Ornithocephalus castelfrancoi Pupulin, sp. nov. Type: COSTA RICA. San José: Dota, eastern slopes of Cerro Nara, 740 m, 09°28′20″N 84°00′25″W, epiphytic in disturbed primary forest, 14 Jan. 1999, F. Pupulin, D. Castelfranco & L. Spadari 1069 (holotype, USJ!). Fig. 4.

Species Ornithocephalo cochleariformi C.Schweinf. similis, sed planta omnino majore, labello ovato cymbiforme sepalorum multo minore et columna abbreviata sine alis differt.

Plant epiphytic, pendent, to 15 cm tall. Roots filiform, glabrous. Leaves unifacial, arranged like a fan, elliptic-oblong to ensiform in profile, acute, 11.0 cm long, to 1.5 cm wide laterally, the blade articulate to the conduplicate, persistent sheath to 4.0 cm long. Inflorescences 1-6, each a slender, arching to erect, many-flowered, axillary raceme, to 12 cm long, the rachis densely glandular-hispid. Floral bracts broadly ovate, ciliate at margins, with hirsute keels, 3.5 mm long. Flowers small for the genus, the perianth parts not spreading, white suffused with emerald green at the apex of sepals and petals, the lip emerald green. Sepals subsimilar, obcordate, apiculate, carinate, concave, the adaxial keels and the margins densely glandular-hirsute, 2.3 mm long, 3.0 mm wide. Petals smaller than sepals, obcordate, apiculate, adaxially adorned with a lacerate keel, the apical margins ciliate, 2.0 mm long, 2.2 mm wide. Lip entire, free, ovate, deeply concave, 1.8 mm long, 1.4 mm wide, the membranous, acute apex strongly revolute, the lateral margins thickened toward the base, the disk minutely papillose. Column short, subterete, without wings, 0.8 mm long; anther cap cucullate, with a long projecting beak, 1-celled; pollinia four, on a slender obtriangular stipe, subquadrate at the saddle-shaped apex; viscidium elliptic. Ovary pedicellate, clavate, densely hirsute.

ETYMOLOGY: Named in honor of Dario Castelfranco, director of Gaia Botanical Garden in Quepos, Costa Rica, who participated in the collection of the species.

DISTRIBUTION: Known only from Costa Rica.

ECOLOGY: Epiphytic in premontane wet forest. At the type locality the plants are growing in shaded areas, high on the trunks of smooth barked trees. The species is locally rare.

This is the largest of Costa Rican Ornithocephalus species, reaching the size of 15 or more cm. It is closely allied to Ornithocephalus cochleariformis C.Schweinf., but it can be easily distinguished by the flowers with the perianth not spreading, the much smaller, ovate, free lip, and the short column without wings. In O. cochleariformis the lip is longer and about as wide as the sepals, whereas in O. castelfrancoi it is shorter and less than one third as wide as the sepals. Moreover, the lip of O. castelfrancoi is deeply cymbiform. Ornithocephalus cochleariformis is a common inhabitant of El Valle de Antón highland in Panama (Allen, 1949), and its presence in Costa Rica has been reported also (Mora-Retana and García, 1992). However, I have seen no Costa Rican specimens, and Dressler (1993) listed this species as an endemic to Panama.

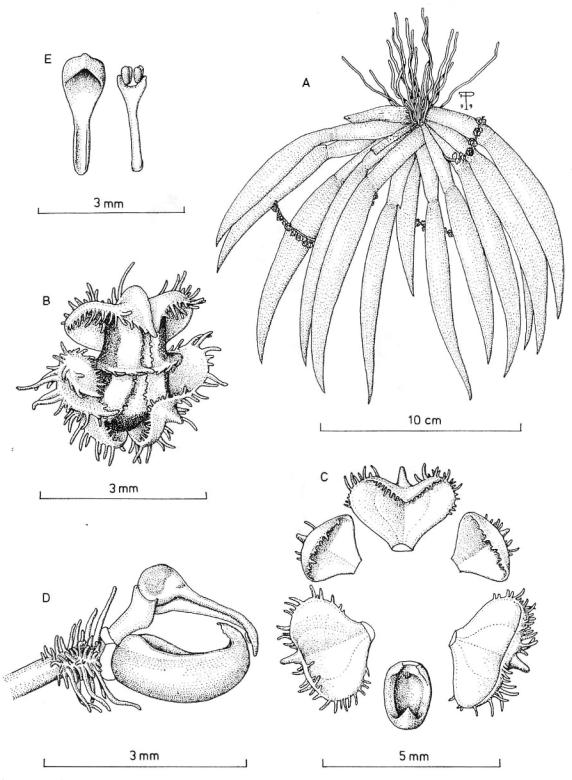


Fig. 4. Ornithocephalus castelfrancoi Pupulin. A. Habit. B. Flower. C. Dissected perianth. D. Column and lip, lateral view. E. Anther cap and pollinarium. Illustration voucher: Costa Rica. San José: Dota, eastern slopes of Cerro Nara, 740 m, epiphytic in disturbed primary forest, 14 Jan. 1999, F. Pupulin, D. Castelfranco & L. Spadari 1069 (USJ). Drawing from the holotype.