Pleurothallis periodica Ames sp. nov. Rhizoma valde abbreviatum. Caules secundarii dense caespitosi, valde abbreviati, monophylli, vaginis nervosis obtecti. Folium anguste oblanceolatum, satis coriaceum, in petiolum sulcatum contractum, apice obscure bilobatum apiculo interjecto. Pedunculus elongatus folium superans, gracilis. fasciculati, bracteis nervosis imbricantibus subtenti. Flores periodici, succedanei, eodem tempore singuli aperti. lateralia usque ad medium cohaerentia, in laminam ovatam bifidam leviter concavam extus bicarinatam expansa. palum dorsale oblongo-lanceolatum, acutum, apice leviter incrassatum, extus per medium carinatum, trinervium. Petala dolabriformia vel subrhomboidea, apice valde incrassata et teretia, extus minute glandulosa, binervia. Labellum breviter unguiculatum, oblongum, apice rotundatum, margine obscure denticulatum, supra dense et breviter glandulosum praecipue per medium disci, utrinque prope marginem leviter carinatum carinis glanduloso-fimbriatis. Columna usque ad apicem leviter dilatata, apice trilobulata. lobo posteriore breviter eroso.

Rhizome abbreviated. Roots whitish, fibrous, spread-Secondary stems caespitose, about 4 mm. long, concealed by closely appressed tubular sheaths which soon break down into spreading fibres, monophyllous. Leaf with the sulcate petiole 2.5-3.5 cm. long, 3.5-5 mm. wide, oblanceolate, with the apex minutely bilobed and apiculate. Peduncle 4-5.5 cm. long, with a closely appressed tubular bract near the middle, terminated by several closely imbricating nervose bracts which subtend the fasciculate pedicels of the successional flowers. Pedicels up to ten or more, up to 5 mm. long, slender, persistent. Ovary about 1 mm. long. Lateral sepals 8 mm. long, 3-nerved, cohering to about the middle, forming a bifid ovate lamina which is about 3 mm. wide at the middle; free portion of each sepal triangular, acute, 4 mm. long, lightly carinate on the outer surface along the middle. Dorsal sepal 7.5 mm. long, about 2 mm. wide near the middle, oblong-lanceolate, acute, 3-nerved, with the central nerve prominent and shortly decurrent on the ovary. Petals 3.5 mm. long, 1.5 mm. wide near the middle, dolabriform or subrhomboidal in outline, the anterior margin protuberant, apex terete, outer surface minutely glandulose. Labellum about 4 mm. long, 1.25 mm. wide, shortly unguiculate, oblong, rounded at the tip, 3-nerved, with the nerves prominent beneath, margin sparsely serrate-dentate, upper surface densely and minutely glandulose especially along the middle of the disc, with the glands near the centre in well-defined transverse rows. Disc lightly bicarinate, with the keels intramarginal and shortly denticulate. Column hardly 4 mm. long, produced at base into a short foot, apex trilobulate, with the posterior lobule obscurely erose-denticulate.

Pleurothallis periodica is closely allied to P. Brighamii S. Wats., from which it differs in the more glandulose denticulate labellum with shortly denticulate carinae and in the absence of an angular marginal projection on each side near the base. [Plate 4.]

Costa Rica, Peralta, C. H. Lankester 463, July 13, 1923. Flowers hyaline, yellowish, deeply tinged and striped with maroon purple. Labellum and petals very dark maroon. (Type in Herb. Ames No. 27021.)