



EPIDENDRUM CLEISTOCOLEUM Hágsater & E. Santiago
THE GENUS EPIDENDRUM PART 4

EPIDENDRUM CLEISTOCOLEUM Hágsater et E. Santiago, *sp. nov.*

Type: COLOMBIA: Antioquia, [possibly Pueblo Rico, 2100 m], hort. Colomborquídeas, col. **Rodrigo Escobar; E. Hágsater 11699**. Holotype: HUA! (Illustration voucher).

Epidendro cottonifloro (Rchb.f.) Hágsater simile sed planta minor, floribus 5-9 majoribus, sepalis ovatis, labello latiore, ad columnae basem cum alis binis prominentibus et rotundatis connato, columnae superficie ventrali profundam cavitatem cum fissura angusta ferenti, columna ad basem leviter arcuata recedit.

Hierba epífita, erecta, hasta 20 cm de alto. **Raíces** basales, delgadas, carnosas, blancas, 1-1.7 mm de grosor. **Tallos** originándose de los entrenudos apicales del tallo anterior, tipo caña, teretes, delgados, rectos a ligeramente sinuosos, color verde rojizo, 3-20 x 0.12-0.26 cm. **Hojas** 8-12, distribuidas a lo largo del tallo, las basales caedizas con el tiempo; 4-5 persistentes hacia el ápice del tallo, articuladas, dísticas; vaina tubular, finamente estriada, 7-15 x 1.2-2.6 mm; lámina linear lanceolada, ápice redondeado, diminutamente bilobado, con una quilla dorsal diminuta, color verde claro con rayas rojas, margen entero, 1.6-5 x 0.4-0.5(0.7) cm. **Bráctea espatácea** ausente. **Inflorescencia** apical, racemosa, corta, arqueada nutante, florece una sola vez, 1.5-3 cm de largo; pedúnculo corto, terete, delgado, 3-7 mm de largo. **Brácteas florales** más cortas que el ovario, triangulares, acuminadas, 3-4.6 mm de largo. **Ovario** terete, no inflado, no ornamentado, 10-14 mm de largo. **Flores** 5-9, simultáneas, resupinadas, sépalos pardo verdosos con puntos rojos, pétalos rojizos, labelo rojo oscuro a púrpura con nervaduras teñidas de rojizo. **Sépalos** inflexos, libres, ovados, agudos, 3-nervados, margen entero, lisos, 9-12 x 4-6.2 mm; los **laterales** oblicuos. **Pétalos** inflexos, libres, linear lanceolados, subagudos, 1-nervados, con un par de nervaduras laterales muy cortas e inconspicuas, dando la apariencia de ser 3-nervados, margen ligeramente eroso, 8-10.7 x 1.7-2 mm. **Labelo** libre, entero, anchamente obovado orbicular, ápice 4-lobado, los lóbulos redondeados, el par externo más corto que el par interno, base cuneada, margen dentado, 10-15 x 12-14 mm; ecaloso, provisto con 5 quillas centrales prominentes y múltiples venas laterales engrosadas bifurcadas en el ápice, distribuidas en toda la superficie del labelo. **Columna** libre, arqueada en la base, 7 mm de largo, con un par de alas redondeadas y prominentes hacia la base, la superficie ventral con una cavidad a la cual se accesa por una hendidura alargada y angosta. **Clinandrio** reducido, entero. **Rostelo** apical, hendido. **Lóbulos laterales del estigma** muy pequeños, de ¼ del largo de la cavidad. **Antera** no vista. **Polinios** 4, obovoides, subiguales; caudículas suaves y granuladas, cortas. **Nectario** semicircular, en forma de ranura profunda, formando una cavidad angosta y profunda en la base de la columna, sin traspasar el perianto, no ornamentado. **Cápsula** elipsoide, 29 x 4.6 mm, pedicelo 3 mm de largo, cuello apical 9 mm de largo.

Epiphytic, erect, herb. Roots basal, thin, fleshy. Stems branching near the apex, cane-like, terete. Leaves distributed throughout the stems, narrowly lanceolate, apex minutely bilobed, dorsally keeled, margin entire, somewhat revolute. Inflorescence apical, from the main stem and branches, racemose, arching, nutant. Floral bracts shorter than the ovary, triangular, acuminate. Ovary terete, thin. Flowers 5-9, simultaneous, resupinate, sepals greenish brown with red dots, petals reddish, lip dark red to purple, with the veins tinged red. Sepals spreading, free, ovoid, acute, 3-veined. Petals spreading, linear-lanceolate, subacute, 1-veined, with a pair of small, inconspicuous lateral veins, margin slightly erose. Lip free, entire, widely obovate, orbicular, apically 4-lobed, the lobes rounded, the central pair slightly longer than the lateral pair, base cuneate, margin dentate, ecallose, with 5 prominent central keels and multiple lateral veins, these bifurcate towards the apex, and covering the whole disc. Column free, slightly arched at the base, with a pair of prominent rounded lateral lobes widened towards the base and joined to the lip; the ventral surface with a cavity accessed through a long narrow slit. Clinandrium hood reduced, entire. Rostellum apical, slit. Nectary semicircular, forming a deep slit, without penetrating the ovary, forming a narrow cavity at the base of the column.

