Pleurothallis decipiens A. & S. sp. nov. Herba mediocris, rhizomate repenti. Caules secundarii elongati, graciles, monophylli. Folium lineari- vel lanceolato-oblongum, rigide coriaceum. Racemi fasciculati, perbreves, pauciflori. Flores parvi. Sepala lateralia in laminam bidentatam connata, extus alte carinata. Sepalum dorsale oblongo-lanceolatum, tertia parte apicali valde incrassata. Petala minuta, cuneatospathulata. Labellum simplex, expansum subpanduratoquadratum.

Plant medium-sized, about 22.5 cm. tall. creeping, slender, entirely concealed by closely wrapped sheaths, somewhat branched. Roots fibrous, filiform, flexuous, glabrous, long, somewhat branched. Secondary stems slender, elongate, 6.5-12.1 cm. tall, approximate to 2.2 cm. apart, about 1 mm. in diameter, sulcate-angulate in the dried state, enveloped below by about two close tubular evanescent sheaths. Leaf solitary at the summit of each stem. erect, linear-oblong or lanceolate-oblong, about 10-11 cm. long, up to 1.35 cm. wide, sessile, gradually narrowed at both ends, rigidly coriaceous, finely striate-rugose with revolute margins when dry, the mid-nerve conspicuously carinate beneath. Inflorescence a cluster of short few-flowered racemes, 1.5-2 cm. long, subtended by a scarious evanescent sheath. Floral bracts minute, infundibuliform. small, 5.9 mm. long; perianth segments subconnivent. Lateral sepals obliquely ovate-lanceolate, acute, connate into a lamina which is bidentate at the apex; lamina 5 mm. long, 5.5 mm. wide when expanded, each sepal 3-nerved and deeply carinate in the middle, forming a prominent mentum with the column-foot, anterior free half of each sepal somewhat fleshy-thickened. Dorsal sepal oblong-lanceolate, very concave, about 6 mm. long, 2.1 mm. wide when expanded, acute, the apical third strongly fleshy-thickened, 3-nerved, bluntly 1-keeled on the outer surface. Petals minute, cuneatespatulate, about 2.4 mm. long, about 1.6 mm. wide above, acutish, the apex broadly rounded and erose-denticulate, 1-nerved, membranaceous. Labellum short, in natural position recurved and subconduplicate, simple with a short quadrate claw which is .9 mm. long; lamina when expanded pandurate-subquadrate, about 2.9 mm. long, 1.9 mm. wide above the middle, apex truncate and irregularly denticulate. 3-nerved, the sides indistinctly carinate-thickened, a fleshy callus at the base. Column short, stout, dorsally about 2.3 mm. long, apex truncate and lobulate-erose. Column-foot very broad.

Pleurothallis decipiens very strongly suggests P. cachensis Ames and P. hondurensis Ames in vegetative characters, but the flowers are very different.

COSTA RICA, Arenal, Juvenal Valerio 68, July 13, 1923. 600 metres altitude. (Type in U. S. Nat. Herb. No. 1169274.)