

STINK BUGS (HETEROPTERA: PENTATOMIDAE) OF THE ISLAND OF HISPANIOLA, WITH SEVEN NEW SPECIES FROM THE DOMINICAN REPUBLIC

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Abstract: A faunal survey of the Hispaniolan stinkbugs (Pentatomidae) is presented based on the study of a recent sample of approximately 800 specimens representing 55 species collected throughout the Dominican Republic. Additionally, approximately 700 specimens were examined from museums with significant holdings of Dominican material. One genus and seven species are described as new: *Antilloosciocoris palisoti*, n. gen., n. sp., *Banasa flavosa* n. sp., *Banasa punctata*, n. sp., *Mediocampus perezii* n. sp., *Mediocampus woodruffii* n. sp., *Oebalus magnus* n. sp. and *Edessa rawlini* n. sp. The males of *Mediocampus dominicanus* Thomas and *Acrosternum insulani* Rolston are described for the first time. The species *Podisus mucronatus* Uhler, *Acrosternum wygodzinskyi* Rolston, *Arvelius porrectispinus* Breddin, *Banasa herbacea* (Stål), *Banasa punctatissima* Barber & Bruner, *Mecidea longula* Stål, *Murgantia varicolor* (Westwood), *Thyanta testacea* (Dallas), *Menudo femoralis* Thomas, *Brepholoxa heidemanni* Van Duzee, *Edessa chlorophylla* Barber & Bruner, and *Vulsirea violacea* (Fabricius) are newly recorded for the island of Hispaniola. *Piezodorus guildinii* (Westwood), *Stiretrus quinquepunctatus* (Germar), and *Fecelia biorbis* Eger, previously known from Haiti, are newly recorded from the Dominican Republic. A single specimen of an exotic species, *Chroantha ornatula* (Herrich-Schaeffer), is reported as a possible introduction of a mediterranean species to the island. The species *Edessa rufomarginata* (De Geer), *Arvelius crassispinus* Breddin, *Antiteuchus piceus* (Palisot de Beauvois), and *Euschistus ictericus* (Linnaeus) which have previously been cited as found in the island, are treated as species of doubtful presence. The total number of species known from Hispaniola is raised to 77.

Key words: Stinkbugs, pentatomids, faunal inventory, Dominican Republic, Haiti, Greater Antilles, West Indies.

Taxonomy:

Antilloosciocoris Thomas, gen. n.
Antilloosciocoris palisoti Thomas, sp. n.
Banasa flavosa Thomas, sp. n.
Banasa punctata Thomas, sp. n.
Edessa rawlini Thomas, sp. n.
Mediocampus perezii Thomas, sp. n.
Mediocampus woodruffii Thomas, sp. n.
Oebalus magnus Thomas, sp. n.

Pentatómidos (Heteroptera: Pentatomidae) de la Española, con la descripción de siete nuevas especies de la República Dominicana

Resumen: Se presenta un inventario de la fauna de "hiedevivos" (Pentatomidae) de la isla de la Española basado en el estudio de una muestra recientemente recolectada en la República Dominicana de alrededor de 800 especímenes pertenecientes a 55 especies. Adicionalmente, se han examinado aproximadamente 700 especímenes depositados en museos con colecciones significativas de material dominicano. Se describen un género y siete especies nuevas: *Antilloosciocoris palisoti* n. gen., n. sp., *Banasa flavosa* n. sp., *Banasa punctata* n. sp., *Mediocampus perezii* n. sp., *Mediocampus woodruffii* n. sp., *Oebalus magnus* n. sp. y *Edessa rawlini* n. sp. Se describen por primera vez los machos de *Mediocampus dominicanus* Thomas y *Acrosternum insulani* Rolston y se citan por primera vez para la isla, *Podisus mucronatus* Uhler, *Acrosternum wygodzinskyi* Rolston, *Arvelius porrectispinus* Breddin, *Banasa herbacea* (Stål), *Banasa punctatissima* Barber & Bruner, *Mecidea longula* Stål, *Murgantia varicolor* (Westwood), *Thyanta testacea* (Dallas), *Menudo femoralis* Thomas, *Brepholoxa heidemanni* Van Duzee, *Edessa chlorophylla* Barber & Bruner y *Vulsirea violacea* (Fabricius). *Piezodorus guildinii* (Westwood), *Stiretrus quinquepunctatus* (Germar) y *Fecelia biorbis* Eger, previamente conocidas de Haití, se registran por primera vez para la República Dominicana. Se reporta un ejemplar de una especie exótica, *Chroantha ornatula* (Herrich-Schaeffer), que supone una posible introducción de esta especie mediterránea en la isla. Las especies *Edessa rufomarginata* (De Geer), *Arvelius crassispinus* Breddin, *Antiteuchus piceus* (Palisot de Beauvois), and *Euschistus ictericus* (Linnaeus) las cuales han sido citadas previamente como encontradas en la isla, son tratadas como especies de presencia dudosa. El número total de especies conocidas de la isla de la Hispaniola se incrementa hasta 77.

Palabras clave: Hiedevivos, pentatómidos, inventario faunístico, República Dominicana, Haití, Antillas Mayores, Indias Occidentales.

Taxonomía:

Antilloosciocoris Thomas, gen. n.
Antilloosciocoris palisoti Thomas, sp. n.
Banasa flavosa Thomas, sp. n.
Banasa punctata Thomas, sp. n.
Edessa rawlini Thomas, sp. n.
Mediocampus perezii Thomas, sp. n.
Mediocampus woodruffii Thomas, sp. n.
Oebalus magnus Thomas, sp. n.



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Fig. 1. Juxtaposition of Hispaniola in the Caribbean Islands.
Fig. 2. Palisot de Beauvois.



2 *Palisot de Beauvois*

Introduction

Hispaniola is the second largest island among those of the Greater Antilles with approximately 78,000 km². It is centrally located in the Caribbean basin just under the Tropic of Cancer and within parallels 17° 40' and 19° 56' North latitude and 68° 20' and 72° 01' West longitude (Fig. 1). This natural geographic unit is politically divided into two different countries, Haiti occupying the western one third and the Dominican Republic on the eastern two thirds. Great physiographic variability of its terrain, punctuated by the highest and most extensive mountain systems in the West Indies have endowed this island with a great variety of ecosystems. Modern Hispaniola was formed by several independent terranes or paleoislands that consolidated in the Miocene. When brought together, their previously separated and different faunas increased the total biological diversity of its territory. The flora of Hispaniola includes some 5,600 species and species endemism has been estimated at around 36% (Liogier, 1976). This plant richness is spread throughout diverse wet and dry forests that create varied ecosystems. Many areas of this insular environment have been significantly altered by agriculture, introduction of exotic plant and animal species, and urbanization.

The insect fauna of the island of Hispaniola is the least known of the Greater Antilles. Approximately 4,500 insect species appear to have been recorded from the island (Perez-Gelabert, in preparation). Through review of the literature we have found that 54 species of stinkbugs were previously recorded for Hispaniola. This relatively high number is due to generic revisions with descriptions of nearly twenty species from the island in recent decades. The purpose of this work is to review the Hispaniolan fauna as a whole based on the study of a collection of nearly 1500 specimens. One genus and seven species are described as new to science and 11 species are cited for the first time for the island. The total number of Pentatomidae species known from Hispaniola is here increased to 77. From this total, 12 (15%) species are considered endemic.

Known in the Dominican Republic by the very descriptive name of "hiedevivos" (meaning live stinkers as opposed to stinking after death), stinkbugs are mostly phytophagous insects that use piercing – sucking mouthparts to feed on plant juices. Their strong repugnatory odor is due to

volatile defensive secretions produced by a pair of specialized glands on the metathorax. Because of their ample food preferences many species have agricultural importance. The nymphs and adults of many species can become important pests that suck the sap from pods, seeds, or fruits, damaging their development. Damage to plants may also occur through the mechanical transmission of microorganisms. On the other hand, and adding to their interest, stinkbug members of the subfamily Asopinae are considered beneficial predators with potential for biological control of several agricultural pests, as they feed on the adult and larval stages of other insects, particularly Coleoptera and Lepidoptera.

Despite their importance, West Indian species of stinkbugs are poorly studied. The acquisition of knowledge on the stinkbug fauna of Hispaniola parallels the development of entomological research in the West Indies as a whole. Taxonomic descriptions of species in the islands started appearing in the literature in the early 1800s, mostly as part of studies of wider geographic coverage produced by European pioneers of entomology. The most important of these, from the stand point of the island of Hispaniola, was the publication of the "Insectes Recueillis en Afrique et en Amérique," by the 18th century naturalist, Palisot de Beauvois.

Palisot de Beauvois

Ambroise Marie Francois Joseph Palisot, Baron de Beauvois (1752-1820) (Fig. 2), made collections of insects "within the realms of Oware, Benin, Saint Domingue, and the United States" during the years 1786 – 1797" [complete translation of the title, see literature cited]. Among these insects were 43 species of stink bugs (excluding Scutelleridae); three assigned erroneously to previously named species, and 40 described as new, the great majority of them from "Saint-Domingue" (Hispaniola). Of the new species, 38 were placed in the genus *Pentatoma*, one in the genus *Halys* and one in the genus *Scutellera*. However, of those described in *Pentatoma*, three were actually Cydnidae and one a Dinidoridae, leaving only 34 in the family Pentatomidae. Of the 39 Pentatomidae, 23 were cited from "Saint-Domingue," 14 were from Africa, one from the United

States, and one species was described without an indication of the origin. Of the 43 total species, researchers have been able to associate valid names with 38, five remaining undetermined as to species and of uncertain origin. All five were cited by Palisot from "Saint-Domingue," but based on our knowledge of the Dominican fauna, our impression from the illustrations is that most if not all are not from there. The problem is that many of the species that Palisot attributed to "Amérique" were actually collected in "Afrique," and vice versa. As the following list shows, of the 17 species attributed to an African origin, five are actually New World insects. Of the 23 species attributed to "Saint-Domingue," three are actually African insects. A further complication is that one of the species described by Palisot from Africa, *Pentatoma furcata*, now recognized as a New World insect, *Edessa rufomarginata* (De Geer), does not occur in the West Indies much less Hispaniola (Ely e Silva *et al.* 2004). This is also the case with *Euschistus variolarius* (Palisot), *Brochymena quadripustulata* (F.), *Mormidea lugens* (F.), and *Antiteuchus piceus* (Palisot). At least the aforementioned *M. lugens*, *E. variolarius*, and *B. quadripustulata*, do occur in Pennsylvania where Palisot was resident for a time. But *E. rufomarginata* and *A. piceus* occur only on the neotropical mainland, where, as far as is known, Palisot did not travel. Similarly, two of the species recorded from Oware, *Agonoscelis nubilis* (F.) and *Pentatoma rufipes* (L.), though Old World in distribution, do not occur in Nigeria, according to Linnavuori (1982).

Especially vexing is the situation with regards to the genus *Proxys* Spinola. Two of the species described by Palisot are clearly recognizable in his sketches as members of this genus, and there are in fact two species of *Proxys* on Hispaniola. However, the two species that occur on Hispaniola are *Proxys punctulatus* (Palisot) and *Proxys victor* (F.), neither one of which was recorded by Palisot for "Saint Domingue." Of the two species that Palisot described, *P. punctulatus* occurs in the southern U.S. and throughout the Antilles but was the one species for which an origin was not cited, and the other, *P. albopunctulatus*, is a South American species which does not occur in the Antilles unless one includes Trinidad (Fennah, 1935).

Details of Palisot's travels are provided by Chase (1925) and Merrill (1937), among others, and can be briefly summarized here, by way of explaining why uncertainty exists as to the origin of his material. Born in France, Palisot was trained as a lawyer but pursued postgraduate studies in botany under Lestiboudois in Lille and Jussieu in Paris. He left France in the year 1786 with an expedition to found a colony at Oware (or Owerri) at the mouth of the Niger River in what is today Nigeria. Palisot assembled material from there with some collections from the neighboring country of Benin. From time to time Palisot sent specimens back to France, but the bulk of his collections were destroyed when the British pillaged the colony and set fire to the trading post where his material was stored. An outbreak of Yellow Fever ravaged the colonists and Palisot became so ill with the disease that in 1788 his friends placed him on a slave ship bound for Haiti where he had an uncle. The uncle's house was in Cape Francais, and there Palisot recuperated and resumed his botanical and entomological collecting, on occasion sending specimens back to France. Yet again disaster struck when in 1793 the slaves revolted and

burned the town including his uncle's house where his collections were stored. Palisot was imprisoned, but through the intercession of a mulatto woman he was freed under order of deportation. Because of the French revolution and his former status in the nobility as the Baron de Beauvois, Palisot was unable to return to France without risking the guillotine. Instead he boarded a ship bound for the United States but en route was relieved of his remaining belongings by pirates and thus he arrived in Philadelphia penniless and bereft. He was able to make a living by joining a circus as a musician, but eventually returned to work as a botanist, hired to curate the private collection of C.W. Peale. In Philadelphia he became a member of the American Philosophical Society, published in its Transactions, and resumed his natural history collecting with the financial support of the French Attaché, Paul Adet, a scientist in his own right. Palisot's collecting forays in the United States ranged as far west as the Ohio River and as far south as Savannah, Georgia. When finally notified by colleagues in Paris that his citizenship had been restored, Palisot began making plans for his return to Europe, including arrangements for the shipment of his specimens. Unfortunately, these collections were lost when the ship carrying them sank off the coast of Nova Scotia in 1798. He left the United States that same year and returned to his native France.

Based on the material that had survived prior shipments, but mainly on his sketches, Palisot published works on plants and insects, the latter in a series of 15 booklets (livraisons) issued between 1805 and 1821, the last issued one year after his death. Griffin (1932, 1937) and Menke (1962) provide the dates of issue for each individual livraison. Each livraison included five to six plates, each with illustrations of six or nine of the insects described in the text, and it is on these sketches rather than actual specimens that Palisot's species are recognized.

Few of Palisot's specimens are extant. His botanical collection was sent from Paris to the herbarium of the Jardin Botanique at Geneva, Switzerland (Merrill 1937). The latter author also reports that the herbarium at the Philadelphia Academy of Natural Sciences has sheets that are marked "Beauv." But these are plants native to India, a place never visited by Palisot. Hence, Palisot must have received specimens collected by others, and this could help explain the mysterious origin of some of his insect material as well. According to Horn & Kahle (1937) some of Palisot's beetle specimens, specifically the Elaterids, were sent by Dejean to Godman and Salvin at the British Museum of Natural History for inclusion in the *Biologia Centrali-Americana*. Other specimens were sent by Chevrolat to Neervoort Van de Poll. Van de Poll's collection was eventually bequeathed to the BMNH as well. Nonetheless, in a week's study of pentatomid material at the BMNH, I found none of Palisot's hemipteran material. Inquiries at the Muséum national d'Histoire Naturelle in Paris have also been negative. In the event that Palisot's specimens should be discovered, it is likely that his names would be synonyms or homonyms of known species and under the International Code of Zoological Nomenclature Rule 23.9, they would fall under the criteria for *nomina oblita*.

The following list cites the Pentatomids that appear in Palisot's booklets, the origin of each species according to Palisot and its modern identity, if determined, and the au-

hority for that identification. Following each, the actual distribution as New World [N] or Old World [O] is indicated by abbreviation.

Pentatomidae of Palisot de Beauvois

- Scutellera dubia* Palisot 1805. Saint-Domingue. Livraison 2, p. 33, Pl. V, fig. 6.
= *Amaurochrous dubius* (Palisot): Stål (1872). [N].
- Pentatoma furcata* Palisot 1806. Oware. Livraison 3, p. 46, Pl. VI, figs. 1-2.
= *Edessa rufomarginata* (De Geer): Ely e Silva *et al.* (2004). [N].
- Pentatoma tenebraria* Palisot 1806. Oware. Livraison 3, p. 46, Pl. VI, figs. 3-4.
= *Piezosternum calidum* (F.): Stål (1876). [O].
- Pentatoma mucronata* Palisot 1806. Oware. Livraison 3, p. 46, Pl. VI, figs 5-6.
= *Piezosternum subulatum* (Thunberg): Stål (1876). [N].
- Pentatoma buonopoziensis* Palisot 1807. Oware. Livraison 5, p. 82, Pl. VII, fig. 2.
= *Bathycoelia buonopoziensis* (Palisot): Amyot & Serville (1843). [O].
- Pentatoma variegata* Palisot 1807. Oware. Livraison 5, p. 82, Pl. VII, fig. 3.
= *Coenomorpha variegata* (Palisot): Kirkaldy (1909). [O].
- Pentatoma nigroviolacea* Palisot 1807. Benin. Livraison 5, p. 83, Pl. VII, fig. 4.
= *Coridius viduatus* (Fabricius) (Dinidoridae): Stål (1876) [O].
- Pentatoma spinulosa* Palisot 1807. Oware. Livraison 5, p. 83, Pl. VII, fig. 5.
= *Pseudatelus spinulosa* (Palisot): Linnavuori (1982). [O].
- Pentatoma punctata* Palisot 1807. Oware. Livraison 5, p. 84, Pl. VII, fig. 6.
= *Lerida punctata* (Palisot): Linnavuori (1982). [O].
- Pentatoma viridis* Palisot 1811. Oware. Livraison 7, p. 111, Pl. VIII, fig. 1.
= *Loxa viridis* (Palisot): Stål (1872). [N].
- Pentatoma discolor* Palisot 1811. Oware. Livraison 7, p.112, Pl. VIII, fig 3.
= *Canthecona discolor* (Palisot): Amyot & Serville (1843). [O].
- Pentatoma 17-maculata* Palisot 1811. Oware. Livraison 7, p. 112, Pl. VIII, fig. 4.
= *Platynopiellus septendecimmaculatus* (Palisot): Thomas (1994). [O].
- Pentatoma phymatophora* Palisot 1811. Saint-Domingue. Livraison 7, p. 112, Pl. VIII, fig. 2.= *Alcaeorrhynchus phymatophorus* (Palisot): Schouteden (1907).[N].
- Pentatoma elegans* Palisot 1811. Oware. Livraison 7, p. 113, pl. VIII, fig. 5.
= *Stenozygum alienatum* (F): Kirkaldy (1909). [O].
- Pentatoma punctipes* Palisot 1811. Oware. Livraison 7, p. 113, pl. VIII, fig. 6.
= *Mormidea lugens* (F.): Stål (1872). [N].
- Pentatoma cincta* Palisot 1811. Benin. Livraison 7, p. 114, Pl. VIII, fig. 7.
= *Sehirus cinctus* (Palisot) (Cydnidae): Amyot & Serville (1843). [N].
- Pentatoma versicolor* Palisot 1811. Oware. Livraison 7, p. 114, Pl. VIII, fig. 8.
= *Menida versicolor* (Palisot): Kirkaldy (1909). [O].
- Pentatoma hirtipes* Palisot 1811. Oware. Livraison 7, p. 114, Pl. VIII, fig. 9.
= *Fromundus hirtipes* (Palisot) (Cydnidae): Lis (1994). [O].
- Pentatoma gladiator* (F.) Saint-Domingue. Livraison 8, p. 127, Pl. IX, fig. 1.
= *Arvelius albopunctatus* (De Geer): Amyot & Serville (1843). [N].
- Pentatoma didyma* Palisot 1811. Saint-Domingue. Livraison 8, p. 128, Pl. IX, fig. 2.
= *Podisus sagitta* (F.): Stål (1872). [N].
- Pentatoma stigmatica* Palisot 1811. Saint-Domingue. Livraison 8, p. 128, Pl. IX, fig. 3.
= *Rhaphigaster nebulosa* (Poda): Kirkaldy (1909). [O].
- Pentatoma semimarginata* Palisot 1811. Saint-Domingue. Livraison 8, p. 129, Pl. IX, fig. 4.
= no determination. [homonym of *P. semimarginata* Westwood 1837].
- Pentatoma grata* Palisot 1811. Saint-Domingue. Livraison 8, p. 129, Pl. IX, fig. 5.
= *Agonoscelis nubilis* (F): Kirkaldy (1909). [O].
- Pentatoma torrida* Palisot 1811. Saint-Domingue. Livraison 8, p. 129, Pl. IX, fig. 6.
= no determination.
- Pentatoma viridiaenea* Palisot 1811. Saint-Domingue & South Carolina. Livraison 8, p. 130, Pl. IX, fig. 7.
= *Pentatoma rufipes* (L.): Kirkaldy (1909). [O].
- Pentatoma albopunctulata* Palisot 1811. Saint-Domingue. Livraison 8, p. 130, Pl. IX, fig. 8.
= *Proxys albopunctulatus* (Palisot): Stål (1872). [N].
- Pentatoma orthacantha* Palisot 1811. Saint-Domingue. Livraison 8, p. 130, Pl. IX, fig. 9.
= *Oebalus pugnax* (F.): Stål (1872). [N].
- Pentatoma marginata* Palisot 1817. Saint-Domingue. Livraison 9, p. 147, Pl. X, fig. 1.
= *Acrosternum marginatum* (Palisot): Kirkaldy (1909). [N].
- Pentatoma chloris* Palisot 1817. Saint-Domingue. Livraison 9, p. 148, Pl. X, fig. 2.
= no determination. [homonym of *P. chloris* Westwood 1837].
- Pentatoma picea* Palisot 1817. Saint-Domingue. Livraison 9, p. 148, Pl. X, fig. 3.
= *Antiteuchus piceus* (Palisot): Ruckes (1964). [N].
- Pentatoma cruenta* Palisot 1817. Saint-Domingue. Livraison 9, p. 148, Pl. X, fig. 4.
= no determination.
- Pentatoma bifibula* Palisot 1817. Saint-Domingue. Livraison 9, p. 148, Pl. X, fig. 5.
= *Euschistus bifibulus* (Palisot): Dallas (1851). [N].
- Pentatoma variolaria* Palisot 1817. Saint-Domingue. Livraison 9, p. 149, Pl. X, fig. 6.
= *Euschistus variolaris* (Palisot): Stål (1872). [N].
- Pentatoma obscura* Palisot 1817. Saint-Domingue. Livraison 9, p. 149, Pl. X, fig. 7.
= *Euschistus crenator* (F.); fig. 9 = *Euschistus obscurus*: Dallas (1851). [N].
- Pentatoma fascifera* Palisot 1817. Saint-Domingue. Livraison 9, p. 150, Pl. X, fig. 8.
= *Thyanta perditor* (F.): Stål (1872). [N].
- Pentatoma octopunctata* Palisot 1818, Saint-Domingue. Livraison 11, p. 184, Pl. XI, fig. 1.
= no determination.
- Pentatoma pustulata* Palisot 1818, Saint-Domingue. Livraison 11, p. 185, Pl. XI, fig. 2.
= *Euschistus crenator* (F.): Stål (1872). [N].
- Pentatoma rubro-fusca* Palisot 1818. Saint-Domingue. Livraison 11, p. 185, Pl. XI, fig. 3.
= *Euschistus ictericus* (L.): Kirkaldy (1909). [N].
- Pentatoma flavicollis* Palisot 1818 (*flavicornis* on plate). Saint-Domingue. Livraison 11, p. 185, Pl. XI, fig. 5.
= *Nezara viridula* (L.): Stål (1872). [O & N].
- Pentatoma pensylvanica* (De Geer). États-Unis d'Amérique. Livraison 11, p. 186, Pl. XI, fig. 6.
= *Acrosternum pensylvanicum* (De Geer): Kirkaldy (1909). [N].
- Pentatoma ciliata* Palisot 1818. États-Unis d'Amérique. Livraison 11, p. 186, Pl. XI, fig. 9.
= *Cyrtomenus ciliatus* (Palisot): Froeschner (1960) [Cydnidae]. [N].

Halys serrata F. Oware & Benin. Livraison 11, p. 188, Pl. XI, fig. 4.
= *Brochymena quadripustulata* (F.): Stål (1872). [N].
Halys punctulata Palisot 1818. No locality cited. Livraison 11, p. 188, Pl. XI, fig. 7.
= *Proxys punctulatus* (Palisot): Stål (1872). [N].

Literature on Antillean Pentatomidae

Following Palisot, the next important faunal work in the Antilles was Sagra's "Physical, Political and Natural History of the Island of Cuba" [our translation] published in 1857. The Hemiptera were covered in vol. VII, authored by Felix Guérin-Ménéville. Guérin-Ménéville listed 18 species of pentatomids for Cuba, three described as new. The early Cuban naturalists Juan Gundlach and Felipe Poey made extensive collections on the island, the results of which were published by Pedro Valdés in 1910. That listing contained 34 species of Pentatomids. A note in the introduction of the work indicates that Gundlach's specimens were identified by the American hemipterist, P.R. Uhler. Uhler also published lists for the islands of St. Vincent (1893) and Grenada (1894). E.P. Van Duzee (1907) published notes on the stink bugs of Jamaica, and D. Stoner (1922) enumerated the stink bugs collected on an expedition to Barbados and Antigua.

During the 1920's and 30's the Scientific Survey of Puerto Rico and the Virgin Islands (Barber 1939), provided the first modern faunal inventories of the West Indies. Barber & Bruner (1932) and Bruner & Barber (1949) followed with important faunistic works on the stinkbugs of Cuba. Ruckes (1952) listed the Scutelleroid Hemiptera of the Bahamas. Building on these and other studies, Wolcott (1948) updated the information on the Pentatomidae of Puerto Rico and Alayo (1967) catalogued (and illustrated) the Pentatomid fauna of Cuba. The most recent faunal survey is the checklist of insects on Grenada and the Grenadines by Woodruff *et al.* (1998).

Since Palisot, the pentatomids of Hispaniola have been studied and described only as part of revisions of New World genera. Among non-taxonomic studies on pentatomids are the works of Liang (1966a, b), who reported on ecological aspects and on the field chemical control of the rice stinkbug *Oebalus ornatus*. The bachelor's thesis and reports of Reynoso (1982, 1983, 1984, and 1985a, b) in Dominican Republic were published as conference abstracts. His studies focused on characterizing the biological cycle and morphology of several well-known species of economic importance. The unpublished thesis study of Rodríguez (1980) in Santo Domingo focused on the biology of *Nezara viridula*.

