

TWO NEW SPECIES OF THE *CHONDRORHYNCHA* COMPLEX
(ORCHIDACEAE: ZYGOPETALINAE)

James D. Ackerman*

Chaubardiella pubescens Ackerman, sp. nov.

Plate 1.

Chaubardiellae chasmatochilae (Fowlie) Garay similis, sed floribus maculatis et magnis, labelli pagina adaxiali puberulo, calli margine leniter sinuoso, columna dense puberula, stipitis apice lato differt.

Plant epiphytic, caespitose, lacking pseudobulbs. Roots 2-3 mm thick. Leaves several per growth, distichous, erect-spreading, lowermost leaves shorter and broader than the uppermost; sheaths narrow, equitant, articulated and confluent with the lamina, 2-4 cm long; lamina oblanceolate, acuminate-acute, conduplicate at base, mid-rib raised on the underside of the leaf, 8-18 cm long, 3-4 cm wide. Inflorescence lateral, simple, short, produced from the axils of the lowermost leaves, peduncle 1-2 cm long. Flowers dark yellowish tan and variously spotted dark maroon, non-resupinate, 2.5-3 cm across. Sepals and petals finely maculate, spreading, adaxial surface of the sepals sparsely pubescent towards their base, petals glabrous. Dorsal sepal elliptic-obovate, obtuse, entire, 25 mm long, 10 mm broad, 7-9 nerved. Lateral sepals elliptic-oblong, acute, broadly attached, slightly oblique, entire, 9-10 nerved, 21-22 mm long, 9-10 wide. Petals oblong-obovate, obtuse, entire, 7-9 nerved, 21-22 mm long, 9-10 mm wide. Labellum fleshy, maculate, the maroon spots abundant within and increasingly denser basally so that most of the inside appears maroon, lip deeply cochleariform, obtuse, minutely erose, 24 mm long, 14 mm deep, 12-13 mm wide when not spread, attached to column foot; callus maroon, located near the base of the lip, thick, fleshy, transverse, apex barely free, margin sinuate, about 5 low, rounded, radiating ridges at its base; lip glabrous on the outside surface except for sparse puberulence near its base, pubescent within, the short hairs are clustered and sparse towards the apex but they become more abundant adjacent to the callus, callus glabrous except for the minutely puberulent front edge. Column short, stout, 11-12 mm long, broadest and deepest at the stigma, column wings prominent, rounded; underside of the column with a low, rounded, median ridge below the stigma; stigma a deep, transverse slit between the apical margins of the column wings; rostellum filiform, curled over the stigma; pollinia four, consisting of two unequal pairs, clavate, stipe broad, pandurate, curled, viscidium triangular; entire column except for the anther, rostellum and stigma densely pubescent especially on the underside. Ovary short, approximately 3-4 mm long, subtended and completely enclosed by two bracts, basal bract nearly orbicular, 11 mm long and appressed to the bases of the sepals and petals, upper bract lanceolate, 11 mm long, appressed to the base of the lip and the margins of the petals.

TYPE: *COLOMBIA*: Dept. Chocó: vicinity of the San Juan River, flowered in cultivation at SEL greenhouses, 15 May 1979, *J. D. Ackerman 1379* (HOLOTYPE: SEL).

ETYMOLOGY: Named for the pubescent lip and column.

The type specimen was sent to the American Orchid Society Orchid Identification Center (OIC No. 2912) at the Marie Selby Botanical Garden by Maruja de Navia of Cali, Valle, Colombia.

* Department of Biological Science, Florida State University, Tallahassee, Florida 32306, U.S.A.
Current address: Department of Biology, University of Puerto Rico, Río Piedras, Puerto Rico 00931.

