







**Memoirs
of the
American Entomological Institute**

Volume 61

**TRUE BUGS (HETEROPTERA) OF PANAMA:
A SYNOPTIC CATALOG AS A CONTRIBUTION
TO THE STUDY OF PANAMANIAN BIODIVERSITY**

by

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*To Dave Rider
with sincere thank,
Richard C. Froeschner*

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3005 SW 56th Avenue
Gainesville, FL 32608-5047

1999

ISBN: 1-887988-05-X

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**TRUE BUGS (HETEROPTERA) OF PANAMA:
 A SYNOPTIC CATALOG AS A CONTRIBUTION TO THE
 STUDY OF PANAMANIAN BIODIVERSITY**

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Abstract: This list, based almost solely on literature records; includes 1,330 species in 585 genera in 51 of the 68 families of Heteroptera known to occur in the Western Hemisphere. A new species name, *Nitornus barberi*, is proposed for the preoccupied *Zylobus lobulatus* Barber.

For a recent family-category standard (with keys), Schuh and Slater's (1995) "True Bugs of the World" was adopted but modified to conform with subsequent publications: e.g. Henry's (1997b) analysis of the Pentatomomorpha, which greatly changed the contents of the traditional family Lygaeidae by raising 11 of its subfamilies to full family status and removing several of the remaining subfamilies into other families. And Packauskas and Schaefer (1998) elevation of the Pentatomidae "subfamily Cyrtocorinae" to full family status.

Two changes had to be made in using Schuh's (1995) "Plant Bugs of the World": one was to recognize the earlier transfer of the genus *Arachnocoris* Scott from the Miridae to the family Nabidae; the second was to follow Gorczyca's (1997) elevation of Palaucorina to subfamily status to contain the two tribes Palaucorini and his new tribe Vanniini.

INTRODUCTION

Panama! A link between two evolutionary patterns! A passageway for northward and southward extensions of two terrestrial faunas that were separated until the end of Tertiary time -- about one million years ago -- by an oceanic connection between the Pacific Ocean and what is now the Caribbean Sea. Evidences drawn from modern sea anemones, sea urchins, corals, and some other marine forms support the geologists' conclusion that such a transisthmus connection between these two large bodies of water existed. Certain Pacific genera of these groups have most of their species in that ocean and only one or a few species on the Caribbean side of the isthmus but nowhere else in the Atlantic waters.

While the insect order Heteroptera contains no truly aquatic marine representation (that is, with all stages living below the ocean's surface), the genus *Hermatobates* Carpenter (Hermatobatidae), comprised of wingless waterstriders that live their entire lives on the surface of salt waters, shows this type of two-ocean distribution with eight of its species on the waters of the Pacific Ocean and one, *Hermatobates breddini* Herring (1965:124), on the Caribbean Sea.

Once the formation of a continuous terrestrial environment was formed, it allowed the natural population spread of northern and southern populations to form a mixture that was further modified as some of the organisms adapted to particular local variations in conditions of altitude, rainfall, and vegetation. Or as Simpson (1965:92) expressed it, "Any major interchange between continents is followed by a period of readjustment during which a new balance with altered faunal composition is achieved."

It was the challenge, in part, to study these resulting "readjustments" that led to the 1923 establishment of a biological station on Barro Colorado Island in the waters of the Panama Canal. The unpublished "Collection Development Policy for the Smithsonian Tropical Research Institute (STRI) Branch of the Smithsonian Institution Libraries" (Smithsonian Institution Libraries, 1992) gave a brief history of that Institute including the information that Congress transferred operations

to the Smithsonian Institution. In 1977, STRI signed a contract with the Republic of Panama, and in 1990 it signed a new "Agreement of Cooperation" with the Universidad de Panama and certain other organizations.

Historically, Panama has been part of the Viceroyalty of Peru, of the Viceroyalty of Grenada, and of the Republic of Great Colombia before gaining its independence in 1903. It is probable that some of the earlier collecting records of these insects from the area now comprising Panama have been variously reported under the latter two of the above-mentioned names.

The country of Panama encompasses slightly over 77,000 square kilometers (29,762 square miles) and thus is about half the size of the North American state of Georgia.

Two "Gazeteers" containing lists of Panamanian collecting localities have been published; the first, by Selander and Vaurie (1962), encompassed the territory of the "*Biologia*" and contained maps, historical data, etc. The second, by Fairchild and Handley (1966), dealt only with the Panamanian localities mentioned in the work entitled "*Ectoparasites of Panama*."

Several sources of helpful comments on the history, physiography, life zones, and ecology of Panama are available. Among these are Weber's (1972) "The Entomology of Panama" which, even though not mentioning any true bugs, is a brief but useful historical-ecological summary. In J. Polhemus' (1985:209-223) discussion of the "Zoogeography" of the Middle American shore bugs (family Saldidae) are many generalizations that could be applied to other forms occurring in that area. A generalized but very informative coverage of the insects in the Neotropics can be found in Hogue's (1993) *Latin American Insects and Entomology*.

The probability of a great number of heteropteran taxa in Panama has long been appreciated, but seldom intensively studied. Except for the enumerations in the *Biologia Centrali-Americana* (in "List of References" see Distant, 1880-1893, Champion, 1897-1901, and Selander and Vaurie, 1962), the present knowledge of this group in Panama is widely scattered and admittedly very incomplete. A modern list of the forms already reported from Panama is needed to establish a base and challenge for further surveying. Such a partial list is here provided; it contains Panama records for 1,330 species in 585 genera.

Anyone accepting these challenges will quickly realize that an identification key based solely on the currently known Panamanian representatives of Heteroptera would be very premature and lead to many errors in naming specimens of still unreported, or even undescribed species. Thus the present list must be viewed as a preliminary step.

For persons interested in identifying specimens of Heteroptera, a "reference guide" to publications dealing with identification and classification of the "true bugs" was published by Stonedahl and Dolling (1991). The more than 350 works listed there are cross-referenced by families and higher groups. Also, in the present text, reference is often made to keys useful in naming components of the various taxa.

In 1995, Schuh and J. Slater produced an illustrated, broad treatment entitled the "True Bugs of the World (Hemiptera: Heteroptera)" that summarized many phases of study of the true bugs and gave keys to superfamilies, families and, where appropriate, subfamilies and tribes as they accept them. Their work is here adopted as providing a basic classification that may be modified by subsequent publications -- for instance, Schuh's (1995) list of the world's Miridae and Henry's (1997b) analysis of the Pentatomomorpha that contained a key (page 297) to its six superfamilies and led to raising 11 of the traditional subfamilies of Lygaeidae to family rank and providing a key (pages 297-298) to the 15 families of the superfamily Lygaeoidea.

EXPLANATIONS FOR THE LIST

The present list of 1,330 species in 585 genera can serve as a groundwork study on which

others, including visitors to the Smithsonian Tropical Research Institute, may build; for as Ryckman (1981:169) noted, "Past research is prologue to future investigations." With a few exceptions based on specimens examined, this list is composed of Panama records encountered while using literature for a variety of purposes; thus one cannot assume all previous literature records are present here. Records given under such general terms as "Central America" and "Mesoamerica" were not entered, as those localities are too imprecise. Unfortunately, time was not available to study the many identified and unidentified specimens of Panama Heteroptera at hand and to incorporate that information.

Currently 67 families of Heteroptera are recognized as established in the Western Hemisphere and are entered below. Two Old World families also have been reported for this hemisphere. The family Stenocephalidae Dallas [see Lansbury, 1965-1966 for a base point of studies on this family], with a single species of unexplained occurrence on the Galapagos Islands, is excluded from further consideration here; and the record for three Alaskan specimens of Plataspidae collected in 1954 and reported by Froeschner (1984) has not been confirmed by additional captures. Of those 68 New World families, 17 are here listed without Panama records-- they are Acanthosomatidae, Aenictopecheidae, Cymidae, Helotrephidae, Hermatobatidae, Heterogastridae, Idiostolidae, Leptopodidae, Lyctocoridae, Macroveliidae, Microphysidae, Oxycarenidae, Phloeidae, Piesmatidae, Plokiophilidae, Potamocoridae, and Thaumastocoridae. Each of these 17 taxa is treated below with information as to whether or not representation of that family can be expected to occur naturally in Panama -- remembering always that a human traveler or one of man's vehicles can carry species past natural barriers that would otherwise exclude it from an area.

For the other 51 families, each treatment begins with a paragraph giving comments on the presently recognized Panamanian occurrence of that group; a few suggestions for collecting species, if appropriate; and sometimes, in a separate paragraph, information on literature of possible help in identifying its species.

For convenience of the user, this catalog is arranged alphabetically by families (also subfamilies and tribes if appropriate), genera, and species. Inclusion of taxonomic units below the family level is based almost entirely on literature records.

In the synonymy under each species for which the cited author described the material as a new species, the data in the brackets that follow start with the words "new species" followed by the names of all countries that author reports for it, plus any more exact Panama listings. The citations not marked within the brackets as "new species" contain only the Panamanian records given by the author cited.

GENERAL WORKS ON PANAMA HETEROPTERA

Serious study of the Heteroptera of Central America (Mexico south into Panama) began with the two parts of the "Rhynchota" in the *Biologia Centrali-Americana* by Distant (1880-1893) and Champion (1897-1901). Subsequent to the publication of that work, a considerable body of literature on the flora and fauna of Panama has appeared, but relatively little of it emphasizes Heteroptera. A number of those works containing information that might be useful to a concentrated study of Panamanian Heteroptera are Goldman and Zetek's (1926) map showing three "Life Zones": (1) Lower Tropical Zone (divided into the lowland rainforests and the arid deciduous forests and savanna; (2) The Upper Tropical Zone (montane rainforests); and (3) the Temperate Zone (temperate forests). For each zone they listed the characteristic mammals, birds, and plants, but did not mention insects.

In 1965 the Smithsonian Institute's Canal Zone Biological Area issued a 65-page

"Bibliography of Papers Pertaining to the Natural History of Barro Colorado Island" containing (pages 56-107) almost 700 titles pertaining to insects, of which 42 deal, at least in part, with Heteroptera.

A generalized but very informative coverage of the Heteroptera of the Neotropics can be found in Hogue's (1993) *Latin American Insects and Entomology*.

ACKNOWLEDGMENTS

For careful, helpful reviews of the manuscript, I extend my special thanks to Thomas J. Henry, U. S. Department of Agriculture, Systematic Entomology Laboratory, to David A. Rider, North Dakota State University, and to Alfred G. Wheeler, Jr., of Clemson University. My thanks are also extended to Thomas J. Henry, of the U. S. Department of Agriculture Systematic Entomology Laboratory and Marc E. Epstein of the Smithsonian Department of Entomology for help in preparation of a camera ready copy of the manuscript; and to Marc E. Epstein who kindly prepared the index. Appreciation is also extended to Smithsonian Library members David T. Steere and Martha A. Rosen for obtaining needed reference items, and to Robert Skarr for providing data on the history of the Smithsonian Tropical Research Institute on Barro Colorado Island in Panama.

CATALOG

FAMILY ACANTHOSOMATIDAE SIGNORET

No Panama records of the family Acanthosomatidae were encountered and no species are likely to occur there.

This family has representatives in both North and South America as well as in the Old World. The few North American representatives are members of the nominate subfamily, Acanthosomatinae Signoret, whose New World distribution extends only as far south as Mexico. The South American representatives, belonging to the subfamilies Blaudusinae Kumar and Ditomotarsinae Signoret are reported only for continental South America and appear to be part of a circumtropical or old Gondwanaland pattern of distribution. Thus no form is known to approach Panama and the assumption must be made that this family is not a natural part of the present-day Panamanian Heteroptera fauna.

Kumar (1974) revised this family and included keys to genera; this was followed by Rolston and Kumar's (1995) description of two new genera and a revised key to the New World genera.

FAMILY AENICTOPECHEIDAE USINGER

Although no Panamanian records have been found, the family undoubtedly is represented there as it is reported as ranging from the western United States south to the extreme tip of South America.

Wygodzinsky and Schmidt (1991) treated this group as a subfamily of Enicocephalidae and gave keys and illustrations to the three genera and nine species known from the Western Hemisphere. Schuh and J. Slater (1995:68) accepted family status of the group and gave a key to the world's four subfamilies.

FAMILY ALYDIDAE AMYOT AND SERVILLE

Listed below are the 14 species in eight genera for which Panamanian records have been found.

Collecting on plant surfaces as well as on the ground, where seed-feeding forms are likely to be found, should add several more to this list.

This group of heteropterans was long considered a subfamily of the family Coreidae, but for the past several decades it has generally been accorded family status. There has been considerable disagreement as to the infrafamilial classification of the Alydidae. One question being, "are there three subfamilies [Alydinae, Leptocorisinae, and Mirelytrinae] or two subfamilies [Alydinae and Mirelytrinae, the latter encompassing the Leptocorinae]?" Support for two was given by Bergroth (1918), Schaefer (1965), and Li and Zheng (1993); and for three by Schaefer (1972, 1980a, 1980b), Linnavuori (1987), and Schuh and J. Slater (1995).

There is no modern taxonomic treatment for all the species in the family. Schuh and J. Slater (1995:272) presented a key to the three subfamilies. Froeschner (1981:10-12) offered a key to the South American genera.

✓SUBFAMILY ALYDINAE AMYOT AND SERVILLE

✓Genus *Burtinus* Stål

Burtinus Stål, 1870:214. Type species: *Burtinus notatipennis* Stål, monotypic.

✓*Burtinus notatipennis* (Stål)

- ✓ *Alydus notatipennis* Stål, 1859c:459 [new species-- Mexico. Colombia].
- ✓ *Alydus femoralis*-- Distant, 1893:373 [Bugaba; David; Volcan de Chiriqui].
- ✓ *Burtinus notatipennis*-- Brailovsky and Flores, 1979:333 [Panama].

✓Genus *Hyalymenus* Amyot and Serville

- ✓ *Hyalymenus* Amyot and Serville, 1843:xxxiv and 223. Type species: *Alydus dentatus* Fabricius, designated by Van Duzee, 1916:13.
- ✓ **Note:** Torre-Bueno (1939b) reviewed the subgenus *Tivarbus* Stål, which contains all the New World species of the genus, and gave a key (pages 179-182) to 12 species.

✓*Hyalymenus pulcher* (Stål)

- ✓ *Alydus pulcher* Stål, 1854:235 [new species-- Honduras].-- Distant, 1893:372 [Bugaba; Tole].
- ✓ *Hyalymenus (Tivarbus) pulcher*-- Brailovsky and Flores, 1979:270 [Panama].

✓*Hyalymenus tarsatus* (Fabricius)

- ✓ *Alydus tarsatus* Fabricius, 1803:250 [new species-- South America].
- ✓ *Hyalymenus tarsatus*-- Distant, 1881a:156 [Panama]; 1893:372 [Bugaba; Caldera; David; Volcan de Chiriqui].--Lethierry and Severin, 1894:105 [Panama].
- ✓ *Hyalymenus (Tivarbus) tarsatus*-- Brailovsky and Flores, 1979:272 [Panama].

✓Genus *Megalotomus* Fieber

- ✓ *Megalotomus* Fieber, 1860b:58. Type species: *Alydus limbatus* Herrich-Schaeffer, a junior synonym of *Cimex junceus* Spinola, designated by Oshanin 1912:24.
Fieber 1860

✓*Megalotomus rufipes* (Westwood)

- ✓ *Alydus rufipes* Westwood, 1842a:19 [new species-- Central America].
- ✓ *Alydus pallescens*-- Distant, 1893:373 [Bugaba].
- ✓ **Note:** *A. pallescens* was synonymized under *rufipes* by Barber (1939:323).

✓SUBFAMILY LEPTOCORISINAE STÅL

Note: This subfamily was revised by Ahmad (1965), who gave keys to the species of the world.

✓ **TRIBE LEPTOCORISINI STÅL**✓ **Genus *Stenocoris* Burmeister**

- ✓ *Myodochus* Burmeister, 1835:303 and 325, preoccupied.
- ✓ *Stenocoris* Burmeister, 1839:1010. Proposed as a new name for preoccupied *Myodochus* Burmeister. Type species: *Cimex tipuloides* De Geer, fixed by Opinion 800 of the International Commission on Zoological Nomenclature, 1967:10-12.

✓ *Stenocoris braziliensis* Ahmad

- ✓ *Stenocoris (Stenocoris) braziliensis* Ahmad, 1965:38 [new species-- Mexico. Panama: Darien. Brazil].-- Brailovsky and Flores, 1979:281 [Panama].

✓ *Stenocoris filiformis* (Fabricius)

- ✓ *Cimex filiformis* Fabricius, 1775:727 [new species-- "America"].
- ✓ *Leptocorisa filiformis*.-- Distant, 1893:375 [Bugaba].
- ✓ *Stenocoris (Stenocoris) filiformis*.-- Brailovsky and Flores, 1979:283 [Panama].

Note: No Panama record for this species was given in Ahmad's (1965) revision of the subfamily Leptocorisinae, but the stated distribution from the United States south to Colombia, Brazil, and the Antillean islands gives no reason to doubt Distant's (1893:above) record, which was also accepted by Brailovsky and Flores (1979:above).

✓ *Stenocoris furcifera* (Westwood)

- ✓ *Leptocorisa furcifera* Westwood, 1842b:18 [new species-- Brazil].
- ✓ *Stenocoris (Stenocoris) furcifera*.-- Ahmad, 1965:67 [Canal Zone].-- Brailovsky and Flores, 1979:284 [Panama].

✓ *Stenocoris tipuloides* (De Geer)

- ✓ *Cimex tipuloides* De Geer, 1773:354 [new species-- Surinam].
- ✓ *Stenocoris (Stenocoris) tipuloides*.-- Ahmad, 1965:55 [Panama].-- Brailovsky and Flores, 1979:282 [Panama].

✓ **TRIBE NOLIPHINI AHMAD**✓ **Genus *Lyrnessus* Stål**

- ✓ *Lyrnessus* Stål, 1862a:59. Type species: *Leptocorisa geniculata* Guérin-Méneville, monotypic.

Lyrnessus geniculatus (Guérin-Méneville)

- ✓ *Leptocorisa geniculata* Guérin-Méneville, 1857:392 [new species-- Cuba].
- ✓ *Lyrnessus geniculatus*.-- Distant, 1893:375 [Bugaba; Volcan de Chiriqui].-- Barber, 1939:324 [Panama].-- Ahmad, 1965:123 [Panama].-- Brailovsky and Flores, 1979:279 [Panama].

✓SUBFAMILY MICRELYTRINAE STÅL

✓Genus *Bactrodosoma* Stål

✓*Bactrodosoma* Stål, 1860:34. Type species: *Bactrodosoma parallela* Stål, monotypic.

✓*Bactrodosoma elongatum* Distant

✓*Bactrodosoma elongatum* Distant, 1893:459 [new species-- Panama: Boquete in Chiriqui].--
Lethierry and Severin, 1894:258 [Panama].

✓Genus *Cydamus* Stål

✓*Cydamus* Stål, 1860:33. Type species: *Cydamus adspersipes* Stål, monotypic.

✓*Cydamus deauratus* Distant

✓*Cydamus deauratus* Distant, 1893:374 [new species-- Panama: Pena Blanca; Volcan de Chiriqui].--
Lethierry and Severin, 1894:99 [Chiriqui].

✓*Cydamus inauratus* Distant

✓*Cydamus inauratus* Distant, 1893:374 [new species-- Panama: Bugaba; Pena Blanca; Volcan de
Chiriqui].--Lethierry and Severin, 1894:99 [Chiriqui].-- Froeschner, 1981:12 [Panama].

✓Genus *Trachelium* Herrich-Schaeffer

✓*Trachelium* Herrich-Schaeffer, 1853:274. Type species: *Trachelium bicolor* Herrich-Schaeffer, see
"Note" below.

✓**Note:** *Trachelium* was originally described to contain two new "species:" *T. bicolor* and *T. fulvipes*;
Kormilev (1953:57) synonymized *fulvipes* under *bicolor*, thus, in effect, making the
original condition monotypic.

✓*Trachelium alboapicatum* Distant

✓*Trachelium albo-apicatus* [sic] Distant, 1881a:159 [new species-- Guatemala]; 1893:373 [Volcan
de Chiriqui].

✓*Trachelium albopicatus*.-- Rau, 1933:189 [Barro Colorado Island].-- Brailovsky and Flores,
1979:294 [Panama].

✓*Trachelium tessellatum* Distant

✓*Trachelium tessellatus* Distant, 1893:373 [new species-- Panama: Bugaba; David; Volcan de
Chiriqui].-- Lethierry and Severin, 1894:99 [Panama].

✓ FAMILY ANTHOCORIDAE AMYOT AND SERVILLE

The following listing of only 21 species in 10 genera for Panama shows the need for careful collecting of these small insects in their specialized habitats.

The formerly generally accepted family "Anthocoridae" has been divided into three families [see Schuh and J. Slater (1995:190-198)] by removing the subfamilies Lasiophilinae and Lyctocorinae and elevating each of them to family status. Schuh and J. Slater (1995:197) presented a key to seven tribes of the family Anthocoridae in the restricted sense but did not indicate any subfamilies thereunder.

Carayon (1972) had presented a detailed analysis of the family Anthocoridae in its former broad sense.

✓ TRIBE ANTHOCORINI AMYOT AND SERVILLE

✓ Genus *Anthocoris* Fallén

✓ *Anthocoris* Fallén, 1814:9. Type species: *Cimex nemorum* Linnaeus, by Opinion 104 of the International Commission on Zoological Nomenclature, 1928:28.

✓ *Anthocoris dentipes* Champion

✓ *Anthocoris dentipes* Champion, 1900:325 [new species-- Panama: Pena Blanca; Tole].

✓ *Anthocoris variicornis* Champion

✓ *Anthocoris variicornis* Champion, 1900:325 [new species-- Panama: Volcan de Chiriqui].

✓ Genus *Macrotrachelia* Reuter

✓ *Macrotrachelia* Reuter, 1871:566. Type species: *Anthocoris nigronitens* Stål, monotypic.

✓ *Macrotrachelia elongata* Champion

✓ *Macrotrachelia elongata* Champion, 1900:319 [new species-- Panama: Volcan de Chiriqui].

✓ *Macrotrachelia nigronitens* (Stål)

✓ *Anthocoris nigronitens* Stål, 1860:43 [new species-- Brazil].

✓ *Macrotrachelia nigronitens*-- Champion, 1900:321 [Volcan de Chiriqui].

✓ *Macrotrachelia nitida* Champion

✓ *Macrotrachelia nitida* Champion, 1900:320 [new species-- Panama: Volcan de Chiriqui].

✓ *Macrotrachelia opacipennis* Champion

✓ *Macrotrachelia opacipennis* Champion, 1900:321 [new species--Panama: Boquete].

✓ **TRIBE DUFOURIELINI VAN DUZEE**✓ **Genus *Cardiastethus* Fieber**

✓ *Cardiastethus* Fieber, 1860a:266. Type species: *Cardiastethus luridellus* Fieber, designated by Kirkaldy, 1906a:121.

✓ *Cardiastethus assimilis* (Reuter)

✓ *Dasypterus assimilis* Reuter, 1871:564 [new species--United States of America].
 ✓ *Cardiastethus assimilis*-- Champion, 1900:332 [Peña Blanca; Volcan de Chiriqui].

✓ *Cardiastethus tropicalis* Champion

✓ *Cardiastethus tropicalis* Champion, 1900:331 [new species-- Guatemala. Panama: David. Grenada].

✓ **Genus *Solenonotus* Reuter**

✓ *Solenonotus* Reuter, 1871:599. Type species: *Anthocoris sulcifer* Stål, monotypic.
 ✓ **Note:** Carayon (1972:342) listed this genus under the subfamily "Lyctocorinae" as "incertae sedis." It appears to belong in this tribe, although no authority for such placement was noticed during this study.

✓ *Solenonotus canaliculatus* Champion

✓ *Solenonotus canaliculatus* Champion, 1900:334 [new species-- Guatemala. Panama: Bugaba; San Feliz].

✓ *Solenonotus nigromarginatus* Champion

✓ *Solenonotus nigromarginatus* Champion, 1900:335 [new species-- Guatemala. Panama: Bugaba].

✓ *Solenonotus sulcifer* (Stål)

✓ *Anthocoris sulcifer* Stål, 1860a:43 [new species-- Brazil].
 ✓ *Solenonotus sulcifer*-- Champion, 1900:334 [Volcan de Chiriqui].

✓ **TRIBE ORIINI CARAYON**✓ **Genus *Macrotracheliella* Champion**

✓ *Macrotracheliella* Champion, 1900:322. Type species: *Macrotracheliella laevis* Champion, monotypic.

✓ *Macrotracheliella laevis* Champion

✓ *Macrotracheliella laevis* Champion, 1900:322 [new species-- Mexico. Panama: Volcan de Chiriqui].-- Parshley, 1917:37 [Panama].-- Henry, 1988a:18 [Panama].

✓ Genus *Orius* Wolff

- ✓ *Orius* Wolff, 1811:161. Type species: *Salda nigra* Wolff, original designation.
 ✓ **Note:** Herring (1966b) revised *Orius* for the Western Hemisphere and keyed the 21 species (pages 1093-1095).

✓ *Orius insidiosus* (Say)

- ✓ *Anthocoris insidiosus* Say, 1832:32 [new species-- United States of America].
 ✓ *Orius insidiosus*-- Herring, 1966b:1102 [Panama].

✓ *Orius perpunctatus* (Reuter)

- ✓ *Triphleps perpunctatus* Reuter, 1884:654 [new species-- Mexico].
 ✓ *Triphleps aterrimus* Champion, 1900:328 [new species-- Panama: Pena Blanca].

✓ *Orius tricolor* (F. White)

- ✓ *Triphleps tricolor* F. White, 1879b:145 [new species-- United States of America].-- Champion, 1900:327 [San Miguel in Pearl Islands].
 ✓ *Orius tricolor*-- Herring, 1966b:1103 [Panama].

✓ Genus *Paratriphleps* Champion

- ✓ *Paratriphleps* Champion, 1900:328. Type species: *Paratriphleps laeviusculus* Champion, monotypic.

✓ *Paratriphleps laeviusculus* Champion

- ✓ *Paratriphleps laeviusculus* Champion, 1900:329 [new species-- Panama: Volcan de Chiriqui].-- Bachelier and Baranowski, 1975:157 [Volcan de Chiriqui].-- Henry, 1988a:20 [Panama].

✓ TRIBE SCOLOPINI CARAYON

✓ Genus *Calliodis* Reuter

- ✓ *Calliodis* Reuter, 1871:558. Type species: *Calliodis picturata* Reuter, monotypic.
Note: Péricart (1972:341) made *Asthenidea* Reuter a junior synonym of *Calliodis* and thereby established the combinations used below.

✓ *Calliodis bifasciatus* (Champion)

- ✓ *Asthenidea bifasciata* Champion, 1900:318 [new species-- Panama: David; Tole].

✓ *Calliodis nebulosus* (Uhler)

- ✓ *Lasiochilus nebulosus* Uhler, 1894a:200 [new species-- Grenada].

- ✓ *Asthenidea nebulosa*.-- Champion, 1900:317 [Volcan de Chiriqui].-- Herring, 1966a:127 [Panama].

✓ **Genus *Eulasiocolpus* Champion**

- ✓ *Eulasiocolpus* Champion, 1900:313. Type species: *Eulasiocolpus megalops* Champion, monotypic.

✓ *Eulasiocolpus megalops* Champion

- ✓ *Eulasiocolpus megalops* Champion, 1900:313 [new species-- Guatemala. Panama: Bugaba; Volcan de Chiriqui].

✓ **TRIBE XYLOCORINI CARAYON**

✓ **Genus *Xylocoris* Dufour**

- ✓ *Xylocoris* Dufour 1831:423. Type species: *Xylocoris rufipennis* Dufour, a junior synonym of *Lygaeus cursitans* Fallén, monotypic.

✓ *Xylocoris albonotatus* (Champion)

- ✓ *Piezostethus albonotatus* Champion, 1900:316 [new species-- Guatemala. Panama: Bugaba; Tole].

✓ *Xylocoris sordidus* (Reuter)

- ✓ *Piezostethus sordidus* Reuter, 1871:560 [new species-- United States of America. Brazil].-- Champion, 1900:316 [Bugaba].

FAMILY ARADIDAE SPINOLA

So far, Panama records for 54 species in 24 genera have been found.

Close inspection of the cryptic habitats into which the members of this family often retreat (under bark, in fungi, in termites nests) plus examination of the moist surfaces of plants (especially trees and log) in rainforests should markedly increase the numbers known from Panama.

Literature essential for study of Neotropical flat bugs are the Usinger and Matsuda (1959) "Classification" and the more recent synoptic world list of the Aradidae by Kormilev and Froeschner (1987). The latter includes many references to keys separating taxa at various levels. A phylogenetic study of the subfamilies of Aradidae was published by Grozeva and Kerzhner (1992).

SUBFAMILY ANEURINAE DOUGLAS AND SCOTT

Genus *Aneurosoma* Champion

- Aneurosoma* Champion, 1898a:116. Type species: *Aneurus dissimilis* Bergroth, monotypic.

Aneurosoma dissimilis (Bergroth)*Aneurus dissimilis* Bergroth, 1889:52 [new species-- Brazil].*Aneurosoma dissimilis*-- Champion, 1898a:117 [Volcan de Chiriqui].Genus *Aneurus* Curtis*Aneurus* Curtis, 1825:pl.86. Type species: *Acanthia laevis* Fabricius, original designation.**Note:** Picchi (1977) reviewed this genus and keyed (page 267-270) the species for North and Middle America and the West Indies.-- Kormilev and Froeschner, 1987:22-35, raised all subgenera to generic status [see also *Iralunelus*].*Aneurus championi* Kormilev*Aneurus* (*Aneurus*) *championi* Kormilev, 1968b:3 and 9 [new species--Mexico. Guatemala].-- Picchi, 1977:307 [Panama (map record)].*Aneurus froeschneri* Kormilev*Aneurus froeschneri* Kormilev, 1968b:7 [new species-- Panama: El Valle].-- Picchi, 1977:307 [Panama (map record)].-- Kormilev and Froeschner, 1987:26 [Panama].*Aneurus usingeri* Picchi*Aneurus minutus*-- Champion, 1898a:114 [Bugaba; Volcan de Chiriqui].-- Barber, 1939:330 [Panama].*Aneurus usingeri* Picchi, 1977:269, 284 and 308 [new species--Mexico. Guatemala. Panama: Volcan de Chiriqui].-- Kormilev and Froeschner, 1987:31 [Panama].**Note:** Picchi (1977:above) made Champion's Volcan de Chiriqui specimen the holotype of her new species *A. usingeri*.Genus *Iralunelus* Štys*Aneurus* (*Iralunelus*) Štys, 1974:91. Type species: *Aneurus gallicus* Štys, original designation. *Iralunelus*-- Kormilev and Froeschner, 1987:31.*Iralunelus leptocerus* (Hussey)*Aneurus tenuicornis* Champion, 1898a:116, preoccupied [new species-- Guatemala. Panama: Volcan de Chiriqui].--Blatchley, 1926:328 [Panama].*Aneurus leptocerus* Hussey, 1957:80, proposed as new name for the preoccupied *A. tenuicornis* Champion.--Froeschner, 1988a:31 [Panama].*Iralunelus leptocerus*--Kormilev and Froeschner, 1987:32 [Panama].*Iralunelus tenuis* (Champion)*Aneurus tenuis* Champion, 1898a:115 [new species-- Panama: Volcan de Chiriqui].-- Picchi, 1977:272 [Volcan de Chiriqui].

Iralunelus tenuis.-- Kormilev and Froeschner, 1987:33 [Panama].

SUBFAMILY ARADINAE AMYOT AND SERVILLE

Genus *Aradus* Fabricius

Aradus Fabricius, 1803:116. Type species: *Cimex betulae* Linnaeus, designated by Latreille, 1810:433.

Note: Parshley (1921) revised and keyed the New World species, including all here reported from Panama.

Aradus falleni Stål

Aradus "Falleni" Stål, 1860:68 [new species--Brazil].-- Champion, 1898a:66 [Panama City; San Miquel on Pearl Island].

Aradus (Aradus) falleni.-- Parshley, 1921:92 [Panama].

Aradus quadrilineatus Say

Aradus quadrilineatus Say, 1825:326 [new species-- United States of America].-- Uhler, 1878:418 [Panama].-- Bergroth, 1892b:335 [Panama].-- Champion, 1898a:65 [Panama].-- Blatchley, 1926:292 [Panama].

Aradus (Aradus) quadrilineatus.-- Parshley, 1921:32 [Panama].-- Froeschner, 1988a:39 [Panama].

Note: Champion (1898a:above) expressed doubts about this species occurring in Panama, but Parshley (1921; above) and subsequent authors accepted the record of its occurrence there.

SUBFAMILY CALISIINAE STÅL

Note: Kormilev (1959b:210) provided a key to three genera of this subfamily.

Genus *Calisiopsis* Champion

Calisiopsis Champion, 1898a:67. Type species: *Calisiopsis ampliceps* Champion, monotypic.

Note: Froeschner (1992) revised this genus and presented a key (pages 33-34) to its 7 species.

Calisiopsis ampliceps Champion

Calisiopsis ampliceps Champion, 1898a:67 [new species-- Panama: Bugaba; Tole].-- Kormilev, 1952b:119 [Bugaba; Tole]; 1976:69 [Panama].-- Kormilev and Froeschner, 1987:57 [Panama].-- Froeschner 1992:34 [Panama].

Genus *Calisius* Stål

Calisius Stål, 1860:68. Type species: *Calisius pallipes* Stål, monotypic.

Calisius ferox Champion

Calisius ferox Champion, 1898a:66 [new species-- Panama: Bugaba].-- Kormilev, 1953a:215 [Panama].-- Usinger and Matsuda, 1959:94 [Panama].-- Kormilev and Froeschner, 1987:60 [Panama].

Calisius longiventris Kormilev

Calisius longiventris Kormilev, 1959b:216 [new species-- Panama: Canal Zone, Paraiso].-- Kormilev and Froeschner, 1987:61 [Panama].

Subfamily CARVENTINAE USINGER

Carventini Usinger, 1950:176.
Carventinae.-- Usinger and Matsuda, 1959:100.

Genus *Acaricoris* Harris and Drake

Acaricoris Harris and Drake, 1944:128. Type species: *Acaricoris ignotus* Harris and Drake, monotypic.

Acaricoris barroanus Drake and Kormilev

Acaricoris barroanus Drake and Kormilev, 1958:244, 246 [new species-- Panama: Barro Colorado Island, Canal Zone].-- Kormilev and Froeschner, 1987:66 [Panama].

Genus *Carventus* Stål

Carventus Stål, 1865a:32. Type species: *Carventus denticollis* Stål, monotypic.

Carventus mexicanus Bergroth

Carventus mexicanus Bergroth, 1895a:167 [new species-- Mexico].-- Champion, 1898a:71 [Volcan de Chiriqui].-- Kormilev, 1981:296 [Panama].

Genus *Kolpodaptera* Usinger and Matsuda

Kolpodaptera Usinger and Matsuda, 1959:144. Type species: *Kolpodaptera prominens* Usinger and Matsuda, original designation.

Kolpodaptera panamensis Usinger and Matsuda

Kolpodaptera panamensis Usinger and Matsuda, 1959:146 [new species-- Panama: Barro Colorado Island].-- Kormilev and Froeschner, 1987:82 [Panama].

Genus *Neoproxius* Usinger and Matsuda

Proxius (*Neoproxius*) Usinger and Matsuda, 1959:113. Type species: *Proxius gypsatus* Bergroth, designated by Kormilev and Froeschner, 1987:84.
Neoproxius.-- Kormilev and Froeschner, 1987:84.

Neoproxius gypsatus (Bergroth)

Proxius gypsatus Bergroth, 1898a:100 [new species-- Venezuela].-- Champion, 1898a:70 [Bugaba].-- Blatchley, 1926:319 [Panama].-- Torre-Bueno, 1939a:272 [Panama].-- Drake and Harris, 1944:40 [Panama].-- Kormilev, 1952a:53 [Panama].
Proxius (*Nesoproxius*) *gypsatus*.-- Froeschner, 1988a:43 [Panama].

Neoproxius palliatus (Champion)

Proxius palliatus Champion, 1898a:69 [new species-- Guatemala. Panama: Bugaba].
Neoproxius palliatus.-- Kormilev and Froeschner, 1987:85 [Panama].

Neoproxius personatus (Champion)

Proxius personatus Champion, 1898a:69 [new species-- Guatemala. Panama: Bugaba; David; San Miguel on Pearl Island; Volcan de Chiriqui].
Neoproxius personatus.-- Kormilev and Froeschner, 1987:85 [Panama].

Genus *Peggycoris* Drake

Asterocoris (*Peggycoris*) Drake 1956a:326. Type species: *Asterocoris zeteki* Drake, monotypic.
Peggycoris.-- Drake and Kormilev, 1958:242, 245.

Peggycoris zeteki (Drake)

Asterocoris (*Peggycoris*) *zeteki* Drake, 1956a:326 [new species--Panama: Canal Zone, Barro Colorado Island].-- Usinger and Matsuda, 1959:129 [Panama].
Peggycoris zeteki.-- Drake and Kormilev, 1958:245 [Panama].-- Kormilev and Froeschner, 1987:88 [Panama].

Genus *Psorosoma* Champion

Psorosoma Champion 1898a:72. Type species: *Psorosoma forficulinum* Champion, monotypic.

Psorosoma forficulinum Champion

Psorosoma forficulinum Champion, 1898a:72 [new species-- Panama: Bugaba].-- Usinger and Matsuda, 1959:116 [Panama].-- Kormilev and Froeschner, 1987:89 [Panama].

SUBFAMILY MEZIRINAE OSHANIN

Genus *Aphleboderrhis* Stål

Aphleboderrhis Stål, 1860:67. Type species: *Aphleboderrhis pilosa* Stål, monotypic.

Aphleboderrhis comatus Champion

Aphleboderrhis comatus Champion, 1898a:79 [new species-- Panama: Volcan de Chiriqui].--
Drake and Harris, 1944:41 [Panama].-- Usinger and Matsuda, 1959:368 [Panama].--
Kormilev and Froeschner, 1987:98 [Panama].

Aphleboderrhis pubescens (Walker)

Aradus pubescens Walker, 1873b:38 [new species-- Brazil].
Aphleboderrhis pubescens.-- Champion, 1898a:79 [Bugaba; Volcan de Chiriqui].-- Drake and
Harris, 1944:41 [Panama].

Genus *Artagerus* Stål

Artagerus Stål, 1860:67. Type species: *Artagerus crispatus* Stål, monotypic.
Note: Kormilev (1959a:67) keyed the males (four) and females (six) separately.

Artagerus crispatus Stål

Artagerus crispatus Stål, 1860:67 [new species-- Brazil].-- Champion, 1898a:77 [Volcan de
Chiriqui].-- Drake and Harris, 1944:41 [Panama].-- Usinger and Matsuda, 1959:366
[Panama].

Artagerus hispidus Champion

Artagerus hispidus Champion, 1898a:78 [new species-- Panama: Bugaba; Volcan de Chiriqui].--
Drake and Harris, 1944:40 [Panama].-- Usinger and Matsuda, 1959:366 [Panama].--
Kormilev, 1975:7 [Canal Zone, Barro Colorado].-- Kormilev and Froeschner, 1987:110
[Panama].

Artagerus setosus Stål

Artagerus setosus Stål, 1873:142 [new species-- Colombia].-- Champion, 1898a:77 [Bugaba].--
Usinger and Matsuda, 1959: 366 [Panama].

Genus *Banksiessa* Usinger and Matsuda

Banksiessa Usinger and Matsuda, 1959:349. Type species: *Banksiessa pubescens* Usinger and
Matsuda, monotypic.

Banksiessa pubescens Usinger and Matsuda

Banksiessa pubescens Usinger and Matsuda, 1959:350 [new species--Panama: Barro Colorado Island].-- Kormilev and Froeschner, 1987:111 [Panama].

Genus *Cinyphus* Stål

Cinyphus Stål, 1865a:31. Type species: *Depodius emarginatus* Stål, monotypic.
Note: Champion's (1898a:88) key included all species now known from Panama.

Cinyphus lutosus Champion

Cinyphus lutosus Champion, 1898a:90 [new species-- Panama: Bugaba].-- Usinger and Matsuda, 1959:365 [Panama].-- Kormilev and Froeschner, 1987:127 [Panama].

Cinyphus squalidus Champion

Cinyphus squalidus Champion 1898a:89 [new species-- Panama: Volcan de Chiriqui].-- Usinger and Matsuda, 1959:365 [Panama].-- Kormilev and Froeschner, 1987:128 [Panama].

Cinyphus subtruncatus Bergroth

Cinyphus subtruncatus Bergroth, 1898b:149 [new species--Venezuela].-- Champion, 1898a:89 [Volcan de Chiriqui].-- Usinger and Matsuda, 1959:365 [Panama].

Genus *Coloborrhinus* Bergroth

Coloborrhynchus Champion 1898a:105, preoccupied. Type species: *Coloborrhynchus pumilio* Champion, monotypic.
Coloborrhinus Bergroth, 1906:202. Proposed as a new name for the preoccupied *Coloborrhynchus* Champion.

Coloborrhinus pumilio (Champion)

Coloborrhynchus pumilio Champion, 1898a:106 [new species-- Panama: Bugaba].
Coloborrhinus pumilio.-- Usinger and Matsuda, 1959:376 [Panama].-- Kormilev and Froeschner, 1987:129 [Panama].

Genus *Dysodius* Lepeletier and Serville

Dysodius Lepeletier and Serville, 1828:654. Type species: *Acanthia lunata* Fabricius, monotypic.
Note: Heiss' (1990) review of this genus included a key (pages 293-294) to seven species.

Dysodius ampliventris Bergroth

Dysodius ampliventris Bergroth, 1894:103 [new species-- Brazil].-- Champion, 1898a:88 [Panama].--Kormilev, 1975:9 [Barro Colorado Island; Gatun Lake].-- Heiss, 1990:291 [Canal Zone; Barro Colorado Island; Gatun Lake; Colon Prov.: Sta Rita Ridge].

Dysodius crenulatus Stål

Depodius [sic] crenulatus Stål, 1862b:437 [new species-- Mexico].

Dysodius crenulatus.-- Champion, 1898a:87 [Bugaba; Caldera; Volcan de Chiriqui].-- Drake and Harris, 1944:41 [Patreillos].-- Kormilev, 1962b:259 ["Vulcan Chiriqui [sic]"]; 1975:9 [Panama].-- Heiss, 1990:286 [Colon: Portobelo; Chiriqui: Santa Clara; Volcan de Chiriqui; El Zumbador].

Dysodius lunatus (Fabricius)

Acanthia lunata Fabricius, 1794:72 [new species-- "indiis," changed to "America meridionali" in Fabricius, 1803:117].

Dysodius lunatus.-- Champion, 1898a:86 [Bugaba; Volcan de Chiriqui].-- Rau, 1933:188 [Barro Colorado Island].-- Kormilev, 1975:9 [Panama].-- Heiss, 1990:280 [Barro Colorado Island; Chiriqui; Coiba; Colon, La Guaira; Panama Prov.: Chepa; Portobelo; Contadora Is. in Perlas Islands].

Genus *Helenus* F. White

Helenus F. White, 1879c:485. Type species: *Helenus hesiformis* F. White, monotypic.

Helenus hirsutus Champion

Helenus hirsutus Champion, 1898a:75 [new species-- Panama: Bugaba].-- Usinger and Matsuda, 1959:371 [Panama].-- Kormilev, 1975:8 [Barro Colorado Island, Canal Zone].-- Kormilev and Froeschner, 1987:141 [Panama].

Note: Kormilev (1975:8) expressed doubt about separation of this species from *H. hesiformis*.

Genus *Hesus* Stål

Hesus Stål, 1862b:437. Type species: *Aradus cordatus* Fabricius, monotypic.

Note: Kormilev (1968a:282) keyed six species.

Hesus cordatus (Fabricius)

Aradus cordatus Fabricius, 1803:117 [new species-- "America meridionalis"].

Hesus cordatus.-- Champion, 1898a:73 [Bugaba; Caldera; David; Volcan de Chiriqui].-- Kormilev, 1975:8 [Panama].

Hesus flaviventris (Burmeister)

Dysodius flaviventris Burmeister, 1835:255 [new species-- Brazil].

Hesus flaviventris.-- Champion, 1898a:74 [Bugaba; Volcan de Chiriqui].-- Drake and Harris, 1944:40 [Panama].-- Kormilev, 1975:8 [Panama].

Hesus flaviventris variety *subarmatus*.-- Champion, 1898a:74 [Panama].-- Drake and Harris, 1944:40 [Panama].

Hesus mexicanus Kormilev

Hesus mexicanus Kormilev, 1968a:281 [new species-- Mexico]; 1975:8 [Gatun Lake].

Genus *Illibius* Stål

Illibius Stål, 1873:143. Type species: *Illibius laticeps* Stål, monotypic.

Illibius laticeps Stål

Illibius laticeps Stål, 1873:143 [new species-- Colombia].-- Champion, 1898a:91 [Bugaba].-- Usinger and Matsuda, 1959:325 [Panama].-- Kormilev, 1982:39 [Chilibrillo Cave].

Genus *Lobocara* Bergroth

Lobocara Bergroth, 1892c:259. Type species: *Lobocara ovata* Bergroth, designated by Usinger and Matsuda, 1959:358.

Lobocara ovata Bergroth

Lobocara ovata Bergroth, 1892c:260 [new species-- Mexico].-- Usinger and Matsuda, 1959:358 [Panama].

Genus *Mezira* Amyot and Serville

Mezira Amyot and Serville, 1843:305. Type species: *Mezira granulata* Amyot and Serville, preoccupied, now in synonymy under *Mezira abdominalis* (Stål), monotypic.

Note: Kormilev (1971:282-290) provided a key to 87 American species.

Mezira angustata (Champion)

Brachyrrhynchus [*sic*] *angustatus* Champion, 1898a:100 [new species-- Panama: Volcan de Chiriqui].

Mezira angustata.-- Usinger and Matsuda, 1959:379 [Panama].-- Kormilev, 1962b:261 [Panama].-- Kormilev and Froeschner, 1987:148 [Panama].

Mezira handlirschi (Bergroth)

Brachyrrhynchus [*sic*] *handlirschi* Bergroth, 1898b:150 [new species-- Panama: "Paya in Darien". French Guiana. Brazil].-- Champion, 1898a:95 [Bugaba; Isthmus of Darien; Paya; Volcan de Chiriqui].

Mezira handlirschi.-- Kormilev and Froeschner, 1987:152 [Panama].

Mezira laeviventris (Champion)

Brachyrrhynchus [*sic*] *laeviventris* Champion 1898a:94 [new species-- Panama: Volcan de Chiriqui].

Mezira laeviventris.-- Usinger and Matsuda, 1959:380 [Panama].-- Kormilev, 1962b:262 [Panama]; 1971:287 [Panama].-- Froeschner, 1981:14 [Panama].-- Kormilev and Froeschner, 1987:153 [Panama].

Mezira lobata (Say)

Aradus lobatus Say, 1832:30 [new species-- United States of America].
Brachyrhynchus [*sic*] *lobatus*.-- Champion, 1898a:96 [Bugaba].

Genus *Miorrhynchus* Champion

Miorrhynchus Champion, 1898a:75. Type species: *Miorrhynchus longipes* Champion, monotypic.
Note: Kormilev (1973:744) keyed 13 species.

Miorrhynchus longipes Champion

Miorrhynchus longipes Champion, 1898a:76:76 [new species-- Panama: Volcan de Chiriqui].-- Usinger and Matsuda, 1959:346 [Panama].-- Kormilev, 1952b:119 [Volcan de Chiriqui]; 1973:744 [Panama].-- Kormilev and Froeschner, 1987:161 [Panama].

Miorrhynchus usingeri Kormilev

Miorrhynchus usingeri Kormilev, 1952b:120 [new species-- Panama: Canal Zone, Barro Colorado Island]; 1973:744 [Panama].-- Usinger and Matsuda, 1959:346 [Panama].-- Kormilev and Froeschner, 1987:162 [Panama].

Genus *Nannium* Bergroth

Nannium Bergroth, 1898a:100. Type species: *Nannium parvum* Bergroth, original designation.

Nannium parvum Bergroth

Nannium parvum Bergroth, 1898a:100 [new species-- Venezuela].-- Champion, 1898a:85 [Bugaba; Volcan de Chiriqui].-- Usinger and Matsuda, 1959:363 [Panama].

Genus *Neuroctenus* Fieber

Neuroctenus Fieber, 1860b:34. Type species: *Neuroctenus brasiliensis* Mayr, a junior synonym of *Brachyrhynchus punctulatus* Burmeister, designated by Van Duzee, 1916:17.
Note: Kormilev (1973:736-738) keyed 26 Neotropical species.

Neuroctenus litigiosus (Stål)

Mezira litigiosa Stål, 1862b:439 [new species-- Mexico].
Neuroctenus litigiosus.-- Champion, 1898a:109 [Bugaba; Volcan de Chiriqui].-- Kormilev, 1952a:55 [Panama].

Neuroctenus longiventris Kormilev

Neuroctenus longiventris Kormilev, 1960a:15 [new species-- Peru]; 1975:16 [Gatun Lake, Tres Rios Plantation].

Neuroctenus punctulatus (Burmeister)

Brachyrhynchus punctulatus Burmeister, 1835:254 [new species--Brazil].
Neuroctenus punctulatus-- Champion, 1898a:110 [Volcan de Chiriqui].

Neuroctenus robustus Kormilev

Neuroctenus robustus Kormilev, 1973:739 [new species-- Colombia]; 1975:12 [Gatun Lake, Tres Rios Plantation].

Neuroctenus simplex (Uhler)

Brachyrhynchus simplex Uhler, 1876:323 [new species-- United States of America. Cuba].
Neuroctenus simplex-- Barber, 1906:282 [Panama].

Neuroctenus vanduzeei Kormilev

Neuroctenus vanduzeei Kormilev, 1975:16 [new species--Panama:Gatun Lake, Tres Rios Plantation].-- Kormilev and Froeschner, 1987:176 [Panama].

Genus *Notapictinus* Usinger and Matsuda

Notapictinus Usinger and Matsuda, 1959:361. Type species: *Pictinus dominicus* Usinger, original designation.

Note: Kormilev (1964:469-471) gave a key to 29 species.

Notapictinus breviceps (Champion)

Pictinus breviceps Champion, 1898a:81 [new species-- Panama: Volcan de Chiriqui].
Notapictinus breviceps--Usinger and Matsuda, 1959:362 [Panama].-- Kormilev, 1964:470 [Panama].-- Kormilev and Froeschner, 1987:77 [Panama].

Notapictinus denticollis (Champion)

Pictinus denticollis Champion, 1898a:83 [new species-- Panama: Volcan de Chiriqui].
Notapictinus denticollis-- Kormilev, 1964:470 [Panama].-- Kormilev and Froeschner, 1987:177 [Panama].

Notapictinus parviceps (Champion)

Pictinus parviceps Champion, 1898a:84 [new species-- Panama:Volcan de Chiriqui].
Notapictinus parviceps-- Usinger and Matsuda, 1959:362 [Panama].-- Kormilev, 1964:470 [Panama].-- Kormilev and Froeschner, 1987:179 [Panama].

Notapictinus parvulus Kormilev

Notapictinus parvulus Kormilev, 1960b:37 [new species-- Panama: Barro Colorado Island];
1964:471 [Panama].--Kormilev and Froeschner, 1987:179 [Panama].

Notapictinus quadraticeps (Champion)

Pictinus quadraticeps Champion, 1898a:83 [new species-- Panama: Volcan de Chiriqui].
Notapictinus quadraticeps.-- Usinger and Matsuda, 1959:362 [Panama].-- Kormilev and
Froeschner, 1987:179 [Panama].

Genus *Phyllotingis* Walker

Phyllotingis Walker, 1873b:3. Type species: *Phyllotingis arida* Walker, a junior synonym of
Alyattus eximia Haglund, monotypic.

Note: Usinger and Matsuda (1959:357) keyed the 3 species.

Phyllotingis interjecta (Bergroth)

Phyllocraspedum interjecta Bergroth, 1894:98 [new species--Colombia].

Phyllotingis interjecta.-- Champion, 1898a:68 [Bugaba].-- Drake and Harris, 1944:39 [Panama].--
Usinger and Matsuda, 1959:357 [Panama].-- Heiss, 1993:192 [Barro Colorado, Canal
Zone; Madden Forest, Canal Zone; Punta Vaca Monte; Santa Fe, Veraguas].

Genus *Pictinus* Stål

Pictinus Stål, 1873:140. Type species: *Pictinus cinctipes* Stål, monotypic.

Note: Kormilev (1964:465-466) gave a key to 12 species.

Pictinus armatus Champion

Pictinus armatus Champion, 1898a:81 [new species--Panama: Bugaba].-- Kormilev and
Froeschner, 1987:177 [Panama].

Pictinus spiniger Champion

Pictinus spiniger Champion, 1898a:81 [new species--Panama: Volcan de Chiriqui].-- Kormilev,
1964:465 [Panama]; 1975:6 [Canal Zone, Barro Colorado].-- Kormilev and Froeschner,
1987:186 [Panama].

Genus *Saileriessa* Usinger and Matsuda

Saileriessa Usinger and Matsuda, 1959:346. Type species: *Saileriessa stigmata* Usinger and
Matsuda, monotypic.

Saileriessa stigmata Usinger and Matsuda

Saileriessa stigmata Usinger and Matsuda, 1959:347 [new species--Panama: Barro Colorado]

Island].-- Kormilev and Froeschner, 1987:189 [Panama].

FAMILY ARTHENEIDAE STÅL

The lone species reported from Panama is the only indigenous member of the family occurring in the New World. Two species introduced into North America were reported by Wheeler and Fetter (1987) and Hoffman and Slater (1995).

In Henry's (1997b:196) analysis of the Pentatomomorpha, this group was elevated from a subfamily in Lygaeidae [see J. Slater, 1964:695 and J. Slater and O'Donnell, 1995:79] to a full family status.

TRIBE POLYCHISMINAE J. SLATER AND BRAILOVSKY

TRIBE POLYCHISMINI J. SLATER AND BRAILOVSKY

Genus *Polychisme* Kirkaldy

Imbrius Stål, 1874a:123, preoccupied. Type species: *Imbrius ferruginosus* Stål, monotypic.
Polychisme Kirkaldy, 1904b:280. Proposed as new name for preoccupied *Imbrius* Stål.

Polychisme ferruginosus (Stål)

Imbrius ferruginosus Stål, 1874a:125 [new species-- Colombia].-- Distant, 1893:387 [Volcan de Chiriqui]. *Polychisme ferruginosus*.-- Scudder, 1962c:182 [Panama].-- J. Slater, 1964:377 [Panama].

FAMILY BELOSTOMATIDAE LEACH

The following list records six species in three genera for Panama; more species in two of these genera may be expected to occur therein.

These aquatic insects are aggressive predators on other water-dwelling insects, and on small fishes and frogs; they can inflict a painful sting to the human hand that handles them carelessly.

The present day classification of the Belostomatidae is that of Lauck and Menke (1961), who revised the higher classification of the water bugs and provided a key for separation of the family's seven genera.

SUBFAMILY BELOSTOMATINAE LEACH

Genus *Abedus* Stål

Abedus Stål, 1862b:461. Type species: *Abedus ovatus* Stål, designated by Kirkaldy, 1906a:151.
Note: Menke (1960) presented a revision with a key (pages 400-401) to species; later (1977:115-123) he added synonymies and distribution records.

Abedus signoreti Mayr

Abedus signoreti Mayr, 1871:404 [new species-- Mexico. Guatemala].-- Champion, 1901:363 [Volcan de Chiriqui].-- Kirkaldy and Torre-Bueno, 1909:140 [Panama].-- De Carlo, 1938:242 [Panama].-- Menke, 1977:116 [Rio Cana, Darien].

Abedus signoreti signoreti.-- Menke, 1960:407 [Potrerillos, Chiriqui].

Note: Menke (1977:116) put the subspecies into synonymy by noting "I now regard this species as monotypic."

Genus *Belostoma* Latreille

Belostoma Latreille, 1807:144. Type species: *Belostoma testaceopallidum* Latreille, monotypic.

Note: Lauck (1962-1964) revised *Belostoma* in a series of papers containing keys to species arranged in species-groups.

Belostoma porteri De Carlo

Belostoma porteri De Carlo, 1942:212 [new species-- Panama: Canal Zone. Venezuela. Peru].-- Lauck, 1962:54 [Panama City; Trinidad Rio].

Belostoma subspinosum (Palisot)

Nepa subspinosa Palisot, 1820:236 [Neotype from Dominican Republic designated by Lauck, 1962:67].

Zaitha anura.-- Champion, 1901:365 [David; Panama City; Volcan de Chiriqui].

Zaitha micranthula.-- Champion, 1901:366 [Panama City].

Belostoma boscii.-- Kirkaldy and Torre-Bueno, 1909:190 [Panama].-- De Carlo, 1930:112 [Panama]; 1938:215 [Panama].

Belostoma subspinosum cupreomicans.-- Lauck, 1962:63 [El Volcan, Chiriqui].

Belostoma subspinosa.-- J. Polhemus, D. Polhemus, and Henry, 1988:53 [Panama].

Belostoma subspinosum bifoveatum.-- J. Polhemus, D. Polhemus, and Henry, 1988:53 [Panama].

SUBFAMILY LETHOCERINAE LAUCK AND MENKE**Genus *Lethocerus* Mayr**

Lethocerus Mayr, 1863:15. Type species: *Lethocerus cordofanus* Mayr, a junior synonym of *Belostoma fakir* Gistel, monotypic.

Notes: Menke (1963a) reviewed the species in North and Central America and the West Indies and gave a key (page 263) to 10 species. (2) Opinion 1248 (1983:81) of the International Commission on Zoological Nomenclature conserved the name *Lethocerus* Mayr, 1853, over the earlier name *Iliastus* Gistel, 1848.

Lethocerus colossicus (Stål)

Belostoma collosicum Stål, 1855a:240 [new species-- Honduras].

Lethocerus collosicus.-- De Carlo, 1938:204 [Panama].-- Hungerford, 1940:255 [Panama].

Lethocerus (Lethocerus) colossicus.-- Menke, 1963a:265 [Panama].

Lethocerus delpontei De Carlo

Lethocerus delpontei De Carlo, 1930:108 [new species-- Argentina]; 1938:200 [Panama].-- Nieser, 1975:122 [Panama].

Lethocerus (Lethocerus) delpontei.-- Menke, 1963:265 [Panama].

Lethocerus medius (Guérin-Méneville)

Belostoma medium Guérin-Méneville, 1857:419 [new species--Cuba].

Belostoma annulipes.-- Champion 1901:368 [David; Volcan de Chiriqui].

Lethocerus annulipes.-- Kirkaldy and Torre-Bueno, 1909:188 [Panama].-- Hungerford, 1944:129 [Panama].--DeCarlo, 1930:107 [Panama]; 1938:201 [Panama].

Lethocerus (Lethocerus) medius.-- Menke, 1963:264 [Panama].-- J. Polhemus, D. Polhemus, and Henry, 1988:55 [Panama].

FAMILY BERYTIDAE FIEBER

Panama records have been found for ten species in four genera. More forms should be expected.

Henry (1997a) monographed the berytid genera of the World; and later (1997c) provided keys to the 13 genera and their 53 species. A catalog of the world's Berytidae was published by Henry and Froeschner (1998).

SUBFAMILY GAMPSOCORINAE SOUTHWOOD AND LESTON

TRIBE GAMPSOCORINI SOUTHWOOD AND LESTON

Genus *Gampsocoris* Fuss

Gampsocoris Fuss, 1852:73. Type species: *Gampsocoris transylvanicus* Fuss, a junior synonym of *Berytus punctipes* Germar, monotypic.

Gampsocoris decorus (Uhler)

Pronotacanthus decorus Uhler, 1893:707 [new species-- St. Vincent].

Gampsocoris decorus.-- Henry, 1997c:24 [Barro Colorado Island; Juan Mina, C.Z.].

TRIBE HOPLININI HENRY

Genus *Parajalysus* Distant

Parajalysus Distant, 1881a:163. Type species: *Parajalysus spinosus* Distant, monotypic.

Parajalysus papillatus Henry

Parajalysus papillatus Henry 1997c:64 [new species: Panama: Empire, Canal Zone].-- Henry and Froeschner, 1998:26 [Panama].

Parajalysus spinosus Distant

Parajalysus spinosus Distant, 1881a:163 [new species-- Mexico. Guatemala]; 1893:376 [Bugaba].-- Stusak, 1977:343 [Barro Colorado Island].-- Henry, 1997c:68 [Panama].

Parajalysus tenuicornis Henry

Parajalysus tenuicornis Henry 1997c:70 [new species: Panama: Barro Colorado Island, C.Z.; Pipeline Road, Canal Zone].--Henry and Froeschner, 1998:27 [Panama].

SUBFAMILY METACANTHINAE DOUGLAS AND SCOTT

Genus *Jalysus* Stål

Jalysus Stål, 1862a:50. Type species: *Metacanthus macer* Stål, designated by Van Duzee, 1916:17.

Jalysus caducus (Distant)

Neides caducus Distant, 1893:460 [new species-- Mexico. Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:259 [Panama].

Jalysus caducus.-- Barber, 1948b:21 [Panama].-- Froeschner and Henry, 1988:59 [Panama].-- Henry, 1997c:99 [Panama].-- Henry and Froeschner, 1998:32 [Panama].

Jalysus macer (Stål)

Metacanthus macer Stål, 1859d:236 [new species-- Ecuador].

Jalysus mollitus Distant, 1893:375 [new species-- Panama: Bugaba; San Feliz; San Miquel in Pearl Islands; Tabogo Island; Volcan de Chiriqui].

Jalysus macer.-- Stusak, 1977:341 [Panama].-- Henry, 1997c:102 [Barro Colorado Isl., Canal Zone; Boquette; Potrerillos; Summit, C.Z.].-- Henry and Froeschner, 1998:32 [Panama].

Jalysus nigriventris Henry

Jalysus nigriventris Henry, 1997c:107 [new species-- Mexico. Guatemala. Costa Rica. Panama: Chiriqui, 3 mi NE Boquete; Chiriqui, 5 km W Boquete].-- Henry and Froeschner, 1998:33 [Panama].

Jalysus reductus Barber

Jalysus reductus Barber 1923:12 [new species-- Mexico. Honduras. Panama: Corozal; Canal Zone; Hernandez; Matias; Paraiso, Canal Zone; Toboga Island. Cuba. Haiti. Dominican Republic. Trinidad].-- Stusak, 1977:342 [Panama].-- Henry, 1997c:109 [Boquette,

Chiriqui; Corosa; Frijoles; Paraiso; Potrerillos; Taboga Isl.--Henry and Froeschner, 1998:33 [Panama].

Jalysus sobrinus Stål

Jalysus sobrinus Stål, 1862a:60 [new species-- Brazil].

Jalysus sobrinus-- Stusak, 1977:342 [Bugaba (cited, lapsus, as in Guatemala).-- Henry, 1997c:112 [Barro Colorado Isl.; Concepcion; El Valle; Indio Hydrographic Sta., CZ; Potrerillos; Summit, CZ].

Genus *Metacanthus* Costa

Metacanthus Costa, 1847:258. Type species: *Berytus elegans* Costa, monotypic.

Metacanthus tenellus Stål

Metacanthus tenellus Stål, 1859d:236 [new species-- Ecuador].-- Stusak, 1977:339 [Panama].-- Henry, 1997c:129 [Panama].

Jalysus tenellus-- Distant, 1893:373 [Bugaba; Volcan de Chiriqui].-- Harris, 1941:107 [Panama].

Metacanthus (Metacanthus) tenellus.-- Henry and Froeschner, 1998:40 [Panama].

FAMILY BLISSIDAE STÅL

The family Blissidae has Panamanian records of 10 species in three genera.

Formerly a subfamily in the Lygaeidae [see J. Slater, 1964:435 and J. Slater and O'Donnell, 1995:44], this group was recently elevated to family status by Henry (1997b:296).

A major monograph on the "Systematics, Phylogeny, and Zoogeography of the Blissinae of the World" was published by J. Slater (1979); it contains a key (pages 58-61) to 46 genera and a checklist of all known species and keys to most of them.

Genus *Blissus* Burmeister

Blissus Burmeister, 1835:290. Type species: *Blissus hirtulus* Burmeister, monotypic.

Blissus insularis Barber

Blissus leucopterus-- Distant 1882:196 [Volcan de Chiriqui]; 1893:392 [Bugaba; San Feliz].-- J. Slater 1964:448 [Panama].

Blissus leucopterus var. *insularis* Barber, 1918a:38 [new variety-- United States of America, Puerto Rico].-- J. Slater, 1964:446 [Panama].

Notes: (1) Early records of *Blissus leucopterus* (Say) for Panama were based on misidentifications because later studies by Leonard (1966, 1968) and J. Slater (1979) indicated that species does not occur that far south. (2) Specific status for "*insularis*" was accepted in J. Slater's two world lists (1964:446 and 1979:48).

Blissus pulchellus Montandon

Blissus pulchellus Montandon, 1893:406 [new species-- Argentina].-- Lethierry and Severin, 1894:166 [Panama].-- Drake, 1951b:319 [Los Sabanas].-- J. Slater, 1964:459 [Panama]; 1979:49 [Panama].

Genus *Ischnodemus* Fieber

Ischnodemus Fieber, 1837:337. Type species: *Ischnodemus quadratus* Fieber, monotypic.

Note: J. Slater and Wilcox (1969) revised the Neotropical members of this genus and gave a checklist (p. 205) of the 32 species and a key (pp. 205-207) to them. Later, J. Slater (1979:112-129) expanded the key to include 95 species.

Ischnodemus nigripes Stål

Ischnodemus nigripes Stål, 1874a:131 [new species-- Colombia].-- J. Slater and Wilcox, 1969:225 [Canal Zone; Perlas Island, Isla del Rey].-- J. Slater, 1979: 53 [Panama].

Ischnodemus oblongus (Fabricius)

Lygaeus oblongus Fabricius, 1803:232 [new species-- "America meridionali"].
Ischnodemus oblongus.-- J. Slater, 1987b:294 [Coco Solo, Canal Zone; "Trinidad, Rio Pan."].

Ischnodemus praecultus Distant

Ischnodemus praecultus Distant, 1882:196 [new species-- Guatemala]; 1893:391 [Caldera].-- J. Slater, 1964:483 [Panama].-- J. Slater and Wilcox, 1969:211 [Crystobal, Canal Zone; Gamboa, Canal Zone; Juan Mina, Canal Zone; Balboa Prado, Canal Zone].

Ischnodemus sallei (Signoret)

Cimex fulvipes De Geer, 1773:355, preoccupied [new species-- Surinam].
Micropus sallei Signoret, 1857:25 [new species-- Mexico].
Ischnodemus "sallaei".-- Distant, 1882:195 [Volcan de Chiriqui].
Ischnodemus sallei.-- Lethierry and Severin, 1894:164 [Panama].-- Barber, 1939:345 [Panama].-- J. Slater, 1964:491 [Panama].
Ischnodemus fulvipes fulvipes.-- J. Slater and Wilcox, 1969:207 [Exp. Sta. Matied Hernandez; Chiriqui].

Ischnodemus variegatus (Signoret)

Micropus variegatus Signoret, 1857:26 [new species-- Colombia].
Ischnodemus variegatus.-- J. Slater, 1987b:297 [26 mi NW Guabala Jnc. Chiriqui Mts.].

Genus *Toonglasa* Distant

Toonglasa Distant, 1893:391. Type species: *Toonglasa forficuloides* Distant, monotypic.

Note: J. Slater and Brailovsky (1983a) reviewed this genus and gave a key (page 524) to its 12 species.

