

## CAYMANIS, A NEW GENUS OF ANTILLOCORINI FROM THE CAYMAN ISLANDS (HEMIPTERA: LYGAEIDAE)

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### ABSTRACT

*Caymanis bracensis*, a new genus and species of Antillocorini from the Cayman Islands, is described and illustrated. This species differs from other antillocorines by the reticulated texture of the surface of the third and fourth abdominal sternites in both sexes and by the presence of a large curved basal spine found ventrally on the fore femur in the males.

Key Words: Hemiptera, Lygaeidae, Antillocorini, new genus, new species, *Caymanis bracensis*, Cayman Brac, West Indies

### RESUMEN

Se describe e ilustra el género *Caymanis* y la especie nueva *C. bracensis* de Antillocorini de la isla de Cayman Brac. Esta especie se distingue de otros antillocorinos por la textura reticulada de la superficie ventral de los segmentos abdominales tercero y cuarto en ambos sexos y por una espina curvada presente ventralmente en el primer par de fémures en los machos.

Baranowski and Slater (1998) reported specimens collected in the Cayman Islands as apparently representing an undescribed species of the *Botocudo* complex. These specimens are not congeneric with the type species of *Botocudo*. They differ from *Botocudo* and most other antillocorines by the presence of all trichobothria of the fifth abdominal sternite located anterior to the spiracle of the same segment, fore femora incrassate and armed ventrally with spines in both sexes, and the males with a large distally curved spine at the base of the fore femur.

"We are using "Lygaeidae" in the traditional sense rather than "Rhyparochromidae" as used in the Henry (1997) classification. This is done to conform to the conservative course we will follow in a large manuscript on the Lygaeidae (sensu lato) of the West Indies, but is not to be interpreted as basic disagreement with the Henry classification."

All measurements are in millimeters.

### *Caymanis* Baranowski and Brambila, **New Genus**

Type species: *Caymanis bracensis* Baranowski and Brambila. Monobasic.

This genus is characterized by the incrassate fore femur with one row of spines on the anterior margin of its ventral surface; males with a basal, ventral, large, distally curved spine, (Fig. 2) on fore femur; pronotum with lateral margins slightly sinuate and carinate, but not explanate; metapleuron with scent gland auricle sessile and curved posteriorly (Fig. 4); trichobothria on abdominal sternite 5 slightly dorsoventral to each

other and anterior to spiracle (Fig. 3). Abdominal sternites 3 and 4 reticulate in both male and female.

Etymology. Named for the island, Cayman Brac, on which it was found.

*Caymanis* has the following typical antillocorine characters: 1) inner half of apical corial margin concave, 2) three sets of gland scars dorsally on the abdomen between terga 3-4, 4-5, and 5-6, 3) innerlatero tergites present, and 4) all abdominal spiracles ventral. The spiracles on abdominal segments 3, 4 and 5 are below the sternal shelf (Fig. 3).

The femoral spine of the male is considered apomorphic for *Abroxis* since no other Antillocorini has this character; *Paradema* has a large spine ventrally on the fore femur, but it is not curved and it is placed distally rather than proximally.

The position of the trichobothria on the fifth abdominal sternite, both located anterior to the spiracle, is also apomorphic since the plesiomorphic condition is the position of these trichobothria below (or behind) the spiracle (Slater 1980). Species of *Caymanis* also have the trichobothria anterior to the spiracle, but in *Abroxis* they are slightly dorsoventrad to each other rather than linear, the latter a highly derived condition according to Slater (1980); furthermore, *Cligenes* differs from *Caymanis* by the presence of a prosternal groove.

No other antillocorine has been found with abdominal sternites 3 and 4 reticulate in both male and female; this character might prove to be an apomorphic generic character rather than a specific character. Sexual dimorphism occurs in the

genus *Caymanis*, males having on the fore femora a large spine near the base, on the ventral surface, not present in females.

