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Eger and Bianchi (Heteroptera: Pentatomidae: Pentatominae:  
Carpocorini)

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(Heteroptera: Pentatomidae: Pentatominae: Carpocorini)

Joseph E. Eger, Jr.

Florida State Collection of Arthropods  
P.O. Box 147100  
Gainesville, FL 32614-7100

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Description of the male of  
*Euschistus (Euschistus) baranowskii* Eger and Bianchi  
(Heteroptera: Pentatomidae: Pentatominae: Carpocorini)

Joseph E. Eger, Jr.

Florida State Collection of Arthropods  
P.O. Box 147100  
Gainesville, FL 32614-7100  
jeeger811@gmail.com.

**Abstract.** *Euschistus (Euschistus) baranowskii* Eger and Bianchi (Heteroptera: Pentatomidae: Pentatominae: Carpocorini) was described based on a single female specimen. In this paper, I describe the male of the species, primarily the genitalia, and compare it to other species of *Euschistus (Euschistus)* Dallas.

**Key words.** Description, male genitalia, *Euschistus heros*, *Euschistus rugifer*, *Euschistus servus*.

**ZooBank registration.** urn:lsid:zoobank.org:pub:E02D3F0E-F692-4DD2-B0E8-A1C8BB55CE9C

## Introduction

The original description of *Euschistus (Euschistus) baranowskii* Eger and Bianchi, was based on a single female specimen from Jamaica (Cioato et al. 2015). While examining specimens in the collection of the Academy of Natural Sciences of Drexel University, Philadelphia, PA (ANSP), I located a second specimen of this species, a male. The purpose of this paper is to describe and figure the male of this species.

## Materials and Methods

Specimens studied belong to the collections of the author (JEE) and ANSP. All measurements are in mm. Terminology follows that of Rolston (1974). Photos were taken and edited using Auto-Montage™ software (Syncroscopy, Cambridge, UK) at the Florida State Collection of Arthropods, Gainesville, FL (FSCA).

Label data were transcribed as they appear on the labels. If there was more than one label, the label closest to the insect is indicated by 1), the second by 2), etc. In addition to the single male specimen of *E. (E.) baranowskii*, male specimens of other species examined (all in JEE) were as follows: *E. (E.) heros* (Linnaeus) labeled BRAZIL: Rondonia. 62 km SW Ariquimes, nr. Fzda. Rancho Grande, 30-III–10-IV-1992, J. E. Eger, coll.; *E. (E.) rugifer* Stål labeled 1) MEXICO: Sinaloa, Mazatlan, 10 mi S., VII-3-65; 2) J. A. & M. A. Chemaak, E. G. & J. M. Linsley, Collectors; and *E. (E.) servus* (Say) labeled TEXAS: Brazos Co., College Station, 19-VII-1981, J. E. Eger, coll.

## Results

**Material examined.** Male, labeled: 1) JAMAICA: Trelawney Parish; N edge ‘Cockpit Country’; Windsor Research Station, ±5.5 km SW Sherwood Content; 18°21'23.7" N, 77°33'49.3"W, 100–120 m, 2° veg. nr. 2° forest on karst limestone formation; at 160w “blended” MV light; 21.V.2000; D. Perez & J. D. Weintraub; 2) JBS-E1.

**Description.** Body similar to that of female as described by Eger and Bianchi in Cioato et al. (2015) (Fig. 1) except that the head is slightly wider than long (longer than wide in female) and connexival segments darker brown posteriorly and anteriorly (uniformly brown in female).

*Male genitalia:* (Fig. 2–4) Ventral rim of pygophore with mesial half deeply concave in dorsal and ventral views; inferior ridge broadly concave, entire, elevated above floor of pygophore, forming distinct narrow sulcus between inferior ridge and posterior margin; superior ridge broadly exposed with small concave notch mesially; dorsal rim smooth, each lateral wall below dorsal rim with four black carinae, anterior one largest. Proctiger with



