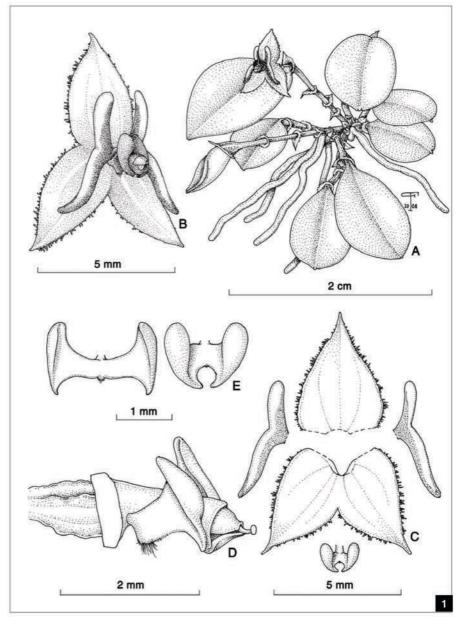
## Two New Lepanthes from Costa Rica

Describing Taxa in the Pleurothallidinae: Orchidaceae/By Franco Pupulin and Diego Bogarin



[1] Lepanthes falx-bellica Pupulin & Bogarín. A. Habit. B. Flower. C. Perianth, flattened. D. Column and lip, lateral view. E. Lip, adaxial view, spread and in natural position. Drawn by F. Pupulin from the holotype.

Lepanthes falx-bellica Pupulin & Bogarín, sp. nov.

TYPE Costa Rica. Puntarenas: Santa Elena, road toward Cerro Amigos, 10°19′20″N 84°48′01″W, 5,577 feet (1,700

m), July 30, 2003, flowered in cultivation at Lankester Botanical Garden, University of Costa Rica, February 4, 2005, D. Bogarín 394, M. Blanco & M. Whitten (holotype, JBL-Spirit; isotype, USJ). Figs. 1–2.

Species Lepanthi monteverdensi Luer et R. Escobar similis, distincta habito perparvo, colore floribus, petalibus multo majoribus, laminis labelli ovatis non lunatis columnam aequantis, appendice integra.

Epiphytic, small, cespitose, suberect to prostrate herb, to 2.5 cm tall. Roots slender, flexuous, about 1 mm in diameter. Ramicauls 0.7-1.4 cm long, enclosed by three to five lepanthiform, micropubescent sheaths, the ostia obliquely dilated, with ciliate margins. Leaves coriaceous, flat, conduplicate, ovate-elliptic to suborbicular, broadly obtuse-rounded, minutely emarginate, abaxially provided with a minute, rounded apicule,  $6-12 \times 6-10$  mm, the base shortly cuneate, narrowing into a petiole 1.0−1.5 mm long. Inflorescence racemose, 5 ditichous, successively flowered, borne above the leaf, to 1 cm long; peduncle filiform, about 5 mm long. Floral bracts conduplicate, ovate, subacute, sparsely muriculate, about 1 mm long. Pedicel 1.2 mm long, persistent. Ovary subclavate, rounded-subwinged, the wings membranaceous-crenulate, in section, 1 mm long. Flowers with the sepals orange-yellow, the veins tinged pale yellow, the petals basally orange, the proximal half red, the apex of the lower lobe red, the lip concolorous purple red, the column purple, the anther white strongly suffused with purple. Dorsal sepal triangular-ovate, acute, slightly concave toward the apex,  $4.5 \times 3.5$  mm, three-veined, the margins minutely and irregularly ciliate, connate to the lateral sepals for about 1.5 mm. Lateral sepals triangular-ovate, acute to subacuminate, three-veined, the margins irregularly ciliate, slighty concave at apex,  $4.5 \times 3.0$  mm, connate at the base 1.5 mm. Petals transversely bilobed, 0.5 × 5.0 mm, the upper lobe transversely linear-subfalcate, rounded, 0.5 × 2.0 mm, the lower lobe transversely linear-subfalcate, rounded, 0.5 × 3.0 mm, acute-rounded. Lip three-lobed, basally connate to the column, 1.2 × 2.0 mm, cellular-subpubescent along the blades, shortly hispid under the body, the blades ovate, acute, the connectives broadly oblong, the appendix external, short, subglobose, hirsute. Column short, 1.2 mm long, with the anther dorsal, the stigma apical. Anther cap cucullate, twocelled. Pollinia two.

HABITAT Epiphytic in lower montane rain forest on the Pacific slopes of Cordillera de Tilarán, Costa Rica.

DISTRIBUTION Known only from the type locality.



DERIVATION OF NAME From falxbellica, the Latin word for halberd, the weapon that came to prominent use during the 14th and 15th centuries, in reference to the shape of the petals.

Within the complex of endemic species close to Lepanthes monteverdensis (including, in Costa Rica, Lepanthes mentosa and Lepanthes cribbii), Lths. falx-bellica can be distinguished by the diminutive habit, the small, ovate-rounded leaves, the proportionally broader petals (broader than the length of the dorsal sepal), the body of the lip without a chin, the fully formed, nonlunate blades of the lip, and the small, rounded, external appendix. The flowers of Lths. falx-bellica also differ in color from their close relatives, with concolorous sepals and bright orange petals, basally blotched and suffused with red.

[2] Lepanthes falx-bellica, flower from the plant that served as the holotype, flowered in cultivation at Lankester Botanical Garden, University of Costa Rica, and photographed in July 2003.