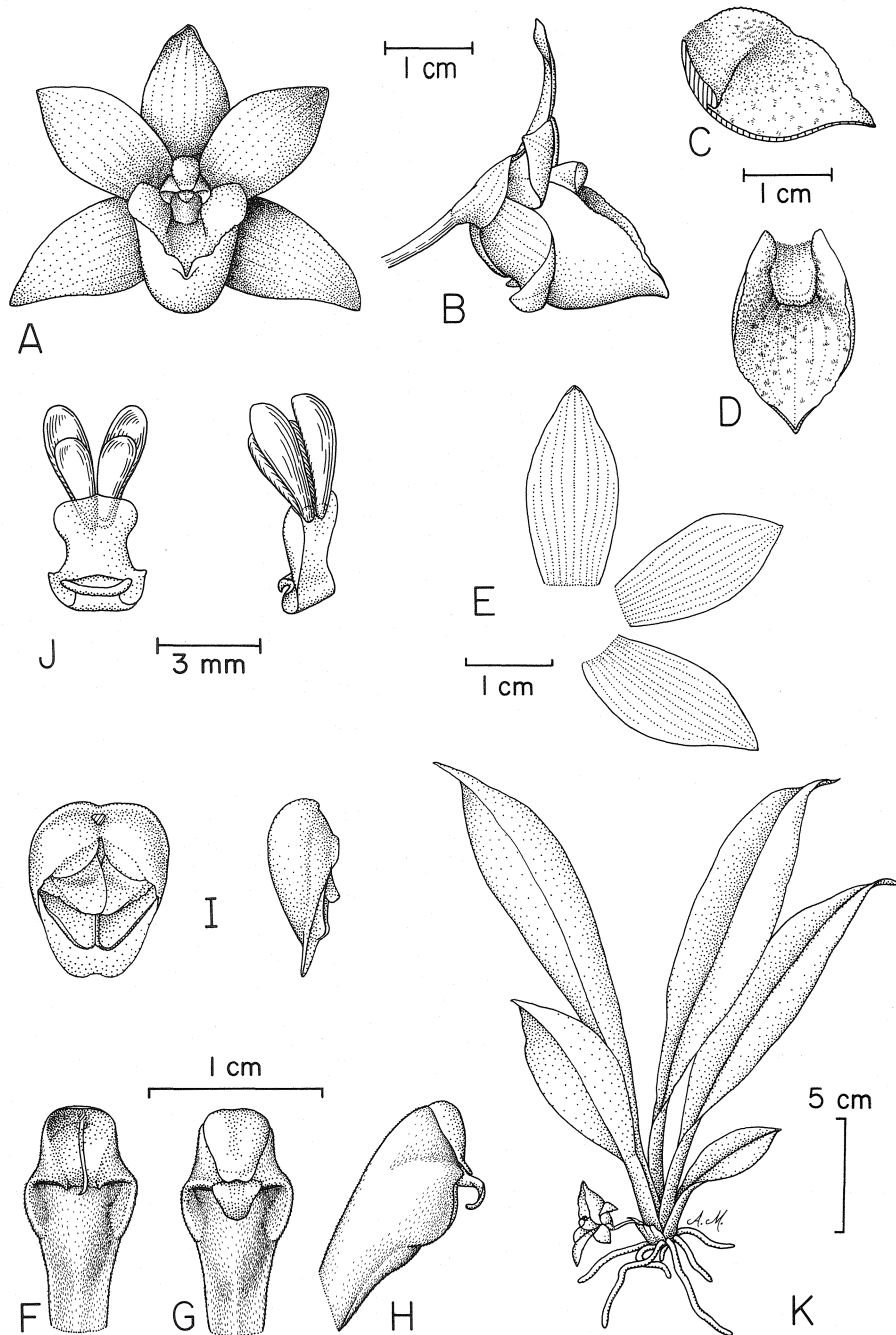


Plate 1. *Chaubardiella pubescens*. A. Flower front view. B. Flower side view. Flower is naturally non-resupinate. C. Labellum longitudinally halved. D. Labellum adaxial view. E. Sepals and petals. F. Column front view with anther removed and rostellum exposed. G. Column intact. H. Side view. I. Anther cap with pollinarium removed, internal structure and side view. J. Pollinarium underside and angled from above. K. Habit. All floral parts are drawn from pickled material.

Chaubardiella pubescens has larger flowers than any other species of the genus. The lip is deeply spoon-shaped, densely spotted, and pubescent on its adaxial surface. *Chaubardiella chasmatochila* has a lip somewhat similar to *C. pubescens* but the former is immaculate, smaller, only sparsely pubescent, retuse, and has a bifid callus. *Chaubardiella calceolaris* Garay is similarly colored but the flowers differ by the smaller, subglobose, glabrous lip and the subquadrate callus with its sharp lateral teeth. Like *C. tigrina* (Garay and Dunsterv.) Garay, the stipe of the proposed species is very broad at its apex. The stipe of at least *C. chasmatochila* and *C. subquadrata* (Schltr.) Garay narrows toward the attachment of the pollinia. *Chaubardiella* now consists of five species: *C. pubescens*, *C. chasmatochila*, *C. calceolaris*, *C. tigrina*, and *C. subquadrata*. I exclude *C. saccata* (Garay) Garay and have transferred it to a new genus (Ackerman, 1979).