Material and Methods

For this survey, approximately 800 specimens were captured by a team of three collectors during the period 2002 – 2004 in diurnal and nocturnal forays throughout the Dominican Republic. The Provinces of the Dominican Republic are shown in Figure 3 and the localities where new species were discovered are plotted in Figure 4. Collections were done by hand and by using a sweep net or stink bug net (sometimes referred to as a butterfly net). Other specimens were also taken when attracted to a UV lighted sheet. The

collection of specimens assembled by the first author will be shared between the National Museum of Natural History, Washington, DC (USNM), the Museo Nacional de Historia Natural, Santo Domingo (MHND) and the Instituto de Investigaciones Zoológicas y Botánicas (IIZB) of the Universidad Autónoma de Santo Domingo, Santo Domingo, Dominican Republic. A smaller group of about 100 specimens collected in Dominican Republic by Thomas Henry and Robert Woodruff in 2000 was borrowed from the USNM collection. The private collection of Joseph E. Eger, Tampa FL, contained rare and valuable specimens that were sent for inclusion. Specimens from institutions with holdings from Hispaniola were made available for our study through their respective curators including: the Florida State Collection of Arthropods (FSCA) [191 specimens], the Carnegie Museum of Natural History (CMNH) (390 specimens), and the Museo Nacional de Historia Natural, Santo Domingo (MNHD) [96 specimens]. Paratypes were distributed to most of these as well as the private collections of the junior author (DBTC) and Joseph E. Eger (JEEC). Acronyms for collections follow Arnett *et al.* (1993).

Under the descriptions of new species, measurements of specimens provided in the text are from the holotypes unless otherwise stated and were made with a graduated ocular on a dissecting microscope. Illustrations of genitalia were tracings made with the aid of a camera lucida. The scale bars in the plates represents 1 mm. Dried specimens were prepared for dissection by immersion in near scalding water for one hour (it is recommended that labels be removed first). The male genital cup (pygophore) was removed from the insect and immersed in 20% potassium hydroxide (KOH) solution overnight at room temperature prior to dissection. The spermatheca was dissected from females by removal of the entire abdomen followed by immersion overnight in the KOH solution. The female abdomen was glued, using clear finger nail polish, to a small card pinned below the specimen. Dissected spermathecae from the females and the pygophore and its contents from the males were preserved in a microvial with glycerine which was then pinned beneath the body of the corresponding specimen.

Species Accounts

Family PENTATOMIDAE

Subfamily ASOPINAE

Alcaeorrhynchus phymatophorus (Palisot de Beauvois)

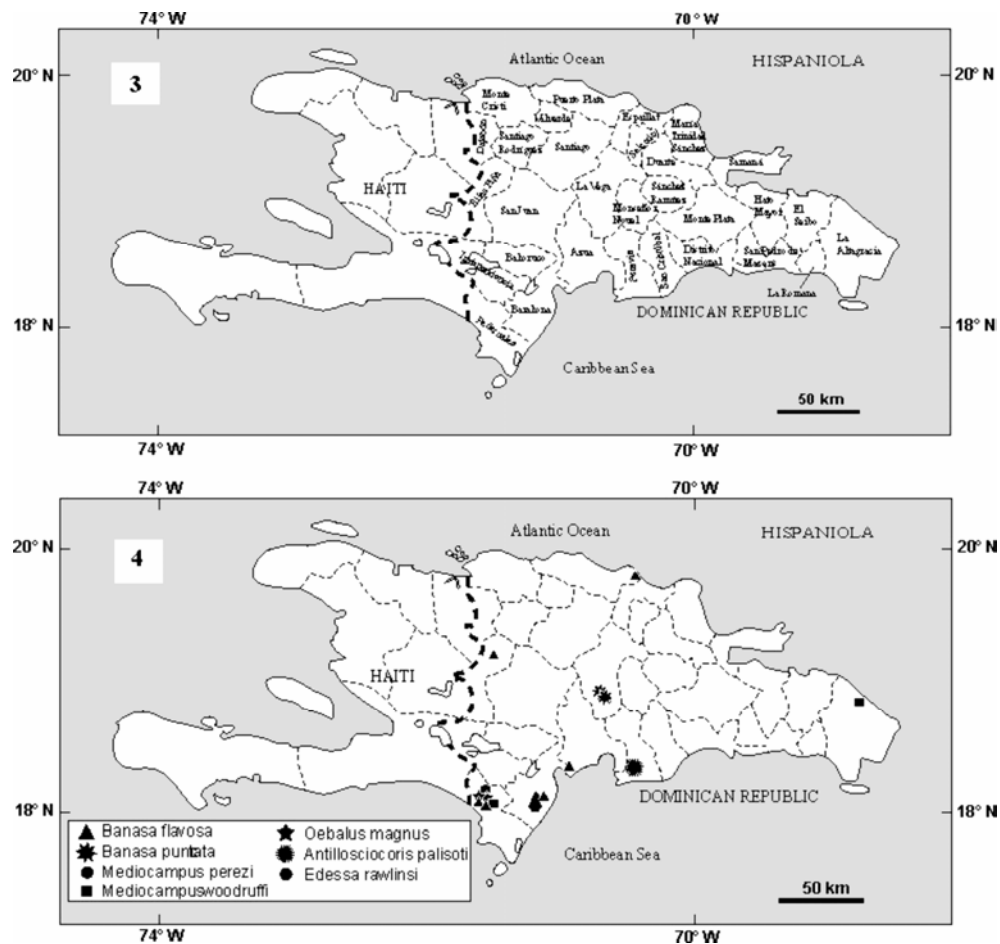
Pentatoma phymatophora Palisot de Beauvois, 1811. Insectes recueillis en Afrique et en Amérique, Pt. 7, p. 112.

REMARKS. This is a large species endemic to the Caribbean Islands and originally described from Hispaniola. It differs from the only other species in the genus, *A. grandis*, by the form of the humeral angles which project laterally rather than forward.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 7 ♂♂ RD-241 Entrance to Boca Vieja Marina, near Biyeya beach, Azua prov., 23.iv.2004, D. Perez, B. Hierro. (n) [night, at UV light] [USNM, MHND and IIZB]. 1 ♂, 3 ♀♀ Pedernales Prov., Cabo Rojo, Alcoa, 30-VI-98, R.E. Woodruff & R.M. Baranowski, blacklight trap [FSCA]. 1 ♂ La Altagracia Prov. Punta Cana, 24 viii 1980, K. Will & C. Chaboo [UCB].

DISTRIBUTION. Dominican Republic, Haiti, Puerto Rico, Cuba, Florida Keys.

Fig. 3-4. Hispaniola: 3. Provinces of the Dominican Republic. 4. Localities where new taxa were collected.



Andrallus spinidens (Fabricius)

Cimex spinidens Fabricius, 1787, Mantissa Insectorum, vol. II, p. 285.

REMARKS. A pan-tropical predator associated with rice fields. It is pale brown with pale stripes on the midline of the thorax and sides of the corium. The life history is described by Manley (1982). In Florida, it has been reported preying on larvae of a species of Noctuidae, *Mocis latipes* (Guenée) in sugarcane (Mead & Eger 1992).

MATERIAL EXAMINED. 1 ♂ Port au Prince, Haiti, M.L. Rockwell Coll. [no date]. Barber & Bruner (1932) reported specimens in the USNM from “Santo Domingo.”

DISTRIBUTION. Dominican Republic, Haiti, Puerto Rico, United States, Mexico, Guatemala, El Salvador, Honduras, Costa Rica, Panama, Ecuador, Brazil, Bolivia.

Podisus maculiventris (Say)

Pentatoma maculiventris Say, 1831. Descriptions of new species of Heteropterous Hemiptera of North America, p. 11.

REMARKS. This species is much more abundant on the continent where it is an important predator of the Mexican bean beetle (Waddill & Shepard 1975). Females have a large spot on the last ventral sternite (accounting for the latin name) and both genders have acutely produced humeral angles, accounting for the common name, spined soldier bug.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ RD-166 La Travesía, Eastern Sierra de Bahoruco, Barahona Prov., near Larimar mine, 18°07.163'N 71°08.505'W, 850 m, 29.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [USNM]; 1♂ 1♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [IIZB]; 1♀ RD-218 1 km ESE Cortico, Barahona prov., 1,347 m, 18°06.520'N 71°12.898'W,

9-10.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1♀ RD-246 Road Rincón de Piedra – Mata Grande, near bridge on Bao river, Santiago prov., 770 m, 19°12.822'N 70°57.709'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM]; 1♀ RD-266 Las Abejas, P N Sierra de Bahoruco, Pedernales prov., 1,310 m, 18°09.011'N 71°37.342'W, 11.vii.2004, D. Perez (d/n) [day/night] [USNM]; 1♂ 1♀ RD-275 La Ciénaga – Los Tablones, P N Armando Bermúdez, La Vega prov., 19°04.044'N 70°51.789'W, 1,100 – 1,270m, 17.vii.2004, D. Perez (d) [day] [MHND]; La Vega Prov., 4 km E. of La Ciénaga de Manabao, 3050 ft., 19°04'47"N 70°49'29"W, 19-21 April 2000, T.J. Henry & R.E. Woodruff [USNM]. 1♀ Pr. La Vega, La Ciénaga de Manabao, 3-5-VII-99, 3000 ft elev. R.E. Woodruff, blacklight [FSCA].

DISTRIBUTION. Canada, United States, Mexico, Bahamas, Haiti, Dominican Republic.

Podisus mucronatus Uhler

Podisus mucronatus Uhler, 1897 Canadian Entomologist 29: 386.

REMARKS. This Caribbean species was originally described from Cuba and Florida and reported from Puerto Rico by Barber (1939). A figure of the bug was published by Alayo (1967). It is easily distinguished by the forwardly directed humeral spines and mildly inflated anterolateral pronotal margins.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ RD-187 Near Uvero, Rd. to Playa Buen Hombre, Montecristi Prov., 200 m, 7.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day) [USNM]; 1♂ RD-241 Entrance to Boca Vieja Marina, near Biyeya beach, Azua prov., 23.iv.2004, D. Perez, B. Hierro. (n) [night, at UV light] [USNM]. 1♂, 1♀, Prov. Pedernales, Cabo Rojo, Alcoa, 1-VII-98, R.E. Woodruff / R.M. Baranowski, blacklight trap [FSCA].

DISTRIBUTION. Cuba, Puerto Rico, Dominican Republic, United States (Florida).

Podisus sagitta (Fabricius)

Cimex sagitta Fabricius, 1794, Entomologia systematica, v. 4, p. 99.

Pentatoma didyma Palisot de Beauvois, 1811. Insectes recueillis en Afrique et en Amérique, Pt. 8, p. 128.

REMARKS. This species is common throughout northern Latin America, and is easily recognized by the bifid humeral angles. The type locality is the West Indies. On Trinidad, Callan (1948) reported it preying on the tropical cabbage butterfly, *Ascia monuste* (L.) and in Puerto Rican cotton fields it feeds on larvae of *Alabama argillacea* Hubner (Wolcott 1948).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 1♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [MHND]; 1♂ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM]; 1♀ RD-203 Rd. El Seibo – Miches, El Seibo Prov., 18°55.435'N 69°07.065'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 2♂♂ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 1♂ 1♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [IIZB]; 1♂ RD-211 Upper Las Abejas, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,310 m, 6.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1♀ RD-222 2 km S road Rio San Juan - Nagua, near Rio Piedras, Espaillat prov., 41 m, 19°36.650'N 70°11.753'W, 15.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [MHND]; 1♀ RD-234 Cerro San Francisco, Bánica, Elias Piña prov., 366 m, 19°05.284'N 71°41.096'W, 21.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [USNM]; 1♀ La Altagracia Prov., Nisibon, Batey Papagayo, elev. 150 ft., 18°56'41"N 68°45'42"W, 4-8 April 2000, T.J. Henry & R.E. Woodruff, hand catch [NMNH]. 1♀ Prov. Barahona, nr. Filipinas, Larimar Mine, 6-11-VII-1993. R.E. Woodruff, blacklight trap [FSCA]. 1♂ Monseñor Nouel, Bonaio, Presa Rio Blanco, 13 May 2001, C. Nuñez [MNHD]. 1♂, 1♀ Bani Prov., Galeon, 22-VIII-1979, Marcano & Dominguez [MNHD]. 4♂♂, 7♀♀ La Altagracia Prov., 4.4 Km SE Bayahibe, 18-19-59N, 68-48-42W, 3m, 26 May 2004, C. Young, J. Rawlins, J. Fetzner, C. Nuñez [CMNH]. 2♀♀ Independencia, Sierra de Bahoruco, north slope, 13.5 km SE Puerto Escondido. 18-12-18N, 71-31-08W. 1789 m. 24-25 Nov 2004. J.E. Rawlins, C. Young, C. Nunez, V. Verdecia, W.A. Zanol. Ecotonal Pinus Grassland.

DISTRIBUTION. Dominican Republic, Haiti, Bahamas, Cuba, Curacao, Jamaica, Puerto Rico, Trinidad, Virgin Islands, St. Lucia, Mona Island, Grenada, Barbados, Antigua, United States (Texas, Florida), México, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, and Venezuela.

Stiretrus quinquepunctatus Germar

Stiretrus quinquepunctatus Germar, 1839. Zeitschrift für die Entomologie. 1: 20.

Karaibocoris quinquepunctatus Schumacher 1912 Sitzungs-Berichten der Gesellschaft Naturforschender Freunde zu Berlin. 1912: 93.

REMARKS. Schumacher (1912) proposed a new genus *Karaibocoris* with the West Indian *Stiretrus quinquepunctatus* as type. The generic name was synonymized by Thomas (1992). Until now this ultrarare species was known only from the type specimen which bears a label for Port au Prince, Haiti. It is dull orange with four red spots on the scutellum and one on the middle of the pronotum.

MATERIAL EXAMINED. 1♂, 1♀ DOMINICAN REPUBLIC: Verón, Higüey, Prov. La Altagracia, 19-XI-1979, Cols. Marcano, Vega, Martínez [MNHD].

DISTRIBUTION. Haiti, Dominican Republic.

Tylospilus accutissimus (Stål)

Podisus (Tylospilus) acutissimus Stål, 1870. Kongliga Svenska Vetenskaps-Akademiens Handlingar 9: 53.

REMARKS. This species is often found on mesquite (*Prosopis*). Among the asopines, it is the species most polyphagous, including plants in its diet (Stoner *et al.* 1974). It has a yellow background color with contrasting black and sometimes red dorsal markings.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-225 100 m N Playa Buen Hombre, Montecristi prov., near sea level, 19°51.797'N 71°24.181'W, 17.iv.2004, D. Perez, B. Hierro. (d) [day] [USNM]; 4♂♂ 3♀♀ La Vega Prov., 4 km E. of La Ciénaga de Manabao, 3050 ft., 19°04'47"N 70°49'29"W, 19 April 2000, T.J. Henry & R.E. Woodruff, black lights [USNM].

DISTRIBUTION. Dominican Republic, United States, Mexico, Honduras, Nicaragua, Colombia.

Tyrannocoris jole (Stål)

Telepta jole Stål, 1862. Stettiner Entomologische Zeitung 23: 92. *Rhaphigaster aggressor* Walker, 1867. Catalog of Specimens of Heteropterous Hemiptera in the British Museum. Pt. 1, p. 359.

REMARKS. This species is nowhere common. It resembles but differs from the aforementioned species in being more coarsely punctate dorsally with the anterolateral pronotal margin straight.

MATERIAL EXAMINED. No specimens of this species were encountered in this survey. The junior author examined the type specimen of *Rhaphigaster aggressor* Walker from "Santo Domingo."

DISTRIBUTION. Dominican Republic, Haiti, Cuba, México, Honduras.

Subfamily DISCOCEPHALINAE

Tribe Ochlerini

Alathetus haitiensis Rolston

Alathetus haitiensis Rolston, 1982, J. Kansas Entomol. Soc. 55: 156.

REMARKS. Other than the unconfirmed report that *Macropygium reticulare* (F.) occurs on Cuba (Uhler 1894), the endemic genus *Alathetus* Dallas is the only ochlerine in the West Indies. The type species *A. rufitarsis* Dallas is found on Jamaica. *A. haitiensis* is brachypterous, flattened, dull black, with only four antennal segments and is therefore unmistakable.

MATERIAL EXAMINED. No specimens of this species were found in this survey.

DISTRIBUTION. Haiti.

Subfamily PENTATOMINAE

Tribe Pentatomini

Acrosternum (Chinavia) insulani Rolston

Figs. 5-8.

Acrosternum (Chinavia) insulani Rolston, 1983. J. New York Entomol. Soc. 91: 113.

REMARKS. This large green species is readily recognized by the right-angular, produced humeral angles and alternate yellow and black connexivum. It is endemic to Hispaniola and is the largest member of the genus. Inasmuch as the original description was based on females, the male is reported and described here for the first time.

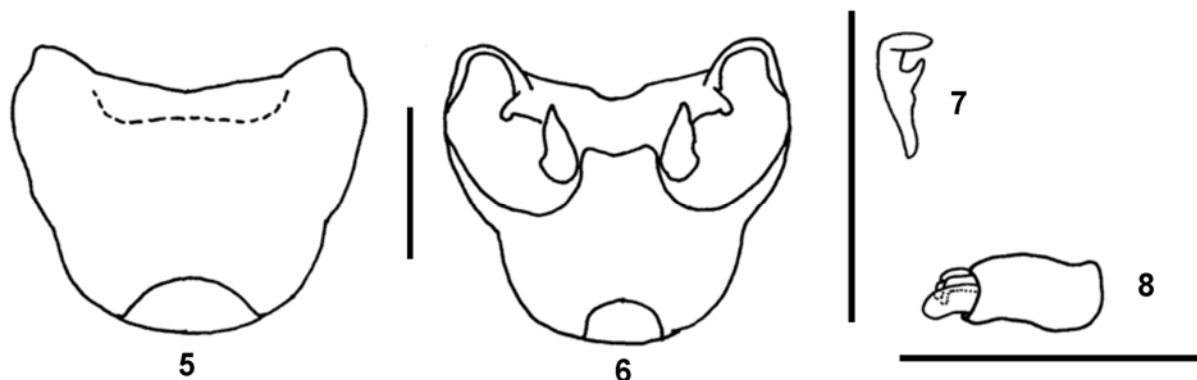


Fig. 5-8. Male genitalia of *Acrosternum insulani* Rolston: 5. Pygophore, ventral. 6. Pygophore, dorsal. 7. left Paramere, ental. 8. Aedeagus, lateral. Scale bar = 1 mm.

Male somatic morphology as in female. Genitalia.- pygophore an open capsule; ventral inframargin broadly impressed mesially; ventral margin mildly concave in caudo-ventral view, in dorsal view weakly emarginated medially; lateral angles obtusely produced, lobate (figs. 5 & 6). Paramere f-shaped, with spur on shaft angled toward the apex (fig. 7). Aedeagus with simple theca; visible portion of vesica short, straight, digitoid; about equal in length and situated between sclerotized median penial lobes each of which has the apex deflected; conjunctival appendages paired, membranous (fig. 8).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 2♀♀ RD-165 Rio Limpio, Elías Piña Prov., behind baseball field, 19°14.908'N 71°32.228'W, 769 m, 25.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [USNM]; 2♀♀ RD-184 Trail to peak and Centro SOECI, Pico Diego de Ocampo, Santiago Prov., 918 m, 5.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day/night) [MHND]; 1♀ RD-213 km 25 road to Aceitillar, Pedernales prov., 736 m, 18°06.591'N 71°37.234'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [USNM]; 1♂ RD-247 Road Inoa – El Caimito, near San José de las Matas, Santiago prov., 552 m, 19°22.225'N 71°00.661'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1♂ Dajabon, Rio Limpio, 2400 ft., elev., 19°11'01"N 71°32'22"W, 26 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♀ Prov. Sánchez Ramírez, Mina de Oro Pueblo Viejo, alrededores Casa 10, UTM 375-812 mE 2094-033 mN, 15-16.VIII.2003, R.H. Bastardo [IIZB]; 1♂ La Vega Prov., 4 km E. of La Ciénaga de Manabao, 3050 ft., 19°04'47"N 70°49'29"W, 19 April 2000, T.J. Henry & R.E. Woodruff, black lights [USNM]; 1♂ Pr. La Vega, La Ciénaga de Manabao, 3-5-VII-99, 3000 ft. elev. R.E. Woodruff, blacklight [FSCA]; 2♀♀ Prov. La Altagracia, Nisibon "Papagalillo", 16-19-VI-98, R.E. Woodruff/ P.H. Freytag, blacklight [FSCA]; 3♂♂, 10♀♀ Prov. Barahona nr. Filipinas, Larimar Mine: 26-VI-7-VII-1992; R.E. Woodruff, P.E. Skelley at light [FSCA]. 1♂ Pedernales Prov., 26 km N Cabo Rojo, 760 m, 17 July 1987, J. Rawlins, R. Davidson [CMNH].

DISTRIBUTION. Dominican Republic.

Acrosternum (Chinavia) marginatum (Palisot de Beauvois)
Pentatoma marginata Palisot de Beauvois, 1817. Insectes recueillis en Afrique et en Amérique, Pt. 9, p. 147.

REMARKS. This is a very common species throughout Latin America and a pest on beans (Hallman *et al.* 1992). It is leaf green in color, typically with a reddish-orange margin. In the key to the species by Rolston (1983) the abdominal process is described as compressed, but I have seen several hispaniolan specimens in which the process is cylindrical and very robust.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-152 Barreras, Azua Prov., 18°19.527'N 70°54.411'W, 174 m,

14.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ RD-162 Rio Limpio, Elías Piña Prov., around house, 19°14.685'N 71°31.991'W, 781 m, 24-25.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 2♂♂ RD-166 La Travesía, Eastern Sierra de Bahoruco, Barahona Prov., near Larimar mine, 18°07.163'N 71°08.505'W, 850 m, 29.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ RD-170 km 8 Cabo Rojo-Aceitillar Rd., Pedernales Prov., 17°59.378'N 71°39.001'W, 27 m, 30.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [NMNH]; 1♂ 1♀ RD-180 Loma Pan de Azúcar, N El Valle, Samaná Prov., 291 m, 29.xi.2003, 19°15.619'N 69°17.874'W, D. Perez, R. Bastardo, A. Francisco. (day/night) [NMNH]; 1♂ 5♀♀ RD-191 Around Caseta No. 1, Parque Nacional Sierra de Bahoruco, 1,239 m, Independencia Prov., 18°16.038'N 71°32.691'W, 11-12.xii.2003, D. Perez, R. Bastardo, B. Hierro. (day/night) [USNM]; 1♂ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM]; 1♀ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 2♀♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [MHND]; 2♂♂ 1♀ RD-210 Mirador del Hoyo de Pelempito, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,250 m, 18°05.396'N 71°30.663'W, 5.iv.2004, D. Perez, R. Bastardo, B. Hierro. (d/n) [day/night] [USNM]; 6♂♂ 9♀♀ RD-211 Upper Las Abejas, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,310 m, 6.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND and USNM]; 1♀ RD-212 ~150 m N bridge on road Cabo Rojo – Aceitillar, Pedernales prov., 16 m, 17°58.530'N 71°39.034'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 2♂♂ 3♀♀ RD-213 km 25 road to Aceitillar, Pedernales prov., 736 m, 18°06.591'N 71°37.234'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [NMNH]; 2♀♀ RD-220 El Callejón de la Loma, Parque Nacional El Choco, Puerto Plata prov., 110 m, 19°44.428'N 70°25.459'W, 13.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [IIZB]; 2♂♂ 3♀♀ RD-221 ~8 km S Bombita, Parque Nacional El Choco, beside karst mogote, Puerto Plata prov., 144 m, 19°43.249'N 70°28.216'W, 14.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [NMNH]; 6♂♂ 12♀♀ RD-222 2 km S road Rio San Juan - Nagua, near Rio Piedras, Espaillat prov., 41 m, 19°36.650'N 70°11.753'W, 15.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [MHND and NMNH]; 1♂ RD-223 Villa Vista, near Nagua, María Trinidad Sánchez prov., near sea level, 18°04.779'N 71°39.159'W, 16.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [MHND]; 3♂♂ 2♀♀ RD-246 Road Rin-

cón de Piedra – Mata Grande, near bridge on Bao river, Santiago prov., 770 m, 19°12.822'N 70°57.709'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [IIZB]; 1 ♀ Pedernales Prov., 20 km N Cabo Rojo, elev. 1300 ft., 18°05'31"N 71°38'48"W, 12 April 2000, T.J. Henry & R.E. Woodruff [NMNH]; 1 ♂ Pedernales Prov., 24.5 km N. Cabo Rojo, elev. 750 m, 18°06'39"N 71°37'19"W, 10-14 April 2000, T.J. Henry & R.E. Woodruff [NMNH]; 2 ♀♀ Prov. Pedernales, Km 24 N Cabo Rojo, 2-VII-96, 3000 ft. R.E. Woodruff / R.M. Baranowski, Blacklight trap [FSCA]; 1 ♀ Prov. La Altagracia, La Laguna Nisibon at Rio Maimon, RE. Woodruff / P. Freytag, blacklight, 18-VI-1996 [FSCA]. 2 ♀♀ La Altagracia prov., 2.9 km SW Boca de Yuma, 18-21-51N, 68-37-05W, 11 m, 28 May 2004, J. Rawlins, C. Young, C. Nuñez, J. Fetzner [CMNH]. 1 ♂ San Juan, 10 km SSW El Cercado, 2009 m, 18-39-07N, 71-33-21W, 20 June 2003, J. Rawlins, C. Nuñez, R. Davidson, C. Young, P. Acevedo [CMNH]. 1 ♂, 1 ♀ La Altagracia. Parque del Este. 2.9 km SW Boca de Yuma. 18-21-51N, 68-37-05W. 11 m. 28 May 2004. J. Rawlins, C. Young, C. Nunez, J. Fetzner. Dry forest, UV Light.

HOST PLANT RECORDS. *Pteridium* sp. (Polypodiaceae), *Triumfetta semitriloba* (Tiliaceae), *Senna* sp. (Caesalpinaceae), *Eupatorium odoratum* (Asteraceae), *Calliandra* sp. (Mimosaceae).

DISTRIBUTION. Dominican Republic, Haiti, Puerto Rico, Cuba, Jamaica, Mona Island, Guadeloupe, Grenada, Southern United States, México, Central America, Colombia, Venezuela and Ecuador.

Acrosternum (Chinavia) montivagum (Distant)

Chlorochroa montivaga Distant, 1890. Biologia Centrali-Americana, Hemiptera Pt. 1, p. 333.