Toonglasa humerus (J. Slater and Wilcox)

Extarademus humerus J. Slater and Wilcox, 1966:65 [new species--Panama: Ft. Clayton, Canal Zone].-- J. Slater, 1979:51 [Panama].

Toonglasa humerus.-- J. Slater and Brailovsky, 1983a:533 [El Valle].-- J. Slater and O'Donnell, 1995:63 [Panama].

Toonglasa tumorosis (J. Slater and Wilcox)

Extarademus tumorosis J. Slater and Wilcox, 1966:67 [new species-- Guatemala. Panama: Caldera].-- J. Slater, 1979:51 [Panama].

Toonglasa tumorosis.-- J. Slater and Brailovsky, 1983a:532 [Panama]; 1990:420 [Caldera].

Toonglasa umbratus (Distant)

Ischnodemus umbratus Distant, 1893:391 [new species-- Guatemala].

Toonglasa umbratus.-- J. Slater and Brailovsky, 1983a:534 [21 mi SW Chepo; Coco Solo, Canal Zone; Contractors Hill, Canal Zone; Galeta Island, Canal Zone; Kobe Beach, Canal Zone].

FAMILY CANOPIDAE AMYOT AND SERVILLE

The lone genus of this family, *Canopus* (Fabricius), is represented in Panama by six species names [see note under genus *Canopus*].

The family status was used by Štys and Kerzhner (1975) and retained by Schuh and J. Slater (1995:219).

Genus *Canopus* Fabricius

Canopus Fabricius, 1803:127. Type species: *Canopus obtectus* Fabricius, monotypic.

Notes: (1) McAtee and Malloch (1928), in their revision of this genus, keyed (pages 12-14) eight species. (2) They also inserted a footnote (page 14) saying, "There are seven as yet unidentified names available for species of *Canopus*, six of them based on nymphs; if these ever become identifiable, the new names proposed in this paper are likely to pass into synonymy; they are presented therefore in a provisional sense."

Among those names, three are represented by Panamanian records:-- *Canopus arctatus* (Distant); *C. compressus* (Distant), and *C. dissimilis* (Distant). To correctly associate immature stages with the adults, so that the earlier names may be properly assigned, the nymphs must be reared and their cast nymphal skins saved in association with the adult.

Canopus arctatus (Distant)

Chlaenocoris arctatus Distant, 1893:454 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:263 [Panama].

Canopus arctatus.-- McAtee and Malloch, 1928:20 [Panama; type-series of unidentifiable nymphs only material examined].

Canopus compressus (Distant)

Chlaenocoris compressus Distant, 1889:310 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:14 [Panama].

Canopus compressus.-- McAtee and Malloch, 1928:20 [Panama. Only the type-series of unidentifiable nymphs examined].

Canopus dissimilis (Distant)

Chlaenocoris dissimilis Distant, 1889:310 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:14 [Panama].

Canopus dissimilis.-- McAtee and Malloch, 1928:19 [Panama: type-series of unidentifiable nymphs only material studied].

Canopus fabricii McAtee and Malloch

Chlaenocoris caesus.-- Distant, 1889:310 [Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1893:14 [Panama].

Canopus fabricii McAtee and Malloch, 1928:14 [new species-- Nicaragua. Costa Rica. Panama: Bocas del Toro; Bugaba; Chontales; Volcan de Chiriqui. Costa Rica. Colombia. Ecuador. Nicaragua].

Note: McAtee and Malloch (1928:19) transferred Distant's (1889, above) Panama records of *C. caesus* to their new species *C. fabricii*.

Canopus germari McAtee and Malloch

Canopus germari McAtee and Malloch, 1928:15 [new species-- Costa Rica. Panama: Cano Saddle. Colombia. Ecuador].

Canopus globosus Horvath

Canopus globosus Horvath, 1919:207 [new species-- Peru. Bolivia].-- McAtee and Malloch, 1928:14 [Bugaba].

FAMILY CERATOCOMBIDAE FIEBER

Only two species of the sole genus so far reported for the New World have been reported from Panama. There is every likelihood that a much larger number of species will be found there, including undescribed forms.

Two authors, Emsley (1969) and Štys (1970), working independently, agreed on the contents of this taxon but differed as to its hierarchical position. The present work follows Štys (1983), who considered it to be a family and presented keys to the subfamilies, tribes, and genera; that work is also followed by Schuh and J. Slater (1995:750).

SUBFAMILY CERATOCOMBINAE FIEBER

TRIBE CERATOCOMBINI FIEBER

Genus *Ceratocombus* Signoret

Ceratocombus Signoret, 1852:542. Type species: *Astemma mulsanti* Signoret, junior synonym of *Anthocoris coleopratus* Zetterstedt, monotypic.

Ceratocombus panamensis Champion

Ceratocombus panamensis Champion 1900:336 [new species-- Panama: Bugaba].

Ceratocombus vagans McAtee and Malloch

Ceratocombus (Xylonannus) vagans McAtee and Malloch, 1925b:7 [new species-- United States of America. Panama: Porto Bello].-- Blatchley, 1926:649 [Panama].-- Walley, 1935:159 [Panama].-- Barber, 1939:405 [Panama].

Ceratocombus (Ceratocombus) vagans.-- Henry, 1988b:62 [Panama].

Note: McAtee and Malloch, with their original description, commented that the name *Ceratocombus panamaensis* Champion (above) may apply to this species; if that proves the case, *C. vagans* will be a junior synonym of it.

FAMILY CIMICIDAE LATREILLE

Literature records at hand encompass only two species of Panamanian bed bugs in the genus *Cimex* -- the common bed bug and the tropical bedbug, both of which frequently attack humans. Certainly other species in other genera can be discovered in Panama by specialized collecting in the bird and animal retreats where these blood suckers often hide during their prey's absence.

A single profusely illustrated volume giving detailed biologies and full taxonomic treatment was presented by Usinger (1966). It should be available to anyone who anticipates studies in this family. An updated list of the American cimicid species, with distributions, was included in a publication by Ryckman, Bentley, and Archbold (1981).

SUBFAMILY CIMICINAE LATREILLE

Genus *Cimex* Linnaeus

Cimex Linnaeus, 1758:441. Type species: *Cimex lectularius* Linnaeus, fixed by Opinion 81 of the International Commission on Zoological Nomenclature, 1924:19.

Cimex hemipterus (Fabricius)

Acanthia hemiptera Fabricius, 1803:113 [new species-- South America].

Cimex rotundatus.-- Dunn, 1923:345 [Panama]; 1924:77 [Panama].

Cimex hemipterus.-- Barber, 1939:398 [Panama].-- Fairchild, 1943:579 [Panama].-- Usinger, 1966:324, map records page 251 [Panama].

Cimex lectularius Linnaeus

Cimex lectularius Linnaeus, 1758:441 [new species-- Europe].-- Champion, 1900:336 [Bugaba].

FAMILY COLOBATHRISTIDAE STÅL

Panama records were found for but a single species of this small family. In the Western Hemisphere the family is a Neotropical group whose northern limits are reached in southern Central America.

An illustrated key to the 13 Neotropical genera was given by Carvalho and Costa (1989a:271-277). Horvath's (1904) review treated the family with keys to the then-known genera and species. Štys (1966) discussed the morphology and phylogeny of the family.

Genus *Diascopoea* Horvath

Diascopoea Horvath, 1904:154.

Diascopoea villosa (Distant)

Curupira villosa Distant, 1893:460 [new species-- Panama: Caldera in Chiriqui].-- Lethierry and Severin, 1894:258 [Panama].

Diascopoea villosa.-- Horvath, 1904:156 and 172 [Caldera].-- Bergroth, 1913:176 [Panama].

FAMILY COREIDAE LEACH

The following list of Panamanian Coreidae records account for 83 species in 40 genera. Careful examination of plants on which these insects feed undoubtedly would greatly increase those numbers.

The older, classical suprageneric classification of this family has been undergoing significant changes. Bergroth (1913:126) tabulated the subfamily and tribes ("Divisions") and changed the limits of several of the tribes as previously used by Lethierry and Severin (1894).

Schaefer (1964, 1965) began a series of intense studies on the status of the various suprageneric categories in the superfamily Coreoidea. In them he confirmed the separate family status for the Alydidae, Coreidae, and Rhopalidae. Within the restricted family Coreidae he recognized the four subfamilies Agriopocorinae, Coreinae, Meropachydinae, and Pseudophloeinae, these were accepted and keyed in Schuh and J. Slater (1995:275).

Papers by Schaefer (1964, 1965, 1968), O'Shea and Schaefer (1978), O'Shea (1979, 1980a and b), O'Shea and Schaefer (1978), and by Li (1996, 1997) treated subfamily and/or tribal values.

A most useful paper for study of New World Coreidae is Packauskas (1994) with keys to three subfamilies and 15 tribes and a checklist of published keys to genera and species.

SUBFAMILY COREINAE LEACH

For this subfamily Schaefer (1965) offered a key to the 19 tribes, which he arranged in various "groups"; later (1968:196) he proposed the new tribe Stenoscelidini. O'Shea and Schaefer (1978) divided Schaefer's keyed tribe "Mictini" into three tribes, two New World tribes Acanthocerini and Nematopodini, and pointed out that the newly restricted Mictini was a wholly Old World group.

O'Shea (1979) discussed three Neotropical genera of the subfamily Coreinae and concluded that they could be assigned to no known tribe of that subfamily. Of those three (*Curtius* Stål, *Mammurius* Stål, and *Molchina* Amyot and Serville) only *Molchina* has been reported from Panama. O'Shea further pointed out that Bergroth (1913) placed *Molchina* in his "Division Menonotaria" of the Coreinae and that placement was accepted by Blöte (1936). Bergroth (1913:126) considered "Menonotaria" at the same taxonomic level as "Acanthocephalaria," "Chariesteraria," and other taxa now treated as tribes. Until a more satisfactory placement is determined, the present list places it in the tribe Nematopodini Amyot and Serville where they were included and keyed -- with O'Shea's (1980a:190) footnote caution they "do not belong in the Nematopodini."

TRIBE ACANTHOCEPHALINI STÅL

Genus *Acanthocephala* Laporte

Acanthocephala Laporte, 1833:29. Type species: *Lygaeus compressipes* Fabricius, a junior synonym of *Cimex latipes* Drury, monotypic.

Acanthocephala bicoloripes (Stål)

Metapodius bicoloripes Stål, 1855b:184 [new species--Colombia].

Acanthocephala bicoloripes.--Distant, 1893:359 [Caldera; Volcan de Chiriqui].--Blöte, 1938:276 [Chiriqui; Lino].

Acanthocephala declivis (Say)

Rhinuchus declivis Say, 1832:10 [new species-- United States of America].

Metapodius thoracicus Dallas, 1852:428 [new species-- Panama].

Acanthocephala declivis.--Lethierry and Severin, 1894:30 [Panama].

Acanthocephala declivis var. *panamensis* Distant, 1881a:119 [new variety-- Panama]; 1892:359 [Bugaba; David; Tole].--Lethierry and Severin, 1894:30 [Panama].--Blöte, 1938:275 [Chiriqui].

Acanthocephala declivis var. *calerensis* Distant, 1893:359 [new variety-- Panama: Caldera].

Acanthocephala latipes (Drury)

Cimex latipes Drury, 1782:63, pl. XLV, fig. 3, Index [P. 2] [new species-- Jamaica].

Acanthocephala latipes.--Distant, 1881a:118 [Panama]; 1893:358 [Bugaba; San Feliz].--Lethierry and Severin, 1894:31 [Panama].--Bergroth, 1913:129 [Panama].--Gibson and Holdridge, 1918:240 [Panama].--Rau, 1933:188 [Barro Colorado Island].

Acanthocephala sericeicollis (Walker)*Metapodius sericeicollis* Walker, 1871:49 [new species--British Guiana. Brazil].*Acanthocephala sericeicollis*--Blöte, 1938:275 [Chiriqui].**Genus *Laminiceps* Costa***Laminiceps* Costa, 1863:250.*Laminiceps quadrisignatus* Distant*Laminiceps quadrisignatus* Distant, 1893:360 [new species-- Panama: Bugaba. Nicaragua].--

Lethierry and Severin, 1894:34 [Panama].

TRIBE ACANTHOCERINI BERGROTH

O'Shea (1980a) presented a generic revision of the Acanthocerini with a key (p. 58) to 13 included genera, all of which are restricted to the Neotropics.

Genus *Acanthocerus* Palisot*Acanthocerus* Palisot, 1818:204. Type species: *Acanthocerus crucifer* Palisot, monotypic.*Acanthocerus clavipes* (Fabricius)*Coreus clavipes* Fabricius, 1803:196 [new species-- South America].*Acanthocerus clavipes*-- Distant, 1881a:116 [Panama]; 1893:358 [Bugaba; Caldera; Tole; Volcan de Chiriqui].-- Lethierry and Severin, 1894:20 [Panama].**Genus *Machtima* Amyot and Serville***Machtima* Amyot and Serville, 1843:215. Type species: *Lygaeus crucigera* Fabricius, monotypic.*Machtima mexicana* Stål*Machtima mexicana* Stål, 1870:147.-- Distant, 1893:358 [Bugaba; David; Tole].**Genus *Zoreva* Amyot and Serville***Zoreva* Amyot and Serville, 1843:216. Type species: *Coreus dentipes* Fabricius, monotypic.**Note:** Brailovsky and Barrera's (1982b) revision of this genus contained a key to 11 species (pages 325-326).*Zoreva convulsa* Brailovsky and Barrera*Zoreva convulsa* Brailovsky and Barrera, 1982b:314 [new species-- Panama: Jaque].

Zoreva lobulata Stål

Zoreva lobulata Stål, 1870:148 [new species-- Colombia].-- Brailovsky and Barrera, 1982b:307 [Barro Colorado Island; Cabima; Gambia; Gatun; 6 mi. E. of Porto Bello, all in Canal Zone].

TRIBE ANISOSCELINI AMYOT AND SERVILLE

This tribe was revised at the generic level by Osuna (1985), who provided keys to 14 genera arranged in 3 generic "groups."

Packauskas (1994:45) explained why the above tribal name spelling should be used rather than the old "Anisoscelidini."

Genus *Bitta* Osuna

Bitta Osuna, 1985:104. Type species: *Anisoscelis affinis* Westwood, monotypic.

Bitta flavolineatus (E. Blanchard)

Anisoscelis flavolineatus E. Blanchard, 1849: plate 89, figure 5 [new species-- no locality given].-- Curran 1929:613

[Panama].

Anisoscelis flavolineatus [sic].-- Distant, 1881a:123 [Panama].

Bitta flavolineata.-- Brailovsky and Mayorga, 1995:198 [Panama].

Notes: Curran's (1929:above) reference dealt with a photograph labeled "The airplane bug" but without a scientific name.

Bitta gradadia (Distant)

Anisoscelis gradadia Distant, 1881a:122 [new species-- Guatemala]; 1893:360 [Bugaba].

Note: Brailovsky and Mayorga (1995:198) used the combination *Bitta gradadia* but without a Panamanian record.

Genus *Diactor* Perty

Diactor Perty, 1833:169. Type species: *Diactor elegans* Perty, monotypic.

Diactor bogotanus Stål

Diactor bogotanus Stål, 1870:160 [new species-- "Nova Granada, Bogata"].-- Distant, 1893:360 [Bugaba].

Genus *Holymenia* Stål

Holymenia Lepeletier and Serville, 1825: 61. Type species: *Holymenia latreillii* Lepeletier and Serville, monotypic.

Holymenia Stål, 1870:157 [emended spelling].

Holymenia histrio (Fabricius)

Alydus histrio Fabricius, 1803:248 [new species-- South America].

Holymenia histrio-- Distant, 1881a:122 [Panama].-- Lethierry and Severin, 1894:44 [Panama].-- Brailovsky and Sanchez, 1983b:242 [Panama].

Genus *Leptoglossus* Guérin-Ménéville

Leptoglossus Guérin-Ménéville, 1838:174. Type species: *Leptoglossus dilaticollis* Guérin-Ménéville, monotypic.

Note: In a well-illustrated revision of *Leptoglossus*, Allen (1969) included a key (pages 54-60) to 37 species. Later, Osuna (1985) removed several species and with them formed the new genera *Fabricitilis*, *Stalifera*, and *Veneza*, the latter two occurring in Panama.

Leptoglossus concolor (Walker)

Anisoscelis concolor Walker, 1871:128 [new species--Mexico].

Leptoglossus concolor-- Allen, 1969:118 [Barro Colorado Island; Chiriqui; Colon].

Leptoglossus dilaticollis Guérin-Ménéville

Leptoglossus dilaticollis Guérin-Ménéville, 1838:174 [new species-- Brazil].-- Allen, 1969:79 [Panama].

Leptoglossus nigropearlei Yonke

Leptoglossus nigropearlei Yonke, 1981:213 [new species--Panama: San Jose on Pearl Island].

Leptoglossus pallidivenosus Allen

Leptoglossus pallidivenosus Allen, 1969:128 [new species-- Panama: Barro Colorado Island].

Leptoglossus phyllopus (Linnaeus)

Cimex phyllopus Linnaeus, 1767:731 [new species-- South America].

Leptoglossus phyllopus-- Distant, 1893:361 [Bugaba; Caldera].-- McGuire and Crandall, 1967:84 [Panama].-- Allen, 1969:100 [Panama].-- Brailovsky and Sanchez, 1983b:227 [Panama].

Leptoglossus stigma (Herbst)

Cimex stigma Herbst, 1784:258 [new species-- Surinam].

Leptoglossus stigma-- Distant, 1893:361 [Volcan de Chiriqui].

Note: All localities given for this species by Allen (1969:120) were from continental South America; he made no comment about Distant's (1893:361) listing for Panama.

Genus *Stalifera* Osuna

Stalifera Osuna 1985:108. Type species: *Anisoscelis cincta* Herrich-Schaeffer, original designation.

Stalifera cincta (Herrich-Schaeffer)

Anisoscelis cincta Herrich-Schaeffer, 1835a:91 [new species.-- Colombia].

Leptoglossus cinctus.--Distant, 1893:361 [Caldera; Tole; Volcan de Chiriqui].-- Allen, 1969:61 [Chiriqui].-- Brailovsky and Sanchez, 1983b:224 [Panama].

Note: This species was transferred from *Leptoglossus* into *Stalifera* by Osuna (1985:108) when he made it the type species of his new genus.

Genus *Veneza* Osuna

Veneza Osuna 1985:117. Type species: *Anisoscelis zonata* Dallas, original designation.

Veneza zonatus (Dallas)

Anisoscelis zonatus Dallas, 1852:452 [new species.--Mexico].

Leptoglossus zonatus.-- Allen, 1969:110 [Boquete; Bugaba; Cerro Zunil; Las Campana; Porto Bello; Volcan de Chiriqui].-- Brailovsky and Sanchez, 1983b:232 [Panama].

Note: This species was transferred from *Leptoglossus* into *Veneza* by Osuna (1985:117) when he made it the type species of his new genus.

TRIBE CHARIESTERINI STÅL**Genus *Chariesterus* Laporte**

Chariesterus Laporte, 1832:44. Type species: *Chariesterus gracilis* Laporte, a junior synonym of *Pendulinus armatus* Thunberg, monotypic.

Note: Ruckes (1955) reviewed the genus and keyed (pages 4-5) 12 species.

Chariesterus cuspidatus Distant

Chariesterus cuspidatus Distant, 1893:364 [new species.-- Panama: David; San Miguel in Pearl Islands].-- Lethierry and Severin, 1894:62 [Panama].-- Barber, 1906:266 [Panama].-- Van Duzee, 1917:49 [Panama].-- Fracker, 1919:228 [Panama].-- Torre-Bueno, 1941:63 [Panama].-- Ruckes, 1955:13 [Chiriqui].

TRIBE COREINI LEACH**Genus *Althos* Kirkaldy**

Margus Dallas, 1852:523, preoccupied. Type species: *Margus pectoralis* Dallas, designated by Van Duzee, 1916:12.

Althos Kirkaldy, 1904b:280. Proposed as new name for preoccupied *Margus* Dallas.

Note: Brailovsky (1990a) revised *Althos* and keyed (pages 25-26, 28-29) 24 species.

Althos obscurator (Fabricius)

Coreus obscurator Fabricius, 1803:200 [new species.-- South America].

Margus obscurator.-- Distant, 1893:365 [Peña Blanca; Tole; Volcan de Chiriqui].

Althos obscurator.-- Brailovsky, 1990a:90 [Peña Blanca; Tole; Volcan de Chiriqui].

Genus *Anasa* Amyot and Serville

Anasa Amyot and Serville, 1843:209. Type species: *Anasa cornuta* Amyot and Serville, monotypic.

Note: Brailovsky (1985) revised *Anasa* and gave a key (pages 215-222) to 60 species.

Anasa andresii (Guérin-Méneville)

Coreus (*Gonocerus*) *andresii* Guérin-Méneville, 1857:383 [new species-- Cuba].

Anasa andresii.-- Distant, 1881a:141 [Panama]; 1893:366 [Bugaba; Volcan de Chiriqui].-- Jones, 1916:431 [Panama].-- Brailovsky, 1985:80 [Bugaba; Volcan de Chiriqui].-- McGuire and Crandall, 1967:59 [Panama].

Anasa bellator (Fabricius)

Cimex bellator Fabricius, 1787:286 [new species-- French Guiana].

Anasa bellator.-- Distant, 1893:366 [Bugaba; Caldera; David; Volcan de Chiriqui].-- Brailovsky, 1985:90 [Barro Colorado; Bocas del Torro; Gatun Lake; Bugaba; Caldera; 5 mi "Noreste" de Chepo; David; Volcan de Chiriqui].

Anasa montivaga Distant, 1893:366 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:75 [Chiriqui].

Anasa flavovittata Distant

Anasa flavo-vittata [*sic*] Distant, 1881a:145 [new species-- Costa Rica]; 1893:367 [Bugaba; Volcan de Chiriqui].-- Brailovsky, 1985:113 [Bugaba; Volcan de Chiriqui].

Anasa hesperia Brailovsky

Anasa hesperia Brailovsky, 1985:125 [new species-- Panama: North of Arraijan on C-5, Canal Zone. Ecuador].

Anasa madida Distant

Anasa madida Distant, 1881a:143 [new species-- Costa Rica]; 1893:367 [Volcan de Chiriqui].-- Brailovsky, 1985:148 [Volcan de Chiriqui].

Anasa nigricollis Stål

Anasa nigricollis Stål, 1870:191 [new species--Colombia].--Brailovsky 1985:155 [El Valle, Coclé Prov.].

Anasa peregrina Distant

Anasa peregrina Distant, 1881a:145 [new species-- Costa Rica].-- Brailovsky, 1985:163 [Volcan de Chiriqui].

Anasa scorbutica (Fabricius)

Cimex scorbuticus Fabricius, 1775:706 [new species-- "America"].

Anasa scorbutica.--- Distant, 1893:366 [Volcan de Chiriqui].-- Brailovsky, 1985:179 [David and Santiago in Chiriqui Prov.].

Anasa tauriformis Distant

Anasa tauriformis Distant, 1881a:142 [new species-- Costa Rica]; 1893:366 [Volcan de Chiriqui].--Brailovsky, 1985:191 [Volcan de Chiriqui].

Anasa tenebricosa Distant

Anasa tenebricosa Distant, 1881a:146 [new species-- Costa Rica].-- Brailovsky, 1985:193 [8 mi E of Volcan de Chiriqui; 5 km W of Boquete].

Genus *Catorhintha* Stål

Catorhintha Stål, 1859c:470. Type species: *Lygaeus guttulus* Fabricius, designated by Van Duzee, 1916:12.

Note: Brailovsky and Garcia (1987) revised this genus and gave a key to 26 species (pages 20-22).

Catorhintha abdita Brailovsky and Garcia

Catorhintha abdita Brailovsky and Garcia, 1987:89 [new species--Panama: Bella Vista].

Catorhintha divergens Barber

Catorhintha divergens Barber, 1926:214 [new species-- United States of America. Mexico. Cuba].-- Brailovsky and Garcia, 1987:52 [Barro Colorado Island].

Catorhintha guttula (Fabricius)

Lygaeus guttula Fabricius, 1794:162 [new species-- "America Insulare"].

Catorhintha guttula "var." Ståli Blöte, 1935:194 [new variety-- Peru. Surinam].-- Brailovsky and Garcia, 1987:60 [Frijoles, Canal Zone].

Genus *Cebrenis* Stål

Cebrenis Stål, 1862b:298. Type species: *Hypselonotus pulchellus* Herrich-Schaeffer, a junior synonym of *Hypselonotus centrolineatus* Westwood, monotypic.

Note: Brailovsky's (1995) revision of the *Cebrenis* complex contained a key (pages 28-31) to the 23 species.

Cebrenis centrolineata (Westwood)

Hypselonotus centrolineatus Westwood, 1842b:21 [new species--Brazil].

Cebrenis centro-lineata [sic].-- Distant, 1893:369 [Bugaba].-- Brailovsky, 1984b:124 [Panama].

Cebrenis ningula Brailovsky

Cebrenis ningula Brailovsky 1995:61 [new species.-- Panama: Canal Zone: Barro Colorado; Gatun Lake Lookout. Trinidad].

Genus *Cimolus* Stål

Cimolus Stål, 1862b:302. Type species: *Cimolus vitticeps* Stål, monotypic.

Cimolus vitticeps Stål

Cimolus vitticeps Stål, 1862b:302 [new species-- Mexico].-- Distant, 1893:366 [Bugaba; Volcan de Chiriqui].

Genus *Daphnasa* Brailovsky

Daphnasa Brailovsky, 1984c:162. Type species: *Anasa mucronata* Distant, original designation. **Note:** Brailovsky (1984c:170) provided a key to the four included species.

Daphnasa mucronata (Distant)

Anasa mucronata Distant, 1881:145 [new species-- Mexico].
Daphnasa mucronata.-- Brailovsky, 1984c:164 [Obispo Station].

Genus *Hypselonotus* Hahn

Hypselonotus Hahn, 1833:186. Type species: *Cimex venosus* Fabricius, a junior synonym of *Cimex fulvus* De Geer, designated by Brulle, 1835:371.

Note: Whitehead (1974:224) published a key (pages 365-368) to the nine species.

Hypselonotus fulvus (De Geer)

Cimex fulvus De Geer, 1773:341 [new species-- Surinam].

Hypselonotus fulvus.-- Distant, 1881a:151 [Panama]; 1893:370 [Caldera; David; Volcan de Chiriqui]. Lethierry and Severin, 1894:82 [Panama].-- McGuire and Crandall, 1967:82 [Panama].-- Whitehead, 1974:224 [Canal Zone: Bobio, Juan Mina, Tabernillea, Panama:Colon].

Hypselonotus interruptus Hahn

Hypselonotus interruptus Hahn, 1833:187 [new species-- Brazil].-- Whitehead, 1974:226 [Canal Zone: Ancon, Barro Colorado, Bobio, Cabima, Corazal, Las Cruces, Limon, Pegregal, Summit, Darien: Sabanas: Panama: Taboga Island].

Hypselonotus atratus Distant, 1893:370 [Caldera; Volcan de Chiriqui].-- Torre-Bueno, 1926a:108 [Gamboa].-- Blöte, 1935:20 [Boquete].

Hypselonotus atratus var. *hilaris* Horvath, 1913:365 [new variety-- Panama: Chiriqui].

Hypselonotus linea (Fabricius)

- Lygaeus linea* Fabricius, 1803:220 [new species-- "America meridionali"].
Hypselonotus proxima [sic] Distant, 1881a:153 [new species-- Costa Rica. Panama. "Amazons"].
Hypselonotus proximus-- Distant, 1893:370 [Bugaba; Volcan de Chiriqui]-- Lethierry and Severin, 1894:82 [Panama]-- Horvath, 1913:370 [Chiriqui]-- Blöte, 1935:202 [Chiriqui].
Hypselonotus linea-- Whitehead, 1974:228 [Canal Zone: Alhajuelo, Cabima, Rio Trinidad. Chiriqui: Volcan de Chiriqui. Panama: Cerro Campana, El Valle].

Hypselonotus lineatus Stål

- Hypselonotus lineatus* Stål, 1862b:297 [new species-- Mexico]-- Whitehead, 1974:229 [Canal Zone: Barro Colorado Island, Cabima, Comacho, Juan Mina, Paraiso, Summit, Upper Rio Indio; Panama: Panama, Taboga Island, Veraguas: Santiago].
Hypselonotus intermedius Distant, 1893:370 [Bugaba].
Hypselonotus lineatus var. *detersus* Horvath, 1913:363 and 369 [new variety-- Costa Rica. Panama: David, Chiriqui]-- Blöte, 1935:202 [Lina].
Hypselonotus lineatus var. *hilaris* Horvath, 1913:367, 370 [new variety-- Panama: Chiriqui].

Genus *Paryphes* Burmeister

- Paryphes* Burmeister, 1835:335. Type species: *Lygaeus laetus* Fabricius, designated by Kirkaldy, 1903:233.
Note: Brailovsky (1986a:113-116) gave a key to the 27 species and their subspecies.

Paryphes blandus Horvath

- Paryphes blandus* Horvath, 1913:355 [new species-- Costa Rica]-- Brailovsky, 1986a:115 [Panama].

Paryphes falsus Schmidt

- Paryphes falsus* Schmidt, 1926:139 [new species-- Colombia].
Paryphes falsus marginalis-- Brailovsky, 1986a:112 [Barro Colorado].

Paryphes flavocinctus Stål

- Paryphes flavocinctus* Stål, 1859c:461 [new species-- Costa Rica]-- Distant, 1881a:154 [Colon]-- Lethierry and Severin, 1894:84 [Panama]-- Horvath, 1913:354 [Chiriqui]-- Blöte, 1935:202 [Chiriqui]-- Brailovsky, 1986a:115 [Panama].

Genus *Sphicyrtus* Stål

- Sphicyrtus* Stål, 1859c:462. Type species: *Lygaeus chrysis* Lichtenstein.
Note: A key to the 30 species in this genus was given by Brailovsky and Melendez (1989:47-48).

Sphictyrtus bugabensis Distant

Sphictyrtus bugabensis Distant, 1893:371 [new species-- Panama: Bugaba].-- Uhler, 1894b:235 [Panama].-- Lethierry and Severin, 1894:83 [Panama].-- Brailovsky and Melendez, 1989:37 [Bugaba].

Sphictyrtus intermedius Stål

Sphictyrtus intermedius Stål, 1859c:463 [new species-- French Guiana. Colombia].-- Distant, 1881a:153 [Panama]; 1893:371 [Bugaba; Caldera].-- Lethierry and Severin, 1894:83 [Panama].-- Brailovsky and Melendez, 1989:32 [Bugaba; Caldera].

Genus *Zicca* Amyot and Serville

Zicca Amyot and Serville, 1843:240. Type species: *Zicca massulata* Amyot and Serville, a junior synonym of *Cimex nigropunctatus* De Geer, monotypic.

Note: The genus *Zicca* was revised by Brailovsky and Cadena (1992), with a key (pages 30-38) to 19 species.

Zicca acetabularia Brailovsky and Cadena

Zicca acetabularia Brailovsky and Cadena, 1992:38 [new species-- Costa Rica. Panama: Chiriqui. Colombia. Venezuela].

Zicca commaculata Distant

Zicca commaculata Distant, 1881:146 [new species-- Guatemala]; 1893:368 [Bugaba; Volcan de Chiriqui].-- Brailovsky and Cadena, 1992:46 [Balboa; Bugaba; Gatun; Gatun Lake; Porto Bello 6 mi. E of Plantation XX; Tabernilla; Volcan de Chiriqui].

Zicca rubricator mayorgaea Brailovsky and Cadena

Zicca rubricator mayorgaea Brailovsky and Cadena, 1992:76 [new subspecies-- Mexico. Honduras. El Salvador Nicaragua. Costa Rica. Panama: Canal Zone Gatun Lake, Tres Rios Plantation; Chiriqui: Vertiena Atlantica Atlantica, Sur de CerroLa Pelota, Volcan de Chiriqui].

Zicca recurva Distant

Zicca recurva Distant, 1881:147 [new species--Guatemala]; 1893:368 [Bugaba; Volcan de Chiriqui].

Zicca taeniola (Dallas)

Clavigralla taeniola Dallas, 1852:514 [new species-- Venezuela].

Zicca taeniola.-- Distant, 1893:368 [Volcan de Chiriqui].-- Brailovsky and Cadena, 1992:90 [Barro Colorado I.; Bugaba; Volcan Chiriqui].

TRIBE DISCOGASTRINI STÅL

Genus *Savius* Stål

Savius Stål, 1862a:58. Type species: *Paryphes suturellus* Stål, a junior synonym of *Homoeocerus diversicornis* Westwood, monotypic.

Savius dilectus Stål

Savius dilectus Stål, 1862b:297 [new species-- Mexico].-- Distant, 1893:372 [David].-- Brailovsky, 1986b:404 [Panama].

Savius diversicornis (Westwood)

Homoeocerus diversicornis Westwood, 1842:22 [new species--Brazil].

Savius diversicornis.-- Brailovsky, 1986c:211 [La Joya].

TRIBE HYDARINI STÅL

Brailovsky (1988b:623-649) revised this tribe and gave a key (p. 638) to its 3 genera.

Genus *Madura* Stål

Madura Stål, 1860:35. Type species: *Madura fuscoclavata* Stål, monotypic.

Note: A key to the 3 species of *Madura* was presented by Brailovsky (1988b:638).

Madura perfida Stål

Madura perfida Stål, 1862b:304 [new species-- Mexico].-- Distant, 1893:365 [Bugaba; Volcan de Chiriqui].-- Torre-Bueno, 1926a:108 [Alajuela].-- Brailovsky and Rivera, 1979:245 [Bugaba; Volcan de Chiriqui].-- Froeschner, 1988b:84 [Panama].

TRIBE LEPTOSCELINI STÅL

Packauskas (1994:45) explained why the above tribal spelling should be used instead of the older "Leptoscelidini."

Genus *Dalatomammurius* Brailovsky

Dalatomammurius Brailovsky 1982d:278. Type species: *Dalatomammurius westcotti* Brailovsky, original designation.

Note: A key to the six species was given by Brailovsky (1990b:354) when he moved this genus from Mictini to Leptoscelini.

Dalatomammurius cebrenoides (Blöte)

Collatia cebrenoides Blöte, 1935:200 [new species-- Surinam].

Dalatomammurius cebrenoides.-- Brailovsky, 1990b:345 [Barro Colorado].

Genus *Leptoscelis* Berthold

Leptoscelis Berthold, 1827:417. Type species: *Leptoscelis haemorrhoidalis* Fabricius, a junior synonym of *Cimex bipustulatus* Linnaeus, monotypic.

Leptoscelis tricolor (Westwood)

Leptoscelis tricolor Westwood, 1842a:17 [new species-- Colombia].-- Distant, 1881a:127 [Panama]; 1893:362 [Bugaba].-- Blöte, 1936:26 [Chiriqui].

Genus *Phthia* Stål

Phthia Stål, 1862b:294. Type species: *Cimex lunatus* Fabricius, designated by Van Duzee, 1916:11.

Phthia lunata (Fabricius)

Cimex lunatus Fabricius, 1787:289 [new species-- French Guiana].

Phthia lunata.-- Distant, 1881a:128 [Panama]; 1893:362 [Bugaba; Volcan de Chiriqui].-- McGuire and Crandall, 1967:94 [Panama].

TRIBE NEMATOPODINI AMYOT AND SERVILLE

O'Shea (1980b) revised this tribe and gave a key (pages 198-199) to 17 genera, all of which occur in the New World; he keyed (p. 198) *Molchina* as a member of this tribe, but in a footnote called attention to his earlier paper (1979) in which he presented evidence it did not belong here. The present inclusion of *Molchina* in this tribe is tentative until another placement is made.

Genus *Grammopocilus* Stål

Grammopocilus Stål, 1868:48. Type species: *Lygaeus flavicornis* Fabricius, monotypic.

Grammopocilus flavicornis (Fabricius)

Lygaeus flavicornis Fabricius 1803:213 [new species-- "America meridionalis"].

Grammopocilus flavicornis.-- Blöte, 1938:305 [Chiriqui].

Genus *Melucha* Amyot and Serville

Melucha Amyot and Serville, 1843:195. Type species: *Melucha lineicollis* Amyot and Serville, monotypic.

Melucha quinquelineata Stål

Melucha quinquelineata Stål, 1865b:175 [new species-- Brazil].-- Distant, 1893:353 [Bugaba].

Note: O'Shea (1980b:205) listed this species only from Brazil and made no comment about Distant's (1893: above) Panama record.

Genus *Molchina* Amyot and Serville

Molchina Amyot and Serville, 1843:188. Type species: *Lygaeus compressicornis* Fabricius, monotypic.

Molchina obtusidens Blöte

Molchina obtusidens Blöte, 1936:24 [new species-- Panama: Chiriqui].-- O'Shea, 1979:49 [Panama].

Genus *Nematopus* Latreille

Nematopus Berthold, 1827:417. Type species: *Nematopus nervosus* Laporte, first included species, by Laporte, 1832:30.

Nematopus lepidus Stål

Nematopus lepidus Stål, 1862b:293 [new species-- México].-- Distant, 1893:357 [San Feliz; Volcan de Chiriqui].

Nematopus nervosus Laporte

Nematopus nervosus Laporte, 1833:30 [new species-- Brazil].-- Distant, 1893:357 [San Feliz].

Nematopus ruficrus (Perty)

Anisoscelis ruficrus Perty, 1833:171 [new species-- Brazil].
Nematopus ruficrus.-- Distant, 1893:357 [Bugaba; Volcan de Chiriqui].

Genus *Ouranion* Kirkaldy

Bardistus Dallas, 1852:377, 380. Preoccupied. Type species: *Coreus serrulatus* Perty, monotypic.
Ouranion Kirkaldy, 1904b:280. Proposed as new name for preoccupied *Bardistus* Dallas.

Ouranion serrulatus (Perty)

Coreus serrulatus Perty, 1833:169 [new species-- Brazil].

Bardistus serrulatus.-- Distant, 1893:356 [Volcan de Chiriqui].

Note: O'Shea, in his generic revision of the Nematopodini (1980b:210), listed this species only from

Brazil and made no comment about Distant's (1893:above) Panama record.

Genus *Pachylis* Lepeletier and Serville

Pachylis Lepeletier and Serville, 1825:62. Type species: *Cimex pharaonis* Herbst, designated by Blanchard, 1845: plate 89, fig. 4.

Pachylis hector Stål

Pachylis hector Stål, 1862b:276 [new species-- Mexico].-- Distant, 1881a:107 [Panama]; 1893:351 [San Feliz, Volcan de Chiriqui].-- Lethierry and Severin, 1894:13 [Panama].-- O'Shea, 1980b:211 [Panama].-- Brailovsky, Mayorga, Leon, and Barrera 1995:64 [Panama].

Pachylis pharaonis (Herbst)

Cimex pharaonis Herbst, 1784:258 [new species-- Brazil].
Pachylis pharaonis.-- Walker, 1871:52 [Panama].-- Distant, 1881a:107 [Panama].-- Lethierry and Severin, 1894:14 [Panama].-- O'Shea, 1980b:211 [Panama].

Genus *Piezogaster* Amyot and Serville

Piezogaster Amyot and Serville, 1843:197. Type species: *Piezogaster albonotatus* Amyot and Serville, monotypic.

Piezogaster chiriquinus (Distant)

Archimerus chiriquinus Distant, 1893:355 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:17 [Panama].
Piezogaster chiriquinus.-- O'Shea, 1980b:214 [Panama].-- Brailovsky and Barrera, 1984c:140 [Panama].

Piezogaster loricata (Distant)

Ojedana loricata Distant, 1893:356 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1894:17 [Panama].
Piezogaster loricata: O'Shea, 1980b:214 [Panama].

Piezogaster odiosa (Stål)

Capaneus odiosus Stål, 1862b:291 [new species-- Mexico].-- Distant, 1881a:113 [Panama]; 1893:355 [Bugaba; David; Volcan de Chiriqui].-- Lethierry and Severin, 1894:16 [Panama].-- Blöte, 1938:304 [Lino].-- Torre-Bueno, 1941:58 [Panama].
Piezogaster odiosus.-- Brailovsky and Barrera, 1984c:142 [Panama].

Piezogaster scutellaris Stål

Piezogaster scutellaris Stål, 1862b:292 [new species-- Mexico].
Archimerus scutellaris.-- Distant, 1893:355 [Bugaba; Caldera; David; Volcan de Chiriqui].
Piezogaster scutellaris.-- Brailovsky and Barrera, 1984c:143 [Panama].

Genus *Thasopsis* O'Shea

Thasopsis O'Shea, 1980b:198, 217. Type species: *Bardistus formidabilis* Distant, original designation.

Thasopsis formidabilis (Distant)

Bardistus formidabilis Distant, 1893:357 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:18 [Chiriqui].-- Blöte, 1938:305 [Chiriqui].
Thasopsis formidabilis.-- O'Shea, 1980b:218 [Chiriqui].

TRIBE SPARTOCERINI AMYOT AND SERVILLE

Genus *Sephina* Amyot and Serville

Sephina Amyot and Serville, 1843:185. Type species: *Lygaeus pustulata* Fabricius, monotypic.

Sephina geniculata Distant

Sephina geniculata Distant, 1881a:132 [new species-- Costa Rica]; 1893:363 [Volcan de Chiriqui].

Sephina limbata Stål

Sephina limbata Stål, 1862b:273 [new species-- Mexico].-- Distant, 1893:363 [Volcan de Chiriqui].-- Brailovsky and Sanchez, 1983a:187 [Panama].

Sephina rogersi Distant

Sephina rogersi Distant, 1881:132 [new species-- Costa Rica]; 1893:363 [Volcan de Chiriqui].-- Blöte, 1936:24 [Chiriqui].

Sephina sulcaticollis Schmidt

Sephina sulcaticollis Schmidt, 1907:110 [new species-- Panama: Bugaba].-- Bergroth, 1913:148 [Panama].-- Blöte, 1936:24 [Chiriqui].

Genus *Spartocera* Laporte

Spartocera (*Spartocera*) Laporte, 1833:43. Type species: "*Spartocerus*" *geniculatus* Burmeister, a junior synonym of *Cimex fuscus* Thunberg, designated by Kirkaldy, 1903:232.

Spartocera fusca (Thunberg)

Cimex fuscus Thunberg, 1783:44 [new species-- no locality given].

Spartocera fusca.-- Distant, 1893:363 [Volcan de Chiriqui].-- Brailovsky and Sánchez, 1983a:184 [Panama].

Corecoris fuscus.-- McGuire and Crandall, 1967:45, 68 [Panama].

Spartocera granulata Stål

Spartocera granulata Stål, 1870:173 [new species-- Unknown locality].-- Distant, 1881a:130 [Panama]; 1893:362 [Volcan de Chiriqui].-- Lethierry and Severin, 1894:55 [Panama].

SUBFAMILY MEROPACHYINAE STÅL

A key to the 3 tribes that occur in the Western Hemisphere was given by Froeschner (1981:27).

Packauskas (1994:45) gave reasons why this subfamily and its nominate tribe should be spelled without the letter "d" that was formerly used.

TRIBE MEROPACHYINI STÅL

Genus *Menardus* Distant

Menardus Distant, 1900:366. Type species: *Meropachys notatus* Walker, monotypic.

Menardus notatus (Walker)

Meropachys notatus Walker, 1871:70 [new species-- Brazil].

Flavius notatus-- Distant, 1893:458 [Bugaba].

Genus *Merocoris* Perty

Merocoris Perty, 1833:170. Type species: *Merocoris tristis* Perty, monotypic.

Note: Kormilev (1954:157) gave a key to three species in South America.

Merocoris distinctus Dallas

Merocoris distinctus Dallas, 1852:419 [new species-- "St. Louis"].

Corynocoris distinctus-- Distant, 1893:459 [Bugaba; Davis; Tole; Volcan de Chiriqui].

SUBFAMILY PESUDOPHLOEINAE STÅL

TRIBE PSEUDOPHLOEINI STÅL

Note: Dolling (1977:28) offered a key to the three genera occurring in the New World.

Genus *Vilga* Stål

Vilga Stål, 1859c:474. Type species: *Clavigralla acanthion* Dallas, a junior synonym of *Centrocoris westwoodi* Kolenati, monotypic.

Note: Dolling (1977) revised the species of *Vilga* with a key to its 14 species (page 30).

Vilga dissimilis Distant

Vilga dissimilis Distant, 1893:368 [new species-- Panama: David].-- Lethierry and Severin, 1894:78 [Panama].-- Dolling, 1977:35 [Canal Zone; Cocle; Coco Solo; El Valle; Fort Clayton; Fort Gulick].

Vilga divaricata Distant

Vilga divaricata Distant, 1893:369 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:78 [Chiriqui].-- Dolling, 1977:38 [Volcan de Chiriqui].

FAMILY CORIXIDAE LEACH

Surprisingly few records for Panamanian occurrences of Corixidae have been encountered--only five species in two genera. Published distribution maps do not indicate that very many more will be found.

A well-illustrated monograph of the Corixidae of the Western Hemisphere, including definitions and keys, was provided by Hungerford (1948); this work was reprinted (1977) with the same pagination except that the key to the species of the genus *Trichocorixa* Kirkaldy was corrected by Sailer, who also up dated the list of publications.

SUBFAMILY CORIXINAE LEACH

TRIBE CORIXINI LEACH

Genus *Trichocorixa* Kirkaldy

Arctocorisa (*Trichocorixa*) Kirkaldy, 1908b:118. Type species: *Corisa pygmaeus* Fieber, a junior synonym of *Corisa verticalis* Fieber, original designation.

Trichocorixa.-- Hungerford, 1927:96.

Note: Sailer (1948) revised this genus with a key to 16 species (pages 302-303), a key which he later revised (1977).

Trichocorixa reticulata (Guérin-Méneville)

Corisa reticulata Guérin-Méneville, 1857:423 [new species--Cuba].

Corixa pygmaea.-- Kirkaldy, 1899b:2 [Darien].

Note: Sailer's (1948:401) revision and his later paper (1977:401), both without mentioning Panama, mapped *reticulata* as the only species of the genus whose range encompassed Panama wholly or in part.

SUBFAMILY MICRONECTINAE JACZEWSKI

Genus *Tenagobia* Bergroth

Tenagobia Bergroth, 1899:282. Type species: *Tenagobia marmorata* Bergroth, monotypic.

Note: The genus was revised by Deay (1935) and more recently by Nieser (1977a), who presented keys to the seven subgenera and 27 species.

Tenagobia costaricana Jaczewski

Tenagobia costaricana Jaczewski, 1930b:144 [new species-- Costa Rica].-- Deay, 1935:437 [Boqueron River]; 1948:68 [Boqueron River]; 1977 [Boqueron River].-- Nieser, 1977a:8

[Panama].

Tenagobia minuta Deay, 1930:171 [new species-- Panama: Boqueron River].

Tenagobia incerta Lundblad

Tenagobia signata var. *incerta* Lundblad, 1928:16 [new species-- Paraguay].

Tenagobia incerta-- Nieser, 1977a:16 [Canal Zone: Ancon; Tabernilla. Tocumen Prov.].

Tenagobia mexicana Deay

Tenagobia mexicana Deay, 1930:174 [new species-- Mexico]; 1935:448 [David].

Tenagobia socialis-- Champion, 1901:383 [David].-- Kirkaldy and Torre-Bueno, 1909:193

[Panama].

Note: Nieser (1977a:23) had specimen records extending only so far south as Honduras, which led him to write that Panama records "have to be confirmed."

Tenagobia socialis (F. White)

Sigara socialis F. White, 1879a:274 [new species-- Brazil].

Tenagobia socialis-- Nieser, 1977a:25 [Tocumen Prov.].

FAMILY CYDNIDAE BILLBERG

The following list of this currently inclusive family contains records of 33 species in 15 genera for Panama.

Following Schuh and J. Slater (1995), as stated in the introduction to the present paper, it is necessary to here accept Dolling's (1981) broad definition of the family "Cydnidae" [except for the African family Thaumastellidae that was removed by Jacobs, 1989] and include a number of groups that were often recognized as separate families [in our area Corimelaenidae which was combined with Thyreocoridae]; Schuh and J. Slater (1995:22) presented a key to the eight subfamilies they include herein.

SUBFAMILY AMNESTINAE HART

Genus *Amnestus* Dallas

Amnestus Dallas, 1851:126. Type species: *Cydnus spinifrons* Say, monotypic.

Note: Froeschner's (1960) publication included a key (pages 633-634) to the 20 species of this genus.

Amnestus championi Distant

Amnestus championi Distant, 1893:453 [new species-- Guatemala].-- Froeschner, 1960:640 [Barro Colorado Island].

Amnestus forreri Distant

Amnestus forreri Distant, 1893:452 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and

Severin, 1893:265 [Panama].-- Froeschner, 1960:645 [Barro Colorado Island; Cano Saddle, Gatun Lake].

Amnestus pusio (Stål)

Magoa pusio Stål, 1860:14 [new species-- Brazil].

Amnestus pusio.-- Froeschner, 1960:654 [Ancon; Barro Colorado Island].

Amnestus subferrugineus (Westwood)

Cydnus subferrugineus Westwood, 1837:19 [new species-- St. Vincent Island, British West Indies].

Amnestus uhleri.-- Caudell, 1924:136 [Chilibrillo caves]

Amnestus subferrugineus.-- Froeschner, 1960:660 [Barro Colorado Island; Cabima; Molino; Rio Chilibrillo Caves].--Peck, 1971:431 [Chilibrillos caves].

Note: Peck (1971:431) pointed out Caudell's (1924: above) misidentification of *Amnestus subferrugineus*.

Amnestus uhleri Distant

Amnestus uhleri Distant, 1893:453 [new species-- Guatemala. Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:453 [Panama].-- Froeschner, 1960:663 [Volcan de Chiriqui].

SUBFAMILY CORIMELAENINAE

Schuh and J. Slater (1995:222-224) accepted and keyed the two subfamilies, Thyreocorinae (from the Old World) and Corimelaeninae (from the New World).

McAtee and Malloch's (1933) revision of this group, as the subfamily Thyreocorinae of Pentatomidae, provided keys to subspecies level and still stands as a most useful work in the study of these insects.

Genus *Alkindus* Distant

Alkindus Distant, 1889:309. Type species: *Alkindus atratus* Distant, monotypic.

Alkindus atratus Distant

Alkindus atratus Distant, 1889:309 [new species-- Panama: Tolé].--Lethierry and Severin, 1893:14 [Panama].-- McAtee and Malloch, 1933:348 [Panama].

Genus *Amyssonotum* Horvath

Amyssonotum Horvath, 1919:212. Type species: *Corimelaena rastrata* Stål, monotypic.

Amyssonotum rastratum (Stål)

Corimelaena rastrata Stål, 1862a:8 [new species-- Brazil].

Thyreocoris rastratus.-- Distant, 1889:308 [Bugaba; Caldera; Volcan de Chiriqui].

- Amyssonotum rastratum* subsp. *rastratum*.-- McAtee and Malloch, 1933:350 [Panama].
Amyssonotum rastratum subsp. *flexum* McAtee and Malloch, 1933:351 [new subspecies-- Panama: Canal Zone; Volcan de Chiriqui].-- Froeschner, 1988g:699 [Panama].

Genus *Corimelaena* A. White

- Corimelaena* A. White, 1839:539. Types species: *Tetyra lateralis* Fabricius, original designation.
Note: Torre-Bueno (1939a:186) made *Allocoris* McAtee and Malloch a junior synonym of *Corimelaena*.

Corimelaena elegans (McAtee and Malloch)

- Allocoris (Allocoris) elegans* McAtee and Malloch, 1933:368 [new species-- Guatemala. Costa Rica. Panama: Chagres River; Juan Mina Citrus Plantation; Limon. Trinidad].

Corimelaena tibialis (Fabricius)

- Tetyra tibialis* Fabricius, 1803:144 [new species-- "America meridionali"].
Allocoris (Allocoris) tibialis.-- McAtee and Malloch, 1933:379 [Borracho Plantation; Panama City].

Genus *Galgupha* Amyot and Serville

- Galgupha* Amyot and Serville, 1843:68. Type species: *Galgupha atra* Amyot and Serville, a junior synonym of *Scutellera unicolor* Palisot, designated by Horvath, 1919:216.

Galgupha guttiger (Stål)

- Thyreocoris guttiger* Stål, 1862b:94 [new species-- Mexico].-- Distant, 1889:308 [Bugaba; Volcan de Chiriqui].-- Barber, 1906:255 [Panama].
Galgupha (Gyrocnemis) guttiger.-- McAtee and Malloch, 1933:256 [Panama].

Galgupha nitida McAtee and Malloch

- Galgupha (Euryscyrtus) nitida* McAtee and Malloch, 1933:226 [new species-- Panama: Cabima; Paraiso; Porto Bello; Tabernilla].

Galgupha punctifer McAtee and Malloch

- Galgupha (Gyrocnemis) punctifer* McAtee and Malloch, 1933:264 [new species-- United States of America. Mexico. Tabernilla; Taboga. Colombia. Bolivia].-- Froeschner, 1988g:706 [Panama].

Galgupha schulzii (Fabricius)

- Cimex schulzii* Fabricius, 1781:340 [new species-- "Cayenne"].
Acrotmetus sphaeroides Horvath, 1919:224 [new species-- Panama: Chiriqui].
Galgupha (Acrotmetus) schulzii.-- McAtee and Malloch, 1933:277 [Volcan de Chiriqui].

Galgupha signatipennis (Germar)

Odontoscelis signatipennis Germar, 1839b:42 [new species-- Brazil].

Thyreocoris signatipennis-- Distant, 1889:308 [Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1893:13 [Panama].

Note: McAtee and Malloch (1933:233) listed this species only for the southern half of South America; thus it is possible the species does not occur as far north as Panama, and the above listed Panamanian records may have to be transferred to another species.

Genus *Pruhleria* McAtee and Malloch

Pruhleria McAtee and Malloch, 1933:354. Type species: *Corimelaena incerta* Uhler, monotypic.

Pruhleria incerta (Uhler)

Corimelaena incerta Uhler, 1863:354 [new species-- Cuba].

Thyreocoris incertus-- Distant, 1889:308 [Bugaba].

Note: McAtee and Malloch (1933:354) listed this species for Cuba only, thus it is possible Distant's

(above) record will eventually be transferred to another species.

SUBFAMILY CYDNINAE BILLBERG

Froeschner (1960) revised this subfamily for the Western Hemisphere and provided keys to genera and species.

Genus *Cyrtomenus* Amyot and Serville

Cyrtomenus Amyot and Serville, 1843:90. Type species: *Cyrtomenus castaneus* Amyot and Serville, a junior synonym of *Pentatoma ciliata* Palisot, designated by Kirkaldy, 1903:230.

Cyrtomenus bergi Froeschner

Cyrtomenus ciliatus Berg, 1879a:234, preoccupied [new species-- Argentina].

Cyrtomenus mirabilis-- Distant, 1884:304 [Bugaba].

Cyrtomenus (*Cyrtomenus*) *bergi* Froeschner, 1960:527, proposed as new name for preoccupied *Cyrtomenus ciliatus* Berg [Barro Colorado Island].

Cyrtomenus teter (Spinola)

Cydnus teter Spinola, 1837:332 [new species-- Brazil].

Cyrtomenus (*Syllobus*) *teter*-- Froeschner, 1960:523 [El Volcan; Potrerillos].

Genus *Dallasiellus* Berg

Stenocoris Signoret, 1880b:xliv, preoccupied. Type species: *Aethus longulus* Dallas, monotypic.

Dallasia Bergroth, 1891:235, preoccupied. Proposed as a new name for preoccupied *Stenocoris* Signoret.

Dallasiellus Berg, 1901:281. Proposed as new name for preoccupied *Stenocoris* Signoret and *Dallasia* Bergroth.

Dallasiellus bacchinus Froeschner

Dallasiellus (Dallasiellus) bacchinus Froeschner, 1960:599 [new species-- Mexico. Panama: La Chorrera; Ancon; Aquadulces].

Dallasiellus levipennis (Signoret)

Geotomus levipennis Signoret, 1883:35 [new species-- French Guiana. Brazil].

Dallasiellus (Dallasiellus) levipennis-- Froeschner, 1960: 609 [Panama].

Dallasiellus lugubris (Stål)

Aethus lugubris Stål, 1860:13 [new species-- Brazil].

Dallasiellus (Dallasiellus) lugubris-- Froeschner, 1960:613 [Barro Colorado Island].

Dallasiellus megalcephalus Froeschner

Dallasiellus (Ecarinoceps) megalcephalus Froeschner, 1960:592 [new species-- Panama: Barro Colorado Island. British Guiana. Brazil].

Dallasiellus orchidophilus Froeschner

Dallasiellus (Dallasiellus) orchidophilus Froeschner, 1960:618 [new species-- Panama: Summit. Colombia].

Genus *Ectinopus* Dallas

Ectinopus Dallas, 1851:121. Type species: *Cydnus holomelas* Burmeister, monotypic.

Ectinopus holomelas (Burmeister)

Cydnus holomelas Burmeister, 1835:375 [new species-- Brazil].

Ectinopus holomelas-- Distant, 1889:307 [Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1893:64 [Panama].-- Froeschner, 1960:412 [Alhajuelo; Barro Colorado Island; Boquete; Bugaba].

Genus *Melanaethus* Uhler

Melanaethus Uhler, 1876:280. Type species: *Melanaethus elongatus* Uhler, preoccupied, renamed *Geotomus parvulus* Signoret, which is a junior synonym of *Aethus subglaber* Walker, monotypic.

Melanaethus spinolai (Signoret)

Aethus spinolae [sic] Signoret, 1863:545 [new species-- Chile].

Melanaethus spinolae [sic].-- Froeschner, 1960:449 [Ancon; Barro Colorado Island; Corozal].

Genus *Onalips* Signoret

Onalips Signoret, 1881:323. Type species: *Aethus nigerrimus* Dallas, designated by Froeschner, 1960:416.

Onalips nigerrimus (Dallas)

Aethus nigerrimus Dallas, 1851:112 [new species-- Colombia].

Onalips nigerrimus.-- Signoret, 1881:323 [Panama].-- Distant, 1889:305 [Volcan de Chiriqui].-- Lethierry and Severin, 1893:66 [Panama].-- Froeschner, 1960:420 [Ancon; Barro Colorado Island; Campana].

Genus *Pangaeus* Stål

Pangaeus Stål, 1862b:95. Type species: *Aethus margo* Dallas, preoccupied, a junior synonym of *Cimex aethiops* Fabricius, preoccupied, must take the name *Cydnus serripes* Westwood, designated by Van Duzee, 1916:3.

Pangaeus serripes (Westwood)

Cimex aethiops Fabricius, 1787:296, preoccupied [new species --French Guiana].

Cydnus serripes Westwood, 1837:19 [new species-- "Insula Sti.Vincent"].

Pangaeus margo.-- Distant, 1889:306 [Bugaba; Volcan de Chiriqui].

Pangaeus (Pangaeus) aethiops.-- Froeschner, 1960:504 [Madden Dam; Progreso].

Note: Rider (1998:449) pointed out that *Cimex aethiops* Fabricius was preoccupied and had to be replaced with Westwood's (1837:above) *Cydnus serripes*.

Pangaeus docilis (Walker)

Aethus docilis Walker, 1867:154 [new species-- Brazil].

Pangaeus (Pangaeus) docilis.-- Froeschner, 1960:484 [Barro Colorado Island; Bugaba; Cano Saddle, Gatun Lake; Chilibrillo Caves; Mt. Hope; Paraiso; Summit].-- Peck, 1971:438 [Chilibrillo Caves].

Pangaeus piceatus Stål

Pangaeus piceatus Stål, 1862b:96 [new species-- Mexico].-- Caudell, 1924:136 [Chilibrillo Caves].

Pangaeus quinquespinosus Froeschner

Pangaeus (Pangaeus) quinquespinosus Froeschner, 1960:497 [new species-- Panama: Barro Colorado Island].

Genus *Prolobodes* Amyot and Serville

Lobostoma Amyot and Serville, 1843:87, preoccupied. Type species: *Cydnus giganteus* Burmeister,

designated by Kirkaldy, 1903:232.

Prolobodes Amyot and Serville, 1843:676. Proposed as new name for preoccupied *Lobostoma* Amyot and Serville.

Prolobodes gigas (Signoret)

Lobostoma gigas Signoret, 1881:195 [new species-- Bolivia].

Prolobodes gigas-- Froeschner, 1960:512 [Barro Colorado Island; Cocoli; Gatun; La Chorrera].

Genus *Tominotus* Mulsant and Rey

Tominotus Mulsant and Rey, 1866:319. Type species: *Cydnus (Tominotus) signoreti* Mulsant and Rey, monotypic.

Tominotus impuncticollis (Distant)

Pangaeus impuncticollis Distant, 1880:7 [new species-- Mexico. Panama].

Aethus impuncticollis-- Signoret, 1881:428 [Panama].

Cydnus impuncticollis-- Lethierry and Severin, 1893:66 [Panama].

Tominotus impuncticollis-- Froeschner, 1960:560 [Panama].

SUBFAMILY SCAPTOCORINAE FROESCHNER

Becker (1967) treated this subfamily and gave keys to the three genera and keys to the two species of her new genus *Atarsocoris* and seven species of *Scaptocoris* Perty.

Genus *Scaptocoris* Perty

Scaptocoris Perty, 1833:165. Type species: *Scaptocoris castanea* Perty, monotypic.

Scaptocoris divergens Froeschner

Scaptocoris divergens Froeschner, 1960:369 [new species-- Guatemala. Honduras. Panama: Fort Clayton; Madden Dam. Venezuela. Colombia. Trinidad].-- Becker, 1967:307 [Panama].

Scaptocoris talpa Champion

Scaptocoris talpa Champion, 1900b:256 [new species-- Guatemala].-- Becker, 1967:304 [Panama].

FAMILY CYMIDAE BAERENSPRUNG

Although no Panama records of this family were encountered while assembling this list, some species may be found as the ranges of two of its genera extend from North America to South America.

The Lygaeidae long contained a subfamily "Cyminae" with two tribes, Cymini and Ninini Barber [see J. Slater (1964:383) and J. Slater and O'Donnell, (1995:40)]. Each of those tribes has now been elevated to the family level by Henry (1997b:296).

A revision of this family, as a tribe of the lygaeid subfamily "Cyminae" for the world, was published by Hamid (1975:53-97), who included keys to the genera and species.

✓FAMILY CYRTOCORIDAE DISTANT

Panama records for two species in one genus were found in literature.

This taxonomic group has moved up and down the taxonomic hierarchy. Although Schuh and Slater (1995) is the arrangement generally followed in the present paper, and they treated it as subfamily "Cyrtocorinae" of the family Pentatomidae, the group is here accorded family rank as it was revised by Packauskas and Schaefer (1998).

✓Genus *Cyrtocoris* A. White

Coptosoma (*Oxynotus*) Laporte, 1832:74, preoccupied. Type species: *Tetyra gibba* Fabricius, monotypic.

Cyrtocoris A. White, 1842:89. Proposed as a new name for the preoccupied *Oxynotus* Laporte. **Note:** The following assignment of literature records follows Packauskas and Schaefer's (1998) revision.

✓*Cyrtocoris egeris* Packauskas and Schaefer

Cyrtocoris trigonus Horvath, 1916:221, in part [Chiriqui].- Brailovsky, Cervantes, and Mayorga, 1988:541 [Panama].

Cyrtocoris egeris Packauskas and Schaefer, 1998:37 [new species: Mexico. Honduras, Costa Rica. Panama (Chiriqui). Colombia. Venezuela. Ecuador. Bolivia. Brazil. Argentina. Trinidad.

✓*Cyrtocoris trigonus* (Germar)

Oxynotus trigonus Germar, 1839:43 [new species: Brazil].

Cyrtocoris trigonus.- Distant, 1880:322 [Bugaba; Caldera; Chiriqui; Volcan de Chiriqui].- Kormilev, 1955b:329 [Panama].- Packauskas and Schaefer, 1988:381 [Panama].

Cyrtocoris obtusus.- Brailovaky, Cervantes, and Mayorga, 1988:541 [Panama].

✓FAMILY DINIDORIDAE STÅL

Panama records are available for a single species of *Dinidor* Latreille, the only genus of this family known to occur in the New World.

The group is now generally accepted as an independent family rather than as a subfamily under Pentatomidae in the older classification. It was treated in its entirety twice, once by Schouteden (1913), as a subfamily, and more recently as a family by Durai (1987), who provided a revision with keys to the world's species.

✓SUBFAMILY DINIDORINAE STÅL

✓TRIBE DINIDORINI STÅL

✓Genus *Dinidor* Latreille

Edessa (*Dinidor*) Latreille, 1829:195. Type species: *Cimex mactans* Fabricius, designation by Kirkaldy 1902:137.

Dinidor.-- Laporte, 1833:63.

Note: Rolston, Rider, Murray, and Aalbu (1996) published a "Catalog of the Dinidoridae of the World."

✓*Dinidor rufocinctus* Stål

Dinidor rufocinctus Stål, 1870:79 [new species-- Colombia].-- Distant, 1881:103 [Panama].-- Kirkaldy, 1909:254 [Panama].-- Schouteden, 1913:5 [Panama].-- Durai, 1987:232 [Panama].- Rolston, Rider, Murray, and Aalbu, 1996:60 [Panama].

FAMILY DIPSOCORIDAE DOHRN

Panamamanian records for one species of Dipsocoridae, representing one of the two contained genera, has been found. Undoubtedly, additional species of this poorly known family will be discovered here.

As pointed out by Štys (1970:44), the proper name for this family, according to the International "Codes" must be Dipsocoridae rather than the previously oft used "Cryptostemmatidae." The only comprehensive work on this group is in McAtee and Malloch's (1925b) paper; while it is still useful, it is now out of date because numerous taxa have since been described. Štys' above-mentioned work included (pages 42-43) a key to the suprageneric groups within the complex of taxa to which Dipsocoridae belongs -- the "Trichotelocera" now generally designated the Dipsocoromorpha.

Genus *Cryptostemma* Herrich-Schaeffer

Cryptostemma Herrich-Schaeffer, 1835b:11. Type species: *Cryptostemma alienum* Herrich-Schaeffer, monotypic.

Cryptostemma pedunculatum McAtee and Malloch

Cryptostemma pedunculatum McAtee and Malloch, 1925b:9 [new species-- Panama: Bohio, Canal Zone].-- Usinger, 1945b:238 [Panama].

FAMILY ENICOCEPHALIDAE STÅL

The present summary lists Panama records for five species in four genera.

The generally cryptic habits, small size, and fragile bodies of these insects probably account for their rarity in collections. Careful collecting should reveal a richer fauna.

The "Panama" record for *Systelloderes biceps* (Say), as given by Froeschner (1988c:134) and accepted by Krauth and Young (1994:160), must have been a lapsus because its source was not found during preparation of the present enumeration.

Comprehensive works on this family by Jeannel (1942) and Usinger (1945a) were much used for later works, such as Wygodzinsky and Schmidt's (1991) "Revision" of the family for the New World [with keys to the species of all included genera except those of *Systelloderes*]. The latter work included a subfamily "Aenictopecheinae" which is now considered a full family. Schuh and J. Slater (1995:71) include a modified key to the five subfamilies of Enicocephalidae.

SUBFAMILY ENICOCEPHALINAE STÅL

TRIBE ENICOCEPHALINI STÅL

Genus *Chiricocoris* Wygodzinsky and Schmidt

Chiricocoris Wygodzinsky and Schmidt, 1991:95. Type species: *Chiricocoris dybasi* Wygodzinsky and Schmidt, monotypic.

Chiricocoris dybasi Wygodzinsky and Schmidt

Chiricocoris dybasi Wygodzinsky and Schmidt, 1991:97 [new species-- Panama: Chiriqui Prov.: Barca Area, Finca Lerida near Boquete; Finca Palo Santo, near Nuevo California].