Chondrorhyncha caudata Ackerman, sp. nov.

Plate 2.

Species nova foliis griseo-viridi cum margine modice revoluto et convexiter arcuato pro irregularibus longitudinibus, vaginis inflatis, labello profunde cochleariformi carnosum cum apice caudato deflexo, calli crista humili transverso cum prominentia mediana dilute elevata subquadrata vel bifida a specibus adhuc discriptis recendens.

Plant epiphytic, caespitose, lacking pseudobulbs. Roots about 2 mm thick, white with several layers of velamen cells. Leaves several, grey-green, distichous, erect-spreading, coriaceous, glabrous; sheaths equitant, clasping, inflated especially toward the base, 1-4 cm long; lamina conduplicate, margin entire, wavy for irregular lengths, slightly recurved, blades of inner leaves much larger than those of the outermost, lanceolate-oblong-lanceolate, acuminate, underside of the leaf greyer and with the mid-vein prominently raised, 9-20 cm long, 1.5-3.5 cm wide. Inflorescence lateral from axils of lower leaf sheaths, simple, erect, peduncle 3-4 cm long. Flowers conspicuous, 3-4 cm across, glabrous. Sepals and petals spreading, white and lightly suffused with yellow or green at their apices. Dorsal sepal oblong-lanceolate, acute, concave, entire, 14-18 mm long, 5-6 mm wide. Lateral sepals ovate-lanceolate, acute, concave at the base, broadly attached to the base of the column foot, 18-21 mm long, 5-9 mm wide. Petals oblong, abruptly acute, entire, obliquely and broadly attached to nearly the full length of the column foot, 15-16 mm long, 6 mm wide. Labellum fleshy, cochleariform, conspicuously caudate, deflexed, entire, 13-16 mm long, white with a yellow apex and spotted red or emaculate and suffused red along the margins, natural conformation deeper than broad, the margins slightly enrolled forming a tubular throat with the column and column foot; callus a low, transverse, fleshy ridge with a median, subquadrate or bifid thickening, the ridge situated just below the middle of the lip and extending halfway up the sides; claw of the lip geniculate, 1.5-2.0 mm long, 1 mm wide, attached to the apex of the column foot. Column white with a few red spots ventrally, slender, slightly arched, gradually dilated toward the apex, semiterete, slightly concave beneath, 10-11 mm long; column foot arched back and downward, tapered, lying adjacent to the ovary, 7-8 mm long; stigma a deep transverse slit distal to the greatest width of the column; rostellum tridentate, lateral teeth minute, mid-tooth relatively long, filiform, 1 mm long; pollinia 4, composed of two unequal pairs, clavate depressed, viscidium triangular, stipe short. Pedicellate ovary 7-10 mm long; subtended by two bracts, the lowermost bract clasping, cordate-orbicular,

