

**Acianthera hamata** Pupulin & G. A. Rojas, *sp. nov.* TYPE: COSTA RICA. Without specific locality, a plant collected by Adolfo Quesada Chanto, flowered in cultivation at Jardín Botánico Lankester, Universidad de Costa Rica, accession No. JBL-11485, 22 September 2005 (Holotype: CR; Isotype: USJ-Spirit). Fig. 1.

*Species Aciantherae cogniauxianae* (Schltr.) Pridgeon & M. W. Chase *similis*, *folia lanceolata base rotunda erecta, multo angustioris, rhachidi hamata, floribus minoribus, petalis integris lobo rotundo parte inferna instructis, labelli disco duabus carinis magis late flabel-latis ornato dignoscenda*.

*Plant* epiphytic, erect to repent, with a thick rhizome concealed by scarious sheaths, producing secondary stems (ramicauls) every 12–15 mm. *Roots* flexuous, glabrous, 1.0–1.5 mm in diam. *Stem* stout, compressed, broadened toward the apex, triangular in section, with sharp margins, centrally grooved, 5.5–10.5 cm long, 0.6–0.9 cm wide at apex, basally provided with 3 slightly loose sheaths, apically monophyllous. *Leaf* fleshy, sessile, lanceolate, acute, tridenticulate, the base rounded, suberect to erect, 8–14 cm long, 2.4–3.7 cm wide. *Inflorescence* an abbreviated, few-flowered (to 5 flowers) raceme, to 6.5 cm long, the rachis uncinat, produced at the base of the leaf from a papyraceous spathe 10–12 mm long, the spathe fugacious. *Floral bract* infundibuliform, acute, 2.0–2.5 mm long. *Pedicel* cylindric, to 1.5 mm long. *Ovary* articulate with the pedicel, glabrous, 2 mm long. *Flowers* with greenish cream sepals, spotted with dark purple, the petals translucent cream, spotted purple, the lip whitish to pale yellow, spotted purple. *Dorsal sepal* oblanceolate, obtuse to rounded, 5.5 mm long, 2.7 mm wide. *Lateral sepals* connate almost to the apex into an obovate-suborbicualr synsepal, emarginate

