

*Lepanthes sandiorum* Bogarín & Karremans, *sp. nov.*

TYPE: Costa Rica. Puntarenas: Coto Brus, Sabalito,

Zona Protectora Las Tablas, 13 km al noreste de Lucha, Sitio Coto Brus, entre Río Surá y Quebrada Sutú, Finca de Miguel Sandí, 8°56'46.1" N 82°44'30.9" W, 1778 m, bosque pluvial montano bajo, epífitas en potreros arbolados, 6 junio 2010, *D. Bogarín 7773 & A.P. Karremans* (holotype, JBL-Spirit!). FIG. 2, 4B.

*Species Lepanthes dolabriforimi Luer similis, distincta habito perparvo, floribus in diametro brevioribus, petalis angustis filiformis et lobo superno petalorum oblongo, rotundato, glabro.*

*Plant* epiphytic, caespitose, suberect, up to 5.5 cm tall. *Roots* slender, flexuous, to 0.5 mm in diameter. *Ramicauls* slender, erect, 2.3–3.5 cm long, enclosed by 7 glabrous, lepanthiform sheaths, the ostia minutely ciliate, ovate, acute, adpressed. *Leaves* coriaceous, elliptic to ovate or suborbicular, obtuse, emarginate, with a short apiculus, purplish beneath, 1.3–1.7 × 0.6–1.4 cm, the rounded base narrowing into a petiole less than 1 mm long. *Inflorescence* racemose, distichous, glabrous, successively flowered, born above the leaf, exceeding the leaves, up to 3 cm long, peduncle 1.5 cm long, rachis 1.5 cm long. *Floral bracts* ovate, acuminate, conduplicate, membranaceous, 1 mm long, muriculate. *Pedicels* 2 mm long, persistent. *Ovary* to 1 mm long, glabrous. *Flowers* with orange sepals, the petals scarlet red with the margin yellow, the lip scarlet with the apex yellow, the column red. *Dorsal sepal* ovate, acute, denticulate, slightly reflexed, dorsally with three keels, connate to the lateral sepals for about 0.4 mm, 2.6 × 1.4 mm. *Lateral sepals* narrowly ovate, acute, denticulate, dorsally with three ciliate keels, connate for 0.4 mm, 2.6 × 1.3 mm. *Petals* transversely bilobed, entire, glabrous, 0.4 × 2.3 mm, the upper lobe oblong, filiform, 1.7 mm long, rounded, the lower lobe smaller than the upper lobe, to 0.6 mm long, ovate, obtuse. *Lip* bilobate, adnate to the column, the blades oblong with rounded ciliolate ends, embracing the column 1.5 × 1.2 cm, the connectives terete, oblong, to 0.4 mm long, the body thick, oblong, rounded, connate to the base of the column, the appendix thick, oblong, cylindrical. *Column* cylindrical, to 2 mm long, mucronate, the anther dorsal and the stigma apical. *Pollinia* two, ovoid, basally filiform. *Anther cap*, oblong, cucullate.

PARATYPES: Costa Rica. Puntarenas: Coto Brus, Sabalito,

Zona Protectora Las Tablas, 13 km al noreste de Lucha, Sitio Coto Brus, entre Río Surá y Quebrada Sutú, Finca de Miguel Sandí, 8°56'46.1" N 82°44'30.9" W, 1778 m, bosque pluvial montano bajo, epífitas en potreros arbolados, 20 abril 2012, *A.P. Karremans 5350 & J. Gemmel* (JBL-Spirit!). Same locality and date, *A.P. Karremans 5381 & J. Gemmel* (CR!). Coto Brus, Sabalito, Zona Protectora Las Tablas, 13 km al noreste de Lucha, Sitio Coto Brus, entre Río Surá y Quebrada Sutú, Finca de Miguel Sandí, 8°56'46.1" N 82°44'30.9" W, 1778 m, bosque pluvial montano bajo, epífitas en potreros arbolados, 6 junio 2010, *D. Bogarín 7786* (JBL-Spirit!). Coto Brus, Sabalito, Zona Protectora Las Tablas, 13 km NE of Lucha, Sitio Coto Brus, finca Sandí "El Capricho", 8°56'46.1" N 82°44'30.9" W, 1778 m, epiphytic, mostly on *Quercus* sp. in pastures and along the river Sutú, wet premontane forest, 6 October 2010, *F. Pupulin et al. 7929* (JBL -Spirit!). Same locality and date, *F. Pupulin et al. 7930* (JBL -Spirit!). Same locality and date, *F. Pupulin et al. 7934* (JBL -Spirit!). Same locality and date, *F. Pupulin et al. 7951* (JBL -Spirit!).

DISTRIBUTION: Endemic to Costa Rica, however, most probably found also in Panama, as the large populations were found growing very close to the border. It is known only from the south-east Costa Rica, on the southernmost portion of the Pacific watershed of the Talamanca mountain range.

HABITAT AND ECOLOGY: plants were found growing epiphytically in disturbed lower montane rain forest, at around 1800 m elevation.

EPONYMY: dedicated to Miguel Sandí and his family, pioneers in the region of Las Tablas and owners of the farm where this species was found.

