

**CHELONISTELE LAETTITIA-REGINAE,
A NEW ORCHID SPECIES FROM SARAWAK**

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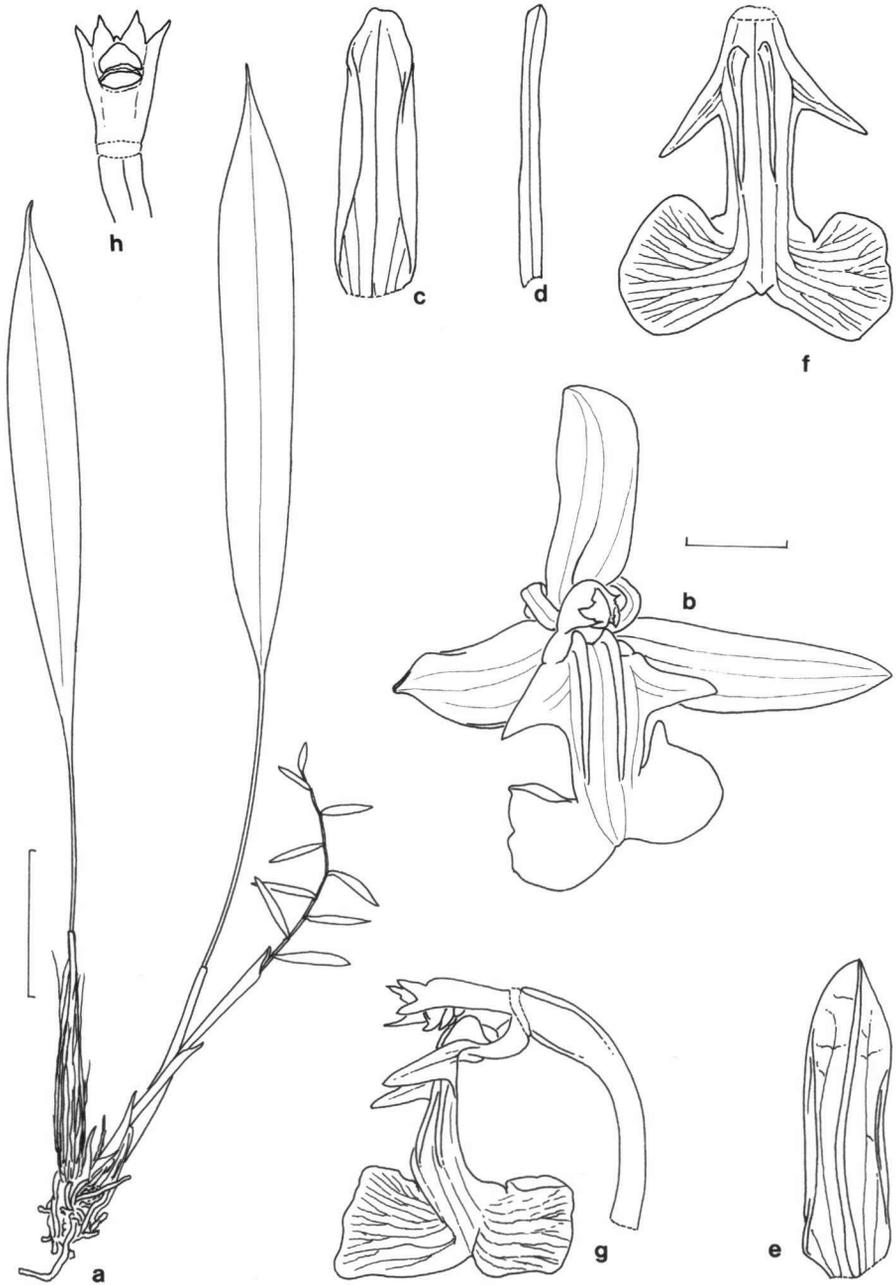
INTRODUCTION

The revision of the genus *Chelonistele* in Orchid Monographs 1 (1986) 23–40 lists 11 species and 4 variations. All occur in Borneo, which is evidently the centre of speciation of this genus; only *Chelonistele sulphurea* var. *sulphurea* occurs in addition in Java, Sumatra and the Malay Peninsula. During joint fieldwork in 1991 with staff of the Sarawak Herbarium in the Hose Mountains, Sarawak, the present author collected herbarium and live specimens of many orchids. Among the live orchids were quite a number of *Chelonistele* species from different habitats. Fifteen of these, belonging to six species, flowered in the Leiden Hortus Botanicus. Two are common and are well known from many herbarium specimens: *C. sulphurea* var. *sulphurea* and *C. amplissima*. Three were in 1986 known by a few specimens only: *C. ingloria* (7 specimens), *C. unguiculata* (3), and *C. brevilamellata* (20). One species, in the field represented by a few specimens, appeared to be new to science, and is described here.

Chelonistele laetitia-reginae* de Vogel, *spec. nov.

