



**EPIDENDRUM NIVEOCALIGARIUM** Hágster

THE GENUS EPIDENDRUM PART 5

Plate 860

ICONES ORCHIDACEARUM 8. 2006

**EPIDENDRUM NIVEOCALIGARIUM** Hágster, sp. nov.

Type: PANAMA: Darién: 10 km NE of Jaqué, ridge between Río Tabuelita and Río Pavarandó, 1400-1600 ft, 1 Feb. 1981, W. G. D'Arcy & K. Sytsma 14547. Holotype: MO! (Illustration voucher).

*Epidendro caligario* Rchb.f. simile sed floribus albis, angulo inter labellum et columnae dorsum formato multo majore, segmentis floralibus relative latioribus, discrepans.

Hierba cespitosa, erecta, recta, de 40 cm de alto. Raíces basales, carnosas, gruesas, blancas; 1.3-3 mm de grosor. Tallos sencillos, tipo caña, teretes, delgados, rectos; 36.5 x 0.1-0.2 cm. Hojas 5, agregadas hacia el ápice del tallo, alternas, articuladas, gramíneas; vaina tubular, finamente estriada en seco, verrugosa; 13-20 x 1-2 mm; lámina angostamente lanceolada, aguda, margen entero; 5-7 x 0.6-0.7 cm. Bráctea espatácea ausente. Inflorescencia apical, florece una sola vez, racemosa, ligeramente arqueada, densa; 3.5 cm de largo; pedúnculo corto, terete, delgado; 5 mm de largo, desprovisto de brácteas. Brácteas florales mucho más cortas que el ovario, triangulares, agudas, abrazadoras, gradualmente más cortas; 1-4 mm de largo. Flores 22, simultáneas, resupinadas, de color blanco; sin datos de fragancia. Ovario subterete, con un septo longitudinal que casi divide al nectario en dos, ligeramente inflado cerca de la mitad apical, liso; 15-22 mm de largo. Sépalos extendidos, libres, elípticos, redondeados, diminutamente apiculados, 5-nervados, algunas nervaduras ramificadas desde la base, dando la apariencia de ser 7-8 nervados, margen entero, 6.2-6.5 x 3.3-3.5 mm. Pétalos extendidos, libres, obtrulados, redondeados, 3-nervados, las nervaduras muy ramificadas arriba, margen dentado en la mitad apical, entero en la mitad basal; 5.7 x 3 mm. Labelo unido a la columna, trilobado, ligeramente cordado en la base; 8.5 x 11 mm; bicalloso, los callos delgados, alargados hasta la base del lóbulo medio; con una quilla, delgada, lisa, decurrente, alargada hasta el seno apical; lóbulos laterales oblicuamente elípticos, profundamente 5-laciniados; 5.1 x 6.0 mm; lóbulo medio flabeliforme, con un istmo largo y delgado, margen fimbriado en la mitad apical y entero en la mitad basal; 6.5 x 8.5 mm. Columna recta, prominentemente dilatada hacia el ápice, de manera que el labelo y el dorso de la columna forman un ángulo de unos 70°; 4 mm de largo. Clinandrio prominente, entero, margen eroso. Antera obovoide, 4-locular. Polinios 4, semiovados, lateralmente aplanos, subiguales; caudículas granulosas, ligeramente más largas que los polinios. Rostelo perpendicular con respecto al eje de la columna, formando un seno amplio. Nectario penetrando poco menos de la mitad del ovario, ligeramente inflado, liso. Cápsula no vista.

Caespitose, erect herb. Roots basal, fleshy, thick, white. Stems simple, cane-like, terete, thin, straight. Leaves 5, aggregate towards the apex of the stem, alternate, articulate, grass-like; sheaths tubular, minutely striated in dry material, verrucose; blade narrowly lanceolate, acute, margin entire. Inflorescence apical, flowering only once, racemose, slightly arching, dense-flowered; peduncle, short, terete, thin. Floral bracts much shorter than the ovary, triangular, acute, gradually shorter. Flowers 22, simultaneous, resupinate, pure white. Ovary subterete, smooth, ventrally with longitudinal septum, and thus vertically flattened, apically somewhat inflated. Sepals spreading, free, elliptic, rounded, minutely apiculate, 5-veined, some veins branching from the base and thus appearing 7-8 veined, margin entire. Petals spreading, free, obtusate, rounded, 3-veined, the lateral veins much branched above, apical margin dentate, basal margin entire. Lip united to the column, 3-lobed, slightly cordate at the base; bicallose, the calli thin, elongate, reaching the base of the midlobe; with a narrow, smooth keel running down the midlobe to the apical sinus; lateral lobes obliquely elliptic, margin deeply 5-laciniate. Midlobe flabelliform, with a long, narrow isthmus, margin fimbriate towards the apex, entire at the base. Column straight, strongly dilated, the lip forming a 70° angle with the back of the column. Clinandrium-hood prominent, entire, margin erose. Anther obovoid, 4-celled. Pollinia 4, subequal, semiovate, laterally compressed; caudicles granulose, slightly longer than the pollinia. Rostellum transverse to the axis of the column, forming a wide sinus. Nectary penetrating somewhat less than half the ovary, somewhat inflated, smooth.

**OTHER SPECIMENS:** PANAMÁ: Panamá: Serranía de Majé Trail, between Charco Rico and the Headwater of the Río Ipét Grande, 700 m, 24 I 1984, Churchill 4337, MO! Los Santos: above Guanico River, 550-650 m, 5 I 1989, McPherson 13514, MO!

**DISTRIBUTION AND ECOLOGY:** Known only from southern Panama, on both sides of the Gulf of Panama, in the Península de Azuero and in the Serranía del Sapo, Darién, at 450-700 m altitude. Flowering in January and February.

**RECOGNITION:** *Epidendrum niveocaligarium* belongs to the Oerstedella Group which is characterized by the sympodial habit, mostly verrucose stems, and the rostellum which is perpendicular to the axis of the column instead of parallel, forming a wide, open sinus, and without a viscidium, and the Verrucosum Subgroup, recognized by the small to medium sized, membranaceous flowers with sepals and petals immaculate, a bilobed clinandrium-hood slightly surpassing the body of the column, obovoid, subequal pollinia with long granulose caudicles. The species is recognized by the thin stems, white, immaculate flowers, deeply 5-laciniate lateral lobes of the lip and the column and lip forming a 70° angle. It is nearly identical to *Epidendrum caligarium* Rchb.f. from western Panama which has rosy purple flowers, with the angle between the lip and column about 45° wide, and the clinandrium-hood deeply slit. The Mexican (Isthmus of Tehuantepec) *Epidendrum macdougalii* (Hágster) Hágster is vegetatively also very similar, but the lobes of the lip are narrow and entire, neither dentate nor deeply laciniate.

**CONSERVATION STATUS:** DD. Data deficient.

**ETYMOLOGY:** From the Latin *niveo*, pure white, and *caliga*, the footgear of a Roman soldier, referring to the deeply laciniate lateral lobes of the lip which look like the straps of the *caliga*, thus pure white-strapped footgear.