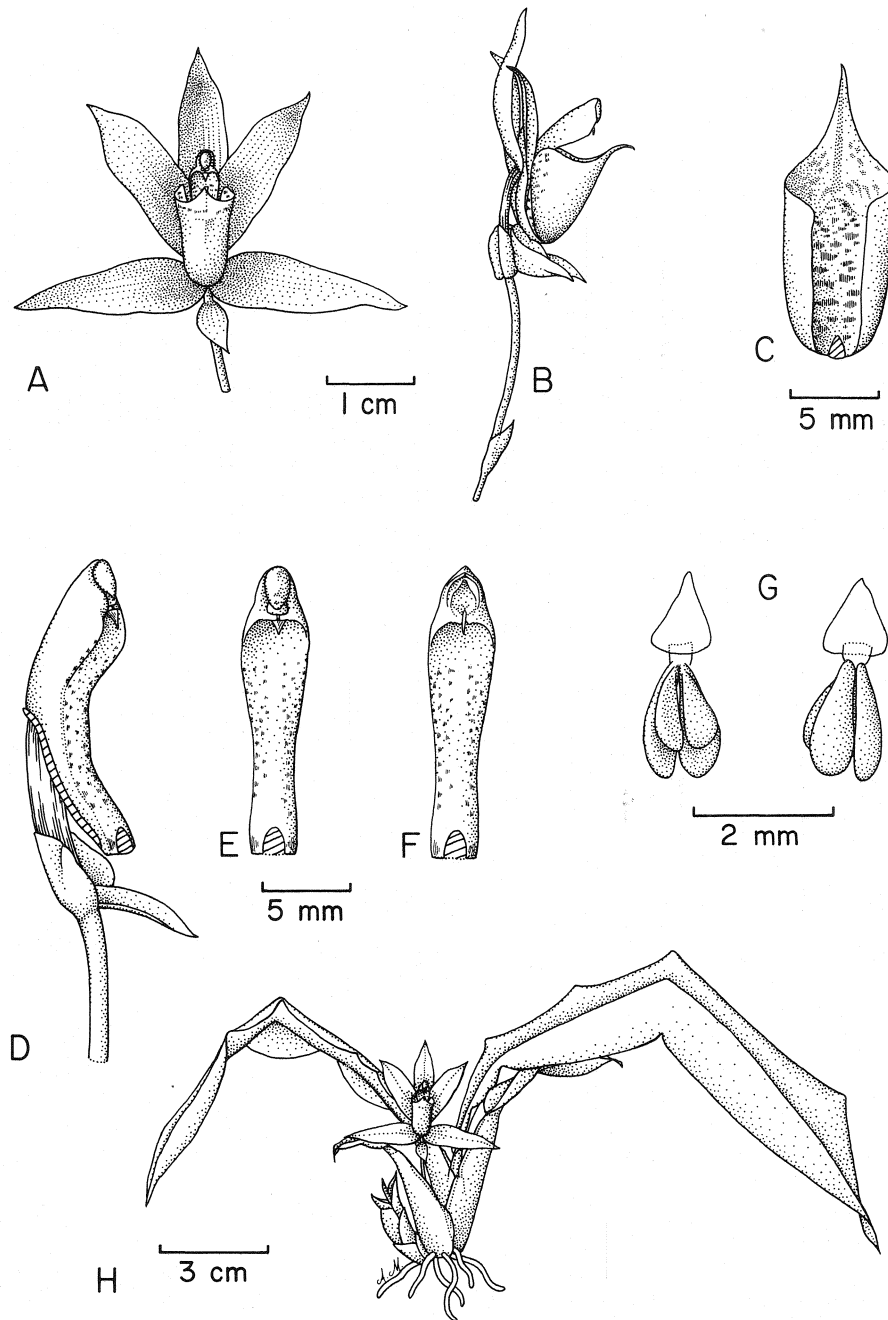


Plate 2. *Chondrorhyncha caudata*. A. Flower front view. B. Flower side view. C. Labelum viewed from above. D. Flower with perianth parts removed. E. Column and column foot intact, viewed from below. F. Column with anther removed. G. Pollinarium viewed from below and above. H. Habit. Drawn from a live specimen.

5-6 mm long.

TYPE: *ECUADOR*: without specific locality, flowered in cultivation at SEL greenhouses, 17 June and 1 August 1977, and 24 July 1978, *J. D. Ackerman 1259* (HOLOTYPE: SEL).

ETYMOLOGY: Named for the tail-like apex of the lip.

ADDITIONAL MATERIAL EXAMINED: *ECUADOR*: ZAMORA: Loja to Zamora Rd., km 42, alt. 1400-1500 m, 1962(?), *C. H. Dodson s.n.* (SEL), flowers only, spirit collection.

The type specimen was purchased from Ilgenfritz Orchids in 1971 by Mr. F L Stevenson who graciously donated the plant to the Marie Selby Botanical Gardens (greenhouse accession number SEL 77-2330). Kodachrome slides of presumably the Dodson specimen are deposited in the OIC slide collection.

Unlike most species of the *Chondrorhyncha* complex, *C. caudata* is easily recognized without flowers. The grey green leaves with their wavy margins and the inflated sheaths are distinctive. *Chondrorhyncha cornuta* Garay appears to be its closest relative. The labellum is similar in both species. *Chondrorhyncha cornuta* differs by its much larger flowers, erose labellum, and ventrally pubescent column. Moreover, the apex of the lip is porrect and more horn-like than tail-like.

ACKNOWLEDGEMENTS

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