OTHER SPECIMENS: COLOMBIA: Antioquia: Cañasgordas, 2120 m, 2 V 1983, Luer 8914, SEL! El Plateado, 2060 m, 5 V 1983, Luer 9046, SEL! Támesis, 2100 m, 9 XI 1989, Fonnegra 3194, SEL! U! Pueblo Rico, 2100 m, 1 V 1997, Colomborquídeas, Hágsater 11660, AMO! El Retiro, 2400 m, X 1969, Ortiz V. 296, HPUJ. **Risaralda:** San Clemente, 2030 m, 20 IV 1982, Luer 7460, SEL! **Valle del Cauca:** Morro Pelado, 2270-2320 m, 17 X 1944, Cuatrecasas 18160, AMES!

OTHER RECORDS: COLOMBIA: Without locality, McCullough 1569, flower card, AMO! **Antioquia:** Colomborquídeas, 15 XI 1988, Múnera y Escobar 333, (color slide) AMO! published as *Colomborquídeas s.n.*, **Orquídeas Nativas de Colombia** 2: 170. 1991. San Antonio de Prado, G. Escobar 218, photo, **Orquideología** 5(3): 186. 1970. El Retiro, Vereda Pantanillo, 2400 m, X 1969, Ortiz V. 296, illustration, HPUJ! xerox AMO! **Valle del Cauca/Chocó:** without locality, Duque 110, photo, AMO! *ibid.* Duque 1294, photo, AMO!

DISTRIBUTION AND ECOLOGY: Known only from western Colombia, around Medellín, and further south west of Cali; from both the Cordillera Occidental, and the Cordillera Oriental; at about 2000-2700 m altitude. Flowering from October to May.

RECOGNITION: *Epidendrum cleistocoleum* belongs to the Diothonea Group and Subgroup which is characterized by the branching habit, linear-lanceolate to lanceolate, apically bilobed leaves, arching-nutant, racemose inflorescence, membranaceous or rarely fleshy flowers,



the lip entire to 3-lobed, with an erose margin, ecallose, without or with 1-10 thin, smooth to erose keels, the column united to the lip from totally to obliquely to free. The species has small plants, a short, few-flowered inflorescence, lip is 12-14 mm wide, entire, widely obovate, orbicular, apically 4-lobed, the lobes rounded, the central pair slightly longer than the lateral pair, base cuneate, 5 prominent keels, column nearly free, with the basal wings rounded, the apex of the column rounded, without acute teeth, and a cavity in the lower half of the column, to which there is access by a narrow slit. It closely resembles *Epidendrum cottoniflorum* which has taller plants, the inflorescence has 12-14 flowers which are smaller, the sepals narrowly elliptic, the lip is 8-10 mm wide, narrowly cuneate at the base and united up to half the column; the base of the column is strongly arched in the bottom half forming a prominent dorsal hump, the ventral side is straight, not forming large, rounded lobes. *Epidendrum gastrochilum* Kraenzlin has the column upturned at the apex, and joined throughout to the lip, it also has a short narrow slit giving access to the cavity at the base of the column, and the lip is entire, orbicular. *Epidendrum arevaloides* Hágsater & Dodson has wider narrowly ovate petals, 2.4-3.0 mm wide, the lip ovate to suborbicular with the surface strongly ornamented with ancinstrous trichomes, the column is thin, straight and free.

CONSERVATION STATUS: DD. Data deficient. Apparently widely distributed in the highlands of Antioquia.

ETYMOLOGY: From the Greek κλειστός- closed, shut, and κολεός- vagina, sheath, in reference to the cavity in the lower part of the column, which is accessed by a long narrow slit along the ventral side of the column. This feature is visible in only one other species, *Epidendrum gastrochilum* Kraenzlin, though much reduced.

Author: E. Santiago

Illustrator: R. Jiménez M.

Editors: E. Hágsater & L. Sánchez S.

Herbario AMO Apartado Postal 53-123, 11320 México, D.F., MÉXICO

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