Genus *Enicocephalus* Westwood

Enicocephalus Westwood, 1837:22. Type species: *Enicocephalus flavicollis* Westwood, monotypic.

Note: Kritsky (1979) revised this genus and included a key (page 94) to its 10 species.

Enicocephalus pilosus (Champion)

Enicocephalus pilosus Champion, 1898a:160 [new species-- Guatemala].

Enicocephalus emarginatus-- Kritsky, 1979:97 [Barro Colorado Island].

Enicocephalus pilosus-- Wygodzinsky and Schmidt, 1991:126 [El Valle; Summit, Canal Zone].

Note: *E. emarginatus* was synonymized under *E. pilosus* by Wygodzinsky and Schmidt (1991:126).

Genus *Neocylocotis* Wygodzinsky and Schmidt

Neocylocotis Wygodzinsky and Schmidt, 1991:164. Type species: *Neocylocotis albovenosus* Wygodzinsky and Schmidt, monotypic.

Neocylocotis annulipes (Champion)

Enicocephalus annulipes Champion, 1898a:160 [new species--Panama: Volcan de Chiriqui].

Stenopirates (Hymenocoris) annulipes-- Jeannel, 1942:330 [Panama].

Oncylocotis annulipes-- Usinger, 1945a:333 [Panama].

Neocylocotis annulipes-- Wygodzinsky and Schmidt, 1991:175 [Volcan de Chiriqui].

Neocylocotis concolor (Champion)

Enicocephalus concolor Champion, 1898a:160 [new species-- Guatemala. Panama: Volcan de Chiriqui].

Stenopirates (Hymenocoris) concolor.-- Jeannel, 1942:329 [Panama].

Oncylocotis concolor.-- Usinger, 1945a:329 [Panama].

Neoncylocotis concolor.-- Wygodzinsky and Schmidt, 1991:179 [Barca Arca, Finca Lerida near Boquete; Volcan de Chiriqui].

Note: Panama records for this species, including their own, were designated as of "uncertain identification" by Wygodzinsky and Schmidt (1991:179).

Genus *Xenicocephalus* Wygodzinsky and Schmidt

Xenicocephalus Wygodzinsky and Schmidt, 1991:200. Type-species *Xenicocephalus giganticus* Wygodzinsky and Schmidt, monotypic.

Xenicocephalus giganticus Wygodzinsky and Schmidt

Xenicocephalus giganticus Wygodzinsky and Schmidt, 1991:205 [new species--Costa Rica. Panama: Barro Colorado Island. Colombia].

FAMILY GELASTOCORIDAE CHAMPION

Panama records have been found for 14 species in two genera.

A world monograph for this family, including data on its biology, ecology, and phylogeny, was presented by Todd (1955), who updated (1961) the list of species and distribution data with a checklist. De Carlo (1959) and Nieser (1975, 1977b) resurrected certain genera that Todd had considered synonyms of the only two genera recognized by himself; Todd's (1955) more comprehensive work is followed here.

SUBFAMILY GELASTOCORINAE CHAMPION

Genus *Gelastocoris* Kirkaldy

Galgulus Latreille, 1802:253, preoccupied. Type species: *Naucoris oculata* Fabricius, monotypic. *Gelastocoris* Kirkaldy, 1897:258. Proposed as new name for preoccupied *Galgulus* Latreille.

Gelastocoris bufo (Herrich-Schaeffer)

Galgulus bufo Herrich-Schaeffer, 1840:88 [new species--America].

Gelastocoris bufo.-- Melin, 1929:156 [Tolé].-- Todd, 1955:322 [Cochea River]; 1961:462 [Panama].-- Nieser, 1977b:293 [Panama].

Gelastocoris hungerfordi Melin

Gelastocoris hungerfordi Melin, 1929:168 [new species-- Mexico. Guatemala. Nicaragua. Costa Rica. Panama: Bugaba; Caldera; S. Feliz; Tolé. Venezuela].-- Todd, 1955:316 [Barro Colorado, C. Z.; Caldera; Cochea River; Gamboa, C. Z.; Progreso, Chiriqui Prov.; Pehonoma].

Gelastocoris cucullatus Martin, 1929:363 [new species-- Guatemala. Panama: Barro Colorado; Penemoma].

Gelastocoris major Montandon

Gelastocoris major Montandon, 1910:2 [new species-- No locality given].-- Todd, 1955:327 [Gamboa, C. Z.; Ft. Clayton, C. Z.]; 1957:147 [Panama]; 1961:463 [Panama].

Gelastocoris andinus andinus Melin, 1929:159 [new species-- Colombia. Panama: Boucard; Tolé. Ecuador. Brazil].

Gelastocoris nebulosus (Guérin-Méneville)

Galgulus nebulosus Guérin-Méneville, 1844:351 [new species-- Brazil].

Gelastocoris nebulosus.-- Montandon, 1910:2 [transfers Colon record from his previous listing as *G. flavus*].

Note: Todd (1961:463) listed this species for "South America, but presently not known from Colombia;" this statement removes its area of occurrence a significant distance from Panama and suggests the published Panamanian records need verification.

Gelastocoris oculatus (Fabricius)

Naucoris oculata Fabricius, 1798 :525 [new species-- "Carolina"].

Pelegonus oculatus.-- Champion, 1901:348 [Bugaba; Caldera; San Feliz; Tolé].

Gelastocoris variegatus.-- Champion, 1901:348 [San Feliz; Tolé].-- Kirkaldy and Torre-bueno, 1909:181 [Panama].--Melin, 1929:162 [S. Feliz; Tolé].

Gelastocoris oculatus variegatus.-- Todd, 1955:311 [Progreso, Chiriqui Prov.]; 1961:464 [Panama].-- Nieser, 1977b:294 [Panama].-- Menke, 1979:128 [Panama].

Gelastocoris oculatus oculatus.-- Menke, 1979:128 [Panama].

Gelastocoris vicinus Champion

Gelastocoris vicinus Champion, 1901:349 [new species-- United States of America. Mexico.

Nicaragua. Costa Rica. Panama: Bugaba; Tolé; Volcan de Chiriqui. "South America to Brazil, Peru, and Bolivia. See "Note" below].-- Kirkaldy and Torre-Bueno, 1909:181 [Panama].-- Melin, 1929:163 [Bugaba; Tolé; V. de Chiriqui].-- Todd, 1955:319 [Barro Colorado; Boquest, Chiriqui; Cochea River]; 1961:465 [Panama].-- Nieser, 1977b:295 [Panama; Isla de Pinas].

Note: Todd (1955:321) expressed doubts about Champion's (1901:above) identifications of the United States and South American records for this species.

Gelstocoris viridis Todd

Gelastocoris flavus.-- Champion, 1901:349 [Colon; David; Tolé].-- Kirkaldy and Torre-Bueno, 1909:180 [Panama].

Gelastocoris viridis Todd, 1955:338 [new species-- Mexico. Guatemala].

Note: Todd (1955:above) cited Champion's (1901:above) record as "probably referring to this species," but made no mention of a Panama record.

SUBFAMILY NERTHRINAE KIRKALDY

Genus *Nerthra* Say

Nerthra Say, 1832 :37. Type species: *Nerthra stygica* Say, monotypic.

Notes: (1) Rau (1933:189) listed a McAtee-determined specimen from Barro Colorado Island as *Mononyx vespaeformis* [sic] (probably a lapsus for *N. nepaeformis*) (Fabricius). Todd (1955:371) neither listed Panama in the distribution of this species nor mentioned Rau's paper; his verified records were all from farther south: Brazil, Paraguay, and Argentina. (2). In addition to the species of *Nerthra* listed below, there are two, *ampliocollis* (Stål) and *ater* (Melin), that are of probable occurrence as their known distributions (Todd, 1955) extend from Costa Rica south onto South America.

Nerthra ecuadorensis (Melin)

Mononyx ampliocollis variety *ecuadorensis* Melin, 1929:185 [new variety-- Colombia. Ecuador].
Nerthra ecuadorensis.-- Todd, 1955:387 [Boquete, Chiriqui Prov.]; 1961:467 [Panama].

Nerthra fuscipes (Guérin-Méneville)

Mononyx fuscipes Guérin-Méneville, 1843:114 [new species-- Colombia].-- Champion, 1901:351 [Bugaba; Caldera; David; Tolé; Volcan de Chiriqui].-- Kirkaldy and Torre-Bueno, 1909:181 [Panama].

Nerthra fuscipes.-- Melin, 1929:181 [Darién; D. Festa; Punta de Sabena].-- Todd, 1955:393 [Albrook Field, C. Z.; Avon, C. Z.; Barro Colorado, C. Z.; Boquete, Chiriqui Prov.; Cano Saddle, Gatun Lake; Chilibrillo Caves; Colon; Corozal; Ft. Clayton, C. Z.; Ft. Kobbe Rd., C. Z.; Paraiso, C. Z.].-- Nieser, 1975:41 [Panama].

Nerthra hungerfordi Todd

Nerthra hungerfordi Todd, 1955:398 [new species-- British Honduras. Guatemala. Salvador. Nicaragua. Costa Rica. Panama: Boquete, Chiriqui Prov.].-- J. Polhemus, 1972:308 [Panama].-- Nieser, 1977b:296 [Volcan de Chiriqui].

Nerthra raptoria (Fabricius)

Naucoris raptoria Fabricius, 1803:111 [new species-- South America].

Mononyx raptorius.-- Champion, 1901:352 [Panama City].-- Kirkaldy and Torre-Bueno, 1909:182 [Panama].-- Melin, 1929:191 [Panama].

Nerthra raptoria.-- Todd, 1955:366 [Paraiso, C. Z.]; 1957:149 [Gatun; Canal Zone].

Nerthra rudis (Melin)

Mononyx fuscipes var. *rudis* Melin, 1929:182 [new variety-- Mexico. Guatemala].

Nerthra rudis.-- Todd, 1955:390 [Bohio, C. Z.; Buenaventura; XX Plantation 6 mi E. Porto Bello].

Nerthra rugosa (Desjarins)

Naucoris rugosa Desjardins, 1837:239 [new species-- Mauritius].

Nerthra rugosa.-- Todd, 1955:412 [Pearl Island; San Jose Island]; 1959:68 [Pearl Island]; 1961:473 [Panama].--Hungerford, 1958:337 [Panama].-- D. Polhemus and J. Polhemus, 1988a:137 [Panama].

Nerthra tenebrosa Todd

Mononyx obscurus Melin, 1929:178, preoccupied [new species-- Mexico. Colombia. Bolivia].

Nerthra tenebrosa Todd, 1955 :376, proposed as new name for preoccupied *Mononyx obscura* Melin [Colon].

FAMILY GEOCORIDAE MONTANDON

Records of 11 species in four genera in Panama are listed below. More may be found.

This group was formerly included as a subfamily of Lygaeidae [see J. Slater, 1964:520 and J. Slater and O'Donnell, 1995:65], but Henry (1997b:296) elevated it to family status encompassing the three subfamilies Bledionotinae, Henestarinae, and Geocorinae.

SUBFAMILY BLEDIONOTINAE REUTER

TRIBE PAMPHANTINI BARBER

Genus *Epipolops* Herrich-Schaeffer

Epipolops Herrich-Schaeffer, 1850:191, 201. Type species: *Epipolops frondosus* Herrich-Schaeffer, monotypic.

Epipolops acuminatus (Distant)

Enciscoa acuminatus Distant, 1893:389 [new species-- Panama: Bugaba].

Epipolops acuminatus.-- Lethierry and Severin, 1894:168 [Panama].-- J. Slater, 1964 :417 [Panama].

Epipolops mucronatus (Distant)

Enciscoa mucronatus Distant 1893:389 [new species-- Panama].

Epipolops mucronatus.-- Lethierry and Severin 1894:168 [Panama].-- J. Slater 1964:417 [Panama].

Epipolops osculuscancri (De Geer)

Cimex oculus cancri [sic] DeGeer, 1773:343 [new species -- Surinam].

Enciscoa inermis Distant, 1893:389 [new species -- Mexico. Guatemala. Panama].

Epipolops osculuscancri.-- Lethierry and Severin 1894:168, [Panama].-- J. Slater 1964:417 [Panama].

Genus *Phaeax* Distant

Phaeax Distant, 1893:413. Type species: *Phaeax formicarius* Distant, designated by Hussey, 1929:26.

Note: This genus, originally placed in the family Largidae, was transferred to the Lygaeidae subfamily Rhyapochrominae by Woodward (1962:122), thence to the lygaeid subfamily Bledionotinae by Sweet (1967:225); then Henry (1997b:269) elevated the lygaeid subfamily "Geocorinae" to family status and included the Bledionotinae as a subfamily of it.

Phaeax balteatus Distant

Phaeax balteatus Distant, 1893:413 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1894:240 [Panama].-- Hussey, 1929:26 [Panama].-- Woodward, 1962:122 [Bugaba].-- J. Slater, 1964:1162 [Panama].

Phaeax formicarius Distant

Phaeax formicarius Distant, 1893:413 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:240 [Panama].-- Hussey, 1929:27 [Panama].-- Woodward, 1962:122 [Volcan de Chiriqui].-- J. Slater, 1964:1162 [Panama].

SUBFAMILY GEOCORINAE MONTANDON**Genus *Geocoris* Fallén**

Geocoris Fallén, 1814:10. Type species: *Cimex grylloides* Linnaeus, designated by Oshanin, 1912:30.

Geocoris flavilineus Stål

Geocoris flavilineus Stål, 1874a:135 [new species-- Colombia].-- Distant, 1893:392 [Peña Blanca].-- J. Slater, 1964:550 [Panama].

Geocoris lividipennis Stål

Geocoris lividipennis Stål, 1862b:311 [new species-- Mexico].-- Distant, 1893:392 [Bugaba; Peña Blanca].-- J. Slater, 1964: 561 [Panama].

Geocoris punctipes (Say)

Salda bullata variety *punctipes* Say, 1831:19 [new variety-- United States of America. *Geocoris punctipes*.-- Distant, 1893:392 [Bugaba].-- J. Slater, 1964:581 [Panama].

Genus *Ninyas* Distant

Ninyas Distant, 1882:194. Type species: *Ninyas strabo* Distant, monotypic.

Ninyas solubilis Distant

Ninyas solubilis Distant, 1893:388 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:176 [Panama].-- J. Slater, 1964:604 [Panama].

Ninyas strabo Distant

Ninyas strabo Distant, 1882:194 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:176 [Panama].-- Barber, 1947a:70 [Panama].-- J. Slater, 1964:604 [Panama].

Ninyas torvus Distant

Ninyas torvus Distant, 1893:388 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1894:176 [Panama].-- J. Slater, 1964:604 [Panama].

FAMILY GERRIDAE AMYOT AND SERVILLE

The family Gerridae should have more representatives in Panama than the 21 species in 11 genera listed below.

A family-wide classification proposed by Hungerford and Matsuda (1960) consisted of keys to subfamilies, tribes, and genera; it was accompanied by Matsuda's (1960) lengthy paper giving the morphological details and evolutionary sequences of that classification. Andersen (1975) modified the above classification with a key (page 25) to the subfamilies of Gerridae; and elevated Hungerford and Matsuda's tribe Gerrini to subfamily status, Gerrinae with the two tribes Gerrini Leach and his new tribe Tachgerrini; then in 1995 he presented a revised key (pages 102-103) to the genera of the restricted subfamily Gerrinae.

SUBFAMILY CHARMOMETRINAE MATSUDA**Genus *Brachymetra* Mayr**

Brachymetra Mayr, 1865:445. Type species: *Halobates albinervus* Amyot and Serville, monotypic.

Brachymetra albinerva (Amyot and Serville)

Halobates albinervus Amyot and Serville, 1843:412 [new species-- Brazil].

Brachymetra albinervus [sic].-- Champion, 1898a:153 [Bugaba].-- Kirkaldy and Torre-Bueno, 1909:211 [Panama].

Brachymetra albinervis [sic].-- Drake and Harris, 1942a:95 [Panama].-- Nieser and Alkins-Koo, 1991:69 [Panama].

Brachymetra albinerva.-- Harris and Drake, 1945:212 [Panama].

SUBFAMILY CYLINDROSTETHINAE MATSUDA

Genus *Potamobates* Champion

Potamobates Champion, 1898a:154. Type species: *Potamobates unidentatus* Champion, designated by Drake and Harris, 1934:223.

Note: J. Polhemus and D. Polhemus's (1995a) phylogenetic review of the Colombian species of this genus contained a key (pages 362-365) to the 15 known species.

Potamobates anchicaya J. Polhemus and D. Polhemus

Potamobates anchicaya J. Polhemus and D. Polhemus 1995a:353, 369 [new species-- Panama: Altos del Cerro Azul; Canal Zone; Gamboa; La Cascada; Maria Eugenia; Nusagandi; Pearl Islands, San Jose; Pipeline Road; Portobello; Rio Agua; Rio Indio; Rio Juan Grande; San Blas Prov.; Villa Linda. Colombia].

Potamobates horvathi Esaki

Potamobates horvathi Esaki, 1926a:254 [new species-- Colombia].-- Hungerford, 1937:146 [Fort Clayton, Canal Zone].-- Kuitert, 1942:141 [Ft. Clayton, Canal Zone].-- J. Polhemus and D. Polhemus 1995a:358, 366 [Bocas del Toro Prov.: Chiriqui Grande, S. Punt Peña; Chiriqui Prov.: Balneario; Colon Prov.: Maria Chiquita, Portobello; Herrera Prov.; Ocu; Panama Prov.: Altos Cerro Azul, San Carlos, Panama City; Canal Zone].

Potamobates tridentatus Esaki

Potamobates tridentatus Esaki, 1926a:251 [new species-- Costa Rica].-- Hungerford, 1937:145 [Fort Clayton, Canal Zone]; 1939:587 [Fort Clayton, C.Z.].-- Kuitert, 1942:141 [Ft. Clayton, Canal Zone].-- J. Polhemus and D. Polhemus 1995a:369 [Panama].

Potamobates unidentatus Champion

Potamobates unidentatus Champion, 1898a:155 [new species-- Panama: Bugaba].-- Kirkaldy and Torre-Bueno, 1909:211 [Panama].-- Esaki, 1926a:251 [Panama].-- Hungerford, 1939:587 [Panama]; 1944a:129 [Panama].-- Drake and Harris, 1934:227 [Panama].-- J. Polhemus and D. Polhemus 1995a:360, 366 [Bocas del Toro Prov.; Chiriqui Grande, Reserva la Fortuna; Coclé Prov.: El Valle. Panama Prov.: Altos Cerru Azul, Villa Linda; San Blas Prov.: Nusagandi].

SUBFAMILY GERRINAE AMYOT AND SERVILLE

Note: Andersen's (1995) comprehensive study of this subfamily included a key (pages 102-103) to the world's genera and subgenera and a check list (pages 111-123) of the world's species.

TRIBE GERRINI AMYOT AND SERVILLE

Genus *Limnogonus* Stål

Limnogonus Stål, 1868:132. Type species: *Hydrometra hyalina* Fabricius, designated by Kirkaldy,

1906a:155.

Note: The species *L. franciscanus* (Stål) 1859d:265 will undoubtedly be found in Panama as Andersen (1995:116) gave its range as extending from the United States south to "all of South America".

Limnogonus aduncus Drake and Harris

Limnogonus aduncus Drake and Harris 1932:110 [new species-- Brazil].-- Andersen 1995:115 [Panama].

Limnogonus recens Drake and Harris

Limnogonus recens Drake and Harris, 1934:207 [new species-- British Honduras. Guatemala. Panama: Panama City].-- Hungerford, 1939:588 [Panama].-- Andersen 1995:116 [Panama].

Limnogonus hyalinus.-- Champion, 1898a:153 [Panama City].-- Kirkaldy and Torre-Bueno, 1909:210 [Panama].-- Andersen 1995:116 [Panama].

Genus *Neogerris* Matsumura

Neogerris Matsumura, 1913:100. Type species: *Neogerris boninensis* Matsumura, monotypic.

Note: Nieser's (1994) review of *Neogerris* included a key (34-35) to eight New World species.

Neogerris hesione (Kirkaldy)

Gerris hesione Kirkaldy, 1902c:137 [new species-- "Florida: Darien"].

Limnogonus hesione.-- Osborn and Drake, 1915a:503 [Darien].-- Blatchley, 1926:979 [Panama].-- Drake and Harris, 1934:211 [Panama].-- Smith 1988:146 [Panama].

Neogerris hesione.-- Smith, 1988:146 [Panama].-- Nieser, 1994:35 [Panama].-- Andersen, 1995:120 [Panama].

TRIBE TACHYGERRINI ANDERSEN

Genus *Eurygerris* Hungerford and Matsuda

Eurygerris Hungerford and Matsuda, 1958:165. Type-species *Brachymetra fuscinervis* Berg, original designation.

Eurygerris cariniventris (Champion)

Gerris cariniventris Champion, 1898a:148 [new species-- Mexico. Guatemala. Costa Rica. Panama: Volcan de Chiriqui].-- Kirkaldy and Torre-Bueno, 1909:208 [Panama].-- Drake and Harris, 1934:197 [Panama].-- Barber, 1939:409 [Panama].

Eurygerris cariniventris.-- Drake, 1963:95 [Panama].-- Andersen 1995:122 [Panama].

Genus *Tachygerris* Drake

Tachygonus Drake, 1957a:111, preoccupied. Type species: *Tenagobius adamsoni* Drake, original

designation.

Tachygerris Drake, 1957b:193. Proposed as new name for preoccupied *Tachygonus* Drake.

Tachygerris opacus (Champion)

Limnometra opaca Champion 1898a:150 [new species-- Panama: Bugaba; San Miguel in Pearl Islands].-- Torre-Bueno, 1926a:108 [Bugaba; Gamboa].-- Andersen 1995:123 [Panama].

Tenagogonus opacus.-- Kirkaldy and Torre-Bueno, 1909:209 [Panama].-- Drake and Harris, 1934:217 [Bugaba].-- Drake, 1940:108 [Canal Zone].

SUBFAMILY HALOBATINAE BIANCHI

TRIBE HALOBATINI BIANCHI

Note: Andersen and Weir (1994:11-13) discussed the phylogeny of the four genera belonging to the tribe Halobatini.

Genus *Halobates* Eschscholtz

Halobates Eschscholtz, 1822:106. Type species: *Halobates micans* Eschscholtz, designated by Laporte, 1833:24.

No actual occurrence on Panamanian land has been reported for the species of this genus. Yet, there is evidence that two or maybe three of the "open-ocean" species do occur in proximity to Middle America; at times violent storms and ocean movements may carry them landward to Panama. In Herring's (1961) revision of this genus he mapped (page 227) the range of the circumtropical *Halobates micans* Eschscholtz (1822:107) to occur on both the Atlantic and Pacific sides of the isthmus; the range (page 229) of *H. sobrinus* F. White (1883:46) to extend off-shore along the Pacific margin of the Americas from Mexico to just south of the Equator; and the range (page 227) of *H. sericeus* Eschscholtz (1822:108) along the Pacific coasts of North and South America, but without records along Central America.

Cheng (1997:134), in her study of Pacific *Halobates*, reported *H. micans* as "cosmopolitan" in the Pacific, apparently accepting Herring's report; she also reported both *H. sobrinus* and *H. sericeus* as occurring "off the Pacific coasts of Central and South America."

SUBFAMILY RHAGADOTARSINAE LUNDBLAD

Genus *Rheumatobates* Bergroth

Rheumatobates Bergroth, 1892a:321. Type-species *Rheumatobates rileyi* Bergroth, monotypic.

Rheumatobates bergrothi Meinert

Rheumatobates bergrothi Meinert, 1895:1 [new species-- Grenada].-- Drake and Harris, 1942b:402 [Panama].-- Drake and Hottes, 1951:154 [Panama].-- Hungerford, 1954:568 [Fort Clayton, Canal Zone].-- Spangler, Froeschner, and J. Polhemus, 1985:198 [Panama]. J. Polhemus and Spangler, 1989:423 [San Carlos; E of Panama City].

Rheumatobates minutus Hungerford

Rheumatobates minutus Hungerford, 1936:147 [new species--Mexico].-- Drake and Harris, 1942b:402 [Panama].-- Drake and Hottes, 1951:155 [Panama].-- Herring, 1958:175 [Panama].

Note: J. Polhemus and Spangler (1989:426) wrote they "question" the distinctness of the two subspecies and commented that "There appears to be a gradation between the two forms in Mesoamerica."

Rheumatobates minutus flavidus Drake and Harris

Rheumatobates minutus flavidus Drake and Harris, 1942b:401 [new species-- Peru].-- J. Polhemus and Spangler, 1989:426 [San Carlos, "CL"; Porto Bello, "CL"].

Rheumatobates minutus minutus Hungerford

Rheumatobates minutus [*minutus*] Hungerford 1936:see above.-- Spangler, Froeschner, and J. Polhemus, 1985:198 [Panama].-- Smith, 1988:148 [Panama].

Rheumatobates prostates J. Polhemus

Rheumatobates prostates J. Polhemus, 1975:243 [new species-- Costa Rica].-- J. Polhemus and Manzano, 1992:302, 306 [Bahia Honda, Pacific Side].

SUBFAMILY TREPOBATINAE MATSUDA

Note: J. Polhemus and D. Polhemus (1993b) divided this subfamily into four tribes and gave a key to them and a list of genera included in each.

TRIBE TREPOBATINI MATSUDA

Genus *Ovatometra* Kenaga

Ovatometra Kenaga, 1942:136. Type species: *Halobatopsis parvulus* Drake and Harris, original designation.

Ovatometra amnica Drake

Ovatometra amnica Drake, 1957a:112 [new species-- Panama: Canal Zone]; 1959:107 [Panama].-- J. Polhemus and D. Polhemus, 1995b:113 [Panama].

Genus *Telmatometra* Bergroth

Telmatometra Bergroth, 1908b:374. Type species: *Telmatometra whitei* Bergroth, monotypic.

Telmatometra panamensis Drake and Harris

Telmatometra panamensis Drake and Harris, 1941a:239 [new species-- Panama: Canal Zone].-- J. Polhemus and Manzano, 1992:439 [Canal Zone].-- J. Polhemus and D. Polhemus, 1995b:113 [Panama].

Telmatometra ujhelyii Esaki

Telmatometra ujhelyii Esaki, 1926b:133 [new species-- Colombia].
Telmatometra ujelyi [sic].-- Drake and Harris, 1937:360 [Canal Zone].

Telmatometra whitei Bergroth

Telmatometra whitei Bergroth, 1908b:376 [new species-- Guatemala].-- Drake and Harris, 1941a:238 [Barro Colorado Island; "Gatum," Panama City].

Genus *Telmatometroides* J. Polhemus

Telmatometroides J. Polhemus, 1991:78. Type species: *Telmatometra rozeboomi* Drake and Harris, monotypic.

Telmatometroides rozeboomi (Drake and Harris)

Telmatometra rozeboomi Drake and Harris, 1937:358 [new species-- Panama: Canal Zone]; 1941a:238 [Panama City].
Telmatometroides rozeboomi.-- J. Polhemus, 1991:81 [Bahia Honda, Pacific side].-- J. Polhemus and Manzano, 1992:302, 309 [Bahia Honda, Pacific side].-- J. Polhemus and D. Polhemus, 1995b:114 [Panama].

Genus *Trepobates* Uhler

Stephania A. White, 1883:79, preoccupied. Type species: *Halobates picta* Herrich-Schaeffer, monotypic.

Trepobates Uhler, 1894a:213. Proposed as new name for preoccupied *Stephania* A. White.

Trepobates panamensis Drake and Hottes

Trepobates panamensis Drake and Hottes, 1952b:35 [new species-- Mexico. Panama: Canal Zone; Panama City].-- Drake and Chapman, 1953a:112 [Panama].

Trepobates taylori (Kirkaldy)

Kallistometra taylori Kirkaldy, 1899c:28 [new species-- Jamaica].
Trepobates "Taylori".-- Drake and Hottes, 1951:154 [Panama City].

Trepobates trepidus Drake and Harris

Trepobates trepidus Drake and Harris, 1928a:27 [new species-- Mexico. Guatemala].-- Drake and

Hottes, 1951:154 [Panama City].

FAMILY HEBRIDAE AMYOT AND SERVILLE

Panama records have been found for 13 species in three genera.

Andersen (1981a) discussed the classification within this family, broke it into two subfamilies, resurrected the genus *Lipogomphus* Berg, and gave a key to the world's seven genera and their subgenera. Drake and Chapman (1958) gave a list of the American species.

SUBFAMILY HEBRINAE AMYOT AND SERVILLE

Genus *Hebrus* Curtis

Hebrus Curtis, 1838:196. Type species: *Lygaeus pusillus* Fallén, monotypic.

Hebrus bilineatus Champion

Hebrus bilineatus Champion, 1898a:119 [new species-- Mexico].-- Drake and Harris, 1943:46 [Canal Zone].

Hebrus catus Drake and Chapman

Hebrus catus Drake and Chapman, 1958:324 [new species-- Panama: Canal Zone].

Hebrus concinnus Uhler

Hebrus concinnus Uhler, 1894a:221 [new species-- United States of America. Grenada].-- Champion, 1898a:121 [Peña Blanca].-- Drake and Harris, 1943:46, 49 [Panama].-- Drake and Chapman, 1958:325 [Panama].-- Drake and Cobben, 1960a:35, 39 [Panama].-- J. Polhemus and Chapman, 1979a:36 [Panama].

Hebrus consolidus Uhler

Hebrus consolidus Uhler, 1894a:222 [new species-- Grenada].-- Champion, 1898a:119 [Panama City].-- Drake and Harris, 1943:46, 48 [Barro Colorado].-- Drake and Chapman, 1953c:10 [Barro Colorado]; 1958:325 [Panama].-- Nieser, 1977c:355 [Panama].-- J. Polhemus and Chapman, 1979a:36 [Panama].

Naeogeus consolidus.-- Kirkaldy and Torre-Bueno, 1909:214 [Panama].-- Blatchley, 1926:608 [Panama].

Hebrus laeviventris Champion

Hebrus laeviventris Champion, 1898a:120 [new species-- Panama: Tolé].-- Drake and Chapman, 1958:325 [Panama].

Naeogeus laeviventris.-- Kirkaldy and Torre-Bueno, 1909:215 [Panama].

Hebrus parvulus Stål

Hebrus parvulus Stål, 1860:60 [new species-- Brazil].-- Drake and Harris, 1943:46 [Panama].

Hebrus priscus Drake and Harris

Hebrus priscus Drake and Harris, 1943:57 [new species-- Brazil].-- Drake and Chapman, 1953c:9 [Barro Colorado]; 1958:325 [Panama].

Hebrus spiculus J. Polhemus and McKinnon

Hebrus spiculus J. Polhemus and McKinnon, 1983:114 [new species-- Costa Rica. Panama: San Carlos. Colombia].

Hebrus sulcatus Champion

Hebrus sulcatus Champion, 1898a:120 [new species-- Panama: Bugaba; Caldera].-- Drake and Chapman, 1958:325 [Panama].

Naeoergus sulcatus.-- Kirkaldy and Torre-Bueno, 1909:215 [Panama].

Genus *Lipogomphus* Berg

Lipogomphus Berg, 1880:286. Type species: *Lipogomphus lacunifera* Berg, monotypic.

Note: Andersen (1981a:387) resurrected this genus from synonymy and listed in it three species, including the two reported below.

Lipogomphus brevis (Champion)

Merragata brevis Champion, 1898a:122 [new species-- Mexico. Panama: Panama City; Tolé].-- Kirkaldy and Torre-Bueno, 1909:215 [Panama].-- Drake and Harris, 1943:43 [Bohío].-- Drake and Chapman, 1954:153 [Panama]; 1958:325 [Panama].-- J. Polhemus and Chapman, 1979a:38 [Panama].

Lipogomphus brevis.-- J. Polhemus and D. Polhemus, 1988:155 [Panama].

Lipogomphus leucostictus (Champion)

Merragata leucosticta Champion, 1898a:122 [new species-- Guatemala].-- Drake and Chapman, 1958:325 [Panama].

Genus *Merragata* F. White

Merragata F. White, 1877:113. Type species: *Merragata hebroides* F. White, monotypic.

Merragata hebroides F. White

Merragata hebroides F. White, 1877:114 [new species-- Hawaiian Islands].-- Drake and Harris, 1943:43 [Panama].

Merragata quieta Drake

Merragata quieta Drake, 1952b:194 [new species-- Mexico. Panama: Canal Zone. Colombia].--
Drake and Chapman, 1958:325 [Panama].

FAMILY HELOTREPHIDAE ESAKI AND CHINA

No Panama records for this small family of tiny (less than 3 mm) aquatic bugs have come to hand. It is known from running and standing waters in Africa, southern Asia, and South America. Records of one of the Neotropical species from Colombia bring its known range close enough to Panama to suggest its possible occurrence there.

Papacek, Štys, and Tonner (1988) modified China's (1940) definitive discussion of the family's contents when they added a third Old World subfamily to it. Froeschner (1981:38) abstracted from China's (1940) study a key to the two South American genera. J. Polhemus' (1990) publication included a list (pages 59-62) of the world's 39 species. Schuh and J. Slater (1995:131) keyed the four subfamilies.

FAMILY HERMATOBATIDAE COUTIÈRE AND MARTIN

No member of this small family is known from Panama. Only one species of this basically Old World group is known from the Western Hemisphere, it occurs in the West Indies.

FAMILY HETEROGASTRIDAE STÅL

Neither of the two species of the only New World genus is likely to occur Panama; both are listed only from the United States.

Until recently considered a subfamily of Lygaeidae [See, J. Slater, 1964:739 and J. Slater and O'Donnell, 1995:83], this group was raised to family rank by Henry (1997b:296).

FAMILY HYDROMETRIDAE BILLBERG

Listed below are Panama records for eight species in one genus; additional species should be found there.

Torre-Bueno (1926b) published a review of the Hydrometridae of the Western Hemisphere. It was followed by Hungerford and Evans' (1934) extensive treatment of the Hydrometridae of the world with keys to genera and species. Drake and Lauck (1959) included a list (pages 50-52) of the 41 New World species. Andersen (1977) presented (page 315) a key to the three subfamilies and seven genera and a cladistic analysis (pages 308-313) of the genera.

SUBFAMILY HYDROMETRINAE BILLBERG**Genus *Hydrometra* Latreille**

Hydrometra Latreille, 1796:86. Type species: *Cimex stagnorum* Linnaeus, designated by Latreille, 1810:434.

Hydrometra adnexa Drake

Hydrometra adnexa Drake, 1956b:154 [new species-- Panama: Barro Colorado, Canal Zone].--
Drake and Lauck, 1959:50 [Panama].

Hydrometra argentina Berg

Hydrometra argentina Berg, 1879b:182 [new species-- Argentina].-- Drake, 1954:61 [Panama].--
Nieser and Alkins-Koo, 1991:44 [Panama].

Hydrometra argenitn [sic].-- Drake and Lauck, 1959:51 [Panama].

Hydrometra barrana Drake

Hydrometra barrana Drake, 1952c:1 [new species-- Panama: Barro Colorado Island; Gatun Lake;
Tres Rio Plantation].-- Drake and Lauck, 1959:51 [Panama].

Hydrometra caraiba Guérin-Ménéville

Hydrometra caraiba Guérin-Ménéville, 1857:413 [new species-- Cuba].-- Champion, 1898a:124
[David; Panama City].-- Kirkaldy and Torre-Bueno, 1909:213 [Panama].-- Drake, 1954:63
[Panama].-- Drake and Lauck, 1959:49 [Panama].

Hydrometra championiana Torre-Bueno, 1926b:119 [new species-- Guatemala. Panama. Colombia.
Cuba. Brazil].-- Drake and Hottes, 1952a:110 [Panama].

Hydrometra exilis Torre-Bueno

Hydrometra exilis Torre-Bueno, 1926b:115 [new species-- Honduras].-- Drake and Lauck, 1959:51
[Panama].

Hydrometra naiades Kirkaldy

Hydrometra mensor Champion, 1898a:125, preoccupied [new species-- Panama: David].

Hydrometra naiades Kirkaldy, 1902a:281 [new name for preoccupied *Hydrometra mensor*
Champion, 1898].-- Kirkaldy and Torre-Bueno, 1909:214 [Panama].-- Drake, 1954:62
[David].-- Drake and Lauck, 1959:51 [Panama].

Hydrometra panamensis Drake

Hydrometra panamensis Drake, 1952c:2 [new species-- Panama: Canal Zone.-- Drake and Hottes,
1952a:110 [Panama].-- Drake and Lauck, 1959: 51 [Panama].

Hydrometra zeteki Drake

Hydrometra zeteki Drake, 1952c:2 [new species-- Panama: Canal Zone.-- Drake and Hottes,
1952a:110 [Panama].-- Drake and Lauck, 1959:52 [Panama].

FAMILY IDIOSTOLIDAE SCUDDER

But one of the world's three genera occurs in the Western Hemisphere where it is known only from southernmost South America (Argentina and Chile) remote from Panama.

The morphology and higher classification of this family were discussed by Schaefer (1966a, b), who accorded it family status, a status accepted by subsequent writers.

FAMILY LARGIDAE AMYOT AND SERVILLE

The following list enumerates seven species in five genera for Panama. More should be expected.

The family was cataloged by Parshley (1929) in the traditional status as the subfamily Euryphthalminae in the family Pyrrhocoridae. China (1954:188-189) explained why Largidae is the proper name for this group. A particularly important paper dealing, in part, with the South American forms was published by Schmidt (1931). There are considerable differences of opinion as to the status of this family.

The genus *Phaeax* Distant, originally assigned to the family Largidae, has been transferred to the subfamily Bledionotinae of the family Geocoridae [which see].

SUBFAMILY LARGINAE AMYOT AND SERVILLE

Genus *Acinocoris* Hahn

Acinocoris Hahn, 1834:113. Type species: *Astemma calidus* Hahn, a junior synonym of *Cimes lunaris* Gmelin, monotypic.

Note: Schmidt (1931) supplied a key (pages 4-6) to nine species.

Acinocoris lunaris (Gmelin)

Cimex lunatus Fabricius, 1787:302, preoccupied [new species-- French Guiana].

Cimex lunaris Gmelin, 1788:2178, proposed as a new name for preoccupied *Cimex lunatus* Fabricius.

Largus lunatus-- Distant, 1882:221 [Panama]-- Lethierry and Severin, 1894:238 [Panama].

Genus *Fibrenus* Stål

Fibrenus Stål, 1861a: 195, 198. Type species: *Fibrenus gibbicollis* Stål, monotypic.

Note: Schmidt (1931) provided a key (pages 34-36) to 10 species.

Fibrenus globicollis (Burmeister)

Largus globicollis Burmeister, 1835:282 [new species-- Brazil].

Fibrenus globicollis-- Distant, 1882: 224 [Bugaba]; 1893: 412 [Volcan de Chiriqui]-- Schmidt, 1931:36 [Bugaba; Chiriqui]-- Hussey, 1929: 24 [Panama].

Genus *Largus* Hahn

Largus Hahn, 1831:1. Type species: *Cimex humilis* Drury, monotypic.

Largus cinctus Herrich-Schaeffer

Largus cinctus Herrich-Schaeffer, 1842: 6 [new species-- Mexico].-- Distant, 1882: 223 [in part, Volcan de Chiriqui].-- Lethierry and Severin, 1894: 238 [Panama].

Euryophthalmus cinctus.-- Hussey, 1929:14 [Panama].-- Wu, 1935:33 [Panama].-- Torre-Bueno, 1941:110 [Panama].

Note: Halstead (1972:247) listed this species from Canada to Mexico-- a significant distance short of reaching Panama.

Largus varians Stål

Largus varians Stål, 1870: 94 [new species-- Colombia].-- Distant, 1882: 223 [in part, Volcan de Chiriqui].

Euryophthalmus varians.-- Hussey, 1929:21 ["Panama(?)"].

Genus *Stenomacra* Stål

Stenomacra Stål, 1870: 90, 97. Type species: *Largus marginellus* Herrich-Schaeffer, designated by Van Duzee, 1916:24.

Stenomacra marginella (Herrich-Schaeffer)

Largus marginellus Herrich-Schaeffer, 1850:182 [new species-- Mexico].

Stenomacra marginella.-- Distant, 1883:226 [Volcan de Chiriqui].-- Lethierry and Severin, 1894:240 [Panama].-- Hussey, 1929:26 [Panama].

Genus *Theraneis* Spinola

Theraneis Spinola, 1837:179. Type species: *Theraneis vittata* Spinola, monotypic.

Theraneis dissimilis Distant

Theraneis dissimilis Distant, 1883:225 [new species-- Costa Rica. Panama: Bugaba].-- Lethierry and Severin, 1894:240 [Panama].-- Hussey, 1929:24 [Panama].

Theraneis pulchra Distant

Theraneis pulchra Distant, 1883:225 [new species-- Panama: Volcan de Chiriqui]; 1893:42 [San Feliz; Tole].-- Lethierry and Severin, 1894:240 [Panama].-- Hussey, 1929:25 [Panama].

FAMILY LASIOCHILIDAE CARAYON

Undoubtedly, more genera and species will be added to the following Panama records of nine species in three genera.

Long considered a subfamily of Anthocoridae, this group was accorded family status by Schuh and Štys (1991) and is so recognized by Schuh and J. Slater (1995:190).

Genus *Lasiochilus* Reuter

Lasiochilus Reuter, 1871:562. Type species: *Lasiochilus pallidulus* Reuter, monotypic.

Lasiochilus divisus Champion

Lasiochilus divisus Champion, 1900a:310 [new species-- Mexico; Grenada].-- Drake and Harris, 1926:35 [Canal Zone].

Lasiochilus foveicollis Champion

Lasiochilus foveicollis Champion, 1900a:309 [new species-- Panama: David].

Lasiochilus pallidulus Reuter

Lasiochilus pallidulus Reuter, 1871:562 [new species-- United States of America.-- Champion, 1900a:309 [San Feliz].-- Barber, 1939:400 [Panama].-- Herring, 1966a:128 [Panama].

Lasiochilus punctipennis Champion

Lasiochilus punctipennis Champion, 1900a:308 [new species-- Panama: Volcan de Chiriqui].

Lasiochilus reuteri Champion

Lasiochilus reuteri Champion, 1900a:308 [new species-- Guatemala Panama: Bugaba].

Lasiochilus sulcatus Champion

Lasiochilus sulcatus Champion, 1900:310 [new species-- Panama: David].

Genus *Lasiocolpus* Reuter

Lasiocolpus Reuter, 1884:582. Type species: *Lasiocolpus sinuaticollis* Reuter, monotypic.

Lasiocolpus minor Champion

Lasiocolpus minor Champion, 1900a:312 [new species-- Panama: Bugaba].

Lasiocolpus sinuaticollis Reuter

Lasiocolpus sinuaticollis Reuter, 1884:582 [new species-- Mexico].-- Champion, 1900a:312 [Bugaba].

Genus *Plochiocoris* Champion

Plochiocoris Champion, 1900a:314. Type species: *Plochiocoris longicornis* Champion, monotypic.

Plochiocoris longicornis Champion

Plochiocoris longicornis Champion, 1900a:315 [new species-- Panama: David. Grenada].

FAMILY LEPTOPODIDAE AMYOT AND SERVILLE

No Panamanian record of any members of this family has been encountered while compiling this list.

Two species of this predominantly Old World family are known from the New World. The only one native thereto, *Saldolepta kistnerorum*, was described from Ecuador by Schuh and J. Polhemus (1980a, 1980b); the other, the introduced circum-Mediterranean species, *Patapius spinosus* (Rossi), was first reported by Usinger (1941c) as established in the western United States and later for central Chile by Froeschner and Peña (1985) and by Zambrano and Yrarrázaval (1985). These localities are remote from each other and far removed from Panama.

The standard comprehensive works on this family are Horvath's (1911) family treatment, Drake and Hoberlandt's (1951a) world check list and the Schuh, Galil, and J. Polhemus (1987) catalog and bibliography of the family.

FAMILY LYCTOCORIDAE REUTER

No literature record of Panama occurrence of any species was noted during this compilation; however, several species of the lone included genus, *Lyctocoris* Hahn, are known from northern South America and may occur here.

Long treated as a subfamily of Anthocoridae, this group is now accorded family status, documented by Schuh and Štys (1991).

FAMILY LYGAEIDAE SCHILLING

Listed below are Panama records for 42 species in 19 genera. These totals must be considered less than the actual numbers of Lygaeidae existing in Panama -- including described and undescribed species.

The classical grouping of taxonomic categories in this family was drastically reduced by Henry's (1997b) critical study of the relationship of included forms. That work retained the subfamilies Ischnorhynchinae, Lygaeinae, and Orsillinae as members of Lygaeidae, but removed the other suprageneric taxa to new positions, as follows: Artheninae to family; Bledionotinae and Henestarinae to subfamilies in the newly elevated Geocoridae; Blissinae to family, Cyminae to the two families Cymidae and Ninidae; Geocorinae to family; Heterogastrinae to family; Oxycarinae to family; Pachygronthinae to family; Psamminae to subfamily status under the family Piesmatidae; Rhyparochrominae to family. It also includes a key (pages 297-298) to the 15 families of the superfamily Lygaeoidea.

The starting access to studies in this family must be comprised the J. Slater's (1964) catalog and J. Slater and O'Donnell's (1995) list that extends it to 1994, coupled with Henry's (1997b) phylogenetic study.

SUBFAMILY ISCHNORHYNCHINAE STÅL

Scudder (1962c) revised of the world's members of this subfamily; he included keys to the 14 genera (pages 165-167) and their species.

Genus *Kleidocerys* Stephens

Kleidocerys Stephens, 1829:342. Type species: *Lygaeus resedae* Panzer, designated by Barber, 1953b:273 [fide J. Slater, 1964:354, footnote].

Kleidocerys punctatus (Distant)

Ischnorhynchus punctatus Distant, 1893:386 [new species-- Panama: Caldera].-- Lethierry and Severin, 1894:159 [Panama].

Kleidocerys (Kleidocerys) punctatus.-- Scudder, 1962c:174 [Panama].

Kleidocerys punctatus.-- J. Slater, 1964:358 [Panama].

Kleidocerys resedae (Panzer)

Lygaeus resedae Panzer, 1797:20 [new species-- Germany].

Ischnorhynchus resedae.-- Distant, 1882:193 [Volcan de Chiriqui].

Kleidocerys resedae geminatus.-- J. Slater, 1964:367 [Panama].-- Brailovsky, 1976:47 [Panama].

Kleidocerys virescens (Fabricius)

Acanthia virescens Fabricius, 1794:70 [new species-- United States of America].

Ischnorhynchus championi.-- Barber, 1939:344 [Panama].

Kleidocerys virescens.-- J. Slater, 1964:373 [Panama].-- Brailovsky, 1976:47 [Panama].

Genus *Neokleidocerys* Scudder

Kleidocerys (Neokleidocerys) Scudder, 1962c:173. Type species: *Ischnorhynchus godmani* Distant, original designation.

Neokleidocerys.-- J. Slater and Brailovsky, 1989:183.

Neokleidocerys godmani (Distant)

Ischnorhynchus godmani Distant, 1882:193 [new species-- Guatemala].

Neokleidocerys godmani.-- J. Slater and Brailovsky, 1989:186 [Caldera Island, Portobello Bay, Colon; 30 km. al noroeste del Volcán Chiriqui].

SUBFAMILY LYGAEINAE SCHILLING

A. Slater (1992) published a revision of the genera of Lygaeinae for the Western Hemisphere and included keys to the 22 genera and their species.

Genus *Acroleucus* Stål

Acroleucus Stål, 1874a:99, 114. Type species: *Lygaeus coxalis* Stål, designated by J. Slater, 1964:11.

Acroleucus brevicollis (Stål)

Lygaeus brevicollis Stål, 1862b:311 [new species-- Mexico].

Acroleucus brevicollis-- Distant, 1893:384 [Volcan de Chiriqui].-- J. Slater, 1964:11 [Panama].-- Brailovsky, 1977bc 127 [Panama]; 1980:57 [Portrerillos; Valle].

Acroleucus delineatus Distant

Acroleucus delineatus Distant, 1893:384 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:149 [Chiriqui].-- J. Slater, 1964:11 [Panama].-- Brailovsky, 1980:79 [Volcan de Chiriqui].

Acroleucus nigellus Distant

Acroleucus nigellus Distant, 1893:383 [new species-- Panama: Volcan de Chiriqui. Colombia].-- Lethierry and Severin, 1894:149 [Chiriqui].-- J. Slater, 1964:12 [Panama].-- Brailovsky, 1980:70 [Volcan de Chiriqui].

Acroleucus rubefactus Distant

Acroleucus rubefactus Distant, 1893:384 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:149 [Chiriqui].-- J. Slater, 1964:12 [Panama].-- Brailovsky, 1980:81 [Volcan de Chiriqui].

Acroleucus signaticollis Stål

Acroleucus signaticollis Stål, 1874a:114 [new species-- Colombia].-- Brailovsky, 1980:55 [Coco Solo, Canal Zone].

Lygaeus calderensis Distant, 1893:381 [new species-- Panama: Caldera].-- J. Slater, 1964:154 [Panama].

Acroleucus signoreti Stål

Acroleucus signoreti Stål, 1874a:114 [new species-- Brazil].-- Brailovsky, 1980:77 [Volcan de Chiriqui].

Acroleucus sceleratus Distant, 1893:384 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894: 149 [Chiriqui].-- J. Slater, 1964:12 [Panama].

Acroleucus tullus (Stål)

Lygaeus tullus Stål, 1862b:311 [new species-- Mexico].

Acroleucus tullus Distant, 1882:189 [Volcan de Chiriqui].-- Lethierry and Severin, 1894:149 [Panama].-- J. Slater, 1964:13 [Panama].-- Brailovsky, 1977c:126 [Panama]; 1980:60 [Volcan de Chiriqui].

Acroleucus vittaticeps Stål

Acroleucus vittaticeps Stål, 1874a:114 [new species-- Colombia].-- Distant, 1893:383 [Volcan de

Chiriqui].-- J. Slater, 1964:13 [Panama].-- Brailovsky, 1980:72 [Volcan Bamblito; Volcan de Chiriqui].-- Brailovsky and Barrera, 1984b:97 [Panama].

Genus *Anochrostomus* A. Slater

Anochrostomus A. Slater, 1992:9. Type species: *Lygaeus formosus* Blanchard, original designation.

Anochrostomus formosus (Blanchard)

Lygaeus formosus Blanchard, 1840:130 [new species-- Mexico].-- Distant, 1893:380 [Volcan de Chiriqui].-- Brailovsky, 1978b: 149 [Volcan de Chiriqui].-- Brailovsky and Barrera, 1984b: 104 [Panama].

Anochrostomus formosus: A. Slater, 1992:9 [Panama].

Genus *Craspeduchus* Stål

Lygaeus (Craspeduchus) Stål, 1874a:105, 109. Type species: *Lygaeus xanthostaurus* Herrich-Schaeffer, designated by Van Duzee, 1916:18.

Craspeduchus.-- J. Slater, 1964:47.

Craspeduchus uhleri (Stål)

Lygaeus (Craspeduchus) Uhleri [sic] Stål, 1874a:109 [new species-- Mexico].

Lygaeus (Craspeduchus) uhleri.-- Distant, 1882:181 [Volcan de Chiriqui].

Lygaeus uhleri.-- Distant, 1893:381 [Bugaba; David].-- Lethierry and Severin, 1894:147 [Panama].

Craspeduchus uhleri.-- J. Slater, 1964:49 [Panama].-- Brailovsky, 1979b:215 [Barro Colorado].

Craspeduchus variegatus (De Geer)

Cimex variegatus De Geer, 1773:342 [new species-- South America].

Lygaeus (Melanocoryphus) variegatus.-- Distant, 1882:188 [Bugaba].

Lygaeus variegatus.-- Lethierry and Severin, 1894:147 [Panama].

Melanocoryphus variegatus.-- J. Slater, 1964:145 [Panama].

Neacoryphus variegatus.-- Brailovsky, 1977a:93 [Panama]; 1977b:97 [Panama].

Note: A. Slater (1992:11) included this species in *Craspeduchus*.

Genus *Ektyphonotus* A. Slater

Ektyphonotus A. Slater, 1992:13. Type species: *Lygaeus cruentatus* Distant, original designation.

Ektyphonotus cruentatus (Distant)

Lygaeus (Ochrostomus) cruentatus Distant, 1882:184 [new species-- Panama: Volcan de Chiriqui].

Lygaeus cruentatus.-- Lethierry and Severin, 1894:140 [Panama].

Ochrostomus cruentatus.-- J. Slater, 1964:155 [Panama].

Torvochromnus cruentatus.-- Brailovsky, 1983:290 [Panama].

Ektyphonotus cruentatus.-- A. Slater, 1992:14 [Panama].

Genus *Latochrinnus* Brailovsky

Latochrinnus Brailovsky, 1982a:141. Type species: *Lygaeus vittiscutis* Stål, original designation.

Latochrinnus funereus Brailovsky

Latochrinnus funereus Brailovsky, 1984a:118 [new species-- Panama: Cerro Campana; Cabima; Ft. Clayton, Canal Zone; Paraiso; Pipeline Road, Canal Zone. Venezuela].-- J. Slater and O'Donnell, 1995:12 [Panama].

Latochrinnus vittiscutis (Stål)

Lygaeus (Ochrostomus) vittiscutis Stål, 1862b:310 [new species-- Mexico].
Ochrimnus vittiscutis.-- Ashlock, 1975:29 [Panama].

Genus *Lygaeus* Fabricius

Lygaeus Fabricius, 1794:133. Type species: *Cimex equestris* Linnaeus, designated by Latreille, 1810:433.

Note: A. Slater (1992) included a list (page 17) of 20 contained species and keyed them (pages 18-19).

Lygaeus analis Dallas

Lygaeus analis Dallas, 1852:540 [new species-- Mexico].-- J. Slater, 1964:81 [Panama].-- Brailovsky, 1978b:143 [Matachin].

Lygaeus ruficeps.-- Distant, 1882:179 [Matachin].-- Lethierry and Severin, 1894:145 [Panama].

Lygaeus truculentus Stål

Lygaeus truculentus Stål, 1862b:308 [new species-- Mexico].-- Distant, 1893:380 [Volcan de Chiriqui].-- J. Slater, 1964:101 [Panama].-- Brailovsky, 1978b:141 [Volcan de Chiriqui].

Genus *Melacoryphus* A. Slater

Melacoryphus A. Slater, 1988:309. Type species: *Lygaeus lateralis* Dallas, original designation.

Melacoryphus circumlitus (Stål)

Lygaeus circumlitus Stål, 1862b:309 [new species-- Mexico].

Lygaeus (Melanocoryphus) circumlitus.-- Distant, 1893:383 [Volcan de Chiriqui].

Melanocoryphus circumlitus.-- J. Slater, 1864:129 [Panama].

Neacoryphus circumlitus.-- Brailovsky, 1977a:93 [Panama]; 1977b: 97 [Panama]; 1979c:227 [Panama].

Note: This species was placed in *Melacoryphus* by A. Slater (1992:19).

Genus *Melanopleurus* Stål

Lygaeus (Melanopleurus) Stål, 1874a:105, 109. Type species: *Lygaeus bicolor* Herrich-Schaeffer, designated by Van Duzee, 1916:18.

Melanopleurus.-- J. Slater, 1964:146.

Melanopleurus bistriangularis (Say)

Lygaeus bistriangularis Say, 1832:14 [new species-- Mexico].-- Distant, 1893:380 [Bugaba; Volcan de Chiriqui].--Lethierry and Severin, 1894:139 [Panama].

Lygaeus (Melanopleurus) bistriangularis.-- Distant, 1882:180 [Volcan de Chiriqui].

Melanopleurus bistriangularis.-- J. Slater, 1964:147 [Panama].

Melanopleurus bistriangularis bistriangularis.-- Maldonado, 1974:24 [Panama].-- Brailovsky, 1975b:55 [Panama].

Genus *Neacoryphus* Scudder

Neacoryphus Scudder, 1965:34. Type species: *Lygaeus bicrucis* Say, original designation.

Neacoryphus bicrucis (Say)

Lygaeus bicrucis Say, 1825:322 [new species-- United States of America].-- Distant, 1893:382 [Volcan de Chiriqui].

Melanocoryphus bicrucis.-- J. Slater, 1964:126 [Panama].

Neacoryphus bicrucis.-- Brailovsky, 1977a:93 [Panama].

Genus *Nicuesa* Distant

Nicuesa Distant, 1893:385. Type species: *Nicuesa speciosus* Distant, monotypic.

Nicuesa speciosa Distant

Nicuesa speciosus [sic] Distant, 1893:385 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1894:149 [Panama].

Nicuesa speciosa.-- J. Slater, 1964:152 [Panama].-- Brailovsky, 1979d:251 [Panama].-- A. Slater, 1992:24 [Panama].

Genus *Ochrimnus* Stål

Melanocoryphus (Ochrimnus) Stål, 1874a:113. Type species: *Lygaeus collaris* Fabricius, designated by J. Slater, 1964:152.

Ochrimnus.-- J. Slater, 1964:152.

Ochrimnus conjunctus (Distant)

Lygaeus conjunctus Distant, 1882:183 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:140 [Panama].

Ochrostomus conjunctus.-- J. Slater, 1964:155 [Panama].

Ochrinnus conjunctus.-- Brailovsky, 1982a:76 [Volcan de Chiriqui].

Ochrinnus disseptus (Stål)

Lygaeus (Ochrostomus) disseptus Stål, 1874a:110 [new species-- Colombia].

Ochrinnus disseptus.-- Brailovsky, 1982a:108 [Cerro Campana; El Valle de Cocle].-- A. Slater, 1992:28 [Panama].

Ochrinnus interstinctus (Distant)

Lygaeus (Ochrostomus) interstinctus Distant, 1882:183 [new species-- Panama].

Lygaeus interstinctus.-- Lethierry and Severin, 1894:193 [Panama].

Ochrostomus interstinctus.-- J. Slater, 1964:156 [Panama].

Ochrinnus interstinctus.-- Brailovsky, 1982a:33 [Volcan de Chiriqui].

Ochrinnus limbatipennis (Stål)

Lygaeus limbatipennis Stål, 1860:38 [new species-- Brazil].

Ochrinnus limbatipennis.-- Brailovsky, 1982a:27 [Panama Province].

Ochrinnus neotropicalis (Kirkaldy)

Lygaeus (Ochrostomus) dispar Stål, 1874a:110, preoccupied [new species-- Colombia].-- Distant, 1882:182 [Caldera].

Lygaeus dispar.-- Distant, 1893:381 [Volcan de Chiriqui].

Stålagnostethus neotropicalis Kirkaldy, 1909b:31, proposed as a new name for preoccupied

Lygaeus dispar Stål.

Ochrostomus neotropicalis.-- J. Slater, 1964:158 [Panama].

Ochrinnus neotropicalis.-- Brailovsky, 1982a:103 [David; Caldera; Santiago; Tres Rios, Plantation, Canal Zone].

Ochrinnus pallescens (Stål)

Lygaeus pallescens Stål, 1862b:310 [new species-- Mexico].

Lygaeus (Ochrostomus) pallescens "var. a" Distant, 1882:183 [Volcan de Chiriqui].

Ochrinnus pallescens.-- Brailovsky, 1982a:24 [Volcan de Chiriqui].

Ochrinnus (Phaeochrinnus) pallescens.-- A. Slater, 1992:31 [Panama].

Genus *Ochrostomus* Stål

Ochrostomus Stål, 1874a:105. Type species: *Lygaeus pulchellus* Fabricius, designated by Van Duzee, 1916:18.

Ochrostomus bilimeki (Distant)

Lygaeus (Craspeduchus) bilimeki Distant, 1882:181 [new species-- Mexico].

Craspeduchus bilimeki.-- J. Slater, 1964:47 [Panama].-- Brailovsky, 1979b:210 [Bugaba; Cerro de la Campana; Volcan de Chiriqui].

Ochrostomus pulchellus (Fabricius)

Lygaeus pulchellus Fabricius, 1794:133 [new species--"Insula St. Crucis Americae"].
Lygaeus (*Craspeduchus*) *pulchellus*.-- Barber, 1939:336 [Panama].
Ochrostomus pulchellus.-- J. Slater, 1964:159 [Panama].
Craspeduchus pulchellus.-- Brailovsky, 1979b:213 [Cuba, Canal Zone].

Genus *Oncopeltus* Stål

Lygaeus (*Oncopeltus*) Stål, 1868:70 and 75. Type species: *Cimex famelicus* Fabricius, designated by Distant, 1903:4.
Oncopeltus.-- Stål, 1872:40.

Oncopeltus cingulifer Stål

Oncopeltus (*Erythriscnius*) *cingulifer* Stål, 1874a:103 [new species-- Mexico. Honduras. Colombia].-- Torre-Bueno, 1944:135 [Canal Zone]; 1946:11 [Canal Zone].-- J. Slater, 1964:176 [Panama].
Oncopeltus cingulifer.-- Distant, 1882:175 [Volcan de Chiriqui]; 1893 :379 [Bugaba].-- Lethierry and Severin, 1894:136 [Panama].

Oncopeltus fasciatus (Dallas)

Lygaeus aulicus.-- Herrich-Schaeffer, 1842:76 misidentified [North America].
Lygaeus fasciatus Dallas, 1852:538 [proposed as a new name for misidentified *Lygaeus aulicus* Herrich-Schaeffer].
Oncopeltus fasciatus.-- Distant, 1893:379 [Bugaba].
Oncopeltus (*Erythriscnius*) *fasciatus*.-- J. Slater, 1964:177 [Panama].

Oncopeltus sandarachtus (Say)

Lygaeus sandarachtus Say, 1832:13 [new species-- Mexico].
Oncopeltus sandarachtus.-- Distant, 1882:176 [Volcan de Chiriqui].-- Lethierry and Severin, 1894:137 [Panama].
Oncopeltus (*Erythriscnius*) *sandarachtus*.-- J. Slater, 1964:183 [Panama].

Oncopeltus varicolor (Fabricius)

Lygaeus varicolor Fabricius, 1794:149 [new species-- Trinidad].
Oncopeltus varicolor.-- Distant, 1882:174 [Volcan de Chiriqui].-- Lethierry and Severin, 1894:137 [Panama].
Oncopeltus (*Oncopeltus*) *varicolor*.-- J. Slater, 1964:173 [Panama].

Genus *Pseudoacroleuroides* Brailovsky

Pseudoacroleuroides Brailovsky, 1982c:262. Type species: *Acroleucus vicinalis* Distant, monotypic.

Pseudoacroleuroides vicinalis (Distant)

Acroleucus vicinalis Distant, 1882:189 [new species-- Panama: David].-- Lethierry and Severin, 1894:149 [Panama].-- J. Slater, 1964:13 [Panama].

Pseudoacroleuroides vicinalis.-- Brailovsky, 1982c:264 [David].-- A. Slater, 1992:38 [Panama].

Genus *Torvochromnus* Brailovsky

Torvochromnus Brailovsky, 1982a:133. Type species: *Coreus striatus* Fabricius, original designation.

Note: Brailovsky (1983) revised this genus and presented a key (pages 305-306) to eight species.

Torvochromnus poeyi (Guérin-Ménéville)

Lygaeus poeyi Guérin-Ménéville, 1838:346 [new species-- Cuba].-- Lethierry and Severin, 1894:144 [Panama].

Lygaeus venosus Distant, 1882:184 [new species-- Mexico. Guatemala. Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:144 [Panama].

Ochrostomus poeyi.-- J. Slater, 1964:159 [Panama].

Torvochromnus poeyi.-- Brailovsky, 1983:297 [David; Volcan de Chiriqui].

SUBFAMILY ORSILLINAE STÅL

Ashlock's (1967) revision of this subfamily provided keys to the world's tribes and genera; his tribal arrangement of genera was accepted by Schuh and J. Slater (1995).

TRIBE NYSIINI UHLER**Genus *Nysius* Dallas**

Nysius Dallas, 1852:551. Type species: *Lygaeus thymi* Wolff, designated by Oshanin, 1912:28 and action of the International Commission on Zoological Nomenclature, 1955:133, Opinion 319.

Nysius ericae (Schilling)

Heterogaster ericae Schilling, 1829:86 [new species-- Poland].

Nysius ericae.-- Barber, 1939:342 [Panama].-- J. Slater, 1964:278 [Panama].

Nysius grandis Baker

Nysius coloradensis variety *grandis* Baker, 1906:136 [new variety-- United States of America].

Nysius grandis.-- Barber, 1947b:359 [Volcan de Chiriqui].-- J. Slater, 1964:280 [Panama].

TRIBE ORSILLINI STÅL

Genus *Neortholomus* Hamilton

Neortholomus Hamilton, 1983:201. Type species: *Lygaeus scolopax* Say, original designation.

Note: Hamilton (1983:202-203) provided a key to nine species.

Neortholomus jamaicensis (Dallas)

Nysius jamaicensis Dallas, 1852:555 [new species-- Jamaica].

Nysius providus Uhler, 1894a:182 [new species-- United States of America. Mexico. Panama. Colombia. Brazil. Cuba. Dominican Republic. Puerto Rico. St. Vincent Island. Grenada. Trinidad].

Ortholomus jamaicensis.-- J. Slater, 1964:335 [Panama].

Neortholomus jamaicensis.-- Hamilton, 1983:208 [Panama].

Neortholomus rubricatus (Berg)

Nysius rubricatus Berg, 1879a:225 [new species-- Argentina].

Neortholomus rubricatus.-- Hamilton, 1983:212 ["Panama north of the Canal Zone"].

FAMILY MACROVELIIDAE MCKINSTRY

The lack of Panamanian records is not surprising, as the reports for the three genera of the family occur quite some distance north or south of Panama.

A summary of the knowledge of the macroveliids can be found in Polhemus and Chapman (1979c). A key to the three contained genera was given by Štys (1976:402).

FAMILY MEGARIDIDAE MCATEE AND MALLOCH

The only genus in this family, *Megaridius* Stål, has Panama literature records for but two species; both were described, at least in part, from Panama.

The genus *Megaridius* has been assigned to a number of suprageneric categories. Stål (1860) originally described it, with the preoccupied name *Cyrtaspis*, as a member of the subfamily Plataspinae in the family Pentatomidae; McAtee and Malloch (1928:4) designated it as the sole member of their new subfamily Megaridinae in the family Pentatomidae. China and Miller (1955:258) included the subfamily "Megaridiinae" as a subfamily of the Cydnidae and then (1959:38) returned it to subfamily status under the Pentatomidae; later Štys and Kerzhner (1975:74) treated it as a full family. This latter placement was followed by Schuh and J. Slater (1995:228).

McAtee and Malloch (1928) treated the species of this group and provided a key for separating the 13 species known to them.

Genus *Megaridius* Stål

Cyrtaspis Stål, 1860:9, preoccupied. Type species: *Cyrtaspis nigrifolius* Stål, monotypic.

Megaris Stål, 1862a:57. Proposed as a new name for preoccupied *Cyrtaspis* Stål.

✓*Megaris semiamicta* McAtee and Malloch

Megaris semiamicta McAtee and Malloch, 1928:10 [new species-- Guatemala. Panama: Porto Bello].

✓*Megaris trinotata* (Distant)

Cyrtaspis trinotata Distant, 1889:309 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:13 [Panama].

Megaris trinotata.-- McAtee and Malloch, 1928:7 [Flohr; Motzoronggo; Porto Bello; Vera Cruz; Volcan de Chiriqui].

FAMILY MESOVELIIDAE DOUGLAS AND SCOTT

Panama records for five species in two genera of this small family of carnivorous bugs are reported below.

Mesoveliids are generally thought of as living on or near bodies of water, but some species have been taken by sifting in litter on the floor of a rain forest in Brazil, and one species occurs not only on or near bodies of water but also appears to wander among mosses at a distance from ponds or streams; still others are adapted for a life on water in caves and these even have marked reduction in eye size.

Andersen and J. Polhemus (1980) discussed the classification of this family and gave a key (pages 383-384) to the 10 genera of the world.