*Caymanis bracensis* Baranowski and Brambila,

**New Species**

(Figs. 1-8)

Chiefly dark reddish brown. Scutellum reddish brown with brownish black at base and sides, with apex yellowish white. Clavus and corium brownish white (bronze-like in appearance); corium with two dark brown markings, one laterally at center and one at apex. Membrane opaque brownish white. Abdominal sternites 5-7 dark brown. Antennae, labium and legs yellowish brown, antennal segment IV darker brown. Tylus reaching middle of antennal segment I. Gula narrow, deep, and with apex of bucculae meeting in a round arc, reaching anterior margin of prosternum (Fig. 1). Surface of thorax, clavus and corium not polished but dull; pronotum, scutellum, clavus, and corium punctate; pronotum and scutellum with short decumbent setae. Corium with anterior half of lateral margin slightly sinuate. Male genital capsule Fig. 5 posterior view, Fig. 6 lateral view, Fig. 7 dorsal view and Fig. 8, right paramere. Thoracic sterna keeled, keel on prosternum only between coxae. Metapleuron with evaporative area triangular with apex ventral. Antennal segment II somewhat clavate. Fore femur incrassate with a row of small straight spines on anterior margin of ventral surface, an irregular row of small knobs on the posterior margin, and with a large curved spine near base (Fig. 2).

Head length total 0.35, width across eyes 0.43, interocular distance 0.26. Pronotal length 0.46, width at humeral angles 0.82. Scutellar length 0.46, width 0.50. Length claval commissure 0.12. Total wing length from base of corium 1.28. Length antennal segments I 0.22, II 0.24, III 0.20, IV 0.26. Length labial segments I 0.16, II 0.34, III 0.16, IV 0.14. Total body length 1.86.

Holotype: ♂ CAYMAN BRAC, W.I., Major Donald Road, 17-19-X-1995, under *Ficus* sp., H. V. & R. M. Baranowski (RMB).

Paratypes: 7 ♂♂, 2 ♀♀ same data as holotype (RMB); 1 ♂, 1 ♀ same locality as holotype, 7-VII-1997 (R. M. Baranowski). In R. M. Baranowski and J. A. Slater collections.

**Etymology.** This species was named for the island, Cayman Brac, on which it was found.

Females similar to males in size, texture, and coloration, except fore femur without large ventral spine. Some specimens with posterior pronotal lobe darker than anterior lobe, membrane translucent, or membrane opaque white; nearly all specimens with scutellum lacking dark brown areas; one specimen small and yellowish brown. Range of total body length: 1.65 to 1.88 mm. All specimens macropterous.

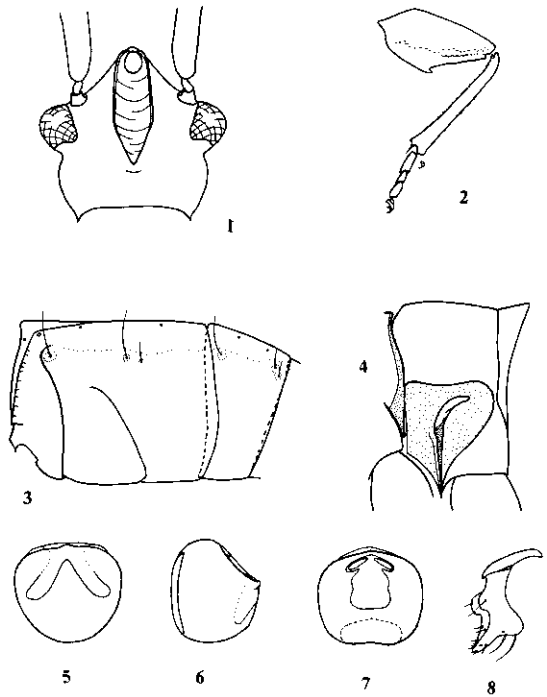


Fig. 1. Head, ventral view.

Fig. 2. Male fore leg, anterior view.

Fig. 3. Male abdominal sternites 3-6, lateral view.

Fig. 4. Metathorax with scent gland auricle and evaporative area.

Figs. 5-7. Male genital capsule, posterior, lateral and dorsal views.

Fig. 8. Right paramere.

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