REMARKS. This is a large green stink bug with red margins. An important recognition character is the red color found on the basal portion of the tibia and the arcuate anterolateral pronotal margin.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2 ♀♀ RD-181 Loma Quita Espuela, halfway to peak, 616 m, 19°20.912'N 70°08.941'W, 3.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day/night) [MHND]; 2 ♀♀ RD-191 Around Caseta No. 1, Parque Nacional Sierra de Bahoruco, 1,239 m, Independencia Prov., 18°16.038'N 71°32.691'W, 11-12.xii.2003, D. Perez, R. Bastardo, B. Hierro. (day/night) [USNM]; 1 ♂ 3 ♀♀ RD-210 Mirador del Hoyo de Pelempito, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,250 m, 18°05.396'N 71°30.663'W, 5.iv.2004, D. Perez, R. Bastardo, B. Hierro. (d/n) [day/night] [USNM]. 1 ♀ Pedernales Prov., Sierra de Bahoruco, 25.2 km ENE Pedernales, 18-05-29N, 71-31-16W, 1272 m, 14 June 2003, C. Young, J. Rawlins, C. Nuñez, R. Davidson, P. Acevedo [CMNH].

DISTRIBUTION. Hispaniola, México, Panama.

Acrosternum (Chinavia) ubicum Rolston

Acrosternum (Chinavia) ubicum Rolston, 1983, J. New York Entomol. Soc. 91: 135.

REMARKS. Although distributed widely, this is a rare bug known for few specimens collected in isolated localities. One of the paratypes came from La Vega Province in the Dominican Republic and we have seen one additional specimen listed below.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1 ♀ RD-223 Villa Vista, near Nagua, Maria Trinidad Sánchez prov., near sea level, 18°04.779'N 71°39.159'W, 16.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM].

DISTRIBUTION. Dominican Republic, Colombia, Guyana, Surinam, Ecuador, Brazil, Bolivia, and Galapagos Islands.

Acrosternum (Chinavia) wygodzinskyi Rolston

Acrosternum (Chinavia) wygodzinskyi Rolston, 1983, J. New York Entomol. Soc. 91: 142.

REMARKS. This species was described from St. Thomas in the Virgin Islands by Rolston (1983). Rider (1987) found specimens on Puerto Rico. We can now extend its known range to include the Dominican Republic. These bugs are green in color dorsally, including the apex of the scutellum, margin of hemelytra and the laterotergites of the connexivum. The latter lack the dark spot found in the common species *A. marginatum*.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1 ♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM]; 1 ♀ RD-196 ~4 km S of Cabral, Barahona Prov., 18°13.835'N 71°14.251'W, 105 m, 14.xii.2003, D. Perez, R. Bastardo, B. Hierro (night) [MHND]; 2 ♂♂ RD-199 Boca de Yuma, P. N. Del Este, La Altagracia Prov., 20 m, 18°21.875'N 68°37.081'W, 16-17.xii.2003, D. Perez, R. Bastardo (day/night) [MHND]; 1 ♂ RD-202 La Enea, ~15 Km W of Higüey, La Altagracia Prov., 18°39.415'N 68°51.129'W, 100 m, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 1 ♂ 1 ♀ RD-212 ~150 m N bridge on road Cabo Rojo – Aceitillar, Pedernales prov., 16 m, 17°58.530'N 71°39.034'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1 ♂ 3 ♀♀ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1 ♀ RD-220 El Callejón de la Loma, Parque Nacional El Choco, Puerto Plata prov., 110 m, 19°44.428'N 70°25.459'W, 13.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1 ♀ RD-228 1 km E Talanquera, San Pedro de Macoris prov., 16 m, 18°25.655'N 69°22.374'W, 19.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [USNM]; 1 ♂ 4 ♀♀ RD-234 Cerro San Francisco, Bánica, Elias Piña prov., 366 m, 19°05.284'N 71°41.096'W, 21.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [IIZB]; 1 ♂ RD-241 Entrance to Boca Vieja Marina, near Biyeya beach, Azua prov., 23.iv.2004, D. Perez, B. Hierro. (n) [night] [IIZB]; 3 ♂♂ 1 ♂ RD-247 Road Inoa – El Caimito, near San José de las Matas, Santiago prov., 552 m, 19°22.225'N 71°00.661'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1 ♂ Pedernales Prov., 5 km N Cabo Rojo, 17°57'59"N 71°39'02"W, 12 April 2000, T.J. Henry & R. E. Woodruff [USNM]; 1 ♀ Pedernales Prov., 24.5 km N. Cabo Rojo, elev. 750 m, 18°06'39"N 71°37'19"W, 10-14 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1 ♂, 2 ♀♀ Prov. Pedernales, Cabo Rojo, Alcoa, 1-VII-98, R.E. Woodruff / R.M. Baranowski, blacklight trap [FSCA]; 1 ♂, 2 ♀♀ Prov. Barahona, nr. Filipinas, Larimar Mine, 26-VI-7-VII-1992: R.E. Woodruff, P.E. Skelley, at light [FSCA]. 2 ♂♂, 3 ♀♀ San Juan Prov., 8 km NE Vallejuelo, 690 m, 18-42N, 71-16W, 30 Aug 95, J. Rawlins, G. Onore, R. Davidson [CMNH]. 4 ♂♂, 7 ♀♀ La Altagracia Prov., 4.4 km SE Bayahibe, 3 m, 18-19-51N, 68-48-42W, 26-27 May 2004, C. Young, J. Rawlins, J. Fetzner, C. Nuñez [CMNH].

HOST PLANT RECORDS. *Crotalaria* sp. (Fabaceae).

DISTRIBUTION. Virgin Islands (St. Thomas, St. John), Dominican Republic, Puerto Rico.

Agonoscelis puberula Stål

Agonoscelis puberula Stål, 1853. Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar 10: 216

REMARKS. The African cluster bug has spread into the New World from Africa (Thomas *et al.* 2003). It is a hirsute bug which will key to the genus *Trichopepla* from which it can be differentiated by the black stripes following the venation in the hemelytral membrane. Its primary host is the introduced weed, whorlhound (*Marrubium vulgare* L.), but it has been reported as a nuisance in fruit orchards (Haines 1935). Specimens from Jamaica have been intercepted at U.S. ports on shipments of thyme, *Thymus vulgaris* (Thomas Henry, pers. comm.).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ RD-204 Near Laguna El Limón, El Seibo Prov., 10 m, 18°59.282'N 68°52.289'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; La Vega: 21 km S. Jarabacoa, 18-26-1994, C. & K. Messenger [DBTC].

DISTRIBUTION. Jamaica, Dominican Republic, México, and United States (Arizona, New Mexico, Texas, Utah and California).

Arocera (Euopta) placens (Walker)

Strachia placens Walker, 1867. Catalog of specimens of Heteropterous-Hemiptera in the British Museum Pt. II, p. 316.

REMARKS. This is the species reported as *Arocera protea* in Barber & Bruner (1932). It is a bright red stink bug with large black spots on the dorsum and a black head, and is thus unmistakable. Walker's type came from Haiti.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 8♂♂ 3♀♀ RD-154 Busú, El Curro, Sierra Martín García, Azua Prov., 18°17.819'N 70°57.287'W, 771 m, 16-17.vii.2003, D. Perez, R. Bastardo, B. Hierro. (day/night) [USNM, MHND and IIZB]; 5♂♂ 1♀ La Vega Prov., Parque Nacional Armando Bermudez, La Ciénaga Manabao, 3050 ft., 19 03 45''N 70 51'50''W, 19 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ 1♀ prov. Barahona, nr. Filipinas, Larimar Mine: 26-VI-7-VII-1992: R.E. Woodruff, P.E. Skelley, at light [FSCA]; 1♀ Prov. Pedernales, 5 km N Mercedes, 24-VI-1999, R. Woodruff & R. Baranowski, blacklight trap [FSCA]; 1♀ Prov. Pedernales, km 18 N. Cabo Rojo, 12-VI-98, 1000 ft. R.E. Woodruff, at night [FSCA].

DISTRIBUTION. Dominican Republic, Haiti, Puerto Rico, Cuba, Jamaica, St. Lucia, Trinidad, México, Guatemala, Honduras, Costa Rica, Panama, Venezuela, French Guiana, Ecuador, Peru.

Arvelius albopunctatus (De Geer)

Cimex albopunctatus De Geer, 1773, Mémoires pour servir à l'histoire des Insectes, III, p. 331.

Cimex gladiator Fabricius 1775. Systema Entomologiae p.705.

REMARKS. This species is yellowish to yellowish green with black punctations and ivory calli on the dorsum. Both the humeral angles and jugal apices are spinous. It is considered to be a minor pest of tomatoes, eggplant, and peppers on Puerto Rico (Wolcott, 1948).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2♂♂ 3♀♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM and MHND]; 1♂ RD-212 ~150 m N bridge on road Cabo Rojo – Aceitillar, Pedernales prov., 16 m, 17°58.530'N 71°39.034'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1♂ 1♀ La Altagracia Prov., Nisibón, 2.7 km E Batey Papagayo, elev., 150 ft., 18°55'24''N 68°44'21''W, 4-8 April 2000, T.J. Henry & R. E. Woodruff [USNM]; 1♀ Pedernales Prov., Cabo Rojo, 17°54'10''N 71°40'23''W, 10 April 2000, T.J. Henry & R.E. Woodruff [USNM]. 7♂♂, 4♀♀ Samaná Prov., 8 km S. Las Galeras, 35 m, 19-11N, 69-14W, 10 OCT 1991, C. Young, S. Thompson, R. Davidson, J. Rawlins [CMNH].

DISTRIBUTION. Dominican Republic, Haiti, Cuba, Puerto Rico, Mona Island, Grenada, St. Vincent, Barbados, Trinidad, Southern United States, México, Honduras, northern Argentina.

Arvelius haitianus Brailovsky

Arvelius haitianus Brailovsky, 1981. Anales del Instituto de Biología, UNAM Ser. Zoología 51: 271.

REMARKS. The species remains known only from the male type specimen which we examined at the USNM. It has an unusual paramere, lacking a lobe at the angle of deflection, but is otherwise morphologically identical to *A. porrectispinus* Breddin.

MATERIAL EXAMINED. Only the type specimen was examined.

DISTRIBUTION. Haiti.

Arvelius porrectispinus Breddin

Arvelius porrectispinus Breddin, 1909. Sitzungs-Berichten der Gesellschaft naturforschender Freunde zu Berlin 1909: 158.

REMARKS. This species is not as common as *A. albopunctatus*. The apex of the male paramere has a single digitoid process instead of the forked parameral apex found in *A. albopunctatus*. Otherwise they are difficult to separate.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2♂♂ Barahona, 6 km NW Paraiso, Rio Nizao, 18.02N, 71-12W, 170m. 25-26 July 1990, C. Young, J.E. Rawlins, S.A. Thompson [CMNH]. 1♀ RD-158 ~2 km N Maizal, Valverde Prov., dry forest, 19°39.819'N 70°58.422'W, 23.vii.2003, D. Perez, R. Bastardo, B. Hierro. (day) [USNM]; 1♀ "Dom. Rep." [USNM]. 1♀ Barahona Prov., 6 km NW Paraiso, 18-02N, 71-12W, 170 m, 25-26 July 1990, C. Young, J. Rawlins, S. Thompson [CMNH].

DISTRIBUTION. Jamaica, Dominican Republic, Trinidad, México, Central America, Colombia, Surinam, British Guyana, and Brazil.

Banasa herbacea (Stål)

Piezodorus herbaceus Stål, 1872. Kongliga Svenska Vetenskaps-Akademiens Handlingar 10: 44.

REMARKS. Originally described from the Virgin Islands but also found in the U.S., Mexico, and the Greater Antilles. It is translucent green in color with a narrow ivory edge on the anterolateral pronotal margin. It differs from the more widespread *B. lenticularis* (Uhler) by the punctuation on the dorsum of the head, and by characters in the male genitalia.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-055 ~2 km N Bayahibe, La Altagracia Prov., 31.vii.2002, 18°23.423'N 68°50.453'W, D. Perez, R. Bastardo, B. Hierro [NMNH]; 1♀ RD-149 Loma La Golondrina, Reserva Ebano Verde, La Vega Prov., 19°03.498'N 70°32.670'W, 11.vii.2003, D. Perez, R. Bastardo, B. Hierro. (day/night) [MHND]; 1♂ RD-199 Boca de Yuma, P. N. Del Este, La Altagracia Prov., 20 m, 18°21.875'N 68°37.081'W, 16-17.xii.2003, D. Perez, R. Bastardo (day/night) [MHND]; 1♂ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1♂ 1♀ RD-228 1 km E Talanquera, San Pedro de Macoris prov., 16 m, 18°25.655'N 69°22.374'W, 19.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [USNM]; 1♀ RD-245 Jaiquí Picado, ~2 km W road to Santiago-Sajoma, Santiago prov., 531 m, 19°26.372'N 70°52.434'W, 27.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [MHND]; 1♀ RD-247 Road Inoa – El Caimito, near San José de las Matas, Santiago prov., 552 m, 19°22.225'N 71°00.661'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1♂ RD-268 Entrance to Fuerte Banano, Pedernales prov., ~300 m, 12.vii.2004, D. Perez (d/n) [day/night] [NMNH]; 1♂ 1♀ RD-279 Half of trail to Hoyo Claro, forest S Verón, La Altagracia prov., 18°34.976'N 68°26.555'W, 68 m, 22.vii.2004, D. Perez (n) [night] [IIZB]; 2♂♂ Prov. Pedernales, Cabo Rojo, Alcoa, 1-VII-98, R.E. Woodruff / R.M. Baranowski, blacklight trap [FSCA]; 1♀ Prov. Altagracia, Nisibón "Papagayo", 16-19-VI-98, R.E. Woodruff, P.H. Freytag, blacklight trap [FSCA]; 1♀ Prov. Barahona nr. Filipinas, Larimar Mine: 26-VI-7-VII-1992, R.E. Woodruff, P.E. Skelley, at light [FSCA]. 12♂♂, 14♀♀ La Altagracia Prov., 2 km N Bayahibe, 10 m, 18-23N, 68-51W, 3 July 1992, C. Young, J. Rawlins, R. Davidson, S. Thompson [CMNH]. 1♂, 1♀ Azua Prov., 7 km WNW Barro, 860 m, 18-21N, 70-58W, 25 July 1992, C. Young, R. Davidson, J. Rawlins, S. Thompson [CMNH].

DISTRIBUTION. Dominican Republic, Puerto Rico, Vieques, Virgin Islands, United States (Florida), México.

***Banasa lenticularis* Uhler**

Banasa lenticularis Uhler, 1894, Proceedings Zoological Society London 1894: 174.

REMARKS. This species is leaf green to translucent green in newly emerged adults. The dorsum of the head is smooth, lustrous, essentially devoid of punctuations. It seems to be circum-Caribbean in distribution, including both the islands and the regions bordering its shores. It was described by Uhler (1894) from the island of Grenada "swept from herbage in open weedy places."

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1 ♂, 1 ♀, La Altagracia, 2 km N. Bayahibe, 18°23'N, 68°51'W, 10 m, July 3, 1992. C. Young, R. Davidson, S. Thompson, J. Rawlins [CMNH]. 1 ♀, Pedernales, 30 km N Cabo Rojo, 18° 7'N, 71°39'W, 1070 m, 23-24 July 1990. C. Young, J. Rawlins, S. Thompson [CMNH]. 1 ♂, 1 ♀, Bahoruco, Sierra de Neiba, Los Guineos on upper Rio Colorado, 18° 35'N, 71°11'W, 630 m, Aug 11-12 1990. J. Rawlins, S. Thompson [CMNH].

DISTRIBUTION. Dominican Republic, Jamaica, Dominica, Grenada, Trinidad, Southern United States, México, Belize, Guatemala, Honduras, Panama, northern South America.

***Banasa punctatissima* Barber & Bruner**

Banasa punctatissima Barber & Bruner, 1932. J. Dept. Agric. Puerto Rico 16: 263.

REMARKS. This species was originally described from Cuba. It is green but somewhat smaller than *B. lenticularis* from which it can be distinguished because of the punctuations on the dorsum of the head. From *B. herbacea* it differs in the structure of the genitalia.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2 ♂♂ RD-182 Loma Quita Espuela, Firme de loma, S. F. de Macorís Prov., 19°21.101'N 70°08.930'W, 715 m, 3-4.xii.2003, D. Perez, R. Bastardo, A. Marmolejos (day/night) [USNM]; 1 ♀ RD-186 Rd. to Playa Buen Hombre, Montecristi Prov., 132 m, 19°46.213'N 71°23.996'W, 6-7.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day/night) [MHND]; 1 ♂ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1 ♀ Dajabón, Rio Limpio, 2400 ft., elev., 19°11'01" N 71°32'22"W, 26 April 2000, T.J. Henry & R.E. Woodruff [USNM].

DISTRIBUTION. Cuba, Dominican Republic.

***Banasa zeteki* Sailer**

Banasa zeteki Sailer, 1959. Bulletin Brooklyn Entomological Society 54: 89.

REMARKS. This species is shining, multicolored dorsally. It is the only species in the Antilles that has dark punctuations on the propleura.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1 ♀ RD-156 La Furnia, Barreras, Azua Prov., 18°19.289'N 70°54.755'W, 18.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [NMNH]; 1 ♂ RD-165 Rio Limpio, Elías Piña Prov., behind baseball field, 19°14.908'N 71°32.228'W, 769 m, 25.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [USNM]; 1 ♂ 4 ♀♀ RD-166 La Travesía, Eastern Sierra de Bahoruco, Barahona Prov., near Larimar mine, 18°07.163'N 71°08.505'W, 850 m, 29.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1 ♂ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [MHND]; 1 ♀ RD-213 km 25 road to Aceitillar, Pedernales prov., 736 m, 18°06.591'N 71°37.234'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [NMNH]; 1 ♂ Cotuí, El Llagal (EL-3T), prov. Sánchez Ramírez, 376-420 mE 2089-887 mN, 16.viii.2003, R. H. Bastardo [IIZB]; 2 ♂♂ 5 ♀♀ La Vega

Prov., Parque Nacional Armando Bermudez, La Cienaga Manabao, 3050 ft., 19 03 45"N 70 51'50"W, 19 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1 ♂ 1 ♀ La Vega Prov., Rt. 12, 20 km SW of Jct 1, above Bonao, 3400 ft., 19 00 37"N 70 33 34"W, 18 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 5 ♂♂ 9 ♀♀ Pr. La Vega, La Cienega de Manabao, Park Hdqt. 3-5-VII-99, 3000 ft elev. R.E. Woodruff, at night on *Solanum umbellatum* [FSCA]. 2 ♀♀ Prov. Barahona, nr Filipinas, Larimar Mine: 26-VI-7-VII-1992, R.E. Woodruff, P.E. Skelley, at light [FSCA]. 1 ♀ Prov. Monseñor Noel, 20 km W. Bonao Hydroelectric Plant, Rio Blanco, 13-V-2001, R.E. Woodruff, C. Nuñez [FSCA]. 2 ♀♀ Azua Prov., Sierra Martin Garcia, 7 km WNW Barrero, 18-21N, 70-58W, 860 m, 26 July 1992, C. Young, R. Davidson, J. Rawlins, S. Thompson [CMNH]. 4 ♂♂ San Juan Prov., 7 km N Arroyo Cano, 1120 m, 18-52N, 71-01W, 1 Sept 1996, J. Rawlins, G. Onore, R. Davidson [CMNH]. 2 ♀♀ Puerto Plata Prov., Pico El Murazo, 910 m, 19-41N, 70-57W, 28 Nov 1992, J. Rawlins, R. Davidson, M. Klingler, S. Thompson [CMNH]. 1 ♂, 1 ♀ Pedernales Prov., La Abeja, 18-09N, 71-38W, 1250 m, 15 July 1987, J. Rawlins, R. Davidson [CMNH]. 1 ♂, 2 ♀♀ Elías Piña, 2 km SW Canada, 980 m, 18-42N, 71-45W, 29 Aug 1995, J. Rawlins, G. Onore, R. Davidson [CMNH]. 1 ♂, 10 ♀♀ La Vega, El Convento Constanza, 26-VIII-1979, M. Marcano [MHND]. 1 ♀ Bonao, Blanco, Senderos, 13 May 2001, C. Nuñez, H. Matzuzawa [MHND].

HOST PLANT RECORDS. *Inga* sp. (Mimosaceae); *Solanum umbellatum* (Solanaceae).

DISTRIBUTION. México, Belize, Guatemala, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Cuba, Dominica, Dominican Republic.

***Banasa flavosa* Thomas, new species**

Figs. 9-13, 40.

DESCRIPTION:

Elongate, ovate; body dorso-ventrally compressed. Dorsal color green, shining, suffused with yellow on anterolateral areas of pronotum. Ventral color yellowish suffused with green. Length of body along midline (tip of tylus to last abdominal sclerite): 8.5 mm (male); 10.0 mm (female).

Head.- dorsal surface lustrous, flat, substrigose; with scattered, reddish-brown punctuations laterally, these nearly absent from disc. Each ocellus separated from eye by about diameter of ocellus. Supra-antenniferal vitta present. Antennae green; segment I shortest, II, IV and V subequal, II almost two-thirds length of III. Rostrum in repose just attaining abdominal tubercle. Length of head at midline (tip of tylus to imaginary line connecting ocelli): 1.4 mm (male); 1.6 mm (female). Width of head (across eyes): 2.2 mm (male); 2.4 mm (female). Greatest anteocular width: 1.5 mm (male); 1.6 mm (female).

Thorax.- Surface of pronotal dorsum shiny, green on disc with strong yellow suffusion on anterolateral margin and inframargin; with scattered reddish-brown punctuations, tending to run in transverse lines. Anterolateral pronotal margin rectilinear in dorsal view; humeri angular, obtuse, not produced. Length of pronotum at midline: 1.9 mm (male); 2.0 mm (female). Pronotal width (across humeri): 5.4 mm (male); 5.9 mm (female). Scutellum concolorous with posterior pronotum and similarly punctate except apex nearly lacking punctuations. Length of scutellum along midline: 3.8 mm (male); 4.2 mm (female). Scutellar width at base: 3.5 mm (male); 3.7 mm (female). Corium and embolium similar in color to

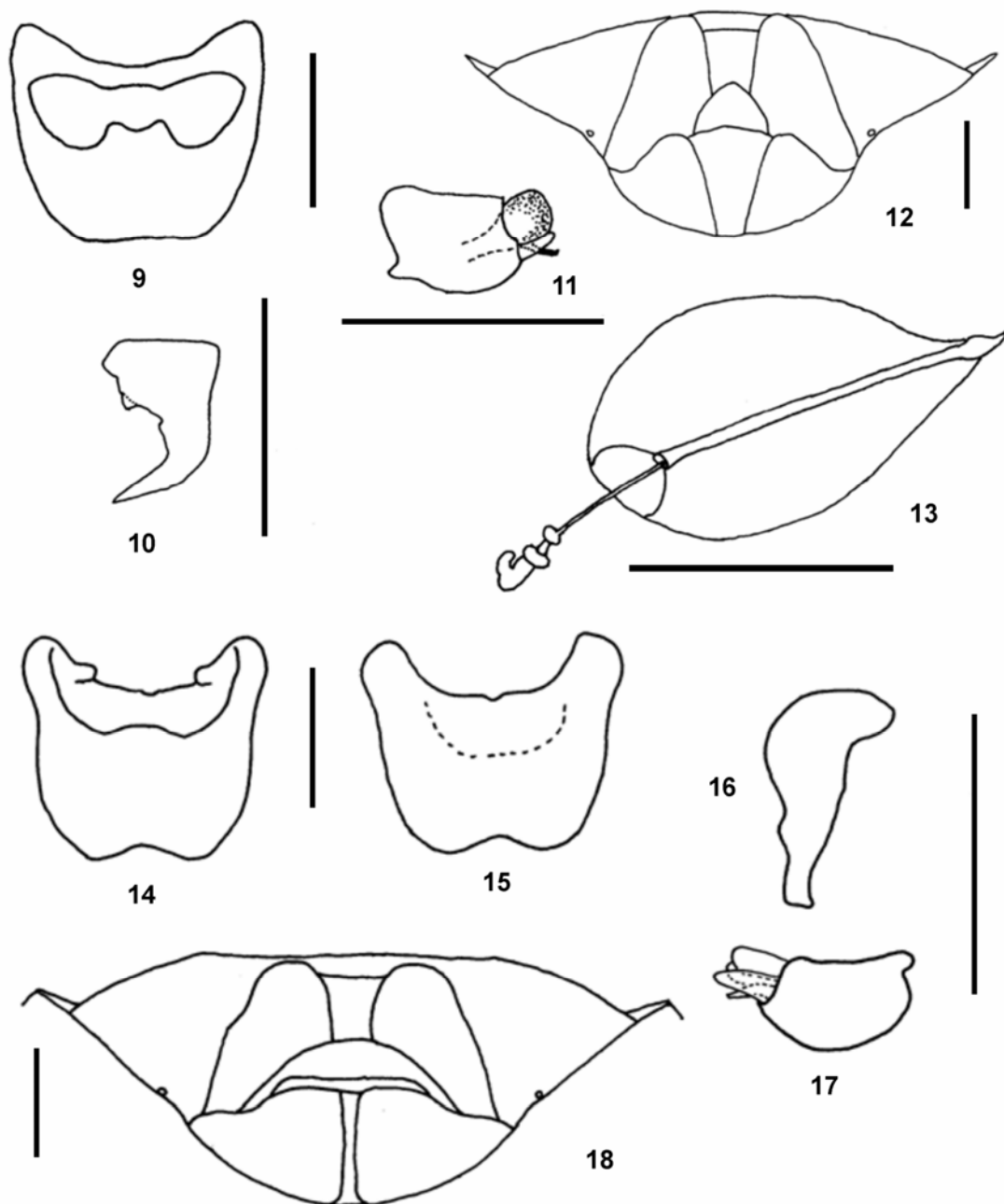


Fig. 9-13. Genitalia of *Banasa flavosa*, n. sp.: 9. Pygophore, dorsal. 10. right Paramere, ental. 11. Aedeagus, lateral. 12. female terminalia, ventral. 13. Spermatheca. Scale bar = 1 mm.

Fig. 14-18. Genitalia of *Banasa punctata*, n. sp.: 14. Pygophore, dorsal. 15. Pygophore, ventral. 16. left Paramere, ental. 17. Aedeagus, lateral. 18. female terminalia, ventral. Scale bar = 1 mm.

scutellum but more densely punctate; hemelytral membrane clear, transparent. Pro-meso- and metapleura with weak, colorless punctations. Each metapleuron with brown stigmatose spot at lateral margin of evaporatorium. Legs dark green, immaculate; tibia terete.