SUBFAMILY MESOVELIINAE DOUGLAS AND SCOTT

Genus *Mesovelia* Mulsant and Rey

Mesovelia Mulsant and Rey, 1852:138. Type species: *Mesovelia furcata* Mulsant and Rey, monotypic.

Note: Spangler (1990) listed (page 93) the 10 New World species of *Mesovelia*, with their known distribution, and provided a key (pages 92-94) for the identification of their males.

Mesovelia amoena Uhler

Mesovelia amoena Uhler, 1894a:218 [new species-- Grenada].-- Drake and Harris, 1941b:275 [Barro Colorado]; 1946:9 [Panama].-- Drake, 1949:147 [Panama].-- Cobben, 1960:30 [Panama].-- Nieser, 1977c:355 [Panama].-- J. Polhemus and Chapman, 1979b:41 [Panama].-- Spangler, 1990:93 [Panama].

Mesovelia blissi Drake

Mesovelia blissi Drake, 1949:146 [new species-- Panama: Corozal, Canal Zone].-- Hungerford, 1951:34 [Canal Zone].-- Andersen and J. Polhemus, 1980:389 [Panama].-- Spangler, 1990:93 [Panama].

Mesovelia mulsanti F. White

Mesovelia mulsanti F. White, 1879a:268 [new species-- Brazil].-- Champion, 1898a:123 [Panama City].-- Kirkaldy and Torre-Bueno, 1909:213 [Panama].-- Horvath, 1915:548 [Panama]; 1929:5 [Panama].-- J. Polhemus and Chapman, 1979b:39 [Panama].

Mesovelia mulsanti caraiba Jaczewski, 1930a:9 [new subspecies-- Mexico. Panama. Cuba. St. Thomas, Virgin Islands. St. Vincent, West Indies. Grenada].-- Barber, 1939:393 [Panama].

Notes: (1) The taxon described by Jaczewski (above) was listed in the synonymy of *M. mulsanti* by J. Polhemus and Chapman (1979b) but was not mentioned by Andersen and J. Polhemus (1980) nor by Spangler (1990).

Mesovelia zeteki Drake and Harris

Mesovelia zeteki Harris and Drake, 1941b:276 [new species-- Panama: Old Panama City].-- Drake and Harris, 1946:9 [Panama].-- Drake, 1949:147 [Panama].-- Hungerford, 1951:34 [Panama].-- Andersen and J. Polhemus, 1980:390 [Panama].-- Spangler, 1990:93 [Panama].

Genus *Mesoveloidea* Hungerford

Mesoveloidea Hungerford, 1929a:288. Type species: *Mesoveloidea williamsi* Hungerford, monotypic.

Mesoveloidea williamsi Hungerford

Mesoveloidea williamsi Hungerford 1929a:289 [new species-- Ecuador].

Note: A lone female labeled "Panama, Pan. Prov. Tocumen, 20 XII 1951," is in the Smithsonian collection. Andersen and J. Polhemus (1980:389) included "Middle America" in its distribution.

FAMILY MICROPHYSIDAE DOHRN

No Panama records for the species of this family of small, predaceous bugs have been found.

Schuh and J. Slater (1995:163) listed the five known genera. The two New World genera, each with a single species, are *Chinaola* Blatchley in the eastern United States, and *Mallochiola* Bergroth in the eastern United States and Mexico.

FAMILY MIRIDAE HAHN

The family Miridae, by far the largest family in the Heteroptera, is represented in the following Panamanian list by 229 species in 115 genera. Several times that many can be expected to be found when the fauna is better known.

The base for modern studies of the Miridae was laid by Carvalho in his (1955c) "Keys to the Genera of Miridae of the World" and his (1957-1960) "Catalogue of the Miridae of the World." Schuh and J. Slater (1995:172-173) gave an updated key to the subfamilies. A key to subfamilies, based on nymphs, was given by Akingbohunge (1974:693). The numerous studies published subsequent to Carvalho's (1957-1960) "Catalogue" made many changes and greatly increased the

total numbers of genera and species in the Miridae; these were included in Schuh's (1995) "Plant Bugs of the World." This latter work listed Distant's (1893:419) *Herdonius panamensis* as a mirid, apparently having misread Carvalho and Dolling's (1976:803) generic assignment of it -- SEE *Arachnocoris panamensis* in the family Nabidae.

SUBFAMILY BYROCORINAE BAERENSPRUNG

TRIBE DICYPHINI REUTER

The tribe Dicyphini, cataloged in the subfamily Phylinae by Carvalho (1958a:181), is now placed in the subfamily Bryocorinae, a placement supported by Schuh's (1976) study of the pretarsal structures of the Miridae.

Genus *Engytatus* Reuter

Engytatus Reuter, 1876:82. Type species: *Engytatus geniculatus* Reuter, preoccupied, next available name is *Neosilis modesta* Distant, monotypic.

Engytatus modestus (Distant)

Engytatus geniculatus Reuter, 1876:83, preoccupied [new species-- United States of America].
Neosilis modesta Distant, 1893:447 [new species-- Guatemala].
Cyrtopeltis (Engytatus) modestus-- Carvalho, 1958a:186 [Panama].

Genus *Macrolophus* Fieber

Macrolophus Fieber, 1858:326. Type species: *Capsus nubilus* Herrich-Schaeffer, designated by Kirkaldy, 1906a:129.

Macrolophus cuiabanus Carvalho

Macrolophus cuiabanus Carvalho, 1945b:529 [new species-- Brazil].-- Maldonado, 1976a:11 [Fort Amador].

Genus *Monalonion* Herrich-Schaeffer

Monalonion Herrich-Schaeffer, 1850 :168. Type species: *Monalonion parviventre* Herrich-Schaeffer, monotypic.

Note: Carvalho (1972:121-123) keyed 12 species of *Monalonion*.

Monalonion annulipes Signoret

Monalonion annulipes Signoret, 1858b:500 [new species-- Mexico].-- Distant, 1883:246 [Bugaba; Volcan de Chiriqui].-- Atkinson, 1890:50 [Bugaba].-- Carvalho, 1957:138 [Panama]; 1972:121 [Panama].-- Schuh, 1995:517 [Panama].

Monalonion atratum Distant, 1883:247 [new species-- Panama: Bugaba].-- Atkinson, 1890:50

[Bugaba].-- Carvalho, 1957:138 [Panama]; 1972:121 [Panama].-- Carvalho and Dolling, 1976:793 [Bugaba].

Genus *Tupiocoris* China and Carvalho

Cyrtopeltis (*Tupiocoris*) China and Carvalho, 1952:159, 162. Type species: *Neoproba notata* Distant, original designation. *Tupiocoris*.-- Cassis, 1986:148.

Tupiocoris cucurbitaceus (Spinola)

Phytocoris cucurbitaceus Spinola, 1852:196 [new species-- Chile].
Dicyphus (*Dicyphus*) *cucurbitaceus*.-- Carvalho, 1958a:195 [Panama].

Tupiocoris notatus (Distant)

Neoproba notata Distant, 1893:432 [new species-- Panama: Bugaba; Volcan de Chiriqui].
Cyrtopeltis notatus.-- Carvalho, 1947:11 [Panama].-- Carvalho and Dolling, 1976:803 [V. de Chiriqui].
Cyrtopeltis (*Tupiocoris*) *notatus*.-- Carvalho, 1958a:190 [Panama].
Tupiocoris notatus.-- Schuh, 1995:506 [Panama].

TRIBE ECCRITOTARSINI BERG

Genus *Adneella* Carvalho

Adneella Carvalho, 1960b:47. Type species: *Neella distincta* Carvalho, original designation.

Adneella panamensis Carvalho and Schaffner

Adneella panamensis Carvalho and Schaffner, 1985:4 [new species-- Panama: Cerro Campana, Panama; Rio Changuinola, B. de T].-- Carvalho and Froeschner, 1990:314 [Cerro Campana].-- Schuh, 1995:536 [Panama].

Genus *Bothrophorella* Reuter

Bothrophorella Reuter, 1907a:40. Type species: *Eccritotarsus niger* Stål, monotypic.

Bothrophorella nigra (Stål)

Eccritotarsus niger Stål, 1860:58 [new species-- Brazil].
Bothrophorella procurrans Distant, 1893:442 [new species-- Panama: Bugaba. Mexico. Guatemala].
Bothrophorella nigra.-- Carvalho, 1945c:318 [Panama]; 1957:92 [Panama].-- Maldonado, 1976a:10 [Porto Bello].-- Carvalho and Afonso, 1977:7 [Gatun Lake].-- Schuh, 1995:538 [Panama].

Carvalho and Dolling,

Genus *Bugabocoris* Carvalho and China

Bugabocoris Carvalho and China, 1959:72. Type species: *Zoilus marginatus* Distant, original designation.

*Neoproba notata**Bugabocoris marginatus* (Distant)

Zoilus marginatus Distant, 1893:422 [new species-- Panama: Bugaba].-- Carvalho, 1957:44 [Panama].

Bugabocoris marginatus.-- Carvalho and China, 1959:73 [Panama].-- Carvalho and Dolling, 1976:801 [Bugaba].--Schuh, 1995:539 [Panama].

Genus *Cyrtocapsus* Reuter

Cyrtocapsus Reuter, 1876:78. Type species: *Capsus caligineus* Stål, monotypic.

Cyrtocapsus nanus Carvalho

Cyrtocapsus nanus Carvalho, 1954c:13, 14 [new species-- Panama: Summit, Canal Zone; Fort Clayton]; 1957:96 [Panama].-- Carvalho and Froeschner, 1987:155 [Summit, Canal Zone].-- Schuh, 1995:542 [Panama].

Genus *Eccritotarsus* Stål

Eccritotarsus Stål, 1860:57. Type species: *Eccritotarsus nigrocruciatu*s Stål, designated by Kirkaldy, 1906a:135.

Note: Carvalho and Schaffner (1987a:485-488) listed and keyed the 80 species of this genus.

original designation.

Eccritotarsus angularis Maldonado

Eccritotarsus angularis Maldonado, 1983b:65 [new species-- Panama: Fortuna, C. Z.].-- Carvalho and Schaffner, 1987a:487 [Panama].-- Schuh, 1995:544 [Panama].

Eccritotarsus argentatus (Distant)

Neofurius argentatus Distant, 1884:293 [new species-- Guatemala. Panama: Volcan de Chiriqui].-- Atkinson, 1890:45 [Volcan de Chiriqui].-- Costa Lima, 1942:106 [Panama].

monotypic.

Eccritotarsus argentatus.-- Carvalho and Dolling, 1976:792 [V. de Chiriqui].-- Schuh, 1995:544 [Panama].

Eccritotarsus brunimaculatus Maldonado

Eccritotarsus brunimaculatus Maldonado, 1983b:66 [new species-- Panama: Fortuna, C.Z.].-- Carvalho and Schaffner, 1987a:487 [Panama].-- Schuh, 1995:544 [Panama].

aba. Mexico.

].-- Maldonado,

e].-- Schuh, 1995:538

Eccritotarsus cinctus Carvalho and Schaffner

Eccritotarsus cinctus Carvalho and Schaffner, 1986:307 [new species-- Panama: Fortuna,

Chiriqui].-- Carvalho and Froeschner, 1990:321 [Fortuna, Chiriqui].-- Schuh, 1995:445 [Panama].

Eccritotarsus elongatus Carvalho

Eccritotarsus elongatus Carvalho, 1953c:472 [new species-- Costa Rica].-- Maldonado, 1983b:68 [Fortuna].

Eccritotarsus embolionigrus Carvalho

Eccritotarsus embolionigrus Carvalho, 1953c:471 [new species-- Costa Rica].-- Maldonado, 1976a:10 [Cerro Campana]; 1983b:66 [Cerro Campana].

Eccritotarsus englemani Carvalho and Schaffner

Eccritotarsus englemani Carvalho and Schaffner, 1986:311 [new species-- Panama: Bocas d. T., Corriente Grande].--Carvalho and Froeschner, 1990:321 [Bocas d. T., Corriente Grande].-- Schuh, 1995:546 [Panama].

Eccritotarsus nigriritibialis Maldonado

Eccritotarsus nigriritibialis Maldonado, 1983b:66 [new species-- Panama: Fortuna, C.Z.].-- Carvalho and Schaffner, 1987a:487 [Panama].-- Schuh, 1995:547 [Panama].

Eccritotarsus panamensis Carvalho and Schaffner

Eccritotarsus panamensis Carvalho and Schaffner, 1986:321 [new species-- Panama: Chiriqui].-- Carvalho and Froeschner, 1990:322 [Chiriqui, Fortuna].-- Schuh, 1995:547 [Panama].

Eccritotarsus plagosus (Distant)

Neofurius plagosus Distant, 1884:295 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:45 [Volcan de Chiriqui].-- Costa Lima, 1942:106 [Panama].-- Maldonado, 1983b:66 [Fortuna].

Eccritotarsus plagosus.-- Carvalho, 1953c:488 [Panama]; 1957:100 [Panama].-- Carvalho and Dolling, 1976:804 [V. de Chiriqui].-- Carvalho and Schaffner, 1987a:487 [Panama].-- Schuh, 1995:548 [Panama].

Eccritotarsus scriptus (Distant)

Neofurius scriptus Distant, 1884:293 [new species-- Guatemala].
Eccritotarsus scriptus.-- Maldonado, 1983b:66 [Fort Amador].

Eccritotarsus stieglmayri (Reuter)

Neofurius stieglmayri Reuter, 1907a:40 [new species-- Brazil].
Eccritotarsus stieglmayri.-- Maldonado, 1983b:66 [Fortuna].

Eccritotarsus tresrianus Carvalho and Schaffner

Eccritotarsus tresrianus Carvalho and Schaffner, 1987a:479 [new species-- Panama: Gatun Lake, Tres Rios Plantation].-- Carvalho and Froeschner, 1990:322 [Gatun Lake, Tres Rios Plantation].-- Schuh, 1995:548 [Panama].

Eccritotarsus trimaculatus Maldonado

Eccritotarsus trimaculatus Maldonado, 1983b:67 [new species-- Panama: Darien, C.Z.].-- Carvalho and Schaffner, 1987a:487 [Panama].-- Schuh, 1995:549 [Panama].

Eccritotarsus urus Maldonado

Eccritotarsus urus Maldonado, 1983b:67 [new species-- Panama: Fortuna, C. Z.].-- Carvalho and Schaffner, 1987a:488 [Panama].-- Schuh, 1995:549 [Panama].

Eccritotarsus woldai Carvalho and Schaffner

Eccritotarsus woldai Carvalho and Schaffner, 1987a:481 [new species-- Panama: Bocas d. T., Corriente Grande].-- Carvalho and Froeschner, 1990:323 [Bocas de T. Corriente Grande].-- Schuh, 1995:549 [Panama].

Genus *Englemania* Maldonado

Englemania Maldonado, 1976a:6. Type species: *Englemania bicolor* Maldonado, original designation.

Englemania bicolor Maldonado

Englemania bicolor Maldonado, 1976a:6 [new species-- Panama: Coco Solo Hospital, Canal Zone].-- Schuh, 1995:549 [Panama].

Englemania lutea Carvalho

Englemania lutea Carvalho, 1985f:273 [new species-- Panama: Tres Rios Plantation, Gatun Lake, Canal Zone].-- Carvalho and Froeschner, 1987:162 [Tres Rios Plantation, Gatun Lake, Canal Zone].-- Schuh, 1995:549 [Panama].

Englemania panamensis Carvalho

Englemania panamensis Carvalho, 1985f:274 [new species-- Panama: Fort Amador]. Carvalho and Froeschner, 1987:162 [Fort Amador].-- Schuh, 1995:549 [Panama].

Genus *Eurychilella* Reuter

Eurychilella Reuter, 1908:159. Type species: *Eurychilella pallida* Reuter, monotypic.

Note: Carvalho (1953b:353) provided a key to seven species.

Eurychilella rubra Carvalho

Eurychilella rubra Carvalho, 1953b:351 [new species-- Panama: Barro Colorado Island; Porto Bello]; 1957:102 [Panama].-- Carvalho and Froeschner, 1987:163 [Porto Bello].-- Schuh, 1995:551 [Panama].

Genus *Eurycipitia* Reuter

Eurycipitia Reuter, 1905:3. Type species: *Eccritotarsus splendens* Distant, a junior synonym of *Sysinas clarus* Distant, designated by Reuter, 1907a:34.

Eurycipitia clarus (Distant)

Sysinas clarus Distant, 1883:249 [new species-- Panama: Matachin].-- Atkinson, 1890:52 [Matachin].

Eccritotarsus splendens Distant, 1884:284 [new species-- Panama: Bugaba].-- Atkinson, 1890:44 [Bugaba].

Eurycipitia splendens.-- Reuter, 1905:4 [Panama].-- Carvalho, 1951b:153 [Barro Colorado Isl., Canal Zone].

Eurycipitia clarus.-- Carvalho, 1957:102 [Panama].-- Carvalho and Dolling, 1976:795 [Matachin].-- Schuh, 1995:551 [Panama].

Genus *Knightocoris* Carvalho and China

Knightocoris Carvalho and China, 1951:686. Type species: *Neofurius villosus* Distant, original designation.

Knightocoris villosus (Distant)

Neofurius villosus Distant, 1884:292 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:46 [Volcan de Chiriqui].-- Costa Lima, 1942:106 [Panama].

Knightocoris villosus.-- Carvalho and China, 1951:686 [Volcan de Chiriqui].-- Carvalho, 1957:107 [Panama].-- Carvalho and Dolling, 1976:810 [V. de Chiriqui].-- Schuh, 1995:555 [Panama].

Genus *Mala* Distant

Mala Distant, 1884:296. Type species: *Mala unicolor* Distant, designated by Kirkaldy, 1906a:147.

Mala nigrescens Carvalho

Mala nigrescens Carvalho, 1985f:293 [new species-- Panama: Fortuna, Canal Zone].-- Carvalho and Froeschner, 1987:180 [Fortuna, Canal Zone].-- Schuh, 1995:556 [Panama].

Mala ornata Distant

Mala ornata Distant, 1884:296 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Atkinson, 1890:46 [Bugaba; Volcan de Chiriqui].-- Carvalho and Dolling, 1976:803 [Bugaba].--

Schuh, 1995:556 [Panama].

Mala unicolor Distant

Mala unicolor Distant, 1884:296 [new species-- Guatemala].-- Carvalho, 1952:56 [Panama].

Note: The above "Panama" record is apparently a *lapsus*; in Carvalho's (1957:108) "Catalogue" the species was listed only for Guatemala, the lone locality given with the original description.

Genus *Neella* Reuter

Neella Reuter, 1908b:152. Type species: *Eccritotarsus eucosmus* Stål, original designation.

Note: Carvalho (1954c:8-10) keyed 16 species.

Neella bicolor Hsiao

Neella bicolor Hsiao, 1946:386 [new species-- Panama: Porto Bello].-- Carvalho, 1957:112 [Panama].-- Schuh, 1995:558 [Panama].

Neella carvalhoi Hsiao

Neella carvalhoi Hsiao, 1946:386 [new species-- Costa Rica. Panama: Trinidad River].-- Carvalho, 1957:112 [Panama].-- Maldonado, 1976a:10 [Coco Solo Hospital; Gatun Spillway].-- Schuh, 1995:558 [Panama].

Neella fasciata Hsiao

Neella fasciata Hsiao, 1946:386 [new species-- Costa Rica. Panama: Barro Colorado Island; Gatun Lake; Porto Bello; Trinidad River].-- 1957:112 [Panama].-- Schuh, 1995:559 [Panama].

Neella floridula (Distant)

Sysinas floridulus Distant, 1883:249 [new species-- Panama: Bugaba].-- Atkinson, 1890:52 [Bugaba].

Neella floridula.-- Reuter, 1908:153 [Bugaba].-- Carvalho, 1945d:167 [Panama]; 1957:112 [Panama].-- Maldonado, 1976a:10 [Cerro Campana].-- Carvalho and Dolling, 1976:797 [Bugaba].-- Schuh, 1995:559 [Panama].

Neella frumentaria (Distant)

Poecilocapsus frumentarius Distant, 1884:275 [new species--Panama: Volcan de Chiriqui].-- Atkinson, 1890:97 [Volcan de Chiriqui].

Neella frumentaria.-- Carvalho, 1954c:7 [Volcan de Chiriqui]; 1957:113 [Panama].-- Carvalho and Dolling, 1976:797 [V. de Chiriqui].-- Schuh, 1995:559 [Panama].

Genus *Neofurius* Distant

Neofurius Distant, 1884:292. Type species: *Neofurius affinis* Distant, designated by Kirkaldy, 1906a:147.

Neofurius affinis Distant

Neofurius affinis Distant, 1884:294 [new species-- Guatemala. Panama: Bugaba; Volcan de Chiriqui].-- Atkinson, 1890:45 [Volcan de Chiriqui].-- Costa Lima, 1942:106 [Panama].-- Carvalho and China, 1951:697 [Volcano de Chiriqui].-- Carvalho, 1954d:148 [Panama]; 1957:114 [Panama].-- Carvalho and Dolling, 1976:791 [V. de Chiriqui].-- Schuh, 1995:560 [Panama].

Neofurius bimaculatus Carvalho and Hsiao

Neofurius bimaculatus Carvalho and Hsiao, 1954:140 [new species-- Panama: Limon Plantation, Chagras River].--Carvalho, 1957:114 [Panama].-- Maldonado, 1976a:10 [Coco Solo Hospital].-- Carvalho and Froeschner, 1987:186 [Limon Plantation, Chagras River].-- Schuh, 1995:560 [Panama].

Neofurius chiriquiensis Carvalho

Neofurius chiriquiensis Carvalho, 1985d:579 [new species-- Panama: Chiriqui Volcano].-- Carvalho and Froeschner, 1990:331 [Panama: Chiriqui Volcano].-- Schuh, 1995:560 [Panama].

Neofurius fasciatus Carvalho and Schaffner

Neofurius fasciatus Carvalho and Schaffner, 1985:19 [new species-- Panama: Boco de T., Corriente Grande].--Carvalho and Froeschner, 1990:331 [Bocas d. T., Corriente Grande].-- Schuh, 1995:561 [Panama].

Neofurius pallidus Carvalho

Neofurius pallidus Carvalho, 1985f:277 [new species-- Panama: Citrico, Delega, Chiriqui].-- Carvalho and Froeschner, 1987:186 [Chiriqui; Citrico; Delega; Chiriqui].-- Schuh, 1995:561 [Panama].

Neofurius viduatus (Distant)

Neosilia viduata Distant, 1884:297 [new species-- Panama: Bugaba].-- Atkinson, 1890:47 [Bugaba].
Neofurius viduatus.-- Carvalho and China, 1951:696 [Bugaba].-- Carvalho, 1954d:149 [Panama]; 1957:114 [Panama].-- Carvalho and Dolling, 1976:809 [Bugaba].-- Schuh, 1995:562 [Panama].

Genus *Neoleucon* Distant

Neoleucon Distant, 1884:299. Type species: *Neoleucon horribilis* Distant, monotypic.
Note: Carvalho (1988a:177-178) provided a key to five species.

Neoleucon horribilis Distant

Neoleucon horribilis Distant, 1884:300 [new species-- Panama: Bugaba].-- Atkinson, 1890:47 Bugaba].-- Carvalho, 1954e:101 [Panama]; 1957:113 [Panama].-- Schuh, 1995:562 [Panama].

Neoleucon [sic] horribilis.-- Carvalho and Dolling, 1976:798 [Bugaba].

Neoleucon panamensis Carvalho

Neoleucon panamensis Carvalho, 1988a:175 [new species-- Panama: Colon, Canal Zone].-- Carvalho and Froeschner, 1990:31 [Colon, Canal Zone].

Genus *Neosilia* Distant

Silia Distant, 1884:296, preoccupied. Type species: *Neosilia cineracea* Distant, designated by Kirkaldy, 1906a:147.

Neosilia Distant, 1884:297. Proposed as new name for preoccupied *Silia* Distant.

Neosilia cineracea Distant

Neosilia cineracea Distant, 1884:297 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:46 [Volcan de Chiriqui].-- Carvalho, 1957:115 [Panama]; 1985e:661 [Volcan de Chiriqui].-- Carvalho and Dolling, 1976:795 [V. de Chiriqui].-- Schuh, 1995:563 [Panama].

Note: Distant (1884, above), recognizing that his new genus *Silia* was preoccupied, changed the name of his genus on the next page to be published but did not make the change on the captions for plate 27.

Genus *Nototremates* Carvalho and China

Nototremates Carvalho and China, 1951:680. Type species: *Neofurius denigratus* Distant, original designation.

Nototremates chiriquiensis Carvalho and Schaffner

Nototremates chiriquiensis Carvalho and Schaffner, 1985:27 [new species-- Panama: Boca de T., Corriente Grande; Fortuna, Chiriqui].-- Carvalho and Froeschner, 1990:332 [Boca d.t. Corriente Grande].-- Schuh, 1995:563 [Panama].

Genus *Odontocerochoris* Carvalho and China

Odontocerochoris Carvalho and China, 1951:678. Type species: *Neofurius ornandus* Distant, original designation.

Odontocerochoris ornandus (Distant)

Neofurius ornandus Distant, 1884:293 [new species-- Guatemala. Panama: Tolé].-- Atkinson, 1890:46-? [Tolé].

Odontocerocheris ornandus.-- Carvalho and China, 1951:678 [Tolé]-- Carvalho and Dolling, 1976:803 [Tolé].

Genus *Pachymerocerista* Carvalho and Gomes

Pachymerocerista Carvalho and Gomes, 1971c:99. Type species: *Pachymerocerus pilosus* Carvalho, monotypic.

Pachymerocista pilosus (Carvalho)

Pachymerocerus pilosus Carvalho, 1947b:108 [new species-- Brazil].

Pachymerocerista pilosus.-- Carvalho and Gomes, 1971c:100 [Fort Amador; Igazú].-- Maldonado, 1976a:10 [Coco Solo Hospital].-- Carvalho and Afonso, 1977:8 [Barro Colorado].-- Schuh, 1995:564 [Panama].

Genus *Pachypoda* Carvalho and China

Pachypoda Carvalho and China, 1951:691. Type species: *Eccritotarsus vultuosus* Distant, original designation.

Pachypoda sordida Carvalho and China

Pachypoda sordida Carvalho and China, 1951:691 [new species-- Panama: La Palma].-- Carvalho, 1957:118 [La Palma].-- Carvalho and Froeschner, 1987:189 [La Palma].-- Schuh, 1995:565 [La Palma].

Genus *Panamacoris* Carvalho and Gomes

Panamacoris Carvalho and Gomes, 1971b:469. Type species: *Panamacoris stramineus* Carvalho and Gomes, original designation.

Panamacoris stramineus Carvalho and Gomes

Panamacoris stramineus Carvalho and Gomes, 1971b:470 [new species-- Panama: Paraiso, C.Z].-- Maldonado, 1976a:10 [Coco Solo Hospital].-- Carvalho and Froechner, 1987:190 [Paraiso].-- Schuh, 1995:565 [Panama].

Genus *Parafurius* Carvalho and China

Parafurius Carvalho and China, 1951:678, 692. Type species: *Eccritotarsus discifer* Stål, original designation.

Parafurius discifer (Stål)

Eccritotarsus discifer Stål, 1860:57 [new species-- Brazil].

Neofurius variabilis Distant, 1884:292 [new species-- Panama: Bugaba; Volcan de Chiriqui];

- 1893:446 [Peña Blanca].--Atkinson, 1890:46 [Bugaba].-- Costa Lima, 1942:106 [Panama].
- Neofurius amethystus* Distant, 1884:293 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Atkinson, 1890:45 [Bugaba].-- Costa Lima, 1942:106 [Panama].
- Parafurius discifer*.-- Carvalho, 1957:118 [Panama].-- Carvalho and Dolling, 1976:792 [Bugaba].-- Maldonado, 1976a:10 [Madden Dam, Canal Zone; Punta Vacamonte].-- Schuh, 1995:566 [Panama].

Parafurius pollutus (Distant)

- Neofurius pollutus* Distant, 1893:446 [new species-- Mexico. Panama: Volcan de Chiriqui].
- Parafurius pollutus*.-- Carvalho and China, 1951:694 [Volcan de Chiriqui].-- Carvalho, 1957:119 [Panama].-- Carvalho and Dolling, 1976:805 [V. de Chiriqui].-- Schuh, 1995:566 [Panama].

Genus *Perissobasis* Reuter

- Perissobasis* Reuter, 1892:397. Type species: *Perissobasis aurora* Reuter, monotypic.

Perissobasis panamensis Carvalho

- Perissobasis panamensis* Carvalho, 1990b:503 [new species-- Panama: Mojinga Swamp, Canal Zone].-- Carvalho and Froeschner, 1995:499 [Mojinga, Canal Zone].-- Schuh, 1995:567 [Panama].

Genus *Pseudobryocoris* Distant

- Pseudobryocoris* Distant, 1884:284. Type species: *Pseudobryocoris bicolor* Distant, monotypic.

Pseudobryocoris bicolor Distant

- Pseudobryocoris bicolor* Distant, 1884:286 [new species-- Panama: Bugaba].-- Atkinson, 1890:43 [Bugaba].-- Carvalho, 1957:121 [Panama].-- Carvalho and Dolling, 1976:793 [Panama].-- Schuh, 1995:570 [Panama].

Genus *Pycnoderes* Guérin-Ménéville

- Pycnoderes* Guérin-Ménéville, 1857:404. Type species: *Pycnoderes quadrimaculatus* Guérin-Ménéville, monotypic.

Pycnoderes angustatus Reuter

- Pycnoderes angustatus* Reuter, 1907b:2 [new species-- Jamaica].-- Carvalho and Afonso, 1977:8 [Gatun Lake].-- Schuh, 1995:571 [Panama].

Pycnoderes atratus (Distant)

- Eccritotarsus atratus* Distant, 1884:285 [new species-- Panama: Bugaba].-- Atkinson, 1890:42

[Bugaba].

Pycnoderes atratus.-- Carvalho, 1957:121 [Panama].-- Maldonado, 1976a:10 [Coco Solo Hospital].-- Carvalho and Dolling, 1976 :793 [Bugaba].-- Carvalho and Afonso, 1977:8 [Gatun Lake].-- Schuh, 1995:571 [Panama].

Pycnoderes pallidirostris (Stål)

Eccritotarsus pallidirostris Stål, 1862b:323 [new species-- Mexico].

Pycnoderes pallidirostris.-- Carvalho and Afonso, 1977:8 [Barro Colorado, Gatun Lake].-- Schuh, 1995:573 [Panama].

Pycnoderes quadrimaculatus Guérin-Ménéville

Pycnoderes quadrimaculatus Guérin-Ménéville, 1857:404 [new species-- Cuba].-- Maldonado, 1976a:10 [Boquete, Chiriqui; Panama City, Porto Bello].-- Carvalho and Afonso, 1977:8 [Gatun Lake].-- Schuh, 1995:573 [Panama].

Genus *Sixeonotus* Reuter

Sixeonotus Reuter, 1876:77. Type species: *Sixeonotus insignis* Reuter, monotypic.

Sixeonotus nocturnus (Distant)

Eccritotarsus nocturnus Distant, 1893:442 [new species-- Panama: Bugaba. Guatemala].

Sixeonotus nocturnus.-- Schuh, 1995:576 [Panama].

Genus *Spartacus* Distant

Spartacus Distant, 1884:300. Type species: *Spartacus albatu*s Distant, monotypic.

Spartacus panamensis Carvalho

Spartacus panamensis Carvalho, 1985d:577 [new species-- Panama: Prov. Tocumen].-- Carvalho and Froeschner, 1990:344 [Prov. Tocumen].-- Schuh, 1995:577 [Panama].

Genus *Sysinas* Distant

Sysinas Distant, 1883:249. Type species: *Sysinas linearis* Distant, designated by Kirkaldy, 1906a:146.

Sysinas audens Distant

Sysinas audens Distant, 1883:249 [new species-- Panama: San Lorenzo].-- Atkinson, 1890:52 [San Lorenzo].-- Schuh, 1995:579 [Panama].

Sysinas fulvicollis.-- Carvalho, 1951b:153 [Barro Colorado Isl., Canal Zone]; 1957:128 [Panama].

Sysinas panamensis Carvalho

Sysinas panamensis Carvalho, 1985f:290 [new species.-- Panama: Fortuna, Canal Zone].--
Carvalho and Froeschner, 1987:213 [Fortuna, Canal Zone].-- Schuh, 1995:579 [Panama].

Genus *Tenthecoris* Scott

Tenthecoris Scott, 1886:65. Type species: *Tenthecoris bicolor* Scott, monotypic.

Note: Carvalho (1951c), key on (pages 300-301), explained the earlier misdeterminations and confusions of *T. bicolor* and several other species. Thus, until Swezey's (1945:367) specimens can be reexamined against that study, his Panama (Canal Zone) record of *T. bicolor* must remain in question.

The general ranges reported for several species indicate they should be found in Panama.

SUBFAMILY CYLAPINAE KIRKALDY

TRIBE CYLAPINI KIRKALDY

Note: A key to the Neotropical genera of Cylapinae was presented by Carvalho and Ferreira (1994:327-333).

Genus *Adcylapocoris* Carvalho

Adcylapocoris Carvalho, 1989:80. Type species: *Adcylapocoris castaneus* Carvalho, original designation.

Adcylapocoris castaneus Carvalho

Adcylapocoris castaneus Carvalho, 1989:80 [new species-- Panama: Madden Dam].-- Carvalho and Froeschner, 1995:485 [Madden Dam].-- Schuh, 1995:19 [Panama].

Genus *Amapacylapus* Carvalho and Fontes

Amapacylapus Carvalho and Fontes, 1968:279. Type species: *Amapacylapus amapariensis* Carvalho and Fontes, original designation.

Amapacylapus englemanni Carvalho

Amapacylapus englemanni Carvalho, 1992:478 [new species-- Panama: Fort Sherman, Canal Zone].-- Carvalho and Froeschner, 1995:485 [Fort Sherman, Canal Zone].-- Schuh, 1995:19 [Panama].

Note: The caption associated with the illustration in the original description was inadvertently labeled "*A. panamensis*," as pointed out by Carvalho and Costa (1995:358).

Genus *Cylapocoris* Carvalho

Cylapocoris Carvalho, 1954a:507. Type species: *Cylapocoris tiquiensis* Carvalho, original designation.

Cylapocoris funebris (Distant)

Carnus funebris Distant, 1884:288 [new species-- Panama: Bugaba].

Cylapocoris funebris-- Carvalho, 1976a:56 [Bugaba].-- Schuh, 1995:22 [Panama].

Genus *Cylapus* Say

Cylapus Say, 1832:26. Type species: *Cylapus tenuicornis* Say, monotypic.

Cylapus funebris (Distant)

Valdasus funebris Distant, 1883:244 [new species-- Panama: Bugaba].-- Atkinson, 1890:49 [Bugaba].

Cylapus funebris-- Bergroth, 1920:71 [Panama].-- Carvalho and Fontes, 1968:274 [Panama].-- Carvalho and Dolling, 1976:797 [Bugaba].-- Schuh, 1995:23 [Panama].

Cylapus (Cylapus) funebris-- Carvalho, 1957:30 [Panama].

Cylapus marginicollis (Distant)

Valdasus marginicollis Distant, 1883:243 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:49 [Volcan de Chiriqui].

Cylapus marginicollis-- Reuter, 1913:58 [Bugaba].-- Bergroth, 1920:71 [Panama].-- Carvalho and Dolling 1976:801 ["Dugaba"].-- Schuh, 1995:23 [Panama].

Cylapus (Cylapus) marginicollis-- Carvalho, 1957:30 [Panama].

Genus *Fulvius* Stål

Fulvius Stål, 1862b:322. Type species: *Fulvius anthocoroides* Stål, monotypic.

Note: Carvalho and Costa's (1994) treatment of the 42 American species of *Fulvius* included a key (pages 64-68) to them.

Fulvius albonotatus Carvalho

Fulvius albonotatus Carvalho, 1955a:629 [new species-- Panama: Barro Colorado Island]; 1957:15 [Panama].--Carvalho and Froeschner, 1987:165 [Barro Colorado Island].-- Carvalho and Costa, 1994:70 [Barro Colorado Island, Canal Zone].-- Schuh, 1995:26 [Panama].

Fulvius anthocoroides Stål

Fulvius anthocoroides Stål, 1862b:322 [new species-- Mexico].-- Distant, 1884:281 [Bugaba; David; Volcan de Chiriqui].-- Atkinson, 1890:105 [Panama].-- Carvalho, 1957:15 [Panama].-- Carvalho and Costa, 1994:74 [Panama].

Fulvius atratus Distant

Fulvius atratus Distant, 1884:281 [new species-- Guatemala].-- Carvalho and Afonso, 1977:7 [Gatun Lake].

Note: Carvalho and Costa (1994:78) explained that Carvalho's (1957:19), treatment of this species as a junior synonym of *F. quadristillatus* Stål had been an error.

Fulvius bisbistillatus (Stål)

Cyllecoris bisbistillatus Stål, 1860:54 [new species-- Brazil].

Fulvius albomaculatus Distant, 1884:282 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:105 [Volcan de Chiriqui].-- Bergroth, 1920:75 [Panama].

Fulvius bisbistillatus.--Carvalho, 1957:15 [Panama].-- Carvalho and Afonso, 1977:7 [Gatun Lake].-- Carvalho and Dolling, 1976:792 [V. de Chiriqui].-- Carvalho and Costa, 1994:78 [Barro Colorado Islands; Boqueron; Cabima; Darien Province; Ft. Amador; Ft. Gulick; Gatun Lake, Chiriqui Province; Las Cumbres; Tres Rios Plantation; Volcan de Chiriqui].-- Schuh, 1995:26 [Panama].

Fulvius breddini Reuter

Fulvius breddini Reuter, 1902:156 [new species-- Brazil].-- Carvalho and Costa, 1994:82 [El Real].

Fulvius chiriquinus Carvalho and Costa

Fulvius chiriquinus Carvalho and Costa, 1994:90 [new species-- Panama: Volcan de Chiriqui].

Fulvius fuscans Distant

Fulvius fuscans Distant, 1884:282 [new species-- Guatemala]; 1893:440 [Bugaba].-- Carvalho and Costa, 1994:97 [Panama].

Fulvius flavicornis.-- Carvalho, 1957:17 [Panama].

Note: The Panama and Guatemala localities given for *F. flavicornis* Poppius in Carvalho (1957:17) resulted from a printer's error that shifted these localities from *P. fuscans* and left the latter without distribution records.

Fulvius gamboensis Carvalho and Costa

Fulvius gamboensis Carvalho and Costa, 1994:97 [new species-- Panama: Gamboa, Pipeline Road, Canal Zone].

Fulvius imbecilus (Say)

Capsus imbecilus Say, 1832:25 [new species-- United States of America].

Fulvius imbecilus.-- Carvalho and Afonso, 1977:7 [Gatun Lake].-- Carvalho and Costa, 1994:100 [Tres Rios Plantation, Gatun Lake].-- Schuh, 1995:27 [Panama].

Fulvius minimus Carvalho

Fulvius minimus Carvalho, 1988b:880 [new species-- Brazil. Panama: Tres Rios Plantation, Gatun Lake].-- Carvalho and Costa, 1994:110 [Tres Rios Plantation, Gatun Lake].-- Schuh, 1995:28 [Panama].

Fulvius quadristillatus (Stål)

Cyllecoris quadristillatus Stål, 1860:54 [Brazil].

Fulvius quadristillatus-- Schuh, 1995:29 [Panama].

Note: Schuh's (1995:above) record for the Panama occurrence of this species was perhaps a *lapsus*; his credited source, Carvalho and Afonso (1977:7), listed only Brazil and Peru; apparently, the "Panama" locality given under the species (*F. imbecilus*) just above *quadristillatus* was accidentally transferred to it.

Fulvius venezuelanus Carvalho and Costa

Fulvius venezuelanus Carvalho and Costa, 1994:133 [new species-- Panama. Venezuela].

Genus *Peltidocylapus* Poppius

Cylapus (Peltidocylapus) Poppius, 1909:12. Type species: *Valdasus rugosus* Distant, designated by Carvalho, 1957:31.

Peltidocylapus-- Carvalho and Fontes, 1968:275.

Peltidocylapus cerbereus (Distant)

Valdasus cerbereus Distant, 1883:244 [new species-- Panama: Bugaba].-- Atkinson, 1890:49 [Bugaba].

Cylapus cerbereus-- Bergroth, 1920:71 [Panama].

Cylapus (Peltidocylapus) cerbereus-- Carvalho, 1957:29 [Panama].

Peltidocylapus cerbereus-- Carvalho and Fontes, 1968:276 [Panama].-- Schuh, 1995:32 [Panama].

Peltidocylapus erebeus (Distant)

Valdasus erebeus Distant, 1883:244 [new species-- Panama: Bugaba].-- Atkinson, 1890:48 [Bugaba].

Cylapus erebeus-- Bergroth, 1920:71 [Panama].

Cylapus (Peltidocylapus) erebeus-- Carvalho, 1957:30 [Panama].

Peltidocylapus erebeus-- Carvalho and Fontes, 1968:276 [Panama].-- Carvalho and Dolling, 1976:794 [Bugaba].-- Schuh, 1995:32 [Panama].

Peltidocylapus nubilus (Distant)

Cylapus nubilus Distant, 1893:421 [new species-- Panama: Volcan de Chiriqui].-- Bergroth, 1920:71 [Panama].

Cylapus (Cylapus) nubilus-- Carvalho, 1957:30 [Panama].

Peltidocylapus nubilus.-- Carvalho and Fontes, 1968:276 [Panama].-- Carvalho and Dolling, 1976:803 [V. de Chiriqui].-- Schuh, 1995:32 [Panama].

Peltidocylapus picatus (Distant)

Valdasus picatus Distant, 1893:421 [new species-- Panama: Bugaba].-- Bergroth, 1920:71 [Panama].

Cylapus (Cylapus) picatus.-- Carvalho, 1957:30 [Panama].

Peltidocylapus picatus.-- Carvalho and Fontes, 1968:276 [Panama].-- Carvalho and Dolling, 1976:804 [Bugaba].-- Schuh, 1995:32 [Panama].

Peltidocylapus stygius (Distant)

Valdasus stygius Distant, 1883:245 [new species-- Panama: Bugaba].-- Atkinson, 1890:49 [Bugaba].

Cylapus stygius.-- Bergroth, 1920:71 [Panama].

Cylapus (Cylapus) stygius.-- Carvalho, 1957:31 [Panama].

Peltidocylapus stygius.-- Carvalho and Fontes, 1968:276 [Panama].-- Carvalho and Dolling, 1976:807 [Bugaba].-- Schuh, 1995:32 [Panama].

Genus *Peritropoides* Carvalho

Peritropoides Carvalho, 1955a:624. Type species: *Peritropoides annulatus* Carvalho, original designation.

Peritropoides quadrinotatus Carvalho

Peritropoides quadrinotatus Carvalho, 1955a:625 [new species-- Panama: Barro Colorado Island, Canal Zone]; 1957:22 [Panama].-- Carvalho and Froeschner, 1987:193 [Barro Colorado Island, Canal Zone].-- Schuh, 1995:35 [Panama].

Genus *Trynocoris* Herring

Trynocoris Herring, 1976:91. Type species: *Trynocoris lawrencei* Herring, original designation.

Trynocoris lawrencei Herring

Trynocoris lawrencei Herring, 1976:92 [new species-- Panama: Barro Colorado Island].-- Schuh, 1976:21 [Panama]; 1995:38 [Panama].

SUBFAMILY DERAECORINAE DOUGLAS AND SCOTT

TRIBE CLIVINEMINI REUTER

Genus *Admetus* Distant

Admetus Distant, 1883:250. Type species: *Admetus fimbriatus* Distant, monotypic.

Admetus fimbriatus Distant

Admetus fimbriatus Distant, 1883:250 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:52 [Volcan de Chiriqui].-- Carvalho, 1952:50 [Panama]; 1957:37 [Panama].-- Carvalho and Dolling, 1976:797 [V. de Chiriqui].-- Schuh, 1995:587 [Panama].

Genus *Bothynotus* Fieber

Bothynotus Fieber, 1864:76. Type species: *Bothynotus minki* Fieber, a junior synonym of *Phytocoris pilosus* Boheman, monotypic.

Note: Henry (1979:233-234) gave a key to the 10 New World species.

Bothynotus impunctatus Henry

Bothynotus impunctatus Henry, 1979:236 [new species-- Mexico. Panama: Tabernilla, Canal Zone].-- Schuh, 1995:588 [Panama].

Genus *Guanabarea* Carvalho

Guanabarea Carvalho, 1948b:532. Type species: *Ambracius phaleratus* Stål, original designation.

Guanabarea panamensis Carvalho

Guanabarea panamensis Carvalho, 1985b:319 [new species-- Panama: Cerro Campana].-- Carvalho and Froeschner, 1987:166 [Cerro Campana].-- Schuh, 1995:591 [Panama].

TRIBE DERAECORINI DOUGLAS AND SCOTT**Genus *Carmelocoris* Carvalho and China**

Carmelocoris Carvalho and China, 1959:70. Type species: *Carmelus sanguineus* Distant, original designation.

Carmelocoris sanguineus (Distant)

Carmelus sanguineus Distant, 1893:44 [new species-- Panama: Bugaba].
Carmelocoris sanguineus.-- Carvalho and China, 1959:71 [Bugaba].-- Carvalho and Dolling, 1976:806 [Bugaba].-- Schuh, 1995:598 [Panama].

Genus *Carmelus* Distant

Carnus Distant, 1884:287, preoccupied. Type species: *Carnus lunatus* Distant, designated by Kirkaldy, 1906a:147.

Carmelus Distant, 1884:297. Proposed as a new name for preoccupied *Carnus* Distant.

Carmelus fasciatus Distant

Carmelus fasciatus Distant, 1893:444 [new species-- Panama: Bugaba].-- Carvalho, 1957:55 [Panama].-- Carvalho and Dolling, 1976:797 [Bugaba].-- Schuh, 1995:797 [Panama].

Carmelus formosus (Distant)

Carnus formosus Distant, 1884:287 [new species-- Panama: Volcan de Aittlan].
Carmelus formosus.-- Atkinson, 1890:44 [Volcan de Aittlan].-- Carvalho, 1957:55 [Panama].-- Carvalho and Dolling, 1976:797 [V. de Aittlan].-- Schuh, 1995:598 [Panama].

Carmelus lunatus (Distant)

Carnus lunatus Distant, 1884:287 [new species-- Panama: Bugaba; Volcan de Chiriqui].
Carmelus lunatus.-- Atkinson, 1890:44 [Volcan de Chiriqui].-- Carvalho, 1957:55 [Panama].-- Carvalho and Dolling, 1976:800 [V. de Chiriqui].-- Schuh, 1995:598 [Panama].

Genus *Deraeocapsus* Knight

Deraeocapsus Knight, 1921:198. Type species: *Deraeocoris ingens* Van Duzee, original designation.

Deraeocapsus panamensis Carvalho

Deraeocapsus panamensis Carvalho, 1992:477 [new species-- Panama: Fortuna, Canal Zone].-- Carvalho and Froeschner, 1995:490 [Fortuna, Canal Zone].-- Schuh, 1995:600 [Panama].

Genus *Lundiella* Carvalho

Lundiella Carvalho, 1951a:132. Type species: *Cimatlan pertingens* Distant, original designation.
Note: Carvalho and Maldonado (1982b) gave a key (pages 55-56) to nine species.

Lundiella panamensis Schaffner and Carvalho

Lundiella panamensis Schaffner and Carvalho, 1985:313 [new species-- Panama: Bocas d. T., Corriente Grande].-- Carvalho and Froeschner, 1990:328 [Bocas d. T., Corriente Grande].-- Schuh, 1995:629 [Panama].

Lundiella pertingens (Distant)

Cimatlan pertingens Distant, 1893:439 [new species-- Panama: Volcan de Chiriqui].
Lundiella pertingens.-- Carvalho, 1957:87 [Panama].-- Carvalho and Dolling, 1976:804 [V. de Chiriqui].-- Schuh, 1995:629 [Panama].

Genus *Pseudocarnus* Distant

Pseudocarnus Distant, 1884:288. Type species: *Pseudocarnus lineolatus* Distant, designated by Kirkaldy, 1906a:147.

Pseudocarnus lineolatus Distant

Pseudocarnus lineolatus Distant, 1884:288 [new species-- Panama: Bugaba].-- Atkinson, 1890:44 [Bugaba].-- Carvalho, 1957:51 [Panama].-- Carvalho and Dolling, 1976:800 [Bugaba].-- Schuh, 1995:632 [Panama].

TRIBE HYALIODINI CARVALHO AND DRAKE

Genus *Annona* Distant

Ania Distant, 1884:289, preoccupied. Type species: *Ania bimaculata* Distant, designated by Kirkaldy, 1906a:129.

Annona Distant, 1884:297. Proposed as new name for preoccupied *Ania* Distant.

Annona bimaculata (Distant)

Ania bimaculata Distant, 1884:290 [new species-- Guatemala. Panama: Volcan de Chiriqui].
Annona bimaculata.-- Atkinson, 1890:44 [Volcan de Chiriqui].-- Maldonado, 1976a:10 [Boquete, Chiriqui].-- Carvalho and Dolling, 1976:794 [V. de Chiriqui].-- Carvalho and Schaffner, 1977:248 [Panama].-- Schuh, 1995:636 [Panama].

Genus *Antias* Distant

Antias Distant, 1884:298. Type species: *Antias subaeratus* Distant, designated by Kirkaldy, 1906a:146.

Note: Carvalho (1982) provided a key (pages 325-326) to 16 species.

Antias aheneus Distant

Antias aheneus Distant, 1884:299 [new species-- Panama: David].-- Atkinson, 1890:47 [Panama].-- Carvalho, 1957:45 [Panama]; 1982:325 [Panama].-- Carvalho and Dolling, 1976:792 [David].-- Schuh, 1995:636 [Panama].

Genus *Auchus* Distant

Auchus Distant, 1893:450. Type species: *Auchus foliaceus* Distant, monotypic.

Auchus foliaceus Distant

Auchus foliaceus Distant, 1893:451 [new species-- Panama: Bugaba].-- Knight and Carvalho, 1943:83 [Panama].-- Carvalho, 1957:45 [Panama]; 1974b:497 [Bugaba].-- Carvalho and Dolling, 1976:797 [Bugaba].-- Schuh, 1995:637 [Panama].

Genus *Florus* Distant

Florus Distant, 1884:301. Type species: *Florus insolitus* Distant, monotypic.

Note: Schaffner and Carvalho (1985) gave a key (pages 312-313) to six species.

Florus englemani Schaffner and Carvalho

Florus englemani Schaffner and Carvalho, 1985:331 [new species-- Panama: Canal Zone; Fortuna, Chiriqui].-- Carvalho and Froeschner, 1990:324 [Fortuna, Chiriqui].-- Schuh, 1995:639 [Panama].

Florus insolitus Distant

Florus insolitus Distant, 1884:301 [new species-- Panama: David].-- Atkinson, 1890:47 [Panama].-- Carvalho, 1957:46 [Panama].-- Maldonado, 1976a:10 [Coco Solo Hospita;].-- Carvalho and Dolling, 1976:799 [David].-- Schuh, 1995:639 [Panama].

Florus panamensis Carvalho and Costa

Florus panamensis Carvalho and Costa 1995:358 [new species: Panama: Coclé, El Vale].

Florus vittifrons Carvalho

Florus vittifrons Carvalho, 1955b:112 [new species-- Panama: Barro Colorado Island, Canal Zone]; 1957:46 [Panama].-- Carvalho and Froeschner, 1987:164 [Barro Colorado Island, Canal Zone].-- Schuh, 1995:639 [Panama].

Genus *Hyaliodes* Reuter

Hyaliodes Reuter, 1876:83. Type species: *Capsus vitripennis* Say, monotypic.

Hyaliodes decoloris (Distant)

Annona decoloris Distant, 1884:290 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:44 [Volcan de Chiriqui].

Ania decoloris.-- Distant, 1884:290 [Volcan de Chiriqui].

Hyaliodes decoloris.-- Carvalho, 1957:47 [Panama].-- Carvalho and Dolling, 1976:795 [V. de Chiriqui].-- Schuh, 1995:640 [Panama].

Note: Distant (1884:290) corrected the caption for the illustration of *Ania decoloris* by pointing out that "On the Plate the figure of this species has been erroneously ascribed to the genus *Mala*."

Hyaliodes vitreus (Distant)

Neocarnus vitreus Distant, 1884:289 [new species-- Panama: Bugaba].-- Atkinson, 1890:45 [Bugaba].

Hyaliodes vitreus.-- Carvalho, 1957:48 [Panama].-- Carvalho and Dolling, 1976:810 [Bugaba].-- Schuh, 1995:641 [Panama].

Genus *Paracarnus* Distant

Paracarnus Distant, 1884:289. Type species: *Paracarnus elongatus* Distant, monotypic.

Paracarnus elongatus Distant

Paracarnus elongatus Distant, 1884:289 [new species-- Panama: Bugaba].-- Atkinson, 1890:45 [Bugaba].-- China, 1931:288 [Panama].-- Carvalho, 1957:50 [Panama].-- Carvalho and Dolling, 1976:796 [Bugaba].-- Schuh, 1995:644 [Panama].

Genus *Trygo* Distant

Trygo Distant, 1884:300. Type species: *Trygo imitationis* Distant, monotypic.

Trygo bipunctatus Carvalho

Trygo bipunctatus Carvalho, 1985c:375 [new species-- Panama: Fortuna, Canal Zone].-- Carvalho and Froeschner, 1987:217 [Fortuna, Canal Zone].-- Schuh, 1995:646 [Panama].

Trygo imitationis Distant

Trygo imitationis Distant, 1884:300 [new species-- Panama: Bugaba].-- Atkinson, 1890:47 [Bugaba].-- Carvalho, 1957:51 [Panama].-- Carvalho and Dolling, 1976:799 [Bugaba].-- Schuh, 1995:646 [Panama].

TRIBE SURINAMELLINI CARVALHO AND ROSA**Genus *Eustictus* Reuter**

Eustictus Reuter, 1909:35. Type species: *Megacaelum grossum* Uhler, monotypic.

Eustictus panamensis Carvalho

Eustictus panamensis Carvalho, 1990:219 [new species-- Panama: Las Cumbres].-- Carvalho and Froeschner, 1995:492 [Las Cumbres].-- Schuh, 1995:652 [Panama].

SUBFAMILY ISOMETOPINAE FIEBER

Note: This subfamily was revised by Henry (1977, 1979a, 1980) and by Henry and Herring (1979). Henry (1980:179-181) included a key to 11 New World genera.

Genus *Lidopiella* Henry

Lidopiella Henry, 1980:183. Type species: *Lidopiella slateri* Henry, original designation.

Lidopiella slateri Henry

Lidopiella slateri Henry, 1980:183 [new species-- Panama: Barro Colorado Isle, Canal Zone].-- Schuh, 1995:11 [Panama].

Genus *Myiomma* Puton

Myiomma Puton, 1872:177. Type species: *Myiomma fieberi* Puton, monotypic.

Note: Henry (1979a:554-556) keyed 10 New World species.

Myiomma ornatum Henry

Myiomma ornatum Henry, 1979a:563 [new species-- Panama: Las Cumbres].-- Schuh, 1995:14 [Panama].

Genus *Myiopus* Henry

Myiopus Henry, 1980:191. Type species: *Myiopus woldai* Henry, monotypic.

Myiopus woldai Henry

Myiopus woldai Henry, 1980:191 [new species-- Panama: Fortuna, Chiriqui].-- Schuh, 1995:15 [Panama].

SUBFAMILY MIRINAE HAHN**TRIBE HERDONIINI DISTANT**

Notes: 1) Schuh's (1995:668) inclusion of the species *Herdonius panamensis* Distant (1893:419) in his catalog of the world's Miridae was in error; that species belongs in the Nabidae.-- see under Nabidae in the present study. 2) A key to 24 genera of Herdoniini was given by Carvalho (1973:197-200).

Genus *Allommatus* Reuter

Allommatus Reuter, 1907a:43. Type species: *Allommatus albosignatus* Reuter, monotypic.

Allommatus foedus (Distant)

Zosippus foedus Distant, 1893:418 [new species-- Panama: Bugaba].

Allommatus foedus.--Carvalho, 1959:348 [Panama].-- Carvalho and Ferreira, 1973:92 [Bugaba].-- Carvalho and Dolling, 1976:797 [Bugaba].-- Schuh, 1995:663 [Panama].

Genus *Myrmecomiris* Maldonado

Myrmecomiris Maldonado, 1976a:7. Type species: *Myrmecomiris clistogaster* Maldonado, original designation.

Myrmecomiris clistogaster Maldonado

Myrmecomiris clistogaster Maldonado, 1976a:9 [new species-- Panama: Coco Solo Hospital, Canal Zone].-- Schuh, 1995:668 [Panama].

Genus *Paraxenetus* Reuter

Paraxenetus Reuter, 1907a:46. Type species: *Xenetus bracteatus* Distant, designated by VanDuzee, 1916:37.

Paraxenetus bracteatus (Distant)

Xenetus bracteatus Distant, 1883:240 [new species-- Guatemala].

Paraxenetus bracteatus-- Maldonado, 1976a:11 [Coco Solo Hospital].

Genus *Xenetus* Distant

Xenetus Distant, 1883:239. Type species: *Xenetus lanuginosus* Distant, designated by Kirkaldy, 1906a:133.

Xenetus ambiguus Distant

Xenetus ambiguus Distant, 1883:239 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:39 [Volcan de Chiriqui].-- Carvalho, 1959:354 [Panama].-- Carvalho and Dolling, 1976:792 [V. de Chiriqui].

Xenetus lanuginosus-- Schuh, 1995:672, in part [Panama].

Note: Schuh (1995:672) placed *ambiguus* as a junior synonym of *X. lanuginosus* Distant and gave as authority for such placement Carvalho, 1973:196; however, Carvalho and Dolling's (1976:792, 800) study of Distant types indicated these as two valid species.

Xenetus lanuginosus Distant

Xenetus lanuginosus Distant, 1883:239 [new species-- Guatemala]; 1893:417 [Bugaba].-- Carvalho, 1959:354 [Panama].-- Schuh, 1995:672, in part [Panama].

Genus *Zacynthus* Distant

Zacorus Distant, 1883:240, preoccupied. Type species: *Zacorus staphyliniformis* Distant, designated by Kirkaldy, 1906a:133.

Zacynthus Distant, 1884:297. Proposed as new name for preoccupied *Zacorus* Distant.

Zacynthus curvicornis (Distant)

Zacorus curvicornis Distant, 1883:241 [new species-- Panama: Bugaba].

Zacynthus curvicornis-- Atkinson, 1890:40 [Bugaba].-- Carvalho, 1959:354 [Panama].-- Carvalho and Ferreira, 1974:186 [Panama].-- Carvalho and Dolling, 1976:795 [Bugaba].-- Schuh, 1995:672 [Panama].

Genus *Zosippus* Distant

Zosippus Distant, 1883:241. Type species: *Zosippus inhoneus* Distant, monotypic.

Note: Carvalho (1974a:192) presented a key to separate the two following species.

Zosippus gibbus Distant

- Zosippus gibbus* Distant, 1893:418 [new species-- Panama: Bugaba].-- Carvalho, 1974a:192 [Bugaba].-- Maldonado, 1976a:11 [Coco Solo Hospital].--Carvalho and Dolling, 1976:798 [Bugaba].-- Schuh, 1995:673 [Panama].
Paraxenetus gibbus.-- Carvalho, 1959:352 [Panama].

Zosippus inhoneustus Distant

- Zosippus inhoneustus* Distant, 1883:241 [new species-- Panama: Tolé].-- Atkinson, 1890:60 [Tolé].-- Reuter, 1905:28 [Panama].-- Carvalho, 1959:355 [Panama]; 1974a:193 [Tolé].-- Carvalho and Dolling, 1976:799 [Tolé].-- Schuh, 1995:673 [Panama].

TRIBE MIRINI HAHN

Genus *Calocorisca* Distant

- Calocorisca* Distant, 1884:280. Type species: *Calocorisca villosa* Distant, designated by Kirkaldy, 1906a:141.
Note: Carvalho (1986a) reviewed *Calocorisca* and gave a key (page 57) to 12 species.

Calocorisca chontalensis Distant

- Calocorisca chontalensis* Distant, 1893:439 [new species-- Nicaragua].-- Carvalho, 1986a:63 [Chiriqui, Dist. Renacimiento, Sta. Clara; Sta. Rita Arriba; Volcano Chiriqui; Zamora].-- Schuh, 1995:721 [Panama].

Calocorisca fortuna Carvalho

- Calocorisca fortuna* Carvalho, 1986a:65 [new species-- Panama: Fortuna, Chiriqui].-- Carvalho and Froeschner, 1990:316 [Fortuna].-- Schuh, 1995:721 [Panama].

Calocorisca longirostris Carvalho

- Calocorisca longirostris* Carvalho, 1986a:69 [new species-- Panama: Renacimiento, Chiriqui; Cerro Punta, Chiriqui].-- Carvalho and Froeschner, 1990:317 [Chiriqui District, Renacimiento, Santa Clara].-- Schuh, 1995:721 [Panama].

Calocorisca tenera Distant

- Calocorisca tenera* Distant, 1884:280 [new species-- Guatemala].-- Carvalho, 1951b:155 [El Volcan, Chiriqui]; 1959:52 [Panama].-- Schuh, 1995:721 [Panama].

Calocorisca villosa Distant

- Calocorisca villosa* Distant, 1884:280 [new species-- Guatemala. Panama: Volcan de Chiriqui].-- Atkinson, 1890:104 [Panama].-- Carvalho, 1951b:155 [El Volcan Chiriqui]; 1959:52

[Panama]; 1986a:77 [Volcan de Chiriqui].-- Carvalho and Dolling, 1976:810 [V. de Chiriqui].

Genus *Calondas* Distant

Calondas Distant, 1884:268. Type species: *Calondas superbus* Distant, designated by Kirkaldy, 1906a:138.

Calondas fasciatus Distant

Calondas fasciatus Distant, 1884:268 [new species-- Panama: Bugaba].-- Atkinson, 1890:79 [Bugaba].-- Carvalho, 1959:52 [Panama].-- Carvalho and Dolling, 1976:797 [Bugaba].-- Schuh, 1995:721 [Panama].

Calondas superbus Distant

Calondas superbus Distant, 1884:268 [new species-- Mexico. Guatemala. Panama: Volcan de Chiriqui].-- Atkinson, 1890:79 [Panama].-- Carvalho, 1951b:156 [Volcan de Chiriqui]; 1959:53 [Panama].-- Schuh, 1995:721 [Panama].

Genus *Chrysodasia* Reuter

Chrysodasia Reuter, 1892:400. Type species: *Chrysodasia strigifrons* Reuter, monotypic.
Note: A key to nine species was given by Carvalho (1986b:227-229).

Chrysodasia chiriquina Carvalho

Chrysodasi chiriquina Carvalho, 1986b:221 [new species-- Panama: Renacimiento, Chiriqui; Santa Clara, Chiriqui].-- Carvalho and Froeschner, 1990:318 [Chiriqui Dist.: Renacimiento, Santa Clara].-- Schuh, 1995:742 [Panama].

Chrysodasia crassa (Distant)

Neoborus crassus Distant, 1893:436 [new species-- Panama: Volcan de Chiriqui].
Tropidosteptes crassus.-- Carvalho, 1959:271 [Panama].-- Carvalho and Dolling, 1976:795 [V. de Chiriqui].
Chrysodasia crassa.-- Schuh, 1995:742 [Panama].

Genus *Derophthalma* Berg

Derophthalma Berg, 1883:22. Type species: *Derophthalma reuteri* Berg, monotypic.
Note: Carvalho and Gomes (1980) revised this genus and included a key (pages 97-100) to 21 species.

Derophthalma laterata (Distant)

Monalocorisca laterata Distant, 1893:443 [new species-- Panama: Volcan de Chiriqui].
Derophthalma laterata.-- Carvalho, 1959:81 [Panama]; 1981:2 [Chiriqui].-- Carvalho and Dolling,

1976:800 [V. de Chiriqui].-- Carvalho and Gomes, 1980:118 [Volcan de Chiriqui].-- Schuh, 1995:754 [Panama].

Genus *Eubatas* Distant

Eubatas Distant, 1884:277. Type species: *Eubatas chiriquinus* Distant, monotypic.

Eubatas chiriquinus Distant

Eubatas chiriquinus Distant, 1884:277 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:103 [Volcan de Chiriqui].-- Carvalho, 1959:89 [Panama].-- Carvalho and Dolling, 1976:794 [V. de Chiriqui].-- Carvalho and Wallerstein, 1978:263 [Panama].-- Schuh, 1995:761 [Panama].

Genus *Euchilocoris* Reuter

Euchilocoris Reuter, 1907a:48. Type species: *Lopus hahni* Stål, monotypic.

Note: Carvalho (1986c:258-259) gave a key to 12 species.

Euchilocoris rufinasoides Carvalho

Euchilocoris rufinasoides Carvalho, 1986c:266 [new species-- Costa Rica. Panama: Renacimiento, Chiriqui; Santa Clara, Chiriqui].-- Carvalho and Froeschner, 1990:323 [Chiriqui Dist.: Renacimiento, Santa Clara].-- Schuh, 1995:764 [Panama].

Euchilocoris scutellatus (Distant)

Poecilocapsus scutellatus Distant, 1893:436 [new species-- Mexico].

Euchilocoris scutellatus.-- Maldonado, 1976a:10 [Coco Solo Hospital].-- Carvalho, 1986c:268 [Trinidad River].-- Schuh, 1995:764.

Genus *Eurotas* Distant

Eurotas Distant, 1884:303. Type species: *Eurotas nodosus* Distant, monotypic.

Eurotas nodosus Distant

Eurotas nodosus Distant, 1884:303 [new species-- Panama: Bugaba].-- Atkinson, 1890:160 [Bugaba].-- Carvalho, 1959:90 [Panama].-- Carvalho and Dolling, 1976:803 [Bugaba].-- Schuh, 1995:765 [Panama].

Genus *Fortunacoris* Carvalho

Fortunacoris Carvalho, 1985e:656. Type species: *Fortunacoris castaneus* Carvalho, original designation.

Fortunacoris castaneus Carvalho

Fortunacoris castaneus Carvalho, 1985c:656 [new species-- Panama: Fortuna].-- Carvalho and Froeschner, 1990:324 [Fortuna].-- Schuh, 1995:769 [Panama].

Genus *Guianella* Carvalho

Guianella Carvalho, 1946a:4. Type species: *Guianella marmorata* Carvalho, original designation.

Guianella nematocerata Maldonado and Carvalho

Guianella nematocerata Maldonado and Carvalho, 1981b:389 [new species-- Panama: Coco Solo Hospital, Canal Zone].-- Carvalho and Froeschner, 1987:167 [Coco Solo Hospital, Canal Zone].-- Schuh, 1995:773 [Panama].

Guianella pilosa Maldonado and Carvalho

Guianella pilosa Maldonado and Carvalho, 1981b:390 [new species-- Panama: Coco Solo Hospital, Canal Zone].-- Carvalho and Froeschner, 1987:167 [Coco Solo Hospital, Canal Zone].-- Schuh, 1995:773 [Panama].

Guianella trimaculata Maldonado and Carvalho

Guianella trimaculata Maldonado and Carvalho, 1981b:391 [new species-- Panama: Coco Solo Hospital, Canal one.].-- Carvalho and Froeschner, 1987:167 [Coco Solo Hospital, Canal Zone].-- Schuh, 1995:773 [Panama].

Guianella tuberculifrons Maldonado and Carvalho

Guianella tuberculifrons Maldonado and Carvalho, 1981b:392 [new species-- Panama: Las Cumbres].-- Carvalho and Froeschner, 1987:167 [Las Cumbres].-- Schuh, 1995:773 [Panama].

