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## The Reduviidae (Hemiptera) of Puerto Rico: an annotated list<sup>1</sup>

Jenaro Maldonado Capriles<sup>2</sup>

### ABSTRACT

Thirty-one species of Reduviidae are reported from Puerto Rico. Of these, 12 are endemic, and 7 represent new records. The species are distributed in 7 subfamilies. More than 20 of these species have been collected in light traps. Search among dead leaves in humus has revealed the secluded predatory habits of *Tagalis* sp. and *Ghilianella varicornis*. *Ploiaria gundlachi* and *Ghilianella longula*, previously recorded, do not occur in Puerto Rico.

### INTRODUCTION

The Reduviidae is one of the most thoroughly studied families in the Hemiptera. Some members of the Triatominae are vectors of the deadly Chagas' disease and are important research animals, especially in physiological studies. The members of the other subfamilies are all predators.

One of my sources of information is Barber's work on the Hemiptera of Puerto Rico (2). His paper includes keys to 4 subfamilies and generic key to 3, because the Piratinae are represented by one genus only. Barber used the names Ploiariinae, Stenopodinae, and Zelinae. The correct names for these subfamilies are Emesinae, Stenopodainae, and Harpactorinae, respectively. Wolcott's records (11) are mentioned below. In my paper "Additions and corrections to Wolcott's Insects of Puerto Rico (8) (hereafter Additions) I gave 6 new records of reduviids for the island. Seven additional records are listed herein. All the species listed below are represented in my collection.

### DISCUSSION

The known species of Reduviidae from Puerto Rico are as follows:

#### BACTRODINAE

1. *Bactrodes spinulosus* Stål—A specimen from Maricao. Also known from Mexico and Guatemala. Recorded in Additions. See McAtee and

<sup>1</sup> Manuscript submitted to Editorial Board June 27, 1984.

<sup>2</sup> Department of Anatomy, Ponce School of Medicine, Ponce, and Department of Crop Protection, College of Agricultural Sciences, University of Puerto Rico, Mayagüez.

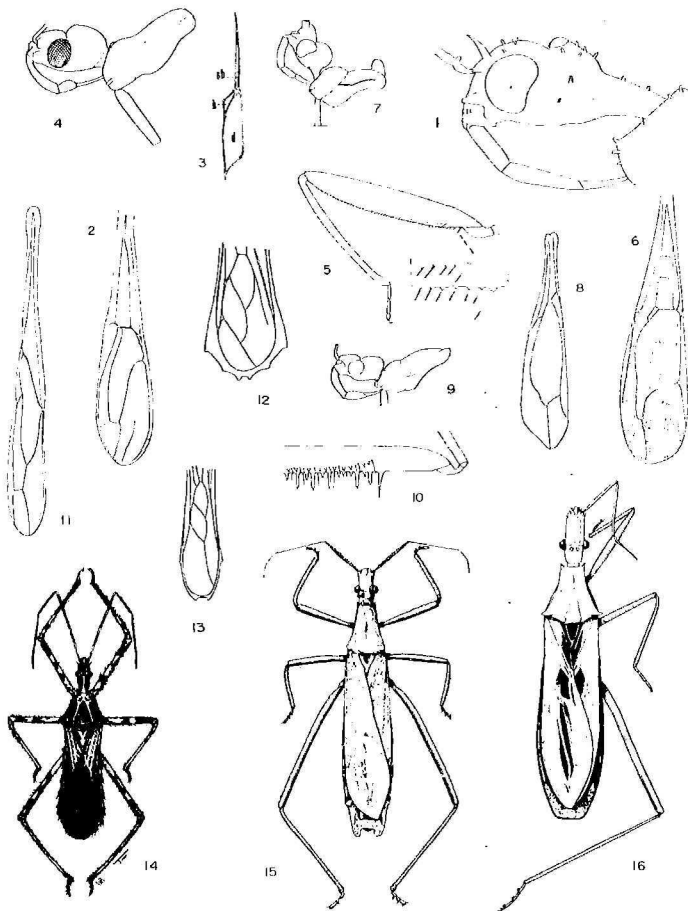


PLATE I.—*Bactrodes spinulosus* 1. head, lateral, 2. forewing venation; *Emesa tenerrima* 3. detail of cells of forewing—sb: subbasal, b: basal, d: discal; *Emesopsis nubilus* 4. head and pronotum, lateral, 5. foreleg and detail of armature, 6. forewing venation; *Empicoris armatus* 7. head and pronotum, lateral; *Empicoris rubromaculatus* 8. head and pronotum, lateral, 9. forewing venation; *Ghilianella* sp. 10. detail of armature of fore femur; *Ploiaria* sp. 11. forewing venation; *Heza angulifer* 12. apical half of abdomen, female, 13. apical half of abdomen, male; *Heza ornata* 14. habitus; *Pygolampis pectoralis* 15. habitus; *Stenopoda cinerea* 16. habitus.