Abdomen.- Base of third (second visible) sternite with obtuse, weakly conical, forwardly directed tubercle. Lateral apices of each sternite minutely acute and tipped with dark-brown. Connexiva and laterotergites concolorous with sternites, greenish-yellow.

Genitalia.- Proctiger of male bilaterally lobate, lobes angular and apposing medially. Pygophore with prominent inferior ridge, recessed from ventral rim (Fig. 9); in cau-

dal view, margin of inferior ridge weakly bisinuate. Paramere flattened, quadrately capitate, more-or-less hatchet shaped, a small flange-like angular cusp present on ental margin (Fig. 10). Theca of aedeagus simple; vesica short, medial; median penial lobes thick, sclerotized; conjunctival appendages membranous (Fig. 11). Female basal gonocoxites separated, mesial margins diverging caudally, exposing triangulin. Ninth paratergites just attaining margin of eighth paratergite, their apices rounded, obtuse. Eighth paratergites with spiracle present (Fig. 12). Bulb of spermathecal pump elongate, bent, reflected (Fig. 13).

HOLOTYPE: Male, labeled: "Dominican Republic: La Vega

Prov., 4 km E. of La Cienega de Manabao, 3050 ft., 19°04'47"N; 70°49'29"W, 19 April 2000. T.J. Henry & R.E. Woodruff, black lights." (Deposited USNM).

PARATYPES: 1♂, 2♀, labeled same data as holotype (deposited USNM). 3 ♀, labeled: "DOMINICAN REPUBLIC: RD-165 Rio Limpio, Elias Piña Prov., behind baseball field. 19°14.908N; 71°32.228W, 769 m, 25 vii 2003, D. Perez, R. Bastardo, B. Hierro. (night)." (deposited USNM). 1 ♂, 1 ♀, labeled: "DOMINICAN REPUBLIC: RD-272 Caseta 1, P.N. Sierra de Bahoruco, Independencia Prov., 18°16.038N; 71°32.691'W, 1,239 m, 14 vii 2004, D. Perez." (deposited USNM). 1 ♂, labeled: "DOMINICAN REPUBLIC: RD-221 -8 km S Bombita, Parque Nacional El Choco, beside karst mogote, Puerto Plata Prov., 144 m, 19°43.249'N; 70°28.216'W, 14.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n)." (deposited DBTC). 1 ♀ labeled: (a) "DOMINICAN REPUBLIC: Azua, east side of crest, Sierra Martin Garcia, 7 km WNW Barrero. 18-21N, 70-58W, 860 m." (b) "25-26 July 1992, C. Young, R. Davidson, S. Thompson, J. Rawlins, Cloud forest adjacent to disturbed forest." (deposited CMNH). 1 ♀ labeled, (a) "DOMINICAN REPUBLIC: Pedernales, 26 km N Cabo Rojo, 18-06N, 71-38W, 230 m, 16 July 1992." (b) "C. Young, R. Davidson, S. Thompson, J. Rawlins, Mesic deciduous forest with scattered pines." (deposited CMNH); 4 ♂, 7 ♀, labeled: "DOMINICAN REPUBLIC: Prov. Barahona, nr. Filipinas, Larimar Mine: 20-26-VI-1992: R.E. Woodruff, P.E. Skelley, at light" (deposited FSCA, JEEC and DBTC); 3 ♂, 14 ♀, labeled: "DOMINICAN REPUBLIC, Prov. Barahona, nr. Filipinas, Larimar Mine: 26-VI-7-VII-1992: R.E. Woodruff, P.E. Skelley, at light" (Deposited FSCA).

ETYMOLOGY.- *flavosa*, meaning yellowish, in reference to the flavous or yellowish suffusion on the pronotum.

REMARKS.- Clearly related to the other green species found in the Antilles. As in males of *B. lenticularis*, the inferior ridge is deeply seated within the ventral rim of the pygophore. In *B. punctatissima*, *B. herbacea* and *B. inopinata* the ventral rim is weak medially such that the inferior ridge is not deeply seated. The new species differs from *B. lenticularis* in that the edge of the inferior ridge as seen in caudal view is nearly straight (weakly bisinuate), while in *B. lenticularis* the inferior ridge is strongly U-shaped in caudal view, following the curve of the ventral rim. There were no obvious differences in the female genitalia among these related species. For identification of females the difference in coloration may be useful. The new species has a broad yellow suffusion on the anterolateral pronotal margin and inframargin. In *B. punctatissima* and *B. herbacea* only the narrow edge of the pronotum is trimmed with a white or pale yellow line. In *B. lenticularis* the head is essentially devoid of punctures or strigae, whereas in *B. flavosa* the surface of the head is strigose with fine scattered punctures.

***Banasa punctata* Thomas, new species**

Figs. 14-18, 41.

DESCRIPTION:

Elongate-ovate, dorso-ventrally compressed; surface lustrous, pale tan, densely black punctate throughout dorsally, smooth, impunctate ventrally. Length of body (tip of

tylus to apex of abdomen): 8.7 mm; width (across humeri): 5.3 mm (measurements from paratype).

Head.- Dorsal surface densely black punctate throughout except for small more or less circular areas next to eyes and at ends of anteclypeal sutures. Base of head behind ocelli, black. Each ocellus separated from eye by distance about equal to two ocellar diameters. Length of head (tip of typus to imaginary line connecting ocelli): 1.5 mm. Width of head (across eyes): 2.2 mm. Antecular width: 1.5 mm. Supra-antenniferal vitta present. Antennae yellowish-tan, immaculate. Antennal segment I shortest, segments IV and V longest, subequal, slightly longer than III; segment II slightly longer than I. Rostrum in repose surpassing metacoxae and reaching nearly to end of third (second visible) abdominal sternite. Last rostral segment bicolor, tan basally, dark brown apically. Rostral segments II and III subequal and longer by half than segments I and IV.

Thorax.- Dorsal pronotal surface lustrous, punctations denser on posterior half, less dense on anterolateral pronotal inframargin. Anterolateral pronotal margin rectilinear in dorsal view. Humeral angles obtuse, angular, not produced. Length of pronotum at midline: 2.1 mm. Scutellum densely black punctate throughout, though punctations finer at apex. Length of scutellum: 3.8 mm; basal width: 3.2 mm. Hemelytral corium black punctate throughout except for basal inframargin of embolium where punctations nearly absent. Hemelytral membrane transparent, colorless. Pleura yellowish; propleura with colorless punctations. Minute brownish spot present at lateral margin of evaporatorium on metapleura. Legs immaculate.

Abdomen.- Base of third (2nd visible) abdominal sternite with weakly conical, forwardly directed tubercle. Connexiva, apices of sternites, and spiracles, concolorous with abdominal disc.

Genitalia.- Male: ventral surface of pygophore with shallow semicircular, inframarginal impression; posteroventral margin concave in ventral view, weakly emarginated at middle, small lobes present just ental to lateral angles; lateral angles produced (figs. 14-15). Paramere semiscimitar shaped, foliate (fig. 16). Theca of aedeagus cylindrical, simple; vesica short, digitoid, slightly deflexed; median penial lobes sclerotized, broad, about equal in length with vesica; conjunctival appendages membranous (fig. 17). Female: basal gonocoxites clearly separated, not contiguous or proximal mesially. Apex of ninth paratergites rounded, just attaining posterior margin of eighth paratergite. Spiracles present on eighth paratergite (Fig. 18).

HOLOTYPE.- male, labeled: "DOMINICAN REPUBLIC: El Convento, Constanza Prov. La Vega R.D. 26-VIII-1979, cols: Marcano y Marcano." (Deposited MNHD).

PARATYPES.- 1 male, labeled: "Dominican Rep., La Vega, 12 km S. Constanza. IX-3-1997, P.W. Kovarik Collector." (Deposited JEEC). 1 female, labeled: "DOMINICAN REPUBLIC: La Vega, vic. Salto de Aguas Blancas, 16 July 1996. R. Turnbow." (Deposited DBTC).

ETYMOLOGY.- The specific epithet "*punctata*" referring to the densely punctate dorsum.

REMARKS. The only species of *Banasa* in the Antilles that is densely punctate or unicolorous brown, Reminiscent of

B. sordida (Uhler) and *B. grisea* Ruckes in color and punctuation, but *B. sordida* is larger with a proportionately longer head, a longer rostrum, and is punctate both dorsally and ventrally. *B. grisea* has deeply cleft basal gonocoxites and only occurs in Arizona. Other differences as illustrated in male genitalia.

Caribo fasciatus Rolston

Caribo fasciatus Rolston, 1984, Journal New York Entomological Society 92: 82.

REMARKS. These are small mottled stink bugs with the head strongly deflexed. Typically, the female has a black spot on the last abdominal sternite and the male has a black spot on the base of the genital capsule.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2♂♂ 3♀♀ RD-149 Loma La Golondrina, Reserva Ebano Verde, La Vega Prov., 19°03.498'N 70°32.670'W, 11.vii.2003, D. Perez, R. Bastardo, B. Hierro. (day/night) [USNM]; 1♂ RD-156 La Furnia, Barreras, Azua Prov., 18°19.289'N 70°54.755'W, 18.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♀ RD-161 ~3 km SE Montecristi, Montecristi Prov., very dry forest, 19°50.117'N 71°37.234'W, 42 m, 23.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [IIZB]; 1♂ 1♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [NMNH]; 1♀ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 3♀♀ RD-234 Cerro San Francisco, Bánica, Elias Piña prov., 366 m, 19°05.284'N 71°41.096'W, 21.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [NMNH]; 1♀ RD-247 Road Inoa – El Caimito, near San José de las Matas, Santiago prov., 552 m, 19°22.225'N 71°00.661'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [IIZB]; RD-279 Half of trail to Hoyo Claro, forest S Verón, La Altagracia prov., 18°34.976'N 68°26.555'W, 68 m, 22.vii.2004, D. Perez (n) [night] [MHND]; 1♀ Prov. Pedernales, Cabo Rojo, Alcoa (cafeteria) 9-13-IV-2000, blacklight, R.E. Woodruff, T.J. Henry [FSCA]; 2♂♂ 2♀♀ Prov. Pedernales, Cabo Rojo, Alcoa Headquarters, 20-24-VI-99, R.E. Woodruff, R. Baranowski, blacklight [FSCA]. 15♀♀, 5♂♂ La Altagracia Prov., 2 km N Bayahibe, 18-23N, 68-51W, 10 m, 3 July 1992, C. Young, R. Davidson, S. Thompson, J. Rawlins [CMNH]. 2♂♂, 3♀♀ Pedernales Prov., 14.5 km N. Cabo Rojo, 165 m, 18-03N, 71-39W, 19 July 1990, J. Rawlins, C. Young, S. Thompson [CMNH].

DISTRIBUTION. Jamaica, Dominican Republic, Puerto Rico, St. John, St. Croix.

Chroantha ornata (Herrich-Schäffer)

Cimex ornatus Herrich-Schaffer, 1842. Wanzenartigen Insecten 6: 93.

REMARKS. A single specimen of this Old World monotypic genus bears a collection label for “Republica de Dominica” forwarded to us by the University of California Berkeley. The collector, Ms. Sarah Crews assures us (personal communication) that she did make collections at the cited locality and that she mounted and labeled the specimens herself. Inasmuch as only a single collection of this species is known, we consider this record as a possible exotic introduction requiring confirmation from additional collections. The food plants according to Ahmad *et al.* (1974) include the thistle *Salsola ruthenica* and grasses.

MATERIAL EXAMINED. 1♂, Republica de Dominica [sic]: Provincia Pedernales, Oviedo – Grupo Jaragua Residence N 17.47.968' W 71.24.216' 190' 23-26 Oct 2003, coll. S. Crews SCC03_020a. [MNHD]

DISTRIBUTION. Holomediterranean and Asia Minor east to Pakistan.

Cyptocephala antiguensis (Westwood)

Pentatoma antiguensis Westwood, 1837, Catalogue of Hemiptera in the collection of Rev. F.W. Hope, Vol. 1, p. 36.

REMARKS. This is a small colorful species, basically green with red and white markings on the pronotum. According to Wolcott (1948) it damages rice in the lowlands of Puerto Rico. Callan (1948) reports it on flowers of “*Celosia cristata*.” It appears in some Antillean records as *Thyanta taeniola* (Dallas).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: RD-185 ~3km S Cruce de Guayacanes, Valverde Prov., 19°38.779'N 71°03.717'W, 40 m, 6.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day) [IIZB]; 2♀♀ RD-227 Hill W electric transformers, ~4 kms E Montecristi, Montecristi prov., 57 m, 19°50.203'N 71°37.932'W, 17.iv.2004, D. Perez, B. Hierro. (n) [night] [MHND]; 2♀♀ Montecristi prov., 15 km N. of Dajabón, 2 km N. of Copey, sea level, 19°41'38" N 71°40'42" W, 26 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ 4♀♀ Prov. Altagracia, Nisibón “Papagayo” at beach, 25-VI-98, R.E. Woodruff, sweeping [FSCA]. 1♂ Distrito Nacional, Lomas Lindas, 12-VI-1979, Dominquez [MNHN]. 1♀ Pedernales Prov., Cabo Rojo, 20-5-92, Guerrero-Del Monte [MNHN]. 2♀♀ Distrito Nacional Santo Domingo, Parque Paseo de los Indios, 18-26-53N, 69-56-39W, 60 m, 10 Nov 2002, W. Zanol [CMNH].

DISTRIBUTION. Dominican Republic, Puerto Rico, Cuba, Jamaica, Antigua, Trinidad, Southern United States, Mexico, Central America, Colombia, Brazil and Peru.

Cyptocephala bimini (Ruckes)

Thyanta bimini Ruckes, 1952, Bulletin Brooklyn Entomological Society 47: 65

REMARKS. As the name implies, this species was originally discovered in the Bahamas. These are small, pale green stink bugs and are attracted to lights. The basal genital plates of the female are umbonate.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-186 Rd. to Playa Buen Hombre, Montecristi Prov., 132 m, 19°46.213'N 71°23.996'W, 6-7.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day/night) [USNM]. 1♂, 2♀♀, Pedernales, Cabo Rojo, 17° 55 N 71° 39 W, 10m. July 15-18, 1992. J. Rawlins, S. Thompson, C. Young, R. Davidson [CMNH]. 1♀, Dajabón, 9 km S Loma de Cabrera, 19° 21 N, 71° 37 W, 620 m, July 12, 1992, J. Rawlins, S. Thompson, C. Young, R. Davidson [CMNH]. 1♂, Independencia, 4 km S Los Pinos, Loma de Vientos, 18° 35 N, 71° 46 W, 455 m. July 23, 1992. R. Davidson, J. Rawlins, S. Thompson, C. Young [CMNH]. 1♀, Pedernales, 30 km N Cabo Rojo, 18° 7 N, 71°39 W, 1070 m, July 23-24, 1990. C. Young, J. Rawlins, S. Thompson [CMNH].

DISTRIBUTION. Florida keys, Bahamas, Turk and Caicos, Cuba, Jamaica, Dominican Republic, Puerto Rico.

Cyptocephala pallida Rolston

Cyptocephala pallida Rolston, 1986, Journal New York Entomological Society 94: 431.

REMARKS. In accord with its name, this species is a pallid green in color as is *C. bimini*, but the female basal genital plates are not umbonate.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 1♀ RD-170 km 8 Cabo Rojo-Aceitillar Rd., Pedernales Prov., 17°59.378'N 71°39.001'W, 27 m, 30.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ RD-186 Rd. to Playa Buen Hombre, Montecristi Prov., 132 m, 19°46.213'N 71°23.996'W, 6-7.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day/night) [MHND]; 1♂ 7♀♀ RD-227 Hill W electric transformers, ~4 kms E Montecristi, Montecristi prov., 57 m, 19°50.203'N 71°37.932'W, 17.iv.2004, D. Perez, B. Hierro. (n) [night] [USNM and IIZB]; 1♂ RD-263 Km 11.5 road Ca-

bo Rojo - Aceitillar, Pedernales prov., 18°01.216'N 71°38.834'W, 9.vii.2004, D. Perez (n) [night] [IIZB]; 1♂ RD-268 Entrance to Fuerte Banano, Pedernales prov., ~300 m, 12.vii.2004, D. Perez (d/n) [day/night] [MHND]; 2♂♂ 3♀♀ Pedernales Prov., Cabo Rojo, 17°54'10"N 71°40'23"W, 10 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♀ Pedernales Prov., 5 km N Cabo Rojo, 17°57'59"N 71°39'02"W, 12 April 2000, T.J. Henry & R. E. Woodruff [USNM]; 1♂ 1♀ Pedernales Prov., 24.5 km N. Cabo Rojo, elev. 750 m, 18°06'39"N 71°37'19"W, 10-14 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ 2♀♀ Prov. Pedernales, Cabo Rojo, Alcoa Headquarters, 10-VI-1998, blacklight trap, R.E. Woodruff, P.H. Freytag [FSCA]. 3♀♀ Bahoruco Prov., 5.8 km SW Neiba, 18-25-17N, 71-26-38W, -5 m, 3 April 2004, J. Rawlins, R. Davidson, C. Young [CMNH].

HOST PLANT RECORDS. *Leptochloopsis virgata* (Poaceae).

DISTRIBUTION. Dominican Republic, Haiti, Virgin Gorda (British Virgin Islands).

Euschistus acuminatus Walker

Euschistus acuminatus Walker, 1867, Catalogue of specimens of Hemiptera Heteroptera in the Collection of the British Museum, Pt. II, p. 246.

REMARKS. One of the few species of *Euschistus* that are easily recognized. It has prominent c-shaped marks, one on each cicatrice, black spinose humeri and a white tipped scutellum. Its host plant is the introduced jasmine, *Cestrum diurnum* (Baranowski *et al.*, 1983). Walker's specimen was from Santo Domingo.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [MHND]; 1♀ Pedernales Prov., 24.5 km N. Cabo Rojo, elev. 750 m, 18°06'39"N 71°37'19"W, 10-14 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ La Vega Prov., Parque Nacional Armando Bermúdez, La Ciénaga Manabao, 3050 ft., 19 03 45"N 70 51'50"W, 19 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ Pedernales Prov., Jaragua: Trail to Carlitos ca. 6 km S. hwy 44; 106m; blacklight 17°48.932'N, 71°28.271'W 8 July 2004 S. W. Lingafelter [USNM]; 2♀♀ Prov. Pedernales, Cabo Rojo, Alcoa Headquarters, 20-24-VI-99, R. Woodruff, R. Baranowski blacklight [FSCA]; Prov. La Vega, La Ciénaga Manabao, Park Hdqt, 3-5-VII-89, 3000 ft elev., R.E. Woodruff, blacklight. 1♂, 2♀♀ Sabaneta Prov., Gurabo, 5-VII-1980, Mota & Aquino [MNHN]. 1♂, Independencia, 4 km S Los Pinos, Loma de Vientos, 18° 35 N 71° 46 W, 455 m, July 23 1992, R. Davidson, J. Rawlins, S. Thompson, C. Young. [CMNH]. 1♀, Azua, Sierra Martin Garcia 18° 21 N, 70° 58 W, 860 m, July 21-26, 1992, C. Young, R. Davidson, S. Thompson, J. Rawlins [CMNH].

DISTRIBUTION. Dominican Republic, Puerto Rico, Cuba, St. Lucia, United States (Florida).

Euschistus bifibulus (Palisot de Beauvois)

Pentatoma bifibula Palisot de Beauvois, 1817. Insectes recueillis en Afrique et en Amérique, Pt. 9, p. 148.

REMARKS. This is a small to medium sized stink bug (8-10 mm), brown in color, with the development of the humeral angles quite variable. The defining characters are in the male genitalia. It is reported to be a minor pest becoming abundant on tomatoes and beans on Puerto Rico (Wolcott 1948).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 6♂♂ 1♀ RD-179 La Laguna, N. El Valle, Samaná Prov., 28-29. xi.2003, 54 m, 19°15.007'N 69°18.471'W, D. Perez, R. Bastardo, A. Francisco. (day/night) [MHND]; 2♀♀ RD-203 Rd. El Seibo - Miches, El Seibo Prov., 18°55.435'N 69°07.065'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [MHND]; 10♂♂ 4♀♀

RD-204 Near Laguna El Limón, El Seibo Prov., 10 m, 18°59.282'N 68°52.289'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [NMNH]; 1♀ RD-205 Eastern margin Rio Yonu, Rd. Nisibón-Higüey, La Altagracia Prov., 20 m, 18°47.776'N 68°40.027'W, 19.xii.2003, D. Perez, B. Hierro, R. Bastardo (day) [IIZB]; 1♀ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 2♂♂ 5♀♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 1♂ RD-211 Upper Las Abejas, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,310 m, 6.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [IIZB]; 3♂♂ 1♀ RD-222 2 km S road Rio San Juan - Nagua, near Rio Piedras, Espaillat prov., 41 m, 19°36.650'N 70°11.753'W, 15.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [IIZB]; 1♀ RD-246 Road Rincón de Piedra - Mata Grande, near bridge on Bao river, Santiago prov., 770 m, 19°12.822'N 70°57.709'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM]; 1♂ La Vega Prov., Parque Nacional Armando Bermúdez, La Ciénaga Manabao, 3050 ft., 19 03 45"N 70 51'50"W, 19 April 2000, T.J. Henry & R.E. Woodruff [NMNH]; 1♀ La Altagracia Prov., Nisibón, Batey Papagayo, elev. 150 ft., 18°56'41"N 68°45'42"W, 4-8 April 2000, T.J. Henry & R.E. Woodruff [USNM]. 1♂ Monseñor Nouel, Bonao, Presa Rio Blanco, 13-V-2001, C. Nuñez [MNHN].

HOST PLANT RECORDS. *Leonurus sibiricus* (Lamiaceae), *Cleome spinosa* (Capparaceae), *Hyptis americana* (Lamiaceae), *Lepidium virginicum* (Brassicaceae).

DISTRIBUTION. Dominican Republic, Puerto Rico, Cuba, Jamaica, St. Vincent, México, Central America, and northern South America.

Euschistus crassus Dallas

Euschistus crassus Dallas, 1851, List of Specimens of Hemipterous Insects in the Collection of the British Museum, Pt. 1, p. 205.

REMARKS. This bug is tan in color, around 7-8 mm long, and is easily recognized by the narrow pale impunctate fascia traversing the pronotum and the evaporatorium having black punctuations.

MATERIAL EXAMINED. No specimens of this species were collected.

DISTRIBUTION. Hispaniola, Cuba, United States (Florida).

Euschistus crenator (Fabricius)

Cimex crenator Fabricius, 1794, Entomologia systematica, vol. 4, p. 101.

Mormidea melanocantha Walker, 1868. Catalogue of specimens of Hemiptera-Heteroptera in the Collection of the British Museum. Pt. 3, p. 552.

Pentatoma pustulata Palisot de Beauvois, 1818. Insectes recueillis en Afrique et en Amérique, Pt. 11, p. 185

REMARKS. A small brown stink bug with acutely produced humeral angles and a vague white tip on the scutellum. The form in the Antilles is the nominate subspecies which extends into South America. Callan (1948) reports a number of host plants and says it is sometimes common on tomatoes on the island of Trinidad. Uhler (1894) reports finding large numbers in cocoa plantations on Grenada. Stoner (1922) discovered great numbers on solanecous plants on Antigua. Fabricius' type came from the Virgin Islands. The types of Palisot and Walker were from Hispaniola.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-184 Trail to peak and Centro SOECI, Pico Diego de Ocampo, Santiago Prov., 918 m, 5.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day/night) [MHND]; 1♂ RD-185 ~3km S Cruce de Guayacanes, Valverde Prov., 19°38.779'N 71°03.717'W,

40 m, 6.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day) [MHND]; 2♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [MHND]; 1♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM]; 1♀ RD-204 Near Laguna El Limón, El Seibo Prov., 10 m, 18°59.282'N 68°52.289'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 2♂♂ 1♀ RD-206 Entrance to Playa Cumayasa, San Pedro de Macorís Prov., 18.xii.2003, D. Perez, B. Hierro, R. Bastardo. (day) [USNM]; 3♂♂ 5♀♀ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 2♂♂ 2♀♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [IIZB]; 1♀ RD-220 El Callejón de la Loma, Parque Nacional El Choco, Puerto Plata prov., 110 m, 19°44.428'N 70°25.459'W, 13.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1♀ RD-221 ~8 km S Bombita, Parque Nacional El Choco, beside karst mogote, Puerto Plata prov., 144 m, 19°43.249'N 70°28.216'W, 14.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 4♂♂ 3♀♀ RD-222 2 km S road Rio San Juan - Nagua, near Rio Piedras, Espaillat prov., 41 m, 19°36.650'N 70°11.753'W, 15.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [USNM]; 1♂ RD-243 Babosico, on road to Jánico, Santiago prov., 515 m, 19°20.955'N 70°47.503'W, 27.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM]; 1♀ RD-246 Road Rincón de Piedra – Mata Grande, near bridge on Bao river, Santiago prov., 770 m, 19°12.822'N 70°57.709'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM]; 1♀ RD-248 Entrance to Sabana Iglesia, Santiago prov., 372 m, 19°20.196'N 70°45.483'W, 29.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [MHND]; 1♂ RD-279 Half of trail to Hoyo Claro, forest S Verón, La Altagracia prov., 18°34.976'N 68°26.555'W, 68 m, 22.vii.2004, D. Perez (n) [night] [MHND]; 1♂ EL-5T Prov. Sanchez Ramirez, Mina de Oro Pueblo Viejo, Rio Naranjo (por el cementerio), 3.viii.2003, R. H. Bastardo [IIZB]; 1♀ Mina de Oro Pueblo Viejo (PV-1T), prov. Sanchez Ramirez, 377-063mE 2095-641 mN, 15.viii.2003, R. H. Bastardo [IIZB]; La Altagracia prov., 8 mi. E Batey Papagayo, elev. 150 ft., 18°56'41"N 68°45'42"W, 4-8 April 2000, T.J. Henry & R.E. Woodruff, sticky plant [USNM]; 2♀♀ La Altagracia Prov., Nisibón, Batey Papagayo, elev. 150 ft., 18°56'41"N 68°45'42"W, 4-8 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ 3♀♀ Prov. La Altagracia, Nisibon "Papagayo", blacklight, R.E. Woodruff & R.M. Baranowski, 16-19-VI-1999 [FSCA]. 1♀ Dist. Nac., 15-III-1980, Reynoso [MNHN]. 1♀ Sabaneta Prov., Gurabo, 5-VII-1980, Abud-Aquino [MNHN]. 2♂♂, 2♀♀ La Altagracia Prov., 2.9 km SW Boca de Yuma, 18-21-51N, 68-37-05W, 11 m, 28 May 2004, C. Young, J. Rawlins, J. Fetzner, C. Nuñez [CMNH]. 1♂ 2♀♀ Independencia, 4 km S Los Pinos, Loma de Vientos, 18-35N, 71-46W, 455 m. 23 July 1992. R. Davidson, J. Rawlins, S. Thompson, C. Young. Semiarid Deciduous Forest.