*Lepanthes sandiorum* resembles *L. dolabriforimi* Luer, however it can be distinguished mainly by the smaller plants, less than 5.5 cm tall (vs. up to 7.5 cm), the smaller flowers with sepals 2.6 × 1.4 mm (vs. 4.0 × 2.5 mm), the narrower petals, which are filiform, 2.3 mm (vs. 3.5–3.75 mm) with the upper lobe oblong, rounded, entire, glabrous (vs. obtusely angled with a hatchet-shaped appearance, minutely ciliate, pubescent). Both species are related to *L. blepharistes* Rehb.f. but they can be easily distinguished by the petals with the lower lobe smaller than the upper lobe (vs. equal in length).

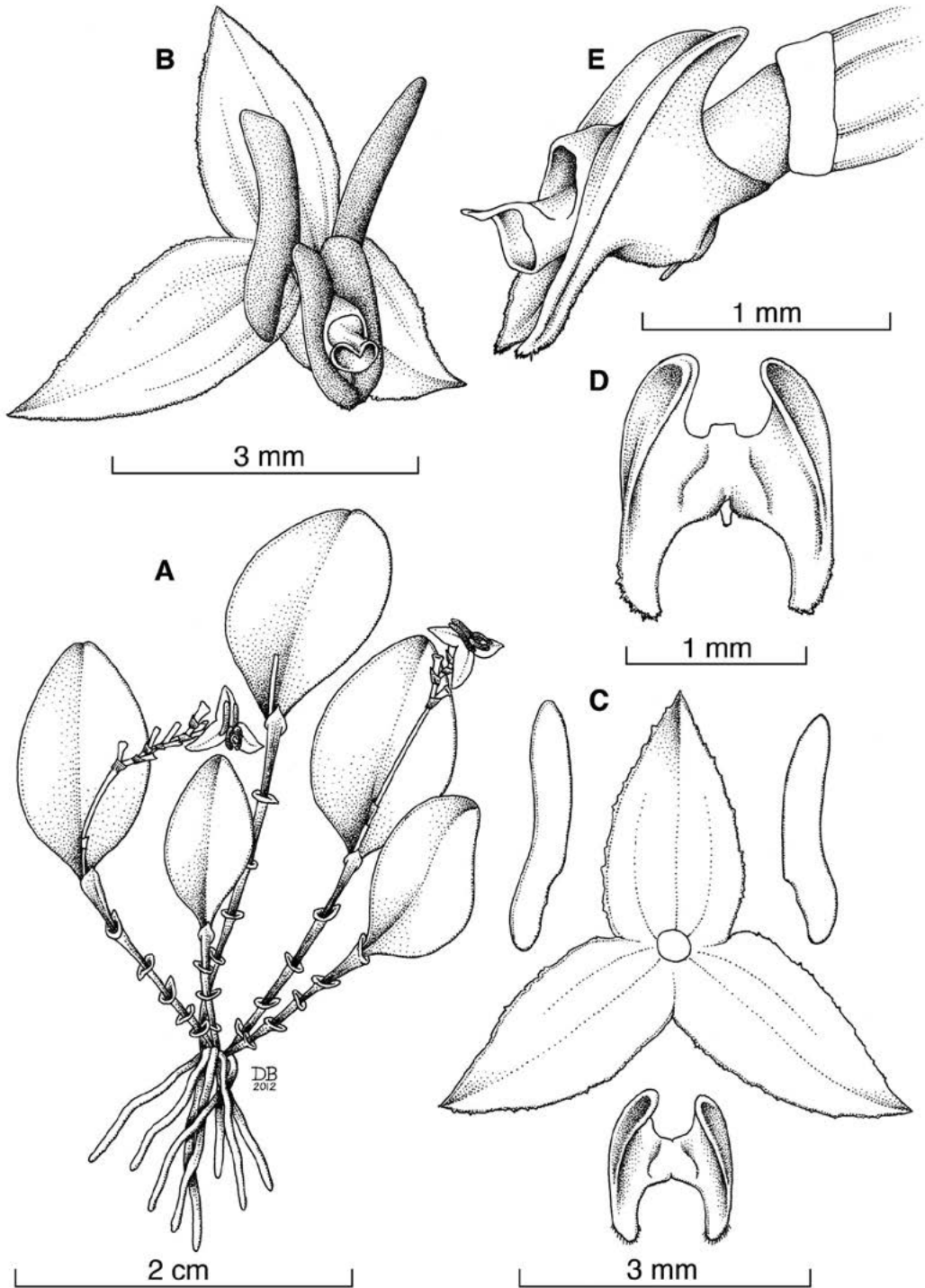


FIGURE 2. *Lepanthes sandiorum* Bogarín & Karremans. A — Habit. B — Flower. C — Perianth flatten. D — Lip, spread. E — Column and lip, lateral view. Drawn by D. Bogarín from the holotype.

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FIGURE 4. Flowers of the new species of *Lepanthes*. A—*L. erubescens* (F. Pupulin 4027). B—*L. sandiorum* (F. Pupulin 7929). C — *L. sanjuanensis* (D. Bogarín 7773). Photographs by F. Pupulin (A, B) and D. Bogarín (C).