

Pleurothallis navisepala

PUPULIN, J. AGUILAR & M. DÍAZ
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Type: Costa Rica. Alajuela: San Ramón, Ángeles, Balsa, road between San Ramón and La Fortuna de San Carlos, 1150 m. 29 May 2013. F. Pupulin 8435, D. Bogarín, M. Díaz, & M. Fernández (holotype, JBL-spirit; LCDP voucher).

Plant epiphytic, caespitose, erect to suberect, to 25 cm tall. **Roots** slender, flexuous, ca. 1 mm in diameter. **Ramicauls** terete, slender, 15–23 cm long, 2–3 mm in diameter, yellowish green, provided with two tubular, short, obtuse sheaths to 15 mm long at the base, and a longer, tubular, tightly adpressed, subobtuse to truncate sheath below the middle, to 4 cm long, the bracts glumaceous, pale green when young, becoming brown, dry-papyraceous with age. **Leaf** borne horizontally at the apex of the ramicaul, becoming curved-subpendent with age, thinly coriaceous, flexible, sessile, ovate, narrowly acute to acuminate, 5–14 × 3–7 cm, deeply cordate at the base, grass-green, matte. **Inflorescence** a solitary flower, usually produced singly, rarely in pairs, from a reclined spatheaceous bract to 11 mm long, brown, dry-papyraceous when mature, eventually dissolving with age. **Pedice**l terete, green, 5–8 mm long. **Ovary** terete-subclavate, curved, rounded in section, 5–8 mm long. **Flowers** not completely spreading, opening and closing several times during anthesis, short-lived (to 5 days), the sepals purple, sparkingly pale reddish and microscopically pubescent-glandulous abaxially, the synsepal with a large, basal, pale greenish yellow, hyaline blotch, the petals purple, the lip purple-magenta. **Dorsal sepal** erect, ovate, acute, 5–7 × 3–4 mm, the margins microscopically glandulose, 7–9 veined. **Lateral sepals** connate into a broadly ovate, obtuse, deeply cymbiform synsepal, the margins microscopically glandulose, 5–6 × 6–8 mm when spread, 9–11 veined. **Petals** narrowly triangular-subfalcate, subsigmoid, acuminate, 4 × 1 mm, porrect, apically incurved, 3-veined. **Lip** unguiculate, hinged to the column foot, strongly geniculate, peltate, basally truncate with rounded angles, acute, apiculate, infolded, 5–8 × 3–5 mm, strongly conduplicate at the base, the apical margins thickened, inrolled, finely pubescent abaxially; glenion recessed between the thickened margins of the hypochile, ca. 1 mm long, the front of the glenion with a line of short papillae extending to the margins of the lip. **Column** short, transversely subrectangular, dorsiventrally complanate, ca. 1 × 2–3 mm, the anther apical, bent, the stigma apical,

bilobed. **Anther cap** oblong, acute, bilobed at the base, 2-celled. **Pollinia** 2, narrowly oblong-pyriform, 1 mm long, attached to an elliptic viscidium through a short, cylindrical caudicle.

Etymology: From the Latin *navis*, “ship”, and *sepala*, “sepals”, in reference to the boat-shaped synsepal.

Pleurothallis navisepala is similar in habit to medium sized specimens of *P. cardiothallis*, but the flowers easily allow distinction between the two species. The former frequently produces two to four flowers at once, bearing comparatively small flowers that do not spread out completely, provided with a deeply concave-navicular synsepal and porrect petals, while in the latter the flowers are produced singly, very rarely in pairs; they are large flowers for the genus, with the margins of the sepals and the petals reflexed at maturity. The size of the peltate lip is very similar between the two species, so that the ratio lip:synsepal is notably greater in *P. navisepala*, the lip occupying most of the concave synsepal.

References:

Pupulin, F., M. Díaz-Morales, J. Aguilar & M. Fernández. 2017. *Pleurothallis*. Two new species of *Pleurothallis* (Orchidaceae: Pleurothallidinae) allied to *P. cardiothallis*, with a note on flower activity. *Lankesteriana* 17(2): 329–356.



LCDP: *Pleurothallis navisepala* Pupulin, J. Aguilar & M. Díaz. A. Habit. B. Flower. C. Perianth flattened. D. Column and lip, lateral view. E. Column, frontal and three quarters views. F–G. Pollinarium, three views. H. Anther cap.

