

TWO NEW SPECIES AND A NEW RECORD OF *EPIDENDRUM* (ORCHIDACEAE: LAELIINAE) FROM COSTA RICA

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TAXONOMIC TREATMENT

Epidendrum fulfordianum Pupulin & Karremans, sp. nov. TYPE: Costa Rica—Limón:
Sixaola, Valle del Río Estrella, Bocuare, near
sea level, collected by Ana Cecilia Fonseca,

March 2004, flowered in cultivation and exhibited at the XXXIV National Orchid Show in San José, 16 March 2005, F. Pupulin 5570 (Holotype, USJ). FIGURES 1, 4A.

Epidendro chlorocorymbos Schltr. similis, floribus majoribus, petalis ellipticis, labello trilobato, lobo intermedio quadrato recedit.

Epiphytic, caespitose, sympodial **herb**, 10–30 cm tall. **Roots** basal, flexuous, to 1.5 mm in diameter. **Stem** simple, cane-like, cylindric, foliaceous. **Leaves** 3–6, subcoriaceous, distributed along the stem, basally embracing the stem, the lamina narrowly elliptic, 3–8 × 0.9–2.0 cm. **Inflorescence** terminal, sessile, subumbellate, short, flowering only once. **Floral bract** much shorter than the ovary. **Ovary** cylindrical, 3–4 cm long. **Flowers** 8–9, simultaneous, resupinate, spreading, no fragrance detected during daytime. **Dorsal sepal** spreading, narrowly elliptic, rounded, the margins revolute, 25–28 × 7.5 mm. **Lateral sepals** spreading, narrowly elliptic, slightly falcate, acute, the margins revolute, 25–28 × 7.5 mm. **Petals** spreading, narrowly elliptic, rounded, with revolute margins, 23 × 4 mm. **Lip** adnate to the column, the lamina subreniform, trilobulate, 15 × 22 mm, with two small, rounded basal calli, the midlobe subrectangular, retuse, mucronate, the lateral lobes suborbicular, rounded. **Column** cylindric, bent downwards in the apical one third, 14–16 mm long; clinandrium-hood prominently fringed. **Anther cap** ovoid, 4-celled. **Pollinia** 4, rounded.

Comments. *Epidendrum fulfordianum* is similar to *E. chlorocorymbos* Schltr., but can be distinguished by its much larger flowers, the wider petals (narrowly elliptic vs. linear, 4 mm wide vs. 1 mm) and the shape of the midlobe of the lip, which is entire, subrectangular and retuse-mucronate vs. bilobed, with suborbicular lobes. *Epidendrum chlorocorymbos* and *E. fulfordianum* both grow in the tropical Caribbean forests, but the first one in the premontane watershed and the second in the lowlands close to sea level. *Epidendrum lagenocolumna* Hágster & L. Sanchez, from the Pacific rain and cloud forests at 1500–2500 m, has a similar habit but the new species can be distinguished by the spreading sepals, the petals elliptic (vs. linear), and the non inflated column base.

Epidendrum fulfordianum is known only from the type collection in the Río Estrella valley, on the Costa Rican Atlantic coast close to Limón, where it is apparently rare. It is more probable, however, that its rarity reflects the paucity of collections made in the hot Caribbean lowlands, and the difficult taxonomy of this group of *Epidendrum*. The new species would have prob-

ably been overlooked if judges of the American Orchid Society had not called our attention on it for taxonomic determination.

Eponymy. Named in honor of Richard A. Fulford of Miami, USA, an accredited judge of the American Orchid Society, who required our awareness on the identity of the new taxon.

Distribution and ecology. Known only from the Caribbean coastal plains in Costa Rica, where it is found growing epiphytically in tropical wet forests close to sea level.

