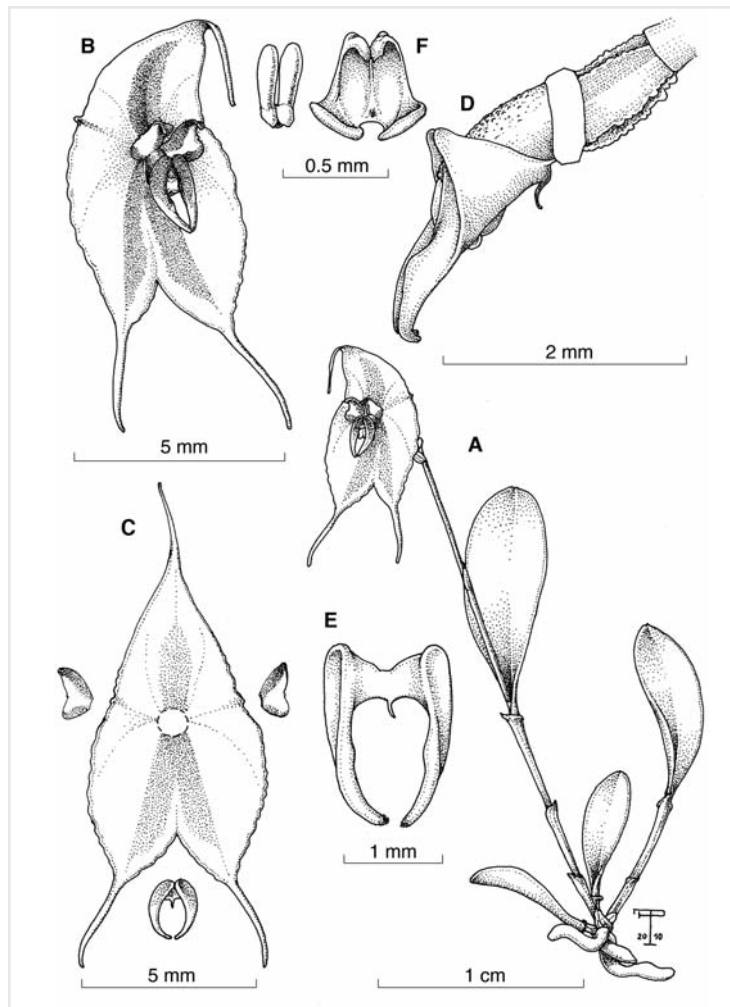


Lepanthes tapantiensis Pupulin & Bogarín, sp. nov.

TYPE: COSTA RICA. Cartago: Paraíso, Orosi, Tapantí, Tapantí National Park, near the Mirador Point, Alto Patillos, 9°44'04.22"N 83°46'41.17" W, 1470 m, epiphytic on small trees along the main road, premontane rain forest, mature vegetation, 18 November 2010, F. Pupulin 8010, D. Bogarín, A. Karremans, R. Gómez, B. Klein & G. Meza, (holotype, JBL). Figs. 14-15.

Species Lepanthes johnsonii Ames affinis, *vaginis ramicaulibus glabris, marginibus sepalorum crenulatis, petalis obrheniformibus lobulis apiculo rotundato disjunctis, laminis labelli apicaliter papilloso appendiceque plana extensa non incurvata, colore floribus recedit.*

Plant epiphytic, caespitose, erect, to 2 cm tall. **Roots** coarse, glabrous, to 1.5 mm in diameter. **Ramicauls** slender, 7-12 mm long, enclosed by 2-3 concealing, glabrous, whitish, lepanthiform sheaths, slightly dilated at the acute apices. **Leaf** elliptic to obovate-elliptic, rounded, minutely retuse, with a short abaxial apicule, thin-coriaceous, cuneate at the base into a short, conduplicate petiole, 6.5-11.0 x 3.0-6.5 mm including the petiole. **Inflorescence** a distichous, loose, successively 1- to 2-flowered raceme to 15 mm long, produced in front of the leaf by a slender, terete peduncle, 1.3 cm long, with 2-3 brownish, adpressed, lanceolate, acute bracts to 1.3 mm long. **Floral bracts** glumaceous, glabrous, broadly lanceolate, 0.7 x 0.5 mm; pedicels terete, to 1.5 mm long; ovary subclavate, winged, ca. 1 mm long, the margins of the crests cartilaginous, irregularly crenulate. **Flowers** large for the plant, spreading, resupinate, the sepals yellow, the dorsal one suffused with purple-red along the midvein, the lateral ones suffused with purple-red along the labellar side of the midvein, the petals yellow, blotched with red on the proximal margins, the apex of the upper lobe violet, the lip yellow, the blades red at the base, the column violet, the anther yellow.



Lepanthes tapantiensis Pupulin & Bogarín. A: Habit. B: Flower. C: Dissected perianth. D: Ovary, column and lip, lateral view. E: Lip, flattened. F: Pollinarium and anther cap.

Drawn by F. Pupulin from the holotype.



Lepanthes tapantiensis, a flower from the plant that served as the holotype.

All photos ©F. Pupulin

Sepals connate, forming a spreading 3-lobed calyx with caudate lobes. **Dorsal sepal** triangular, 3-veined, ending in a filiform tail 2.5 mm long, connate at the base to the lateral sepals for 1.7 mm, irregularly and shallowly crenulate along the basal margins, 7 x 4 mm including the tail. **Lateral sepals** ovate, abruptly constricted at the apices into filiform tails 3 mm long, connate to each other for ca. 3 mm, the margins crenulate, 8.0 x 2.7 mm including the tails. **Petals** transversely bilobed, sub-obreniform, the lobes separated by a rounded apicule, glabrous, 0.7 x 1.5 mm, the upper lobe obliquely triangular-ovate, minutely rounded, 1.2 x 0.8 mm, the lower lobe smaller, elliptic, rounded, 1.0 x 0.5 mm. **Lip** 3-lobed, bilaminate, 1.7 x 1.4 mm across the lateral lobes when spread, the lateral blades narrowly triangular-falcate, slightly concave adaxially, the acute, papillose apices approximate, basally adpressed to the column, 1.7 x 0.4 mm, the connectives obtuse, the appendix filiform, glabrous, white. **Column** terete, minutely papillose, ca. 1 mm long, the anther subdorsal, the stigma ventral. **Anther** cap ovate, 2-celled, the base deeply emarginate, the apex with 2 flap-like, subquadrate, diverging lobes. **Pollinia** 2, narrowly linear-oblong, strongly complanate, with a rounded viscidium.

HABITAT: Epiphytic in premontane wet forest on the Caribbean slopes of Cordillera de Talamanca in Tapantí National Park, Costa Rica.

DISTRIBUTION: Known only from the type locality in Costa Rica.

DERIVATION OF NAME: Named from the region of Tapantí and the homonymous National Park.

Lepanthes tapantiensis is similar to *L. johnsonii*, but can be distinguished vegetatively by the glabrous sheaths of the ramicaul (vs. hispidulous), and florally by the crenulate margins of the sepals (vs. smooth), the distinctly bilobed, obreniform petals with the two lobes separated by a small, rounded apicule (vs. subentire, narrowly triangular, without an apicule), the lip provided with blades that are papillose at the apices (vs. glabrous), and the color of the perianth. While in *L. johnsonii* the sepals are yellow, sometimes with the tails' apices tinged with red, and the petals and column purple-red, in *L. tapantiensis* the dorsal sepal is suffused with purple-red along the midvein and the lateral ones are suffused with the same color along the labellar side of the midvein, the petals are yellow, blotched with red on the proximal margins, the apex of the upper lobe violet, and the column is violet.