Genus *Henicocnemis* Stål

Henicocnemis Stål, 1860:53. Type species: *Henicocnemis patella* Stål, monotypic.

Note: Carvalho and Fontes (1972) reviewed this genus and gave a key (pages 523-524) to its seven species.

Henicocnemis alboornatus Distant

Henicocnemis alboornatus Distant, 1884:283 [new species-- Panama: Bugaba].-- Atkinson, 1890:106 [Bugaba].-- Carvalho, 1959:99 [Panama].-- Carvalho and Fontes, 1972:526 [Panama].-- Carvalho and Dolling, 1976:792 [Bugaba].-- Schuh, 1995:775 [Panama].

Genus *Horcias* Distant

Horcias Distant, 1884:277. Type species: *Horcias variegatus* Distant, designated by Kirkaldy,

1906a:141.

Note: Carvalho (1976b) gave keys to two subgenera (*Horcias* and *Horciasoides*) and to the 31 included species.

Horcias centralis Carvalho

Horcias (Horciasoides) centralis Carvalho, 1976b:431, 452 [new species-- Costa Rica. Panama: El Valle].-- Carvalho and Froeschner, 1987:170 [El Vale].-- Schuh, 1995:777 [Panama].

Horcias chiriquinus Distant

Horcias chiriquinus Distant, 1884:278 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:103 [Volcan de Chiriqui].-- Carvalho, 1959:100 [Panama].-- Carvalho and Dolling, 1976:794 [V. de Chiriqui].-- Schuh, 1995:777 [Panama].

Horcias rutilus Distant, 1884:279 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:104 [Volcan de Chiriqui].-- Carvalho, 1959:102 [Panama].-- Carvalho and Dolling, 1976:806 [V. de Chiriqui].

Horcias (Horcias) chiriquinus.-- Carvalho, 1976b:430 [Volcan de Chiriqui].

Horcias notatus Distant

Horcias notatus Distant, 1884:278 [new species-- Costa Rica. Panama: David].-- Atkinson, 1890:104 [Panama].--Carvalho and Dolling, 1976:802 [David].-- Schuh, 1995:778 [Panama].

Horcias (Horciasoides) notatus.-- Carvalho, 1976b:431, 462 [David].

Horcias plagosus Distant

Horcias plagosus Distant, 1884:279 [new species-- Panama: Volcan de Chiriqui]; 1893: 438 [Bugaba; Tolé].--Atkinson, 1890:104 [Volcan de Chiriqui].-- Carvalho, 1951b:156 [Chiva Chiva Trail, Canal Zone]; 1959:102 [Panama].-- Carvalho and Dolling, 1976:804 [V. de Chiriqui].-- Schuh, 1995:779 [Panama].

Horcias (Horciasoides) plagosus.-- Carvalho, 1976b:431, 466 [Bugaba; Volcan de Chiriqui].

Horcias scutellatus Distant

Horcias scutellatus Distant, 1884:278 [new species-- Guatemala. Panama: Bugaba; Volcan de Chiriqui].-- Atkinson, 1890:103 [Bugaba].-- Carvalho, 1959:102 [Panama].-- Carvalho and Dolling, 1976:866 [Bugaba].-- Schuh, 1995:779 [Panama].

Horcias atratus Distant, 1884:280 [new species-- Panama: Volcan de Chiriqui]; 1893:439 [Bugaba; Tolé].-- Atkinson, 1890:103 [Volcan de Chiriqui].-- Carvalho, 1959:100 [Panama].-- Carvalho and Dolling, 1976:793 [V. de Chiriqui].

Horcias (Horcias) scutellatus.-- Carvalho, 1976b:430, 440 [Bugaba; Volcan de Chiriqui].

Horcias thoracicus Distant

Horcias thoracicus Distant, 1884:278 [new species-- Panama: Bugaba].-- Atkinson, 1890:104 [Bugaba].-- Carvalho, 1959:103 [Panama].-- Carvalho and Dolling, 1976:808 [Bugaba].--

Schuh, 1995:779 [Panama].

Horcias (*Horcias*) *thoracicus*.-- Carvalho, 1976b:430, 432 [Barro Colorado Island, Canal Zone; Bugaba; David].

Horcias unicolor Distant

Horcias unicolor Distant, 1884:279 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:104 [Volcan de Chiriqui].-- Carvalho, 1959:103 [Panama].-- Carvalho and Dolling, 1976:809 [V. de Chiriqui].-- Schuh, 1995:779 [Panama].

Horcias (*Horciasoides*) *unicolor*.-- Carvalho, 1976b:431, 469 [Volcan de Chiriqui].

Horcias variegatus Distant

Horcias variegatus Distant, 1884:227 [new species-- Panama: Bugaba; David].-- Atkinson, 1890:104 [Bugaba; David].-- Carvalho, 1959:103 [Panama].-- Carvalho and Jurburg, 1974:57 [Bugaba; David].-- Maldonado, 1976a:10 [Coco Solo Hospital].-- Carvalho and Dolling, 1976:809 [David].

Horcias (*Horcias*) *variegatus*.-- Carvalho, 1976b:430, 443 [Barro Colorado Island, Canal Zone; Bugaba; David].

Genus *Lampethusa* Distant

Lampethusa Distant, 1884:303. Type species: *Lampethusa anatina* Distant, monotypic.

Lampethusa anatina Distant

Lampethusa anatina Distant, 1884:303 [new species-- Guatemala]; 1893:451 [Bugaba].-- Reuter, 1905:18 [Panama].-- Knight, 1933:72 [Canal Zone].-- Carvalho, 1947:9 [Panama]; 1959:107 [Panama].-- Kelton, 1959:17 [Chiriqui].-- Maldonado, 1976a:10 [Coco Solo Hospital; Madden Reservoir].

Lampethusa annulata (Distant)

Paracalocoris annulatus Distant, 1893:264 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Atkinson, 1890:69 [Bugaba; Volcan de Chiriqui].

Lampethusa annulata.-- Carvalho, 1959:107b [Panama].-- Carvalho and Dolling, 1976:792 [Bugaba].-- Schuh, 1995:786 [Panama].

Genus *Minytus* Distant

Minytus Distant, 1883:237. Type species: *Minytas argillaceus* Distant, designated by Kirkaldy, 1906a:144.

Minytus amplificatus Distant

Minytus amplificatus Distant, 1883:238 [new species-- Panama: Volcan de Chiriqui].-- Carvalho, 1959:163 [Panama].-- Carvalho and Dolling, 1976:792 [V. de Chiriqui].-- Schuh, 1995:839 [Panama].

Minytus argillaceus [sic].-- Atkinson, 1890:38 [Volcan de Chiriqui].-- Carvalho, 1959:163 [Panama].

Note: Atkinson (1890:above) switched the type localities for *amplificatus* and "*argillaceus*" and led Carvalho (1959:above) to list the latter for Panama.

Genus *Monalocorisca* Distant

Monalocorisca Distant, 1884:286. Type species: *Monalocorisca granulata* Distant, designated by Kirkaldy, 1906a:147.

Monalocorisca ravida Distant

Monalocorisca ravida Distant, 1884:286 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:44 [Volcan de Chiriqui].-- Carvalho, 1959:169 [Panama].-- Carvalho and Dolling, 1976:805 [V. de Chiriqui].-- Schuh, 1995:843 [Panama].

Monalocorisca tuberculata Distant

Monalocorisca tuberculata Distant, 1893:442 [new species-- Panama: Volcan de Chiriqui].-- Carvalho, 1959:169 [Panama].-- Carvalho and Dolling, 1976:809 [V. de Chiriqui].-- Schuh, 1995:843 [Panama].

Genus *Neurocolpus* Reuter

Neurocolpus Reuter 1876:69. Type species: *Capsus nubilus* Say, monotypic.

Note: The revision of this genus by Henry and Kim (1984) contained a key (pages 12-15) to its 19 species.

Neurocolpus mexicanus Distant

Neurocolpus mexicanus Distant, 1883:262 [new species-- Mexico]; 1893:427 [David; Taboga Island].-- Carvalho, 1959:171 [Panama].-- Henry and Kim, 1984:54 [Panama].-- Schuh, 1995:849 [Panama].

Neurocolpus affinis Distant, 1883:263 [new species-- Guatemala. Panama: Volcan de Chiriqui].
Neurocolpus nubilus.-- Uhler, 1894b:255 [Panama].-- Kirkaldy, 1902b:252 [Panama].-- Barber, 1906:279 [Panama].

Note: Henry and Wheeler (1988:331) noted that "Earlier records of *nubilus* from Mexico to Panama should be assigned, in part to *N. mexicanus* or in part to other species described by Henry (1984, In Henry and Kim)." Because *N. mexicanus* is the species ranging as far south as Panama, the Panama records for *N. nubilus* are assigned here.

Genus *Notholopus* Bergroth

Notholopus Bergroth, 1922:3. Type species: *Lopus sulcatiformis* Stål, original designation.

Notholopus lunatus (Distant)

Paracalocoris lunatus Distant, 1883:265 [new species-- Guatemala].

Paracalocoris mastrucatus Distant, 1883:265 [new species-- Panama: Bugaba].-- Atkinson, 1890:70 [Bugaba].

Notholopus lunatus.-- Carvalho and Dolling, 1976:801 [Bugaba].-- Schuh, 1995:851 [Panama].

Genus *Phytocoris* Fallén

Phytocoris Fallén, 1814:10. Type species: *Cimex populi* Linnaeus, designated by Westwood, 1840:122.

Phytocoris annulicornis (Reuter)

Compsocerochoris annulicornis Reuter, 1876:70 [new species-- United States of America].-- Distant, 1883:261 [Bugaba; Volcan de Chiriqui].-- Atkinson, 1890:68 [Panama].

Phytocoris annulicornis.-- Carvalho, 1959:190 [Panama].-- Carvalho and Gomes, 1970:115 [Panama].

Phytocoris panamensis Carvalho and Costa

Phytocoris panamensis Carvalho and Costa, 1991:48 [new species-- Panama: Santa Clara, Renacimiento, Chiriqui District].-- Carvalho and Froeschner, 1995:501 [Renacimiento, Santa Clara, Chiriqui District].-- Schuh, 1995:897 [Panama].

Phytocoris veraguasinus Carvalho and Costa

Phytocoris veraguasinus Carvalho and Costa, 1991:51 [new species-- Panama: Santa Fé, Veraguas].-- Carvalho and Froeschner, 1995:501 [Santa Fé, Veraguas].-- Schuh, 1995:914 [Panama].

Phytocoris vilis (Distant)

Compsocerochoris vilis Distant, 1883:260 [new species-- Panama: Bugaba].-- Atkinson, 1890:69 [Panama].

Phytocoris vilis.-- Reuter, 1905:15 [Panama].-- Carvalho and Gomes, 1970:116 [Panama].-- Carvalho and Dolling, 1976:809 [Bugaba].

Phytocoris tibilis.-- Carvalho 1959:218 [Panama].

Note: Carvalho's (1959, above) Panama record for *tibilis* resulted from listing *vilis* as a synonym of *tibilis*.

Genus *Piasus* Distant

Piasus Distant, 1883:242. Type species: *Piasus illuminatus* Distant, a junior synonym of *Deraeocoris cribricollis* Stål, monotypic.

Note: Maldonado (1976a:10) mentioned a possibly undescribed species from Coco Solo Hospital, Canal Zone.

Piasus cribricollis (Stål)

Deraeocoris cribricollis Stål, 1860:48 [new species-- Brazil].

Piasus illuminatus Distant, 1883:242 [new species-- Panama: Volcan de Chiriqui]; 1893:419 [Bugaba; David].--Atkinson, 1890:49 [Volcan de Chiriqui].

Piasus cribricollis.-- Carvalho, 1946b:16 [Panama]; 1959:225 [Panama].-- Carvalho and Dolling, 1976:799 [V. de Chiriqui].-- Schuh, 1995:916 [Panama].

Genus *Poeas* Distant

Poeas Distant, 1893:428. Type species: *Poeas reuteri* Distant, monotypic.

Poeas reuteri Distant

Poeas reuteri Distant, 1893:428 [new species-- Panama: Bugaba].-- Carvalho, 1959:228 [Panama]; 1975b:168 [Panama].-- Carvalho and Dolling, 1976:805 [Bugaba].-- Schuh, 1995:923 [Panama].

Poeas reuteri reuteri.-- Carvalho, 1975b:168 [Panama].

Genus *Polymerus* Hahn

Polymerus Hahn, 1831:27. Type species: *Polymerus holosericeus* Hahn, monotypic.

Polymerus cuneatus (Distant)

Lygus cuneatus Distant, 1893:435 [new species-- Mexico. Guatemala. Nicaragua].

Polymerus testaceipes.-- Carvalho, 1959:340 [Panama].

Polymerus cuneatus.-- Carvalho and Afonso, 1977:11 [Gatun Lake, Barro Colorado].-- Schuh, 1995:927 [Panama].

Note: Carvalho (1959, above) cataloged this species as a junior synonym of *P. testaceipes* (Stål) and thus entered a Panama record for that species; but later (1993a:209) he resurrected *P. cuneatus* as a valid species.

Genus *Proba* Distant

Proba Distant, 1884:269. Type species: *Proba gracilis* Distant, monotypic.

Note: A key to eight South American species of this genus was given by Carvalho and Costa (1989b:333).

Proba distanti (Atkinson)

Lygus scutellatus Distant, 1884:274, preoccupied [new species-- Mexico. Guatemala].-- Carvalho 1951b:156 [Boquete].

Lygus distanti Atkinson, 1890:92 [proposed as new name for preoccupied *Lygus scutellatus* Distant].

Proba distanti.-- Carvalho, 1959:244 [Panama].

Proba sallei (Stål)

Lygus sallei Stål, 1862a:32 [new species-- Mexico].

Proba sallei-- Maldonado, 1976a:10 [Boquete, Chiriqui].-- Carvalho and Afonso, 1977:11 [Potrevilles].-- Carvalho and Costa, 1989b:338 [Panama].-- Schuh, 1995:937 [Panama].

Proba tactilis (Distant)

Lygus tactilis Distant, 1893:432 [new species-- Panama: Peña Blanca].

Lygus panamensis Distant, 1893:433 [new species-- Panama: Peña Blanca].

Proba tactilis-- Carvalho, 1959:245 [Panama].-- Carvalho and Dolling, 1976:808 [Peña Blanca].-- Carvalho and Costa, 1989b:341 [Panama].-- Schuh, 1995:937.

Proba vittiscutis (Stål)

Deraeocoris vittiscutis Stål, 1860:48 [new species-- Brazil].

Lygus cristatus Distant, 1884:247 [new species-- Mexico. Guatemala. Panama: Volcan de Chiriqui]; 1893:434 [Bugaba].-- Atkinson, 1890:87 [Panama].-- Carvalho, 1951b:156 [Boquete].

Horcias plumatus Distant, 1884:279 [new species-- Panama: Bugaba].-- Atkinson, 1890:104 [Bugaba].

Paralygus plumatus-- Reuter, 1905:23 [Panama].

Proba vittiscutis-- Carvalho, 1959:245 [Panama].-- Carvalho and Dolling, 1976:804 [Bugaba].-- Schuh, 1995:937 [Panama].

Genus *Taedia* Distant

Taedia Distant, 1883:262. Type species: *Taedia bimaculata* Distant, preoccupied, renamed *Taedia distantina* Carvalho, monotypic.

Note: Carvalho (1975b:182-186) gave a key to the 34 known species of *Taedia*, and later Carvalho and Costa (1993:218-221) offered a key to 47 South American species.

Taedia attenuata (Distant)

Paracalocoris attenuatus Distant, 1883:264 [new species-- Guatemala. Panama: Bugaba].-- Atkinson, 1890:69 [Bugaba].

Taedia attenuata-- Carvalho, 1959:258 [Panama]; 1975b:182 [Panama].-- Carvalho and Gomes, 1971a:250 [Panama].-- Carvalho and Dolling, 1976:793 [Bugaba].-- Schuh, 1995:952 [Panama].

Taedia distantina Carvalho

Taedia bimaculata Distant, 1883:262, preoccupied [new species--Panama: Bugaba].-- Atkinson, 1890:68 [Bugaba].

Taedia distantina Carvalho, 1954b:426 [proposed as new name for preoccupied *Taedia bimaculata* Distant]; 1959:259 [Panama].-- Carvalho and Gomes, 1971a:250 [Panama].-- Carvalho, 1975b:192 [Bugaba].-- Carvalho and Dolling, 1976:794 [Bugaba].-- Schuh, 1995:953 [Panama].

Taedia signata Carvalho and Gomes

Taedia signata Carvalho and Gomes, 1971a:277 [new species-- Costa Rica. Bolivia. Paraguay. Brazil. Argentina].--Maldonado, 1976a:10 [Coco Solo Hospital].-- Carvalho and Afonso, 1977:12 [Gatun Lake].-- Schuh, 1995:957 [Panama].

Genus *Taylorilygus* Leston

Lygus (*Taylorilygus*) Leston, 1952:219. Type species: *Lygus simonyi* Reuter, original designation. *Taylorilygus* Kelton, 1955:281.

Taylorilygus apicalis (Fieber)

Lygus apicalis Fieber, 1861:275 [new species-- Spain].
Phytocoris pallidulus Blanchard, 1852:193 [new species-- Chile].
Lygus apicalis-- Carvalho, 1951b:156 [Boquete].
Taylorilygus pallidulus-- Maldonado, 1976a:10 [Boquete, Chiriqui; Coco Solo Hospital].

Genus *Tropidosteptes* Uhler

Tropidosteptes Uhler, 1878:404. Type species: *Tropidosteptes cardinalis* Uhler, monotypic.
Note: Carvalho (1986d) provided a key (pages 402-403) to 11 Neotropical species.

Tropidosteptes fasciatus (Distant)

Neoborus fasciatus Distant, 1893:436 [new species-- Mexico. Panama: David].
Tropidosteptes fasciatus-- Carvalho, 1959:271 [Panama].-- Schuh, 1995:960 [Panama].

Tropidosteptes fortunensis Carvalho

Tropidosteptes fortunensis Carvalho, 1986d:406 [new species-- Panama: Fortuna, Canal Zone].-- Carvalho and Froeschner, 1990:345 [Fortuna, Canal Zone].-- Schuh, 1995:968 [Panama].

Tropidosteptes hirsutus (Distant)

Neoborus hirsutus Distant, 1884:276 [new species-- Guatemala].
Tropidosteptes hirsutus-- Carvalho, 1959:272 [Panama].

Tropidosteptes lineatus Carvalho

Tropidosteptes lineatus Carvalho, 1986d:408 [new species-- El Salvador. Panama: Fortuna. Venezuela. Brazil].--Schuh, 1995:968 [Panama].

Tropidosteptes saxeus (Distant)

Neoborus saxeus Distant, 1884:276 [new species-- Panama: Volcan de Chiriqui].-- Atkinson, 1890:98 [Volcan de Chiriqui].
Tropidosteptes saxeus-- Carvalho, 1959:273 [Panama]; 1986d:409 [Volcano de Chiriqui].--

Carvalho and Dolling, 1976:806 [V. de Chiriqui].-- Schuh, 1995:696 [Panama].

Tropidosteptes scaber (Distant)

Neoborus scaber Distant, 1884:276 [new species-- Guatemala].

Tropidosteptes scaber.-- Carvalho, 1986d:410 [District Renacimiento, Santa Clara, Chiriqui].

Tropidosteptes scutellatus (Distant)

Monalocorisca scutellata Distant, 1893:444 [new species-- Panama: Volcan de Chiriqui].--
Carvalho, 1959:169 [Panama].-- Carvalho and Dolling, 1976:806 [V. de Chiriqui].

Tropidosteptes scutellatus.-- Carvalho, 1986d:411 [Volcan de Chiriqui].-- Schuh, 1995:969
[Panama].

TRIBE RESTHENIINI REUTER

Note: Carvalho and Fontes (1971b) provided a key (pages 141-144) to 17 genera of this tribe.

Genus *Callichila* Reuter

Platytylus (Callichila) Reuter, 1876:64. Type species: *Resthenia plagigera* Stål, designated by
Kirkaldy, 1906a:126.

Callichila.-- Carvalho and Schaffner, 1976:705

Note: Carvalho and Schaffner (1976) included a key (pages 718-718) to eight species.

Callichila bracteata (Distant)

Resthenia bracteata Distant, 1883:254 [new species-- Panama: Bugaba].-- Atkinson, 1890:57
[Bugaba].

Prepops bracteatus.-- Carvalho, 1959:333 [Panama].

Platytylus bracteatus.-- Carvalho and Fontes, 1970:442, 446 [Bugaba].

Callichila bracteata.--Carvalho and Schaffner, 1976:707 [Panama].-- Carvalho and Dolling,
1976:794 [Bugaba].--Schuh, 1995:975 [Panama].

Callichila plagigera (Stål)

Resthenia plagigera Stål, 1862b:316 [new species-- Mexico].-- Atkinson, 1890:60 ["Panama", see
Note below].

Callichila plagigera.-- Carvalho and Schaffner, 1976:714 [Panama].

Note: The above two records of this species from "Panama" apparently resulted from Atkinson's
(1890) misreading of the Guatemalan locality "Panima" given by Distant (1883:251).

Genus *Mabelia* Kirkaldy

Mabelia Kirkaldy, 1903b:14. Type species: *Mabelia pulcherrima* Kirkaldy, monotypic.

Mabelia pulcherrima Kirkaldy

Mabelia pulcherrima Kirkaldy, 1903b:15 [new species-- Brazil].-- Maldonado, 1976a:10 [Coco Solo Hospital].

Genus *Mimoncopeltus* Kirkaldy

Lygdus Distant, 1883:242, preoccupied. Type species: *Lygdus simulans* Distant, monotypic.
Mimoncopeltus Kirkaldy, 1906b:374. Proposed as a new name for preoccupied *Lygdus* Distant.

Mimoncopeltis simulans (Distant)

Lygdus simulans Distant, 1883:242 [new species-- Panama: Volcan de Chiriqui.-- Atkinson, 1890:40 [Volcan de Chiriqui].
Mimoncopeltus simulans.-- Carvalho, 1959:328 [Panama].-- Carvalho and Dolling, 1976:807 [V. de Chiriqui].-- Schuh, 1995:981 [Panama].

Genus *Platytylus* Fieber

Platytylus Fieber, 1858:308. Type species: *Phytocoris pyrrehulus* Burmeister, a junior synonym of *Capsus bicolor* Lepeletier and Serville, monotypic.

Note: Carvalho and Schaffner's (1976) review of this genus keyed (pages 733-735) 22 species.

Platytylus bicinctus (Walker)

Capsus bicinctus Walker, 1873a:100 [new species-- Mexico].
Resthenia (Resthenia) mimica Distant, 1883:255 [new species-- Panama: Bugaba].
Resthenia mimica.-- Atkinson, 1890:59 [Bugaba].
Prepops mimica.-- Carvalho, 1959:338 [Panama].
Platytylus ornaticollis.-- Carvalho and Fontes, 1970:442, 456 [Bugaba].
Platytylus bicinctus.-- Carvalho and Schaffner, 1976:719 [Panama].-- Schuh, 1995:983 [Panama].
Platytylus mimicus.-- Carvalho and Dolling, 1976:802 [Bugaba].

Platytylus chiriquinus (Distant)

Resthenia (Resthenia) chiriquina Distant, 1883:253 [new species-- Panama: Volcan de Chiriqui].
Resthenia chiriquina.-- Atkinson, 1890:57 [Volcan de Chiriqui].
Platytylus chiriquinus.-- Carvalho, 1959:330 [Panama].-- Carvalho and Fontes, 1970:442,446 [Panama].--Carvalho and Dolling, 1976:794 [V. de Chiriqui].-- Schuh, 1995:984 [Panama].

Platytylus montanus (Distant)

Resthenia (Callichila) montana Distant, 1883:252 [new species--Panama: Volcan de Chiriqui].
Resthenia montana.-- Atkinson, 1890:59 [Volcan de Chiriqui].
Platytylus montanus.-- Carvalho, 1959:330 [Panama].-- Carvalho and Fontes, 1970:442,453 [Volcan de Chiriqui].-- Carvalho and Dolling, 1976:802 [V. de Chiriqui].-- Schuh, 1995:984 [Panama].

Platytylus ornaticollis (Stål)

Resthenia ornaticollis Stål, 1862b:317 [new species-- Mexico].

Platytylus ornaticollis-- Carvalho and Fontes, 1970:442, 456 [Panama].

Genus *Prepops* Reuter

Resthenia (Prepops) Reuter, 1905:15. Type species: *Resthenia frontalis* Reuter, monotypic.

Prepops--Carvalho, 1954b:426.

Prepops accincta (Distant)

Resthenia accincta Distant, 1893:425 [new species-- Panama: David].

Prepops accincta-- Carvalho, 1959:331 [Panama].-- Carvalho and Dolling, 1976:791 [David].-- Schuh, 1995:986 [Panama].

Prepops englemani Carvalho and Schaffner

Prepops englemani Carvalho and Schaffner, 1987b:37 [new species-- Panama: B. de T., Rio Changuinola].-- Carvalho and Froeschner, 1990:338 [B. de T. Rio Changuinola].-- Schuh, 1995:989 [Panama].

Prepops erubescens (Distant)

Resthenia (Resthenia) erubescens Distant, 1883:254 [new species-- Panama: Bugaba; Volcan de Chiriqui].

Resthenia erubescens-- Atkinson, 1890:58 [Bugaba; Volcan de Chiriqui].

Prepops erubescens-- Carvalho, 1959:335 [Panama].-- Carvalho and Fontes, 1969b:263 [Panama].-- Carvalho and Dolling, 1976:796 [Bugaba].-- Schuh, 1995:990 [Panama].

Prepops frontalis (Reuter)

Resthenia (Prepops) frontalis Reuter, 1905:5 [new species-- Venezuela].

Prepops frontalis-- Maldonado, 1976a:10 [Coco Solo Hospital].

Prepops jamaicensis (Walker)

Capsus jamaicensis Walker 1873a:101 [new species-- Jamaica].

Resthenia (Resthenia) panamensis Distant, 1883:253 [new species-- Panama: Matachin].

Resthenia panamensis-- Atkinson, 1890:60 [Matachin].

Platytylus panamensis-- Carvalho, 1951b:155 [Barro Colorado Island].

Prepops jamaicensis-- Carvalho, 1959:337 [Panama].-- Carvalho and Fontes, 1969b:267 [Panama].-- Schuh, 1995:992 [Panama].

Prepops panamensis--Carvalho and Afonso, 1977:12 [Panama].-- Carvalho and Dolling, 1976:803 [Matachin].

Prepops montivagus (Distant)

Resthenia (Resthenia) montivaga Distant, 1883:256 [new species-- Panama: Volcan de Chiriqui].-- Reuter, 1905:12 [Panama].

Resthenia montivaga.-- Atkinson, 1890:59 [Volcan de Chiriqui].

Prepops montivagus.-- Carvalho, 1959:339 [Panama].-- Carvalho and Fontes, 1971a:796 [V. de Chiriqui].-- Carvalho and Dolling, 1976:802 [V. de Chiriqui].-- Schuh, 1995:993 [Panama].

Prepops obscurans (Distant)

Resthenia (Resthenia) obscurans Distant, 1883:254 [new species-- Panama: Bugaba].

Resthenia obscurans.-- Atkinson, 1890:60 [Bugaba].

Prepops obscurans.-- Carvalho, 1959:339 [Panama].-- Carvalho and Dolling, 1976:803 [Bugaba].-- Schuh, 1995:994 [Panama].

TRIBE STENODEMINI CHINA

Notes: (1) Eyles and Carvalho (1975) provided a key (pages 266-268) to the world's 80 genera of this tribe; (2) A key to the eight Neotropical genera was given by Carvalho (1975a:121-122).

Genus *Collaria* Provancher

Collaria Provancher, 1872:79. Type species: *Collaria meilieurii* Provancher, monotypic.

Note: A key to the four Neotropical species was given by Carvalho (1945d:174).

Collaria oleosa (Distant)

Trachelomiris oleosus Distant, 1883:238 [new species-- Guatemala. Panama: Bugaba].-- Atkinson, 1890:40 [Bugaba].

Collaria oleosa.-- Reuter, 1905:10 [Panama].-- Rau, 1933:188 [Barro Colorado Island].-- Carvalho, 1951b:155 [Barro Colorado Island; Boquete; Fort Davis]; 1959:285 [Panama].-- Maldonado, 1976a:11 [Boquete; Coco Solo Hospital; Darien; Panama City; Port Bello].-- Carvalho and Dolling, 1976:803 [Bugaba].-- Carvalho and Fontes, 1981:23 [Panama].-- Schuh, 1995:1007 [Panama].

Colaria [sic] oleosa.-- Carvalho and Afonso, 1977:12 [Gatun Lake].

Genus *Neotropicomiris* Carvalho and Fontes

Neotropicomiris Carvalho and Fontes, 1969a:332. Type species: *Neotropicomiris pilosus* Carvalho and Fontes, original designation.

Note: A key to six species was given by Carvalho and Fontes (1969a:333-334).

Neotropicomiris nordicus Carvalho and Fontes

Neotropicomiris nordicus Carvalho and Fontes, 1969a:338 [new species-- Venezuela. Ecuador].--

Carvalho and Afonso, 1977:12 [Gatun Lake].-- Schuh, 1995:1015 [Panama].

Genus *Stenodema* Laporte

Stenodema Laporte, 1833:40. Type species: *Miris virens* Fabricius, a junior synonym of *Cimex virens* Linnaeus, monotypic.

Stenodema guatemalana (Distant)

Miris guatemalanus Distant, 1883:236 [new species-- Guatemala]; 1893:415 [Volcan de Chiriqui].-- Atkinson 1890:34 [Quezaltenango, Volcano de Agua].

Stenodema (Stenodema) guatemalanus [sic].-- Carvalho, 1959:303 [Panama].

Stenodema guatemalana.-- Carvalho, 1975a:123 [Panama].

Stenodema panamensis (Distant)

Miris panamensis Distant, 1893:415 [new species-- Panama: Volcan de Chiriqui].

Stenodema (Stenodema) panamensis.-- Carvalho, 1959:306 [Panama].

Stenodema panamensis.-- Carvalho and Dolling, 1976:803 [V. de Chiriqui].-- Schuh, 1995:1025 [Panama].

Genus *Trigonotylus* Fieber

Trigonotylus Fieber, 1858:302. Type species: *Miris ruficornis* Fallén, a junior synonym of *Cimex ruficornis* Geoffroy, monotypic.

Trigonotylus tenuis (Reuter)

Trigonotylus ruficornis tenuis Reuter, 1893:208 [new subspecies-- Seychelles].

Trigonotylus dohertyi.-- Carvalho and Wagner, 1957:132 [Panama].

Trigonotylus doddi.-- Carvalho and Afonso, 1977:12 [Panama].

Note: Schuh (1995:1035) listed this species (in this combination) for many Old and New World localities, but gave no Panama record.

SUBFAMILY ORTHOTYLINAE VAN DUZEE

TRIBE ORTHOTYLINI VAN DUZEE

Genus *Ceratopsus* Reuter

Ceratopsus Reuter, 1876:87. Type species: *Ceratopsus lutescens* Reuter, designated by Kirkaldy, 1906a:127.

Ceratopsus egens (Distant)

Pappus egens Distant, 1893:429 [new species-- Panama: Bugaba].

Ceratopsus egens.-- Carvalho, 1958b:45 [Panama].-- Carvalho and Dolling, 1976:796 [Bugaba].-- Schuh, 1995:92 [Panama].

Ceratocapsus insignis (Distant)

Pappus insignis Distant, 1893:429 [new species-- Panama: David].

Ceratocapsus insignis-- Carvalho, 1958b:46 [Panama].-- Carvalho and Dolling, 1976:790 [David].-
Schuh, 1995:93 [Panama].

Genus *Cyrtotyloides* Carvalho and Maldonado

Cyrtotyloides Carvalho and Maldonado, 1982a:559. Type species: *Cyrtotyloides panamensis*
Carvalho and Maldonado, original designation.

Cyrtotyloides panamensis Carvalho and Maldonado

Cyrtotyloides panamensis Carvalho and Maldonado, 1982a:559 [new species-- Barro Colorado
Island, Canal Zone; Fortuna].-- Carvalho and Froeschner, 1987:156 [Barro Colorado
Island, Canal Zone].-- Schuh, 1995:101 [Panama].

Genus *Falconia* Distant

Falconia Distant, 1884:298. Type species: *Falconia aduca* Distant, a junior synonym of *Falconia*
poeica Distant, designated by Kirkaldy, 1906a:146.

Falconia incaica Carvalho

Falconia incaica Carvalho, 1987b:608 [new species-- Panama: Pipeline Road, Canal Zone.
Ecuador. Bolivia. Peru].-- Schuh, 1995:107 [Panama].

Genus *Jobertus* Distant

Jobertus Distant, 1893:421. Type species: *Jobertus chrysolectrus* Distant, monotypic.

Note: Maldonado (1980:308) keyed the six species.

Jobertus nigricephalus Maldonado

Jobertus nigricephalus Maldonado, 1980:307 [new species-- Panama: Porto Bello].-- Schuh,
1995:127 [Panama].

Jobertus nigrithorax Maldonado

Jobertus nigrithorax Maldonado, 1980:304 [new species-- Panama: Porto Bello].-- Schuh,
1995:127 [Panama].

Genus *Paraproba* Distant

Paraproba Distant, 1884:270. Type species: *Paraproba fasciata* Distant, designated by Kirkaldy,
1906a:138.

Note: A key to the 26 species was given by Carvalho (1987a: 84-85).

Paraproba fasciolata Reuter

Paraproba fasciolata Reuter, 1908:173 [new species-- Mexico].-- Carvalho, 1987a:97 [5 km Boquete Road to El Salto, Chiriqui].

Genus *Saileria* Hsiao

Saileria Hsiao, 1945:27. Type species: *Hyalochloria bella* Van Duzee, monotypic.

Note: A key to the four species was given by Henry (1976:31).

Saileria youngi Carvalho

Saileria youngi Carvalho, 1953a:574 [new species-- Panama: Prov. Tocumen]; 1958a:131 [Panama].-- Henry, 1976:29 [Panama].-- Carvalho and Froeschner, 1987:208 [Prov. Tocumen].-- Schuh, 1995:192 [Panama].

Genus *Sericophanes* Reuter

Sericophanes Reuter, 1876:79. Type species: *Sericophanes ocellatus* Reuter, monotypic.

Note: Carvalho and Costa (1988) presented a key (pages 907-908) to nine species in South and Central America.

Sericophanes oscurus Maldonado

Sericophanes oscurus Maldonado, 1970:101 [new species-- Costa Rica].-- Carvalho and Costa, 1988:904 [Canal Zone].

Sericophanes panamensis Carvalho

Sericophanes transversus.-- Carvalho, 1944:523 [Canal Zone].

Sericophanes panamensis Carvalho, 1955d:224 [new species for misidentified *S. transversus* Carvalho (1944:above)-- Panama: Canal Zone. Colombia]; 1958a:152 [Panama].-- Carvalho and Froeschner, 1987:210 [Canal Zone].-- Carvalho and Costa, 1988:905 [Canal Zone; Fort Clayton; Summit].-- Schuh, 1995:196 [Panama].

SUBFAMILY PALAUCORINAE CARVALHO

Gorczyca (1997:518) returned this taxon to subfamily status as originally proposed by Carvalho (1956:47.).

TRIBE VANNIINI GORCZYCA

With his proposal of this new tribe (page 519), Gorczyca (1997) gave a key (pages 519-520) to its five genera.

Genus *Vannius* Distant

Vannius Distant, 1883:246. Type species: *Vannius rubrovittatus* Distant, monotypic.
Note: Gorczyca (1997:521) keyed the four species of this genus.

Vannius rubrovittatus Distant

Vannius rubrovittatus Distant 1883:246 [new species-- Guatemala. Panama: Vocan de Chiriqui].--
 Atkinson, 1890:49 [Volcan de Chiriqui].-- Reuter, 1913:60 [Panama].-- Carvalho, 1957:34
 [Panama].-- Schuh, 1995:39.-- Gorczyca, 1997:521 [Pipeline Road; Summit; V. de
 Chiriqui].

SUBFAMILY PHYLINAE DOUGLAS AND SCOTT**TRIBE LEUCOPHOROPTERINI SCHUH****Genus *Tytthus* Fieber**

Tytthus Fieber, 1864:82. Type species: *Capsus geminus* Flor, designated by Kirkaldy. 1906a:128.

Tytthus panamensis Carvalho and Southwood

Tytthus panamensis Carvalho and Southwood, 1955:32 [new species-- Panama: Corozal, Canal
 Zone].-- Carvalho, 1958a:158 [Panama].-- Carvalho and Afonso, 1977:9 [Barro
 Colorado].-- Carvalho and Froeschner, 1987:218 [Corozal, Canal Zone].-- Schuh,
 1995:249 [Panama].

Tytthus pygmaeus.-- Schuh, 1995:250 [Panama].

Note: Schuh's (1995:250) listing of *T. panamensis* under the species *T. pygmaeus* (Zetterstedt) was
 apparently a typographical error.

Tytthus parviceps (Reuter)

Cyrtorhinus parviceps Reuter, 1890a:258 [new species-- Egypt].

Tytthus parviceps.-- Carvalho and Southwood, 1955:21 [Pto. Obaldia, Cocle Prov.].-- Carvalho,
 1958a:158 [Panama].

TRIBE PHYLINI DOUGLAS AND SCOTT**Genus *Campylomma* Reuter**

Campylomma Reuter, 1878:52. Type species: *Campylomma nigronasuta* Reuter, designated by
 Distant, 1904:483.

Campylomma cardini Barber and Bruner

Campylomma cardini Barber and Bruner, 1946:58 [new species-- Cuba].-- Maldonado, 1976a:11
 [Coco Solo Hospital].

Genus *Crassicornus* Carvalho

Crassicornus Carvalho, 1945a:303. Type species: *Crassicornus pulchrus* Carvalho, original designation.

Notes: (1) Carvalho originally (supra) described this genus in the tribe Dicyphini, but later (1952:62) transferred it to the tribe Phylini. (2) A key to four species was given by Maldonado (1981a:117-118).

Crassicornus parvus Becker and Carvalho

Crassicornus parvus Becker and Carvalho, 1957:421 [new species-- Panama: Tres Rios Plantation, Gatun Lake].-- Maldonado, 1981a:118 [Panama].-- Schuh, 1995:302 [Panama].

Crassicornus rubritinctus Becker and Carvalho

Crassicornus rubritinctus Becker and Carvalho, 1957:423 [new species-- Panama: Tres Rios Plantation, Gatun Lake].-- Maldonado, 1981a:117 [Panama].-- Schuh, 1995:302 [Panama].

Genus *Keltonia* Knight

Keltonia Knight, 1966:590. Type species: *Keltonia rubrofemorata* Knight, original designation.
Note: Henry (1991) revised *Keltonia* and provided a key (pages 355-356) to 12 species.

Keltonia tuckeri (Poppius)

Pseudatomoscelis tuckeri Poppius, 1911:86 [new species-- United States of America].
Keltonia tuckeri.-- Henry, 1991:378 [Pt. Aguadulce; Rio Sajalises, near Villa Real].

Genus *Moissonia* Reuter

Moissonia Reuter, 1894:148. Type species: *Agalliastes punctatus* Fieber, monotypic.

Moissonia cuneata (Stål)

Capsus cuneatus Stål, 1860:55 [new species-- Brazil].

Ellenia cuneata.-- Carvalho, 1951b:155 [Boquete]; 1958b:59 [Panama].

Note: When the genus *Ellenia* Reuter was synonymized under *Moissonia* by Linnavuori and Alfadi (1993:233), this species had to take the new combination *Moissonia cuneata*.

Genus *Platyscytus* Reuter

Platyscytus Reuter, 1907b:16. Type species: *Platyscytus binotatus* Reuter, monotypic.

Notes: 1) Carvalho's (1955c:137) record of *P. binotata* Reuter from "Prov. Tocumen, Panama" was deleted by Carvalho (1990c:206). 2) Maldonado and Carvalho (1981a) included a key (page 387) to 14 species.

Platyscytus blantoni Carvalho

Platyscytus blantoni Carvalho, 1955c:138 [new species-- Panama: Pt. Mensable, Los Santos Province].-- Carvalho and Froeschner, 1987:195 [Pt. Mensable, Los Santos Province].-- Schuh, 1995:392 [Panama].

Platyscytus englemanni Carvalho

Platyscytus englemanni Carvalho, 1985a:288 [new species-- Panama: Barro Colorado Island].-- Carvalho and Froeschner, 1990:336 [Barro Colorado Is.].-- Schuh, 1995:392 [Panama].

Platyscytus hemiruber Maldonado and Carvalho

Platyscytus hemiruber Maldonado and Carvalho, 1981a:385 [new species-- Panama: Porto Bello --see "Note" below].-- Carvalho and Froeschner, 1987:196 [Porto Bello].

Note: The introduction (page 385) to the description of this species reported it from "Porto Bello, Panama" [the holotype in the USNM is also labeled "Panama, Porto Bello"]. The locality of the type series was listed [on page 386] as "Panama, Porto Rico" -- the latter, undoubtedly a lapsus for "Porto Bello," led Schuh (1995:392) to list the type locality as "Puerto Rico."

Genus *Reuteroscopus* Kirkaldy

Episcopus Reuter, 1876:90, preoccupied. Type species: *Episcopus ornatus* Reuter, monotypic. *Reuteroscopus* Kirkaldy, 1905b:268. Proposed as a new name for preoccupied *Episcopus* Reuter.

Note: A revision of *Reuteroscopus* by Kelton (1964) contained a key (pages 1432-1433) to the males of 16 species.

Reuteroscopus diffusus Kelton

Reuteroscopus diffusus Kelton, 1964:1423 [new species-- Mexico. Costa Rica. Panama: El Real; Garachine].-- Schuh, 1995:421 [Panama].

Reuteroscopus hamatus Kelton

Reuteroscopus hamatus Kelton, 1964:1426 [new species-- United States of America. Panama: Balboa Prado, C.Z.; Barrache Plantation, C.Z.; Davis, C.Z.; El Real; Espino; Garachin, David Prov.: Jacque; Juan Mina Plantation; Chagras River; Sapatillo; Tabogo Is.].-- Schuh, 1995:421 [Panama].

Reuteroscopus ornatus (Reuter)

Episcopus ornatus Reuter, 1876:90 [new species-- United States of America].-- Carvalho, 1958a:137 [Panama].--Kelton, 1964 [Panama].

Reuteroscopus uvidus (Distant)

Lygus uvidus Distant, 1893:433 [new species-- Mexico. Panama: Volcan de Chiriqui].

Reuteroscopus uvidus.-- Kelton, 1964:1431 [Aguadulce; Chep; Nueva Gorgana; Palm Beach, San Carlos; Penanome].-- Carvalho and Afonso, 1977:8 [Gatun Lake].-- Schuh, 1995:422 [Panama].

Note: Carvalho (1958a:137) included this species as a junior synonym of *R. ornatus*.

Genus *Rhinacloa* Reuter

Rhinacloa Reuter, 1876:88. Type species: *Rhinacloa forticornis* Reuter, monotypic.

Note: Schuh and Schwartz's (1985) revision of *Rhinacloa* included a key (pages 389-392) to its 37 species.

Rhinacloa basalis (Reuter)

Sthenarus basalis Reuter, 1907b:26 [new species-- Jamaica].

Rhinacloa basalis.-- Schuh and Schwartz, 1985:395 [Dolega; Darien Province, Garachine; Canal Zone, Barro Colorado; Chiriqui; Pearl Island, San Jose].-- Maldonado, 1991:121 [Panama].

Rhinacloa cardini (Barber and Bruner)

Campylomma cardini Barber and Bruner, 1946:58 [new species-- Cuba].-- Maldonado, 1976a:11 [Coco Solo Hospital].

Rhinacloa cardini.-- Schuh and Schwartz, 1985:414 [Coco Solo Hospital; Las Cumbres; Madden Dam; Porto Chitre; Tocumen].-- Maldonado, 1991:121 [Panama].

Rhinacloa clavicornis (Reuter)

Sthenarus clavicornis Reuter, 1905:38 [new species-- Venezuela].

Rhinacloa clavicornis.-- Schuh and Schwartz, 1985:399 [Ancon, C.Z.; Barro Colorado, C.Z.; Darien, Garachine; La Jolla; Las Cumbres; Madden Dam; Mojiga Swp., C.Z.; Nata; Puerto Chitre; Tocumen].-- Maldonado, 1991:121 [Panama].

Rhinacloa forticornis Reuter

Rhinacloa forticornis Reuter, 1876:80 [new species-- Mexico].-- Carvalho, 1958a:139 [Panama].-- Schuh and Schwartz, 1985:417 [Panama].-- Maldonado, 1991:121 [Panama].

Rhinacloa manleyi Schuh and Schwartz

Rhinacloa manleyi Schuh and Schwartz, 1985:241 [new species-- Mexico. Honduras. Costa Rica. Panama: 1 km E of Bejuco. Brazil].

Rhinacloa mesoamericana Schuh and Schwartz

Rhinacloa mesoamericana Schuh and Schwartz, 1985:423 [new species-- Mexico. Panama: Barro Colorado Island; Puerto Chitre].

Rhinacloa misteriosa Schuh and Schwartz

Rhinacloa misteriosa Schuh and Schwartz, 1985:404 [new species-- Mexico. Costa Rica. Panama: Porto Bello. Brazil].-- Schuh, 1995:426 [Panama].

Rhinacloa pallidipes Maldonado

Rhinacloa pallidipes Maldonado, 1969:83 [new species-- Puerto Rico].-- Schuh and Schwartz, 1985:407 [Renacimiento, Santa Clara, Chiriqui; Tocumen].-- Maldonado, 1991:121 [Panama].

TRIBE PILOPHORINI DOUGLAS AND SCOTT

Note: Schuh and Schwartz's (1988) revision of the New World members of this tribe included a key (page 108) to the three genera.

Genus *Sthenaridea* Reuter

Sthenaridea Reuter, 1885:197. Type species: *Sthenaridea pusilla* Reuter, a junior synonym of *Deraeocoris piceoniger* Motschulsky, monotypic.

Note: Schuh and Schwartz (1988:184-195) revised this genus and provided a key (pages 185-186) to its eight species.

Sthenaridea araguaiana (Carvalho)

Rhinacloa araguaiana Carvalho, 1948a:11 [new species-- Brazil].

Sthenaridea araguaiana.-- Schuh and Schwartz, 1988:186 [Juan Mina Plantation; Summit, Canal Zone].

Sthenaridea hansonii Schuh and Schwartz

Sthenaridea hansonii Schuh and Schwartz, 1988:188 [new species-- Mexico. Panama: Barro Colorado Island; Paraiso. Colombia. Guyana. Venezuela. Ecuador. British Virgin Islands. Guadeloupe. Tabago. Trinidad].

Sthenaridea maldonadoi Schuh and Schwartz

Sthenaridea maldonadoi Schuh and Schwartz, 1988:189 [new species-- United States of America. Panama: Barro Colorado Island, Canal Zone; 2 mi S of Chepo; Cerro Jefe, Panama Prov.; El Valle. Panama Prov.; Galeta Island, Canal Zone; Flat Rock 1 mi above Juan Mina, Chilibre River; Juan Mina Plantation; Paraiso, Canal; Zone Pipe Line Road, Canal Zone; Tabernilla, Canal Zone. Colombia. Venezuela. Guyana. Ecuador. Brazil. Cuba. Jamaica. Puerto Rico. Dominica. Guadeloupe. Tabago. Trinidad].

Sthenaridea vulgaris (Distant)

Jornandes vulgaris Distant, 1893:448 [new species-- Mexico. Guatemala].

Sthenaridea vulgaris.-- Schuh and Schwartz, 1988:192 [Boquete Trail, Chiriqui].

SUBFAMILY PSALLOPINAE SCHUH

Genus *Isometocoris* Carvalho and Sailer

Isometocoris Carvalho and Sailer, 1954:86. Type species: *Isometocoris blantoni* Carvalho and Sailer, original designation.

Isometocoris blantoni Carvalho and Sailer

Isometocoris blantoni Carvalho and Sailer, 1954:87 [new species-- Panama: Pedregoso].-- Eyles, 1971:942 [Panama].-- Henry and Maldonado, 1982:245 [Barro Colorado Isl.; Coco Solo Hospital, Canal Zone; Pedroesa; Pt. Aguadulce].-- Carvalho and Froeschner, 1987:176 [Pedregoso].-- Schuh, 1995:92 [Panama].

✓FAMILY NABIDAE COSTA

So far, Panama records for 17 species in 10 genera have been encountered for this list. A key to the two subfamilies was provided by Schuh and J. Slater (1995:186-187).

✓SUBFAMILY NABINAE COSTA

✓TRIBE ARACHNOCORINI REUTER

✓Genus *Arachnocoris* Scott

✓*Arachnocoris* Scott, 1881:272. Type species: *Arachnocoris albomaculatus* Scott, monotypic.

Notes: (1) Adults and nymphs of this genus have been reported as living in spider webs. (2) China (1946:121-122]) presented a key to seven species. (3) see "Note 2" under *A. panamensis*.

✓*Arachnocoris panamensis* (Distant)

Herdonius panamensis Distant, 1893:419 [new species-- Panama: Bugaba].-- Schuh 1995:668 - SEE Note 2, below [Panama].

Arachnocoris albomaculatus.-- Bergroth, 1914a:117 [Tabernilla, Canal Zone].-- Myers, 1925:136 [Barro Colorado Island].-- Harris, 1926:1 [Tabernilla, Canal Zone]; 1928:29 [Tabernilla, Canal Zone].-- China and Myers, 1929:123 [Panama].-- Carvalho and Dolling, 1976:803 [Bugaba].

Arachnocoris panamensis.-- Bergroth, 1914a:116-117 [Panama].-- Kerzhner, 1986:180 [Panama]; 1990:134 [Panama].

Notes: (1) The two species *A. albomaculatus* and *A. panamensis* have variously been held as separate species or as one. The most recent treatment (Kerzhner, 1990) concurred with Bergroth (1914a:116-117) and considered them separate species; but while Bergroth reported them both from Panama [*albomaculatus* on a "Tabernilla (Canal Zone)" specimen "belonging to the Washington Museum" but it is no longer there], Kerzhner eliminated *A.*

albomaculatus from the Panama fauna. (2) Schuh's (1995:668) inclusion of this species in his catalog of the Miridae of the world resulted from an error in following too closely the word "Miridae" in the title of Carvalho and Dolling's (1976:803) study of Distant Miridae types in the British Museum and overlooking the fact that Carvalho and Dolling (1976:above) actually placed *Arachnocoris albomaculatus* in the family Nabidae.

✓ TRIBE CARTHASINI BLATCHLEY

✓ Genus *Carthasis* Champion

Carthasis Champion, 1900b:305. Type species: *Carthasis rufonotatus* Champion, monotypic.

✓ *Carthasis championi* Harris

Carthasis rufonotatus.-- Champion, 1900b:306 [in part, David].

Carthasis championi Harris, 1928:76 [new species-- Panama: David, Chiriqui].

Note: Harris (1928:supra) described this species from one of Champion's cotypes of *C. rufonotatus*.

✓ *Carthasis rufonotatus* Champion

Carthasis rufonotatus Champion, 1900:306 [new species-- Panama: Bugaba; Caldera; Tole].--

Barber, 1916:308 [Panama].-- Harris, 1928:81 [Caldera].

Note: Champion's cotype from "David" was removed to serve as the holotype of Harris' (1928:above) new species *C. championi*.

✓ Genus *Praecarthasis* Kerzhner

Praecarthasis Kerzhner, 1986:181. Type species: *Nabis panamensis* Harris, original designation.

Notes: (1) When describing this genus (above), Kerzhner noted he had used it as a *nomen nudum* in a 1981 paper. (2) Kerzhner (1986:183-184) provided a key to six species.

✓ *Praecarthasis gibbus* Kerzhner

Praecarthasis gibbus Kerzhner, 1986:187 [new species-- Panama: Barro Colorado I., Canal Zone. Ecuador. Peru].

✓ *Praecarthasis panamensis* (Harris)

Nabis panamensis Harris, 1926:3 [new species-- Panama: Porto Bello].

Nabis (Lasiomerus) panamensis.-- Harris, 1928:46 [Porto Bello].

Praecarthasis panamensis.-- Kerzhner, 1986:184 [Porto Bello].

✓ TRIBE GORPINI REUTER

✓ Genus *Neogorpis* Barber

Neogorpis Barber, 1924:136. Type species: *Gorpis neotropicalis* Barber, monotypic.

✓ *Neogorpis spinicollis* Kerzhner

Neogorpis spinicollis Kerzhner, 1986:190 [new species-- Panama: Barro Colorado I., Canal Zone; Porto Bello].

✓ **TRIBE NABINI COSTA**

The definitions of generic groups within tribes have varied greatly. Two Kerzhner papers (1963 and 1969) helped in dealing with the New World members of this tribe: the first presented (pages 6-8) a key to the genera whose species were variously included in a broad concept of *Nabis*; the second reported on the generic assignment of many New World species.

✓ **Genus *Hoplistoscelis* Reuter**

Hoplistoscelis Reuter, 1890b:295. Type species: *Nabis sericans* Reuter, designated by Van Duzee, 1916:32.

✓ *Hoplistoscelis sordidus* (Reuter)

Nabis sordidus Reuter, 1872:85 [new species-- Mexico].-- Blatchley, 1926:595 [Panama].-- Harris, 1926:2 [Paraiso, Canal Zone].-- Barber, 1939:395 [Panama].

Nabis (*Hoplistoscelis*) *sordidus*.-- Champion, 1899:303 [Volcan de Chiriqui].-- Harris, 1928:41 [Panama]. *Hoplistoscelis sordidus*.-- Henry and Lattin, 1988:511 [Panama].

✓ **Genus *Lasiomerus* Reuter**

Nabis (*Lasiomerus*) Reuter, 1890b:305. Type species: *Nabis annulatus* Reuter, original designation. *Lasiomerus*.-- Kerzhner, 1963:6.

✓ *Lasiomerus constrictus* (Champion)

Nabis (*Hoplistoscelis*) *constrictus* Champion, 1899:303 [new species-- Mexico. Guatemala. Panama: Volcan de Chiriqui].

Nabis constrictus.-- Blatchley, 1926:596 [Panama].

Nabis (*Lasiomerus*) *constrictus*.-- Harris, 1928:51 [Panama].

✓ *Lasiomerus spinicrus* (Reuter)

Nabis (*Acanthonabis*) *spinicrus* Reuter, 1890b:305 [new species-- Brazil].-- Harris, 1926:2 [Paraiso, Canal Zone; Tabernilla, Canal Zone]; 1930:247 [Panama].

Nabis (*Hoplistoscelis*) *signatus* Champion, 1899:304 [new species-- Mexico. Panama: Bugaba. Antilles].

Nabis (*Lasiomerus*) *spinicrus*.-- Harris, 1928:47 [Panama].

✓ Genus *Tropiconabis* Kerzhner

Tropiconabis Kerzhner, 1968:859. Type species: *Nabis capsiformis* Germar, original designation.

✓ *Tropiconabis capsiformis* (Germar)

Nabis capsiformis Germar, 1837b:132 [new species-- South Africa].-- McGuire and Crandall, 1967:89 [Panama].

✓ SUBFAMILY PROSTEMMATINAE REUTER

✓ TRIBE PHORTICINI KERZHNER

✓ Genus *Phorticus* Stål

Phorticus Stål, 1860:69. Type species: *Phorticus viduus* Stål, designated by Distant, 1904:395.

✓ *Phorticus speciosus* Harris

Phorticus speciosus Harris, 1928:11 [new species-- Panama: Ancon, C. Z.].

✓ TRIBE PROSTEMMATINI REUTER

✓ Genus *Alloeorhynchus* Fieber

Alloeorhynchus Fieber, 1860b:43. Type species: *Alloeorhynchus flavipes* Fieber, first included species, by Fieber, 1861:159.

✓ *Alloeorhynchus delicatus* Harris

Alloeorhynchus delicatus Harris, 1928:18 [new species-- Panama: Ancon, C. Z.].

✓ *Alloeorhynchus trimacula* (Stein)

Prostemma trimacula Stein, 1860:76 [new species-- Mexico].

Alloeorhynchus trimacula.-- Champion, 1899:300 [Bugaba, Volcan de Chiriqui].-- Barber, 1922:104 [Panama].-- Harris, 1928:14 [Volcan de Chiriqui].

✓ *Alloeorhynchus vittiventris* Stål

Alloeorhynchus vittiventris Stål, 1873:109 [new species-- Colombia].-- Champion, 1899:300 [Volcan de Chiriqui].-- Barber, 1922:104 [Panama].-- Harris, 1928:14 [Volcan de Chiriqui].

✓ Genus *Pagasa* Stål

Pagasa Stål, 1862a:60. Type species: *Pagasa pallidiceps* Stål, monotypic.

✓Pagasa confusa Kerzhner

Pagasa fusca.-- Champion, 1899:299 [Peña Blanca].-- Blatchley, 1926:589 [Panama].-- Barber, 1939:394 [Panama].

Pagasa (Lampropagasa) confusa Kerzhner, 1992a:43 [new species-- United States of America. Mexico. Guatemala. Costa Rica. Panama: Peña Blanca].

✓Pagasa luteiceps (Walker)

Prostemma luteiceps Walker, 1873b:135 [new species-- South America].

Pagasa luteiceps.-- Harris, 1926:1 [Taboga Island]; 1928:21 [Taboga Island]; 1930:243 [Taboga Island].

✓Pagasa pallipes Stål

Pagasa pallipes Stål, 1873:107 [new species-- United States of America].-- Champion, 1899:299 [Caldera].--Blatchley, 1926:590 [Panama].-- Henry and Lattin, 1988:519 [Panama].

FAMILY NAUCORIDAE LEACH

This list reports eight species in four genera from Panama. Certainly more can be expected.

The present list started with La Rivers' (1971) "Catalogue" and his two supplements to it (1974, 1976) as a point of departure. He based it on Usinger's (1941b) classification but did make some changes of his own and acknowledged Popov's (1970, 1971a, 1971b) review of the superfamily. The five subfamilies recognized by Štys and Jansson (1988) were accepted and keyed by Schuh and J. Slater (1995:124-125).

SUBFAMILY CRYPHOCRICINAE MONTANDON

TRIBE AMBRYSINI USINGER

Genus *Ambrysus* Stål

Ambrysus Stål, 1862b:459. Type species: *Ambrysus signoreti* Stål, designated by Kirkaldy, 1906a:151.

Ambrysus geayi Montandon

Ambrysus geayi Montandon, 1897b:128, 130 [new species-- Panama: Darien]; 1909:318 [Darien].-- Champion, 1901:355 [Darien].-- Torre-Bueno, 1906:54 [Darien].-- Kirkaldy and Torre-Bueno, 1909:186 [Panama].

Ambrysus oblongulus Montandon

Ambrysus oblongulus Montandon, 1897a:11, 14 [new species-- Costa Rica].-- Champion, 1901:355

[Taboga Island].--Kirkaldy and Torre-Bueno, 1909:186 [Panama].

TRIBE CRYPHOCRICINI MONTANDON

Genus *Cryphocricos* Signoret

Cryphocricos Signoret, 1850:290. Type species: *Cryphocricos barozzi* Signoret, monotypic.

Cryphocricos obscuratus Usinger

Cyphocricos obscuratus Usinger, 1947:338 [new species-- Panama: Porto Bello].-- La Rivers, 1971:80 [Panama].

SUBFAMILY LIMNOCORINAE STÅL

Genus *Limnocoris* Stål

Limnocoris Stål, 1860:83. Type species: *Limnocoris insignis* Stål, monotypic.

Limnocoris panamensis La Rivers

Limnocoris panamensis La Rivers, 1970:6 [new species-- Panama: Potrerillos]; 1971:76 [Panama].

SUBFAMILY NAUCORINAE LEACH

Genus *Pelocoris* Stål

Pelocoris Stål, 1876:142. Type species: *Naucoris femoratus* Palisot, designated by Kirkaldy, 1906a:150.

Pelocoris binotulatus (Stål)

Naucoris binotulatus Stål, 1860:83 [new species-- Brazil].-- Champion, 1901:361 [Isthmus of Darien; Laguna de Pita].-- Torre-Bueno, 1906:53 [Pita; Darien].-- Kirkaldy and Torre-Bueno, 1909:184 [Panama].

Pelocoris femoratus (Palisot)

Naucoris femoratus Palisot, 1820:237 [new species-- United States].-- Champion, 1901:360 [David; Panama City; Volcan de Chiriqui].-- Kirkaldy and Torre-Bueno, 1909:184 [Panama].

Note: The Panamanian records for this species are open to question and need verification because Polhemus and Sites (1995:657) and Sites and Polhemus (1995:249) limited its range to Canada and the United States and wrote that the more southern records are in need of verification.

Pelocoris megistus La Rivers

Pelocoris (Dyocyttarus) megistus La Rivers, 1969:7 [new species-- Panama -- see "Note" below]; 1971:71 [Panama].

Note: When describing this species, La Rivers pointed out that the type specimen contained two conflicting labels, one for "Sumatra" and one for "Panama?" He further commented "That this is a New World taxon I do not doubt. And the species is so distinctive that when found again it can be readily identified."

Pelocoris nitidus Montandon

Pelocoris nitidus Montandon, 1898:286 [new species-- Panama: Laguna de Pita].-- Champion, 1901:361 [Isthmus of Darien, Laguna de Pita].-- Torre-Bueno, 1906:53 [Pita; Darien].-- Kirkaldy and Torre-Bueno, 1909:185 [Panama].-- Jansson, 1987:5 [Darien; Laguna de Pita].

Pelocoris (Pelocoris) nitidus.-- La Rivers, 1971:71 [Panama].

FAMILY NEPIDAE LATREILLE

Undoubtedly, the Panamanian fauna of this family must be more numerous than the previously reported five species in two genera.

The suprageneric classification for this family was established by Menke and Stange (1964) and Lansbury (1974). There is no complete set of keys for this family in the Neotropics, but papers by De Carlo (1946, 1951, 1964) may be found useful in identifying species of this area. The two subfamilies were keyed by Schuh and J. Slater (1995:116).

SUBFAMILY NEPINAE LATREILLE

Genus *Curicta* Stål

Curicta Stål, 1861a:202. Type species: *Curicta scorpio* Stål, monotypic.

Curicta carinata Kuitert

Curicta carinata Kuitert, 1949:62 [new species-- Paraguay].-- Keffer, 1997:172 [Panama: 3 km SE Ipeti; 3 km S of Ipeti; Herrera: N fork of Rio Paritas].

Genus *Ranatra* Fabricius

Ranatra Fabricius, 1790:213. Type species: *Nepa linearis* Linnaeus, designated by Latreille. 1810:434.

Note: DeCarlo (1946) treated the *Ranatra* of South America, including some records for Panama. Drake and De Carlo (1953) treated the 10 species in the "annulipes" group.

Ranatra annulipes Stål

Ranatra annulipes Stål, 1854:241 [new species-- Brazil].-- Torre-Bueno, 1906:58 [Isthmus of

Darien].-- Montandon, 1907:58 [Panama].-- Kirkaldy and Torre-Bueno, 1909:203 [Panama].--De Carlo, 1946:14 [Panama].

Ranatra fusca Palisot

Ranatra fusca Palisot, 1820:235 [new species-- United States].-- Champion, 1901:353 [Volcan de Chiriqui].

Ranatra macrophthalma Herrich-Schaeffer

Ranatra macrophthalma Herrich-Schaeffer, 1849:31 [new species--"Ostindien" [in error!].-- Montandon. 1907:59 [Panama].

Ranatra zeteki Drake and De Carlo

Ranatra zeteki Drake and De Carlo, 1953:113 [new species-- Panama: Canal Zone. Colombia.Venezuela].-- De Carlo. 1964:170 [Canal Zone].

FAMILY NINIDAE BARBER

Panama records for two species, each in a separate genus, are listed below. More species may be expected.

Barber (1956:282) originally proposed this group as a tribe in the lygaeid subfamily Cyminae [see J. Slater, 1964:422 and J. Slater and O'Donnell, 1995:42]; Henry (1997b:296) raised it to a full family. (2) Scudder (1957) revised the "tribe Ninini" and gave keys to the five genera and their species.

Genus *Cymoninus* Breddin

Cymoninus Breddin, 1907:38. Type species: *Cymoninus subunicolor* Breddin, monotypic.

Cymoninus notabilis (Distant)

Ninus notabilis Distant, 1882:191 [new species-- Guatemala]; 1893:386 [Bugaba; Pena Blanca].
Cymoninus notabilis.--Barber, 1939:344 [Panama]; 1947a:64 [Panama].-- Scudder, 1957:105 [Bugaba].-- J. Slater, 1962:422 [Panama].-- Brailovsky, 1975a:177 [Panama].

Genus *Neoninus* Distant

Neoninus Distant, 1882:192. Type species: *Neoninus illustris* Distant, monotypic.

Neoninus illustris Distant

Neoninus illustris Distant, 1882:192 [new species-- Guatemala]; 1893a:386 [Bugaba; San Miguel in Pearl Islands; Volcan de Chiriqui].-- Scudder, 1957:102 Bugaba; Volcan de Chiriqui].-- J. Slater, 1964:425 [Panama].

✓FAMILY NOTONECTIDAE LATREILLE

Panama records of Notonectidae have been found for nine species in three genera. Undoubtedly, at least several more species will be found there.

The current generic classification of this family rests on a study by Hungerford (1934). The family name, as explained by Štys and Kerzhner (1975), must be credited to Latreille rather than to Leach. A key to the two subfamilies and three genera of New World Notonectidae was given by Froeschner (1981:59). A key to the two subfamilies was given by Schuh and J. Slater (1995:128).

✓SUBFAMILY ANISOPINAE HUTCHINSON

✓Genus *Buenoa* Kirkaldy

- ✓ *Buenoa* Kirkaldy, 1904a:120. Type species: *Anisops antigone* Kirkaldy, original designation.
 ✓ Note: Truxal (1953) revised this genus and provided (pages 1368-1374) a key to its 40 species.

✓*Buenoa antigone* (Kirkaldy)

- ✓ *Anisops antigone* Kirkaldy, 1899c:30 [new species-- Jamaica].
 ✓ *Buenoa antigone*-- Kirkaldy, 1904a:122 [Darien].-- Kirkaldy and Torre-Bueno, 1909:200 [Panama].

Note: Truxal (1953:1376, 1379) cited the above Kirkaldy and Kirkaldy and Torre-Bueno papers under two Argentina and the subspecies *carinata* from the United States south to Belize. Thus the logical conclusion is that of the two, only the nominate form of *antigone* occurs in Panama.

✓*Buenoa confusa* Truxal

- ✓ *Anisops elegans*-- Kirkaldy, 1899a:2 [Darien]; 1899b:1 [Darien].
 ✓ *Buenoa confusa* Truxal, 1953:1453 [new species-- Canada. United States of America. Mexico. Grand Cayman Islands. Grenada].

Note: Truxal (1953:1457) explained that the early Western Hemisphere records for this species were given under recognizing the insect as an undescribed species. He, therefore, described it as new and recognized it from Canada south to Mexico and the West Indies. In that study he listed the two above-cited Kirkaldy records in the synonymy but did not report Panama in its distribution when he gave Mexico as its southern limit; until the Kirkaldy specimens can be reexamined, these records are left here.

✓*Buenoa gracilis* Truxal

- ✓ *Buenoa gracilis* Truxal, 1953:1439 [new species-- Mexico. Honduras. Panama: Sona. Peru. Cuba. Jamaica. Puerto Rico. St. Croix. Grenada].

✓*Buenoa pallens* (Champion)

- ✓ *Anisops pallens* Champion, 1901:374 [new species-- Guatemala].