**Figure 1.** *Euschistus (E.) baranowskii*, habitus. Scale line = 1.0 mm.

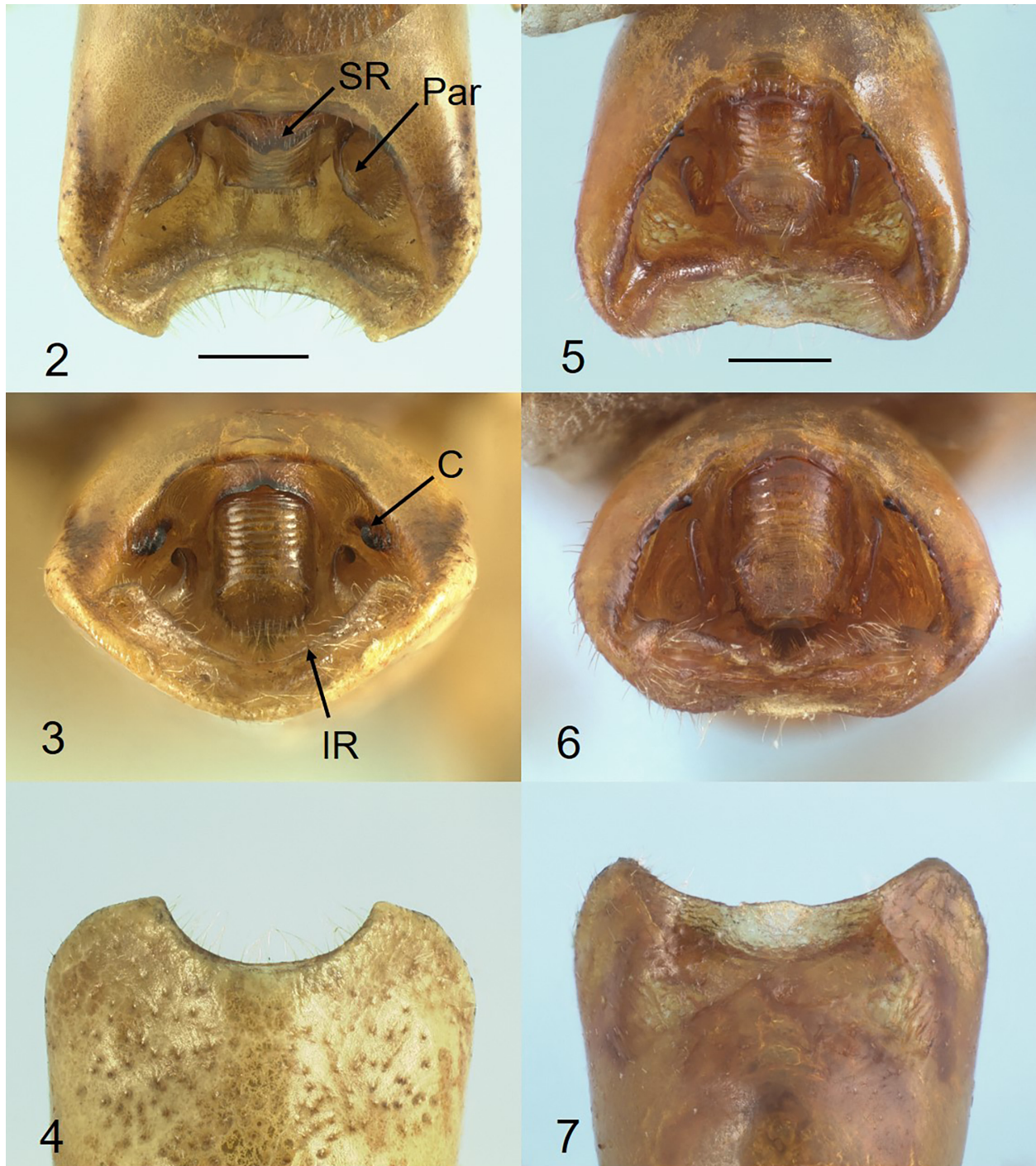
pair of preapical tubercles, impressed below tubercles, transversely ridged above tubercles. Parameres somewhat ovate, flattened, bent laterally, thickened apically.

**Measurements** (n = 1). Body length from anterior margin of head to apex of spines on the seventh abdominal segment (genital cup extruded) 12.35, abdominal width 7.00, head length 2.40, length before eyes 1.35, head width 2.45, interocular width 1.40, length of antennal segments: I 0.75, II 1.10, III 1.25, IV 1.85, V 1.85, pronotum length 3.10, pronotum width 9.40, scutellum length 4.9, scutellum width 4.3.