HOST PLANT RECORDS. *Hyptis americana* (Lamiaceae).

DISTRIBUTION. Dominican Republic, Haiti, Jamaica, Virgin Islands (St. Thomas), Grenada, Culebra Island, Antigua, Barbados, Trinidad, México, Central and South America.

Euschistus obscurus (Palisot de Beauvois)

Pentatoma obscura Palisot de Beauvois, 1817. Insectes recueillis en Afrique et en Amérique, Pt. 9, p. 149.

Euschistus ursus Van Duzee, 1907. Bulletin Buffalo Society for Natural Science 8:8.

REMARKS. This is a brown bug readily identified by the black

spots on the hemelytra. Van Duzee's specimens, described as *E. ursus*, came from Jamaica. Confusion as to the identity of this species resulted because Palisot's name was based on a male and a female specimen, one of which was the species now referenced as *E. obscurus*, the other *E. crenator*.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ RD-199 Boca de Yuma, P. N. Del Este, La Altagracia Prov., 20 m, 18°21.875'N 68°37.081'W, 16-17.xii.2003, D. Perez, R. Bastardo (day/night) [USNM]. 2♂♂, 19♀♀ La Altagracia Prov., 4.4 km SE Bayahibe, 18-19-59N, 68-48-42W, 3 m, 26-27 May 2004, C. Young, J. Rawlins, J. Fetzner, C. Nuñez [CMNH].

DISTRIBUTION. Dominican Republic, Haiti, Cuba, Jamaica, United States (Florida).

Fecelia biorbis Eger

Fecelia biorbis Eger, 1980, J. New York Entomol. Soc. 88: 29.

REMARKS. This species is relatively large, as individuals are approximately 15 mm in length. Its general body coloration reminisces of a soldiers' camouflage, with olive green and brown marks, and one rather large circular area on corium that is whitish surrounded by a fine black ring. *F. biorbis* was described from a single female collected at around 4,000 feet near the Haitian town of Furcy, south of Port-au-Prince. Here it is recorded for the first time in the Dominican Republic, from the eastern section of Sierra de Bahoruco, which is a continuation of the mountain ranges that extend over the Haitian Southern Peninsula. Only four specimens were found on an intensive night search of the cloud forest near Cortico, suggesting that the species is not common.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 2♀♀ RD-218 1 km ESE Cortico, Barahona prov., 1,347 m, 18°06.520'N 71°12.898'W, 9-10.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM].

DISTRIBUTION. Haiti, Dominican Republic.

Fecelia nigridens (Walker)

Loxa nigridens Walker, 1867, Catalogue of Specimens of Hemiptera Heteroptera Hemiptera in the Collection of the British Museum, Pt. II, p. 241.

REMARKS. This is the species of *Fecelia* most commonly encountered in the Dominican Republic. It is relatively large, individuals being 15-16 mm in length. It is colored dark green with a fine light brown line on the border of scutellum. Characteristically the pronotum is anteriorly marked by large and light brown callous maculations. The humeral spines are black and strongly projected outwards.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ RD-164 On way to Loma de las Tayotas, Rio Limpio, Elías Piña Prov., 19°13.333'N 71°31.220'W, 844 m, 24.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 3♂♂ 6♀♀ RD-191 Around Caseta No. 1, Parque Nacional Sierra de Bahoruco, 1,239 m, Independencia Prov., 18°16.038'N 71°32.691'W, 11-12.xii.2003, D. Perez, R. Bastardo, B. Hierro. (day/night) [USNM]; 3♀♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM]; 1♀ RD-210 Mirador del Hoyo de Pelempito, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,250 m, 18°05.396'N 71°30.663'W, 5.iv.2004, D. Perez, R. Bastardo, B. Hierro. (d/n) [day/night] [MHND]; 1♂ RD-213 km 25 road to Aceitillar, Pedernales prov., 736 m, 18°06.591'N 71°37.234'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [MHND]; 4♂♂ 5♀♀ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1♀ 1♂ RD-219 Sierra Prieta, Villa Mella, Santo Domingo Prov., 142 m, 18°38.925'N 69°58.

303°W, 12.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [IIZB]; 1♂ RD-247 Road Inoa – El Caimito, near San José de las Matas, Santiago prov., 552 m, 19°22.225'N 71°00.661'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1♀ RD-275 La Ciénaga – Los Tablones, P N Armando Bermúdez, La Vega prov., 19°04.044'N 70°51.789'W, 1,100 – 1,270m, 17.vii.2004, D. Perez (d) [day] [MHND]; 1♀ Pedernales Prov., 20 km N Cabo Rojo, elev. 1300 ft., 18°05'31"N 71°38'48"W, 12 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ Pedernales Prov., 24.5 km N. Cabo Rojo, elev. 750 m, 18°06'39"N 71°37'19"W, 10-14 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ La Vega Prov., Parque Nacional Armando Bermudez, La Ciénaga Manabao, 3050 ft., 19 03 45"N 70 51'50"W, 19 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♀ Loma El Candon-go, Monseñor Nouel Prov., 21-23.x. 1994, R. H. Bastardo [IIZB]; Prov. La Vega, Pk Hdqts, Armando Bermudez La Ciénaga de Manabao, 16-V-2001, day catch, R.E. Woodruff, 1100m [FSCA]. 1♀ Pedernales Prov., 23.6 km NE Pedernales, Sierra de Bahoruco, 18-09-23N, 71-34-09W, 1560 m, 14 June 2003, C. Young, J. Rawlins, R. Davidson, P. Acevedo, N. De la Cruz [CMNH]. 1♀ La Vega Prov., 5 km SSE Jarambacoa, 640 m, 25 July 87, J. Rawlins [CMNH].

HOST PLANT RECORDS. *Lantana* sp. (Verbenaceae).

DISTRIBUTION. Dominican Republic, Haiti, Trinidad.

Fecelia proxima Grazia

Fecelia proxima Grazia, 1980. Revista Brasileira de Biologia 40: 265.

REMARKS. At about 14 mm, this species is the smallest among the *Fecelia* known from the island. Although having a similar coloration pattern as *F. nigridens* (dark green over most of the body and black but more delicate humeral spines), it lacks the light maculations on the pronotum.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ RD-221 ~8 km S Bombita, Parque Nacional El Choco, beside karst mogote, Puerto Plata prov., 144 m, 19°43.249'N 70°28.216'W, 14.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]. 1♂ 8♀♀ Prov. Barahona nr. Filipinas, Larimar Mine: 26-VI-1992: R.E. Woodruff, P.E. Skelley, at light [FSCA]. Prov. Hato Mayor, 24 km N. Hato Mayor, 28-X-1986, R.E. Woodruff blacklight trap Mango Limpio Farm [FSCA]. 1♂ Independencia Prov., 4 km S. Los Pinos, 475 m, 18-35N, 71-46W, 12 OCT 91, R. Davidson, C. Young, S. Thompson, J. Rawlins [CMNH]. 1♂ Hato Mayor, Parque Los Haitises, nr Cueva de Arena, 19-04N, 69-28W, 10 m, 7-9 July 92, C. Young, R. Davidson, S. Thompson, J. Rawlins [CMNH]. 1♀ San Juan Prov., 7 km N Arroyo Cano, 1120 m, 18-52N, 71-01W, 1 Sept 95, J. Rawlins, G. Onore, R. Davidson [CMNH].

DISTRIBUTION. Trinidad, Dominican Republic.

Grazia tinctoria (Distant)

Piezodorus tinctoria Distant, 1890. Biologia Centrali-Americana, Heteroptera, Pt. 1, p. 341.

REMARKS. This monotypic genus closely resembles *Piezodorus* and Distant's species was originally assigned to that genus. However, aside from differences in the configuration of the genitalia, *Grazia* has a weak mesosternal carina, whereas in *Piezodorus* it is produced forward to protrude between the procoxae. Bruner reported collecting it on the leguminous tree *Pithecolobium arboreum* L. (Barber & Bruner 1932). This is the first record of this stinkbug on Hispaniola.

MATERIAL EXAMINED. 1♂ DOMINICAN REPUBLIC: Salcedo Prov., Salcedo, Las Cuevas, 3-IV-1980, B. Reynoso [MNHD].

DISTRIBUTION. Dominican Republic, Puerto Rico, Cuba, United States (Texas), México, Panama, Venezuela, Ecuador, Brazil, Paraguay.

Loxa nesiotus Horvath

Loxa nesiotus Horvath, 1925. Annales Musei Nationalis Hungarici 22: 322.

REMARKS. The key by Eger (1978) separates this species from its congeners by having humeral spines angled slightly backwards sometimes forwards and having the length of the first female gonocoxae from base at meson to posterior apex 1.4 mm or less.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀, La Vega, 9 km SE La Constanza, nr. Valle Nuevo, 18° 50' N, 70° 42' W, 1930 m, Aug 17, 1990, J. Rawlins, S. Thompson [CMNH].

DISTRIBUTION. Guyana, Venezuela, Colombia, Panama, Curacao, Grenadines, St. Lucia, and Hispaniola.

Loxa pallida Van Duzee

Loxa pallida Van Duzee, 1907. Bulletin Buffalo Society Natural Science 8:9.

Loxa pilipes Horvath, 1925. Annales Musei Nationalis Hungarici 22: 318.

REMARKS. This species is smaller and more delicate than the more common *L. viridis*. It is colored uniformly pale green, also with minute white speckles and somewhat smaller humeral spines. The key of Eger (1978) characterizes *L. pallida* by having lateral margins of dorsolateral parameral processes convex from caudal view in the male and posterior margins of corium broadly rounded in the female.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 3♀♀ RD-055 ~2 km N Bayahibe, La Altagracia Prov., 31.vii.2002, 18°23.423'N 68°50.453'W, D. Perez, R. Bastardo, B. Hierro [MHND]; 1♂ 5♀♀ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 3♂♂ RD-234 Cerro San Francisco, Bánica, Elias Piña prov., 366 m, 19°05.284'N 71°41.096'W, 21.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [USNM]; 1♂ RD-261 ~6 km on trail to Carlitos, S of Manuel Goya, P N Jaragua, Pedernales prov., 106 m, 17°48.932'N 71°28.271'W, 8.vii.2004, D. Perez (d/n) [day/night] [MHND]; 1♀ Pedernales Prov., Cabo Rojo, 17°54'10"N 71°40'23"W, 10 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♀ Prov. Pedernales, 5 km N. Cabo Rojo, near sea level, 17°57'59"N 71°39'02"W, 12 April 2000, T.J. Henry & R.E. Woodruff [USNM]. 1♂, 4♀♀ La Altagracia Prov., 2 km N Bayahibe, 18-23N, 68-51W, 10 m, 3 July 1992, C. Young, R. Davidson, S. Thompson, J. Rawlins [CMNH].

DISTRIBUTION. Dominican Republic, Cuba, Jamaica, Bahamas, Puerto Rico, Dominica.

Loxa viridis (Palisot de Beauvois)

Pentatoma viridis Palisot de Beauvois, 1811, Insectes recueillis en Afrique et en Amérique, Pt. 7, p. 111, Pl. VIII, fig. 1.

Loxa florida Van Duzee, 1909. Bulletin Buffalo Society Natural Science 9: 156.

REMARKS. This is a relatively common species that readily comes to light. It also appears to be the largest stinkbug in Hispaniola. It is recognized by its uniformly dark green body lightly punctuated with minute white speckles, and its yellowish sharply projected humeral spines. It was illustrated in Wolcott (1948) under the synonym *Loxa variegata* Distant and is listed for the Bahamas under the synonym *Loxa florida* by Ruckes (1952). In the key to *Loxa* species by Eger (1978), it is differentiated from its congeners by having dorsolateral parameral processes from caudal view inclined dorsad, rounded at apex in the male and having posterior margins of corium strongly sinuous, the lateral angles produced in the female. It has been reported on oranges (Van Duzee 1909) but actually it normally feeds on the pods of woody legumes such as *Acacia*.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 1♀ RD-156 La Furnia, Barreras, Azua Prov., 18°19.289'N 70°54.755'W, 18.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ RD-157 Los Tablones, Parque Armando Bermúdez, La Vega Prov., 19°03.308'N 70°53.049'W, 1,270 m, 23.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ 1♀ RD-164 On way to Loma de las Tayotas, Río Limpio, Elías Piña Prov., 19°13.333'N 71°31.220'W, 844 m, 24.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 2♂♂ 4♀♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM]; 1♂ RD-199 Boca de Yuma, P. N. Del Este, La Altagracia Prov., 20 m, 18°21.875'N 68°37.081'W, 16-17.xii.2003, D. Perez, R. Bastardo (day/night) [USNM]; 1♀ RD-202 La Enea, ~15 Km W of Higüey, La Altagracia Prov., 18°39.415'N 68°51.129'W, 100 m, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 1♀ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 1♂ RD-212 ~150 m N bridge on road Cabo Rojo – Aceitillar, Pedernales prov., 16 m, 17°58.530'N 71°39.034'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 2♂♂ 1♀ RD-213 km 25 road to Aceitillar, Pedernales prov., 736 m, 18°06.591'N 71°37.234'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [MHND]; 4♂♂ 1♀ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1♀ RD-228 1 km E Talanquera, San Pedro de Macorís prov., 16 m, 18°25.655'N 69°22.374'W, 19.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [USNM]; 1♂ 2♀♀ RD-234 Cerro San Francisco, Bánica, Elías Piña prov., 366 m, 19°05.284'N 71°41.096'W, 21.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [IIZB]; 1♂ RD-240 ~500 m S Cruce de Ocoa, Peravia prov., 23.iv.2004, D. Perez, B. Hierro. (n) [night] [USNM]; 1♀ RD-248 Entrance to Sabana Iglesia, Santiago prov., 372 m, 19°20.196'N 70°45.483'W, 29.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM]; 1♀ RD-261 ~6 km on trail to Carlitos, S of Manuel Goya, P N Jaragua, Pedernales prov., 106 m, 17°48.932'N 71°28.271'W, 8.vii.2004, D. Perez (d/n) [day/night] [USNM]; 1♂ RD-268 Entrance to Fuerte Banano, Pedernales prov., ~300 m, 12.vii.2004, D. Perez (d/n) [day/night] [USNM]; 1♀ MR-3T Prov. Sánchez Ramírez, Mina de Oro Pueblo Viejo, UTM 369-310 mE, 2095-124 mN, 01.viii.2003, R. H. Bastardo [IIZB]; 1♂ 2♀♀ Pedernales Prov., Cabo Rojo, 17°54'10"N 71°40'23"W, 10 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ Pedernales Prov., 5 km N Cabo Rojo, 17°57'59"N 71°39'02"W, 12 April 2000, T.J. Henry & R. E. Woodruff [USNM]; 1♂ Dajabon Prov., Dajabon Prov., 3 km E. Canongo, 5 km N. of Dajabon, elev. 200 ft., 19°35'58"N 71°40'44"W, 25 April 2000, T.J. Henry & R.E. Woodruff, blacklights [USNM]; 1♀ La Vega Prov., 4 km E of La Ciénaga de Manabao, 3050 ft., 19°04'47"N 70°49'29"W, 19 April 2000, T.J. Henry & R.E. Woodruff, black lights [USNM]; 1♀ La Altagracia Prov., Nisibon, 2.7 km E Batey Papagayo, elev., 150 ft., 18°55'24"N 68°44'21"W, 4-8 April 2000, T.J. Henry & R. E. Woodruff [USNM]; Prov. Monseñor Noel, 18 km W. Bonaó Vivero Fund. Moscoso Puello, 10-13-V-2001, 600m, blacklight trap, R.E. Woodruff, C. Nuñez [FSCA]. 1♀ Pedernales Prov., 26 km N Cabo Rojo, 760 m, 17 July 1987, J. Rawlins, R. Davidson [CMNH]. 1♀ La Altagracia Prov., 4.4 km SE Bayahibe, 3 m, 18-19-59N, 68-48-42W, 26-27 May 2004, C. Young, J. Rawlins, J. Fetzner, C. Nuñez [CMNH].

HOST PLANT RECORDS. *Eupatorium odoratum* (Asteraceae).

DISTRIBUTION. Hispaniola, Cuba, Jamaica, Southern United States, Mexico and Central America.

Mediocampus dominicanus Thomas

Figs. 19-23.

Mediocampus dominicanus Thomas, 1994. Annals of Carnegie Museum 63: 259.

REMARKS. This species was described based on females. We can now provide information on the male. The closest relatives of this recently described genus are found on Cuba, the endemic genera *Pharmus* and allies. Now that males of this genus are available for study for this and the new species described below, the hypothesized relatedness to the Edessinae seems not to hold. Rolston and McDonald (1979) cite as a characteristic of the edessines, a lack of conjunctival appendages on the aedeagus. These are present in *Mediocampus*. The male of *M. dominicanus* is described here for the first time.

Males in length and width averaging somewhat smaller, but otherwise somatic morphology same as female. Genitalia: pygophore capsular, subcylindrical; posteroventral margin broadly emarginated, with secondary weak emargination at middle (figs. 19-20). Theca of aedeagus simple, curvicylindrical; vesica thickened basally, tapering to narrow apex; conjunctival appendages membranous; median penial lobes sclerotized, broadly deflexed, apex acute (fig. 21). Paramere complex with irregularly angular head, apex acute with a sub-apical notch; shaft bearing an elongated digitoid spur; base broadly spatulate (figs. 22-23).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 3♀♀ RD-267 Río Pedernales, near Fuerte Banano, Pedernales prov., 280 m, 12.vii.2004, D. Perez (d) [day]. 2♂♂, 1♀, Prov. Barahona, Filipinas, Larimar Mine at light, 16-17-XII-1995, R.E. Woodruff, 3300 ft. 1♂, Prov. Barahona, Filipinas, Larimar Mine, 26-27-VI-99, R.E. Woodruff at light.

DISTRIBUTION. Dominican Republic.

Mediocampus perezii Thomas, new species

Figs. 24-27, 42.

DESCRIPTION:

Elongate, ovate, dorso-ventrally compressed. Surface lustrous, yellowish-green with shiny castaneous punctations dorsally and ventrally. Punctations on disc of scutellum with dark brown color suffusing to include interstitial surface forming an irregular chevron shaped mark, open anteriorly. Each corium with a squarish shiny brown spot on disc of each corium near end of embolar suture. Each connexival segment with anterior and posterior inframargins dark brown with greenish yellow meson. Length of body (apex of juga to apex of sternite VII): 8.2 mm.

Head.- Juga broadly contiguous in front of tylus, lateral margins strongly sinuate. Tylus behind commissure with pair of apostrophe shaped dark marks. Ocelli small, each separated from eye by about two ocellar diameters. Head length (tip of juga to line of ocelli): 1.1 mm; head width (across eyes): 1.8 mm; antecular width: 1.1 mm. Antennal segment IV longest; V very slightly shorter than IV and slightly longer than II. Segment II slightly longer than segment III; segment I shortest, about one-third length of II. Basal three antennal segments vaguely spotted; segment IV bicolor, pale basally, infusate apically; segment V infusate except for very base. Rostrum long, in repose attaining 4th (third visible) abdominal sternite; segment III longest, slightly longer than II; segments I and IV subequal and about half length of III. Rostral segment I much surpassing posterior margin of bucculae.

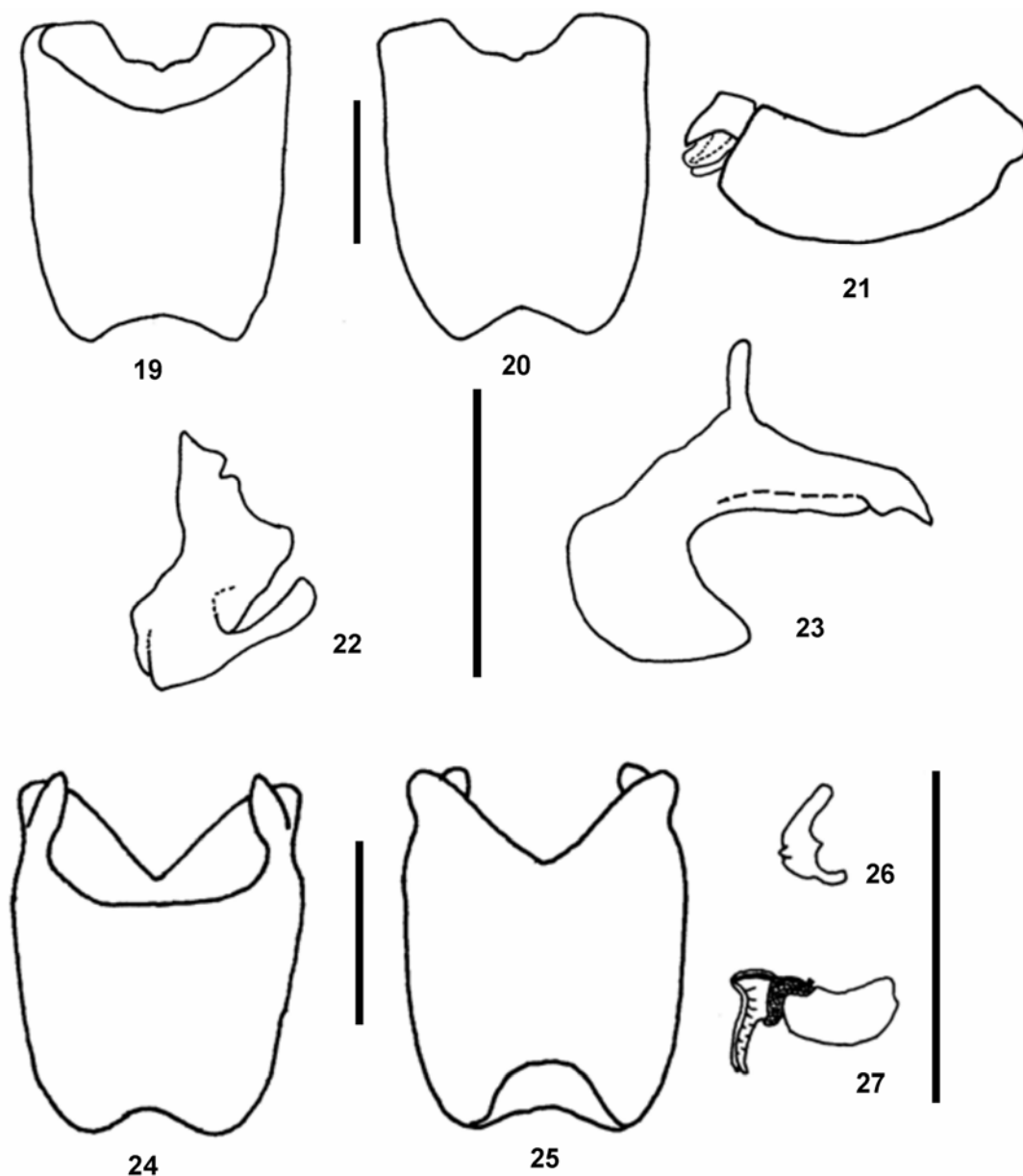


Fig. 19-23. Male genitalia of *Mediocampus dominicanus* Thomas: 19. Pygophore, dorsal. 20. Pygophore, ventral. 21. Aedeagus, lateral. 22. left Paramere, caudal. 23. left Paramere, ental. Scale bar = 1 mm.

Fig. 24-27. Male genitalia of *Mediocampus perezii* n. sp.: 24. Pygophore, dorsal. 25. Pygophore, ventral. 26. left Paramere, ental. 27. Aedeagus, lateral. Scale bar = 1 mm.

Thorax.- Anterolateral pronotal margin rectilinear in dorsal view; anterior angle with small, distinct, cusp; humeral angle produced laterally from line of hemelytra by about width of a tibia. Pronotal length at midline: 1.8 mm; pronotal width across humeri: 4.8 mm. Apex of scutellum acutely angular. Scutellar length: 3.5 mm; scutellar width basally: 3.0 mm. Hemelytral membrane infuscated. Apex of scent gland ruga attaining two-thirds distance from inner orificial angle to lateral margin of metapleuron. Evaporatorium with scattered reddish punctations. Femorae and tibiae maculate.

Abdomen.- Midline of sternum impunctate. Spiracles concolorous with ventral surface. Posterolateral angle of abdominal sternite VII and adjoining area, black.

Genitalia.-Ventral rim of male pygophore broadly V-shaped in ventral view; anterolateral angles subtended by strongly produced, narrow, spatulate process (figs. 24-25).

On each side of pygophore, just inside lumen below dorsal rim, a thickly digitoid, strongly sclerotized, reclinate appendage present. Parameres small, pistol-shaped with the apical projection subterete, compressed; a carinate cusp present on dorso-basal angle (fig. 26). Aedeagus with long, semi-cylindrical phallosome. Vesica short, inconspicuous, and directed at right angle from axis of theca. Vesica seated in trough of strongly sclerotized yoke-like penial lobes; lobes fused on side opposite vesica; an elongate, tapering membranous conjunctival appendage protruding from each lobe (fig. 27).

TYPES.- Holotype, male, labeled: "DOMINICAN REPUBLIC RD-271 4-5 Km S. Puerto Escondido, on trail to Caseta 1, P.N. Sierra de Bahoruco, Independencia Prov., ~950 m. 14.vii.2004, D. Perez (d)." (Deposited USNM). Paratypes: 1 male with same data as holotype (deposited USNM); one male labeled: "DOM. REPUBLIC San Pe-

dro Prov. Nr. Juan Dolio V-13, 18–1985 J.E. Wappes.” (deposited DBTC).

ETYMOLOGY.- This species is named for its discoverer, Daniel E. Perez-Gelabert of the Smithsonian Institution.

