

A NEW SPECIES OF *HADROSOMUS*
(HEMIPTERA: HETEROPTERA: LYGAEIDAE: LYGAEINAE)
FROM THE DOMINICAN REPUBLIC

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ABSTRACT

A new species of *Hadrosomus* A. Slater from Dominican Republic is described; a key to the known species is included and the dorsal view and parameres are illustrated.

Key Words: West Indies, Heteroptera, Lygaeinae, *Hadrosomus*, new species

RESUMEN

Se describe una nueva especie del género *Hadrosomus* A. Slater, recolectada en República Dominicana y se incluye una clave para separar las especies conocidas; los parámetros y el ejemplar en vista dorsal son ilustrados.

In a revision of the Western Hemisphere Lygaeinae A. Slater (1992) recognized 22 genera, 7 subgenera, and 198 species. Each genus and subgenus is described or re-described and a key to genera, subgenera and species is included. Line drawings of head, metapleuron, spermatheca, ovipositor, parameres, and aedeagus are provided, as well as a cladistic analysis of the genera.

One of the new taxa proposed by A. Slater was *Hadrosomus*, with three species: *H. confraternus* (Uhler) distributed from South-central México to southern Brasil, including the Dominican Republic and Trinidad, *H. teapensis* (Distant), the type species, apparently restricted to the southern half of México, and *H. corallipes* (Brailovsky) known only from Brasil.

This genus can be distinguished from other genera in the subfamily on the basis of the following characters: antennal segment I surpassing apex of tylus, eyes not produced, veins of clavus and corium lighter than surrounding areas, hemelytral membrane opaque, area behind callus without a series of four transverse impressions, posterior pronotal lobe higher mesally than at humeral angles, pronotal disc finely punctate, distinctly convex, with median carina obsolete, humeral angles orange, red or yellow, scutellum not swollen, impunctate, and with median carina distinct.

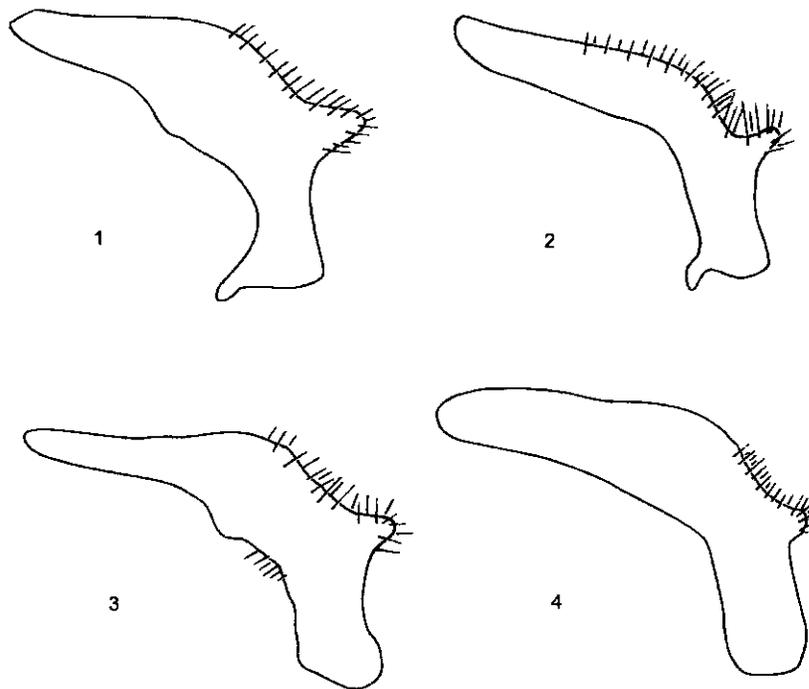
In *Torvochromus* (Brailovsky 1982) a closely related genus, the veins of clavus and corium are darker than surrounding areas and the humeral angles of the pronotum are dark brown to black.

In this paper we describe the fourth species of the genus, and the second species of *Hadrosomus* from the West Indies proper. This new species is described at this time to make the name available for the faunistic study of the Lygaeidae of the West Indies in progress by the senior author and J. A. Slater, University of Connecticut.

All measurements are in millimeters.