✓ *Buenoa pallens*.-- Truxal, 1953:1414 [La Chorra; Sona; Tabernilla].-- Nieser, 1975:190 [Panama].

✓ *Buenoa pallipes* (Fabricius)

✓ *Notonecta pallipes* Fabricius, 1803:103 [new species-- "Americae Insulis"].

✓ *Anisops pallipes*.-- Champion, 1901:372 [Bugaba; David; Panama City; San Miguel in Pearl Islands].

✓ *Buenoa pallipes*.-- Kirkaldy, 1904a:133 [Darien].-- Kirkaldy and Torre-Bueno, 1909:201 [Panama].-- Truxal, 1953:1418 [Panama].

✓ *Buenoa platycnemis* (Fieber)

✓ *Anisops platycnemis* Fieber, 1851:485 [new species-- Puerto Rico].

✓ *Buenoa platycnemis*.-- Truxal, 1953:1421 [Cano Sadle, Gatun Lake; Darien; Fort Clayton, Canal Zone; Las Palmas; Old Panama; San Miguel; Sona].-- Nieser, 1975:192 [Canal Zone].

✓ SUBFAMILY NOTONECTINAE LATREILLE

✓ TRIBE NOTONECTINI LATREILLE

✓ Genus *Notonecta* Linnaeus

✓ *Notonecta* Linnaeus, 1758:439. Type species: *Notonecta glauca* Linnaeus, designated by Latreille, 1810:434.

✓ **Note:** Hungerford (1934, not 1933, SEE under "Literature Cited") revised the world species of *Notonecta* and keyed (pages 65-68) the 28 New World species.

✓ *Notonecta mexicana* Amyot and Serville

✓ *Notonecta mexicana* Amyot and Serville, 1843:453 [new species-- Mexico].-- Champion, 1901:368 [Panama].

✓ **Note:** Hungerford (1934) cited Champion's (1901) combination of *N. mexicana* under four species-- *compacta* p. 63, *hoffmanni* p. 68, *lobata* p. 70, and *mexicana* p. 75 -- but in none of these places did he mention Champion's Panama record.

✓ TRIBE NYCHIINI HUNGERFORD

✓ Genus *Martarega* F. White

✓ *Martarega* White, 1879a:271. Type species: *Martarega membranacea* F. White, monotypic.

✓ **Note:** Truxal (1949) reviewed this genus and offered a key (pages 6-7) to its 11 species.

Martarega hondurensis Bare

✓*Martarega hondurensis* Bare, 1932:60 [new species-- "British Honduras" = Belize].-- Truxal, 1949:10 [Fort Clayton, Canal Zone].-- Nieser, 1975:121 [Canal Zone].

Martarega williamsi Truxal

✓*Martarega williamsi* Truxal, 1949:13 [new species-- Panama: Fort Clayton, Canal Zone. Ecuador. Peru. Brazil].--Nieser, 1968:119 [Panama]; 1975:205 [Canal Zone].

FAMILY OCHTERIDAE KIRKALDY

Panama records for four species in one of the two New World genera have been encountered. This represents most of the species likely to occur here.

A helpful revision of this family in the Western Hemisphere was given by Schell (1943). A second New World genus, *Ocyochterus*, was described by Drake and Gomez-Menor 1954:157).

Genus *Ochterus* Latreille

Ochterus Latreille, 1807:142. Type species: *Ochterus marginatus* Latreille, monotypic.

Note: Schell (1943) reviewed 13 New World species and presented a key to them. Drake (1952a) presented a correction for the Schell paper and an updated list of the New World's 16 species.

Ochterus aeneifrons (Champion)

Pelogonus aeneifrons Champion, 1901:345 [new species-- Mexico. Guatemala. Panama: Peña Blanca; San Feliz; Tolé. Grenada. St. Vincent].

Ochterus aeneifrons.-- Kirkaldy and Torre-Bueno, 1909:179 [Panama].-- Schell, 1943:43 [Peña Blanca; San Feliz; Tolé].-- Froeschner, 1981:61 [Panama].

Ochterus perbosci (Guérin-Méneville)

Pelogonus perbosci Guérin-Méneville, 1843:113 [new species-- Mexico].

Ochterus perbosci.-- Drake, 1952a:72 [Panama].

Ochterus schellae Drake

Ochterus acutangulus.-- Schell, 1943:38 [Porto Bello].

Ochterus schellae Drake 1952a:73 [new species-- Mexico].

Note: Drake (1952a:above) explained that Schell had misidentified *O. acutangulus* (Champion) and that her specimens actually represented a new species.

Ochterus viridifrons (Champion)

Pelogonus viridifrons Champion, 1901:346 [new species-- Guatemala].

Ochterus viridifrons.-- Schell, 1943:37 [Canal Zone].-- Drake, 1952a:72 [Panama].

FAMILY OXYCARENIDAE STÅL

Although no Panama records of this family have been found, there is a possibility that some of its few Neotropical species may occur there [see J. Slater, 1964:622-694 and J. Slater and O'Donnell, 1995:74-78].

This group was raised from a position of subfamily of Lygaeidae to family status by Henry's (1997b:196) analysis.

FAMILY PACHYGRONTHIDAE STÅL

The Panama records for five species in two genera probably will be modestly increased by further collecting.

Traditionally treated as a subfamily of Lygaeidae [see J. Slater, 1964:709, and J. Slater and O'Donnell, 1995:81], this group was raised to family level by Henry's (1997b:296) critical study.

A monograph treating this group to the species level was provided by J. Slater (1955).

TRIBE PACHYGRONTHINI STÅL

Genus *Oedancala* Amyot and Serville

Oedancala Amyot and Serville, 1843:258. Type species: *Oedancala dorsilinea* Amyot and Serville, monotypic.

Oedancala bimaculata (Distant)

Pachygrontha bimaculata Distant, 1893:393 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1894: 180 [Panama].-- Van Duzee, 1917:175 [Panama].-- Barber, 1939:347 [Panama].-- Torre-Bueno, 1946:55 [Panama].

Oedancala bimaculata.-- Barber, 1947a:73 [Panama].-- J. Slater, 1955:99 [Bugaba]; 1964:711 [Panama].-- Baranowski and J. Slater, 1982:498 [Panama].

Genus *Pachygrontha* Germar

Pachygrontha Germar, 1837b:152. Type species: *Pachygrontha lineata* Germar, monotypic.

Pachygrontha barberi J. Slater

Pachygrontha barberi J. Slater, 1955:34 [new species-- Guatemala. Panama: Barro Colorado Island; Los Santos; Tenosi; Trinidad River]; 1964:720 [Panama].

Pachygrontha compacta Distant

Pachygrontha compacta Distant, 1893:393 [new species-- Panama: Volcan de Chiriqui].-- Torre-Bueno, 1946:55 [Panama].-- J. Slater, 1955:39 [Los Santos; Panama City; Pedro

Miguel, C.Z.; Summit; Tenosi]; 1964:721 [Panama].-- Baranowski and J. Slater, 1982:500 [Panama].

Pachygrontha longiceps Stål

Pachygrontha longiceps Stål, 1874a:140 [new species-- Colombia].-- Distant, 1893:393 [Bugaba; David].-- Barber, 1947a:74 [Panama].-- J. Slater, 1955:29 [La Chorrera]; 1964:723 [Panama].-- Baranowski and J. Slater, 1982:501 [Panama].

Pachygrontha oedancalodes Stål

Pachygrontha oedancalodes Stål, 1874a:139 [new species-- Mexico].-- J. Slater, 1964:724 [Panama].

Pachygrontha oedancalodes oedancalodes.-- J. Slater, 1955:36 [Barro Colorado Island; Frijoles; Panama City; Paraiso; Summit, C.Z.]; 1964:725 [Panama].

FAMILY PACHYNOMIDAE STÅL

Two species, in different genera, have been recorded for Panama. The other six species, also members of those two genera known from tropical America, are not likely to be found here.

The present definition of this family is based on the Carayon and Villiers' (1968) study. They reported a world total of 15 species in four genera. Froeschner (1981:61) keyed the two subfamilies and two genera known from tropical America.

SUBFAMILY APHELONOTINAE CARAYON AND VILLIERS

Genus *Aphelonotus* Uhler

Aphelonotus Uhler, 1894a:208. Type species: *Aphelonotus simplex* Uhler, monotypic.

Note: Harris (1931) revised the genus and gave a key (p. 16) to five species.

Aphelonotus fraterculus Harris

Aphelonotus fraterculus Harris, 1931:18 [new species-- Panama: Rio Trinidad; Ancon; Canal Zone; Tabernilla, Canal Zone. Ecuador]; 1943:261 [Panama].-- Carayon and Villiers, 1968:733 [Ancon, C.Z.; Canal Zone; Rio Trinidad; Tabernilla].

SUBFAMILY PACHYNOMINAE STÅL

Genus *Camarochilus* Harris

Pachynomus (*Camarochilus*) Harris, 1930:241. Type species: *Pachynomus* (*Camarochilus*) *americanus* Harris, original designation.

Camarochilus.-- Carayon and Villiers, 1968:732.

Camarochilus americanus (Harris)

Pachynomus (*Camarochilus*) *americanus* Harris, 1930:242 [new species-- Panama: La Chorrera].

Camarochilus americanus.-- Carayon and Villiers, 1968:732 [La Chorrera].

✓FAMILY PENTATOMIDAE LEACH

So far, Panama records have been found for 194 species in 78 genera for this family -- the stink bugs. Undoubtedly, more will be found.

This family has varied considerably in content. Several former member groups are accorded full family ranks. Schuh and J. Slater (1995) provided a key (page 230) to 10 subfamilies, one of which, the "Cyrtocorinae" was returned to family rank by Packauskas and Schaefer (1998).

✓SUBFAMILY ASOPINAE AMYOT AND SERVILLE

A synopsis of the Western Hemisphere Asopinae by Thomas (1992) included keys to the known species.

✓Genus *Apateticus* Dallas

Apateticus Dallas, 1851:77, 105. Type species: *Apateticus halys* Dallas, a junior synonym of *Halys ineolata* Herrich-Schaeffer, monotypic.

✓*Apateticus lineolatus* (Herrich-Schaeffer)

Halys lineolatus Herrich-Schaeffer, 1840:69 [new species-- Mexico].

Podisus lineolatus.-- Distant, 1889:318 [Bugaba; Volcan de Chiriqui].

Apateticus (*Apateticus*) *lineolatus*.-- Kirkaldy, 1909a:22 [Panama].

Apateticus lineolatus.-- Thomas, 1992:25 [Panama].

✓Genus *Coryzorhaphis* Spinola

Coryzorhaphis Spinola, 1837:353. Type species: *Coryzorhaphis leucocephala* Spinola, monotypic.

✓*Coryzorhaphis cruciata* Stål

Coryzorhaphis cruciata Stål, 1870:38 [new species-- Mexico. Colombia].-- Thomas, 1992:37 [Panama].-- Brailovsky and Mayorga, 1994:38 [Panama].

✓Genus *Euthyrhynchus* Dallas

Euthyrhynchus Dallas, 1851:77. Type species: *Cimex floridanus* Linnaeus, designated by Stål,

1870:56.

Note: *Euthyrhynchus* was described to hold two species, *Cimex floridanus* Linnaeus and *Cimex punicus* Linnaeus; Stål (1870:56) made *C. punicus* a junior synonym of *C. floridanus* and thus is credited with designating the type species, as above.

✓*Euthyrhynchus floridanus* (Linnaeus)

Cimex floridanus Linnaeus, 1767:719 [new species-- "America"].

Euthyrhynchus floridanus.-- Distant, 1889:321 [Volcan de Chiriqui].-- Kirkaldy, 1909a:16 [Panama].-- Thomas, 1992:44 [Panama].-- Brailovsky and Mayorga, 1994:38 [Panama].

✓**Genus *Heteroscelis* Latreille**

Heteroscelis Latreille, 1829:194. Type species: *Heteroscelis servillei* Laporte, first included species, by Laporte, 1833:86.

✓*Heteroscelis bimaculata* (Walker)

Platynopus bimaculatus Walker, 1867:124 [new species-- Brazil].

Heteroscelis bimaculata.-- Thomas, 1992:49 [Panama].

✓*Heteroscelis lepida* (Stål)

Phyllochirus lepidus Stål, 1862b:93 [new species-- Mexico].

Heteroscelis lepida.-- Thomas, 1992:48 [Panama].-- Brailovsky and Mayorga, 1994:40 [Panama].

✓**Genus *Oplomus* Spinola**

Oplomus Spinola, 1837:355. Type species: *Cimex tripustulatus* Fabricius, a junior synonym of *Asopus salamandra* Burmeister, designated by Schouteden, 1907:34.

✓*Oplomus festivus* (Dallas)

Pentatoma marginalis Westwood, preoccupied, 1837:37 [new species-- Brazil].

Oplomus festivus Dallas, 1851:85 [new species-- Colombia].

Oplomus marginalis.-- Thomas, 1992:60 [Panama].

Note: Rolston and Rider (1995:845-846) explained the change of name for this species.

✓*Oplomus mundus* Stål

Oplomus mundus Stål, 1862b:87 [new species-- Mexico].-- Thomas, 1992:61 [Panama].

Oplomus lepidus Horvath, 1911:429 [new species-- Panama].

Note: *O. lepidus* was synonymized by Thomas, 1992:61.

✓ *Oplomus pulcher* Dallas

Oplomus pulcher Dallas, 1851:84 [new species-- Mexico].-- Thomas, 1992:62 [Panama].-- Brailovsky and Mayorga, 1994:40 [Panama].

✓ *Genus Perillus* Stål

Oplomus (Perillus) Stål, 1862b:88. Type species: *Asopus confluens* Herrich-Schaeffer, designated by Schouteden, 1907:36.

Perillus.-- Stål, 1870:32.

Notes: (1) All Panama records for this genus appear to be based on a possible mislabelling or misinterpreting a label. In the Smithsonian collection is a Uhler specimen of *P. circumcinctus* (Stål) bearing a handwritten locality appearing as "Pan" with the pin stuck between the apparent "a" and "n." This must be the specimen on which Uhler (1876:282) based his "Panama" record that was accepted by Uhler, 1878:370; Distant, 1880:34; Lethierry and Severin, 1893:206; Van Duzee, 1904:67; Blatchley, 1926:186; and Kirkaldy 1909a:7 under the combination *Perilloides circumcinctus*. (2) Thomas (1992:71) lists six of the seven species in this genus (including *P. circumcinctus*) as occurring from Mexico northward, and only *P. confluens* as occurring far enough south, to Costa Rica, to be close to Panama. This indicates the genus may be represented in Panama by the latter species.

✓ *Genus Podisus* Herrich-Schaeffer

Podisus Herrich-Schaeffer, 1853:296. Type species: *Podisus vitripennis* Herrich-Schaeffer, a junior synonym of *Arma nigrispina* Dallas, designated by Opinion 1755 of the International Commission on Zoological Nomenclature (1994).

✓ *Podisus aenescens* (Stål)

Telepta aenescens Stål, 1860:11 [new species-- Brazil].

Telepta thetis Stål, 1862b:92 [new species-- Mexico].

Podisus thetis.-- Distant, 1889:320 [Bugaba; David; Volcan de Chiriqui].-- Lethierry and Severin, 1893:219 [Panama].

Apateticus (Podisus) thetis.-- Kirkaldy, 1909a:21 [Panama].

Podisus aenescens.-- Thomas, 1992:75 [Panama].

✓ *Podisus affinis* Distant

Telepta fuscescens Stål, 1862b:90, preoccupied [new species-- Mexico].

Podisus affinis Distant, 1880:38. Proposed as "new species" as replacement name for preoccupied

Telepta fuscescens Stål; 1889:319 [Panama; Bugaba; Volcan de Chiriqui. Mexico. Guatemala. Colombia].

Apateticus (Podisus) affinis.-- Kirkaldy, 1909a:18 [Panama].

Note: Thomas (1992:95) listed this species only for Guatemala and Mexico and made no placement of other localities.

✓*Podisus congrex* (Stål)

Telepta congrex Stål, 1862b:91 [new species-- Mexico].

Podisus congrex-- Distant, 1889:319 [Volcan de Chiriqui].-- Thomas, 1992:83 [Panama].

✓*Podisus crassimargo* (Stål)

Telepta crassimargo Stål, 1860:10 [new species-- Brazil].

Apateticus (Podisus) congrex-- Kirkaldy, 1909a:18 [Panama].

Podisus crassimargo-- Thomas, 1992:85 [Panama].

✓*Podisus nigrispinus* (Dallas)

Edessa bifida Laporte, 1833:86, preoccupied [new species-- Brazil].

Arma nigrispina Dallas, 1851:99 [new species-- Brazil].

Podisus nigrispinus-- Thomas, 1992:85 [Panama].

✓*Podisus nigriventris* Distant

Podisus nigriventris Distant, 1880:39 [new species-- Guatemala]; 1889:319 [David; Volcan de Chiriqui].-- Thomas, 1992:97 [Panama].

Apateticus (Podisus) nigriventris-- Kirkaldy, 1909a:20 [Panama].

✓*Podisus sagitta* (Fabricius)

Cimex sagitta Fabricius, 1794:99 [new species-- "Insulis Americae meridionalis"].

Podisus sagitta-- Distant, 1889:318 [Bugaba; Volcan de Chiriqui].-- Thomas, 1992:97 [Panama].-- Brailovsky and Mayorga, 1994:42 [Panama].

Apateticus (Podisus) sagitta-- Kirkaldy, 1909a:20 [Panama].

✓*Podisus sculptus* Distant

Podisus sculptus Distant, 1889:320 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1893:219 [Panama].-- Thomas, 1992:78 [Panama].

Apateticus (Podisus) sculptus-- Kirkaldy, 1909a:20 [Panama].

✓*Podisus trucidatus* Thomas

Podisus trucidatus Thomas, 1992:98 [new species-- Panama: Chiriqui Prov., 3 km W Cerro Punta; Chiriqui Prov., 2.5 km W Cerro Punta; Chiriqui Prov., Cerro Punta; Las Lagunas, Costa Rica].

✓Genus *Stiretrus* Laporte

Stiretrus Laporte, 1833:67, 75. Type species: *Scutellera decemguttata* Lepeletier and Serville, designated by Schouteden, 1907:7.

✓*Stiretrus anchorago* (Fabricius)

Cimex anchorago Fabricius, 1775:699 [new species-- "America"].

Stiretrus caeruleus-- Distant, 1889:316 [Davida].-- Lethierry and Severin, 1893:202 [Panama].

Stiretrus anchorago-- Distant, 1880:28 [Panama]; 1889:317 [David].-- Lethierry and Severin, 1893:202 [Panama].-- Van Duzee, 1904:63 [Panama].-- Thomas, 1992:109 [Panama].-- Arnold 1996:276 [Panama].

Stiretrus (Oncogaster) anchorago-- Kirkaldy, 1909a:32 [Panama].-- Froeschner, 1988d:557 [Panama].

Stiretrus (Oncogaster) caeruleus-- Kirkaldy, 1909a:32 [Panama].

✓**Genus *Supputius* Distant**

Supputius Distant, 1889:321. Type species: *Supputius typicus* Distant, originally designated "by indication" [in sense of International Code of Nomenclature, 1985:129, Article 68c].

✓*Supputius typicus* Distant

Supputius typicus Distant, 1889:321 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1893:220 [Panama].-- Schouteden, 1907:59 [Panama].-- Kirkaldy, 1909a:16 [Panama].-- Pirán, 1956a:2 [Panama].-- Brailovsky and Mayorga, 1994:42 [Panama].

✓**Genus *Tylospilus* Stål**

Podisus (Tylospilus) Stål, 1870:52. Type species: *Oplomus chilensis* Spinola, designated by Schouteden, 1907:70.

✓*Tylospilus cloelia* (Stål)

Telepta cloelia Stål, 1862b:91 [new species-- Mexico].

Podisus cloelia-- Distant, 1889:320 [Tolé; Volcan de Chiriqui].

Apateticus (Tylospilus) cloelia-- Kirkaldy, 1909a:21 [Panama].

Tylospilus cloelia-- Thomas, 1992:117 [Panama].

✓**Genus *Tynacantha* Dallas**

Tynacantha Dallas, 1851:106. Type species: *Tynacantha marginalis* Dallas, monotypic.

✓*Tynacantha splendens* Distant

Tynacantha splendens Distant, 1889:321 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1893:220 [Panama].-- Schouteden, 1907:60 [Panama].-- Kirkaldy, 1909a:16 [Panama].-- Thomas, 1992:123 [Panama].

✓SUBFAMILY DISCOCEPHALINAE FIEBER

Rolston (1981b) divided the classical "Discocephalinae" into two tribes when he erected the new tribe Ochlerini [which see] for some of its genera.

✓TRIBE DISCOCEPHALINI FIEBER

Rolston (1990:15-16) provided a key to the 14 genera of "broadheaded" members of this group.

✓Genus *Ablaptus* Stål

Ablaptus Stål, 1864:49. Type species: *Ablaptus amazonus* Stål, monotypic.

Note: Rolston (1988) published a revision of *Ablaptus* with a key (page 285) to its three species. Becker and Grazia (1989) followed with description of three more species and provided keys for separating the species by males and by females.

✓*Ablaptus brevirostrum* Rolston

Ablaptus brevirostrum Rolston, 1988:285, 286 [new species-- Costa Rica. Panama: Barro Colorado Island].-- Becker and Grazia, 1989:57 [Panama].

✓Genus *Antiteuchus* Dallas

Antiteuchus Dallas, 1851:152. Type species: *Dinidor variolosus* Westwood, designated by Kirkaldy, 1909a:XXIII, 217.

Note: Ruckes' (1964) revision of this genus (including the subgenus *Neodine* Kirkaldy) presented a key (pages 61-64) to 32 species. Engleman and Rolston (1983) added eight new species and provided keys for separating the four species of the genus *Neodine* Kirkaldy and 14 species of the "paralella group" of the subgenus *Antiteuchus*.

✓*Antiteuchus costaricensis* Ruckes

Antiteuchus (Antiteuchus) costaricensis Ruckes, 1964b:64, 80 [new species-- Costa Rica. Panama: Bocas de Toro].

✓*Antiteuchus cuspidatus* Ruckes

Antiteuchus (Antiteuchus) cuspidatus Ruckes, 1964b:98 [new species-- Colombia].
Antiteuchus cuspidatus.-- Rolston, 1993:116 [Canal Zone].

✓*Antiteuchus macraspis* (Perty)

Pentatoma macraspis Perty, 1833:166 [new species-- Dominican Republic].
Dinocoris macraspis.-- Distant, 1889:323 [David].-- Lethierry and Severin, 1893:86 [Panama].
Neodine macraspis.-- Kirkaldy, 1909a:218 [Panama].

Antiteuchus (Neodine) macraspis-- Ruckes, 1964b:60 [Barro Colorado Island; Bouquete; David; El Volcan].

✓*Antiteuchus panamensis* (Ruckes)

Mecistorhinus panamensis Ruckes, 1959b:4 [new species-- Panama: Barro Colorado Island; Chiva Chiva, Canal Zone; Colon, Canal Zone].-- Schrader 1960:499 [Panama].

Antiteuchus (Antiteuchus) panamensis-- Ruckes, 1964b:7 [Barro Colorado Island; Chiva Chiva; Chorera; Colon; David; Gatun].

Antiteuchus panamensis-- Pirán, 1968:18 [Panama].

✓*Antiteuchus piceus* (Palisot)

Pentatoma picea Palisot, 1817:148 [new species-- Dominican Republic].

Dinocoris piceus-- Distant, 1890:324 [David].

Antiteuchus (Antiteuchus) piceus-- Ruckes, 1964b:67 [David].

✓*Antiteuchus tripterus* (Fabricius)

Cimex tripterus Fabricius, 1787:294 [new species-- Cajennae].

Dinocoris tripterus-- Distant, 1880:46 [Panama].-- Lethierry and Severin, 1893:86 [Panama].

Mecistorhinus (Mecistorhinus) tripterus-- Kirkaldy, 1909a:217 [Panama].

Antiteuchus (Antiteuchus) tripterus tripterus-- Ruckes, 1964b:76 [Ancon; Barro Colorado Island; Colon; Cristobal; La Chorrera; Matchin; Panama City. Santa Cruz. Taboga Island].

Antiteuchus tripterus limbiventris-- Eberhard, 1975:2 [Panama].

✓**Genus *Architas* Distant**

Architas Distant, 1889:323. Type species: *Architas pudens* Distant, monotypic.

✓*Architas pudens* Distant

Architas pudens Distant, 1889:323 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:85 [Panama].-- Kirkaldy, 1909a:215 [Panama].-- Schrader, 1960:499 [Panama].

✓**Genus *Dinocoris* Burmeister**

Dinocoris Burmeister, 1835:363. Type species: *Dinidor maculatus* Laporte, a junior synonym of *Halys variolosus* Fabricius, designated by Kirkaldy, 1909a:365.

Note: Becker and Grazia's (1985) revision of this genus included a key (pages 71-72) to the 14 species in two subgenera.

✓*Dinocoris gibbosus* (Fallou)

Brochymena gibbosa Fallou, 1889:120 [new species-- Brazil].

Dinocoris (Dinocoris) gibbosus-- Becker and Grazia, 1985:96 [Barro Colorado Island, Canal Zone].

✓*Dinocoris rufitarsus* Ruckes

Dinocoris rufitarsus Ruckes, 1958:4 [new species-- Honduras. Panama: Barro Colorado Island].--Schrader, 1960:499 [Panama].-- Becker and Grazia, 1985:98 [Barro Colorado Island; Fort Clayton; San Jose, Pearl Island].

✓*Dinocoris variolosus* (Linnaeus)

Cimex variolosus Linnaeus, 1758:445 [new species-- "America"].

Dinocoris (Dinocoris) variolosus.-- Becker and Grazia, 1985:73 [Armadiilha de Luz; Barro Colorado Island; Las Cambres].

✓Genus *Discocephalessa* Kirkaldy

Platycarenum (Discocephalessa) Kirkaldy, 1909a:215. Type species: *Discocephalessa notulata* Stål, original designation.

Discocephalessa.-- Ruckes, 1966b:2

✓*Discocephalessa humilis* (Herrich-Schaeffer)

Discocephala humilis Herrich-Schaeffer, 1843:39 [new species-- Colombia].-- Distant, 1880:45 [Panama]; 1889:322 [Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1893:84 [Panama].

Platycarenum (Discocephalessa) humilis.-- Kirkaldy, 1909a:215 [Panama].

✓Genus *Dryptocephala* Laporte

Dryptocephala Laporte, 1832:55. Type species: *Dryptocephala brullei* Laporte, monotypic.

Note: Ruckes (1966c) revised the members of the genus and presented an illustrated key (pages 5-7) to the 13 species.

✓*Dryptocephala lurida* Erichson

Storthia livida.-- Herrich-Schaeffer, 1844:42, misidentification [Colombia].

Dryptocephala lurida Erichson, 1848:609. Proposed as a new name for Herrich-Schaeffer's misidentification of *Storthia livida*.

Dryptocephala livida.-- Distant, 1893:455 [Bugaba].

✓*Dryptocephala obtusiceps* Stål

Dryptocephala obtusiceps Stål, 1872:2 [new species-- Colombia].-- Distant, 1880:44 [Panama].--Kirkaldy, 1909a:214 [Panama].-- Ruckes, 1966c:24 [Darien].

✓Genus *Eurystethus* Mayr

Eurystethus Mayr, 1864:907. Type species: *Eurystethus nigropunctatus* Mayr, monotypic.

Note: Ruckes (1966a) provided a revision with keys to the subgenera and nine species.

✓*Eurystethus ellipsoidalis* Ruckes

Eurystethus ellipsoidalis Ruckes, 1958:1 [new species-- Panama: Barro Colorado, Canal Zone].
Eurystethus (Eurystethus) ellipsoidalis.-- Ruckes, 1966a:12 [Canal Zone].

✓Genus *Lineostethus* Ruckes

Lineostethus Ruckes, 1966b:10, 22. Type species: *Discocephala clypeata* Stål, original designation.

Note: Hildebrand and Becker (1982) described a new species and redescribed all the others; they raised *marginellus* back to full species but gave no Panama records for any member of the genus.

✓*Lineostethus clypeatus* (Stål)

Discocephala (Platycarenum) clypeatus Stål, 1862b:96 [new species-- Mexico].
Discocephala clypeata.-- Distant, 1880:45 [Matachin].

Discocephala clypeatus clypeatus.-- Ruckes, 1966b:24 [Matachin].

Note: Ruckes (1966b:22-24) included Stål's two taxa *Discocephala clypeata* and *D. marginella* as subspecies of *D. clypeatus*; he did not list a Panama record for the subspecies *marginellus* and indicated doubt about its occurrence there when he wrote that it "appears to occupy a more northern territory than the typical species [*sic*], *clypeatus*."

✓*Lineostethus marginellus* (Stål)

Discocephala (Platycarenum) marginella Stål, 1872a:6 [new species-- Mexico].
Discocephala marginella.-- Distant, 1889:322 [Bugaba].

✓Genus *Mecistorhinus* Dallas

Mecistorhinus Dallas, 1851:162. Type species: *Mecistorhinus rufescens* Dallas, monotypic.

✓*Mecistorhinus complanatus* (Distant)

Dinocoris complanatus Distant, 1889:324 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:85 [Panama].

Mecistorhinus (Mecistorhinus) complanatus.-- Kirkaldy, 1909a:217 [Panama].

✓*Mecistorhinus josephi* (Stål)

Antiteuchus josephi Stål, 1859d:224 [new species-- Panama: Insula St. Joseph].-- Walker, 1867:199 ["Isle St. Joseph, Bay of Panamá"].

Dinocoris Lethierry and Severin, 1893:85 ["I. S. Joseph (Prope Panama)"].

Mecistorhinus (Mecistorhinus) josephi.-- Kirkaldy, 1909a:217 [St. Joseph's Isle].

✓*Mecistorhinus tibialis* Ruckes

Mecistorhinus tibialis Ruckes, 1959a:2 [new species-- Costa Rica. Panama: Barro Colorado Island, Canal Zone. Colombia].

✓**Genus *Opophylax* Bergroth**

Opophylax Bergroth, 1918:298.

✓*Opophylax signoreti* (Distant)

Eurystethus signoreti Distant, 1880:47 [new species-- Panama].-- Lethierry and Severin, 1893:98 [Panama].--Kirkaldy, 1909a:219 [Panama].

Note: Bergroth (above) assigned this species to his new genus without giving distribution.

✓**Genus *Parvamima* Ruckes**

Parvamima Ruckes, 1960a:6. Type species: *Parvamima bicolor* Ruckes, original designation.

✓*Parvamima bicolor* Ruckes

Parvamima bicolor Ruckes, 1960a:7 [new species-- Panama: Barro Colorado Island].-- Engleman, 1977:263 [Canal Zone; Cerro Campana].-- Rolston, 1987:73 [Barro Colorado].

✓**Genus *Patronatus* Ruckes**

Patronatus Ruckes, 1965:129. Type species: *Patronatus binotatus* Ruckes, original designation.

✓*Patronatus binotatus* Ruckes

Patronatus binotatus Ruckes, 1965:130 [new species-- Panama: Barro Colorado Island, Canal Zone; Chiriqui. Colombia].

✓**Genus *Pelidnocoris* Stål**

Pelidnocoris Stål, 1867:501. Type species: *Pelidnocoris stalii* Haglund, first included species, by Haglund, 1868:150.

Note: Arnold's (1996:276) note that Ruckes (1966d) had described *Pelidnocoris haglundi* from "Panama" was a *lapsus*; it was described from Brazil.

✓*Pelidnocoris majusculus* Ruckes

Pelidnocoris majusculus Ruckes, 1966d:6 [new species-- Panama: Barro Colorado Island, Canal Zone].

✓*Pelidnocoris stalii* Haglund

Pelidnocoris stalii Haglund, 1868:150 [new species-- Mexico].-- Ruckes, 1966d:3 [Chiriqui].-- Arnold, 1996:276 [Panama].

✓Genus *Phoecia* Stål

Phoecia Stål, 1862:97. Type species: *Discocephala lineaticeps* Stål, original designation.

Beroaldus Distant, 1889:322. Type species: *Beroaldus erubescens* Distant, monotypic.

Note: Rolston (1990:18) assigned *Beroaldus* to synonym, as above.

✓*Phoecia erubescens* (Distant)

Beroaldus erubescens Distant, 1889:323 [new species-- Guatemala. Panama: Volcan de

Chiriqui].-- Lethierry and Severin, 1893:84 [Panama].-- Kirkaldy, 1909a:216 [Panama].

Note: Rolston (1990:18) changed the species combination when he made *Beroaldus* a junior synonym of *Phoecia*.

✓Genus *Platycarenum* Fieber

Platycarenum Fieber, 1860b:77. Type species: *Cydnus umbraculatus* Fabricius, first included species, by Fieber, 1861:326.

✓*Platycarenum umbraculatus* (Fabricius)

Cydnus umbraculatus Fabricius, 1803:186 [new species-- South America].

Platycarenum umbraculatus.-- Ruckes, 1966b:12 [Darien].

✓Genus *Priapismus* Distant

Priapismus Distant, 1889:324. Type species: *Priapismus foveatus* Distant, designated by Kirkaldy, 1909a:218.

✓*Priapismus foveatus* Distant

Priapismus foveatus Distant, 1889:324 [new species-- Panama: Volcan de Chiriqui].-- Lethierry

and Severin, 1893:86 [Panama].-- Kirkaldy, 1909a:218 [Panama].-- Rolston, 1984:120 [V. de Chiriqui].

✓*Priapismus maculatus* Distant

Priapismus maculatus Distant, 1889:325 [new species-- Panama: Bugaba; Volcan de

Chiriqui].--Lethierry and Severin, 1893:86 [Panama].-- Kirkaldy, 1909a:218 [Panama].--

Rolston, 1984:123 [V. de Chiriqui].

✓ **Genus *Ruckesiocoris* Rider**

Selenochilus Ruckes, 1963:129, preoccupied. Type species: *Selenochilus nitidus* Ruckes, monotypic.
Ruckesiocoris Rider, 1998b:505. Proposed as new name for preoccupied *Selenochilus* Ruckes

✓ *Ruckesiocoris nitidus* (Ruckes)

Selenochilus nitidus Ruckes, 1964a:131 [new species-- Panama: Cerro Punta, Chiriqui Province].

Note: Rider (1998b:505) formed this combination when he renaming *Selenochilus*.

✓ **TRIBE OCHLERINI ROLSTON**

Note: Rolston's (1981b:40) proposal of this tribe was followed (1992:3-6) by his key to its 28 included genera.

✓ **Genus *Adoxoplatys* Breddin**

Adoxoplatys Breddin, 1903a:368. Type species: *Adoxoplatys minax* Breddin, designated by Kirkaldy, 1909a:xxxiii.

Note: Kormilev (1955a:15) presented a key to eight species.

✓ *Adoxoplatys panamensis* Kormilev

Adoxoplatys panamensis Kormilev, 1951a:90 [new species-- Panama: La Chorrera; Tabernilla, Canal Zone].

✓ **Genus *Alitocoris* Sailer**

Alitocoris Sailer, 1950:69. Type species: *Alitocoris schraderi* Sailer, original designation.
Note: Sailer (1950:75) provided a key to five species.

✓ *Alitocoris parvus* (Distant)

Macropygium parvum Distant, 1880:50 [new species-- Panama].-- Lethierry and Severin, 1893:90 [Panama].--Kirkaldy, 1909a:184 [Panama].

Alitocoris parvus.-- Sailer, 1950:73 [Paraiso, C.Z.].-- Schrader, 1960:499 [Panama].

✓ **Genus *Barola* Rolston**

Barola Rolston, 1992:16. Type species-- *Barola farfala* Rolston, original designation.

✓ *Barola farfala* Rolston

Barola farfala Rolston, 1992:17 [new species-- Panama: Barro Colorado C.Z.; Prov. Chiriqui, Rovira].

✓Genus *Coranda* Rolston

Coranda Rolston, 1992:36. Type species: *Melanodermus picipes* Stål, original designation.

✓*Coranda picipes* (Stål)

Melanodermus picipes Stål, 1872:14 [new species-- Colombia].-- Distant, 1893:455 [Bugaba, Volcan de Chiriqui].

Note: Rolston (1992:above) transferred this species to *Coranda* when he made it the type species of that genus; there he listed it only from Colombia and Peru, making no mention of Distant's (1893:above) record for Panama.

✓Genus *Lincus* Stål

Lincus Stål, 1867:524. Type species: *Pentatoma rufospilota* Westwood, monotypic, **Note:** Rolston (1983a) revised this genus and gave a key (pages 4-7) to its 30 species.

✓*Lincus anulatus* Rolston

Lincus anulatus Rolston, 1983a:22 [new species-- Panama: Sta. Rita Ridge, Colon Prov. Brazil].

✓*Lincus tumidifrons* Rolston

Lincus tumidifrons Rolston, 1983a:20 [new species-- Panama: Altoa de Maje, dist. Chepo; Altos (Isla) de Maje, Panama Prov.; Barro Colorado, Canal Zone; Cabima; Las Cumbres. Peru-?. Trinidad. Venezuela].

✓Genus *Macropygium* Spinola

Macropygium Spinola, 1837:287. Type species: *Macropygium atrum* Spinola, a junior synonym of *Cimex reticularis* Fabricius, monotypic.

✓*Macropygium reticulare* (Fabricius)

Cimex reticularis Fabricius, 1803:170 [new species-- South America].

Macropygium spinolae Stål, 1859d:223 [new species-- Colombia. Panama: Insula St. Joseph].--

Walker, 1867:197 [Insula St. Joseph].

Macropygium reticulare.-- Schrader, 1960:499 [Panama].

✓Genus *Ochlerus* Spinola

Ochlerus Spinola, 1837:294. Type species: *Ochlerus cinctus* Spinola, monotypic.

Note: Rolston (1992:10) made *Melanodermus* Stål a junior synonym of *Ochlerus*.

✓*Ochlerus cinctus* Spinola

Ochlerus cinctus Spinola, 1837:295 [new species-- Brazil].-- Kirkaldy, 1909a:185 [Panama].
Ochlerus marginatus.-- Distant, 1880:50 [Panama]; 1889:326 [Bugaba; Volcan de Chiriqui].--
 Lethierry and Severin, 1893:90 [Panama].

✓Genus *Orbatina* Ruckes

Orbatina Ruckes, 1960:228. Type species: *Orbatina fuligina* Ruckes, monotypic.

✓*Orbatina fuligina* Ruckes

Orbatina fuligina Ruckes, 1960:229 [new species-- Colombia. Peru].-- Rolston, 1992:10
 Panama].

✓Genus *Stalius* Rolston

Stalius Rolston, 1992:11. Type species: *Ochlerus tartareus* Stål, original designation.

✓*Stalius tartareus* (Stål)

Ochlerus tartareus Stål, 1862b:98 [new species-- Mexico].
Melanodermus tartareus.-- Distant, 1889:327 [Bugaba, Volcan de Chiriqui].-- Kirkaldy,
 1909a:185 [Panama].

Note: Rolston (1992:above) transferred this species to *Stalius* when he made it the type species
 of that genus; there he listed it only for Colombia and made no mention of Distant's
 (1889:above) Panama record.

✓*Stalius trisinuatus* Rolston

Stalius trisinuatus Rolston, 1992:13 [new species-- Costa Rica. Panama:Chiriquii Prov. Santa
 Clara; Renacimiento, Santa Clara].

✓SUBFAMILY EDESSINAE KIRKALDY

Note: This taxon varies in position according to author: it was raised from tribal to subfamily
 status by Rolston and McDonald (1979:197, 200) and considered a tribe by Gapud
 (1991). Schuh and J. Slater's (1995:232) acceptance of subfamily status is followed here.

✓Genus *Edessa* Fabricius

Edessa Fabricius, 1803:145. Type species: *Cimex "ceruus"* (a variant spelling of *cervus*)
 Fabricius, fide Kirkaldy, 1909a:153.

✓*Edessa affinis* Dallas

Edessa affinis Dallas, 1851:332 [new species-- Brazil. Colombia].-- Distant, 1890:347 [Bugaba;
 Volcan de Chiriqui].-- Kirkaldy, 1909a:154 [Panama].

Edessa bugabensis Distant

Edessa bugabensis Distant, 1890:344 [new species-- Panama: Bugaba].-- Kirkaldy, 1909a:155 [Panama].

Edessa bulbacea Distant

Edessa bulbacea Distant, 1890:343 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1893:189 [Panama].-- Kirkaldy, 1909a:155 [Panama].

Edessa caldaria Distant

Edessa caldaria Distant, 1890:349 [new species-- Panama: Caldera; David].-- Lethierry and Severin, 1893:189 [Panama].-- Kirkaldy, 1909a:155 [Panama].

Edessa carnososa Westwood

Edessa carnososa Westwood, 1837:29 [new species-- Brazil].-- Kirkaldy, 1909a:155 [Panama].

Edessa celsa Distant

Edessa celsa Distant, 1890:348 [new species-- Panama: David].-- Lethierry and Severin, 1893:189 [Panama].-- Kirkaldy, 1909a:155 [Panama].

Edessa collaris Dallas

Edessa collaris Dallas, 1851:329 [new species-- Brazil. British Guiana].-- Distant, 1890:349 [Bugaba].-- Lethierry and Severin, 1893:189 [Panama].-- Kirkaldy, 1909a:156 [Panama].

Edessa cornuta Burmeister

Edessa cornuta Burmeister, 1835:356 [new species-- Brazil. Mexico].-- Distant, 1881a:97 [Panama]; 1890:350 [Bugaba; David; Volcan de Chiriqui].-- Lethierry and Severin, 1893:189 [Panama].-- Kirkaldy, 1909a:156 [Panama].

Edessa expolita Distant

Edessa expolita Distant, 1890:348 [new species-- Panama: Bugaba; Caldera].-- Lethierry and Severin, 1893:190 [Panama].-- Kirkaldy, 1909a:157 [Panama].

Edessa fuscidorsata Distant

Edessa fuscidorsata Distant, 1881a:89 [new species-- Panama. Colombia].-- Lethierry and Severin, 1893:190 [Panama].-- Kirkaldy, 1909a:157 [Panama].

Note: With his description of this species, Distant (1881a [February]: above) credited it to

"Reuter, in litt."; but since Distant's illustrated description appeared a month before Reuter's (1881[March]:234) description, Distant's use has priority as original description.

✓*Edessa fuscispina* Stål

Edessa fuscispina Stål, 1872:55 [new species-- Colombia].-- Distant, 1890:345 [Bugaba; David].-- Lethierry and Severin, 1893:190 [Panama].-- Kirkaldy, 1909a:157 [Panama].

✓*Edessa helix* Erichson

Edessa helix Erichson, 1848:610 [new species-- British Guiana].-- Kirkaldy, 1909a:158 [Panama].

Edessa costalis.-- Distant, 1890:342 [Panama].

Edessa fulvipes variety *costalis* .-- Distant, 1893:458 [Panama].

✓*Edessa intorta* Distant

Edessa intorta Distant, 1890:343 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:191 [Panama].-- Kirkaldy, 1909a:159 [Panama].

✓*Edessa irrorata* Dallas

Edessa irrorata Dallas, 1851:331 [new species-- Colombia].-- Distant, 1881a:95 [Colon].-- Kirkaldy, 1909a:159 [Panama].

✓*Edessa jugata* Westwood

Edessa jugata Westwood, 1837:28 [new species-- "America Aequinoct."].-- Distant, 1880:88 [Panama]; 1890:343 [Bugaba; Volcan de Chiriqui].-- Kirkaldy, 1909a:159 [Panama].

✓*Edessa junix* Stål

Edessa junix Stål, 1862b:114 [new species-- Mexico].-- Distant, 1890:346 [Bugaba; David; Panama].-- Lethierry and Severin, 1893:191 [Panama].

Edessa junix "var." *dariensis* Kirkaldy, 1909a:159 [new variety-- Panama].

Note: Kirkaldy's (above) new "var." was based on Distant's (above) comment that one of his specimens did "differ widely from the Mexican typical specimen."

✓*Edessa jurgiosa* Stål

Edessa jurgiosa Stål, 1862b:114 [new species-- Mexico].-- Distant, 1890:346 [Boquete; Bugaba; Caldera; David; Volcan de Chiriqui].-- Kirkaldy, 1909a:159 [Panama].

✓*Edessa leucogramma* (Perty)

Pentatoma leucogrammum Perty, 1833:167 [new species-- Brazil].

Edessa leucogramma.-- Distant, 1881a:89 [Panama]; 1890:344 [Bugaba].-- Kirkaldy, 1909a:159 [Panama].

✓*Edessa metata* Distant

Edessa metata Distant, 1890:347 [new species-- Panama: Bugaba; David].-- Lethierry and Severin, 1893:192 [Panama].-- Kirkaldy, 1909a:160 [Panama].-- Breddin, 1904a:145 [Chiriqui].

Edessa notata [sic].-- Lethierry and Severin, 1893:192 [Panama].

Edessa metatata.-- Kirkaldy, 1909a:160 [Panama].

Note: Breddin (1904a:above) listed this species for "Costa Rica (Chiriqui)." Consultation of a number of maps, atlases, etc., found no such geographic name in Costa Rica. Perhaps since the Panama province of Chiriqui is adjacent to Costa Rica, a lapsus might have occurred.

✓*Edessa nigricornis* Stål

Edessa nigricornis Stål, 1862b:110 [new species-- Mexico].-- Distant, 1890:344 [Panama].-- Kirkaldy, 1909a:161 [Panama].

✓*Edessa nigrispina* Dallas

Edessa nigrispina Dallas, 1851:326 [new species-- Mexico. Honduras].-- Distant, 1890:345 [Panama].-- Kirkaldy, 1909a:161 [Panama].

✓*Edessa olivacea* Stål

Edessa olivacea Stål, 1862b:111 [new species-- Mexico].-- Distant, 1890:344 [Bugaba; Tolé; Volcan de Chiriqui].-- Lethierry and Severin, 1893:192 [Panama].-- Kirkaldy, 1909a:161 [Panama].

✓*Edessa patricia* Stål

Edessa patricia Stål, 1862b:114 [new species-- Mexico].-- Distant, 1890:348 [Volcan de Chiriqui].-- Kirkaldy, 1909a:162 [Panama].

✓*Edessa pictiventris* Stål

Edessa pictiventris Stål, 1872:52 [new species-- Panama. Colombia].-- Distant, 1890:343 [Bugaba; Caldera; David; Volcan de Chiriqui].-- Kirkaldy, 1909a:162 [Panama].

✓*Edessa polymita* Distant

Edessa polymita Distant, 1890:348 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1893:193 [Panama].-- Kirkaldy, 1909a:162 [Panama].

✓*Edessa projecta* Distant

Edessa projecta Distant, 1890:345 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:193 [Panama].-- Kirkaldy, 1909a:163 [Panama].

Edessa quadridens Fabricius

Edessa quadridens Fabricius, 1803:148 [new species-- "America meridionale"].-- Distant, 1890:346 [Bugaba; Volcan de Chiriqui].-- Kirkaldy, 1909a:163 [Panama].

Edessa rixosa Stål

Edessa rixosa Stål, 1862b:116 [new species-- Mexico].-- Distant, 1890:347 [Bugaba; Caldera; Volcan de Chiriqui].-- Kirkaldy, 1909a:163 [Panama].

Edessa rufomarginata (DeGeer)

Cimex rufomarginatus DeGeer, 1773:330 [new species-- America].
Edessa rufomarginata.-- Distant, 1881a:96 [Panama]; 1890:349 [Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1893:194 [Panama].-- Kirkaldy, 1909a:164 [Panama].

Edessa salvini Distant

Edessa salvini Distant, 1881a:89 [new species-- Costa Rica]; 1890:345 [Volcan de Chiriqui].

Edessa tauriformis Distant

Edessa tauriformis Distant, 1881b:391 [new species-- Nicaragua]; 1890:342 [Bugaba].-- Lethierry and Severin, 1893:195 [Panama].-- Kirkaldy, 1909a:165 [Panama].

Edessa vinula Stål

Edessa vinula Stål, 1862b:115 [new species-- Mexico].-- Distant, 1890:347 [Bugaba; David].-- Lethierry and Severin, 1893:195 [Panama].-- Kirkaldy, 1909a:166 [Panama].

Genus *Peromatus* Amyot and Serville

Peromatus Amyot and Serville, 1843:156. Type species: *Edessa notata* Burmeister, monotypic.

Peromatus notatus (Burmeister)

Edessa notata Burmeister, 1835:345 [new species-- Brazil].
Peromatus notatus.-- Distant, 1880:85 [Panama]; 1890:342 [Bugaba; Tolé].-- Lethierry and Severin, 1893:188 [Panama].-- Kirkaldy, 1909a:153 [Panama].

Peromatus truncatus Distant

Peromatus truncatus Distant, 1880:86 [new species-- Mexico]; 1890:342 [Bugaba; Panama City].-- Kirkaldy, 1909a:153 [Panama].

✓SUBFAMILY PENTATOMIDAE LEACH

Keys to the Western Hemisphere genera of this tribe can be found in Rolston, McDonald, and Thomas (1980) and Rolston and McDonald (1981, 1984).

✓TRIBE PENTATOMINI LEACH

✓Genus *Acrosternum* Fieber

Acrosternum Fieber, 1860:79. Type species: *Acrosternum heegeri* Fieber, first included species, by Fieber, 1861:331.

Note: Rolston (1983b) gave a revision of the subgenus *Chinavia* Orian (to which all New World species of the genus belong) with a key (pages 105-108) to 51 species.

✓*Acrosternum istum* Rolston

Acrosternum (Chinavia) istum Rolston, 1983b:121 [new species-- Panama: Chepo, Alto de Maje, Panama Prov.]-- Rider, 1986:229 [Alto de Maje, Chepo, Panama Province; Cerro Gaital, Cocle Province].

✓*Acrosternum macdonaldi* Rolston

Acrosternum (Chinavia) macdonaldi Rolston, 1983b:142 [new species-- Panama: Barro Colorado, Canal Zone; Chepos, Panama; Coco Solo Hospital, Canal Zone].

✓*Acrosternum marginatum* (Palisot)

Pentatoma marginatum Palisot, 1817:47 [new species-- Santa Domingo].

Rhaphigaster hilaris-- Uhler, 1871:98 [Panama].

Rhaphigaster pennsylvanicus-- Uhler, 1878:380 [Panama].

Nezara hilaris-- Uhler, 1878:380 [Panama].

Nezara marginata-- Distant, 1880:79 [Panama]; 1890:339 [Bugaba; David; Taboga Island; Volcan de Chiriqui]-- Sharp, 1890:408 [Volcan de Chiriqui]-- Lethierry and Severin, 1893:166 [Panama].

Nezara (Acrosternum) hilaris-- Kirkaldy, 1909a:119 [Panama].

Nezara (Acrosternum) marginata-- Kirkaldy, 1909a:119 [Panama].

Acrosternum hilare-- Blatchley, 1926:162 [Panama].

Acrosternum marginatum-- Hughes-Schrader and Schrader, 1957:3 [Panama]-- McGuire and Crandall, 1967:56 [Panama].

Acrosternum (Chinavia) marginatum-- Rolston, 1983b:152 [Panama].

Notes: (1) Rolston (1983b:152) followed Kirkaldy (1909a:119) in dating the original proposal of *Pentatoma marginatum* as "1805;" but Griffin (1937) and Menke (1963b:701-702) documented [see under Palisot, 1805-1821, in Literature Cited] that page 147 actually was published in 1817. (2) The above earlier assignments of Panama records of *hilare* and *pennsylvanicum* to *marginatum* were probably based on Uhler being misled by the great similarity of the three species; later authors simply followed his records. This surmise was already agreed to by Blatchley (1926:162), and Rolston (1983b:156).

Acrosternum montivagum (Distant)

- Chlorochroa montivaga* Distant, 1890:333 [new species-- Panama: Volcan de Chiriqui].
Pentatoma montivaga-- Lethierry and Severin, 1893:119 [Panama].
Nezara majuscula Distant, 1890:339 [new species-- Mexico. Panama].-- Lethierry and Severin, 1893:165 [Panama].
Rhytidolomia (Chlorochroa) montivaga-- Kirkaldy, 1909a:54 [Panama].
Nezara (Acrosternum) majuscula-- Kirkaldy, 1909a:121 [Panama].
Acrosternum montivagum-- Rolston, 1976:4 [Panama].
Acrosternum (Chinavia) montivagum-- Rolston, 1983b:147 [Panama].

Acrosternum panamensis (Distant)

- Nezara panamensis* Distant, 1890:399 [new species-- Panama: Bugaba].
Nezara (Pellaea) panamensis-- Kirkaldy, 1909a:121 [Panama].
Acrosternum (Chinavia) panamensis-- Rolston, 1983b:126 [Bugaba].

Acrosternum scutellatum (Distant)

- Nezara scutellata* Distant, 1890:339 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:166 [Panama].
Nezara (Acrosternum) scutellata-- Kirkaldy, 1909a:121 [Panama].
Acrosternum (Chinavia) scutellatum-- Rolston, 1983b:117 [Panama].-- Brailovsky, 1988a:114 [Panama].

Acrosternum viridans (Stål)

- Rhaphigaster viridans* Stål, 1859d:228 [new species-- Galapagos Islands. Panama. Peru].-- Walker, 1867:359 [Panama].
Nezara viridans-- Stål, 1872:41 [Panama].-- Distant, 1880:79 [Panama].-- Lethierry and Severin, 1893:166 [Panama].-- Heidemann, 1901:365 [Panama].
Nezara (Acrosternum) viridans-- Kirkaldy, 1909a:120 [Panama].
Acrosternum (Nezara) viridans-- Barber, 1925:241 [Panama].
Acrosternum (Chinavia) viridans-- Rolston, 1983b:128 [Panama].

Genus *Adevoplitus* Grazia and Becker

Adevoplitus Grazia and Becker, 1997:387. Type species: *Pseudevoplitus longicornis* Ruckes, original designation.

Note: Grazia and Becker (1997:389-390) gave a key to five species.

Adevoplitus longicornis (Ruckes)

- Pseudevoplitus longicornis* Ruckes, 1959b:13 [new species-- Panama: Barro Colorado Island].-- Schrader, 1960:499 [Panama].-- Thomas, 1980a:293 [Panama].-- Brailovsky and Barrera, 1982a:232 [Panama].-- Grazia, Becker, and Thomas, 1994:442 [Panama].
Adevoplitus longicornis-- Grazia and Becker, 1997:390 [Barro Colorado Island; Ft. Gulich].

✓Genus *Agroecus* Dallas

Agroecus Dallas, 1851:193, 199. Type species: *Agroecus griseus* Dallas, designated by Kirkaldy, 1909a:63.

Note: Rider and Rolston's (1987) review of this genus provided a key (pages 429-430) to six species.

✓*Agroecus griseus* Dallas

Agroecus griseus Dallas, 1851:199 [new species-- Brazil. British Guiana].-- Distant, 1890:329 [Volcan de Chiriqui].-- Kirkaldy, 1909a:63 [Panama].-- Rider and Rolston, 1987:437 [Panama].

Agraecus [sic] *griseus*.-- Lethierry and Severin, 1893:126 [Panama].

✓Genus *Arocera* Spinola

Arocera Spinola, 1837:316. Type species: *Arocera aurantiaca* Spinola, a junior synonym of *Pentatoma acroleucum* Perty, monotypic.

Note: Rider's (1992b) revision of this genus contained a key (pages 101-103) to the two subgenera (*Arocera* and *Euocta* Stål) and 11 species.

✓*Arocera aequinoxialis* (Westwood)

Pentatoma aequinoxialis Westwood, 1837:33 [new species-- America aequinoctiali].

Arocera acroleuca.-- McDonald 1984:103 [Panama].

Arocera (Arocera) aequinoxialis.-- Rider 1992b:105 [Darien].

Note: Rider (1992:105) showed that *A. acroleuca* (Perty) is distinct from the present species and occurs farther south across central South America.

✓*Arocera apta* (Walker)

Strachia apta Walker, 1867:323 [new species-- Brazil].

Arocera apta.-- Distant, 1880:73 [Panama]; 1890:336 [Volcan de Chiriqui].-- Lethierry and Severin, 1893:159 [Panama].

Arocera (Euocta) apta.-- Kirkaldy, 1909a:109 [Panama].-- Becker and Grazia-Vieira, 1977:55 [Panama].-- Rider, 1992b:131 [Gamboa; Punta Vacamonte; Bocas de Toro: 2 mi N Divide on hwy to Chiriqui Grande; Miramar; Canal Zone: Santa Rita Ridge; Darien, 23 km E Cañanzas; Panama: Alto de Majé, Chepo; Cerro Campana; 10 km N El Llana; Las Cumbres].

✓*Arocera elongata* Showalter

Arocera elongata Showalter, 1929:33, 40 [new species-- Brazil].-- McDonald, 1984:114 [Panama].

Arocera repleta Van Duzee, 1931:94 [new species-- Panama: Canal Zone].

Arocera (Euocta) elongata elongata.-- Rider, 1992b:119 [San Blas: Punta Escoses].

Arocera (Euocta) elongata repleta.-- Rider, 1992b:123 [Bocas del Toro: 2 mi N divide on hwy

to Chiriqui Grande; 10 km NE Fortuna Dam; Canal Zone: Barro Colorado Island; Madden Dam; Margarita; Chiriqui: Fortuna; Cocle: Cerro Gaital; Colón: Sta. Rita Ridge].

✓*Arocera nigrorubra* (Dallas)

Strachia nigrorubra Dallas, 1851:267 [new species-- Colombia].

Arocera nigroubra-- McDonald, 1984:105 [Panama].

Note: Rider (1992b:110) cited McDonald's (above) paper but listed this species only from "Colombia," with the comment, "This species is known only from the type specimen."

✓*Arocera placens* (Walker)

Strachia placens Walker, 1867:316 [new species-- St. Domingo].

Arocera affinis-- Distant, 1890:336 [Volcan de Chiriqui].

Arocera altivola Distant, 1890:337 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:159 [Panama].

Arocera chiriquensis Distant, 1893:337 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:159 [Panama].

Arocera (Euopta) affinis-- Kirkaldy, 1909a:109 [Panama].-- Brailovsky and Barrera, 1982a:236 [Volcan de Chiriqui].

Arocera (Euopta) altivola-- Kirkaldy, 1909a:109 [Panama].

Arocera (Euopta) chiriquensis-- Kirkaldy, 1909a:109 [Panama].

Arocera spectabilis-- McDonald, 1984:100 [Panama].

Arocera repleta [in part].-- McDonald, 1984:114 [Panama].

Arocera (Euopta) placens. Rider, 1992b:114 [Boquete: Majé Stn; Bocas del Toro: Bocas del Toro; Miramar; Canal Zone: Cardenas Village; Coco Solo Hospital; Madden Dam; Pipe Line Rd. Chiriqui; Fortuna: N. Candelas; Volcan de Chiriqui; Panama: Cerro Azul; Cerro Campana; Las Cumbres].

✓Genus *Arvelius* Spinola

Arvelius Spinola, 1837:344. Type species: *Cimex gladiator* Fabricius, a junior synonym of *Cimex albopunctatus* De Geer, designated by Kirkaldy, 1909a:150.

Note: Brailovsky's (1981d) revision of this genus contained a key (pages 290-291) to 17 species.

✓*Arvelius albopunctatus* (De Geer)

Cimex albopunctatus De Geer, 1773:331 [new species-- Surinam].

Arvelius albopunctatus-- Distant, 1880:82 [Panama].-- Brailovsky, 1981d:253 [Rio Abajo].

✓*Arvelius porrectispinis* Breddin

Arvelius porrectispinis Breddin, 1909:158 [new species-- Colombia. British Guiana].--

Brailovsky, 1981d:269 [Barro Colorado Island; La Campana; Potrerillo].

✓Genus *Banasa* Stål

Banasa Stål, 1860:24. Type species: *Banasa induta* Stål, designated by Kirkaldy, 1909a:115.

Note: Thomas and Yonke (1988) reviewed the genus for Mexico, Central America, and the Antilles, and later for South America (1990) and provided keys for the included species; all new species were credited to Thomas alone.

✓*Banasa centralis* Sailer

Banasa centralis Sailer, 1959:90 [new species-- Guatemala. Costa Rica].-- Thomas and Yonke, 1988:36 [Panama].

✓*Banasa cuspidata* Thomas

Banasa cuspidata Thomas, 1988:43 [new species-- Panama: Coco Solo Hospital; Fort Sherman; "Panamá-Chiriqui Boquete"; Panama Prov.: Cerro Campana],

✓*Banasa dolabrata* Thomas

Banasa dolabrata Thomas, 1988:45 [new species-- Costa Rica. Panama: Canal Zone, Pipeline Road; Fortuna, Chiriqui. South America].-- Thomas and Yonke, 1990:677 [Panama].

✓*Banasa dolorosa* Thomas

Banasa dolorosa Thomas, 1990:662 [new species-- "Panama," a female which "may be conspecific." Ecuador].

✓*Banasa excavata* Thomas

Banasa excavata Thomas, 1988:44 [new species-- El Salvador. Guatemala. Costa Rica. Panama: Oeste Clara, Rencimiento, Chiriqui Dst.].

✓*Banasa irata* (Fabricius)

Cimex iratus Fabricius 1787:292 [new species-- Cayenne].

Banasa bidens schraderi.-- Schrader and Hughes-Schrader, 1958:194 [Barro Colorado Island].-- Sailer, 1959:88 [Barro Colorado and Parais in Canal Zone].

Banasa irata.-- Thomas and Yonke, 1985:857 [Panama]; 1988:39 [Panama].

✓*Banasa lacertosa* Thomas

Banasa lacertosa Thomas, 1988:42 [new species-- Panama: Chiriqui, Fortuna].

✓*Banasa lenticularis* Uhler

Banasa lenticularis Uhler, 1894a:174 [new species-- Grenada].--Schrader and Hughes-Schrader, 1958:194 [Barro Colorado Island].-- Thomas and Yonke, 1988:38 [Panama].-- Froeschner, 1988:567 [Panama].

✓*Banasa minor* Sailer

Banasa minor.-- Schrader and Hughes-Schrader, 1958:194, 200 *nomen nudum* [Barro Colorado Island].-- Sailer, 1959:91 [new species-- Guatemala. Panama: Barro Colorado Island].-- Thomas and Yonke, 1988:41 [Barro Colorado Island].

Note: Schrader and Hughes-Schrader (1958:above) used the species name "*Banasa minor*" and credited it to Sailer, but the Sailer paper was not published until the following year.

✓*Banasa panamensis* Sailer

Banasa varians.-- Distant, 1890:340 [Bugaba; Caldera; David; Volcan de Chiriqui].

Banasa (Banasa) subrufescens.-- Kirkaldy, 1909a:122 [Panama].

Banasa panamensis Sailer, 1957a:86 [new species-- Panama: Barro Colorado Island].-- Hughes-Schrader and Schrader, 1957:3 [Panama].-- Schrader and Hughes-Schrader, 1958:194 [Barro Colorado Island].-- Thomas and Yonke, 1985:860 [Panama, map record]; 1988:41 [Barro Colorado Island]; 1990:681 [Barro Colorado Island].

✓*Banasa parapasekae* Thomas

Banasa parapasekae Thomas, 1988:45 [new species-- Panama-?: "Trinidad Rio Pan."].

Note: Thomas (above) wrote that the locality "Trinidad Rio Pan." on the specimen label "presumably" refers to the Rio Trinidad of Panama.

✓*Banasa pygmaea* Thomas

Banasa pygmaea Thomas, 1988:46 [new species-- Panama: Barro Colorado Island, Canal Zone].

✓*Banasa salvini* Distant

Banasa salvini Distant, 1911:251 [new species-- Guatemala].-- Thomas and Yonke, 1988:38 [Panama].

Banasa rufifrons.-- Schrader and Hughes-Schrader, 1958:194 *nomen nudum* [Barro Colorado Island].-- Sailer, 1959:92 [new species-- Panama: Barro Colorado Island].

Note: Schrader and Hughes-Schrader (1958) used the species name *Banasa rufifrons* and credited it to Sailer, but the Sailer paper was not published until the following year.

✓*Banasa stalii* Distant

Banasa stalii Distant, 1880:80 [new species-- Costa Rica].-- Thomas and Yonke, 1988:35 [Panama].

✓*Banasa stigmosa* Distant

Banasa stigmosa Distant, 1890:340 [new species-- Panama: Matachin].-- Lethierry and Severin, 1893:168 [Panama].-- Thomas and Yonke, 1988:40 [Matachin].

Banasa (Banasa) stigmosa.-- Kirkaldy, 1909a:122 [Panama].

✓*Banasa zeteki* Sailer

Banasa zeteki Sailer, 1959:89 [new species-- Panama: Barro Colorado Island].-- Becker and Grazia-Vieira, 1977:57 [Panama].-- Brailovsky, 1988a:129 [Panama].-- Thomas and Yonke, 1988:37 [Barro Colorado Island]; 1990:659 [Panama].

✓**Genus *Berecynthus* Stål**

Berecynthus Stål, 1862b:101. Type species: *Prooxys crenatus* Amyot and Serville, a junior synonym of *Cimex hastator* Fabricius, monotypic.

✓*Berecynthus hastator* (Fabricius)

Cimex hastator Fabricius, 1798:532 [new species-- "Insulae Americae"].
Berecynthus delirator.-- Distant, 1880:61 [Panama].-- Lethierry and Severin, 1893:129 [Panama].-- Kirkaldy, 1909a:68 [Panama].

Note: Rider and Rolston (1995:847) presented the reason for using the combination *B. hastator*.

✓**Genus *Brachystethus* Laporte**

Edessa (Brachystethus) Laporte, 1833:63. Type species: *Edessa marginata* Laporte, junior synonym of *Cimex geniculatus* Fabricius, designated by Kirkaldy, 1909a:152.
Brachystethus.-- Spinola, 1837:343.

✓*Brachystethus coxalis* Breddin

Brachystethus coxalis Breddin, 1904b:178 [new species-- Panama: Chiriqui, Peru].-- Bergroth, 1908a:178 [Panama].

✓*Brachystethus rubromaculatus* Dallas

Brachystethus rubromaculatus Dallas, 1851:337 [new species-- Mexico. Honduras].-- Distant, 1880:85 [Matachin]; 1890:342 [Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1893:187 [Panama].-- Kirkaldy, 1909a:152 [Panama].-- Brailovsky and Barrera, 1982a:238 [Bugaba; Matachin; Volcan de Chiriqui].-- Brailovsky, 1988a:129 [Panama].

✓*Brachystethus vicinus* Signoret

Brachystethus vicinus Signoret, 1851:344 [new species--Brazil].-- Distant, 1890:341 [Bugaba].-- Lethierry and Severin, 1893:187 [Panama].-- Kirkaldy, 1909a:152 [Panama].

✓**Genus *Capivaccius* Distant**

Capivaccius Distant, 1893:456. Type species: *Capivaccius bufo* Distant, monotypic.
Note: Brailovsky and Rolston (1986) presented a key (pages 39-40) to the two included species.

✓*Capivaccius bambusii* Brailovsky and Rolston

Capivaccius bambusii Brailovsky and Rolston, 1986:35 [new species-- Mexico. Panama: El Valle, Cocle].

✓*Capivaccius bufo* Distant

Capivaccius bufo Distant, 1893:457 [new species-- Panama: Caldera].-- Lethierry and Severin, 1893:268 [Panama].-- Kirkaldy, 1909a:72 [Panama].

✓Genus *Chlorocoris* Spinola

Chlorocoris Spinola, 1837:288. Type species: *Chlorocoris tau* Spinola, monotypic.

Note: Thomas (1985) revised this genus and gave keys to the two subgenera and species.

✓*Chlorocoris biconicus* Thomas

Chlorocoris (Monochrocerus) biconicus Thomas, 1985:685, 689 [new species-- Nicaragua. Costa Rica. Panama: Chiriqui].

