

*Lepanthes siboei* Bogarín &  
D.Jiménez, spec. nov.

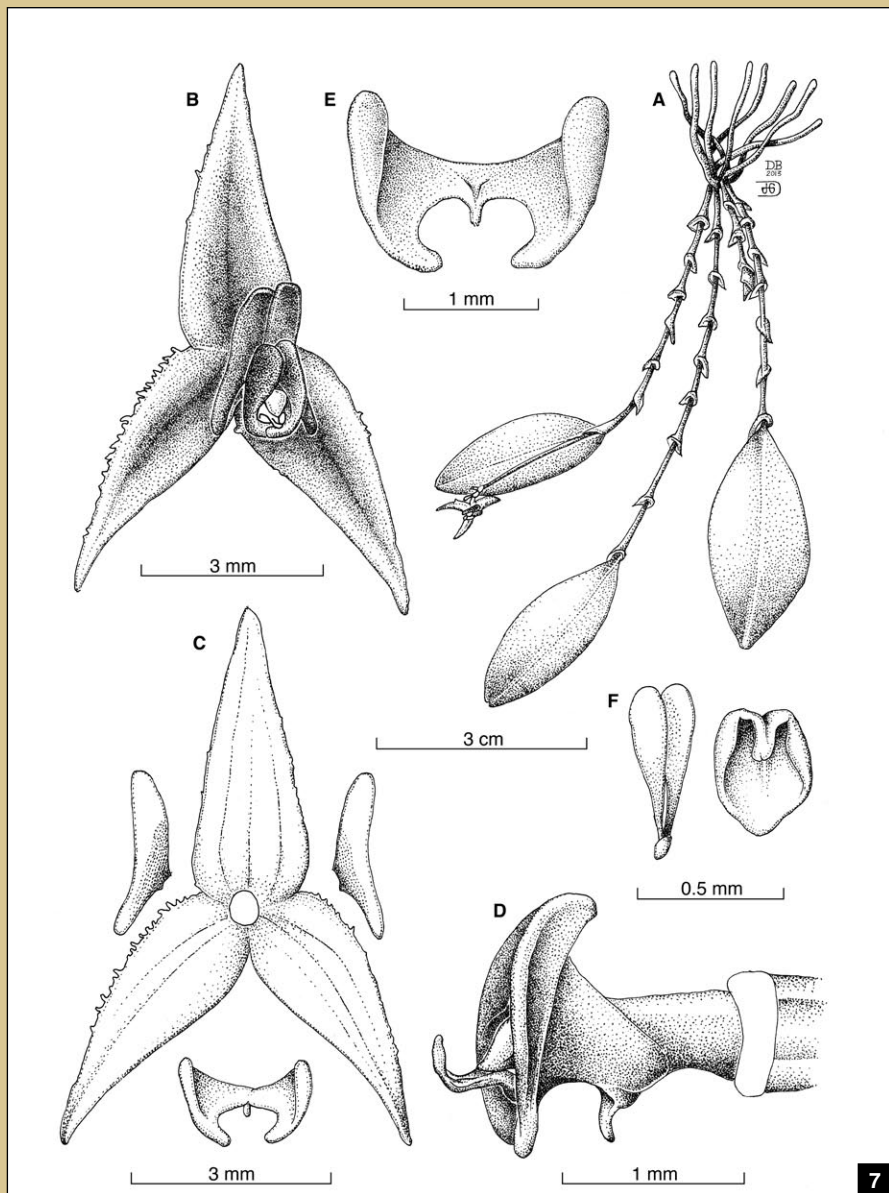
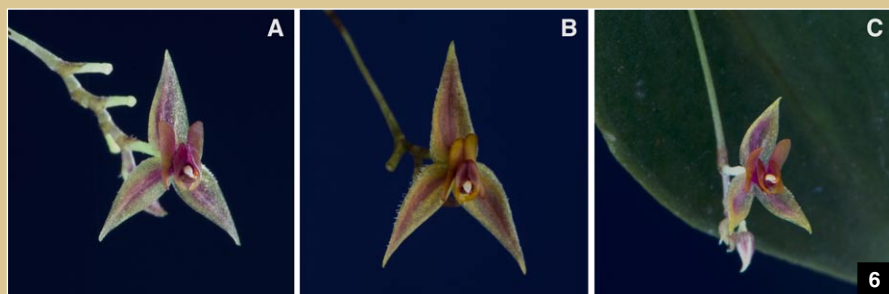
TYPE Costa Rica. Puntarenas:  
Buenos Aires, Reserva Biológica Dúrika,  
sendero después de Bosque Perfecto,  
9°18'46.64"N, 83°12'40.14"W, 2377 m,  
epífita en bosque pluvial premontano,  
invenit D. Jiménez, E. García, W.  
Driessen, P. Dubbeldam, F. Nass, J. Riksen  
et E. Schmidt, 16 enero 2012, floreció en

cultivo en el Jardín Botánico Lankester, 27 setiembre 2012, D. Jiménez sub D. Bogarín 9927. (holotype, JBL).

**DIAGNOSIS** *Lepanthes siboei* is most similar to *Lepanthes falcifera* Luer from which is distinguished by the ovate-elliptic leaves, entire, acute sepals, golden yellow with the midvein stained with red, the rounded yellow-orangish petals and the thick, ovate, folded downward conspicuous appendix.

