

**Epidendrum pseudobarbeyanum** Pupulin & Karremans, sp. nov. TYPE: Costa Rica—Puntarenas: Coto Brus, Las Alturas de Cotón, Zona Protectora Las Tablas, Las Alturas Biological Station, southern slopes of Cerro Chai, 8°56'59"N 82°50'01"W, 1500 m, lower montane wet forest, primary vegetation, 26 October 2005, F. Pupulin 5839, D. Bogarín, R.L. Dressler, R. Gómez, A. Karremans, A. Rambelli & S. Rambelli (Holotype, USJ). FIGURES 2, 4B.

*Ab Epidendro barbeyano* Kraenzl. caule stricto paucifolio, inflorescentia pauciflora, floribus parvioribus, sepalis oblanceolatis, petalis patentibus obtusis vel rotundatis recedit.

Epiphytic, caespitose, sympodial **herb** to 18 cm tall. **Roots** basal, flexuous, to 1.5 mm in diameter. **Stem** simple, cane-like, foliaceous, laterally compressed, straight, covered by loose, inflated, ancapitous sheaths to 4 cm long. **Leaves** 3–4 on the upper part of the stem, distichous, articulate, subcoriaceous, progressively longer, basally loosely embracing the stem, the lamina narrowly elliptic, retuse, 5.5–9.0 × 0.8–1.1 cm. **Inflorescence** a terminal, sessile, congested, few-flowered raceme from the mature growth, less than 1 cm long. **Floral bracts** shorter than the ovary, narrowly ovate, acute, 3.0 × 1.2 mm long. **Flowers** 3–4, resupintae, simultaneous, yellowish green. Pedicellate **ovary** terete-subclavate, rounded in section, to 4.5 cm long. **Dorsal sepal** obovate-oblong, broadly obtuse, slightly revolute, 7-nerved, 20 × 10 mm. **Lateral sepals** obliquely elliptic-oblanceolate, acute, slightly revolute, 7-nerved, 20 × 10 mm. **Petals** oblanceolate, spreading, obtuse to rounded, 5-nerved, 18 × 5–6 mm. **Lip** adnate to the column, 3-lobed-obrhenniferiform, 20 × 30 mm, the lateral lobes elliptic, exceeding the midlobe in length, separate from the midlobe by deep sinuses, the midlobe triangular, deeply retuse, the base cordate; disc with two short, diverging, rounded calli. **Column** stout, straight, 10 mm long, the clinandrium small, entire, the stigma elliptic. **Anther cap** semiorbicular, 4-celled. **Pollinia** 4,