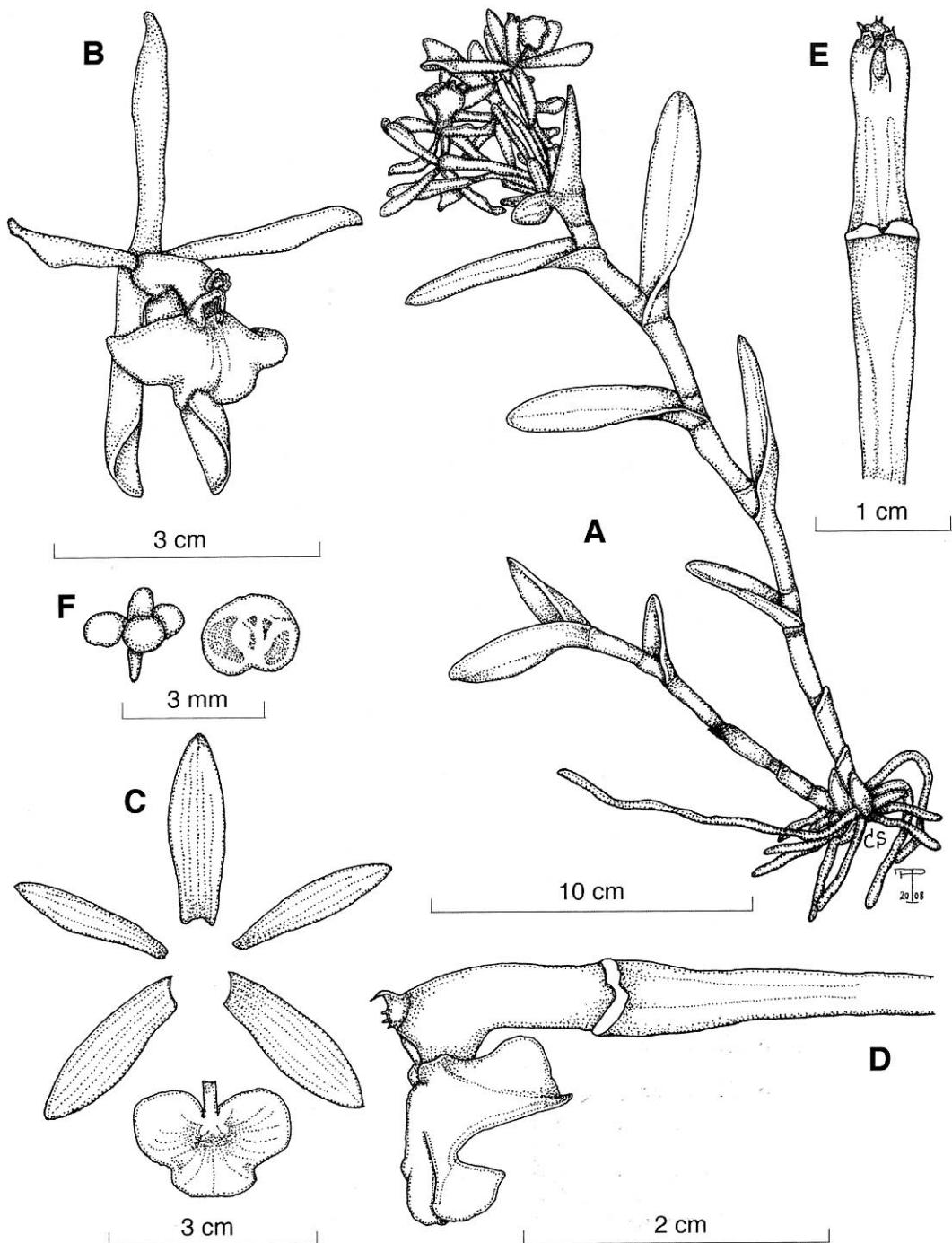


FIGURE 1. *Epidendrum fulfordianum* Pupulin & Karremans. A. Habit. B. Flower. C. Dissected perianth. D. Column and lip, lateral view. E. Column, ventral view. F. Pollinaria and anther cap. Drawn by F. Pupulin & C. Smith from the holotype.