✓*Chlorocoris distinctus* Signoret

Chlorocoris distinctus Signoret, 1851:330 [new species-- Mexico].

Chlorocoris (Chlorocoris) distinctus.-- Thomas 1985:680 [Panama].

Chlorocoris atrispinus Stål, 1862b:99 [new species-- Mexico].-- Distant, 1890:334 [Bugaba; Caldera; Volcan de Chiriqui].-- Lethierry and Severin, 1893:148 [Panama].-- Kirkaldy, 1909a:95 [Panama].

✓*Chlorocoris isthmus* Thomas

Chlorocoris (Chlorocoris) isthmus Thomas, 1985:677, 683 [new species-- Costa Rica. Panama: Bocas del Toro, San Juan; Mojunga Swamp, Canal Zone. Colombia. Ecuador].

✓Genus *Cyptocephala* Berg

Cyptocephala Berg, 1883:209. Type species: *Cyptocephala cogitabunda* Berg, monotypic.

Note: Rolston (1986) revised this genus and gave a key (page 425) to its eight species.

✓*Cyptocephala antiguensis* (Westwood)

Pentatoma antiguensis Westwood, 1837:36 [new species-- Antigua].

Pentatoma taeniola Dallas, 1851:250 [new species-- Central America].

Thyanta taeniola.-- Distant, 1890:334 [Volcan de Chiriqui].-- Lethierry and Severin, 1893:148 [Panama].

Thyanta antiguensis.-- Kirkaldy, 1909a:94 [Panama].-- McGuire and Crandall, 1967:103 [Panama].

Cyptocephala antiguensis.-- Rolston, 1986:429 [Panama].

✓Genus *Dichelops* Spinola

Dichelops Spinola, 1837:299. Type species: *Dichelops punctatus* Spinola, monotypic.

Note: Grazia (1978) revised this genus and gave keys to its three subgenera and their included species.

✓*Dichelops bicolor* Distant

Dichelops bicolor Distant, 1890:332 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:129 [Panama].-- Kirkaldy, 1909a:68 [Panama].

Dichelops (Dichelops) bicolor.-- Grazia, 1978:26 [Volcan de Chiriqui].

✓Genus *Euschistus* Dallas

Euschistus Dallas, 1851:193, 201. Type species: *Pentatoma tristigma* Say, designated by Stål, 1872:26.

Note: Rolston's (1974) revision of the *Euschistus* species of Middle America offered a key (pages 10-14) to the 36 species known from that area. In 1982 he revised the subgenus *Lycipita* Stål and included a key (pages 282-283) to the 10 species. This was followed (1985) by his key (pages 353-356) to the males of 16 South American species of the subgenus *Euschistus*.

✓*Euschistus agudus* Rolston

Euschistus agudus Rolston, 1974:19 [new species-- Panama. Colombia. Venezuela].

✓*Euschistus atrox* (Westwood)

Pentatoma atrox Westwood, 1837:40 [new species-- "America aequinoctiali"].

Euschistus atrox.-- Rolston, 1974:21 [Panama].

✓*Euschistus bifibulus* (Palisot)

Pentatoma bifibula Palisot, 1817:148 [new species-- "St. Domingue"].

Euschistus bifibulus.-- Distant, 1890:330 [Volcan de Chiriqui].-- Kirkaldy, 1909a:64 [Panama].

✓*Euschistus biformis* Stål

Euschistus biformis Stål, 1862b:100 [new species-- Mexico].-- Distant, 1890:331 [Volcan de

Chiriqui].-- Lethierry and Severin, 1893:127 [Panama].-- Kirkaldy, 1909a:64 [Panama].--

McGuire and Crandall, 1967:78 [Panama].-- Rolston, 1974:27 [Panama].

Euschistus (Euschistus) biformis.-- Froeschner, 1988d:577 [Panama].

✓*Euschistus crenator* (Fabricius)

Cimex crenator Fabricius, 1794:101 [new species-- "Americae Insulis"].

Euschistus crenator.-- Distant, 1880:59 [Panama]; 1890:330 [Bugaba; Caldera; David; Volcan de Chiriqui].--Lethierry and Severin, 1893:127 [Panama].-- Kirkaldy, 1909a:64 [Panama].

Euschistus crenator crenator.-- Rolston, 1974:38 [Canal Zone].

Euschistus crenator orbicularis Rolston, 1974:44 [new subspecies-- Mexico. El Salvador. Guatemala. Honduras. Nicaragua. Panama: Barro Colorado; Ft. Clayton].

✓*Euschistus emoorei* Rolston

Euschistus emoorei Rolston, 1972:183 [new species-- Nicaragua. Panama].

✓*Euschistus heros* (Fabricius)

Cimex heros Fabricius, 1798:532 [new species-- Cayenne].

Note: As yet there are no positive records of local occurrence of this species, but Rolston (1974:48) wrote, "May occur in Panama."

✓*Euschistus nicaraguensis* Rolston

Euschistus nicaraguensis Rolston, 1972:182, 185 [new species-- Nicaragua. Panama: David; R.P. "Chirigui"]; 1974:53 [Panama].

✓*Euschistus rohus* Rolston

Euschistus rohus Rolston, 1985:360 [new species-- Panama. Ecuador].

✓**Genus *Glaucioides* Thomas**

Glaucioides Thomas, 1980b:123, 126. Type species: *Glaucioides englemani* Thomas, original designation.

✓*Glaucioides englemani* Thomas

Glaucioides englemani Thomas, 1980b:127 [new species-- Panama: Barro Colorado Island. Venezuela. British Guiana. Surinam. Brazil].

✓**Genus *Grazia* Rolston**

Grazia Rolston, 1981a:262. Type species: *Piezodorus tinctus* Distant, original designation.

✓*Grazia tincta* (Distant)

Piezodorus tinctus Distant, 1890:341 [new species-- Panama: Boquete. Antilles].-- Lethierry and Severin, 1893:176 [Panama].-- Kirkaldy, 1909a:137 [Panama].-- Barber and Bruner, 1932:265 [Panama]; 1939:299 [Panama].-- Torre-Bueno, 1939a:239 [Panama].

Grazia tincta.-- Rolston, 1981a:263 [Panama].-- Brailovsky, 1988a:116 [Panama].

✓**Genus *Hypatropis* Bergroth**

Melpia Stål 1867:529, preoccupied. Type species: *Melpia sternalis* Stål, first included species, by Stål 1869:229.

Hypatropis Bergroth, 1891:235. Proposed as new name for preoccupied *Melpia* Stål.

Note: Fernandes and Grazia (1996) revised this genus and included a key (pages 343-344) to its five species

✓*Hypatropis rolstoni* Fernandez and Grazia

Hypatropis rolstoni Fernandez and Grazia 1996:349 [n. sp.-- Honduras. Nicaragua. Costa Rica. Panama: Coco Solo Hospital, Canal Zone. Colombia. Venezuela].

✓**Genus *Kermana* Rolston**

Kermana Rolston, 1981a:265. Type species: *Rhaphigaster imbutus* Walker, original designation.

Note: Rolston (1981a) keyed (page 266) the three species.

✓*Kermana imbuta* (Walker)

Rhaphigaster imbutus Walker, 1867:358 [new species-- Mexico].

Banasa imbuta-- Distant, 1890:340 [Bugaba; Volcan de Chiriqui].

Nezara (Atomosira) imbuta-- Kirkaldy, 1909a:122 [Panama].

✓**Genus *Lopadusa* Stål**

Lopadusa Stål, 1860:25. Type species: *Lopadusa augur* Stål, monotypic.

Note: The genus-group name *Bothrocoris* Mayr (1866:68) was placed as a subgenus of *Lopadusa* by Becker and Grazia (1970:221, 224).

✓*Lopadusa fuscopunctatus* (Distant)

Bothrocoris fuscopunctatus Distant, 1880:84 [new species--Panama. Guiana].-- Lethierry and Severin, 1893:187 [Panama].-- Kirkaldy, 1909a:152 [Panama].-- Pirán, 1956b:31 [Panama].

Lopadusa (Bothrocoris) fuscopunctata-- Becker and Grazia, 1970:229 [Panama].

✓**Genus *Loxa* Amyot and Serville**

Loxa Amyot and Serville, 1843:137. Type species: *Cimex flavicollis* Drury, designated by Kirkaldy, 1903:231.

Notes: Eger's (1978) study of *Loxa* included a key (pages 227-229) to the 10 included species. He listed (pages 229, 232) the combination *Loxa affinis* in "part" under both *L. flavicollis* and *L. virescens* but did not indicate which "part" belonged where; but because the range he gave for *L. flavicollis* did not encompass Panama and the one for *L. virescens* did, it is assumed here that Distant's and subsequent Panama records for *L. affinis* and *L. flavicollis* belong under *L. virescens*.

✓*Loxa deducta* Walker

Loxa deducta Walker, 1867:242 [new species-- Brazil].-- Eger, 1978:241 [Panama].

✓*Loxa nesiotus* Horvath

Loxa nesiotus Horvath, 1925b:322 [new species-- Curacao].-- Eger, 1978:256 [Panama].

✓*Loxa virescens* Amyot and Serville

Loxa virescens Amyot and Serville, 1843:137 [new species-- Surinam].
Loxa flavicollis-- Distant, 1880:70 [Panama]; 1890:336 [Bugaba].-- Lethierry and Severin, 1893:149 [Panama].-- Horvath, 1925b:319 [Panama].-- Rau, 1933:139 [Barro Colorado Island].-- Hughes-Schrader and Schrader, 1956:137 [Panama].-- Schrader, 1960:499 [Panama].-- Becker and Grazia-Vieira, 1977:59 [Panama].
Loxa affinis-- Distant, 1890:336 [Panama].-- Lethierry and Severin, 1893:149 [Panama].-- Kirkaldy, 1909a:96 [Panama].

✓*Loxa viridis* (Palisot)

Pentatoma viridis Palisot, 1811:111 [new species-- "A Oware" (Africa)].
Loxa picticornis Horvath, 1925b:312 [new species -- Panama. Brazil. Ecuador. Galapagos Islands].-- Schrader, 1960:499 [Panama].-- Becker and Grazia-Vieira, 1977:59 [Panama].
Note: Eger (1978:243) synonymized Horvath's species name under *L. viridis* for which he gave the distribution in encompassing terms that would include Panama, but Panama was not mentioned by name.

✓**Genus *Mormidea*** Amyot and Serville

Mormidea Amyot and Serville, 1843:134. Type species: *Cimex ypsilon* Linnaeus, designated by Kirkaldy, 1903a:231.
Note: Rolston (1978b) provided a revision of *Mormidea* with a key (pages 166-172) to the two subgenera and 33 species.

✓*Mormidea collaris* Dallas

Mormidea collaris Dallas, 1851:211 [new species--Mexico].
Mormidea (Mormidea) collaris-- Rolston, 1978b:190 [Panama].

✓*Mormidea integella* (Distant)

Euschistus integellus Distant, 1893:456 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:267 [Panama].-- Kirkaldy, 1909a:65 [Panama].
Mormidea (Mormidea) integella-- Rolston, 1978b:183 [V. de Chiriqui].

✓*Mormidea lunara* Rolston

Mormidea (Mormidea) lunara Rolston, 1978b:169, 211 [new species-- Mexico. Honduras. Nicaragua. Panama: Cerro Campana, Panama Province; Santa Fe Veraguas].

✓*Mormidea metallica* Stål

Mormidea metallica Stål, 1872:20 [new species-- Colombia].
Mormidea (Mormidea) metallica-- Rolston, 1978b:199 [Panama].

✓*Mormidea notulata* (Herrich-Schaeffer)

Pentatoma notulata Herrich-Schaeffer, 1844:100 [new species-- Mexico].
Mormidea notulata-- Distant, 1889:328 [Volcan de Chiriqui].-- Lethierry and Severin, 1893:124 [Panama].
Mormidea (Mormidea) notulata-- Kirkaldy, 1909a:60 [Panama].
Note: Rolston (1978b:186) did not mention Panama, but gave the range from Mexico south to Colombia and Peru.

✓*Mormidea pictiventris* Stål

Mormidea pictiventris Stål, 1862b:103 [new species-- Mexico].-- Distant, 1889:320 [Bugaba; Caldera; San Feliz; Tole; Volcan de Chiriqui].-- Lethierry and Severin, 1893:124 [Panama].-- McGuire and Crandall, 1867:88 [Panama].
Mormidea (Mormidea) pictiventris--Kirkaldy, 1909a:60 [Panama].-- Rolston, 1978b:204 [Caldera, V. de Chiriqui].

✓*Mormidea vaya* Rolston

Mormidea (Mormidea) vaya Rolston, 1978b:167, 184 [new species-- Panama: Cerro Campana, Distr. Chame; El Valle, Prov. Coclé].

✓*Mormidea ypsilon* (Linnaeus)

Cimex ypsilon Linnaeus, 1758:443 [new species-- "America"].
Mormidea ypsilon-- Distant, 1889:328 [Bugaba; Caldera; David; Volcan de Chiriqui].-- Lethierry and Severin, 1893:124 [Panama].-- McGuire and Crandall, 1967:88 [Panama].
Mormidea ypsilon variety *inermis*-- Distant, 1880:54 [Panama].-- Lethierry and Severin, 1893:124 [Panama].
Mormidea (Mormidea) ypsilon-- Kirkaldy, 1909a:61 [Panama].
Note: Rolston (1978b:211) did not mention "Panama" records for this species by name, but he did cite some of the above references and gave an extensive general range -- from Mexico and the Lesser Antilles south to Argentina and Uruguay -- that would encompass Panama.

✓*Genus Murgantia* Stål

Murgantia Stål, 1862b:105. Type species: *Pentatoma tesselata* Amyot and Serville, designated by Kirkaldy, 1909a:106.

✓*Murgantia tristis* Brailovsky and Barrera

Murgantia tristis Brailovsky and Barrera, 1989:226 [new species-- Costa Rica. Panama: Bocas San San).

✓*Murgantia varicolor* (Westwood)

Pentatoma varicolor Westwood, 1837:37 [new species-- Brazil].

Murgantia munda-- Distant, 1880:71 [Panama].-- Lethierry and Severin, 1893:156 [Panama].

Murgantia varicolor-- Kirkaldy, 1909a:106 [Panama].

✓Genus *Neotibilis* Grazia and Barcellos

Neotibilis Grazia and Barcellos, 1994:56. Type species: *Rhaphigaster fulvicornis* Walker, original designation.

Note: Grazia and Barcellos (1994:58-60) keyed the two subgenera and the species, the latter by sex.

✓*Neotibilis panamensis* Grazia and Barcellos

Neotibilis (*Neotibilis*) *panamensis* Grazia and Barcellos, 1994:66 [new species-- Panama: Cerro Azul].

✓*Neotibilis parva* (Distant)

Brachystethus parvus Distant, 1890:342 [new species-- Panama: David].-- Lethierry and Severin, 1893:187 [Panama].

Brachystethus fulvicornis-- Kirkaldy, 1909a:152 [Panama].

Tibilis parva-- Ruckes, 1960d:23 [Panama].-- Barcellos and Grazia, 1993:184 [Panama].-- Thomas and Brailovsky, 1993:199 [Panama].

Neotibilis (*Neotibilis*) *parva*-- Grazia and Barcellos, 1994:67 [Canal Zone: Albrook Forest Site, Fort Clayton; Barro Colorado Island; Cardenas Villiage; Coco Solo Hospital; Ft. Gulick; Gatun Lake Lookout; Pipeline Road; Chiriqui; Caldera; Panama].

✓Genus *Nezara* Amyot and Serville

Nezara Amyot and Serville, 1843:143. Type species: *Cimex smaragdula* Fabricius, a junior synonym of *Cimex viridulus* Linnaeus, designated by Kirkaldy, 1903a:231.

✓*Nezara viridula* (Linnaeus)

Cimex viridulus Linnaeus, 1758:444 [new species-- India].

Nezara viridula-- McGuire and Crandall, 1867:53, 89 [Panama].

✓Genus *Oebalus* Stål

Oebalus Stål, 1862b:102. Type species: *Cimex typhoeus* Fabricius, a junior synonym of *Cimex pugnax* Fabricius, designated by Kirkaldy, 1909a:61.

Note: Sailer (1944) revised this genus under the generic name *Solubea* and presented a key to the 11 recognized species; later (1957b) he explained the need to use the generic name *Oebalus*.

✓*Oebalus insularis* Stål

Oebalus insularis Stål, 1872:22 [new species-- Cuba].
Solubea insularis-- Barber and Bruner, 1932b:252 [Panama]-- Sailer, 1944:119 [Panama]--
 McGuire and Crandall, 1967:90 [Panama].

✓*Oebalus pugnax* (Fabricius)

Cimex pugnax Fabricius, 1775:704 [new species-- "America"].
Oebalus pugnax-- McGuire and Crandall, 1967:90 [Panama].

✓**Genus *Pallantia* Stål**

Pallantia Stål, 1862b:106. Type species: *Rhaphigaster macula* Dallas, monotypic.
Note: Grazia's (1980) revision of this genus contained a key (page 17) to its four species.

✓*Pallantia maculosa* Grazia

Pallantia maculosa Grazia, 1980:22 [new species-- Panama: Dist. Chepo, Alto de Majé.
 Venezuela].

✓**Genus *Pellaea* Stål**

Nezara (Pellaea) Stål, 1872:40. Type species: *Rhaphigaster sticticus* Dallas, monotypic.
Pellaea-- Bergroth, 1914c:25.

✓*Pellaea stictica* (Dallas)

Rhaphigaster sticticus Dallas, 1851:281 [new species-- Mexico. Colombia. British Guiana].
Nezara stictica-- Distant, 1890:338 [Bugaba; Caldera].
Nezara (Pellaea) stictica-- Kirkaldy, 1909a:121 [Panama].

✓**Genus *Pharypia* Stål**

Pharypia Stål, 1861b:139. Type species: *Cimex pulchellus* Drury, monotypic.

✓*Pharypia nitidiventris* (Stål)

Ptilarmus nitidiventris Stål, 1861b:140 [new species-- Mexico].
Pharypia nitidiventris-- Distant, 1890:338 [David]-- Lethierry and Severin, 1893:162
 [Panama]--Brailovsky and Barrera, 1982a:240 [Panama].
Pharypia (Ptilarmus) nitidiventris-- Kirkaldy, 1909a:113 [Panama]

✓*Pharypia pulchella* (Drury)

Cimex pulchellus Drury, 1782:67, plate XLVI, figure 8, index page 2 [new species: Honduras]
Pharypia pulchella.-- Distant, 1880:76 [Panama]; 1890:338 [Caldera; David].-- Lethierry and
 Severin, 1893:162 [Panama].-- Brailovsky, 1988a:131 [Panama].
Pharypia (Pharypia) pulchella.-- Kirkaldy, 1909a:113 [Panama].

✓*Genus Piezodorus* Fieber

Piezodorus Fieber, 1860:78. Type species: *Piezodorus degeeri* Fieber, first included species, by
 Fieber, 1861:329, a junior synonym of *Cimex lituratus* Fabricius.

✓*Piezodorus guildinii* (Westwood)

Rhaphigaster guildinii Westwood, 1837:31 [new species-- St. Vincent Island].
Piezodorus guildingi [sic].-- Distant, 1890:341 [Bugaba; Caldera].

✓*Genus Proxys* Spinola

Proxys Spinola, 1837:325. Type species: *Cimex victor* Fabricius, monotypic.

✓*Proxys albopunctulatus* (Palisot)

Pentatoma albopunctulatus Palisot, 1811:130 [new species-- Dominican Republic].
Proxys albopunctulatus.-- Distant, 1880:62 [Panama].-- Kirkaldy, 1909a:71 [Panama].--
 Froeschner, 1988d:591 [Panama].

✓*Proxys victor* (Fabricius)

Cimex victor Fabricius, 1775:705 [new species-- Brazil].
Proxys victor.-- Walker, 1867:252 [Panama].-- Distant, 1880:62 [Panama]; 1890:332 [Bugaba;
 Volcan de Chiriqui].-- Lethierry and Severin, 1893:132 [Panama].-- Kirkaldy, 1909a:71
 [Panama].

✓*Genus Ramosiana* Kormilev

Ramosiana Kormilev, 1950:340. Type species: *Ramosiana militaris* Kormilev, a subspecies of
Vulsireia liturata Dallas [fide Kormilev, 1951a:87], monotypic.

Note: Kormilev (1951a:83-87) defined the differences between this genus and *Vulsireia* Spinola.

✓*Ramosiana insignis* (Blanchard)

Edessa insignis Blanchard, 1840:144 [new species-- Bolivia].
Ramosiana insignis insignis.-- Kormilev, 1951a:83, 85, 87 [Panama].
Ramosiana insignis.-- Brailovsky and Barrera, 1982a:240 [Panama].

✓ **Genus *Rhyncholepta* Bergroth**

Rhyncholepta Bergroth, 1911b:120. Type species: *Rhyncholepta grandicallosa* Bergroth, monotypic.

Note: The transfer of this genus, originally described in the subfamily Asopinae, to this tribe was confirmed by Becker and Grazia-Vieira (1971).

✓ *Rhyncholepta grandicallosa* Bergroth

Rhyncholepta grandicallosa Bergroth, 1911b:121 [new species-- French Guiana].-- Becker and Grazia-Vieira, 1971:391 [Panama].

✓ **Genus *Rhysocephala* Rider**

Rhysocephala Rider, 1992a:585. Type species: *Arocera rufonotata* Stål, original designation.

Note: With the original description of this genus, Rider (above) provided a key (pages 587-589) to its 10 species.

✓ *Rhysocephala macdonaldi* Rider

Rhysocephala macdonaldi Rider, 1992a:604 [new species-- Guatemala. Panama: Bocas del Toro, 10 km NE Fortuna; Canal Zone, Barro Colorado Island, Gatun; Darien Province, 23 km E Cañanzas. Colombia. Venezuela. Ecuador].

✓ *Rhysocephala splendens* (Blanchard)

Pentatoma splendens Blanchard, 1840:148 [new species-- Colombia].

Arocera splendens.-- Distant, 1880:74 [Panama]; 1890:337 [Bugaba; Volcan de Chiriqui].-- Lethierry and Severin, 1893:159 [Panama].-- Brailovsky and Barrera, 1982a:238 [Bugaba; Volcan de Chiriqui].-- McDonald, 1984:103 [Panama].

Arocera (Euopta) splendens.-- Kirkaldy, 1909a:110 [Panama].

Rhysocephala splendens.-- Rider, 1992a:596 [Bugaba; Taboga Island; Bocas del Toro; Canal Zone, Madden Dam; Pariso, Pedro Miguel; Chepo, Altos de Majé].

✓ *Rhysocephala verdana* (McDonald)

Arocera verdana McDonald, 1984:114 [new species-- Costa Rica. Panama: Chiriqui Prov., Boquete; 3 km W Cerro Punta; Renacimiento, Oste Clara and Sta. Clara].

Rhysocephala verdana.-- Rider, 1992a:595 [Barriles; Boquete; 3 km W Cerro Punta; Renacimiento Sta. Clara; Volcan de Chiriqui].

✓ **Genus *Rio* Kirkaldy**

Banasa (Rio) Kirkaldy, 1909a:116, 123. Type species: *Rhaphigaster pectoralis* Stål, original designation.

Rio.-- Ruckes, 1960a:13.

Note: Grazia and Fortes (1995) revised *Rio* and gave a key (page 415) to the six included species.

✓*Rio insularis* Ruckes

Rio insularis Ruckes, 1960a:15 [new species-- Panama: Barro Colorado Island].

✓*Rio politulus* (Distant)

Peribalus politulus Distant, 1893:457 [new species-- Guatemala. Panama: Bugaba.

Holcostethus politulus-- Kirkaldy, 1909a:48 [Panama].

Rio politulus-- Brailovsky and Barrera, 1982a:241 [Bugaba].

Note: This species was transferred to *Rio* by Rolston (1976b:6).

✓**Genus *Serdia* Stål**

Serdia Stål, 1860:25. Type species: *Serdia apicicornis* Stål, designated by Kirkaldy, 1909a:xxxi.

Note: This genus was revised by Thomas and Rolston (1985) who gave a key (pages 1165-1166) to its two subgenera and 13 species.

✓*Serdia beckeri* Thomas and Rolston

Serdia (*Serdia*) *beckeri* Thomas and Rolston, 1985:1166, 1169 [new species-- Costa Rica. Panama: Chiriqui Dist., Renacimiento Santa Clara].

✓**Genus *Sibaria* Stål**

Sibaria Stål, 1872:23. Type species: *Mormidea armata* Dallas, monotypic.

Note: Rolston (1976a) reviewed *Sibaria* and included a key to its three species. He pointed out (page 223) that Distant's records of *S. armata* for "Middle America," and those based on them, were misidentifications and should be referred to *S. englemani*, as given below.

✓*Sibaria englemani* Rolston

Sibaria armata-- Distant, 1890:329 [Bugaba; Caldera; David; Volcan de Chiriqui].-- Lethierry and Severin, 1893:126 [Panama].-- Kirkaldy, 1909a:62 [Panama].

Sibaria englemani Rolston, 1976a:222 [new species-- Mexico. Guatemala. El Salvador. Costa Rica. Panama: Gatun Dam; Canal Zone, Barro Colorado, Coco Solo Hospital; Bugaba, Panama Prov., Cerro Campina, Portobella, Corozal, Fort Kobbe, Fort Sherman, 5 mi. E Gamboa, Gatun Spillway, Maddem Reservoir, Mararuta, Piña Road, Pipeline Road. Colombia].-- Arnold 1995:12 [Panama].

✓**Genus *Taurocerus* Amyot and Serville**

Taurocerus Amyot and Serville, 1843:151. Type species: A species thought by Amyot and Serville to be *Arvelius edessoides* Spinola, but in reality an unnamed species later described by Stål (1862b:108) as *Taurocerus achilles*, monotypic.

✓*Taurocerus edessoides* (Spinola)

Arvelius edessoides Spinola, 1837:347 [new species-- Brazil].

Taurocerus edessoides.-- Distant, 1890:341 [Bugaba].-- Lethierry and Severin, 1893:185 [Panama].-- Kirkaldy, 1909a:150 [Panama].

✓Genus *Thyanta* Stål

Thyanta Stål, 1862a:58. Type species: *Cimex perditor* Fabricius, designated by Kirkaldy, 1909a:xxx, 94.

Notes: (1) Rider and Chapin revised the genus in two papers: Part I (1991) covered the genus as it occurs in South America and included a key (pages 2-6) to 27 species; Part II (1992) covered the species north of South America and included a key (pages 44-45) to three subgenera and 15 species. (2) The taxon originally described as *Thyanta humilis* variety *viridescens* Kuhlitz (1803:256) and recorded "zwischen Panamá und Guayaquil" was considered as a *nomen dubium* by Rider and Chapin (1991:73).

✓*Thyanta maculata* (Fabricius)

Cimex maculatus Fabricius, 1775:704 [new species-- "America"].

Thyanta (Argosoma) maculata.-- Rider and Chapin, 1992:80 [Chitré: La Chorrera; Canal Zone: Barro Colorado Island, Base of Cerro Galera; Darien: Santa Fe].

✓*Thyanta perditor* (Fabricius)

Cimex perditor Fabricius, 1794:102 [new species-- "Americae Insulis"].

Thyanta (Thyanta) perditor.-- Rider and Chapin, 1992:64 [New California; Bocas del Toro: Chiriqui Grande; Canal Zone: Barro Colorado Island, Cristobal; Chiriqui: Boquete, Cerro Punta, Portreillos; Coclé: Cerro Pena near Valle; Panama: Cerro Jafe, Madden Lake].

✓Genus *Vulsirea* Spinola

Vulsirea Spinola, 1837:350. Type species: Originally included two newly described "species"-- *V. ancora* Spinola and *V. nigrorubra* Spinola -- both junior synonyms of *Cimex violaceus* Fabricius, as argued by Kirkaldy (1903a:214), then he later (1909a:XXX) he named *nigrorubra* "type."

✓*Vulsirea violacea* (Fabricius)

Cimex violaceus Fabricius, 1803:167 [new species-- "America meridionali"].

Vulsirea violacea.-- Distant, 1880:76 [Panama].-- Lethierry and Severin, 1893:162 [Panama].-- Kirkaldy, 1909a:112 [Panama].

✓ **TRIBE PROCLATICINI PENNINGTON**

Rider (1994) reviewed this tribe and presented a key (pages 194-195) to its 11 genera.

✓ **Genus *Odmalea* Bergroth**

Odmalea Bergroth, 1914b:436. Type species: *Odmalea quadripunctula* Bergroth, original designation.

Note: Rolston (1978a:20-21) included a key to the seven species when he revised this genus.

✓ *Odmalea concolor* (Walker)

Mormidea concolor Walker, 1867:256 [new species-- Brazil].

Odmalea quadripunctula modesta Ruckes, 1959b:17 [new subspecies-- Panama: Canal Zone].

Odmalea concolor-- Rolston, 1978a:22, 23 [Panama].

FAMILY PHLOEIDAE AMYOT AND SERVILLE

This small family, comprised of three species in two genera, has been reported only from Brazil and Chile, a range that does not indicate any likelihood of these large leaf-like insects occurring in Panama.

Leston's (1953) review of the family was expanded by Lent and Jurberg (1965); each work presented a means of identifying the three species.

FAMILY PIESMATIDAE AMYOT AND SERVILLE

The absence of Panamanian records for the Piesmatidae must surely result from inadequate collecting or failure to report finds because elsewhere in the New World this family ranges from southern Canada south to the southern half of South America. Specialized collecting, especially on plants of the family Chenopodiaceae, should find at least the species *Piesma cinereum* Say, which has been reported from southern Canada to Argentina.

Drake and Davis (1958) reviewed the family morphologically, taxonomically and biologically; they also presented keys to the world genera and to the American species. Later, Henry (1997b:296) transferred the Old World lygaeid subfamily "Psamminae" Bergroth [see J. Slater and O'Donnell, 1995:71] to subfamily status under the family Piesmatidae.

FAMILY PLEIDAE FIEBER

Available Panamanian records for these very small (1.5-3.0 mm) water bugs include two species, each in a separate genus.

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Bergroth [see J. Slater and

) water bugs include two

A "Preliminary Report" on this family in the Americas was given by Drake and Chapman (1953b), who added six new species to the previously known eight. Later, Drake and Maldonado (1956) elevated Esaki and China's (1928:166) three subgenera of the classical genus *Plea* Leach (*Plea*, *Paraplea* Esaki and China, and *Neoplea* Esaki and China) to full generic status.

Genus *Neoplea* Esaki and China

Plea (*Neoplea*) Esaki and China, 1928:166. Type species: *Plea striola* Fieber, original designation.

Neoplea.-- Drake and Maldonado, 1956:53.

Neoplea harnedi (Drake)

Plea harnedi Drake, 1922d:114 [new species-- United States of America].

Plea (*Neoplea*) *harnedi*.-- Drake and Chapman, 1953b:57 [Canal Zone].

Note: The combination *Neoplea harnedi* resulted when Drake and Maldonado (1956) raised the subgenus *Neoplea* to status of a full genus.

Genus *Paraplea* Esaki and China

Plea (*Paraplea*) Esaki and China, 1928:166. Type species: *Plea pallescens* Distant, original designation.

Paraplea.-- Drake and Maldonado, 1956:53.

Paraplea puella (Barber)

Plea puella Barber, 1923:11 [new species-- Puerto Rico. Guadeloupe]; 1939:417 [Panama].

Plea (*Paraplea*) *puella*.-- Drake and Chapman, 1953b:54 [Canal Zone].

Paraplea puella.-- Drake and Maldonado, 1956:53 [Panama].-- Nieser, 1977c:356 [Canal Zone].

FAMILY PLOKIOPHILIDAE CHINA

No Panamanian records of this small family have been found during this compilation, but some species may be expected; three of its four genera have representatives in the New World, including the Antilles and Costa Rica in Central America.

Carayon's (1974) studies in this group contained a key (pages 523-524) to the four genera and to the 10 species known at that time. Eberhard, Platnik, and Schuh (1993) gave a key to the four species of the genus *Lipokophila* Štys (1967), two of which occur in neighboring Costa Rica.

FAMILY POLYCTENIDAE WESTWOOD

A single species of the only genus known from the Americas has been reported from Panama. Examination of host bats will probably find more species in this country.

Primary literature for study of this family includes Ferris and Usinger's (1939) well-illustrated monograph, Usinger's (1946) world catalog, and the up dated checklist by Ryckman and

Casdin (1977). Further studies on South American forms were published by Ferris and Usinger (1945) and by Ronderos (1960, 1962, 1964).

Genus *Hesperoctenes* Kirkaldy

Hesperoctenes Kirkaldy, 1906b:375. Type species: *Polyctenes fumarius* Westwood, original designation.

Hesperoctenes angustatus Ferris and Usinger

Hesperoctenes angustatus Ferris and Usinger, 1939:18 [new species-- Panama: Panama City, British Guiana].-- Usinger, 1946:13 [Panama City].-- Ryckman and Casdin, 1977:26 [Panama].-- Ryckman and Sjogren, 1980:10 [Panama].

FAMILY POTAMOCORIDAE USINGER

In spite of the lack of Panama records, it is safe to assume this group should have Panamanian representation because it is known to occur from Honduras south to Brazil.

Originally placed as a subfamily of Naucoridae, this group was raised to family status by Cobben (1978), an action accepted by Štys and Jansson (1988:9) and Schuh and J. Slater (1995:122).

FAMILY PYRRHOCORIDAE AMYOT AND SERVILLE

The family Pyrrhocoridae, in the modern restricted sense, is represented in the New World by but one genus -- *Dysdercus* Guérin-Méneville (1831), which has 12 species reported for Panama.

Genus *Dysdercus* Guérin-Méneville

Dysdercus Guérin-Méneville, 1831:plate 12, figure 16. Type species: *Dysdercus peruvianus* Guérin-Méneville, monotypic.

Notes: (1) The confused history of several New World species of *Dysdercus* has been unraveled in great part by Hussey's (1929) world "Catalogue" and Doesburg's (1968) revision of the New World species of *Dysdercus*; the latter paper (page 18) presented evidence that the subgenus *Megadysdercus* Breddin is not distinct from the nominate subgenus. The present paper accepts that conclusion. (2) Doesburg's (1968) "Revision" included a key (pages 19-23) to the 36 American species and their subspecies. (3) Rau (1933:188) mentioned an unidentified nymph from Barro Colorado Island.

Dysdercus basialbus Schmidt

Dysdercus basialbus Schmidt, 1932:268 [new species-- Colombia].-- Doesburg, 1968:168 [Barro Colorado Island].

Dysdercus bimaculatus Stål

Dysdercus [sic] *bimaculatus* Stål, 1854:236 [new species-- Panama: Isla San José]; 1859d:253

[St. Joseph Island].-- Walker, 1872:184 [Insula St. Joseph].-- Sailer, 1947:15 [Panama].-- Costa Lima, Guitten, and Ferreira, 1962:31 [Canal Zone].-- Doesburg, 1968:75 [Barro Colorado Island].-- Tanaka and Wolda, 1987:559 [Barro Colorado Island].-- Carroll and Loye, 1990:36 [Barro Colorado Island].

Dysdercus obliquus.-- Stål, 1862b:316 [Panama].-- Uhler, 1876:314 [Panama].-- Distant, 1883:232 [Panama].

Dysdercus (Dysdercus) obliquus.-- Hussey, 1929:97 [in part, Panama].

Note: The original description made no mention of a locality; the above type locality is accepted from Doesburg, 1968:75.

Dysdercus chiriquinus Distant

Dysdercus chiriquinus Distant, 1883:232 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:252 [Panama].-- Ballou, 1906:79 [Panama].-- Costa Lima, Guitten, and Ferreira, 1962:32 [Panama].-- Doesburg, 1968:79 [Lino; Merida; Rovira; Volcan de Chiriqui].

Dysdercus (Dysdercus) chiriquinus.-- Hussey, 1929:87 [Panama].

Dysdercus chiquirinus [sic].-- Vivas-Berthier, 1941:117 [Panama].

Dysdercus concinnus Stål

Dysdercus concinnus Stål, 1861a:198 [new species-- Mexico].-- Distant, 1883:231 [Colon; Volcan de Chiriqui]; 1893:415 [Bugaba].-- Lethierry and Severin, 1894:253 [Panama].-- Ballou, 1906:79 [Panama].-- Torre-Bueno, 1926a:108 [Alajuela].-- Costa Lima, Guitten, and Ferreira, 1962:34 [Panama].

Dysdercus (Dysdercus) concinnus.-- Hussey, 1929:88 [Panama].

Dysdercus splendidus Distant, 1883:231 [new species-- Panama: Bugaba].

Dysdercus (Dysdercus) mimus variety *splendidus*.-- Hussey, 1929:96 [Panama].

Dysdercus concinnus concinnus.-- Doesburg, 1968:68 [Barro Colorado Island; Cabima; Colon; Lino; Portobelo; Volcan de Chiriqui; XX Plantation].

Dysdercus concinnus pehlkei.-- Doesburg, 1968:72 [La Chorrera; Lino].-- Adis and Froeschner, 1982:373 [Panama].

Dysdercus flavolimbatus Stål

Dysdercus flavolimbatus Stål, 1861a:198 [new species-- Mexico].

Dysdercus oncopeltus Distant, 1883:232 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:254 [Panama].-- Ballou, 1906:79 [Panama].-- Costa Lima, Guitten, and Ferreira, 1962:45 [Panama].

Dysdercus (Dysdercus) oncopeltus.-- Hussey, 1929:98 [Panama].

Dysdercus flavolimbatus flavolimbatus.-- Doesburg, 1968:64 [Rio Changuen, Boça del Toro],

Dysdercus flavolimbatus oncopeltus.-- Doesburg, 1968:67 [Lino; Volcan de Chiriqui].

Dysdercus lunulatus Uhler

Dysdercus lunulatus Uhler, 1861:23 [new species-- Mexico].-- Doesburg, 1968:88 [Panama].

Dysdercus bidentatus Hussey, 1927:233 [new species-- Honduras. Costa Rica. Panama: Volcan

de Chiriqui; Canal Zone, Barro Colorado].-- Costa Lima, Guitten, and Ferreira, 1962:31 [Panama].

Dysdercus mimuloides Blöte

Dysdercus mimuloides Blöte, 1933:599 [new species-- Panama: Isla del Rey; Perlas Island].-- Costa Lima, Guitten, and Ferreira, 1962:42 [Panama].-- Doesburg, 1968:58 [Isla del Rey; Perlas Island].

Dysdercus mimulus Hussey

Capsus mimus vars. *a* and *b* Say, 1832:20 [new varieties-- Mexico].

Dysdercus mimus.-- Distant, 1893:414 [Bugaba]. *Dysdercus* (*Dysdercus*) *mimulus* Hussey, 1929:95 ["nom. nov." for Say's (above) varieties *a* and *b*-- United States of America. Mexico. Honduras. Nicaragua. Costa Rica. Panama. Cuba. Haiti. Isla de Pinos].

Dysdercus mimulus.-- Torre-Bueno, 1941:117 [Panama].-- Costa Lima, Guitten and Ferreira, 1962:43 [Panama].

Dysdercus mimulus mimulus.-- Doesburg, 1968:104 [Boquete, Chiriqui Prov; E. le Moulte, Chiriqui].

Note: Doesburg (1968:332 and 106) explained that Say's (1832:above) "varieties" of *Capsus mimus* represented a new species, as was recognized and named by Hussey (1920:above). See also *D. mimus*.

Dysdercus mimus (Say)

Capsus mimus Say, 1832:20 [new species-- Mexico, except varieties *a* and *b*].

Dysdercus albidiventris.-- Uhler, 1876:314 [Panama].-- Hussey, 1927:235 [Panama].

Dysdercus splendidus Distant, 1883:231 [new species-- Panama: Bugaba].

Dysdercus (*Dysdercus*) *mimus*.-- Parshley, 1929:95 [Panama].

Dysdercus mimus var. *distanti* Blöte, 1931:128 [new variety-- Panama: Lino. Bolivia. Trinidad].

Dysdercus mimus.-- Pearson, 1933:121 [Ancon; Mt. Hope, C.Z.].-- Costa Lima, Guitten, and Ferreira, 1962:44 [Panama].

Dysdercus mimus var. *splendidus*.-- Costa Lima, Guitten, and Ferreira, 1962:44 [Panama].

Dysdercus mimus mimus.-- Doesburg, 1968:30 [Boca del Toro; Chiriqui].

Dysdercus mimus distanti.-- Doesburg, 1968:34 [Ancon; Cham Field; La Chorrera; Lino; Panama City; Pearl Island; Perlas Island del Rey; Taboga; Volcan de Chiriqui].

Dysdercus obliquus (Herrich-Schaeffer)

Pyrrhocoris obliquus Herrich-Schaeffer, 1843:19 [new species-- Mexico].

Dysdercus obliquus.-- Uhler, 1876:314 [Panama].-- Distant, 1883:232 [Colon]; 1893:415

[Bugaba].-- Lethierry and Severin, 1894:254 [Panama].-- Torre-Bueno, 1926a:108

[Panama].-- Sailer, 1947:15 [Barro Colorado, Canal Zone; San Jose in Pearl Islands].--

Costa Lima, Guitten, and Ferreira, 1962:44 [Panama].-- Doesburg, 1968:83 [Boquete;

Cerro Campana; Lino; Volcan de Chiriqui].

Dysdercus (*Dysdercus*) *obliquus*.-- Hussey, 1929:97 [Panama, in part].

Dysdercus obscuratus Distant

Dysdercus obscuratus Distant, 1883:230 [new species-- Costa Rica].

Dysdercus incertus Distant, 1883:230 [new species-- Costa Rica].-- Costa Lima, Guitten, and Ferreira, 1962:44.

Dysdercus ruficollis Distant, 1883:233 [new species-- Panama: Volcan de Chiriqui]; 1893:415 [Bugaba].-- Rau, 1933:189 [Barro Colorado Island].

Dysdercus garzkei Schmidt, 1932:268 [new species-- Colombia].

Dysdercus incertus variety *flavipennis* Blöte, 1931:126 [new variety-- Panama: Chiriqui; Lino].

Dysdercus clavatus Blöte, 1933:600 [new species-- Panama: V. de Chiriqui].-- Costa Lima, Guitten, and Ferreira, 1962:33 [V. de Chiriqui].

Dysdercus obscuratus obscuratus.-- Doesburg, 1968:97 [Finca].

Dysdercus obscuratus garzkei.-- Doesburg, 1968:101 [Barro Colorado Island; Boquete; Progreso; Rio Changuena, Bocas del Toro; Volcan de Chiriqui].

Dysdercus obscuratus flavipennis.-- Doesburg, 1968:103 [Alhayuela; Bananas; Barro Colorado Island; Boquete; Chiriqui; La Chorrera; Lino; Progreso].

Dysdercus obscuratus incertus.-- Doesburg, 1968:103 [Almirante; Barro Colorado Island; Volcan de Chiriqui].

Dysdercus ruficeps (Perty)

Lygaeus ruficeps Perty, 1833:172 [new species-- Brazil].

Dysdercus ruficeps.-- Uhler, 1869:326 [Panama].-- Stål, 1870:123 [Panama].-- Distant, 1883:234 [Matachin].-- Costa Lima, Guitten, and Ferreira, 1962:46 [Panama].-- Doesburg, 1968:60 [Bocas del Toro; Chanuinola; Fort Clayton; Matachin].-- Adis and Froeschner, 1982:372 [Panama].

Dysdercus (Dysdercus) ruficeps.-- Hussey, 1929:100 [Panama].

FAMILY REDUVIIDAE LATREILLE

The following enumeration accounts for Panamanian occurrence of 203 species in 88 genera. Undoubtedly, future collecting will add many more species to this country's list.

Schuh and J. Slater (1995) followed the classification as cataloged by Putshkov and Putshkov (1985-1989) but acknowledged the later Reduviidae catalog by Maldonado (1990) and the comments on it by Kerzhner (1992b). Schuh and J. Slater (1995:151, 153-154) presented a key to 23 subfamilies.

SUBFAMILY BACTRODINAE STÅL

Genus *Bactrodes* Stål

Bactrodes Stål, 1860:80. Type species: *Bactrodes biannulatus* Stål, monotypic.

Note: Wygodzinsky (1949:21) combined, without comment, the two species listed below, but McAtee and Malloch's (1923:47) key for their separation and the separate listing of them in the Maldonado (1990:14) "Catalogue" led to their being held as distinct in the present

list. If these forms are, indeed, separate and distinct, then Stål's species must remain the type of the genus (as above).

Bactrodes biannulatus Stål

Bactrodes biannulatus Stål, 1860:80 [new species-- Brazil].-- Champion, 1898a:175 [San Miguel in Pearl Island; Tolé].-- McAtee and Malloch, 1923:218 [Portobello].-- Maldonado, 1990:14 [Panama].

Bactrodes femoratus (Fabricius)

Zelus femoratus Fabricius, 1803:291 [new species-- "America meridionali"].
Bactrodes femoratus.-- McAtee and Malloch, 1923:248 [Paraiso, Canal Zone].

SUBFAMILY CETHERINAE JEANNEL

Genus *Eupheno* Gistel

Macrophthalmus Laporte, 1832:11, preoccupied. Type species: *Macrophthalmus pallens* Laporte, monotypic.

Macrops Burmeister, 1835:237, preoccupied. Proposed as a new name for preoccupied *Macrophthalmus* Laporte.

Eupheno Gistel, 1848:149. Proposed as a new name for the two preoccupied names *Macrophthalmus* Laporte and *Macrops* Burmeister.

Eupheno histrionicus (Stål)

Macrops histrionicus Stål, 1862b:456 [new species-- Mexico].
Macrophthalmus histrionicus.-- Champion, 1899:205 [Bugaba; Volcan de Chiriqui].

Eupheno pallens (Laporte)

Macrophthalmus pallens Laporte, 1832:11 [new species-- Brazil].-- Champion, 1899:206 [Bugaba; Tolé].

SUBFAMILY CHRYSINAE CHAMPION

Genus *Chryxus* Champion

Chryxus Champion, 1898a:181. Type species: *Chryxus tomentosus* Champion, monotypic.

Chryxus tomentosus Champion

Chryxus tomentosus Champion, 1898a:181 [new species-- Panama; David].-- Lent and Wygodzinsky, 1944:167 [Panama].-- Wygodzinsky, 1949:21 [Panama].-- Usinger,

species must remain the

1952:55 [Panama].-- Putshkov and Putshkov 1985:8 [Panama].-- Maldonado, 1990:21 [Panama].

Champion, 1898a:175 [San
23:218 [Portobello].--

SUBFAMILY ECTRICHODIINAE AMYOT AND SERVILLE

Note: A key to the 17 American genera and subgenera was provided by Carpintero and Maldonado (1996:125-127).

li"].
one].

Genus *Pothea* Amyot and Serville

Pothea Amyot and Serville, 1843:344. Type species: *Pothea ventralis* Amyot and Serville, designated by Van Duzee, 1916:29.

Notes: (1) Champion's (1899:221) key to four Central American species separates the two cataloged below. (2) Carpintero (1978) revised the genus *Pothea*. (3) Carpintero and Maldonado (1990:455-456) published a key to the eight species in the subgenus *Brachypothea* Carpintero.

Microphthalmus pallens

Pothea annulipes Champion

or preoccupied

Pothea annulipes Champion, 1899:222 [new species-- Panama: Volcan de Chiriqui].-- Wygodzinsky, 1949:23 [Panama].-- Putshkov and Putshkov, 1986:66 [Panama].-- Maldonado, 1990:66 [Panama].

copied names

Pothea lugens (Fabricius)

de Chiriqui].

Reduvius lugens Fabricius, 1803:269 [new species-- "America meridionali"].
Pothea lugens.-- Champion, 1899:222 [Panama].-- Putshkov and Putshkov, 1986:49 [Panama].

- Champion, 1899:206

Genus *Rhiginia* Stål

Rhiginia Stål, 1859b:176, 181. Type species: *Reduvius lateralis* Lepeletier and Serville, monotypic.

Rhiginia crudelis (Stål)

mpion, monotypic.

Ectrichodia crudelis Stål, 1862b:455 [new species-- Mexico].
Rhiginia crudelis.-- Champion, 1899:225 [Panama].-- Putshkov and Putshkov, 1986:52 [Panama].

vid].-- Lent and
21 [Panama].-- Usinger,

SUBFAMILY EMESINAE AMYOT AND SERVILLE

Note: Wygodzinsky (1966) revised this subfamily and gave keys down to species.

TRIBE EMESINI AMYOT AND SERVILLE

Genus *Dohrnemesa* Wygodzinsky

Dohrnemesa Wygodzinsky, 1945:251. Type species: *Dohrnemesa lanei* Wygodzinsky, original designation.

Dohrnemesa difficilis (Dohrn)

Westermannia difficilis Dohrn, 1860:251 [new species-- Colombia].-- Champion, 1898a:164 [Chiriqui].

Note: Wygodzinsky (1966:237), in his treatment of *Dohrnemesa difficilis*, wrote that Champion's (above, Table 10, figures 8, 8a) figure was not truly *difficilis* but "it belongs to the *difficilis* group" [to which he had assigned two other species]. Until a more accurate placement is found, the Champion record is kept under this combination.

Genus *Emesa* Fabricius

Emesa Fabricius, 1803:263. Type species: *Gerris mantis* Fabricius, designated by Laporte, 1833:84.

Emesa annulata (Dohrn)

Westermannia annulata Dohrn, 1860:251 [new species-- Mexico].-- Champion, 1898a:164 [Chiriqui].

Emesa annulata.-- Wygodzinsky, 1966:239 [Barro Colorado, Canal Zone].-- Maldonado and Brailovsky, 1983:73 [Panama].

Emesa annulatus [sic].-- Froeschner, 1988f:622 [Panama].

Genus *Gardena* Dohrn

Gardena Dohrn, 1860:214. Type species: *Gardena melinarthrum* Dohrn, monotypic.

Gardena americana Champion

Gardena americana Champion, 1898a:167 [new species-- Mexico. Guatemala. Panama: Bugaba; Caldera; Volcan de Chiriqui. Colombia].-- Wygodzinsky, 1953b:289 [Las Sabanas]; 1966:253 [Panama].-- Maldonado and Brailovsky, 1983:73 [Panama].

Gardena caesonina McAtee and Malloch, 1925a:70 [new species-- Mexico. Guatemala. Panama: Bugaba].-- Wygodzinsky, 1954:289 [Bella Vista].

Gardena faustina McAtee and Malloch

Gardena faustina McAtee and Malloch, 1925a:73 [new species-- Panama: Porto Bello; Bugaba; Caldera; Trinidad River].-- Wygodzinsky, 1949:28 [Panama]; 1954:291 [Barro Colorado Island; Bugaba; Tres Rios Plantation, Gatun Lake]; 1966:258.-- Maldonado, 1990:86 [Panama].

Genus *Phasmatorcoris* Breddin

Phasmatorcoris Breddin, 1904b:148. Type species: *Phasmatorcoris spectrum* Breddin, monotypic.

Note: Wygodzinsky (1966:292) commented on an unnamed species from Panama.

Phasmatorcoris praecellens (Bergroth)

Myiagreutes praecellens Bergroth, 1911a:15 [new species-- French Guiana].

Emesaya (Myiagreutes) praecellens-- McAtee and Malloch, 1925a:42 [Trinidad Rio].

Phasmatorcoris praecellens-- Wygodzinsky, 1966:290 [Panama].-- Maldonado, 1990:91 [Panama].

Phasmatorcoris usingeri Wygodzinsky

Phasmatorcoris usingeri Wygodzinsky, 1966:292 [new species-- Panama: Barro Colorado Island, Canal Zone; Cermeno; Fort Kobbe: Patino].-- Maldonado, 1990:91 [Panama].

Genus *Polauchenia* McAtee and Malloch

Polauchenia McAtee and Malloch, 1925a:47. Type species: *Polauchenia protentor* McAtee and Malloch, original designation.

Polauchenia protentor McAtee and Malloch

Polauchenia protentor McAtee and Malloch, 1925a:47 [new species-- Panama: Tabernilla, Canal Zone].--Wygodzinsky, 1945:261 [Panama]; 1949:33 [Canal Zone].-- Maldonado, 1990:91 [Panama].

Genus *Stenolemus* Signoret

Stenolemus Signoret, 1858a:251. Type species: *Stenolemus spiniventris* Signoret, monotypic.

Note: Wygodzinsky (1966:334) reported an unnamed species from Panama.

Stenolemus mirabilis Wygodzinsky

Stenolemus mirabilis Wygodzinsky, 1947b:134 [new species-- Barro Colorado Island, Canal Zone]; 1949:34 [Barro Colorado Island, Canal Zone]; 1966:327 [Barro Colorado, Canal Zone].-- Wygodzinsky and Abalos, 1950:107 [Barro Colorado, C.Z.].-- Maldonado, 1990:95 [Panama].

TRIBE LEISTARCHINI STÅL

Genus *Ploiaria* Scopoli

Ploiaria Scopoli, 1786:60. Type species: *Ploiaria domestica* Scopoli, monotypic.

Note: Wygodzinsky's (1949:32) record of *Ploiaria pilicornis* for "Panama" appears to have

been a printer's error, as the species has otherwise been listed only for the state of Arizona in the United States.

Ploiaria brunnea McAtee and Malloch

Ploiaria brunnea McAtee and Malloch, 1925a:54 [new species-- Panama: Trinidad Rio. Brazil].--Wygodzinsky, 1966:173 [Panama].-- Maldonado, 1990:110 [Panama].

Ploiaria buscki Wygodzinsky

Ploiaria macrophthalma.-- McAtee and Malloch, 1925a:53 [Portobello].
Ploiaria buscki Wygodzinsky, 1954:305 [new name for specimens reported and described by McAtee and Malloch (above) as *Ploiaria macrophthalma* (Dohrn), a misidentification]; 1966:173 [Panama].-- Maldonado, 1990:110 [Panama].

Ploiaria macrophthalma (Dohrn)

Luteva macrophthalma Dohrn, 1860:244 [new species-- Colombia. Brazil].
Ploiaria macrophthalma.-- Wygodzinsky, 1954:309 [Ancon, Canal Zone]; 1966:192 [Sabanas].-- Maldonado and Brailovsky, 1983:77 [Panama].-- Maldonado, 1990:112 [Panama].

Ploiaria megalops (Champion)

Ploiariopsis megalops Champion, 1898a:174 [new species-- Panama; Volcan de Chiriqui].
Ploiaria megalops.-- McAtee and Malloch, 1925a:52 [Volcan de Chiriqui].-- Wygodzinsky, 1949:32 [Panama]; 1954:301 [Panama]; 1966:195 [Panama].-- Maldonado, 1990:114 [Panama].

Ploiaria punctipes McAtee and Malloch

Ploiaria punctipes McAtee and Malloch, 1925a:62 [new species-- Panama: La Chorrera].-- Wygodzinsky, 1949:32 [Panama]; 1966:199 [Panama].-- Maldonado and Brailovsky, 1983:78 [Panama].-- Maldonado, 1990:115 [Panama].

TRIBE METAPTERINI STÅL

Genus *Emesaya* McAtee and Malloch

Emesaya McAtee and Malloch, 1925a:74. Type species: *Ploiaria brevipennis* Say, original designation.

Emesaya brevipennis (Say)

Cimex longipes DeGeer, 1773:352, preoccupied [new species-- United States of America].
Ploiaria brevipennis Say, 1828:plate 47 [new species-- United States of America].
Emesa longipes.-- Champion, 1898a:168 [Veruga].

y for the state of Arizona

ma: Trinidad Rio.
00:110 [Panama].

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orted and described by
(hrn), a misidentification];

il].
ne]; 1966:192
-- Maldonado, 1990:112

Volcan de Chiriqui].
qui].-- Wygodzinsky,
].-- Maldonado, 1990:114

Panama: La Chorrera].--
aldonado and Brailovsky,

ipennis Say, original

d States of America].
of America].

- Emesaya brevipennis australis*.-- McAtee and Malloch, 1925a:79 [new subspecies-- United States of America. Guatemala. Costa Rica. Panama: Ancon; Gamboa, Canal Zone; Limon; Paraiso, C.Z.; Taboga Island].-- Blatchley, 1926:531 [Panama].-- Rau, 1933:189, 212 [Barro Colorado Island].-- Wygodzinsky, 1949:26 [Panama]; 1954:284 [Panama].
- Emesaya brevipennis*.-- Wygodzinsky, 1966:464 [Panama].-- Cobben and Wygodzinsky, 1975:4 [Panama].-- Maldonado and Brailovsky, 1983:90 [Panama].

Genus *Ghilianella* Spinola

Ghilianella Spinola, 1850:45. Type species: *Ghilianella filiventris* Spinola, monotypic.

Notes: (1) Wygodzinsky (1966:472) recognized two of McAtee and Malloch's (1925a:98-99) three subgenera -- *Ghilianella* and *Ploeodonyx* -- and (page 482) made their subgenus *Lissonyx* a synonym of *Ploeodonyx*. (2) Uhler's (1893:717-718) original description of *Emesa angulata*, now in *Ghilianella*, was based on specimens from the West Indies Island of St. Vincent and "the vicinity of Panama." Lethierry and Severin (1896:71) accepted this "Panama" locality, but Champion (1898:172) wrote it is "probable" that those Panama specimens belonged to his new species *Ghilianella gibbiventris* being described from Panama; but McAtee and Malloch (1925a:125) used those Panama specimen from the Uhler collection as the basis of their two new species *G. annectans* and *G. truncata*. Subsequent authors omitted Panama from the distribution of *G. angulata*.

Ghilianella annectans McAtee and Malloch

- Emesa angulata*.-- Uhler, 1893:717 [misidentification of Panama specimens].
- Ghilianella angulata*.-- Champion, 1898a:172 [Panama City].
- Ghilianella (Ghilianella) annectans* McAtee and Malloch, 1925a:125 [new species-- Panama].-- Wygodzinsky, 1966:475 [Panama].-- Maldonado, 1990:125 [Panama].
- Ghilianella annectans*.-- Wygodzinsky, 1949:28 [Panama].-- Maldonado, 1960:395, 443 [Barro Colorado Island].

Ghilianella bulbifera Champion

- Ghilianella bulbifera* Champion, 1898a:171 [new species-- Panama: Bugaba (male only, SEE *G. pendula* for associated female).-- Wygodzinsky, 1949:28 [Panama].-- Maldonado, 1960:396 [Panama].
- Ghilianella (Ghilianella) bulbifera*.-- McAtee and Malloch, 1925a:97 [Panama].-- Wygodzinsky, 1966:477 [Panama].-- Maldonado, 1990:125 [Panama].

Ghilianella cuneata McAtee and Malloch

- Ghilianella (Ghilianella) cuneata* McAtee and Malloch, 1925a:113 [new species-- Panama: Alhajuelo; Bueno Ventura; Porto Bello; Upper Pequiru River Camp No. 3].-- Wygodzinsky, 1966:478 [Panama].-- Maldonado, 1990:125 [Panama].
- Ghilianella cuneata*.-- Wygodzinsky, 1949:29 [Panama].-- Maldonado, 1960:396 [Panama].

Ghilianella gibbiventris Champion

Ghilianella gibbiventris Champion, 1898a:172 [new species-- Panama: Bugaba; Tolé; Volcan de Chiriqui].-- Wygodzinsky, 1949:29 [Panama].-- Maldonado, 1960:396, 423 [Barro Colorado Island, Canal Zone; Corozal, Canal Zone].

Ghilianella (Ghilianella) gibbiventris.-- McAtee and Malloch, 1925a:97 [Panama].-- Wygodzinsky, 1966:478 [Panama].-- Maldonado, 1990:125 [Panama].

Ghilianella ignorata Dohrn

Ghilianella ignorata Dohrn, 1860:238 [new species-- Venezuela].-- Champion, 1898a:170 [Chiriqui].-- Maldonado, 1960:445 [Gamboa, Canal Zone].

Ghilianella (Ghilianella) ignorata.-- Wygodzinsky, 1966:479 [Panama].-- Maldonado, 1990:126 [Panama].

Ghilianella inflata Maldonado

Ghilianella (Ghilianella) inflata Maldonado, 1981b:401 [new species-- Panama: Fortuna, Chiriqui]; 1990:126 [Panama].

Ghilianella panamana Maldonado

Ghilianella panamana Maldonado, 1960:434 [new species-- Panama: Barro Colorado Island].

Ghilianella (Ghilianella) panamana.-- Wygodzinsky, 1966:480 [Panama].-- Maldonado, 1990:126 [Panama].

Ghilianella pendula McAtee and Malloch

Ghilianella bulbifera.-- Champion, 1898a:171 [female from Bugaba, misidentified, referred to their new species *G. pendula* by McAtee and Malloch, see next entry].

Ghilianella (Ghilianella) pendula McAtee and Malloch, 1925a:116 [new species-- Panama: Alhajuela; Bugaba; Cabima].-- Maldonado, 1990:126 [Panama].

Ghilianella pendula.-- Wygodzinsky, 1949:29 [Panama].-- Maldonado, 1960:369 [Panama].

Ghilianella truncata McAtee and Malloch

Emesa angulata.-- Uhler, 1893:717 [misidentification of Panama specimens].

Ghilianella (Ghilianella) truncata McAtee and Malloch, 1925a:126 [new species-- Panama].-- Wygodzinsky, 1966:482 [Panama].-- Maldonado, 1990:127 [Panama].

Ghilianella truncata.-- Wygodzinsky, 1949:30 [Panama].-- Maldonado, 1960:369 [Panama].

Ghilianella uncinata McAtee and Malloch

Ghilianella (Ghilianella) uncinata McAtee and Malloch, 1925a:122 [new species-- Panama: Alhajuelo; Cabima; Porto Bello; Trinidad Rio].-- Wygodzinsky, 1966:482 [Panama].-- Maldonado, 1990:127 [Panama].

Ghilianella uncinata.-- Wygodzinsky, 1949:30 [Panama]; 1953:297 [Barro Colorado I., C.Z.; Fort Clayton, Canal Zone; Gamboa, C.Z.].-- Maldonado, 1960:397 [Panama].

TRIBE PLOIARIOLINI VAN DUZEE

Genus *Empicoris* Wolff

Empicoris Wolff, 1811:5. Type species: *Gerris vagabundus* (Linnaeus) [a later combination for *Cimex vagabundus* Linnaeus], monotypic.

Empicoris armatus (Champion)

Ploiariodes armata Champion, 1898a:165 [new species-- Guatemala. Panama: Bugaba].

Empicoris armatus-- McAtee and Malloch, 1925a:20 [Paraiso, Canal Zone]-- Wygodzinsky, 1949:27 [Panama]; 1966:370 [Panama]-- Froeschner, 1988f:628 [Panama]-- Maldonado, 1990:146 [Panama].

Empicoris armatus armatus-- Maldonado, 1992:10 [Panama].

Genus *Malacopus* Stål

Malacopus Stål, 1860:80. Type species: *Malacopus cellularis* Stål, monotypic.

Malacopus zeteki Wygodzinsky

Malacopus zeteki Wygodzinsky, 1947a:463 [new species-- Panama: Barro Colorado Island, Canal Zone]; 1949:30 [Panama]; 1966:395 [Panama]-- Maldonado, 1990:153 [Panama].

Genus *Panamia* Kirkaldy

Panamia Kirkaldy, 1907:249. Type species: *Lutevopsis ornata* Champion, monotypic.

Panamia ornata (Champion)

Lutevopsis ornata Champion 1898a:166 [new species-- Panama: Bugaba]-- Porter, 1923:506 [Panama].

Panamia ornata-- Kirkaldy, 1907:249 [Panama]-- McAtee and Malloch, 1925a:36 [Tabernilla, Canal Zone]-- Wygodzinsky, 1949:31 [Panama]; 1966:405 [Panama]-- Putshkov and Putshkov 1985:28 [Panama]-- Maldonado, 1990:154 [Panama].

SUBFAMILY HAMMACERINAE STÅL

Genus *Homalocoris* Perty

Platycoris Perty, 1833:175, preoccupied. Type species: *Platycoris varia* Perty, monotypic.

Homalocoris Perty, 1833:216. Proposed as a new name for the preoccupied *Platycoris* Perty.

Homalocoris varius (Perty)

Platycoris varia Perty, 1833:175 [new species-- Brazil].

Homalocoris varius-- Champion, 1899:228 [Bugaba; Caldera; Tolé; Volcan de Chiriqui].--
Rau, 1933:188, 189 [Barro Colorado Island].-- Brailovsky, 1981b:116 [Barro Colorado
Island].-- Maldonado, 1987:252 [Panama]; 1990:156 [Panama].

Note: Rau (above) reported nymphs of this species with their sticky body hairs covered with fragments of a termite nest on which they rested.

Genus *Microtomus* Illiger

Microtomus Illiger, 1807:240. Type species: *Cimex purcis* Drury, monotypic.

Microtomus luctuosus (Stål)

Hammatocerus luctuosus Stål, 1854:237 [new species-- Mexico].-- Champion, 1899:227
[Bugaba].

Microtomus luctuosus-- Stichel, 1926:182 [Panama].-- Costa Lima, 1935:317 [Panama].--
Brailovsky, 1981b:114 [Panama].

SUBFAMILY HARPACTORINAE AMYOTY AND SERVILLE**TRIBE APIOMERINI AMYOT AND SERVILLE**

Note: Costa Lima, Hathaway, and Seabra (1948) gave a key (pages 761-763) to 12 Neotropical genera.

Genus *Agriocoris* Stål

Agriocoris Stål, 1866a:247. Type species: *Heniartes curvipes* Signoret, monotypic.

Agriocoris flavipes (Fabricius)

Reduvius flavipes Fabricius, 1803:277 [new species-- "America meridionali"].

Agriocoris flavipes-- Champion, 1899:230 [Bugaba; David; Volcan de Chiriqui].-- Maldonado,
1990:2 [Panama].

Genus *Apiomerus* Hahn

Apiomerus Hahn, 1831:29. Type species: *Reduvius hirtipes* Fabricius, monotypic.

Note: Costa Lima, Seabra, and Hathaway (1951) treated the species of this American genus and provided keys (in Portuguese, pages 284-298; in English, pages 299-312) to the species.

Apiomerus binotatus Champion

Apiomerus (*Apiomerus*) *binotatus* Champion, 1899:237 [new species-- Panama: Bugaba;
Volcan de Chiriqui].

Apiomerus binotatus.-- Wygodzinsky, 1949:17 [Panama].-- Costa Lima, Seabra, and Hathaway, 1951:281, 359 [Chiriqui].-- Maldonado, 1990:3 [Panama].

Apiomerus emarginatus Stål

Apiomerus (Apiomerus) emarginatus Stål, 1872:97 [new species--Colombia].-- Champion, 1899:241 [Bugaba; Caldera; David; San Feliz; Tolé; Volcan de Chiriqui].

Apiomerus emarginatus.-- Costa Lima, Seabra, and Hathaway, 1951:281, 355 [Bugaba; Caldera; David; San Feliz; Tolé; Volcan de Chiriqui].-- Maldonado, 1990:4 [Panama].

Apiomerus hirtipes (Fabricius)

Reduvius hirtipes Fabricius, 1787:311 [new species-- French Guiana].

Apiomerus (Apiomerus) hirtipes.-- Champion, 1899:235 [Colon].

Apiomerus hirtipes.-- Costa Lima, Seabra, and Hathaway, 1951:281, 393 [Panama].-- Maldonado, 1990:5 [Panama].

Apiomerus lanipes (Fabricius)

Reduvius lanipes Fabricius, 1803:274 [new species-- South America].

Apiomerus (Apiomerus) lanipes.-- Champion, 1899:236 [Peña Blanca].

Apiomerus lanipes.-- Costa Lima, Seabra, and Hathaway, 1951:281, 331 [Peña Blanca (Chiriqui)].-- Maldonado, 1990:5 [Panama].

Apiomerus pictipes Herrich-Schaeffer

Apiomerus pictipes Herrich-Schaeffer, 1848:74 [new species-- Central America].

