ca. 3×1 mm, \pm oblong, the ventral face longitudinally convex, stigmatic surface obovate, ca. 1×0.8 mm; column wings ca. 1.8×0.8 mm, asymmetrically bilobed with the apical lobe slightly

smaller; anther ca. 0.9×0.7 mm, apical, operculate, ellipsoid; pollinarium ca. 1.2 mm, tegula spatulate, ca. 0.6×0.3 mm at the subtruncate apex; viscidium disclike, small, pollinia 0.7–0.9 mm; fruit a capsule.

Distribution. The new species is known from two collections from Puerto Ayacucho as well as the type collection of the upper Orinoco in Amazonas State, Venezuela. The labels of the specimens from the Puerto Ayacucho area describe the plants as locally common along the Orinoco.

IUCN Red List category. Because *Cohniella croizatii* is known from only three collections, it can be considered Data Deficient (DD) according to IUCN Red List criteria (IUCN, 2001). Although the region around Puerto Ayacucho has been severely altered during the past few decades, there are still abundant forested patches in the area. Furthermore, since the species is also known from the Alto Orinoco region, it is therefore suspected to be under no special threat, as this area is largely uninhabited except for a few indigenous tribes, primarily Yekuana.

Etymology. The new species honors León Camille Marius Croizat (1894–1982), collector of the type specimen. Croizat contributed enormously to our knowledge of the Euphorbiaceae and also originated the theory of panbiogeography.

Diagnostic features. *Cohniella croizatii* seems to be a rather homogeneous taxon. It is easy to distinguish from related species by its small tripartite callus (vs. 5-partite), consisting of one laterally compressed central tooth or keel that is similar to the lateral teeth (ca. 2 mm vs. ca. 2.8 mm long, respectively). The two lateral teeth are separated by a narrow channel and are marginally serrate to dentate along their proximal half. The column wings in *C. croizatii* seem to be proportionally larger than in *C. cebolleta*, but the available herbarium material is not sufficient to assess this accurately. Because *Cohniella* species usually differ from each other in several floral characters, including color, column width and shape, and the relative positions of the floral parts, we anticipate that fresh material of the new species will reveal further differentiating characters lost during specimen preparation. Otherwise, *C. croizatii* is easily diagnosable by its simple callus.

Paratypes. VENEZUELA. **Amazonas:** Puerto Ayancho [Ayacucho] on Orinoco River, [grown at New York Bot. Gard.], 50 ft., 1 Jan. 1961, *Prop. 1270/59* (NY); Raudal de Atures, 10 km S of Pto. Ayacucho, 100–120 m, 10 Nov. 1953, *B. Maguire, J. J. Wurdack & G. S. Bunting 36131* (AMES, NY).

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