

A new species of *Alcestis* (Homoptera: Fulgoroidea: Tropiduchidae) attacking cacao in Brazil

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Abstract

Alcestis ingens sp. n. is described from a series of adults collected in stands of hybrid cacao between Ilhéus and Itabuna, Brazil.

Introduction

Members of the genus *Alcestis* are widespread in tropical South America, and 15 species have so far been described. Their food-plants appear to be unknown. The writer has taken one species, *A. vitrea* Fennah, on a moraceous tree, *Cecropia peltata*, and it would seem likely that all are associated with native woody dicotyledons. A series of specimens of a further species that had been collected in stands of hybrid cacao was received from Dr Pedrito Silva of the Centro de Pesquisas do Cacau, Bahia, Brazil. The species was found to be new, and is described below.

Alcestis ingens sp. n. (Fig. 1–13)

Head with eyes narrower than pronotum (1:1.3). Vertex markedly elevated above level of thorax, broader at base than long in middle (2.1:1), median carina fine, present in basal two-thirds. Frons longer in middle than broad (1.3:1), wider at widest part than at base (about 1.3:1) and at apex (1.8:1), lateral margins and median carina moderately broadly and shallowly elevated, a pair of broad oblique carinae weakly present distally. Pronotum broader than long in middle (6:1), median carina more or less broadly notched in posterior half. Post-tibiae with 3 spines laterally, 5 apically. Basal metatarsal segment with 5 teeth. Tegmen longer than broad (2.2–2.3:1), precostal area longer than broad (about 5.6:1), not extending to base of tegmen and traversed by 8–9 veins; *Sc* with about 10 veins at margin, *R* with 5, *M* with 6, *Cu*_{1a} with 6 and *Cu*_{1b} with 7; a comparatively regular row of subapical veinlets between *Sc* and *Cu*_{1a}; basal costal cell bounded by *C*, *Sc*+*R*, the first sector of *Sc* and a transverse veinlet, and with an oblique spur-like veinlet extending into the cell from *C* towards base (occasionally two such veinlets). Cells of corium sparsely granulate; transverse veinlets in distal half of tegmen in 4–5 very irregular ranks. Wing with *Sc* with 3 branches at margin, *R* with 2, *M* with 3 and *Cu*₁ with 5.

Body colour green; carinae of pronotum and mesonotum orange yellow. Tegmina greenish hyaline, first transverse vein between *Sc* and *R* and a small spot on commissural margin near union of claval veins, piceous; remaining transverse veins dilute brown. Wings milky hyaline with pale green veins.

Anal segment of male narrow, elongate, tubular, with lateroapical angles each strongly produced caudad in a narrow finger-like lobe. Pygofer moderately long, dorso-lateral angles not evident, margin broadly convex in dorsal half and shallowly concave

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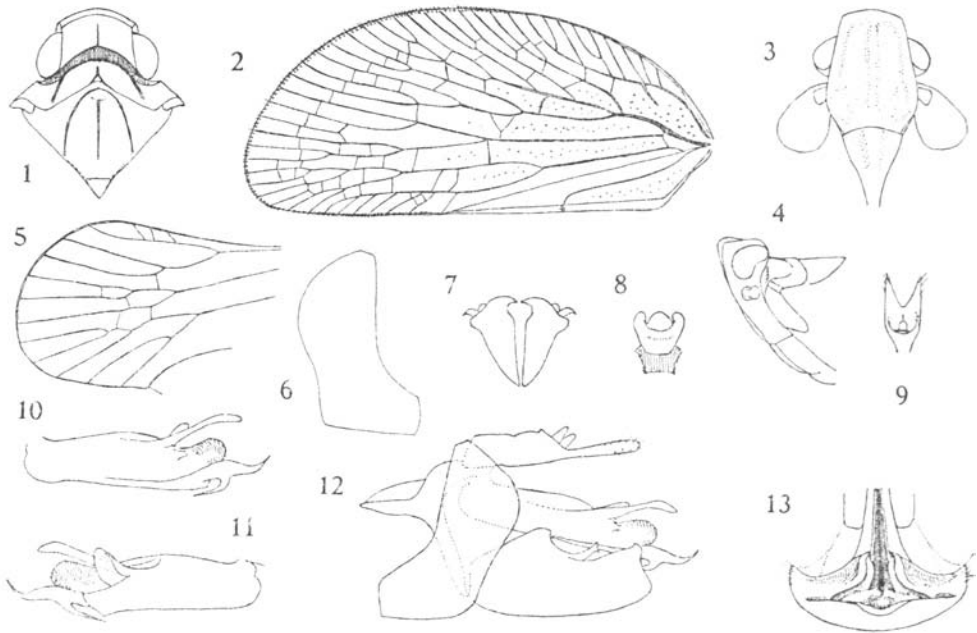


Fig. 1-13.—*Alcestis ingens* sp. n. 1, head and thorax, dorsal view; 2, tegmen; 3, frons, clypeus and lateral lobes of pronotum; 4, head, pronotum and mesonotum, left side; 5, apical part of wing; 6, pygofer, right side; 7, genital styles, posterior view; 8, anal segment of ♂, dorsal view; 9, anal segment of ♀, dorsal view; 10, aedeagus, left side; 11, aedeagus, right side; 12, ♂ genitalia, left side; 13, seventh abdominal sternite of ♀ and base of ovipositor, ventral view. (Fig. 2 & 5 are on a smaller scale than 1, 3 & 4, about 1:1.3.)

in ventral half. Aedeagus large, porrect, tubular; dorsal margin distally produced caudad in a relatively long narrow spatulate lobe, a short broad hood-like lobe on right at its base directed dorsocaudad; right margin of aedeagus terminating in a membranous sac, bulbous when inflated; a long stout process lying along ventral margin and extending posteriorly beyond it, emitting a short stout strongly recurved spine some distance before apex and tapering to a weakly upcurved spine apically. Genital styles in side view moderately broad, with dorsal margin elevated in a triangular lobe in basal third, thence concave and ascending again in a narrow bicuspidate lobe with a spinose process curving laterad and a small spinose process directed dorsomesad; apical margin sinuate, shortly produced mesad at its upper end in a stout curved tooth; ventral margin shallowly convex, entire.

Anal segment of female short, with lateroapical angles strongly produced caudad, acuminate. Third valvulae of ovipositor symmetrical and unornamented at base, with 3 incurved teeth apically and a further 3 or 4 teeth extending along adjacent ventral margin, and 2 pairs of teeth subapically on mesal surface. Seventh sternite transverse, posterior margin very shallowly excavate medially.

Male: length, 6.5 mm; tegmen, 9.5 mm. Female: length, 8.0 mm; tegmen, 11.0 mm.

Material examined. Holotype ♀, BRAZIL: Bahia, CEPEC [Centro de Pesquisas do Cacau, km 22, Ilhéus—Itabuna Highway], i.[19]81 (*Niella*), in Museu Nacional, Rio de Janeiro, Brazil. Other material: 2 ♂, 5 ♀, BRAZIL, Bahia, CEPEC, iv.[19]80, i.[19]81 (*Niella*), in British Museum (Natural History).

Comments. This species is distinguishable from all others of the genus by its

greater size, the more evident elevation of the head above the level of the thorax, the greater number of apical cells between the basal costal cell and the apex of the clavus (in ♂, about 43 ; in ♀, about 47), and the presence of 7 branches in Cu_{1b} .

In letters from the sender, this species was stated to be becoming abundant on certain stands of hybrid cacao at the cacao research station ; the specimens sent had been knocked down by pyrethrum dust applied above the canopy of the cacao.

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