Flos hypochilio brevi notatus lobis lateralibus longis anguste triangularibus carinisque basi altissimis ad unguis epichilii medio submittentibus ubi evanent; epichilio ungue longo angusto desinente in lobum terminalem bene evolutum papilioniformem lobis laterilibus irregulariter rectangularibus, columnae cuculli margine apicali dentibus 4 grandibus triangularibus ad anguste triangularibus. — Typus: *Leiden cult. (de Vogel) 913697* (SAR holo; L iso).

Plant 36–45 cm high. Roots 0.7–1 mm diam. Rhizome short, rhizome scales soon desintegrating. Scales of the young shoot 7; smallest one 12–15 mm long, largest one 10–11.3 cm long; nerves many, fine. *Pseudobulbs* close together, slender fusiform, 9–11.5 cm long, smooth, when dried with fine sharp longitudinal folds. *Leaf* one per pseudobulb, stiff herbaceous. Petiole deeply channelled, 4–9 cm long. Blade elliptic, 19–22(–28?) by 2.4–3.5 cm; top acuminate; midrib prominent below, less so above, main additional nerves 4–6, slightly prominent above and below, small nerves many, hardly prominent. *Raceme* proteranthous to synanthous with the very young leaves, erect, curved, 7–9-flowered. Peduncle beyond the scales of the young shoot 0.5–1 cm long, 2 mm diam. Rhachis slightly zigzag, 5.5–6.5 cm long; internodes 7–10 mm long. Floral bracts persistent, ovate, 14–27 by 7–13 mm; top acute; nerves 17–27. *Flowers* widely open, somewhat fleshy. Pedicel c. 5 by 1 mm; ovary c. 5 by 1.7 mm. *Median sepal* elliptic, c. 13.5 by 5.5 mm; top rounded, retuse; mar-



Chelonistele laetitia-reginae de Vogel. a. Habit; b. flower; c. median sepal; d. petal; e. lateral sepal; f. lip; g. column and lip, lateral view; h. column [a: de Vogel 9292; b–h: Leiden cult. (de Vogel) 913697].

gins rolled backwards; nerves 5, midrib hardly prominent. *Lateral sepals* slightly asymmetric, elliptic, c. 15 by 5 mm; top acute; margins rolled backwards; nerves 5, midrib a pronounced rounded keel. *Petals* rolled backwards, linear, c. 13.5 by 1 mm; top acute; nerve 1, midrib not prominent. *Lip* 3-lobed, twisted sideways, c. 15.5 mm long. *Hypochilium* rather narrowly attached, slightly concave at the base, in front convex, c. 7 by 4 mm; lateral lobes narrowly triangular with acute top, c. 3.5 by 1 mm, width over the spread lobes c. 11 mm; keels 2, starting beyond the concave base of the lip c. 2 mm from the back, highest in the back, to the front lowering and rounded, continuing on the epichilium. *Epichilium* twisted sideways, curved downwards, abruptly divided into a narrow claw and an endlobe which is wider than long, c. 10.5 by 13 mm; claw rectangular with about parallel sides, c. 5 by 3 mm, the two keels low and rounded, continuing over about two-third of its length; endlobe butterfly-shaped, slightly asymmetric, c. 6 by 13 mm, with shallowly emarginate top and abruptly acute tip, the lateral lobes irregularly rectangular, slightly widening to the top which is truncate to rounded, with somewhat irregular margin. *Column* short, widest at the top over the teeth, c. 6 by 4.5 mm; hood rather narrow, its top margin with 4 big teeth of which the lateral ones are narrowly triangular and c. 1.5 by 0.5 mm with entire margin, the median two triangular, c. 1.5 by 1 mm with irregular margin, top minutely apiculate. Anther about semiorbicular in outline, c. 1.7 by 2 mm; top broadly acute, tip recurved. *Pollinia* c. 1.5 by 0.8 mm. Stigma semiorbicular, c. 1 by 2 mm; rostellum semi-elliptic, c. 1 by 2 mm, top broadly rounded, tip abruptly acuminate. *Fruit* not seen.

Collector's notes — Young leaves and bracts bronze coloured, leaves later mid-green above, lighter so below. Sepals and petals cream-coloured to pale ochrish cream, sepals on the midrib sometimes tinged salmon. Lip cream coloured, between the keels with a bright yellow to orange-yellow longitudinal band, grading to dark orange to the base. Column cream coloured, hood dark brown by many small dark brown spots, sometimes at the base with a transverse orange band. Anther pink light reddish, pollinia yellow. Scent sweet.

Etymology — Named to commemorate the opening of the Van Steenis Building by Her Majesty Queen Beatrix on June 11, 1996. The epithet *laetitia-reginae* means 'the joy of the Queen', referring to the elegant posture of the flower parts.

Distribution — Borneo: Sarawak (Bahagian Kapit). Known from two specimens: the type consisting of inflorescences preserved in spirit, and a herbarium specimen, *de Vogel* 9292 (SAR, L), from the same locality.

Ecology — Epiphytes in elfin forest 25 m high on a narrow sandstone ridge, at 1–2 m high on trunks of small to medium-size trees, tree trunks covered with moss.