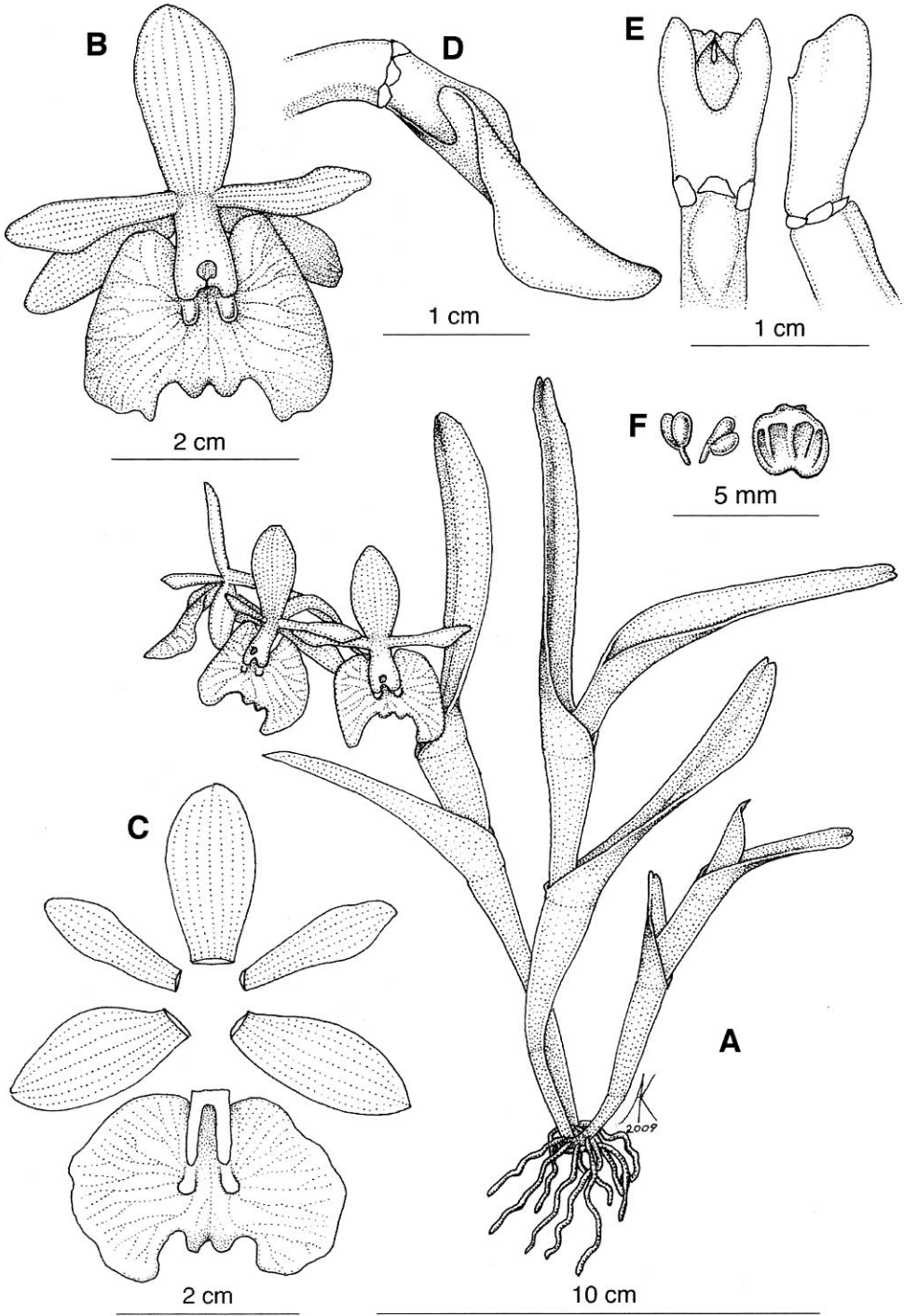


FIGURE 2. *Epidendrum pseudobarbeyanum* Pupulin & Karremans. A. Habit. B. Flower. C. Dissected perianth. D. Column and lip, lateral view. E. Column, ventral and lateral views. F. Pollinaria and anther cap. Drawn by A. Karremans from the holotype.

obovoid, laterally compressed, on short, linear, apically bifid caudicles. **Fruit** not seen.

**Comments.** Among the species of the *Epidendrum difforme* complex, *E. pseudobarbeyanum* is closely allied to *E. barbeyanum* Kraenzl., also originally described from Costa Rica. It can be easily distinguished from the latter by the short (<20 cm long vs. 30 cm) and straight (vs. flexuous) stems, provided with 3 to 4 leaves (vs. 4–8), the few-flowered inflorescence (3–4 flowers vs. 5–10), the distinctly smaller flowers (ca. 4 cm in diameter vs. almost 6 cm), the obovate-oblong sepals (vs. lanceolate), and the spreading (vs. incurved), obtuse-rounded (vs. acute) petals.

**Etymology.** The name refers to its similarity to *E. barbeyanum*.

**Distribution and ecology.** Known only from the Costa Rican southern pacific montane forests in the Coto Brus region, where it grows at around 1500 m of elevation. The type locality of this species is very close to the border with Panama.