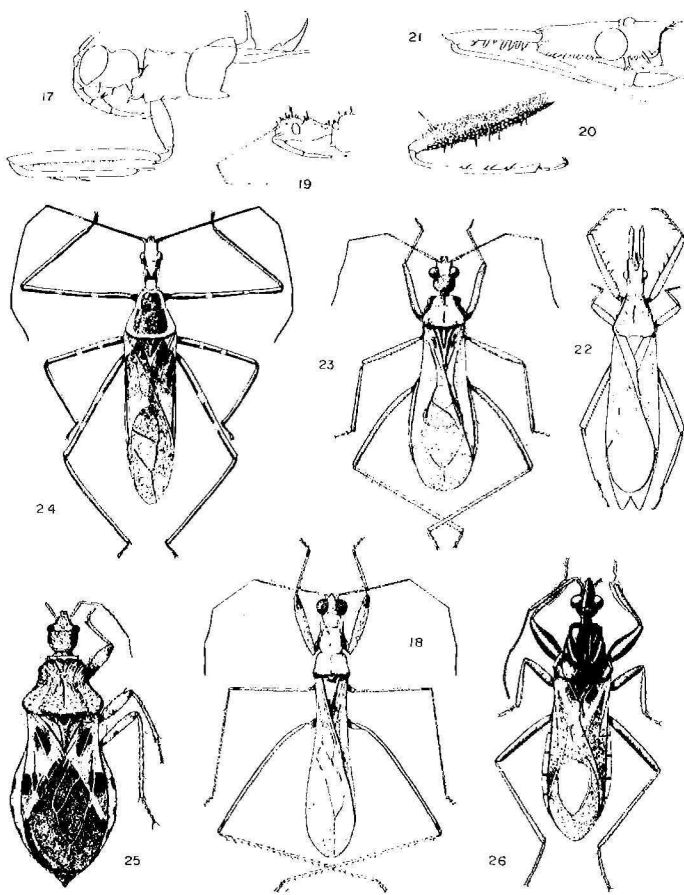


PLATE II.—*Tagalis inornata cubensis* 17. anterior portion of body, 18. habitus; *Sinea diadema* 19. head, lateral, 20 foreleg, lateral; *Pnirontis infirma* 21. head, lateral, 22. habitus; *Oncerotrachelus cubanus* 23. habitus; *Zelus longipes* 24. habitus; *Peregrinator biannulipes* 25. habitus; *Rasahus biguttatus* 26. habitus.

Malloch's paper (9) dealing with this subfamily and the Saicinae. Figures 1 and 2.

## EMESINAE

2. *Emesa tenerrima* (Dohrn)—An endemic species. Specimens are relatively large, reaching over 4 cm with their long legs extended, and with grayish forewings. Santiago Blay observed that it can be collected from spider webs.<sup>3</sup> The almost obsolete basal cell (b in figure 3) and the spined humeral angles separate this species from the other four in the genus. Recorded by Barber and Wolcott.

3. *Emesopsis nubilus* Uhler—Described from St. Vincent and Cuba. A species of worldwide distribution. The apparently reticulate venation, due to the hyaline forewings and their veins in addition to elongated markings, helps to identify this small species. Recorded by Barber and Wolcott. Figures 4-6.

4. *Empicoris armatus* (Champion)—Also known from Guatemala, Panamá, Florida (USA), and Jamaica. The large process of the middle of the pronotum (fig. 7) and the two short vittae on the hind lobe of the pronotum identify this small species. Recorded by Barber and Wolcott.

5. *Empicoris barberi* (McAtee and Malloch)—An endemic species originally described in *Ploiariodes*. The circular hyaline minute spots on the forewing identify this species. Recorded by Barber and Wolcott.

6. *Empicoris rubromaculatus* (Blackburn)—a cosmopolitan species with a long list of synonyms. As the trivial name suggests, a reddish pterostigma helps to identify it. Recorded by Barber and Wolcott. (fig. 8 and 9).

7. *Ghilianella borincana* Maldonado (4)—Known only from Puerto Rico. Described from Villalba and Aibonito. Apparently a mountain species. Barber's specimen of *G. longula* McAtee and Malloch was declared a paratype of *G. borincana*. Most probably *G. longula* does not occur in Puerto Rico. The members of this large genus are apterous, blackish, very slender, and can be separated from others in their tribe by the armature of the forefemur (fig. 10). The species in this genus should be identified with the help of a monographic paper such as Wygodzinsky's (12).

8. *Ghilianella monense* Maldonado—Described from Mona Island in my papers of 1953 (5) (the male), and 1960 (6) (the female). It differs from all other species in the genus by having the basal half of abdominal sterna covered with golden scales.

9. *Ghilianella varicornis* (Dohrn)—An endemic species. Can be collected from litter mostly in dry areas. I have specimens from Ponce to Salinas.

10. *Ploiaria albipennis* McAtee and Malloch—One specimen in my

<sup>3</sup> J. A. Santiago Blay, Department of Crop Protection, Agricultural Experiment Station, personal communication.

collection. Described from Mexico. Given as a new record in Additions. The characteristic forewing venation of this genus is illustrated in figure 11.

