



Above It is likely that the bright yellow spots on the callus of *O. montealegreae* mimic pollen, serving to attract pollinators to the lip apex.

Right As in most *Ornithocephalus* species, the plants of *O. montealegreae* grow upside down in very shaded conditions. At the type locality, *O. montealegreae* forms very large populations on the lower part of trunks and small, shaded branches.

Ornithocephalus montealegreae Pupulin,
sp. nov.

TYPE: COSTA RICA. Cartago. Turrialba. Moravia de Chirripó, Platanillo, 9°49.4'N 83°24.5'W, 1,090 m, along the Quebrada Sipirí, lower montane rain forest, disturbed



primary vegetation, epiphytic in shade on understory vegetation and lower branches, May 3, 2002, *F. Pupulin, H. Montealegre, M. Bonilla and J. C. Cervantes 3607* (holotype, USJ!, isotypes, USJ-Spirit!, CR!).

Inter species generis *Ornithocephali* foliis angustis, inflorescentia pilosa, petalis lineari-subfalcatis sepalorum duplo majoris, labello cymbiformi canaliculato elliptico, duobus callis triangularibus maculae flavae rotundae notatis ad apicem ornato dignoscenda.

Plant epiphytic, small, pendent, psygmoid, without pseudobulbs. *Roots* flexuous, slender, about 0.5 mm in diameter, glabrous. *Leaves* arranged in the form of a fan, laterally flattened, linear-subfalcate to narrowly gladiate, obliquely acuminate, 3.1–4.5 cm long, 2.5–3.5 cm wide (laterally), the base articulate with distichously imbricating sheaths provided with hyaline, scarious margins. *Inflorescence* one to two, each a slender, axillary, arched, many-flowered (eight to 11) raceme longer than leaves, to 7 cm long, the rachis fractiflex, the peduncle and rhachis hispid, with glandular hairs. *Flowers* small, spreading, the sepals and petals green, the lip white with two round, bright yellow blotches at apex. *Sepals* ligulate, rounded, glabrous within, the apex externally provided with stiff hairs; dorsal sepal 2.5 mm long, 1 mm wide; lateral sepals oblique, 2 mm long, 0.8 mm wide. *Petals* linear-subfalcate, somewhat pendent, obtuse, minutely apiculate, the apical margins minutely serrulate, 4.2 mm long, 0.9 mm wide. *Lip* cymbiform (boat-shaped), elliptic, acute, 2.8 mm long, 1.4 mm wide, abaxially keeled, with a large median channel minutely hirsute inside, the base provided with two erect, triangular-falcate teeth, the apex with two prominent pyramidal calli, blotched in front with two rounded, bright yellow spots. *Column* geniculate, the proximal portion wider at the base, 1–5 mm long, 0.5 mm wide, the transversal apex proboscis-like, about 3 mm long. *Anther cap* cucullate, linear-oblong, 3.5 mm long, two-celled. *Pollinia*

four, in two pairs, on a long, obtriangular, attenuate stipe 2.7 mm long; viscidium peltate.

Paratype: Costa Rica. Limón: Guapiles, San Valentín, area between Río Costa Rica and Río Toro Amarillo, approx. 10°10'N 83°50'W, 600 m, epiphytic on vine in the shade of tall trees, April 2000, flowered in cultivation, 20 May 2002, *A. Acuña 9* (USJ-Spirit!).

Ornithocephalus montealegrae can be easily distinguished from other species in Mesoamerica by the long, subfalcate petals and the elliptic, boat-shaped lip, terminating in a bicallous apex with two bright yellow, rounded blotches. We do not know what these bright spots mean to the visiting insects, but, to the human eye, they resemble pollen masses. In fact, I at first confused the lip with the column, interpreting the spots as the anther on the column apex. At the type locality, *O. montealegre* is a rather frequent species in the understory, where it lives epiphytically on small branches and trunks in very shaded conditions. Flowering occurs in April and May.

I am pleased to dedicate this species to Hilda León Paez de Montealegre, research assistant of Jardín Botánico Lankester, who participated in the type collection. □