Plant epiphytic, caespitose, erect or suberect, up to 8 cm tall. Roots slender, flexuous, to 0.5 mm in diameter. Ramicauls slender, erect, 2.5–5.5 cm long, enclosed by 7–8 minutely ciliate, lepanthiform sheaths, the ostia minutely ciliate, ovate, acuminate and slightly dilated. Leaves coriaceous, elliptic, acute, emarginate, with a short apiculus, 1.1–1.5 × 2.3–3.0 cm, the rounded base narrowing into a petiole less than 2 mm long, light green stained with purple beneath. Inflorescence racemose, distichous, glabrous, successively flowered, developed above the leaf, larger or as long as the leaves, up to 2.5 cm long, peduncle 2 cm long, rachis 1.5 cm long. Floral bracts ovate, acuminate, conduplicate, membranaceous, 1.1 mm long, muriculate. Pedicels 2 mm long, persistent. Ovary to 1 mm long, glabrous. Flowers the sepals golden yellow with the midvein stained with red, the petals yellow-orangish with the inner margin stained with red, the lip red with the apex golden yellow, the column pinkish-red. Dorsal sepal ovate, acute, denticulate, slightly concave, dorsally with three keels, connate to the lateral sepals for about 0.5 mm, 4.5 × 1.7 mm. Lateral sepals subsimilar to the dorsal sepal, ovate, acute, denticulate along the outer margin, slightly concave, dorsally with three keels, connate for 0.5 mm, 4.5 × 2.0 mm. Petals transversely bilobed, entire, 0.7 × 2.5 mm, the upper lobe oblong, rounded, 1.5 mm long, the lower ovate, narrowly oblong. Lip bilobate, adnate to the column, 1.6 × 1.8 mm, the blades ovate to oblong with rounded ends, embracing the column 1.3 × 1.9 mm, the connectives cuneate, oblong, to 0.6 mm long, the body thick, subquadrate, rounded, connate to the base of the column, the appendix thick, ovate, folded downward, conspicuous. Column cylindric, to 1.5 mm long, the anther apical and the stigma subapical. Pollinia two, ovoid, basally filiform. Anther cap obovate, cucullate.

**PARATYPE** Costa Rica-Panamá: Puntarenas-Bocas del Toro: Coto Brus-Valle del Risco, línea fronteriza sobre la divisoria de aguas ingresando por el



- [4] Flower morphology of *Lepanthes garciae* Bogarín & D.Jiménez. Photograph by Daniel Jiménez from the type plant.
- [5] *Lepanthes garciae* Bogarín & D.Jiménez. A — Habit. B — Flower. C — Perianth flatten. D — Lip, spread. E — Column and lip, lateral view. Drawings by D. Bogarín and D. Jiménez from the holotype.
- [6] Flower morphology of *Lepanthes siboei*. A — M. Fernández 820. B — D. Bogarín 9927. C — D. Bogarín 10760.
- [7] *Lepanthes siboei* Bogarín & D.Jiménez. A — Habit. B — Flower. C — Perianth flatten. D — Column and lip, lateral view. E — Lip, spread. F — Pollinarium and anther cap. Drawings by D. Bogarín and D. Jiménez from the holotype.

camino de la Finca Sandí-Hartmann “El Capricho”, 8°57'12.34"N, 82°43'32.69"W, 2154 m, bosque pluvial montano bajo, 11 diciembre 2013, D. Bogarín et al. 10760 (JBL). Puntarenas-Bocas del Toro: Coto Brus-Valle del Risco, línea fronteriza sobre la divisoria de aguas ingresando por el camino de la Finca Sandí-Hartmann “El Capricho”, alrededores de riachuelo, 8°57'14"N, 82°43'39"W, 2107 m, bosque pluvial montano bajo, 11 diciembre 2013, M. Fernández et al. 819 (JBL).

**DISTRIBUTION** Costa Rica and Panama. It is known from the trail to Cerro Arbolado, passing “la Pared” and Zona Protectora Las Tablas on the Pacific watershed of the Cordillera de Talamanca along the border between Costa Rica and Panama.

**ETYMOLOGY** Sibö, Sibú or Zipoh is in the mythology of Talamanca, the God or main deity, creator of the universe, humans, plants and animals. Sibö is the most important personage in the religion and culture of Cabécar and Bribri ethnicities.

**HABITAT AND ECOLOGY** Epiphytic in lower montane wet forest at around 7,900 feet (2,400 m) elevation. It is found growing attached to large clumps of mosses with almost no direct contact with the branches of the trees. It is found in shade but it can also grow in exposed direct sunlight as a result of clear spaces formed in the canopy after the fall of trees.

**PHENOLOGY** Plants flower through the year.

**DISCUSSION** This species is most similar to *L. falcifera* from which it is distinguished by the ovate-elliptic leaves (rather than narrowly ovate) entire, acute sepals, golden yellow with the midvein stained with red (rather than denticulate, acuminate, greenish brown), the rounded, yellow orangish petals (rather than obliquely truncate, blood red) and the thick, ovate, folded downward, conspicuous appendix (rather than minute, pubescent; Luer 1996).