REMARKS.- Although the type species, *Mediocampus dominicanus* is known only from female specimens, including three specimens collected during this study, and the series of specimens described here as a new species, includes only males, I have concluded that they represent different species. In *M. dominicanus* the rostrum is shorter, attaining the second visible sternite, whereas in the new species the rostrum attains the middle of the third visible sternite. In *M. dominicanus* the venter is densely darkly punctate, even on the midline of the abdomen whereas in *M. perezi* the midline of the abdomen is impunctate. *M. perezi* has the humeral angles produced whereas the humeri are inconspicuously produced in *M. dominicanus*. The type species is markedly larger, 11 mm length, compared to the new species, which are diminutive, around 8 mm length. This size difference might be sexual dimorphism were it not for the existence of a third distinct species which is intermediate in size compared to the afore-mentioned and in which the sexual dimorphism in size is minimal.

***Mediocampus woodruffi* Thomas, new species**

Figs. 28-33, 43.

DESCRIPTION:

Elongate, ovate, dorso-ventrally compressed; dorsal surface lustrous tan with dense, reddish-brown punctations. Reddish brown color of punctations on disc of scutellum suffusing onto interstitial area to form chevron shaped mark, open anteriorly, and a triangular spot on each side of corial disc near end of embolar suture. Length of body (apex of juga to apex of abdominal sternite VII) 10.5 mm in male; 11.8 mm in female.

Head.- Ocelli small, each separated from eye by 2.5 ocellar diameters. Juga contiguous in front of tylus; just behind commissure on tylus a pair of dark brown apostrophe shaped spots present. Dorsum of head with many punctations except for anterior tylus and semicircular spot next to each eye; venter of head almost impunctate. Antennal segment V longest, slightly longer than IV; segment II slightly shorter than IV; III slightly shorter than II; I about half length of III. Antennal segments I-III maculate; segments IV and V bicolor, pale basally fading to brown distally. Rostrum in repose attaining middle of third (second visible) abdominal sternite; segments II and III longest and subequal; segment IV about two-thirds length of III and subequal to I. Apex of segment I much surpassing posterior margin of bucculae. Head length (apex of juga to line of ocelli): 1.3 mm in male; 1.5 mm in female. Head width (across eyes): 1.9 mm in male; 2.2 mm in female. Anteoocular width: 1.4 mm in male; 1.4 mm in female.

Thorax.- Anterolateral pronotal margin subrectilinear in dorsal view; anterior angle with small cusp; humeri weakly produced, angular. Length of pronotum (midline): 2.0 mm in male; 2.5 mm in female. Width of pronotum (across humeri): 6.7 mm in male; 7.3 mm in female. Apex of scutellum rounded, obtuse; dorsal surface weakly concave. Length of scutellum 4.8 mm in male; 5.3

mm in female. Width of scutellum (basal): 3.9 mm in male; 4.1 mm in female. Hemelytral membrane infuscated. Metathoracic scent gland ruga long, apex attaining three-quarters distance from inner angle of orifice to lateral margin of metapleuron. Evaporatorium with many dark punctations. Femorae with larger spots than tibiae.

Abdomen.- Venter with many dark punctations laterally, impunctate on midline. Lateral apices of each sternite minutely acuminate, darkened. Spiracles concolorous with ventral surface. Anterior and posterior inframargins of each connexival segment with dense, coalescing, dark punctations; medial area tan, sparsely punctate.

Genitalia.- Ventral margin of male pygophore in ventral view with deep, squarish emargination at middle (fig. 29). Seat of emargination with double rim: outer rim carinate, microtuberculate; inner rim thickly carinate, smooth. Posterolateral angles of pygophore obtusely produced (fig. 28). Pygophoral appendage present on each side, just ental to dorsal rim; each appendage thickly digitoid, short, reclinate. Proctiger globose basally, smooth; bilobate, setose at middle; deflexed and spatulate distally. Parameres robust, capitate; head wedge-shaped, twisted; apex darkly strigose on ectal surface, separated by a curved groove from smooth ovoid tumescence on anterior portion of head (fig. 31). Aedeagus with subcylindrical phallosome; vesica short, inconspicuous; penial lobes strongly sclerotized, fused into yoke-shaped collar; each lobe bearing a globular, membranous conjunctival appendage (fig. 30). Posterolateral margins of first gonocoxites in female evenly arcuate in ventral view; mesial margins contiguous entire length and strongly labiate. Eighth paratergites with prismatic lateral lobes, each lobe triangularly produced posteriorly; spiracles present. Ninth paratergites triangular, their apices strongly surpassing posterior margin of eighth paratergite (fig. 32). Spermatheca membranous with sclerotized supporting rod; proximal insertion of membranous sac with rod attended by pair of lunate hooks. Bulb of spermathecal pump orbicular with three short appendages; largest and smallest appendage on opposite sides, with third appendage intermediate in size seated between the other two. Pump region between proximal and distal flange, ovoid; duct between proximal flange and spermatheca dilated (fig. 33).

TYPES. Holotype male, labeled: “DOMINICAN REPUBLIC: La Altagracia Prov., 2.7 km E. Batey Papagayo, elev. 150 ft., 18°55'24”N 68°44'21”W, 4-8 April 2000, T.J. Henry & R.E. Woodruff.” (Deposited USNM). Paratypes: 1 female, same label data as holotype (deposited USNM). 1 male, 1 female, labeled: “DOMINICAN REPUBLIC RD-271 4.5 km S Puerto Escondido, on trail to Ca-seta 1. P N Sierra Bahoruco, Independencia Prov., ~950 m, 14.vii.2004, D. Perez (d).” (Deposited USNM & DBTC).

ETYMOLOGY.- This species is named for Robert Woodruff, who has made extensive collecting efforts in the Dominican Republic.

REMARKS. In *M. woodruffi* the first gonocoxites cover the triangulum so that it is not exposed as in *M. dominicanus* and the mesial margins are labiate. From *M. perezi*, known only from males, the primary differences are in the shape of the ventral pygophoral margin, and the parameres more robust.

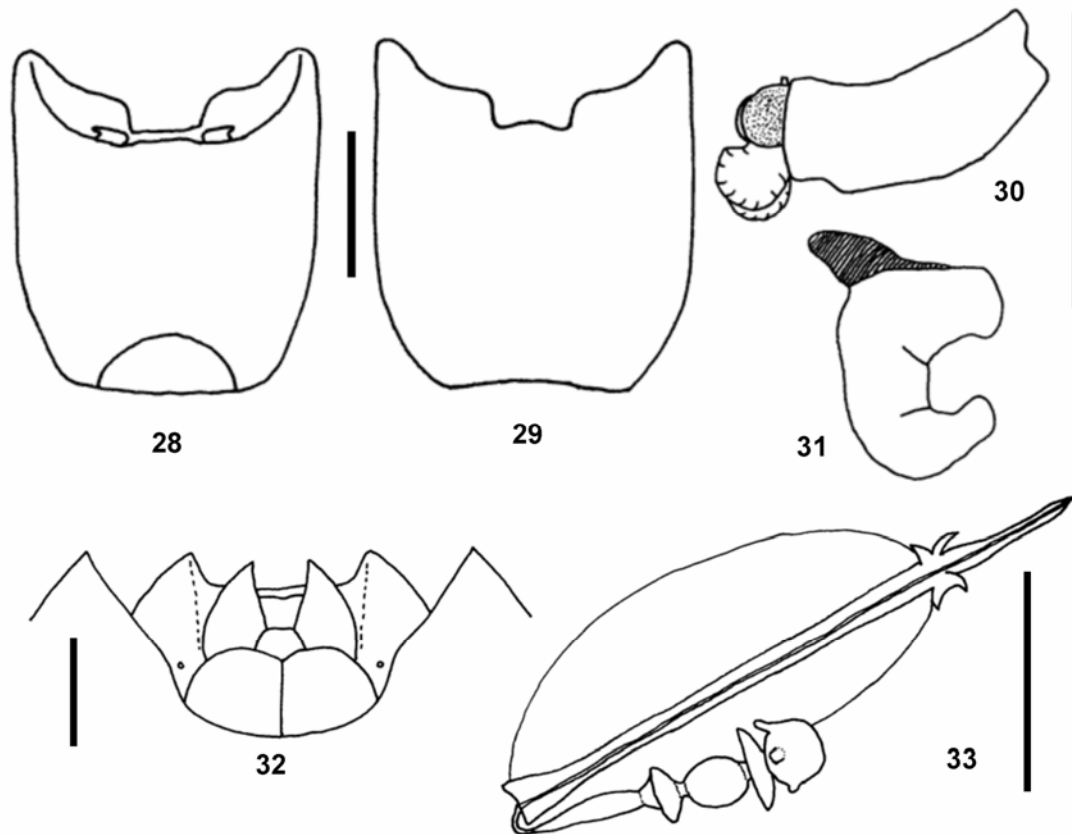


Fig. 28-31. Male genitalia of *Mediocampus woodruffi* n. sp.: 28. Pygophore, dorsal. 29. Pygophore ventral. 30. Aedeagus, lateral. 31. left Paramere, ental. Scale bar = 1 mm.
Fig. 32-33. Female genitalia of *Mediocampus woodruffi* n. sp.: 32. external terminalia, ventral. 33. Spermatheca. Scale bar = 1 mm.

***Menudo femoralis* Thomas 1990**

Menudo femoralis Thomas, 1990. J. New York Entomol. Soc. 98: 427.

REMARKS. The single female available to us differs only slightly from the types which were collected in Puerto Rico.

MATERIAL EXAMINED. 1 ♀ DOMINICAN REPUBLIC, Pedernales Prov., Las Mercedes, 21 km N Cabo Rojo, 490 m, 10 July 1987, R. Davidson, J. Rawlins [CMNH].

DISTRIBUTION. Puerto Rico, Dominican Republic.

***Mormidea albisignis* Stål**

Mormidea albisignis Stål, 1872, Kongliga Svenska Vetenskaps-Akademiens Handlingar 10: 220.

REMARKS. This species resembles the common *M. ypsilon* (L.) but can be distinguished by the punctate basal gonocoxites.

MATERIAL EXAMINED. 1 ♀, DOMINICAN REPUBLIC: La Vega, Bayacanes, 120 m., 24 July 1987. J. Rawlins, R. Davidson. (CMNH).

DISTRIBUTION. Cuba, Hispaniola, Isle of Pines.

***Mormidea angustata* Stål**

Mormidea angustata Stål, 1862, Stettin Ent. Zeit. 23: 102.

REMARKS. This is an important pest of rice in Puerto Rico (Franqui *et al.* 1988). In some early literature this species was reported as *Mormidea ypsilon* (L.) (Uhler 1894, Wolcott 1948).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2 ♂♂, 2 ♀♀, Dajabon, 9 km S Loma de Cabrera, 19° 21' N, 71° 37' W, 620 m, July 12, 1992, J. Rawlins, S. Thompson, C. Young, R. Davidson [CMNH].

DISTRIBUTION. Dominican Republic, Puerto Rico, Cuba, Grenada, México, Nicaragua, Guyana, French Guiana, Brazil.

***Mormidea cubrosa* (Dallas)**

Pentatoma cubrosa Dallas, 1851, List of Specimens of Hemipterous Insects in the Collection of the British Museum Pt. I, p. 247.

REMARKS. This diminutive stink bug feeds on weedy grasses (Franqui *et al.* 1988). It can be recognized by the coloration of the abdominal venter which tends to be all or mostly darkened, that is without a distinct, dark mesial stripe. Dorsally it is somber in color, without the contrasting ivory spots found in most species.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1 ♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [USNM]; 1 ♀ RD-198 Matadero, start of hills, Peravia Prov., 450 m, 18°24.464'N 70°25.736'W, 14.xii.2003, D. Perez, B. Hierro, R. Bastardo (day) [MHND]; 1 ♀ RD-200 ~2 km W San Rafael del Yuma, nr. vertedero, 75 m, 18°26.276'N 68°41.520'W, D. Perez, R. Bastardo (day) [MHND]; 1 ♂ RD-248 Entrance to Sabana Iglesia, Santiago prov., 372 m, 19°20.196'N 70°45.483'W, 29.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [NMNH]; Prov. Puerto Plata, Puerto Plata, 18-28-VI-1993, R.E. Woodruff [FSCA]. 4 ♂♂, 16 ♀♀ Pedernales Prov., Cabo Rojo, 10 m, 19-23 Oct 1991, 17-55N, 71-39W, R. Davidson, C. Young, S. Thompson, J. Rawlins [CMNH]. 1 ♂, 1 ♀ Sabaneta Prov., Rio Gurabo, 5-VII-1980, Marcano [MNHD].

DISTRIBUTION. Hispaniola, Cuba, Jamaica, Puerto Rico, Martinique, Southern United States (Texas to California), México, Honduras, Colombia.

***Murgantia varicolor* (Westwood)**

Pentatoma varicolor Westwood, 1837. Catalogue of Hemiptera in the Collection of Rev. F.W. Hope, p. 37.

REMARKS. This species is metallic purple in color with orange spots and ornate white lines on the dorsum. This species was somewhat unexpected in our survey because *M. histrionica* (Hahn) and *M. violascens* (Westwood) are the species reported from the Greater Antilles. The genitalia are distinctive with the female basal plates curving on the medial margin exposing a mammiliform process on the underlying triangulum.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-055 ~2 km N Bayahibe, La Altagracia Prov., 31.vii.2002, 18°23.423'N 68°50.453'W, D. Perez, R. Bastardo, B. Hierro [USNM]; 9♂♂ 10♀♀ 2 nymphs RD-199 Boca de Yuma, P. N. Del Este, La Altagracia Prov., 20 m, 18°21.875'N 68°37.081'W, 16-17.xii.2003, D. Perez, R. Bastardo (day/night) [USNM and MHND]; Prov. Pedernales 12 km N. Cabo Rojo, 22-VI-1999. R. Woodruff & R. Baranowski, beating at night [FSCA]. 1♂, 1♀ La Altagracia Prov., 2.9 km SW Boca de Yuma, 18-21-51N, 68-37-05W, 11 m, 28 May 2004, J. Rawlins, C. Young, C. Nuñez, J. Fetzner [CMNH].

HOST PLANT RECORDS. *Senna* sp. (Caesalpinaceae).

DISTRIBUTION. Dominican Republic, United States (Florida), México, Brazil.

***Nezara viridula* (Linnaeus)**

Cimex viridulus Linnaeus, 1758, Systema Naturae 10th Ed., p. 444.

Pentatoma flavicollis Palisot, 1818. Insectes recueillis en Afrique et en Amérique, Pt. 11, Pl XI, fig. 5.

REMARKS. This introduced cosmopolitan pestiferous bug is known throughout Latin America as the *chinche verde*. It is a garden and orchard pest that attacks a wide array of fruits, such as citrus, and vegetables, especially beans (Rizzo 1968). It can be distinguished from the species in the native genus *Acrosternum*, which it resembles, by the short scent gland ruga.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2♂♂ 1♀ RD-185 ~3km S Cruce de Guayacanes, Valverde Prov., 19°38.779'N 71°03.717'W, 40 m, 6.xii.2003, D. Perez, R. Bastardo, A. Marmolejos. (day) [MHND]; 3♂♂ 2♀♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [USNM]; 1♀ RD-200 ~2 km W San Rafael del Yuma, nr. vertedero, 75 m, 18°26.276'N 68°41.520'W, D. Perez, R. Bastardo (day) [NMNH]; 1♂ RD-203 Rd. El Seibo - Miches, El Seibo Prov., 18°55.435'N 69°07.065'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [MHND]; 2♂♂ 1♀ RD-204 Near Laguna El Limón, El Seibo Prov., 10 m, 18°59.282'N 68°52.289'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [MHND]; 1♂ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 1♂ 3♀♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 1♀ RD-220 El Callejón de la Loma, Parque Nacional El Choco, Puerto Plata prov., 110 m, 19°44.428'N 70°25.459'W, 13.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [IIZB]; 1♂ RD-221 ~8 km S Bombita, Parque Nacional El Choco, beside karst mogote, Puerto Plata prov., 144 m, 19°43.249'N 70°28.216'W, 14.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [MHND]; 1♀ RD-223 Villa Vista, near Nagua, María Trinidad Sánchez prov., near sea level, 18°04.779'N 71°39.159'W, 16.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [MHND]; 1♀ RD-227 Hill W electric transformers, ~4 kms E Montecristi, Montecristi prov., 57 m, 19°50.203'N 71°37.932'W, 17.iv.2004, D. Perez, B. Hierro. (n) [night] [IIZB]; 1♀ Prov. Dist. Nac.: 4 km E Boca Chica 18°27'05"N 69°35'24"W elev. 40 ft. 16 April 2000 T.J. Henry

& R.E. Woodruff [NMNH]; 2♂♂ 3♀♀ Prov. La Altagracia, Nisibón, Finca Papagayo, blacklight R.E. Woodruff & R.M. Baranowski, 16-19-VI-1999 [FSCA]. 2♂♂ La Altagracia Prov., 4.4 km SE Bayahibe, 3 m, 18-19-59N, 68-48-42W, 26 May 2004, C. Young, J. Rawlins, J. Fetzner, C. Nuñez [CMNH]. 1♀ Monseñor Nouel, Bonao, Presa Rio Blanco, 13-V-2001, C. Nuñez [MNHD]. 1♂ La Vega, Constanza, 13 July 1998, S. Navarro & D. Veloz [MNHD].

HOST PLANT RECORDS. *Cleome viscosa* (Capparaceae), *Hyptis* sp. (Lamiaceae), *Solanum jamaicensis* (Solanaceae).

DISTRIBUTION. Dominican Republic, Trinidad, Puerto Rico, Jamaica, Vieques, Mona Island, Bahamas, Antigua, Southern United States, Mexico, Central and South America. Introduced worldwide.

***Oebalus insularis* Stål**

Oebalus insularis Stål, 1872, Kongliga Svenska Vetenskaps-Akademiens Handlingar. II, 10: 22.

REMARKS. Of economic importance attacking rice on Hispaniola (Wolcott 1948).

MATERIAL EXAMINED. No specimens of this species were collected.

DISTRIBUTION. Dominican Republic, Haiti, Cuba, Puerto Rico, Southern United States, México, Central America, and northern South America.

***Oebalus magnus* Thomas, new species**

Figs. 34-37, 44.

DESCRIPTION:

Elongate, narrowly elliptical, dorso-ventrally compressed.

Tan with dense reddish-brown punctations dorsally, a narrow, pale midline on head and thorax and narrow pale line following lateral margins of scutellum. Ventrally tan with three black longitudinal vittae. Length of body (tip of tylus to apex of seventh abdominal angle): male, 10.0 mm; female, 12.5 mm.

Head.- Elongate, dorsally with three longitudinal bands of reddish-brown punctations: a median band on tylus and midline of vertex, and on each side a broader band running from apex of jugum to cervix, leaving pale, impunctate area adjacent to each eye. Margins of juga with thin, dark-brown edge. Tylus slightly longer than juga. Antennae tan, immaculate, last two segments vaguely bicolor; segments II and III fused but suture evident; segment III longest, segments IV and V subequal and about two-thirds length of III; segment II slightly longer than I and about half length of IV. A line of dark brown punctations present on antennifer. Rostrum in repose just reaching metacoxae; first segment slightly shorter than bucculae; segment II longest, half again as long as I; segment III slightly longer than I; segment IV shortest, about two-thirds length of III. Head length (apex of tylus to line of ocelli): male, 1.9 mm; female, 2.1 mm. Width of head (across eyes): male, 2.1 mm; female, 2.4 mm. Anteocular width: male, 1.5 mm; female, 1.8 mm.

Thorax.- Anterolateral pronotal margins thick, weakly rugose, slightly concave in dorsal view, paler than interstitial areas of disc. Humeral angles obtuse, not produced. Midline of pronotum with pale, narrow, impunctate line. Length of pronotum at midline: (male) 2.0; (female) 2.3 mm. Width across humeri: (male) 4.5 mm; (female) 5.4 mm. Scutellum with pale impunctate midline continuous with line on pronotum. Lateral margin of scutellum darkly, densely punctate with pale, impunctate line paralleling lateral margin from base to apex. Basal angles of

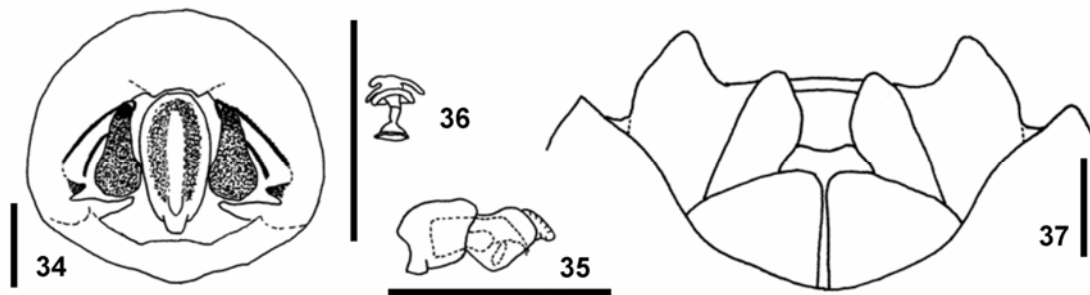


Fig. 34-37. Genitalia of *Oebalus magnus* n. sp.: 34. Pygophore, proctiger and parameres, caudal view. 35. Aedeagus, lateral. 36. Spermathecal pump organ. 37. female terminalia, ventral. Scale bar = 1 mm.

scutellum without fovea. Length of scutellum: (male) 3.5 mm; (female) 4.3 mm. Basal width of scutellum: (male) 2.5 mm; (female) 3.0 mm. Corium with punctures scattered, less dense than on embolium or pronotum. Narrow margin at base of embolium pale; impunctate apex of corium angular; posterior margin of corium straight on outer half, then curving towards clavus. Hemelytral membrane translucent, evenly obscured with smoky tan; veins mostly simple with one furcated on inner half. Pleura pale with dark punctations laterally and dark spot at end of each coxal cleft. An obscure vitta running through evaporatorium and scent gland ruga tending to connect dots on meta- and mesopleura. Mesosternum darkened on either side of mesial carina. Femora and tibia of all legs covered with small, dark spots.

Abdomen.- Base tumid at middle. Disc tan with three longitudinal dark brown vittae: one pigmented with regular margins on midline and one on each side about half way between midline and lateral margin consisting of a band of dark punctations. The lateral lines continuous with row of dark spots and obscure vitta on pleura. Spiracular peritremes dark brown, connexiva pale, immaculate. Apices of laterotergites obtuse, concolorous with connexiva. Genitalia.- Female basal gonocoxites tumid, proximal to nearly contiguous mesially; posterior margin evenly arcuate in ventral view. Posterior margin of fused second gonocoxite concave in ventral view. Posterior margin of eighth paratergite strongly produced caudally on each side, spiracles absent. Apices of ninth paratergites just surpassing posterior margin of eighth paratergite (fig. 37). Bulb of spermathecal pump with three appendages: two longer, digitoid appendages each on opposing sides, inserted basally, one short, deflexed, inserted subapically (fig. 36).

Heads of male parameres thickly wedge-shaped and strongly sclerotized. Ventral rim of pygophore thick, obtuse, lacking bead; inferior ridge obsolete; a digitoid flange at each posteroventral angle directed mesad into lumen. Just forward of each flange a strongly sclerotized cusp directed mesad into lumen. Lateral margins of pygophore adorned on each side by chevron shaped, strongly sclerotized carina. Proctiger dorsally, strongly sulcate (fig. 34). Aedeagus with a broad, semi-sclerotized conjunctiva enshrouding the vesica, median penial lobes and thecal appendages; the sclerotized portion of the conjunctiva about the same size as the theca. Both dorsal and ventral membranous conjunctival appendages present (fig. 35).

TYPES.- Holotype: male, labeled, "DOMINICAN REPUBLIC: RD-210 Mirador del Hoyo de Pelempito, P.N. Sierra de Bahoruco, Pedernales Prov., 1,250 m, 18°05.396'N 71°30.663'W, 5.iv.2004, D. Perez, R. Bastardo, B. Hierro (d/n)" [deposited USNM].

Paratypes: 2 males, 2 females with same label data as holotype [deposited USNM]. 2 males, 2 females, labeled: "DOMINICAN REPUBLIC: RD-272 Caseta 1, P.N. Sierra de Bahoruco, Independencia prov., 18°16.038'N 71°32.691'W, 1,239 m, 14.vii.2004, D. Perez. (Deposited USNM and DBTC).

MATERIAL EXAMINED. 18♂♂ 16♀♀ RD-210 Mirador del Hoyo de Pelempito, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,250 m, 18°05.396'N 71°30.663'W, 5.iv.2004, D. Perez, R. Bastardo, B. Hierro. (d/n) [day/night] [USNM, IIZB and MHND].

HOST PLANT RECORDS. *Schizachyrium gracile* (Poaceae). DISTRIBUTION. Dominican Republic.

Oebalus ornatus (Sailer)

Solubea ornata Sailer, 1944. Proceedings Entomological Society Washington 46: 124.

Solubea guerini Wolcott, 1936. Insectae Borinquensis, Journal of Agriculture, University Puerto Rico 20: 175.

REMARKS. Related to *O. poecilus*, but lacks spots on the hind tibiae. According to Pantoja *et al.* (1995) it is the most important stink bug pest of rice in northern Latin America.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-161 ~3 km SE Montecristi, Montecristi Prov., very dry forest, 19°50.117'N 71°37.234'W, 42 m, 23.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [USNM]; 1♀ RD-227 Hill W electric transformers, ~4 kms E Montecristi, Montecristi prov., 57 m, 19°50.203'N 71°37.932'W, 17.iv.2004, D. Perez, B. Hierro. (n) [MHND]; 2♂♂ RD-236 km 14 road San Juan – Las Matas de Farfán, San Juan prov., 500 m, 18°50.055'N 71°21.029'W, 22.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [MHND]; 1♀ "Dominican Rep.: Nisibón, El Cedro, July 19, 1969 J. C. Maldonado C." [USNM]; 8♂♂ 6♀♀ Prov. La Altagracia, Nisibon "Papagayo," 16-19-VI-98, R.E. Woodruff/P.H. Freytag blacklight trap [FSCA]. 1♀ Dajabón Prov., 5 km S Loma de Cabrera, 19-21N, 71-37W, 620 m, 12 July 92, J. Rawlins, S. Thompson, C. Young, R. Davidson [CMNH].

HOST PLANT RECORDS. On rice, *Oriza sativa* (Poaceae).

DISTRIBUTION. Dominican Republic, Haiti, Puerto Rico, Colombia, Venezuela, Ecuador, Guyana, Surinam.