Hadrosomus nigrocoxalis Baranowski and Brailovsky, **New Species**
(Figs. 1-5)

Head orange dorsally. Following areas black to dark brown: antennal segments, tylus, frons, two lateral spots close to ocelli and connected by two irregular arms with darker frons, ocellar tubercle, and external edge of antenniferous tubercles. Pronotum chiefly dark brown with anterolateral margins including frontal and humeral angles, posterior margin, and a longitudinal median stripe orange; calli black; scutellum dark brown with a complete median orange longitudinal stripe; clavus and corium dark brown with claval and corial veins, costal and apical margin, claval suture and apical corial margin dark orange; connexival and abdominal segments bright orange with anterior margin of segment VII dark brown. Ventrally head orange; buccula pale yellow; rostral segments bright black; prosternum, mesosternum and metasternum black with posterior margin pale yellow; propleura, mesopleura and metapleura pale orange brown, with acetabulae, posterior margin of each segment, anterior margin of propleura and metathoracic peritreme pale yellow to pale orange yellow; propleura and mesopleura with shining black transverse stripe near to posterior margin; upper



Figs. 1-4. Parameres of *Hadrosomus* spp. 1, *H. nigrocoxalis* Baranowski and Brailovsky **New Species**; 2, *H. teapensis* (Distant); 3, *H. confraternus* (Uhler); 4, *H. corallipes* (Brailovsky).

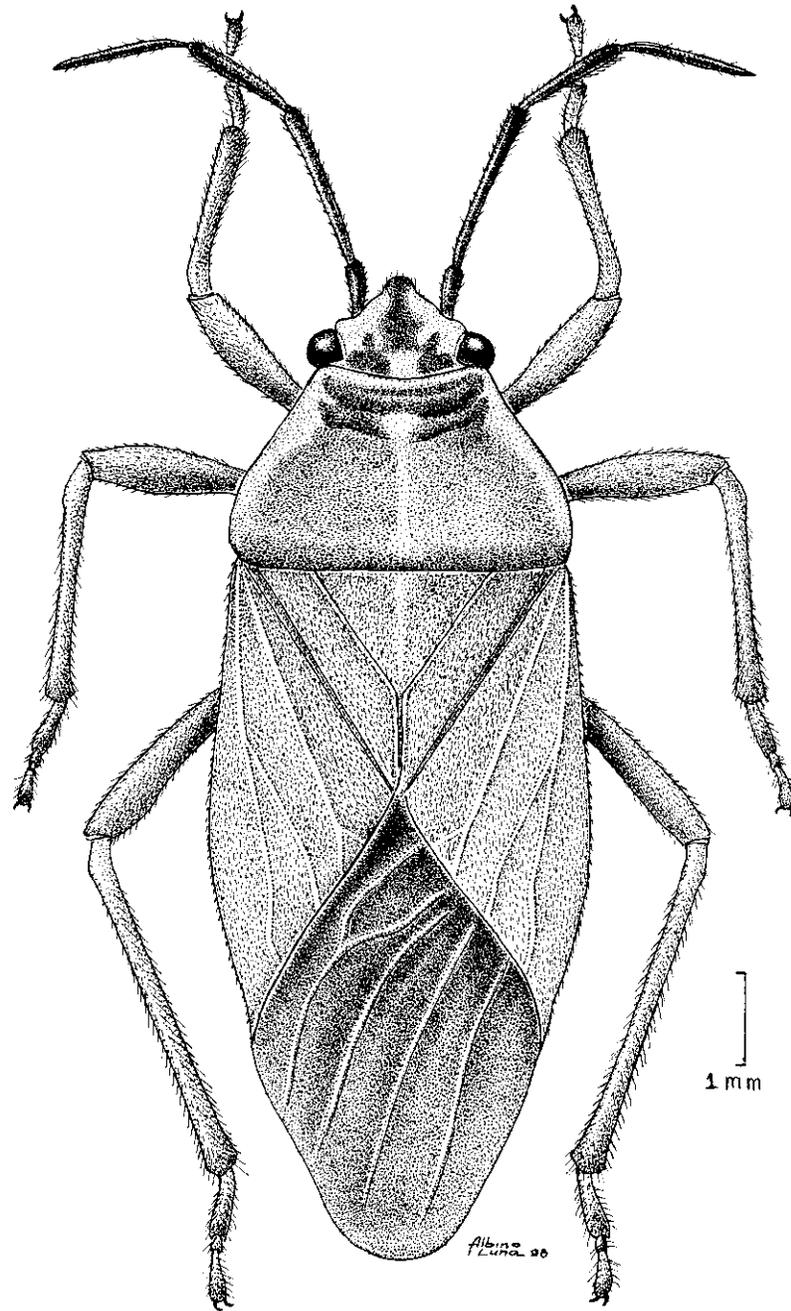


Fig. 5. *Hadrosomus nigrocoxalis* Baranowski and Brailovsky **New Species**.

margin of propleura, mesopleura and metapleura with a narrow shining black longitudinal stripe; coxae, tibiae and tarsi black; trochanters and femora dark orange hazel with apical third of femora black; abdominal sterna yellow, with pleural margin bright red orange to bright pink, and anterior border of each sternite and a narrow transverse stripe near the middle third and close to lateral sterna black; genital capsule dark brown with posteroventral margin pale orange hazel. Labium extending to anterior third of abdominal sternite IV. Paramere shank short, blade elongate and broad, posterior projection conical (Fig. 1).

