7. Lepanthes tarrazuensis Bogarín & D. Jiménez, sp. nov. (Figs. 1D, 5). Type: COSTA RICA. San José: Dota, Santa María, between Santa María and Naranjillo de Tarrazú, 9°35'33.35"N 83°58'26.74"W, 1615 m, epiphytic, legit Daniel Jiménez, flowered in cultivation at Jardín Botánico Lankester, 14 Feb 2012, D. Bogarín 9471 (HOLOTYPE: JBL; ISOTYPE: CR).

A *Lepanthes seegeri* Luer, petalis labelloque glabris in apice ciliatis, flavis aurantiacis in base scarlatis, lobo superiore petalorum truncato non lobato, lobulis labelli conniventibus et appendice minore, a *Lepanthes dikoensis* Bogarín & C.M. Sm. stirpe erecta, lobo superiore petalorum trapeziformi, truncato, statim dignoscenda.

Plant epiphytic, caespitose, erect herb, up to 14 cm tall. **Roots** slender, flexuous, up to 1 mm in diameter. Ramicauls erect to suberect, 3.5–9.0 cm long, enclosed by 7–10 ciliate, lepanthiform sheaths, ciliate especially on new growth; ostia markedly dilated, ciliate. **Leaves** coriaceous, green, elliptic to oblong, acute to acuminate with a short apiculus, 3-veined, $3.2-5.3 \times 1.1-2.5$ cm; cuneate base narrowing into a petiole ca. 7 mm long. **Inflorescence** racemose, distichous, successively flowered, beneath (rarely above) the leaf, shorter than the leaves, up to 2.5 cm long; peduncle 1.3 cm long; rachis 1.2 cm. Floral bracts 1 mm long, ciliate. Pedicel 2 mm long, persistent. **Ovary** up to 1 mm long. **Flowers** sepals light orange, petals and lip with the bases scarlet-red and the apices yellowish-orange, the column pinkish-purplish. **Dorsal sepal** broadly ovate, acute, glabrous, connate to the lateral sepals for about 1.2 mm, 3.7 × 3.6 mm. Lateral sepals broadly ovate, acute, glabrous, connate for about 1 mm, 3.9×2.5 mm. **Petals** transversely bilobed, 1.8×4.2 mm, slightly ciliate along the margins; upper lobes oblong-trapeziform, overlapping, apex broadly rounded or truncate; lower lobes smaller than the upper lobes, oblong to narrowly triangular, oblique, apex rounded. Lip bilobate, adnate to the column, $1.5 \times$ 2.2 mm expanded; blades ovate, glabrous with ciliate, rounded apices, subfalcate; connectives cuneate, up to 0.7 mm long, perpendicular to the column and not leaving it exposed; body oblong, connate to the base of the column; the appendix oblong, shortly pubescent. Column cylindric, 1.2 cm long; anther apical; stigma subapical. Pollinia two, ovoid. Anther cap cucullate.

Distribution.—Only known from the central-southern Pacific region of Costa Rica.

Habitat and ecology.—Epiphytic in premontane and lower montane rain forest along the Pacific watershed of Cordillera de Talamanca.

Etymology.—From the locality of Tarrazú in San José province. Tarrazú comes from an indigenous Huetar word of unknown meaning.

Phenology.—Plants were recorded in flower from February to March.

Discussion.—It is similar to *L. seegeri* but differs mainly by the glabrous petals and the lip glabrous with ciliate apices (vs. long ciliate-pubescent), the upper lobe of petals truncate, without lobules at the inner apical corner (vs. oblong, rounded, with lobule at the inner apical corner), the petals and lip basally red, tinged with yellow-orange at apex (vs. completely red without stains), the blades of the lip touching each other above the column (vs. slightly expanded and not touching each other), the appendix shorter, a small triangular lobule, not extending far from the apex of the column (vs. appendix longer, descending, extending far from the apex of the column) (Fig.1). Other differences are summarized in Table 1.

8. Lepanthes trichocaulis Luer & R. Escobar, Orquideología 17:224–226. 1988. Type: COLOMBIA. Antioquia: Munic. of Yarumal, Briceño, Quebrada El Oro, alt. 1820 m, collected by R. Escobar & E. Valencia, 14 Feb 1984, flowered in cultivation by L. & J. Posada at Colomborquídeas 26 Mar 1984, R. Escobar 3245 (HOLOTYPE: MO). For a complete description and illustration see Luer (1988).

Distribution.—Only known from Colombia.

Habitat and ecology.—Epiphytic around 1820 m of elevation (Luer 1988).

Discussion.—It is recognized by the erect plants, the inflorescences developed behind the leaf, the upper

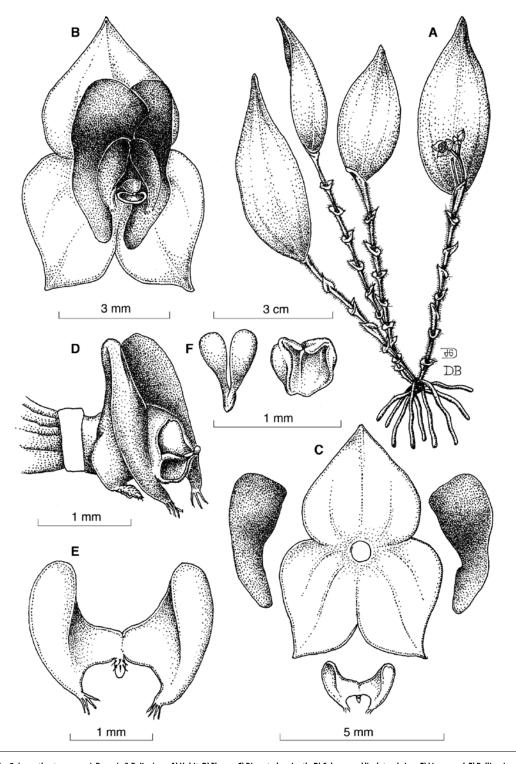


Fig. 5. Lepanthes tarrazuensis Bogarín & D. Jiménez. A) Habit. B) Flower. C) Dissected perianth. D) Column and lip, lateral view. E) Lip, spread. F) Pollinarium anther cap. Drawn by D. Bogarín and D. Jiménez from the holotype (JBL-Spirit).

lobe of petals oblong, rounded and not overlapping each other, the lower lobe longer or as long as the blades of the lip a couple of longer hairs in place of an appendix.

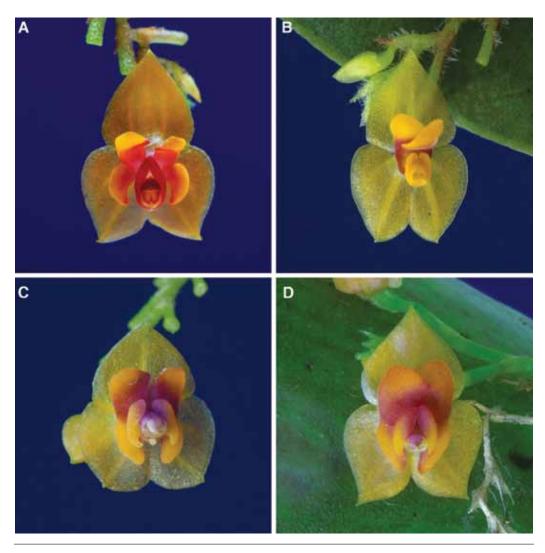


Fig. 1. Floral morphology of species of the L. ovalis group in Costa Rica. A) L. dikoensis. B) L. erinacea. C) L. expansilabia. D) L. tarrazuensis.