Oebalus poecilus (Dallas)

Mormidea poecila, Dallas, 1851. List of Specimens of Hemipterous Insects in the Collection of the British Museum, Pt. 1, p. 213.

REMARKS. This is a highly variable species in form and color. The humeral angles may be spinose or not produced at all. The tibia of all legs are spotted. Reports of this species as a pest of rice in the West Indies were probably misidentifications of *O. ornatus* (Pantoja *et al.* 1995).

MATERIAL EXAMINED. No specimens of this species were collected.
DISTRIBUTION. Trinidad and Colombia to Argentina.

Oebalus pugnax (Fabricius)

Cimex pugnax Fabricius, 1775, Systema Entomologiae, p. 704.

Pentatoma orthocantha Palisot de Beauvois, 1811. Insectes recueillis en Afrique et en Amérique Pt. 8, p. 130.

REMARKS. The rice stink bug is an important economic pest here and elsewhere in the Caribbean region (Jones & Cherry 1986). Like other stink bugs that feed on grasses, the body form is elongated. It can be distinguished from other species in the genus in having the humeral spines directed forward.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 10♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [USNM and MHND]; 1♀ RD-202 La Enea, ~15 Km W of Higüey, La Altagracia Prov., 18°39.415'N 68°51.129'W, 100 m, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 1♀ La Altagracia Prov., Nisibón, Batey Papagayo, elev. 150 ft., 18°56'41''N 68°45'42''W, 4-8 April 2000, T.J. Henry & R.E. Woodruff [USNM]. 1♀ Dist. Nac. Santo Domingo, Parque Paseo de los Indios, 18-26N, 69-56W, 60 m, 10 Nov 2002, W. Zanol [CMNH].

DISTRIBUTION. Dominican Republic, Florida, Puerto Rico, Cuba, Antigua, México, Panama, Colombia.

Oebalus ypsilon (De Geer)

Cimex ypsilon-griseus De Geer, 1773. Mémoires pour servir à l'histoire des Insectes III, p. 333.

Solubea griseus Sailer, 1944. Proceedings Entomological Society Washington 46: 118.

REMARKS. A major pest of rice in the West Indies (Franqui *et al.* 1988). The species is easily recognized because the second antennal segment is shorter than the first and fused to the third.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 1♀ RD-162 Rio Limpio, Elías Piña Prov., around house, 19°14.685'N 71°31.991'W, 781 m, 24-25.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ 2♀ RD-200 ~2 km W San Rafael del Yuma, nr. vertedero, 75 m, 18°26.276'N 68°41.520'W, D. Perez, R. Bastardo (day) [IIZB]; 14♂♂ 11♀♀ RD-236 km 14 road San Juan – Las Matas de Farfán, San Juan prov., 500 m, 18°50.055'N 71°21.029'W, 22.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM, IIZB and MHND].

HOST PLANT RECORDS. On rice, *Oriza sativa* (Poaceae).

DISTRIBUTION. Dominican Republic, Puerto Rico, throughout South America.

Piezodorus guildinii (Westwood)

Rhaphigaster guildinii Westwood, 1837, Catalogue of Hemiptera in the Collection of Rev. F.W. Hope, vol. I, p. 31.

REMARKS. This is an economic pest of soybeans in Latin America and also breeds on weedy legumes such as *Sesbania aculeata* (Panizzi 1985). It is pale tan in color, almost translucent, with a narrow pinkish or ivory stripe across the pronotum and contrasting black spiracles. It was reported on cotton in Puerto Rico (Wolcott 1941). The type locality is the island of St. Vincent.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2♀♀ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [MHND]; 1♂ RD-223 Villa Vista, near Nagua, María Trinidad Sánchez

prov., near sea level, 18°04.779'N 71°39.159'W, 16.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM]; 1♂ 1♀ La Altagracia Prov., Nisibón, Batey Papagayo, elev. 150 ft., 18°56'41''N 68°45'42''W, 4-8 April 2000, T.J. Henry & R.E. Woodruff [USNM]. 1♂, 4♀♀ Santo Domingo D.N. 15-III-84, B. Reynoso [MNHD].

DISTRIBUTION. Dominican Republic, Cuba, Puerto Rico, Jamaica, Vieques, Virgin Islands (St. Vincent), Grenada, Antigua, Barbados, Trinidad, United States, México, Honduras, Peru, Argentina, Brazil,

Proxys punctulatus (Palisot de Beauvois)

Halys punctulatus Palisot de Beauvois, 1818, Insectes recueillis en Afrique et en Amérique, Pt. 11, p. 188.

Proxys brevispinus Guérin-Ménéville, 1857, Sagra's Histoire physique, politique et naturelle de l'île de Cuba. Vol. VII, p. 371.

REMARKS. This is a black stink bug with a white-tipped scutellum and having all femora bicolored: pale basally with black on the apical fifth. The pale areas of the legs may or may not have small black spots. Vangieson and McPherson (1975) report that it breeds on the monocot genera *Tradescantia* and *Commelina*.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 3♂♂ 3♀♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM and MHND]; 1♂ RD-246 Road Rincón de Piedra – Mata Grande, near bridge on Bao river, Santiago prov., 770 m, 19°12.822'N 70°57.709'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM]; 1♀ Dajabón Prov., 3 km E. Canongo, 5 km N. of Dajabón, elev. 200 ft., 19°35 58''N 71°40'44''W, 25 April 2000, T. J. Henry & R.E. Woodruff, blacklights [USNM].

HOST PLANT RECORDS. *Leonurus sibiricus* (Lamiaceae).

DISTRIBUTION. Dominican Republic, Cuba, Isle of Pines, United States, México, and Honduras.

Proxys victor (Fabricius)

Cimex victor Fabricius, 1775, Systema Entomologiae. p. 705.

REMARKS. Our identification of this species, and others in the genus, is based on Stal's (1872) diagnoses. This is a black or dark gray stink bug with a white tipped scutellum and having the pro- and mesofemora entirely pale with dense, dark brown spotting. The metafemora only are bicolored: pale basally with the apical fifth black. Brailovsky *et al.* (1992) found it feeding on *Commelina* in Mexico.

MATERIAL EXAMINED. Prov. Pedernales, Cabo Rojo, 20 km N hand. 12-IV-2000, 1300 ft, R.E. Woodruff, T.J. Henry [FSCA]. 1♂ Monseñor Nouel, Bonao, 1300 m, 25-VI-1998, S. Navarro & D. Veloz [MNHD]. 1♀ Santo Domingo, D.N. 3-II-1976, A. Gomez [MNHD]. 1♂, 1♀ Independencia, 4 km S Los Pinos, 455 m, 18-35N, 71-46W, 23 July 92, R. Davidson, J. Rawlins, S. Thompson, C. Young [CMNH].

DISTRIBUTION. Hispaniola, Puerto Rico, Jamaica, Dominica, Grenada, St. Vincent, México, Central and South America.

Thyanta (Argosoma) obsoleta (Dallas)

Pentatoma obsoleta Dallas, 1851, List of specimens of Hemipterous Insects in the Collection of the British Museum, Pt. 1, p. 215.

REMARKS. Prior to Rider's revision of the genus, this bug appeared in the literature for the Antilles (e.g. Barber & Bruner 1932, Bruner & Barber 1949) as *Thyanta casta* Stål, a name lost to synonymy.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 3♀♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM and MHND]; 1♂ RD-243

Babosico, on road to Jánico, Santiago prov., 515 m, 19°20.955'N 70°47.503'W, 27.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [MHND]; 1♂ RD-263 Km 11.5 road Cabo Rojo - Aceitillar, Pedernales prov., 18°01.216'N 71°38.834'W, 9.vii.2004, D. Perez (n) [night] [NMNH]; 1♀ Pedernales Prov., Cabo Rojo, 17°54'10"N 71°40'23"W, 10 April 2000, T.J. Henry & R.E. Woodruff [NMNH]; 1♂ Prov. Pedernales, Km 21 N. Cabo Rojo, 1-VII-98, 1200 ft, R.E. Woodruff [FSCA]; 1♀ Prov. Barahona nr. Filipinas, Larimar Mine: 26-VI-7-VII-1992: R.E. Woodruff, P.E. Skelley, at light [FSCA]; 1♀ Prov. Dajabón, 5 km N. Dajabón and 3 km E. Cañongo, 25-IV-2000, 200 ft, blacklight trap, RE Woodruff, TJ Henry [FSCA]. 10 ♂♂, 8 ♀♀ La Altagracia Prov., 4.4 km SE Bayahibe, 18-19-59N, 68-48-42W, 3 m, 26 May 2004, C. Young, J. Rawlins, J. Fetzner, C. Nuñez [CMNH]. 1 ♀ San Juan Prov., 8 km NE Vallejuelo, 690 m, 18-42N, 71-16W, 30 Aug 1995, J. Rawlins, G. Onore, R. Davidson [CMNH]. 1 ♀ Higüey Prov., Veron, 3-IV-1980, Dominguez [MNHD]. 1 ♂ Esperanza prov., Jicome, 1-II-1981, Marciano-Mota [MNHD]. 1 ♀ La Altagracia, Parque del Este, Caseta Guaraguao, 4.4 km SE Bayahibe. 18-19-59N, 68-48-42W. 3 m. 26-27 May 2004. C. Young, J. Rawlins, J. Fetzner, C. Nunez. Semihumid Forest near Sea.

DISTRIBUTION. Bahamas, Cuba, Jamaica, Haiti, Dominican Republic, and Puerto Rico.

Thyanta (Thyanta) perditor (Fabricius)

Cimex perditor Fabricius, 1794, Entomologia systematica, vol. 4, p. 102.

Pentatoma fascifera Palisot, 1817. Insectes recueillis en Afrique et en Amérique Pt. 9, p. 150, Pl. X, fig. 8.

Pentatoma collaris Westwood, 1837. Catalogue of Hemiptera in the Collection of Rev. F.W. Hope, p. 40.

REMARKS. This species is common in the West Indies. It is green with spinose humeri with black spots on the pronotal cicatrices. Frequently there is a red band traversing the pronotum. The pest status of this bug is reviewed by Panizzi & Herzog (1984). Although it can be found damaging a variety of crops such as rice, soybeans and citrus, it is most commonly found on weedy plants such as the composit *Bidens pilosa*. On Puerto Rico it is found on *Piriqueta cistoides* (Wolcott 1948).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 2♀♀ RD-188 La Malena de Boca Chica, Santo Domingo Prov., 18°25.539'N, 69°33.501'W, 20 m, 9.xii.2003, D. Perez, R. Bastardo (day/night) [USNM]; 1♂ 1♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [MHND]; 4♂♂ 6♀♀ RD-204 Near Laguna El Limón, El Seibo Prov., 10 m, 18°59.282'N 68°52.289'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 2♂♂ 5♀♀ RD-205 Eastern margin Rio Yonu, Rd. Nisibón-Higüey, La Altagracia Prov., 20 m, 18°47.776'N 68°40.027'W, 19.xii.2003, D. Perez, B. Hierro, R. Bastardo (day) [MHND]; 3♂♂ 3♀♀ RD-206 Entrance to Playa Cumayasa, San Pedro de Macoris Prov., 18.xii.2003, D. Perez, B. Hierro, R. Bastardo. (day) [USNM]; 3♂♂ 2♀♀ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [MHND]; 1♂ 1♀ RD-209 19 kms NE Ocoa on road to Rancho Arriba, Ocoa Prov., 720 m, 18°39.003'N 70°27.849'W, 3.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 1♂ RD-211 Upper Las Abejas, Parque Nacional Sierra de Bahoruco, Pedernales prov., 1,310 m, 6.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [NMNH]; 2♂♂ 2♀♀ RD-213 km 25 road to Aceitillar, Pedernales prov., 736 m, 18°06.591'N 71°37.234'W, 7.iv.2004, D. Perez, B. Hierro, R. Bastardo. (n) [night] [IIZB]; 1♂ RD-280 Catuano, Isla Saona, P N del Este, 18°11.548'N 68°46.789'W, 11 m, 23.vii.2004, D. Perez (d) [day] [IIZB];

1♂ ¾ km S Batey Papagayo, elev. 150 ft., 18°55'24"N 68°44'21"W, 4-8 April 2000, T.J. Henry & R. E. Woodruff [NMNH]; 1♀ La Altagracia Prov., Nisibón, 2.7 km E Batey Papagayo, elev., 150 ft., 18°55'24"N 68°44'21"W, 4-8 April 2000, T.J. Henry & R. E. Woodruff [NMNH]; Prov. Dist. Nac.: 4 km E Boca Chica, 18°27'05"N 69° 35'24"W, elev. 40 ft., 16 April 2000, T.J. Henry & R. E. Woodruff [USNM]. 3 ♀♀ Dist. Nac. Santo Domingo, Parque Paseo de los Indios, 18-26-53N, 69-56-39W, 60 m, W. Zanol [CMNH]. 2 ♂♂, 2 ♀♀ Higüey Prov., Juanillo, 21-III-81, L. Marciano [MNHD]. 2 ♂♂, 2 ♀♀ La Vega Prov., La Vega, 8-I-1970, Dominguez [MNHD].

HOST PLANT RECORDS. *Macroptilium lathyroides* (Fabaceae), *Leonurus sibiricus* (Lamiaceae), *Mimosa pudica* (Mimosaceae), *Eupatorium odoratum* (Asteraceae).

DISTRIBUTION. Dominican Republic, Puerto Rico, Grenada, Mona Island, Barbados, Trinidad, Southern United States, México, Central America, to Brazil and northern Argentina.

Thyanta (Argosoma) testacea (Dallas)

Pentatoma testacea Dallas, 1851, List of Specimens of hemipterous Insects in the Collection of the British Museum, Pt. 1, p. 250.

REMARKS. This species can be definitively determined by the acutely elongate male paramere. Females (and males) have a narrower body than the other small species of *Thyanta* on Hispaniola, *T. obsoleta*.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♀ RD-161 ~3 km SE Montecristi, Montecristi Prov., very dry forest, 19°50.117'N 71°37.234'W, 42 m, 23.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ RD-170 km 8 Cabo Rojo-Aceitillar Rd., Pedernales Prov., 17°59.378'N 71°39.001'W, 27 m, 30.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 3♂♂ 1♀ RD-195 ~6 km S of Cabral, dry forest, Barahona Prov., 18°12.252'N 71°14.401'W, 247 m, 13.xii.2004, D. Perez, R. Bastardo, B. Hierro (night) [USNM]; 1♂ RD-263 Km 11.5 road Cabo Rojo - Aceitillar, Pedernales prov., 18°01.216'N 71°38.834'W, 9.vii.2004, D. Perez (n) [night] [USNM]. 1 ♂ Pedernales Prov., 14.5 km N Cabo Rojo, 165 m, 18-03N, 71-39W, 19 July 1990, J. Rawlins, C. Young, R. Davidson [CMNH]. 1 ♂ Santiago Prov., El Limón, 1-II-1981, Marciano-Mota [MNHD]. 1 ♀ S.J. Matas Prov., Caña Fistol, 25-V-1980, Marciano {MNHD}.

DISTRIBUTION. Dominican Republic, Virgin Islands, Anguilla, Antigua, Dominica, Grenada, Monserrat, St. Kitts, St. Lucia, Trinidad and Tobago, Guadeloupe, Martinique, Barbados, Curacao.

Tibraca limbativentris Stål

Tibraca limbativentris Stål, 1860, Kongliga Svenska Vetenskaps-Akademiens Handlingar 2: 19.

REMARKS. Introduced from South America. This species is now a pest of rice fields throughout Dominican Republic as it is in South America. At the locality collected *T. limbativentris* was the second species in abundance after *Oebalus ypsilongriseus* and *O. ornata*. A search for this species just a week earlier in a rice field near the Dominican northern coast failed to turn out any specimens. I have found that both nymphs and adults of this species hide during the daytime amongst the roots of the rice plant. It can be distinguished from the other two species in the genus by having body and legs brown and basal processes of proctiger, in males, with horn-like projections directed posteriorly.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 3♂♂ 3♀♀ RD-236 km 14 road San Juan - Las Matas de Farfán, San Juan prov., 500 m, 18°50.055'N 71°21.029'W, 22.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [USNM and MHND].

HOST PLANT RECORDS. On rice, *Oriza sativa* (Poaceae).

DISTRIBUTION. Dominican Republic, Guadeloupe, Trinidad, Costa Rica, Colombia, Venezuela, Brazil, Peru, Bolivia.

Vulsirea nigrorubra Spinola

Vulsirea nigrorubra Spinola, 1837. Essai sur les genres d'Insectes, p. 351

REMARKS. Dorsal color is metallic red and blue with pronounced variation in pattern. Because of this variation, earlier workers considered the Antillean form to be a subspecies of *V. violacea* (Fabricius). Kormilev (1951) elevated Spinola's name to full species level. Stoner (1922) reported finding large numbers of nymphs and adults on a "willow-like tree" on the island of Antigua.

MATERIAL EXAMINED. No specimens of this species were collected during our survey. Five specimens were found in the USNM collection with the following data: DOMINICAN REPUBLIC: 2♂♂ Granchorra, PNE, Prov. La Altagracia, Rep. Dom. 11.iv.1992, Cols. Kelvin Guerrero, D. Felix del Monte, Y. León [USNM]; HAITI: 3♀♀ St. Michel, Haiti, Nov. '25, E. C. Leonard [USNM].

DISTRIBUTION. Dominican Republic, Haiti, Cuba, Isle of Pines, Puerto Rico, Antigua, Trinidad.

Tribe Procliticini

Brepholoxa rotundifrons Barber

Brepholoxa rotundifrons Barber, 1939. Scientific survey of Puerto Rico and the Virgin Islands, vol. 14, p. 300.

REMARKS. This species is distinguished by having the juga longer than the tylus and contiguous at the front of the head. It is pale tan in color. We have no information on its biology.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 6♀♀ RD-156 La Furnia, Barreras, Azua Prov., 18°19.289'N 70°54.755'W, 18.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND and USNM]; 2♀♀ RD-170 km 8 Cabo Rojo-Aceitillar Rd., Pedernales Prov., 17°59.378'N 71°39.001'W, 27 m, 30.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 1♂ RD-216 ~10 km on trail to Carlitos, Parque Nacional Jaragua, Pedernales prov., 172 m, 17°47.892'N 71°28.965'W, 7-8.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [USNM]; 1♂ RD-274 Km 2 Rd. La Descubierta - Los Pinos del Edén, Independencia prov., 14.vii.2004, D. Perez (d) [day] [USNM]; 1♂ 2♀♀ Dajabón, Rio Limpio, 2400 ft., elev., 19°11'01"N 71°32'22"W, 26 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ 1♀ La Vega Prov., 4 km E. of La Ciénaga de Manabao, 3050 ft., 19°04'47"N 70°49'29"W, 19 April 2000, T.J. Henry & R.E. Woodruff, black lights [USNM]; Dajabón Prov., Dajabón Prov., 3 km E. Canongo, 5 km N. of Dajabón, elev. 200 ft., 19°35'58"N 71°40'44"W, 25 April 2000, T. J. Henry & R.E. Woodruff, blacklights [USNM]; 1♀ Prov. Pedernales, Cabo Rojo, Alcoa, 1-VII-98, R.E. Woodruff & R. Baranowski, blacklight trap [FSCA]; 1♀ Prov. Dajabón, 5 km N. Dajabón and 3 km E. Cañongo, 25-IV-2000, 200 ft, blacklight trap, R.E. Woodruff, T.J. Henry [FSCA]. 1♂ Bahoruco Prov., 5.8 km SW Neiba, 18-25-17N, 71-26-38W, -5 m, 3 April 2004, J. Rawlins, R. Davidson, C. Young [CMNH]. 1♂, 3♀♀ Monte Cristi Prov., El Morro, 8-XI-80, Marcano-Cicero [MNHD]. 1♂ Bani Prov., Galeón, 22-VIII-1979, Mota-Reynoso [MNHD].

DISTRIBUTION. Dominican Republic, Haiti, Puerto Rico, Virgin Islands, Mona Island.

Brepholoxa heidemanni Van Duzee

Brepholoxa heidemanni Van Duzee, 1904. Trans. Amer. Entomol. Soc. 30: 78.

REMARKS. The dorsal color is yellow with denticulations on the anterolateral pronotal margin. This margin is straight instead of concave as in the previous species. It is restricted to coastal

areas where its host plant is Bay Cedar, a shrub which typically grows within 150 m of salt water (Eger 1987).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂, 2♀♀ Higüey Prov. El Cortecito, 5-IV-1980, Dominguez [MNHD]. DISTRIBUTION. Florida, Dry Tortugas, Cuba, Dominican Republic.

Tribe Mecideini

Mecidea longula Stål

Mecidea longula Stål, 1854. Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar 11: 233.

REMARKS. This species seems to be abundant on small grasses of dry coastal areas. It can be recognized by its linear body and light brown coloration. Stoner (1922) reported finding nymphs and adults on *Chloris radiata* on the island of Antigua.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ 1♀ RD-189 Near Laguna Cabral, Barahona Prov., 55 m, 11.xii.2003, D. Perez, B. Hierro, R. Bastardo (day) [MHND]; 20♂♂ 12♀♀ 13 nymphs RD-227 Hill W electric transformers, ~4 kms E Montecristi, Montecristi prov., 57 m, 19°50.203'N 71°37.932'W, 17.iv.2004, D. Perez, B. Hierro. (n) [night] [MHND, USNM, IIZB]; 4♂♂ 2♀♀ RD-240 ~500 m S Cruce de Ocoa, Peravia prov., 23.iv.2004, D. Perez, B. Hierro. (n) [night] [USNM]; 2♀♀ 1 nymph RD-241 Entrance to Boca Vieja Marina, near Biyeya beach, Azua prov., 23.iv.2004, D. Perez, B. Hierro. (n) [night] [USNM]; 1♂ 1♀ Pedernales Prov., Cabo Rojo, 17°54'10"N 71°40'23"W, 10 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ 1♀ Prov. Pedernales, Cabo Rojo, Alcoa, 3-VII-1998, R. Woodruff & R. Baranowski, blacklight trap [FSCA]. 1♀ Bahoruco, 5.8 km SW Neiba, 18-25-17N, 71-26-38W, -5 m, 3 April 2004, J. Rawlins, R. Davidson, C. Young [CMNH].

HOST PLANT RECORDS. *Aristida adscensionis* (Poaceae).

DISTRIBUTION. Dominican Republic, Cuba, Puerto Rico, Antigua, St. Bartholomew.

Tribe Sciocorini

Antillosciocoris Thomas, new genus

DIAGNOSIS. Head proportionately large, round, flat; juga contiguous before tylus; small eyes subpedunculate. Scutellum enlarged, U-shaped, covering most of abdomen and all but small portion of frenum. Commissure of propleura and prosternum defined by low, obtuse carina. Scent gland orifice round, set into short auriculate ruga. Legs short, stout.

Spiracles of abdomen small, inconspicuous, those on segments IV-VII closer to margin than those on III, and on these latter segments trichobothria seated mesad of line of spiracles.

TYPE SPECIES. *A. palisoti* Thomas (description below).

ETYMOLOGY. Combination of prefix *antillo-* for the Antilles, with *sciocoris*, the type genus of the Sciocorini.

REMARKS: Only two other genera of Sciocorini occur in the New World. Both *Sciocoris* Fallen and *Trincavellius* Distant have a small, V-shaped scutellum. The new genus is assignable to the tribe Sciocorini because of the large flat head with small subpedunculate eyes.

Antillosciocoris palisoti Thomas, new species

Fig. 46.

DESCRIPTION:

Body- Oval in shape, dorso-ventrally compressed. Tan in color, densely punctate, with large flat head, small sub-

pedunculate eyes, and large U-shaped scutellum. Length (apex of juga to end of abdomen) 5.2 mm. Width (across abdomen) 3.3 mm.

Head- Surface densely punctate; ocelli small, each slightly larger than a punctation, separated from eye by about 1.5x eye width. Base of juga with weak angular anteocular production; margin of juga in dorsal view evenly arcuate to apex. Juga much longer than tylus and broadly contiguous before. Antennifers small, antennae concolorous with body. First antennal segment short, its apex not reaching to margin of head; antennal segment II almost twice as long as I; segment III slightly longer than I; segment IV about equal in length as II; segment V longest, 1.5 length of IV. Bucculae strongly elevated, truncate posteriorly. Rostral segment I equal in length to bucculae; segment II attaining procoxae, segment III attaining mesocoxae; apex of segment IV obscured by point mount, but not reaching abdomen. Head length (apex of juga to line of ocelli): 1.35 mm; anteocular width: 1.5 mm.

Thorax- Dorsal surface of pronotum densely punctate, disc surface undulate, inframargins thickly explanate. Anterior angles of pronotum edentate; humeral angles obtuse, not produced. Anterolateral margins thick, without bead or defined edge. Scutellum enlarged, weakly constricted at middle, apex rounded; covering most of abdomen and almost all of corial frenum and corial membrane. Corium, scutellum and pronotum concolorous; embolar suture rectilinear, embolium only slightly wider apically than distally; margin of embolium basally pale, calloused, impunctate. Pleura densely punctate. Evaporatorium small, excavated, covering only about 1/5th of metapleuron. Scent gland orifice round, directed posteriorly, set into short auriculate ruga. Legs short, stout; tibia roundly prismatic in cross-section and clothed in golden hairs. Length of pronotum at midline 1.6 mm; width: 3.2 mm. Length of scutellum (midline) 2.6 mm; basal width: 2.4 mm.

Abdomen- Venter densely punctate, surface brownly infuscated mesially. Spiracles small. Connexivum mostly covered by embolium, angles not produced, margin of abdomen entire.

Genitalia- Pygophore a capsule open dorsally; posterior surface densely punctate, a shallow semicircular excavation subtending ventral margin of lumen at middle (not dissected, see remarks).

TYPES. Holotype ♂ labeled: "Galeón, Baní Prov., Peravia R.D., 22-VIII-1979, Cols. Marcano-Dguez." (Deposited MHND).

ETYMOLOGY. The specific epithet honors A.M.F.J. Palisot, the first entomologist to explore Hispaniola.