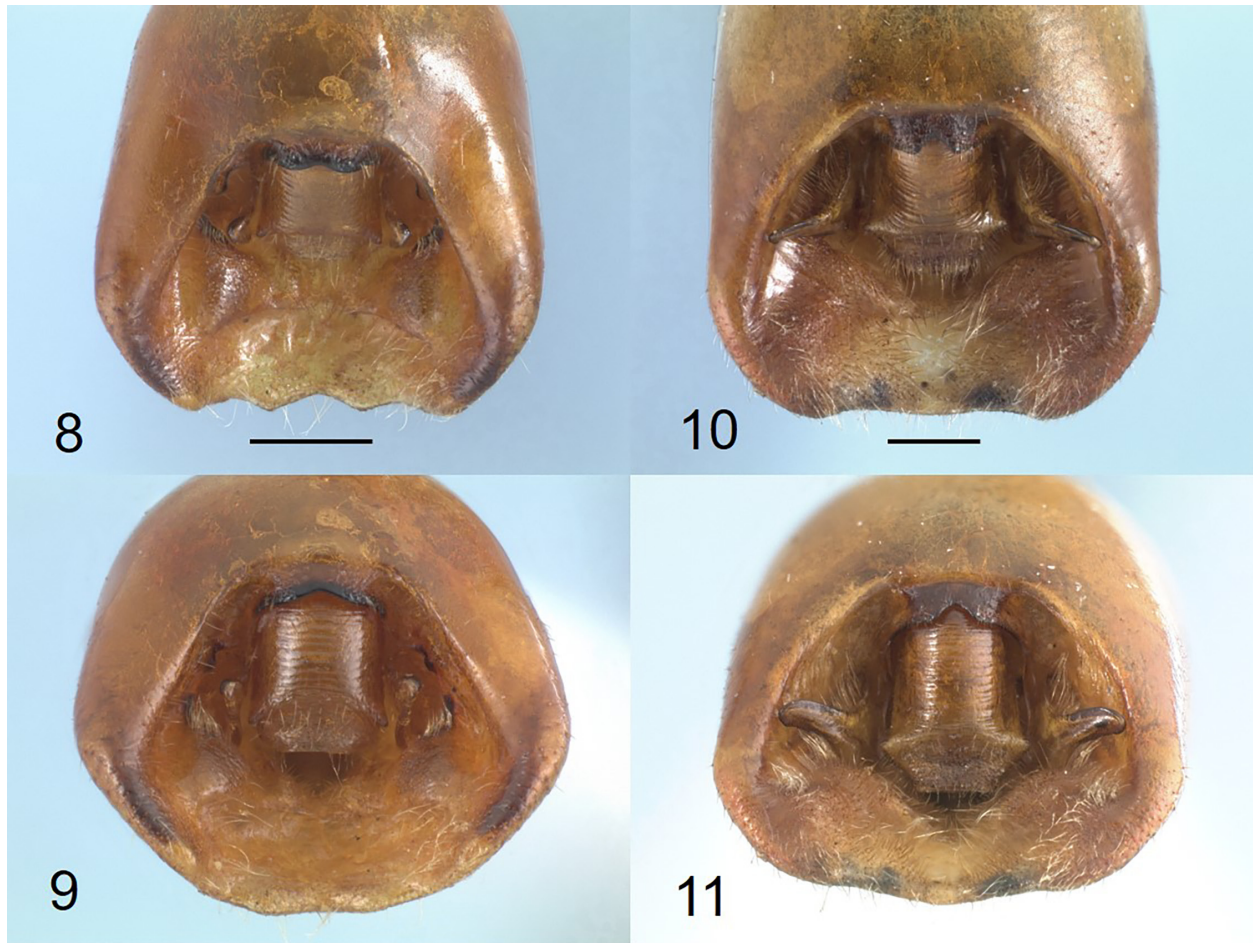
## Discussion

*Euschistus (E.) baranowskii* is one of the larger species of the genus. Cioato et al. (2015) stated that it resembled *E. (E.) heros* (Linnaeus), *E. (E.) rugifer* Stål, and *E. (E.) servus* (Say). The falcate humeral angles (Fig. 1) distinguish it from all congeners. Comparing male genitalia, *Euschistus (E.) baranowskii* has a strongly concave posterior margin of the pygophore and four more or less distinct carinae located just below the dorsal rim laterally. In *E. (E.) servus*, the posterior margin of the pygophore is at most shallowly concave (Fig. 10), the pygophore is more flattened in lateral view, and the carinae on the lateral walls of the pygophore are lacking (Fig. 11). The pygophore of *E. (E.) heros* has a sinuous and less concave posterior margin (Fig. 8) and a single carina located lower on each lateral wall (Fig. 9). *Euschistus (E.) baranowskii* appears to be most closely related to *E. (E.) rugifer* but the pygophore of the latter is more shallowly concave with a mesial convexity (Fig. 5 and 7), and the dorsal rim of the pygophore is denticulate laterally, denticles becoming short carinae anteriorly (Fig. 6).

**Note.** In Cioato et al. (2015) Eger and Bianchi (p. 567) gave the width of the scutellum as 7.70 mm. This was an error. The correct measurement is 4.45 mm.



**Figures 2–7.** *Euschistus* male genitalia. 2–4) *E. (E.) baranowskii*. 5–7) *E. (E.) rugifer*. 2, 5) pygophore, dorsal view. 3, 6) pygophore, posterior view. 5, 7) pygophore, ventral view (C = carina, IR = inferior ridge, Par = paramere, SR = superior ridge). Scale lines = 0.50 mm.



**Figures 8–11.** *Euschistus* male genitalia. **8–9)** *E. (E.) heros*. **10–11)** *E. (E.) servus*. **8, 10)** pygophore, dorsal view. **9, 11)** pygophore, posterior view. Scale lines = 0.50 mm.

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## Literature Cited

- Cioato A, Bianchi FM, Eger J, Grazia J. 2015.** New species of *Euschistus* (*Euschistus*) from Jamaica, *Euschistus* (*Mitripus*) and *Ladeaschistus* from southern South America (Hemiptera: Heteroptera: Pentatomidae: Pentatominae). *Zootaxa* 4048(4): 565–574.
- Rolston LH. 1974.** Revision of the genus *Euschistus* in Middle America (Hemiptera, Pentatomidae, Pentatomini). *Journal of the New York Entomological Society* 48(1): 1–102.

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