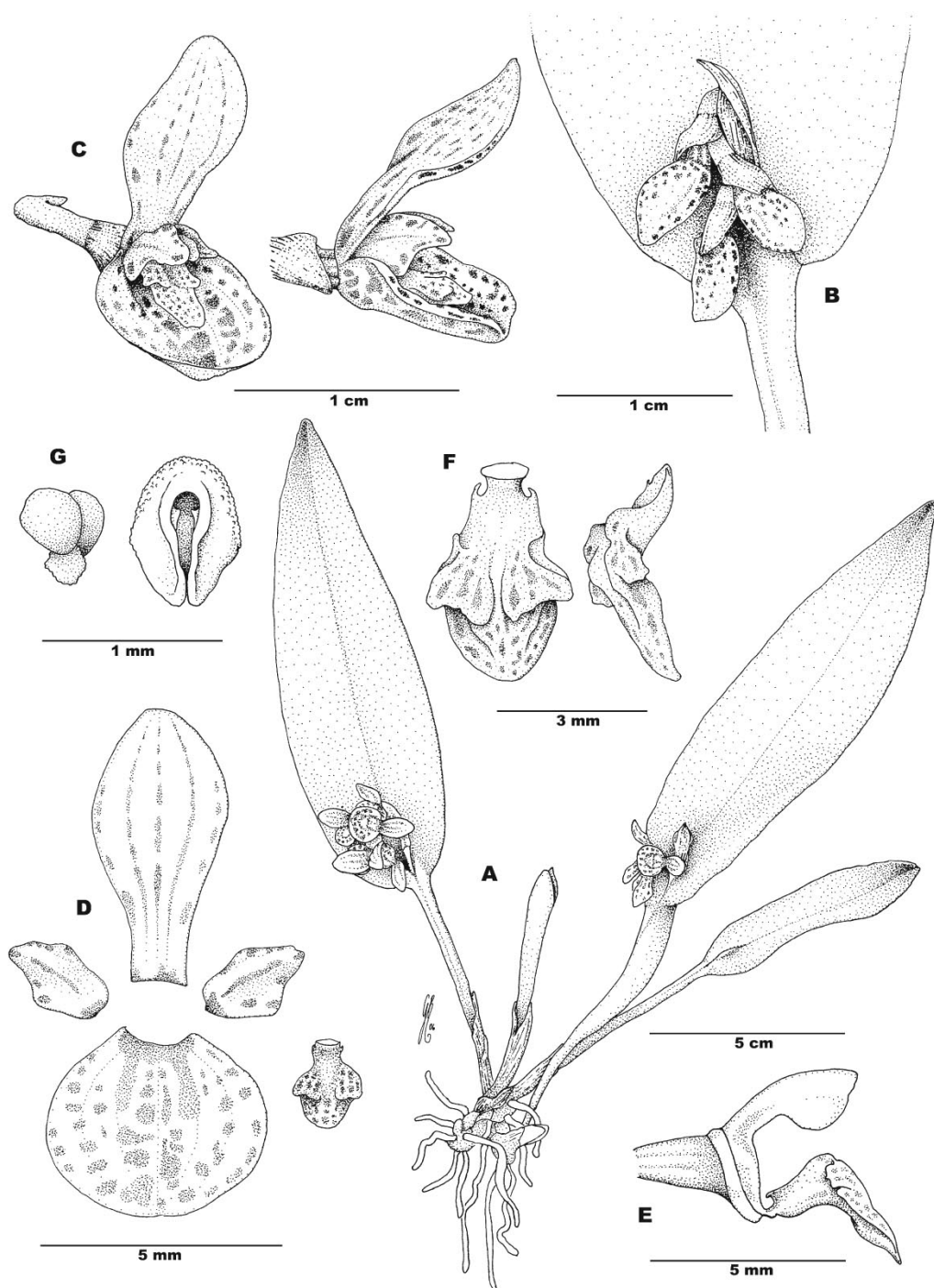


FIGURE 1. *Acianthera hamata* Pupulin & G. A. Rojas. **A**, habit; **B**, detail of the inflorescence; **C**, flower, three quarters and lateral views; **D**, dissected perianth; **E**, column and lip, lateral view; **F**, lip, adaxial and lateral views; **G**, pollinarium and anther cap. Drawn by G. Rojas from the holotype.

at apex, 3.7 mm long, 4.4 mm wide. *Petals* obovate-rhombic, subacute, asymmetric, the inferior side provided with a rounded lobe, 2.3 mm long, 1.4 mm wide. *Lip* clawed, obovate, obtuse-subrounded, 4.5 mm long, 3 mm wide, provided at the base with two small, retrorse horns; the disc with 2 thin, sharply edged, trapezoidal-flabellate, spreading, emarginate-erose keels. *Column* slender, terete, with a short foot, 4 mm long, provided at apex with 2 broad, rounded wings. *Anther cap* cucullate, elliptic, 2-celled. *Pollinia* 2, obovate-suborbicular, with caudicle.

**Paratype:** COSTA RICA. Without specific locality, flowered in cultivation at Jardín Botánico Lankester, Universidad de Costa Rica, accession No. JBL-11484, 1 December 2005 (JBL-Spirit).

**Etymology:** from the Latin *hamatus*, hooked, in reference to the characteristically barbed rachis of the inflorescence.

**Distribution:** known only from Costa Rica.

A specimen of *Acianthera*, collected somewhere in Costa Rica by the staff of Jardín Botánico Lankester at the beginning of the 1990s, and somewhat reminiscent of an aberrant form of *A. cogniauxiana*, has flowered in the living collection of the center for many years now. This accession shows consistent differences in vegetative and floral morphology when compared with *A. cogniauxiana*, but we were reluctant to name a new taxon on the sole basis of a single, cultivated specimen. Now, three more plants from a different source, unfortunately without collecting locality, were obtained from the collection of Costa Rican orchids of Adolfo Quesada Chanto, and we feel therefore more confident in describing it as a new species. *Acianthera hamata* is closely related to *A. cogniauxiana*, with which it shares general habit and flower morphology. However, *A. hamata* has distinctly lanceolate, erect leaves (vs. broadly ovate, horizontal to slightly decumbent in *A. cogniauxiana*), rounded at the base (vs. cordate), less than 4 cm wide (vs. more than 6 cm), a characteristically hooked rachis (vs. straight), with up to 5 flowers (to 14 in *A. cogniauxiana*), smaller flowers (the sepals < 6 mm vs. > 10 mm long), the dorsal sepal obtuse-rounded (vs. acute), the petals entire (vs. serrulate at the apical margins), provided with a rounded lobe on the lower margin, and the disk of the lip with two

large, flabellate keels (vs. small, linear). The original locality data associated with the new species remain, unfortunately, unknown, but we hope the formal description of *A. hamata* will reveal more plants in cultivation and help to gather further information on its ecology.