

## NEW SPECIES OF COSTA RICAN ORCHIDACEAE<sup>1</sup>

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**Chondrorhyncha lankesteriana** Pupulin, *sp. nov.* TYPE: COSTA RICA [?]. Without definite locality, a confiscated plant flowered in cultivation at Jardín Botánico Lankester at Paraíso de Cartago, 1400 m, 19 May 1999, *F. Pupulin 1467* (holotype, USJ!; isotype, SEL-spirit!). Fig. 1.

Herba epiphytica erecta, foliosa; foliis disticis, oblanceolatis vel lineari-lanceolatis, subcoriaceis, marginibus leviter undulatis; inflorescentia laterali, erecta, tereti, uniflora; sepalis postico anguste elliptico vel lanceolato, acuto, dorsaliter carinato;

sepalis lateralibus oblique lineari-ellipticis, deflexis, in medio subgeniculatis, valde concavis; petalis elliptico-lanceolatis, apice breviter revolutis; labello integro, tubulari, elliptico, truncato, apiculo brevi, marginibus minute undulato-crispis; lobis lateralibus erectis, columnae adpressis; callo laminari deltoideo, truncato, apice in quatuor dentes breves producto.

**Plant** epiphytic, erect, to 13 cm tall, caespitose. **Roots** flexuous, glabrous. **Stem** short, less than 1 cm long, provided with 3–5 distichous leaves and 2–4 basal sheaths. **Leaves** subcoriaceous, oblanceolate to linear-lanceolate, acute, with slightly undulate margins, 7–13 cm long, 1.0–1.2 cm wide, contracting at the base into a conduplicate petiole to 2.8 cm long. **Inflorescences** 1–2, each erect, single-flowered, lateral, produced from the base of the stem and arising from the axil of basal cataphylls; peduncle terete, stout, 3.2–4.2 cm long, provided with an infundibuliform, largely ovate, acute bract 7 mm long. **Floral bract** conspicuous, infundibuliform, acute to acuminate, 7 mm long. **Flowers** spreading, white, the lip blotched adaxially with dark purple at the base, this slightly visible without. **Dorsal sepal** narrowly elliptic to lanceolate, acute, concave, dorsally carinate, 2.4 cm long, 0.8 cm wide. **Lateral sepals** linear-elliptic, subfalcate, acute, connate with the base of the column foot, strongly concave, subgeniculate at the middle, the basal margins convolute, apically strongly divergent, 2.6 cm long, 0.8 cm wide. **Petals** elliptic-lanceolate, acute to obscurely apiculate, with revolute apex, 2.2 cm long, 0.9 cm wide. **Lip** entire, tubular, elliptic when spread, truncate, with a short apicule, obscurely cordate at the base, the apical margins slightly undulate-crisped, the basal lobes

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erect, clasping the column, 2.7 cm long, 1.8 cm wide; the disk provided at the base with a low, deltoid, truncate, laminar callus four-toothed at apex. **Column** straight, semiterete, widening toward the stigma, with a short foot, 1.2 cm long; anther cap cucullate, obovate-complanate, four-celled; pollinia four, narrowly obovate, in two pairs of different size, on a short, obdeltoid, hyaline stipe. **Ovary** clavate, arcuate, provided with low, undulate wings, 1.2 cm long including the pedicel.

**ETYMOLOGY:** Named for the Jardín Lankester, Universidad de Costa Rica, where the species is maintained in cultivation.

**DISTRIBUTION:** Known only from confiscated plants in cultivation in Costa Rica. The delimitation of genera in the *Chondrorhyncha* complex is still poor. Whereas *Kefersteinia* may be easily distinguished by the presence of tooth or a longitudinal keel along the abaxial side of the column, the characters delimiting *Chondrorhyncha* and *Cochleanthes* are less obvious. Dressler (1993) suggested *Chondrorhyncha* has a fleshy, laminar callus at the center of the lip that usually is not strongly ridged, with the notable exception of *C. anatona* (Dressler) Senghas from Panama, whereas *Cochleanthes* presents a ridged callus near the lip base. To make things worse, *Chondrorhyncha lankesteriana* has a typical *Chondrorhyncha*-type callus (i.e. a low lamina toothed at apex), but it lies at the base of the lip instead of at the middle.

*Chondrorhyncha lankesteriana* is closely related to *C. helleri* Fowlie and *C. lendyana* Rchb.f., with which it shares a similar low, laminar callus. However, plants of *C. lankesteriana* are much smaller with a shorter inflorescence, the tubular lip is not apically spreading, and it has a four-toothed callus, all of which easily distinguish the new species.