Length head 1.33, width across eyes 1.80, interocular distance 1.20, interocular distance 0.80, preocular distance 0.96. Length antennal segments: I, 0.52, II, 1.64, III, 1.45, IV, 1.55. Length pronotum 1.98, width across frontal angles 1.70, width across humeral angles 3.11. Length scutellum 1.24, width 1.39. Total body length 10.50.

Holotype. ♂ DOMINICAN REPUBLIC: Rio Chavon, 26-VIII-1997, R.M. Baranowski. In Florida State Collection of Arthropods.

Paratypes: 6 ♂♂ males, 6 ♀♀, same data as holotype. In R. M. Baranowski, J. A. Slater, and Instituto de Biología, Universidad Nacional Autónoma de México collections.

ETYMOLOGY. Named for its black coxae.

Color of females similar to holotype. Scutellum black with diffuse or very narrow median longitudinal orange stripe; connexival and abdominal segments VIII and IX bright orange red with two black discoidal spots on segment VIII; abdominal sterna III to VII pale yellow with or without pale green reflections, with pleural margin bright red orange, and anterior margin of each sternum black; gonocoxae I yellow with upper angle dark brown; parategite VIII and IX bright orange red.

Hadrosomus nigrocoxalis n.sp. like *H. confraternus* (Uhler) and *H. teapensis* (Distant) has the metathoracic peritreme yellow, the legs not entirely black, and the abdominal sterna mostly pale yellow. The new species is readily recognizable by the black coxae, on the other two species the coxae are yellow or orange hazel.

Hadrosomus nigrocoxalis like *H. confraternus* has the mesosternum and metasternum dark brown to black with the posterior margin yellow, and the abdominal sterna are yellow with anterior margin black, and pleural margins red to pink. The chief distinguishing features externally are the black frons and black coxae. In *H. confraternus* the head in dorsal view is predominantly yellow to orange, with only the tylus and ocellar tubercles black, and the coxae are yellow to orange hazel. In *H. teapensis* the mesosternum and metasternum are yellow, and the abdominal sterna yellow with anterior margin pale red and pleural margin yellow.

In *H. corallipes* (Brailovsky 1983) the other known species, the metathoracic peritreme is red to bright orange, the legs black, and the abdominal sterna black to red brown.

The parameres of the four known species are different (Figs. 1-4).

Key to Species of *Hadrosomus*

1. Abdominal sterna black to red brown; legs entirely black; metathoracic peritreme red to bright orange *corallipes* (Brailovsky)
- 1'. Abdominal sterna mostly pale yellow; legs not entirely black; metathoracic peritreme yellow 2
2. Coxae black *nigrocoxalis* n.sp.
- 2'. Coxae yellow to orange hazel 3

- 3. Abdominal pleural margins red to pink; head predominantly yellow to orange, with tylus black; mesosternum and metasternum black with posterior margin yellow..... *confraternus* (Uhler)
- 3'. Abdominal pleural margins yellow; head predominantly red, with tylus and irregular marks on frons and vertex black; mesosternum and metasternum yellow *teapensis* (Distant)

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REFERENCES CITED

BRAILOVSKY, H. 1982. Revisión del complejo *Ochrimnus*, con descripción de nuevas especies y nuevos géneros (Hemiptera-Heteroptera-Lygaeidae-Lygaeinae). *Folia Ent. Mexico* 51: 1-163.

BRAILOVSKY, H. 1983. Revisión del género *Torvochrimnus* Brailovsky (Hemiptera-Heteroptera-Lygaeidae-Lygaeinae) con descripción de dos nuevas especies. *Ann. Inst. Biol. Univ. Nal. Autón. México* 53 (1982), Ser. Zool. (1): 285-320.

SLATER, A. 1982. A genus level revision of Western Hemisphere Lygaeinae (Heteroptera: Lygaeidae) with keys to species. *The University of Kansas Science Bulletin* 55(1): 1-56.