11. *Ploiaria maria* Maldonado (4)—An endemic species described from Ponce and Tortuguero in the same paper together with the next two species. Later collected at light in Rincón. Recorded by Wolcott.

12. *Ploiaria poncei* Maldonado—Endemic to the island. Closely allied to *P. gundlachi* from Cuba, recorded by Barber from Puerto Rico, but I believe *gundlachi* does not occur in Puerto Rico. My paper of 1948 has a short key to separate *gundlachi* from the three local species which I described. Recorded in Wolcott.

13. *Ploiaria yunqueensis* Maldonado—Endemic to the island. Found only in mountain areas. Recorded by Wolcott.

#### HARPACTORINAE

14. *Heza pulchripes* Stål—Endemic to Puerto Rico. Recorded by Barber and Wolcott. This genus has been monographed (7).

15. *Heza angulifer* Barber—An endemic species, recorded by Wolcott (fig. 12 and 13 are from Barber).

16. *Heza ornata* Maldonado—An endemic species described from El Yunque. Rafael Inglés (Crop Protection Department) collected one specimen at light near Arecibo (fig. 14).

17. *Sinea coronata* Stål—A female has been collected in a vacant lot south of Ponce. Some specimens in this genus are quite variable in shape, and in a few cases both sexes are needed for an exact identification. For this reason *S. coronata* and *S. diadema* records are tentative.

18. *Sinea diadema* (Fabricius)—A female from Cambalache Forest, near Arecibo, collected by Rafael Inglés. This species is the most common in the genus. A new record for the island (figs. 19, 20).

19. *Zelus longipes* (Linnaeus)—A very common species across the neotropical region. Its red and black warning coloration makes it conspicuous among the vegetation. Recorded by Barber and Wolcott. Ramos (10) records it from Mona Island (fig. 24).

20. *Zelus subimpressus* Stål—Described from Cuba. Also found in Hispaniola and Jamaica. Found all over the island, especially in the coastal areas. Recorded by Barber and Wolcott.

21. *Zelus puertoricensis* Hart, nomen nudum—A species described by E. R. Hart in his still unpublished revision of the genus. A paratype and a few other records in my collection. I also have one specimen from Cuba, a new record.

#### PIRATINAE

22. *Rasahus biguttatus* (Say)—Although relatively abundant elsewhere, it is uncommon in Puerto Rico. A blackish species, about 1.6 cm long,

with a large orange yellow ocellate spot on the membrane. Collected in Río Piedras and Yabucoa. Reported by Barber and Wolcott (fig. 26).

## REDUVIINAE

23. *Peregrinator biannulipes* Montrouzier—J. A. Ramos reared adults from nymphs collected in Mayagüez. About 5 mm long, a gray and black species. It is the only species in the genus and with a worldwide distribution. Recorded by Wolcott (fig. 25).

## STENOPODAINAE

24. *Diaditus nocturnus* Hussey—Probably very recently introduced in Puerto Rico. About a dozen specimens were collected in a light trap by Edwin Abreu (Crop Protection Department) in the Isabela Agricultural Experiment Substation. A new record for the island. The genus was monographed by Giacchi (3). Most members of this subfamily can be identified with Barber's monograph (1).

25. *Narvesus minor* Barber. The records for *N. caroliniensis* are probably *N. minor*. Records from Luquillo Mountains and Gurabo. Specimens from Vieques in my collection.

26. *Pnirontis infirma* Stål—A common species found from southern United States to Brazil. Recorded by Barber and Wolcott (fig. 21 and 22).

27. *Pygolampis pectoralis* (Say)—An uncommon species in Puerto Rico. Collected at light in Gurabo. A new record (fig. 15).

28. *Stenopoda cinerea* Laporte—A widely distributed species in the Antilles, United States, Central and northern South America. Recorded by Barber and Wolcott (fig. 16).

## SAICINAE

29. *Tagalis inornata cubensis* McAtee and Malloch—A delicate species, 3–4 mm long, and light brown. Specimens in my collection from Tortuguero, Carolina, and Gurabo. Given as a new record and misspelled as *Tagalia* in Additions. Figures 17 and 18.

30. *Tagalis* n. sp.—A blackish new species collected in my backyard at Cayey by Eduardo Barreras, a visiting Mexican entomologist. I am revising the genus.

31. *Oncerostrachelus* sp.—A specimen in my collection given as a new record in Additions. For lack of a monographic paper, most species in this neotropical genus cannot be identified with certainty. The genus contains 10 species. Figure 23 illustrates *O. cubanus* from Jamaican specimens.

## RESUMEN

Se informan 31 especies de reduviidos en Puerto Rico. De éstas, 12 son endémicas y 7 representan registros nuevos en la isla. Las especies están distribuidas en 7 subfamilias. Más de 20 de estas especies se han capturado en lámparas trampa. Se informa que, al menos, mientras buscan sus víctimas, *Tagalis* sp. y *Ghilianella varicornis* pueden estar en el suelo y encontrárseles rebuscando con cuidado entre la hojarasca. No se encuentran en Puerto Rico las especies *Ploiaria gundlachi* y *Ghilianella longula*, tal como lo señaló Barber.

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