REMARKS. The single specimen available for study is glued to a point mounted on a pin. In mounting ample glue was applied running on to the specimen's abdominal surface and filling the trough formed by the sternum in which reposes the rostrum and embedding the rostrum. Consequently the specimen cannot be removed from the mount without risking serious damage to the specimen. Unfortunately, such mount precludes the usual procedures for dissection of the internal genitalia. New World sciocorines, other than the introduced *Sciocoris microphthalmus* Flor, are extremely rare insects. There

have been no reports in the literature of either *S. longifrons* Barber or *S. crassus* Ruckes since their original descriptions. We were able to locate and study a single specimen of *S. longifrons* in the Entomology collection at Texas A&M University. It was collected at Junction, Texas. We were also able to examine a series of the Mexican species *S. crassus* in the national collection of the Universidad Nacional Autónoma de México. These were from Michoacan. No ecological information is available for either species.

Subfamily EDESSINAE

Edessa bifida (Say)

Pentatoma bifida, Say, 1832. New species of North American Insects, p. 7.

REMARKS. This common species of *Edessa* has convex anterolateral pronotal margins and a heart shaped white spot on the tip of the scutellum. Its preferred host plant is morning glory. Wolcott (1948) mistakenly reports it in Puerto Rico as *Edessa cornuta* Burmeister.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1♂ RD-051 Alto del Rancho, Loma Guaconejo, M. T. Sánchez Prov., 170 m, 24-25.vii.2002, 19°18.752'N 69°56.663'W, D. Perez, B. Hierro, R. Bastardo [USNM]; 2♀♀ RD-162 Rio Limpio, Elías Piña Prov., around house, 19°14.685'N 71°31.991'W, 781 m, 24-25.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [MHND]; 3♀♀ RD-164 On way to Loma de las Tayotas, Rio Limpio, Elías Piña Prov., 19°13.333'N 71°31.220'W, 844 m, 24.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [USNM]; 6♂♂ 5♀♀ RD-166 La Travesía, Eastern Sierra de Bahoruco, Barahona Prov., near Larimar mine, 18°07.163'N 71°08.505'W, 850 m, 29.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [USNM]; 1♀ RD-167 La Víbora, Eastern Sierra de Bahoruco, Barahona Prov., 17°59.963'N 71°13.114'W, 912 m, 30.vii.2003, D. Perez, R. Bastardo, B. Hierro. (day) [MHND]; 1♂ RD-179 La Laguna, N. El Valle, Samaná Prov., 28-29. xi.2003, 54 m, 19°15.007'N 69°18.471'W, D. Perez, R. Bastardo, A. Francisco. (day/night) [MHND]; 1♂ RD-182 Loma Quita Espuela, Firme de loma, S. F. de Macoris Prov., 19°21.101'N 70°08.930'W, 715 m, 3-4.xii.2003, D. Perez, R. Bastardo, A. Marmolejos (day/night) [USNM]; 1♀ RD-202 La Enea, ~15 Km W of Higüey, La Altagracia Prov., 18°39.415'N 68°51.129'W, 100 m, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 1♂ RD-203 Rd. El Seibo – Miches, El Seibo Prov., 18°55.435'N 69°07.065'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 1♂ RD-205 Eastern margin Rio Yonu, Rd. Nisibón-Higüey, La Altagracia Prov., 20 m, 18°47.776'N 68°40.027'W, 19.xii.2003, D. Perez, B. Hierro, R. Bastardo (day) [MHND]; 2♂♂ RD-207 Loma Novillero, Oficina de foresta, San Cristóbal prov., 70 m, 2.iv.2004, D. Perez, B. Hierro. (d/n) [day/night] [USNM]; 1♀ RD-208 Southern slope Cerro Gordo, Baní, Peravia prov., 18°16.337'N 70°21.091'W, 3.iv.2004, D. Perez, B. Hierro. (d) [day] [MHND]; 3♂♂ 2♀♀ RD-221 ~8 km S Bombita, Parque Nacional El Choco, beside karst mogote, Puerto Plata prov., 144 m, 19°43.249'N 70°28.216'W, 14.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d/n) [day/night] [IIZB]; 2♂♂ RD-246 Road Rincón de Piedra – Mata Grande, near bridge on Bao river, Santiago prov., 770 m, 19°12.822'N 70°57.709'W, 28.iv.2004, D. Perez, B. Hierro, R. Bastardo. (d) [day] [MHND]; 1♂ La Altagracia Prov., Nisibon, Batey Papagayo, elev. 150 ft., 18°56'41"N 68°45'42"W, 4-8 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 3♂♂ 1♀ Dajabon, Rio Limpio, 2400 ft., elev., 19°11'01"N 71°32'22"W, 26 April 2000, T.J. Henry & R.E. Woodruff [USNM]; 1♂ 1♀ Prov. Monseñor Noel, 18 km W. Bonao, Bo-

ca del Rio Blanco, 12-V-2001, 600m, at night R.E. Woodruff, C. Nuñez [FSCA]. 1 ♂ Monseñor Nouel, Bonaó, Presa Rio Blanco, 13 May 2001, C. Nuñez [MNHD]. 1 ♂ El Seibo, Loma Cucuyo, 6 km N Pedro Sanchez, 18-55N, 69-07W, 475 m, 4 July 92, C. Young, R. Davidson, J. Rawlins, S. Thompson [CMNH].

HOST PLANT RECORDS. *Heliotropium* sp. (Boraginaceae).

DISTRIBUTION. Dominican Republic, Puerto Rico, United States (Florida, Texas), México, Central America.

Edessa chlorophylla Barber & Bruner

Edessa chlorophylla Barber & Bruner, 1932. J. Dept. Agric. Puerto Rico 16:272.

REMARKS. This bug was described from a single female specimen. Our single female agrees well with the description and illustrations by Barber & Bruner, in particular the female genitalia. It has a long scent gland ruga, the apex reaching nearly to the metapleural margin; the lateral margins of the impunctate juga are feebly sinuate; and the metathoracic plate is unusual in being depressed, flat with the anterior lobes widened. It only differs in that the Dominican specimen is yellowish tan, whereas the Cuban type specimen is green. But this sort of discoloration is common in preserved specimens that are green in life.

MATERIAL EXAMINED. 1 ♀, DOMINICAN REPUBLIC: Pedernales, 26 km N. Cabo Rojo, 730 m, 18-06N, 71-38W, 26-27 Sept 1991, R. Davidson, C. Young, S. Thompson, J. Rawlins (CMNH).

DISTRIBUTION. Dominican Republic, Cuba.

Edessa excoriata Barber & Bruner

Edessa excoriata Barber & Bruner, 1932. J. Dept. Agric. Puerto Rico 16: 270.

REMARKS. A relatively small (11-13 mm), dorso-ventrally compressed species compared to others in the genus. Dorsally it is olive green except for the shiny brown hemelytra. We have compared this specimen to the type at the USNM.

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 1 ♀ RD-156 La Furnia, Barreras, Azua Prov., 18°19.289'N 70°54.755'W, 18.vii.2003, D. Perez, R. Bastardo, B. Hierro. (night) [USNM].

DISTRIBUTION. Haiti, Dominican Republic, Cuba.

Edessa mediatabunda (Fabricius)

Cimex mediatabundus Fabricius, 1794. Entomologia systematica, vol. 4, p. 113.

Edessa rugulosa Uhler, 1894. Proceedings Zoological Society London 1894: 177.

REMARKS. Unlike most *Edessa*, this species has been reported feeding on crops. Among a long list cited by Quintanilla *et al.* (1976) are rice, tomato, tobacco, soybean, watermelon, lettuce and sunflower. On Trinidad it is found on *Hibiscus* (Fennah 1935).

MATERIAL EXAMINED. DOMINICAN REPUBLIC: 2 ♂♂ 2 ♀♀ RD-203 Rd. El Seibo – Miches, El Seibo Prov., 18°55.435'N 69°07.065'W, 18.xii.2003, D. Perez, B. Hierro, R. Bastardo (night) [USNM]; 1 ♂ 2 ♀♀ RD-278 Near Hoyo Claro, forest S Verón, La Altagracia prov., 18°33.605'N 68°26.875'W, 28 m, 22.vii.2004, D. Perez (d) [day][MHND]; 1 ♀ Mina de Oro Pueblo Viejo, (EL-5T), Prov. Sánchez Ramírez, 3.viii.2003, R. H. Bastardo [IIZB]; 1 ♀ Los Cacaos, nr. Los Quemados, Mina de Oro de Pueblo Viejo, Sánchez Ramírez Prov., 16.viii.2003, R. H. Bastardo [IIZB]; 1 ♂ Cotuí, Fátima (EL-1T), Prov. Sánchez Ramírez, 3.viii.2003, R. H. Bastardo [IIZB]; “St. Domingo WI Aug. 05 Aug. Busck collector” [USNM]; “St. Domingo WI March 1928 G. S. Miller coll.” [USNM]. 1 ♂, 4 ♀♀ Cotuí Prov., La Piedra, 22-VI-1980, Dominguez-Aquino [MNHD]. 2 ♂♂, 1 ♀ Monseñor Nouel,

Bonaó, Presa Rio Blanco, 13 May 2001, C. Nuñez [MNHD]. 1 ♀ Pedro S. Prov., Guayajayuco, 9-XI-1980, Marcano-Cicero [MNHD]. 1 ♀ La Altagracia Prov., 9.7 km NW Punta Cana, 18-35-11N, 68-26-22W, 36 m, 29 May 2004, J. Rawlins, J. Fetzner, C. Nuñez, C. Young [CMNH].

DISTRIBUTION. Dominican Republic, Cuba, Jamaica, Grenada, St. Vincent, Antigua, Barbados, Colombia to Argentina.

Edessa rawlinsi Thomas, new species

Figs. 38-39, 45.

DESCRIPTION:

Elongate-oval, dorso-ventrally compressed. Dorsal color shiny green with golden brown hemelytral corium; ventral color golden yellow. Length of body: 10.1 mm; width (across humeri) 6.0 mm.

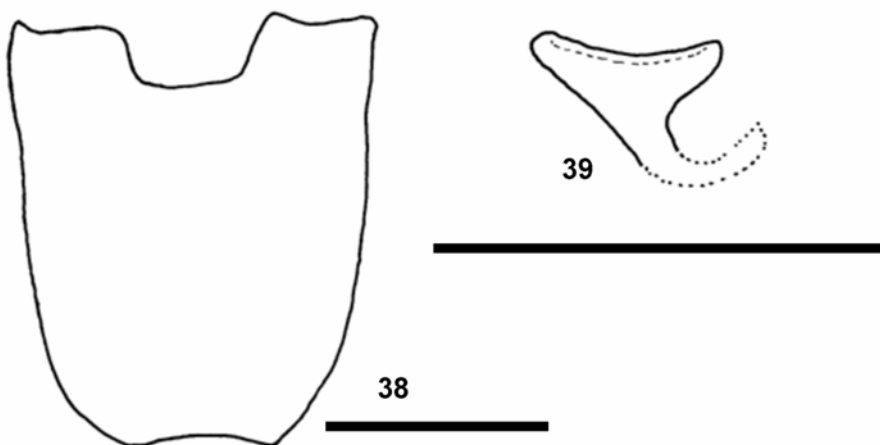
Head.- Dorsal surface shiny green, smooth, with only a few punctations on vertex. Jugal margins sinuate in dorsal view, apices broadly contiguous before tylus. Antennifers simple, inconspicuous. Buccula roundly angular anteriorly, evanescent posteriorly, not continuous behind rostrum. Rostrum of typical length, attaining notch of xiphoid metasternum; segment II longest, about equal to III and IV combined; segment III slightly longer than IV and slightly shorter than I; I equal in length to buccula. First antennal segment thickened, about twice girth of segment II. First two antennal segments and base of third tannish red in color; apical two-thirds of segments III, IV and V dark red. Antennal segment V longest, slightly longer than segment IV which is slightly longer than segment III; segment II about two-thirds length of III and about twice length of segment I. Length of head from tip of tylus to line of ocelli: 1.3 mm; width of head across eyes: 2.1 mm; anteocular width: 1.4 mm.

Thorax.- Humeri right angular, not produced; anterior angle of pronotum with simple tooth. Anterolateral pronotal margin straight in dorsal view, simple, without carina or bead; anterior third with yellow trim. Cicatrices duller, darker green than pronotal disc. Length of pronotum: 2.1 mm. Hemelytral coria golden brown with darkly sanguinous oval spot on disc; frena dark brown; embolia green suffused with golden brown color. Scutellum green with golden tint; apex concolorous with disc; apical portion (beyond frena) narrow with apex obtuse. Length of scutellum: 4.6 mm; basal width: 3.4 mm. Pleura green suffused with golden yellow. Metathoracic scent gland orifice attended by short lobate auricle (extending about one-tenth distance from orifice to lateral margin of metapleura). Evaporatorium covering about two-thirds of metapleuron. Metasternal plate typical for genus, xiphoid; anterior lobes thick, divergent, sloping most precipitously near apex. Coxae yellow; legs greenish yellow except tarsi and distal portion of tibia orange.

Abdomen.- Venter golden medially, greenish laterally. Basal tubercle short, robust, dorso-ventrally compressed. Spiracles large, roundly oval. Apices of sternites minutely acute except last (VII) with apex robustly acute. Connexival segments concolorous yellowish green.

Genitalia.- Pygophore capsular in form, longer than wide; ventro-posterior edge with broad U-shaped emargination (fig. 38); pygophoral appendages, one on each side, sclerotized, peg-shaped, smaller than paramere and seated dorsal to each paramere. Head of paramere thick, blunt, T-shaped (fig. 39).

Fig. 38-39. Male genitalia of *Edessa rawlinsi* n. sp.: 38. Pygopore, ventral. 39. left Paramere, ental. Scale bar = 1 mm.



HOLOTYPE: ♂, labeled a) DOMINICAN REPUBLIC: Barahona, Eastern Sierra Bahoruco. Reserva Cachote. 12.8 km NE Paraiso, 18-05-54 N, 71-11-21 W, 1230 m. 19-21 May 2004. b) C. Young, C. Nunez, J. Rawlins, J. Fetzner. Cloud forest with tree ferns, UV light sample 44214. c) Carnegie Museum Specimen Number CMNH-337-923. [deposited CMNH].

ETYMOLOGY: It is a privilege to name this species in honor of Dr. John E. Rawlins who collected many of the specimens in this survey, including the holotype of the present species.

REMARKS: under most circumstances I would hesitate to describe a species in this unwieldy genus (300 plus species), inasmuch as *Edessa* has never been revised and the only key (Stal 1872) is incomplete and out of date. But several favorable circumstances occluded in this instance. Firstly, there is a manageable number of species occurring in the West Indies and I was able to examine the types of most of those. As a consequence I have been able to identify to species almost all of the specimens available for study with one exception being the aforementioned. Because most of the species on the Greater Antilles are island endemics, and because the present specimen exhibits certain unusual characteristics I feel confident that it has not been previously described. In all other species that I have examined the spout of the scent gland orifice is drawn out into a ruga of variable length. This is the first species known to me which has the spout auricular. Also, in most *Edessa* the buccula are either united behind the rostrum or the ends curve toward one another. In this species the buccula are straight to the end. In all other respects the bug is a typical, though small, specimen of *Edessa*.

Subfamily TESSARATOMINAE

Piezosternum subulatum (Thunberg)

Cimex subulatus Thunberg, 1783. *Dissertatio Entomologica*, Pt. II., p. 41.

Pentatoma mucronata Palisot, 1806. *Insectes recueillis en Afrique et en Amérique*, Pt. 3, p. 46.

REMARKS. *Piezosternum* is the only genus of tessaratomine that occurs in the New World and one of the few pentatomid genera that has species in both Latin America and Africa. It is easily recognized by its large size and by having the pronotum ex-

tending over the base of the scutellum. Rolston and McDonald (1979) follow Kumar (1965) in considering tessaratomids to be of family rank separate from the Pentatomidae. We do not dispute that arrangement, but for convenience include *Piezosternum* in this treatment because it will be recognized as a stink bug by most entomologists.

MATERIAL EXAMINED. No specimens of this species were encountered in this survey.

DISTRIBUTION. Cuba, México, Central America south to Brazil. The only record for the Dominican Republic of which we are aware is that of Palisot.

Subfamily PODOPINAE

Amaurochrous dubius (Palisot de Beauvois)

Scutellera dubia Palisot de Beauvois, 1805, *Insectes recueillis en Afrique et en Amérique*, Pt. 2, p. 33.

REMARKS. This was the first turtle bug species described from the New World, but there is some doubt that this species, found on Hispaniola, is distinct from *Amaurochrous cinctipes* (Say) occurring in the southeastern U.S. It is dull black and has an antehumeral projection on each side of the pronotum. Turtle bugs are associated with swampy habitats. The only other turtle bug in the West Indies is the introduced species *Scotinophara sicula* Costa which has invaded the Virgin Islands (Rolston *et al.*, 1984).

MATERIAL EXAMINED. No specimens of this species were collected.

DISTRIBUTION. Dominican Republic, Haiti, Cuba.

SPECIES OF DOUBTFUL PRESENCE

Edessa rufomarginata (De Geer)

Cimex rufomarginatus De Geer, 1773. *Mémoires pour servir à l'histoire des Insectes*. Vol. 3. Stockholm. p. 330.

Pentatoma furcata Palisot de Beauvois, 1806. *Insectes recueillis en Afrique et en Amérique*, Pt. 3, p. 46.

REMARKS: According to Ely e Silva *et al.* (2004), *Pentatoma furcata* is a junior synonym of *Edessa rufomarginata* (De Geer). Anomalously, Palisot indicated that *Pentatoma furcata* was collected at Oware (Nigeria) in Africa. But inasmuch as the genus *Edessa* occurs only in the New World, Ely and Silva speculate that the specimen must have been mislabeled and probably originated with Palisot's material collected on Santo Domingo. If so, it is the only known record of this species in the West Indies, and therefore we consider the record dubious. As discussed in the introduction, Palisot apparently received

specimens from others and these became mixed with his own collections.

MATERIAL EXAMINED: No specimens of this species were encountered during this survey.

DISTRIBUTION. Mexico to Argentina.

Arvelius crassispinus Breddin

Arvelius crassispinus Breddin, 1909, Sitz-Berichten Gessellschaft Naturforschenden Freunde Berlin. 1909: 159.

REMARKS. The validity of this species is highly dubious. It was described by Breddin (1909) from a single female specimen without label data ("Vaterland?"). Although Breddin illustrated the head and the genitalia of the type, there was nothing in the illustrations which would distinguish his specimen from the common *Arvelius albo-punctatus*. In his revision of the genus, Brailovsky (1981) assigned Breddin's name to specimens from the Dominican Republic in which the juga overlap the tylus slightly more than usual. However, we do not consider this character to be of determinative value, and are unable to distinguish species in this genus without examination of the male genitalia. The genitalia of the specimens figured by Brailovsky differ in no significant details from the typical *A. albo-punctatus*.

MATERIAL EXAMINED. No specimens of this species were encountered in this survey.

DISTRIBUTION. Unknown.

Antiteuchus piceus (Palisot de Beauvois)

Pentatoma picea Palisot de Beauvois, 1817. Insectes Recueillis en Afrique et en Amérique, Pt. 9, p. 148.

REMARKS. This species, if present, would be the only representative of the nominate tribe of the Discocephalinae occurring in the West Indies with the possible exception of *Coriplatus depressus* White, a South American species with one specimen known from Cuba, a record which Alayo (1967) listed as doubtful. As its name implies, *A. piceus* is typically one of the darkest species in the genus, although some individuals are mottled with a mix of dark and pale coloring dorsally. It has a wide distribution in Latin America, but does not occur, to our knowledge, in the Antilles, unless one considers Trinidad a part of the Antilles (Ruckes 1964). Kirkaldy (1909) cited "Antilles," for this species but this was probably based on Palisot's original designation.

MATERIAL EXAMINED. No specimens of this species were encountered in this survey.

DISTRIBUTION. México to Argentina, Trinidad.

Euschistus ictericus (Linnaeus)

Cimex ictericus Linnaeus, 1763. Amoenitates Academicæ, vol. 6, p. 399.

Pentatoma rubro-fusca Palisot de Beauvois, 1818. Insectes recueillis en Afrique et en Amérique, Pt. 11, Pl. XI, fig. 3.

REMARKS. The type locality for *P. rubro-fusca* is "Saint-Domingue" according to Palisot (1818). Its known distribution is the eastern US and Canada so it seems that Palisot's specimen most probably originated from his collecting efforts there. However, because it also occurs in Florida a former distribution that might have included the Greater Antilles cannot be ruled out. It inhabits swampy ground where it feeds on sedges (McPherson 1982).

MATERIAL EXAMINED. No specimen of this species was encountered in this survey.

DISTRIBUTION. Ontario, Canada to Florida in the U.S.

Checklist of Pentatomidae genera and species in Hispaniola

Family PENTATOMIDAE

Subfamily ASOPINAE

- Alcaeorrhynchus* Bergroth, 1891
1. *A. phymatophorus* (Palisot de Beauvois, 1812)
Andrallus Bergroth, 1905
2. *A. spinidens* (Fabricius 1787)
Podisus Herrich-Schäffer, 1851
3. *P. maculiventris* (Say, 1831)
4. *P. mucronatus* Uhler, 1897
5. *P. sagitta* (Fabricius, 1794)
Stiretrus Laporte, 1833
6. *S. quinquepunctatus* Germar, 1839
Tylospilus Stål, 1870
7. *T. accutissimus* (Stål, 1870)
Tyrannocoris Thomas, 1992
8. *T. jole* (Stål, 1862)

Subfamily DISCOCEPHALINAE

Tribe Ochlerini Rolston, 1982

- Alathetus* Dallas, 1851
9. *A. haitiensis* Rolston, 1982

Subfamily PENTATOMINAE

Tribe Pentatomini

- Acrosternum* Fieber, 1860
10. *A. (Chinavia) insulani* Rolston, 1983
11. *A. (Chinavia) marginatum* (Palisot de Beauvois, 1805)
12. *A. (Chinavia) montivagum* (Distant, 1890)
13. *A. (Chinavia) ubicornis* Rolston, 1983
14. *A. (Chinavia) wygodzinskyi* Rolston, 1983
Agonoscelis Spinola, 1837
15. *A. puberula* Stål, 1857
Arocera Spinola, 1837
16. *A. (Euopta) placens* (Walker, 1867)
Arvelius Spinola, 1837
17. *A. albopunctatus* (De Geer, 1773)
18. *A. haitianus* Brailovsky, 1981
19. *A. porrectispinus* Breddin, 1909
Banasa Stål, 1860
20. *B. herbacea* (Stål, 1872)
21. *B. lenticularis* Uhler, 1894
22. *B. flavosa* Thomas, new species
23. *B. punctata* Thomas, new species
24. *B. punctatissima* Barber & Bruner, 1932
25. *B. zeteki* Sailer, 1959
Caribo Rolston, 1984
26. *C. fasciatus* Rolston, 1984
Chroantha Stål, 1872
27. *C. ornatula* (Herrich-Schaeffer, 1842)
Cyptocephala Berg, 1883
28. *C. antiguensis* (Westwood, 1837)
29. *C. bimini* (Ruckes, 1952)
30. *C. pallida* Rolston, 1986
Euschistus Dallas, 1851
31. *E. acuminatus* Walker, 1867
32. *E. bifibulus* (Palisot de Beauvois, 1805)
33. *E. crassus* Dallas, 1851
34. *E. crenator* (Fabricius, 1794)
35. *E. obscurus* (Palisot de Beauvois, 1817)
Fecelia Stål, 1872
36. *F. biorbis* Eger, 1980
37. *F. nigridens* (Walker, 1867)
38. *F. proxima* Grazia, 1980

- Grazia* Rolston, 1980
 39. *G. tincta* (Distant, 1880)
Loxa Amyot & Serville, 1843
 40. *L. nesioties* Horvath, 1925
 41. *L. pallida* Van Duzee, 1907
 42. *L. viridis* (Palisot de Beauvois, 1805)
Mediocampus Thomas, 1994
 43. *M. dominicanus* Thomas, 1994
 44. *M. perezii* Thomas, new species
 45. *M. woodruffi* Thomas, new species
Menudo Thomas, 1994
 46. *M. femoralis* Thomas, 1994
Mormidea Amyot & Serville, 1843
 47. *M. albisignis* Stål, 1872
 48. *M. angustata* Stål, 1862
 49. *M. cubrosa* (Dallas, 1851)
Murgantia Stål, 1862
 50. *M. varicolor* (Westwood, 1837)
Nezara Amyot & Serville, 1843
 51. *N. viridula* (Linnaeus, 1758)
Oebalus Stål, 1862
 52. *O. insularis* (Stål, 1872)
 53. *O. magnus* Thomas, new species
 54. *O. ornatus* (Sailer, 1944)
 55. *O. poecilus* (Dallas, 1851)
 56. *O. pugnax* (Fabricius, 1775)
 57. *O. ypsilongriseus* (De Geer, 1773)
Piezodorus Fieber, 1860
 58. *P. guildinii* (Westwood, 1837)
Proxys Spinola, 1837
 59. *P. punctulatus* (Palisot de Beauvois, 1805)
 60. *P. victor* (Fabricius, 1775)
Thyanta Stål, 1862
 61. *T. (Argosoma) obsoleta* (Dallas, 1851)
 62. *T. (Argosoma) testacea* (Dallas, 1851)
 63. *T. (Thyanta) perditor* (Fabricius, 1794)
Tibraca Stål, 1860
 64. *T. limbiventris* Stål, 1860
Vulsirea Spinola, 1837
 65. *V. nigrorubra* Spinola, 1837

Tribe Proclitini Pennington, 1920

- Brepholoxa* Van Duzee, 1904
 66. *B. heidemanni* Van Duzee, 1904
 67. *B. rotundifrons* Barber, 1939

Tribe Mecidiini

- Mecidea* Dallas, 1851
 68. *M. longula* Stål, 1854

Tribe Sciocorini

- Antillosciocoris* Thomas, new genus
 69. *A. palisoti* Thomas, new species

Subfamily EDESSINAE

- Edessa* Fabricius, 1803
 70. *E. bifida* (Say, 1832)
 70. *E. cornuta* Burmeister, 1835
 72. *E. excoriata* Barber & Bruner, 1932
 73. *E. mediatubunda* (Fabricius, 1794)
 74. *E. chlorophylla* Barber & Bruner, 1932
 75. *E. rawlini* Thomas, new species

Subfamily TESSARATOMINAE

- Piezosternum* Amyot & Serville, 1843
 76. *Piezosternum subulatum* (Thunberg, 1783)

Subfamily PODOPINAE

- Amaurochrous* Stål, 1872
 77. *A. dubius* (Palisot de Beauvois, 1805)

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