Apiomerus (Herega) pictipes.-- Champion, 1899:243 [Bugaba; David; Tolé; Volcan de Chiriqui].

Apiomerus pictipes.-- Costa Lima, Seabra, and Hathaway, 1951:281, 343 [Panama].-- Maldonado, 1990:7 [Panama].

Apiomerus vexillarius Champion

Apiomerus (Apiomerus) vexillarius Champion, 1899:234 [new species-- Panama: Bugaba; Volcan de Chiriqui].

Apiomerus vexillarius.-- Wygodzinsky, 1949:18 [Panama].-- Costa Lima, Seabra, and Hathaway, 1951:281, 291 [Bugaba; Tolé; Volcan de Chiriqui].-- Maldonado, 1986c:41 [Bugaba]; 1990:9 [Panama].

TRIBE HARPACTORINI AMYOT AND SERVILLE

Genus *Arilus* Hahn

Arilus Hahn, 1831:33. Type species: *Cimex serratus* Fabricius, a junior synonym of *Cimex carinatus* Fabricius, monotypic.

Arilus gallus (Stål)

Prionotus gallus Stål, 1872:72 [new species-- Colombia].

Arilus gallus-- Champion, 1899:288 [Volcan de Chiriqui].-- Maldonado, 1990:165 [Panama].

Genus *Atrachelus* Amyot and Serville

Atrachelus Amyot and Serville, 1843:374. Type species: *Atrachelus heterogeneus* Amyot and Serville, a junior synonym of *Reduvius cinereus* Fabricius, monotypic.

Note: Elkins' (1954) synopsis of this genus included keys to the two subgenera and nine species.

Atrachelus cinereus (Fabricius)

Reduvius cinereus Fabricius, 1798:545 [new species-- United States of North America].

Note: Elkins (1954) included no Panama records for this species of the nominate subgenus, but did give the range as from the United States south to Argentina.

Atrachelus mucosa (Champion)

Repipta mucosa Champion, 1899:271 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Wygodzinsky, 1949:45 [Panama].

Atrachelus (Phorobura) beieri Elkins, 1954:110 [new species--Panama: Alhajuelo; Barro Colorado, C. Z.; Gatun, Canal Zone; Porto Bello, 6 mi E XX Plantation; Sabanas; Tres Rios Plantation; Trinidad Rio (holotype)].

Atrachelus (Phorobura) muscosa-- Maldonado, 1986c:42 [Bugaba]; 1990:168 [Panama].-- Froeschner, 1988f:632 [Panama].

Atrachelus tenuispinis Champion

Atrachelus tenuispinis Champion, 1899:284 [new species-- Panama: Bugaba].-- Wygodzinsky, 1949:36 [Panama].

Atrachelus (Phorobura) tenuispinis-- Maldonado, 1990:168 [Panama].

Genus *Castolus* Stål

Castolus Stål, 1858:447. Type species: *Castolus plagiaticollis* Stål, monotypic.

Note: Maldonado (1976b:436-437) gave a key to 11 species of this genus.

Castolus lineatus Maldonado

Castolus lineatus Maldonado, 1976b:439 [new species-- Panama: Barro Colorado, Canal Zone. Colombia]; 1990:176 [Panama].

Castolus pallidus Maldonado

Castolus pallidus Maldonado, 1976b:442 [new species-- Panama: Barro Colorado Island, C.Z.; Coco Solo Hospital, C.Z.]; 1990:176 [Panama].

Castolus plagiaticollis Stål

Castolus plagiaticollis Stål, 1858:447 [new species-- Mexico].-- Champion, 1899:278 [Bugaba; Volcan de Chiriqui].-- Maldonado, 1976b:444 [Panama]; 1990:176 [Panama].-- Brailovsky, 1982b:226 [Panama].

Castolus subinermis (Stål)

Repipta subinermis Stål, 1862b:447 [new species-- Mexico].
Castolus subinermis.-- Rau, 1933:188 [Barro Colorado Island].

Note: No other Panama record of this species has come to hand; Rau's material was determined by McAtee.

Castolus tricolor Champion

Castolus tricolor Champion 1899:284 [new species-- Mexico. British Honduras. Guatemala. Panama; Caldera; Tolé; Volcan de Chiriqui].-- Wygodzinsky, 1949:26 [Panama].-- Maldonado, 1976b:445 [Panama]; 1990:177 [Panama].-- Brailovsky, 1982b:226 [Panama].

Genus *Corcia* Stål

Corcia Stål, 1859b:368. Type species: *Corcia columbica* Stål, fide Wygodzinsky, 1949:37.

Corcia nigricornis Champion

Corcia nigricornis Champion, 1899:277 [new species-- Panama: Volcan de Chiriqui].-- Wygodzinsky, 1949:37.-- Maldonado, 1990:187 [Panama].

Genus *Debilis* Stål

Debilis Stål, 1859b:375. Type species: *Debilis fusciventris* Stål, monotypic.

Debilis angustata Champion

Debilis angustata Champion, 1899:265 [new species-- Panama: Bugaba; Caldera; Volcan de Chiriqui].-- Wygodzinsky, 1949:37 [Panama].-- Maldonado, 1990:190 [Panama].

Genus *Doldina* Stål

Doldina Stål, 1859b:366, 368. Type species: *Doldina carinulata* Stål, monotypic.

Note: Hussey and Elkins (1956) reviewed *Doldina* and provided a key (pages 276-277) to the seven species.

Doldina bicarinata Stål

Doldina bicarinata Stål, 1866b:296 [new species-- Brazil].-- Hussey and Elkins, 1956:265

[Barro Colorado; Flat Rock Plantation, Chagres River; Juan Mina Citrus Plantation; Limon Plantation; Tabernilla].-- Maldonado, 1990:192 [Panama].

Genus *Graptocleptes* Stål

Graptocleptes Stål, 1866a:294. Type species: *Hiranetis gastrica* Stål, designated by Wygodzinsky, 1949:6.

Graptocleptes sanguineiventris (Stål)

Hiranetis sanguineiventris Stål, 1862b:448 [new species-- Mexico].
Graptocleptes sanguineiventris.-- Champion, 1899:282 [Bugaba].

Graptocleptes varians Champion

Graptocleptes varians Champion, 1899:281 [new species-- Panama: Bugaba; Volcan de Chiriqui].--Wygodzinsky, 1949:39 [Panama].-- Maldonado, 1990:205 [Panama].

Genus *Heza* Amyot and Serville

Heza Amyot and Serville, 1843:374. Type species: *Reduvius binotatus* Lepeletier and Serville, monotypic.

Heza fuscinervis Champion

Heza fuscinervis Champion, 1899:286 [new species-- Mexico. Panama: Bugaba].-- Wygodzinsky, 1949:40 [Panama].

Heza multiguttata Champion

Heza multiguttata Champion, 1899:285 [new species-- British Honduras. Panama: Tolé].-- Wygodzinsky, 1949:40 [Panama].-- Cobben and Wygodzinsky, 1975:11 [Panama].-- Maldonado, 1983a:408 [Barro Colorado Island]; 1990:217 [Panama].

Heza similis Stål

Heza similis Stål, 1859b:199 [new species-- Colombia].-- Champion, 1899:285 [Bugaba; Caldera; Tolé; Volcan de Chiriqui].-- Maldonado, 1990:217 [Panama].

Genus *Hiranetis* Spinola

Hiranetis Spinola, 1837:112. Type species: *Hiranetis membranaceus* Spinola, first included species, by Spinola, 1840:113.

Hiranetis braconiformis (Burmeister)

Myocoris braconiformis Burmeister, 1835:226 [new species-- Brazil].
Hiranetis braconiformis.-- Champion, 1899:281 [Bugaba; Volcan de Chiriqui].

Genus *Lindus* Stål

Lindus Stål, 1862a:61. Type species: *Zelus sahlbergi* Stål, monotypic.

Lindus ericius Champion

Lindus ericius Champion, 1899:276 [new species-- Panama: Bugaba].-- Wygodzinsky, 1949:41 [Panama].--Maldonado, 1990:226 [Panama].

Genus *Montina* Amyot and Serville

Montina Amyot and Serville, 1843:363. Type species: *Reduvius sinuosus* Lepeletier and Serville, monotypic.

Montina nigripes Stål

Montina nigripes Stål, 1859b:197 [new species-- Brazil].-- Champion, 1899:287 [Colon; Volcan de Chiriqui].-- Torre-Bueno, 1926a:108 [Chiriqui; Colon].-- Maldonado, 1990:235 [Panama].

Genus *Mucrolicter* Elkins

Mucrolicter Elkins, 1962:360. Type species: *Mucrolicter alienus* Elkins, original designation.

Mucrolicter alienus Elkins

Mucrolicter alienus Elkins, 1962:361 [new species-- Mexico. British Honduras. Guatemala. Honduras. Nicaragua. Panama].

Genus *Neotropiconyttus* Kirkaldy

Amaurosophodrus Stål.-- 1866a:295. A misidentification.

Neotropiconyttus Kirkaldy, 1909b:388. New name for misidentified *Amaurosophodrus* of Stål (above). Type species: *Zelus alboannulatus* Stål, monotypic.

Neotropiconyttus alboannulatus (Stål)

Zelus alboannulatus Stål, 1855a:189 [new species-- Colombia].

Amaurosophodrus alboannulatus.-- Champion, 1899:283 [Bugaba; Tolé].

Note: No Panama record was found for the current combination of names established by Kirkaldy (1909b:388).

Genus *Notocyrtus* Burmeister

Notocyrtus Burmeister, 1835:227. Type species: *Reduvius clavipes* Fabricius, monotypic.

Note: Carvalho and Costa (1992b) revised this genus and presented a key (pages 367-368) to its 15 species.

Notocyrtus bactrianus Champion

Notocyrtus bactrianus Champion, 1899:264 [new species-- Panama: Bugaba; Caldera].-- Wygodzinsky, 1949:42 [Panama].-- Maldonado, 1990:242 [Panama].-- Carvalho and Costa, 1992b:367, 368 [Caldera in Chiriqui].

Notocyrtus dorsalis (Gray)

Reduvius dorsalis Gray, 1832:243 [new species-- Colombia].
Notocyrtus dorsalis variety *flavolineatus*.-- Champion, 1899:263 [Bugaba; Volcan de Chiriqui].
Notocyrtus dorsalis.-- Carvalho and Costa, 1992b:367, 372 [Barro Colo., C.Z.; Cabima; Porto Belo; Summit, Canal Zone].

Notocyrtus dromedarius Stål

Notocyrtus dromedarius Stål, 1862b:449 [new species-- Mexico].
Notocyrtus dorsalis variety *dromedarius*.-- Champion, 1899:263 [Bugaba; Caldera in Chiriqui; David].

Note: Carvalho and Costa (1992b:379) treated *N. dromedarius* as a full species.

Notocyrtus foveatus Stål

Notocyrtus (Cystingonotus) foveatus Stål, 1872:85 [new species-- Colombia].
Notocyrtus foveatus.-- Champion, 1899:264 [Bugaba].-- Carvalho and Costa, 1992b:367 [Panama].

Genus *Pirnonota* Stål

Pirnonota Stål, 1959b:369. Type species: *Pirnonota convexicollis* Stål, monotypic.

Pirnonota convexicollis Stål

Pirnonota convexicollis Stål, 1859b:370 [new species-- Brazil].-- Champion, 1899:265 [Caldera; Tolé; Volcan de Chiriqui].

Genus *Pselliopus* Bergroth

Milyas Stål, 1862a:61, preoccupied. Type species: *Hiranetis ornaticeps* Stål, monotypic.
Pselliopus Bergroth, 1905:112. New name for preoccupied *Milyas* Stål, 1862.

Note: Maldonado (1990:viii) noted that *Pselliopus* is a junior synonym of *Blapton* Spinola (1850:48) and that he wished to appeal to the International Commission on Zoological Nomenclature for suspension of the Rules to conserve *Pselliopus*.

Pselliopus punctipes (Amyot and Serville)

Sinea punctipes Amyot and Serville, 1843:376 [new species-- "Cayenne"].
Milyas punctipes.-- Champion, 1899:247 [Bugaba; Volcan de Chiriqui].

Pselliopus zebra (Stål)

Milyas zebra Stål, 1862b:448 [new species -- Mexico].-- Champion, 1899:247 ["var." *gamma*: Volcan de Chiriqui].-- Maldonado, 1990:268 [Panama].

Genus *Repipta* Stål

Repipta Stål, 1859b:366, 369. Type species: *Zelus taurus* Fabricius, designated by Van Duzee, 1916:31.

Repipta flavicans (Amyot and Serville)

Zelus flavicans Amyot and Serville, 1843:374 [new species--"Cayenne"].
Repipta flavicans.-- Champion, 1899:269 [Bugaba; Volcan de Chiriqui].-- Rau, 1933:189 [Barro Colorado Island].

Repipta gracilis Champion

Repipta gracilis Champion, 1899:270 [new species-- Panama: Bugaba; Caldera; Volcan de Chiriqui].-- Wygodzinsky, 1949:45 [Panama].-- Maldonado, 1990:270 [Panama].

Repipta miniata Champion

Repipta miniata Champion, 1899:271 [new species-- Panama: Bugaba; Volcan De Chiriqui].-- Wygodzinsky, 1949:45 [Panama].-- Maldonado, 1990:270 [Panama].

Repipta sanguinea Champion

Repipta sanguinea Champion, 1899:270 [new species-- Panama].-- Wygodzinsky, 1949:45 [Panama].-- Maldonado, 1990:270 [Panama].

Repipta taurus (Fabricius)

Zelus taurus Fabricius, 1803:291 [new species-- United States of America].
Repipta taurus.-- Champion, 1899:269 [Volcan de Chiriqui].-- Fracker and Bruner, 1924:171 [Panama].--Froeschner, 1988f:634 [Panama].-- Maldonado, 1990:270 [Panama].

Genus *Ricolla* Stål

Ricolla Stål, 1859b:367. Type species: *Cimex quadrispinosus* Linnaeus, designated by Wygodzinsky, 1949:6, 9.

Note: Rau (1933:189) reported an unidentified specimen from grass on Barro Colorado Island.

Ricolla pallidinervis Stål

Ricolla pallidinervis Stål, 1859b:367 [new species-- Venezuela].-- Champion, 1899:267 [Panama City].

Ricolla simillima Stål

Ricolla simillima Stål, 1859b:367 [new species-- Mexico].-- Champion, 1899:267 [Bugaba; David; Volcan de Chiriqui].

Genus *Rocconota* Stål

Rocconota Stål, 1859b:370. Type species: *Rocconota sextuberculata* Stål, designated by Van Duzee, 1916:31.

Rocconota hystricula Champion

Rocconota hystricula Champion, 1899:274 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Wygodzinsky, 1949:46 [Panama].-- Maldonado, 1990:272 [Panama].

Rocconota octispina Stål

Rocconota octispina Stål, 1862b:448 [new species-- Mexico].-- Champion, 1899:275 [Bugaba; Volcan de Chiriqui].

Rocconota tuberculigera Stål

Rocconota tuberculigera Stål, 1862b:447 [new species-- Mexico].-- Champion, 1899:274 [Panama].

Genus *Sindala* Stål

Sindala Stål, 1861b:137, 138. Type species: *Sinea granuliger* Stål, monotypic.

Sindala brevis Champion

Sindala brevis Champion, 1899:290 [new species-- Panama: Bugaba].-- Wygodzinsky, 1949:46 [Panama].-- Maldonado, 1990:295 [Panama].

Genus *Sinea* Amyot and Serville

Sinea Amyot and Serville, 1843:375. Type species: *Cimex multispinosus* De Geer, a junior synonym of *Reduvius diadema* Fabricius, designated by Spinola, 1850:47.

Sinea caudata Champion

Sinea caudata Champion, 1899:293 [new species-- Panama: Bugaba; Caldera; Panama City; Volcan de Chiriqui].-- Torre-Bueno, 1926a:108 [Gamboa].-- Wygodzinsky, 1949:47 [Panama].-- Maldonado, 1990:295 [Panama].

Sinea defecta Stål

Sinea defecta Stål, 1862b:445 [new species-- Mexico].-- Champion, 1899:295 [Tolé; Volcan de Chiriqui].-- Froeschner, 1988f:638 [Panama].-- Maldonado, 1990:296 [Panama].

Sinea raptor Stål

Sinea raptor Stål, 1862b:444 [new species-- Mexico].-- Champion, 1899:293 [Volcan de Chiriqui].-- Maldonado, 1990:296 [Panama].

Genus *Sosius* Champion

Sosius Champion, 1899:275. Type species: *Sosius foliaceus* Champion, monotypic.

Sosius foliaceus Champion

Sosius foliaceus Champion, 1899:275 [new species-- Mexico. Panama: Bugaba].

Genus *Zelus* Fabricius

Zelus Fabricius, 1803:281. Type species: *Cimex longipes* Linnaeus, designated by Latreille, 1810:433.

Note: Hart's two papers (1986, 1987) treating the genus as it occurs in the United States south to northern Mexico, and from the West Indies, furnish keys and information that are useful to the those who work with specimens of this genus.

Zelus atripes Champion

Zelus atripes Champion, 1899:259 [new species-- Panama].-- Wygodzinsky, 1949:48 [Panama].-- Maldonado, 1990:326 [Panama].

Zelus exsanguis Stål

Zelus exsanguis Stål, 1862b:452 [new species-- Mexico].-- Champion, 1899:259 [Tolé].-- Blatchley, 1926:570 [Panama].

Zelus fasciatus Champion

Zelus fasciatus Champion, 1899:257 [new species-- Panama: Bugaba].-- Wygodzinsky, 1949:49 [Panama].-- Maldonado, 1990:327 [Panama].

Zelus impar Kuhlitz

Zelus (Diplodus) impar Kuhlitz, 1903:264 [new species-- Colombia].-- Hart, 1987 [Panama].-- Maldonado, 1990:327 [Panama].

Zelus inconstans Champion

Zelus inconstans Champion, 1899:254 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Wygodzinsky, 1949:49 [Panama].-- Maldonado, 1990:328 [Panama].

Zelus longipes (Linnaeus)

Cimex longipes Linnaeus, 1767:724 [new species-- "America"].

Zelus rubidus.-- Champion, 1899:252 [Volcan de Chiriqui].

Zelus ruficeps.-- Champion, 1899:256 [Panama].-- Cobben and Wygodzinsky, 1975:13 [Panama].

Zelus minutus Hart

Zelus minutus Hart, 1987:299 [new species-- Panama: Barro Colorado; Coco Solo. Colombia. Venezuela. Surinam. Trinidad].-- Maldonado, 1990:330 [Panama].

Zelus nigromaculatus Champion

Zelus nigromaculatus Champion, 1899:261 [new species-- Panama: Bugaba].-- Wygodzinsky, 1949:49 [Panama].-- Maldonado, 1990:330 [Panama].

Zelus nugax Stål

Zelus nugax Stål, 1862b:453 [new species-- Mexico].-- Champion, 1899:261 [Bugaba; Caldera; David; Volcan de Chiriqui].

Zelus trimaculatus Champion

Zelus trimaculatus Champion, 1899:254 [new species-- Panama: Volcan de Chiriqui].-- Wygodzinsky, 1949:50 [Panama].-- Maldonado, 1990:331 [Panama].

Zelus vespiformis Hart

Zelus vespiformis Hart, 1987:301 [new species-- El Salvador. Panama: Drayton Trail, Barro Colorado; Barro Colorado Island. Colombia. Ecuador. Venezuela. Trinidad. Maldonado, 1990:332 [Panama].

SUBFAMILY PEIRATINAE STÅL

Genus *Froeschnerisca* Coscarón

Froeschneriella Coscarón, 1995:453, preoccupied. Type species: *Rasahus vittatus* Coscarón, original designation.

Froeschnerisca Coscarón, 1997:49. Proposed as a new name for preoccupied *Froeschneriella* Coscarón.

Froeschnerisca vittata (Coscarón)

Rasahus vittatus Coscarón, 1983a:96 [new species-- Brazil].

Froeschneriella vittata-- Coscarón, 1995:454 [Barro Colorado Island, Canal Zone; Gatun, Canal Zone].

Froeschnerisca vittata-- Coscarón, 1997:49 [Panama].

Genus *Melanolestes* Stål

Melanolestes Stål, 1866a:251, 259. Type species: *Pirates picipes* Herrich-Schaeffer, designated by Van Duzee, 1916:29.

Note: Coscarón and Carpintero's (1994) revision of *Melanolestes* included a key (page 362) to nine species. They also listed *M. morio* (Erichson) as the only member of the genus occurring in Panama and assigned Coscarón's (1983b:370) Panama record of *M. abdominalis* (Herrich-Schaeffer) to it.

Melanolestes morio (Erichson)

Pirates morio Erichson, 1848:613 [new species-- British Guiana].

Melanolestes morio-- Coscarón, 1983b:374 [Ancon; Canal Zone; Rio Trinidad in Colon; Corozal; Tabernilla].-- Maldonado, 1990:361 [Panama].-- Coscarón and Carpintero, 1994:370 [Corozal; Darien; Sante Fe, Rio Chagres; Juan Mina].

Melanolestes abdominalis--Coscarón, 1983b:370 [Bugaba].

Genus *Phorastes* Kirkaldy

Phorus Stål, 1862b:458, preoccupied. Type species: *Cimex femoratus* De Geer, monotypic.

Phorastes Kirkaldy, 1900:243. Proposed as new name for preoccupied *Phorus* Stål.

Note: Doesburg (1981) clarified the identification of the two species of *Phorastes*.

Phorastes incognitus Doesburg

Phorus femoratus-- Champion, 1899:212 [Panama].

Phorastes incognitus Doesburg, 1981:184 [new species-- Panama. Brazil].-- Coscarón 1983b:376 [Panama].

Note: Comparison of Champion's illustration (plate 13, fig 4) with the illustrations given by Doesburg (1981:figs. 1, 2) shows that Champion's Panama record belongs under this species.

Genus *Rasahus* Amyot and Serville

Rasahus Amyot and Serville, 1843:325. Types species: *Peirates sulcicollis* Serville, designated by Van Duzee, 1916:29.

Note: *Rasahus* was revised by Coscarón (1983a), who gave a key (pages 79-82) to the 25 species.

Rasahus albomaculatus (Mayr)

Pirates albomaculatus Mayr, 1865:438 [new species-- Brazil].

Lestomerus tuberculatus Fallou, 1891:10 [new species-- Panama].

Rasahus albomaculatus.-- Lethierry and Severin, 1896:127 [Panama].-- Champion, 1899:214 [Bugaba; Tolé; Volcan de Chiriqui].-- Coscarón, 1983a:104 [Chiriqui: Chiriqui; Canal Zone: Tres Rio Plantation, Lago Gatun].-- Maldonado, 1990:368 [Panama].

Rasahus arcuiger (Stål)

Pirates arcuiger Stål, 1862b:475 [new species-- Colombia].

Rasahus arciger [sic].-- Champion, 1899:220 [Bugaba; Volcan de Chiriqui].

Rasahus arcuiger.-- Coscarón, 1983a:89 [Chiriqui: Rio Sereno; Canal Zone: Tres Rio Plantation, Lago Gatun; Canal Zone: Barro Colorado; Tozschokke; Fort Clayton]; 1984:6 [Panama].

Rasahus bifurcatus Champion

Rasahus bifurcatus Champion, 1899:219 [new species-- Panama: Caldera; Volcan de Chiriqui].-- Wygodzinsky, 1949:53 [Panama].-- Coscarón, 1983a:85 [Chiriqui].-- Maldonado, 1990:369 [Panama].

Rasahus biguttatus (Say)

Petalcheirus biguttatus Say, 1832:12 [new species-- United States of America].

Rasahus biguttatus.-- Uhler, 1876:330 [Panama].-- Champion, 1899:216 [Panama].-- Coscarón, 1983a:101 [Panama].-- Maldonado, 1990:369 [Panama].

Rasahus brasiliensis Coscarón

Rasahus brasiliensis Coscarón, 1983a:108 [new species-- Costa Rica. Panama: Tres Ríos Plantation, Gatun Lake; Canal Zone: Barro Colorado. Guyana. Surinam. Peru. Brazil. Paraguay. Argentina].-- Maldonado, 1990:369 [Panama].

Rasahus flavovittatus Stål

Rasahus flavovittatus Stål, 1872:457 [new species-- Colombia].-- Maldonado, 1990:369 [Panama].

Rasahus flavovittatus [sic].-- Coscarón, 1983a:87 [Cerro Jefe].

Rasahus guttatipennis (Stål)

Pirates guttatipennis Stål, 1862b:457 [new species-- Mexico].

Rasahus guttatipennis.-- Champion, 1899:212 [Bugaba; Volcan de Chiriqui].-- Coscarón, 1983a:87 [Panama].-- Maldonado, 1990:369 [Panama].

Rasahus hamatus (Fabricius)

- Reduvius hamatus* Fabricius, 1781:381 [new species-- "America meridionali"].
Rasahus hamatus-- Champion, 1899:217 [Tolé].-- Coscarón, 1983a:98 [La Jagua].--
 Maldonado, 1990:370 [Panama].

Rasahus scutellaris (Fabricius)

- Reduvius scutellaris* Fabricius, 1787:313 [new species-- "Cayenne"].
Rasahus scutellaris-- Champion, 1899:218 [Bugaba; Volcan de Chiriqui].-- Maldonado,
 1990:370 [Panama].

Rasahus sulcicollis (Serville)

- Peirates sulcicollis* Serville, 1831:219 [new species-- "Cayenne"].
Rasahus sulcicollis-- Champion, 1899:216 [Bugaba].-- Coscarón, 1983a:109 [Canal Zone:
 Barro Colorado; Panamá: La Chorrera; Tres Ríos Plantation, Gatun].-- Coscarón and
 Maldonado, 1988:249 [Canal Zone].

Rasahus surinamensis Coscarón

- Rasahus surinamensis* Coscarón, 1983a:103 [new species-- Panama: Canal Zone: Barro
 Colorado. Surinam. Brazil. Paraguay].

Genus *Sirthenea* Spinola

- Sirthenea* Spinola, 1837:100. Type species: *Reduvius carinatus* Fabricius, monotypic.
Note: A revision of the New World species of this genus was published by Willemse (1985),
 who included a key (pages 25-28) to the world's 29 included species.

Sirthenea dubia Willemse

- Sirthenea dubia* Willemse, 1985:35 [new species-- Panama: Fortuna. Paraguay. Argentina].--
 Maldonado, 1990:372 [Panama].

Sirthenea stria (Fabricius)

- Reduvius stria* Fabricius, 1794:201 [new species-- "Cayenne"].
Sirthenea stria-- Coscarón, 1983b:378 [Barro Colorado; Maddin [sic] Air Strip]; 1984:6
 [Panama].
Sithenea stria stria-- Willemse, 1985:54 [Barro Colorado Island; Ft. Amador; Gatun Lake;
 Lino; Madden Dam; Porto Bello].

Sirthenea vidua Horvath

- Sirthenea vidua* Horvath, 1909:357, 365 [new species-- Costa Rica].-- Willemse, 1985:60
 [Boquete; Chiriqui].-- Maldonado, 1990:374 [Panama].

Sirthenea vittata Distant

Sirthenea vittata Distant, 1902:286 [new species-- Colombia].-- Coscarón, 1983b:379 [Canal Zone: Tabernilla; Tocumen]; 1984:6 [Panama].-- Willemse, 1985:61 [Canal Zone; Fortuna].-- Maldonado, 1990:374 [Panama].

Genus *Thymbreus* Stål

Thymbreus Stål, 1859b:185. Type species: *Opinis pyrropterus* Stål, monotypic.

Note: Coscarón (1994:223) included a key to the three species.

Thymbreus crocinopterus Stål

Thymbreus crocinopterus Stål, 1862b:457 [new species-- Mexico].-- Champion, 1899:211 [Bugaba].-- Maldonado, 1990:375 [Panama].-- Coscarón, 1994:223 [Panama].

Genus *Tydides* Stål

Tydides Stål, 1866b:113. Type species: *Peirates rufus* Serville, first included species, by Stål, 1872:108.

Note: Lent and Jurberg's (1967) revision of this genus included a key (pages 360-362) to the four species.

Tydides quatuor Lent and Jurberg

Tydides quatuor Lent and Jurberg, 1967:355 [new species-- Costa Rica. Panama: Canal Zone: Barro Colorado; Panamá: La Chorrera. Colombia. Brazil. British Guiana].-- Maldonado, 1990:375 [Panama].

SUBFAMILY PHYMATINAE LAPORTE

Froeschner and Kormilev (1990) presented a synonymic list of the members of the "Phymatidae" and included keys down to species, except for those in the genera *Lophoscutus* Kormilev and *Phymata* Latreille; for the former genus Kormilev (1987:701-702) provided a key to the 17 species occurring in North and Central America, and for the latter genus he had presented (1962a) well-illustrated keys to the genera and species of the subfamily Phymatinae.

TRIBE MACROCEPHALINI HANDLIRSCH

A key to the three genera of American Macrocephalinae was given by Kormilev (1984:624).

Genus *Lophoscutus* Kormilev

Macrocephalus (*Lophoscutus*) Kormilev, 1951b:101. Type species: *Macrocephalus affinis* Guérin-Méneville, designated by Maa and Lin, 1956:116.

Lophoscutus.-- Maa and Lin, 1956:116.

Lophoscutus angustatus (Champion)

Macrocephalus angustatus Champion, 1898a:59 [new species-- Nicaragua. Panama: Volcan de Chiriqui].-- Evans, 1931:730, 733 [Ancon].-- Wygodzinsky, 1949:11 [Panama].
Lophoscutus angustatus.-- Froeschner and Kormilev, 1990:28 [Panama].

Lophoscutus attenuatus (Champion)

Macrocephalus attenuatus Champion, 1898a:60 [new species-- Panama: Volcan de Chiriqui].-- Wygodzinsky, 1949:11 [Panama].
Lophoscutus attenuatus.-- Froeschner and Kormilev, 1990:28 [Panama].

Lophoscutus falleni (Stål)

Macrocephalus falleni Stål, 1862b:441 [new species-- Mexico].-- Champion, 1898a:58 [Boquete].

Genus *Macrocephalus* Swederus

Macrocephalus Swederus, 1787:183. Type species: *Macrocephalus cimicoides* Swederus, monotypic.

Note: Kormilev (1962c:51) mentioned a Panamanian specimen taken by the Yale Peruvian Expedition and misidentified as *M. bergrothi*, apparently that record was not published in that combination.

Macrocephalus notatus Westwood

Macrocephalus notatus Westwood, 1841:24 [new species-- Brazil].-- Champion, 1898a:46 [Taboga Island].-- Evans, 1931:730, 731 [Canal Zone].
Macrocephalus (*Macrocephalus*) *notatus*.-- Kormilev, 1962c:49 [Ancon; Panama; Pedro Miguel; Summit].

Macrocephalus panamensis Champion

Macrocephalus panamensis Champion, 1898a:58 [new species-- Panama: Volcan de Chiriqui].-- Wygodzinsky, 1949:12 [Panama].-- Froeschner and Kormilev, 1990:35 [Panama].

TRIBE PHYMATINI LAPORTE

Genus *Phymata* Latreille

Phymata Latreille, 1802:247. Type species: *Acanthia crassipes* Fabricius, monotypic.

Note: Melin (1930:37) reported a species as "*Phymata* ? n. sp 1 ♂ "V. de Chiriqui, Panama (25-4000 ft, Champion" (Fig. 39)." No subsequent reference to this "species" has been noted during this compilation, although a number of species-group names have been based on specimens with the same locality but from different elevations.

Phymata andina Melin

Phymata andina Melin, 1930:21 [new species-- Colombia].-- Kormilev, 1962a:436 ["Panama (?)"].

Phymata centralis Kormilev

Phymata acutangula.-- Champion, 1898a:53 [Bugaba; Caldera; David; Volcan de Chiriqui].
Phymata (Phymata) centralis Kormilev, 1962a:351 [new species-- Panama: Canal Zone].--
 Froeschner and Kormilev, 1990:47 [Panama].

Note: Champion's (above) record is placed here because his illustration of the elongate head and concave lateral margins of the abdomen most closely match Kormilev's (1962a) figures 75, 77.

Phymata fasciata (Gray)

Syrts fasciatus Gray, 1832:242 [new species-- North America].
Phymata erosa fasciata.-- Champion, 1898a:50 [Volcan de Chiriqui].
Phymata fasciata panamensis Kormilev, 1962c:411 [new subspecies-- Panama: Barro Colorado, Canal Zone. Costa Rica].-- Froeschner and Kormilev, 1990:52 [Panama].
Phymata (Phymata) fasciata.-- Froeschner, 1988e:602 [Panama].

Phymata granulosa Handlirsch

Phymata erosa granulosa Handlirsch, 1897:163 [new subspecies--Mexico].
Phymata chiriquiensis Melin, 1930:18 [new species-- Panama: V. de Chiriqui].-- Wygodzinsky, 1949:13 [Panama].
Phymata (Phymata) granulosa chiriquiensis.-- Kormilev, 1962a:398 [Volcan de Chiriqui].--
 Froeschner and Kormilev, 1990:53 [Panama].

Phymata handlirschi Champion

Phymata handlirschi Champion, 1898a:52 [new species-- Panama: Volcan de Chiriqui].--
 Wygodzinsky, 1949:14 [Panama].
Phymata (Phymata) handlirschi.-- Kormilev, 1962a:360 [Volcan de Chiriqui].

Phymata parva Handlirsch

Phymata erosa parva Handlirsch, 1897:165 [new subspecies-- Mexico. Guatemala. Costa Rica].--Champion, 1898a:51 [Bugaba; Caldera; San Lorenzo; Tole].
Phymata erosa carneipes.-- Champion, 1898a:52 [Volcan de Chiriqui].
Notes: (1) Kormilev (1962a:425) treated this taxon as a full species and listed it from Mexico to Costa Rica but without mention of Panama. (2) He further noted (page 438) that *P. carneipes* Mayr was essentially a Brazilian form and that he had not seen it from Central America.

Phymata severini Handlirsch

Phymata erosa severini Handlirsch, 1897:164 [new subspecies-- Mexico. Guatemala. Costa Rica].--Champion, 1898a:51 [Bugaba; Volcan de Chiriqui].
Phymata (Phymata) severini.-- Kormilev, 1962a:388 [Panama].-- Froeschner and Kormilev, 1990:59 [Panama].

SUBFAMILY PHYSODERINAE MILLER

Genus *Cryptophysoderes* Wygodzinsky and Maldonado

Cryptophysoderes Wygodzinsky and Maldonado, 1972:3. Type species: *Cryptophysoderes fairchildi* Wygodzinsky and Maldonado, original designation.

Cryptophysoderes fairchildi Wygodzinsky and Maldonado

Cryptophysoderes fairchildi Wygodzinsky and Maldonado, 1972:6 [new species-- Panama: Limbo, Gamboa, Canal Zone].-- Maldonado, 1990:377 [Panama].

SUBFAMILY REDUVIINAE LATREILLE

Genus *Aradomorpha* Champion

Aradomorpha Champion, 1899:196. Type species: *Aradomorpha crassipes* Champion, monotypic.

Aradomorpha crassipes Champion

Aradomorpha crassipes Champion, 1899:196 [new species-- Panama: Tolé].-- Lent and Wygodzinsky, 1945:475 [Panama].-- Wygodzinsky, 1949:55 [Panama].-- Maldonado, 1990:391 [Panama].

Genus *Leogorrus* Stål

Leogorrus Stål, 1859e:404. Type species: *Reduvius formicarius* Fabricius, designated by Wygodzinsky, 1949:6.

Leogorrus formicarius (Fabricius)

Reduvius formicarius Fabricius, 1803:280 [new species-- "America meridionali"].
Leogorrus formicarius.-- Champion, 1899:199 [Bugaba; David].-- Rau, 1933:189 [Barro Colorado Island].-- Maldonado, 1990:411 [Panama].

Leogorrus insculptus Hussey

Leogorrus insculptus Hussey, 1953b:196 [new species-- Panama: Los Santos, Guánico].--

Maldonado, 1990:412 [Panama].

Leogorrus interruptus Champion

Leogorrus interruptus Champion, 1899:201 [new species-- Panama: David].-- Wygodzinsky, 1949:55 [Panama].-- Maldonado, 1990:412 [Panama].

Leogorrus litura (Fabricius)

Reduvius litura Fabricius, 1787:310 [new species-- Brazil].
Leogorrus litura.-- Champion, 1899:199 [Bugaba].

Genus *Microlestria* Stål

Microlestria Stål, 1872:120. Type species: *Nalata fuscicollis* Stål, designated by Wygodzinsky, 1949:6.

Microlestria fuscicollis (Stål)

Nalata fuscicollis Stål, 1860:80 [new species-- Brazil].
Microlestria fuscicollis.-- Champion, 1899:185 [Bugaba; Volcan de Chiriqui].

Microlestria laevis Champion

Microlestria laevis Champion, 1899:195 [new species-- Panama: Volcan de Chiriqui].-- Wygodzinsky, 1949:56 [Panama].-- Maldonado, 1990:415 [Panama].

Genus *Nalata* Stål

Nalata Stål, 1860:79. Type species: *Nalata aspera* Stål, designated by Wygodzinsky, 1949:6.

Nalata fuscipennis Stål

Nalata fuscipennis Stål, 1860:80 [new species-- Brazil].-- Champion, 1899:194 [Tolé].-- Maldonado, 1990:416 [Panama].

Nalata irrorata Champion

Nalata irrorata Champion, 1898a:192 [new species-- Panama: Bugaba].-- Wygodzinsky, 1949:56 [Panama].-- Maldonado, 1990:416 [Panama].

Nalata nigrescens Champion

Nalata nigrescens Champion, 1898a:192 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Wygodzinsky, 1949:56 [Panama].-- Maldonado, 1990:416 [Panama].

Nalata quadrituberculata Champion

Nalata quadrituberculata Champion, 1898a:191 [new species-- Panama: Volcan de Chiriqui].-- Wygodzinsky, 1949:56 [Panama].-- Maldonado, 1990:416 [Panama].

Nalata setulosa Stål

Nalata setulosa Stål, 1862b:456 [new species-- Mexico].-- Champion, 1899:194 [Bugaba; Caldera; Volcan de Chiriqui].

Nalata spinicollis Champion

Nalata spinicollis Champion, 1899:193 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Wygodzinsky, 1949:56 [Panama].-- Maldonado, 1990:417 [Panama].

Genus *Namapa* Wygodzinsky and Lent

Namapa Wygodzinsky and Lent, 1980:733. Type species: *Namapa caroli* Wygodzinsky and Lent, original designation.

Namapa caroli Wygodzinsky and Lent

Namapa caroli Wygodzinsky and Lent, 1980:735 [new species-- Panama: Barro Colorado Island, Canal Zone].-- Maldonado, 1990:417 [Panama].

Genus *Opisthacidius* Berg

Spiniger (*Opisthacidius*) Berg, 1879a:273. Type species: *Platymerus rubropictus* Herrich-Schaeffer, monotypic.

Opisthacidius.-- Lent and Wygodzinsky, 1947c:343, 351.

Note: Lent and Wygodzinsky (1956:331-332) provided a key to eight species.

Opisthacidius mexicanus (Peláez)

Spiniger mexicanus Peláez, 1942:60 [new species-- Mexico].

Opisthacidius mexicanus.-- Lent and Wygodzinsky, 1947c:358 [Barro Colorado, C.Z.; Porto Bello].-- Maldonado, 1990:420 [Panama].

Genus *Peregrinator* Kirkaldy

Microcleptes Stål, 1866a:240, preoccupied. Type species: *Opiscoetus biannulatus* Montrouzier and Signoret, monotypic.

Peregrinator Kirkaldy, 1904b:280. A new name for preoccupied *Microcleptes* Stål.

Peregrinator biannulipes (Montrouzier and Signoret)

Opiscoetus biannulipes Montrouzier and Signoret, 1861:69 [new species-- New Caledonia].

Alloeocranum biannulipes.-- Champion, 1899:197 [Bugaba].-- Fracker, 1913:229 [Panama].

Genus *Zelurus* Hahn

Zelurus Hahn, 1826:plate 6. Type species: *Reduvius eburneus* Lepeletier and Serville, monotypic.

Zelurus championi Lent and Wygodzinsky

Spiniger formosus var. "b".-- Champion, 1899:203 [Nicaragua. Panama].

Zelurus championi Lent and Wygodzinsky, 1951:7 [new species-- Costa Rica. Panama: Changuinola Dist., Boc. Toro].-- Lent and Wygodzinsky, 1968:320 [Panama].-- Maldonado, 1990:460 [Panama].

Zelurus chaos Lent and Wygodzinsky

Spiniger formosus var. "a" Champion, 1899:203 [Guatemala. Panama: Volcan de Chiriqui].

Zelurus chaos Lent and Wygodzinsky, 1968:323, 326 [new species--Guatemala].-- Maldonado, 1990:460 [Panama].

Zelurus circumcinctus (Hahn)

Reduvius limbatus Lepeletier and Serville, 1825:275, preoccupied [new species-- Brazil].

Acrocoris circumcinctus Hahn, 1836:23, plate LXXX, fig. 246, on page 23 of "Dritter Band" treated this as a synonym under *Spiniger limbatus* and gave "Brasilien" as locality of origin.

Spiniger limbatus.-- Champion, 1899:204 [Volcan de Chiriqui].

Zelurus circumcinctus.-- Lent and Wygodzinsky, 1947a:343 [Barro Colorado Island, Canal Zone]; 1951:20 [Chiriqui]; 1955:184 [Panama].-- Maldonado, 1990:460 [Panama].

Zelurus circumcinctus circumcinctus.-- Lent and Wygodzinsky, 1957:24 [Panama].

Zelurus lepeletierianus (Kirkaldy)

Reduvius ater Lepeletier and Serville, 1825:274, preoccupied [new species-- Brazil].

Spiniger lepeletierianus Kirkaldy, 1909b:32 [new name for preoccupied *Reduvius ater* Lepeletier and Serville].

Zelurus lepeletierianus.-- Lent and Wygodzinsky, 1951:23 [Panama]; 1957:29 [Panama].-- Maldonado, 1990:463 [Panama].

Zelurus nugax (Breddin)

Spiniger formosus var. "a" Champion, 1899:203 [new variety-- Guatemala. Panama; Volcan de Chiriqui].

Spiniger nugax Breddin, 1903b:108 [new species-- Ecuador].

Zelurus nugax.-- Lent and Wygodzinsky, 1951:6 [Volcan de Chiriqui]; 1957:35 [Panama].-- Maldonado, 1990:465 [Panama].

Zelurus spinidorsis (Gray)

Reduvius spinidorsis Gray, 1832:244 [new species-- British Guiana].

- Spiniger spinidorsis*.-- Champion, 1899:203 [Bugaba; Volcan de Chiriqui].
Zelurus spinidorsis.-- Lent and Wygodzinsky, 1947b:39 [Barro Colorado, Canal Zone];
 1955:177 [Panama]; 1957:39 [Panama].-- Maldonado, 1990:467 [Panama].

SUBFAMILY SAICINAE STÅL

Note: Maldonado (1981b:406-407) provided a key to the six American genera of Saicinae. Blinn (1990:348-350) modified part of that key to include his new genus *Pseudosaica*.

Genus *Bagriella* McAtee and Malloch

Bagriella McAtee and Malloch, 1923:253. Type species: *Bagriella ornata* McAtee and Malloch, original designation.

Bagriella ornata McAtee and Malloch

Bagriella ornata McAtee and Malloch, 1923b:253 [new species-- Panama: Paraiso, Canal Zone].-- Wygodzinsky, 1949:62 [Panama].-- Maldonado, 1990:470 [Panama].

Genus *Buninotus* Maldonado

Buninotus Maldonado, 1981b:404. Type species: *Buninotus niger* Maldonado, original designation.

Buninotus niger Maldonado

Buninotus niger Maldonado, 1981b:406 [new species-- Panama: Fortuna, Chiriqui].-- Maldonado, 1990:470 [Panama].

Genus *Oncerotrachelus* Stål

Oncerotrachelus Stål, 1868:130. Type species: *Reduvius acuminatus* Say, monotypic.

Oncerotrachelus acuminatus (Say)

Reduvius acuminatus Say, 1832:32 [new species-- United States of America].
Oncerotrachelus acuminatus.-- Champion, 1898a:180 [Tolé].-- Fracker, 1913:226 [Panama].-- Monte, 1943:253 [Panama].

Oncerotrachelus conformis Uhler

Oncerotrachelus conformis Uhler, 1894a:211 [new species--Grenada].-- McAtee and Malloch, 1923:249 [Alhajuelo, Canal Zone; Tabernillo, Canal Zone; Trinidad River].

Oncerotrachelus coxatus McAtee and Malloch

Oncerotrachelus coxatus McAtee and Malloch, 1923:249 [new species-- Guatemala. Panama:

Trinidad River. Brazil].-- Monte, 1943:253 [Panama].-- Wygodzinsky, 1949:63 [Panama].-- Maldonado, 1990:473 [Panama].

Oncerotrachelus spiniventris Hussey

Oncerotrachelus spiniventris Hussey, 1953a:61 [new species-- Panama: Progreso, Chiriqui Province].-- Maldonado, 1990:473 [Panama].

Genus *Pseudosaica* Blinn

Pseudosaica Blinn, 1990:347. Type species: *Pseudosaica panamensis* Blinn, original designation.

Pseudosaica panamensis Blinn

Pseudosaica panamensis Blinn, 1990:350 [new species-- Panama: Barro Colorado Island, Canal Zone].

Genus *Saica* Amyot and Serville

Saica Amyot and Serville, 1843:374. Type species: *Zelus recurvatus* Fabricius, monotypic.

Saica apicalis Osborn and Drake

Saica apicalis Osborn and Drake, 1915b:530 [new species--Guatemala].-- McAtee and Malloch, 1923:251 [Ancon, Canal Zone; Trinidad River].-- Froeschner, 1988f:644 [Panama].

Saica erubescens Champion

Saica erubescens Champion, 1898a:178 [new species-- Panama: Bugaba].-- McAtee and Malloch, 1923:251 [Panama].-- Wygodzinsky, 1949:63 [Panama].-- Maldonado, 1990:479 [Panama].

Saica recurvata (Fabricius)

Zelus recurvatus Fabricius, 1803:286 [new species-- "America meirdionali"].
Saica recurvata.-- Champion, 1898a:177 [Bugaba; Caldera; David; Volcan de Chiriqui].-- Maldonado, 1990:479 [Panama].
Saica recurvata recurvata.-- McAtee and Malloch, 1923:251 [Panama].

Saica rubripes Champion

Saica rubripes Champion, 1898a:177 [new species-- Panama: Volcan de Chiriqui. Colombia].-- McAtee and Malloch, 1923:251 [Panama].-- Wygodzinsky, 1949:64 [Panama].-- Maldonado, 1990:479 [Panama].

Wygodzinsky, 1949:63

Saica tibialis Stål

Saica tibialis Stål, 1862b:441 [new species-- Mexico].-- Champion, 1898a:178 [Volcan de Chiriqui].-- McAtee and Malloch, 1923:251 [Panama].-- Maldonado, 1990:479 [Panama].

Progreso, Chiriqui

Genus *Tagalis* Stål

Tagalis Stål, 1860:76. Type species: *Tagalis inornata* Stål, monotypic.

linn, original

Tagalis inornata Stål

Tagalis inornata Stål, 1860:76 [new species-- Brazil].-- Champion, 1898a:179 [Bugaba; Volcan de Chiriqui].

Colorado Island, Canal

Tagalis inornata inornata.-- McAtee and Malloch, 1923:253 [Portbello].-- Maldonado, 1990:479 [Panama].

Tagalis seminigra Champion

bricius, monotypic.

Tagalis seminigra Champion, 1898a:178 [new species-- Panama: Bugaba].-- McAtee and Malloch, 1923:252 [Trinidad River].-- Wygodzinsky, 1949:64 [Panama].-- Maldonado, 1990:480 [Panama]

-- McAtee and Malloch, 1988f:644 [Panama].

SUBFAMILY SALYAVATINAE AMYOT AND SERVILLE**Genus *Salyavata* Amyot and Serville**

Salyavata Amyot and Serville, 1843:349. Type species: *Salyavata variegata* Amyot and Serville, monotypic.

a].-- McAtee and Maldonado, 1990:479

Salyavata variegata Amyot and Serville

Salyavata variegata Amyot and Serville, 1843:350 [new species-- "Cayenne"].-- Champion, 1898a:191 [Bugaba].-- Braïlovsky, 1978c:173 [Bugaba].-- Maldonado, 1990:488 [Panama].

ali"].

can de Chiriqui].--

Note: The original description gave the type locality as "Cayenne," not "Brazil" as cataloged by Maldonado (1990:488).

SUBFAMILY STENOPODAINAE AMYOT AND SERVILLE

e Chiriqui. Colombia].-- y, 1949:64 [Panama].--

Note: Barber's (1930) "Essay" on the New World species of this subfamily was followed by Costa Lima and Campos Seabra's (1945) key (pages 507-510) to 20 American genera. Wygodzinsky and Giacchi (1994) accepted a number of changes in generic compositions and gave a key (pages 5-7) to 18 genera with four subgenera.

Genus *Apronius* Stål

Apronius Stål, 1865a:150. Type species: *Apronius rapax* Stål, first included species, by Stål, 1866b:167.

Note: Key to five species by Maldonado 1986d:175.

Apronius octonotatus Champion

Apronius octonotatus Champion, 1898a:186 [new species-- Panama: Bugaba; Volcan de Chiriqui].-- Barber, 1930:213 [Bugaba; Volcan de Chiriqui].-- Wygodzinsky, 1949:65 [Panama].-- Maldonado, 1986d:179 [Panama]; 1990:493 [Panama].

Apronius rapax Stål

Apronius rapax Stål, 1866b:167 [new species-- Brazil].-- Barber, 1930:211 [Canal Zone].-- Maldonado, 1990:493 [Panama].

Genus *Ctenotrachelus* Stål

Ctenotrachelus Stål, 1868:127. Type species: *Ctenotrachelus macilentus* Stål, first included species, by Stål, 1872:122.

Ctenotrachelus mexicanus (Champion)

Schumannia mexicanus Champion, 1898a:185 [new species-- Mexico].
Ctenotrachelus mexicanus.-- Barber, 1930:186 [Cabima].

Ctenotrachelus testaceus Barber

Ctenotrachelus testaceus Barber, 1930:189 [new species-- Panama: Cano Saddle, Gatun Lake; La Chorrera; Tabernilla. Bolivia. Colombia].-- Wygodzinsky, 1949:66 [Canal Zone].-- Maldonado, 1990:500 [Panama].

Genus *Diaditus* Stål

Diaditus Stål, 1859b:383. Type species: *Diaditus semicolon* Stål, monotypic.

Note: Giacchi (1982) revised this genus and offered a key (pages 13-14) to six species.

Diaditus pictipes Champion

Diaditus pictipes Champion, 1898a:189 [new species-- Mexico. Guatemala].--Heidemann, 1903:102 [Panama].-- Maldonado, 1990:501 [Panama].

Diaditus hirticornis Champion, 1898a:189 [new species-- Panama: Bugaba].-- Heidemann, 1903:102 [Panama].--Barber, 1930:219 [Canal Zone].-- Wygodzinsky, 1949:66 [Panama].

Genus *Gnathobleda* Stål

Gnathobleda Stål, 1859b:380. Type species: *Gnathobleda fraudulenta* Stål, monotypic.

Note: Giacchi's (1977) revision of this genus included a key (page 267) to its three species.

Gnathobleda fraudulenta Stål

Gnathobleda fraudulenta Stål, 1859b:380 [new species-- Surinam].-- Champion, 1898a:184 [David].-- Barber, 1930:180 [Panama].-- Maldonado, 1990:503 [Panama].

Gnathobleda litigiosus Stål

Gnathobleda litigiosus Stål, 1862b:412 [new species-- Mexico].-- Barber, 1930:179 [Panama].-- Maldonado, 1990:503 [Panama].

Genus *Kodormus* Barber

Kodormus Barber, 1930:213. Type species: *Kodormus bruneosus* Barber, monotypic.

Kodormus bruneosus Barber

Kodormus bruneosus Barber, 1930:214 [new species-- Panama: Cabima, British Guiana].-- Wygodzinsky, 1949:66 [Panama].-- Maldonado, 1990:506 [Panama].-- Bérenger and Maldonado, 1996:35 [Panama].

Genus *Nitornus* Stål

Nitornus Stål, 1859b:383, 385. Type species: *Nitornus lobulatus* Stål, monotypic.

Nitornus barberi Froeschner, **New Name**

Zylobus lobulatus Barber, 1930:231 [new species-- Panama: Cabima].-- Costa Lima, 1940:194 [Panama].-- Costa Lima and Campos Seabra, 1945:157 [Panama].-- Wygodzinsky, 1949:70 [Panama].-- Maldonado, 1990:545 [Panama].

Note: Wygodzinsky and Giacchi's (1994:7) synonymizing of *Zylobus* Barber (1930) under *Nitornus* Stål necessitates the above new name for this species.

Genus *Oncocephalus* Klug

Reduvius (Oncocephalus) Klug, 1830:2. Type species: *Reduvius (Oncocephalus) notatus* Klug, monotypic.

Oncocephalus.-- Fieber, 1860:42.

Note: Giacchi (1984) revised the American species and gave a key (pages 42-43) to the nine species.

Oncocephalus internuntius Giacchi

Oncocephalus antipodus.-- Barber, 1930:228 [Tabernilla].-- Cobben and Wygodzinsky, 1975:14 [Panama].

Oncocephalus internuntius Giacchi, 1984:49 [new species-- Panama: Barro Colorado Island, Canal Zone].

Note: Two specimens in the "U.S.N.M." collection labeled Tabernilla, Canal Zone, Panama, were found in the pinning unit with specimens of *O. antipodus*; these apparently were included among the specimens Barber (1930:above) reported as the latter species. They key to *O. internuntius* in Giacchi's key -- thus Panama must be deleted from the range of *O. antipodus*.

Genus *Pnirontis* Stål

Pnirontis Stål, 1859b:381. Type species: *Pnirontis scutelleris* Stål, designated by Van Duzee, 1916:28.

Note: Maldonado (1986b:12-13) divided this genus into three "groups" and gave a key to the 13 species of the *subinermis*-group; later (1994b:715-716) he gave a key to seven species measuring 16 mm or more in length.

Pnirontis brevispina Barber

Pnirontis brevispina Barber, 1930:158 [new species-- Panama: Cabima].-- Wygodzinsky, 1949:68 [Panama].-- Maldonado, 1990:525 [Panama].

Pnirontis infirma Stål

Pnirontis infirma Stål, 1859b:382 [new species-- United States of America].-- Champion, 1898a:183 [Bugaba].--Fracker, 1913:226 [Panama].-- Barber, 1930:171 [Canal Zone].-- Maldonado, 1990:525 [Panama].

Pnirontis languida Stål

Pnirontis languida Stål, 1859b:382 [new species-- United States of America. Brazil].-- Champion, 1898a:183 [Volcan de Chiriqui].-- Barber, 1906:255 [Panama]; 1930:155 [Panama].-- Maldonado, 1990:526 [Panama].

Pnirontis serripes (Fabricius)

Gerris serripes Fabricius, 1803:261 [new species-- "America meridoonali"].
Pnirontis serripes.-- Barber, 1930:165 [Canal Zone].-- Maldonado, 1990:526 [Panama].

Pnirontis subinermis Barber

Pnirontis subinermis Barber, 1930:154 [new species-- Panama: Cabima. Brazil].-- Wygodzinsky, 1949:68 [Panama].-- Maldonado, 1990:527 [Panama].

Genus *Pnohirmus* Stål

Pnohirmus Stål, 1859b:384. Type species: *Pnohirmus violentus* Stål, monotypic.

Pnohirmus violentus Stål

Pnohirmus violentus Stål, 1859b:384 [new species-- Brazil].-- Barber, 1930:180 [Canal Zone].--

Maldonado, 1990:527 [Panama].

Genus *Pygolampis* Germar

Pygolampis Germar, 1817b:286. Type species: *Acanthia denticulata* Rossi, a junior synonym of *Cimex bidentatus* Goeze, monotypic.

Pygolampis spurca Stål

Pygolampis spurca Stål, 1859b:379 [new species-- Surinam].-- Champion, 1898a:183 [Bugaba; Volcan de Chiriqui].-- Barber, 1930:177 [Panama].-- Froeschner, 1988f:647 [Panama].

Genus *Stenopoda* Laporte

Stenopoda Laporte, 1833:26. Type species: *Stenopoda cinerea* Laporte, monotypic.

Note: A revision of *Stenopoda* by Giacchi (1969) included discussions and illustrations for all 11 species, but no key.

Stenopoda cinerea Laporte

Stenopoda cinerea Laporte, 1833:26 [new species-- Cuba].-- Blatchley, 1926:548 [Panama].-- Barber, 1930:202 [Panama].-- Giacchi, 1969:5 [Isla Barro Colorado, Canal Zone; Plantation Tres Rios, Gatun Lake].-- Maldonado, 1990:540 [Panama].

Stenopoda culiciformis.-- Uhler, 1876:331 [Panama].-- Champion, 1898a:187 [Panama].

Stenopoda pallida Giacchi

Stenopoda pallida Giacchi, 1969:13 [new species-- Panama: Potrerillos. Brazil].-- Maldonado, 1990:541 [Panama].

SUBFAMILY TRIATOMINAE JEANNEL

Notes: (1) This subfamily was revised by Lent and Wygodzinsky (1979), who gave keys to the included tribes, genera, and species. (2) Uinger's (1944) review of the Triatominae of North and Central America and the West Indies included information on the biology and medical importance of these insects. (3) A vast literature, both in taxonomic and medical journals, treats this group of insects that attack humans; so one may expect the existence of many more reports than are listed here.

TRIBE BOLBODERINI USINGER

Genus *Belminus* Stål

Belminus Stål, 1859a:101, 102. Type species: *Belminus rugulosus* Stål, monotypic.

Belminus herreri Lent and Wygodzinsky

Belminus herreri Lent and Wygodzinsky, 1979:445 [new species-- Panama: Río Mono; Sasardí].--Schofield and Dolling, 1993:491 [Panama],

Genus *Microtriatoma* Prosen and Martínez

Microtriatoma Prosen and Martínez, 1952:6. Type species: *Microtriatoma mansosoti* Prosen and Martínez, a junior synonym of *Bolbodera trinidadensis* Lent, original designation.

Microtriatoma trinidadensis (Lent)

Bolbodera trinidadensis Lent, 1951:153 [new species-- Trinidad].

Microtriatoma trinidadensis.-- Lent and Wygodzinsky, 1979:458 [Barro Colorado Island].-- Schofield and Dolling, 1993:491 [Panama].

TRIBE CAVERNICOLINI USINGER**Genus *Cavernicola* Barber**

Cavernicola Barber, 1937:60. Type species: *Cavernicola pilosa* Barber, original designation.

Cavernicola pilosa Barber

Cavernicola pilosa Barber, 1937:61 [new species-- Panama: Chilibrillo Caves, Madden Dam].-- Usinger, 1939:35 [Panama]; 1940:459 [Chilibrillo Caves]; 1944:19 [Panama].-- Costa Lima, 1940:186 [Panama].-- Neiva and Lent, 1941:82, 92 [Panama].-- Fairchild, 1943:579 [Chilibrillo Caves].-- Wygodzinsky, 1949:71 [Panama].-- Lent and Jurberg, 1969a:318 [Chilibre].-- Dias, 1952:78 [Chilibrillo Caves, Madden Dam, Canal Zone].-- Peck, 1971 [Chilibrillo Caves].-- Lent and Wygodzinsky, 1979:434 [Panama].-- Maldonado, 1990:548 [Panama]; 1994a:308 [Panama].-- Schofield and Dolling, 1993:492 [Panama].

TRIBE RHODNIINI PINTO**Genus *Rhodnius* Stål**

Rhodnius Stål, 1859a:102, 104. Type species: *Rhodnius prolixus* Stål, fide Neiva and Lent, 1941:70.

Notes: (1) *Rhodnius pictipes* Stål, 1872:110 [new species-- Brazil] was listed as far north as Belize by Lent and Wygodzinsky (1979:421) and so it should be watched for in Panama. (2) Also, *R. robustus* Larrouse, 1927:85 [new species-- Brazil. French Guiana] may occur here as it was reported as far north as Panama's southern neighbor Colombia by Pinto (1931:130) and Lent and Wygodzinsky (1979:426).

Rhodnius pallescens Barber

Rhodnius "sp." Pinto, 1931:130 [Colon].-- Hase, 1932:600 [Panama].

Rhodnius pallescens Barber, 1932:514 [new species-- Panama: La horrera, Trinidad River; Ancon; Cabima; Cano Saddle. Bolivia].-- Pinto, 1938:95 [Panama].-- Dunn, 1933:471 [Aguas Buenas].-- DeCoursey, 1935:34 [Panama].-- Neiva and Lent, 1936:173, 186 [Panama]; 1941:82, 92 [Panama].-- Johnson and Rivas, 1936a:56 [Panama]; 1936b:250 [Panama].-- Lent, 1939:594 [Panama]; 1948:297 [Panama], 330 [Barro Colorado Isl.]; 1954:244 map record for Panama].-- Usinger, 1940:459 [Panama]; 1944:34 [Ancon; Barro Colorado Island; Cabima; Cano Saddle; Madden Dam].-- Costa Lima, 1940:193 [Panama].-- Fairchild, 1943:579 [Barro Colorado Island].-- Wygodzinsky, 1949:73 [Panama].-- Dias, 1952:77 [Aguas Buenas; Ancon; Barro Colorado Island; Cabima; Canete; Caño Saddle; Capiro; La Chorrera; Madden Dam; San Juan; Trinidad River].-- Lent and Jurgburg, 1969b:530 [Barro Colorado Island].-- Ghauri, 1973:384 [Panama].-- Lent and Wygodzinsky, 1979:416 [Panama].-- Maldonado, 1990:549 [Panama].-- Schofield and Dolling, 1993:492 [Panama].

Rhodnius dunni Pinto, 1932:324 [new species-- Panama].

Rhodnius prolixus Stål

Rhodnius prolixus Stål, 1859a:104 [new species-- Venezuela].--Matta, 1922:161 [Panama].-- Neiva and Pinto, 1923:103 [Panama].-- Laroque, 1927:79 [Panama].-- Del Ponte, 1930:928 [Panama].-- Clark and Dunn, 1932:62 [Aguas Buenas; Ancon; Canete, Cabima; San Juan; Santa Rosa].-- Hase, 1932:600 [Panama].-- Dias, 1952:76 [Panama].-- Lent, 1948:304 [Panama]; 1954:244 [map record for Panama].-- Lent and Jurgburg, 1969b:540 [Panama].-- Lent and Wygodzinsky, 1979:442 [Panama].

TRIBE TRIATOMINI JEANNEL

Genus *Eratyrus* Stål

Eratyrus Stål, 1859a:101, 103. Type species: *Eratyrus mucronatus* Stål, fide Wygodzinsky, 1949:71.

Eratyrus cuspidatus Stål

Eratyrus cuspidatus Stål, 1859a:103 [new species-- Colombia].-- Dunn, 1934:291 [Panama City].--De Coursey, 1935:34 [Panama].-- Neiva and Lent, 1936:186 [Panama]; 1941:76, 92 [Panama].-- Johnson and Rivas, 1936a:59 [Panama].-- Rozeboom, 1936:483 [Las Guacas, Chagres River Village].-- Pinto, 1938:93 [Panama].-- Lent, 1939:594 [Panama].-- Usinger, 1940:459 [Panama]; 1944:37 [Barro Colorado Island; Tres Rios Plantation, Gatun Lake].-- Costa Lima, 1940:194 [Panama].-- Fairchild, 1943:579 [Barro Colorado Island; Matias Hernandez (near Panama City)].-- Dias 1952:78 [Barro Colorado Island; Las Guacas, Panama Prov.; Matias Hernandez, 6 mi N of Panama City; Tres Rios Plantation, Gatun Lake].-- Galino and Fairchild, 1963:229 [Almirante, Barro Colorado Island, Canal Zone; Bocas del Toro; Fort Sheridan, Canal Zone; Madden Dam, Canal

Zone].-- Lent and Jurberg, 1970:309 [Barro Colorado, Canal Zone; Panama; Chiriqui].-- Ghauri, 1973:348 [Panama].-- Lent and Wygodzinsky, 1979:346 [Panama].-- Maldonado, 1990:550 [Panama].-- Schofield and Dolling, 1993:492 [Panama].

Eratyrus mucronatus Stål

Eratyrus mucronatus Stål, 1859a:103 [new species-- "Demerary"].-- Dias, 1952:78 [Panama].

Genus *Panstrongylus* Berg

Panstrongylus Berg, 1879a:268. Type species: *Panstrongylus guentheri* Berg, monotypic.

Panstrongylus geniculatus (Latreille)

Reduvius geniculatus Latreille, 1811:225 [new species-- Peru].

Triatoma (Conorhinus) geniculata.-- Caudell, 1924:136 [Chilibrillo Caves].

Triatoma geniculata.-- Clark and Dunn, 1932:49, 63, 75 [Agua Dulce; Ancon; Balboa; Chilibrillo Caves].-- Dunn, 1933:473 [Aguas Buenas].-- Rau, 1933:189 [Barro Colorado Island].-- De Coursey, 1935:34 [Panama].-- Mazza, 1935:6 [Panama].-- Johnson and Rivas, 1936a:56 [Panama]; 1936b:250 [Panama].

Panstrongylus geniculatus.-- Neiva and Lent, 1936:171, 186 [Panama]; 1941:76, 92 [Panama].-- into, 1938:94 [Panama].-- Lent, 1939:593 [Panama]; 1942:7 [Panama].-- Usinger, 1939:39 [Barro Colorado Island]; 1940:460 [Panama]; 1944:43 [Barro Colorado; Chorrera; Cabima; Porto Bello].-- Dias and Pifano, 1941:82 [Panama].-- Fairchild, 1943:579 [Barro Colorado Island; Chilibrillo].-- Abalos and Wygodzinsky, 1951:146 [Panama].-- Dias, 1952:77 [Aguadulce, Coclé Prov.; Aguas Buenas, Panama Prov.; Ancon; Barro Colorado Island; Cabina; Chilibrillo Caves; La Chorrera; Puerto Bello; Santa Rosa, Colón Prov.].-- Peck, 1971:432 [Chilibrillo Caves].-- Ghauri, 1973:384 [Panama].-- Lent and Wygodzinsky, 1979:370 [Panama].-- Maldonado, 1990:551 [Panama].-- Schofield and Dolling, 1993:492 [Panama].

Panstrongylus humeralis Usinger

Panstrongylus humeralis Usinger, 1939:38 [new species-- Panama: Barro Colorado Island]; 1940:459 [Barro Colorado Island]; 1944:46 [Barro Colorado Island].-- Lent and Pifano, 1940:631 [Panama].-- Neiva and Lent, 1941:78, 92 [Panama].-- Fairchild, 1943:579 [Barro Colorado Island].-- Lent, 1943:493 [Barro Colorado Island].-- Wygodzinsky, 1949:72 [Canal Zone].-- Dias, 1952:78 [Barro Colorado Island].-- Lent and Wygodzinsky, 1979:384 [Panama].-- Maldonado, 1990:551 [Panama].-- Schofield and Dolling, 1993:493 [Panama].

Panstrongylus rufotuberculatus (Champion)

Lamus rufotuberculatus Champion, 1898a:210 [new species-- Panama: Bugaba].

Triatoma rufotuberculata.-- Neiva, 1914:61 [Panama]; 1915:3 [Panama].-- Del Ponte, 1921:55 [Bugaba]; 1930:896 [Bugaba]; 1931:1311 [Panama].-- Hussey, 1922:120 [Panama].-- Pinto, 1925:66 [Bugaba].

ne; Panama; Chiriqui].--
Panama].-- Maldonado,
a].

s, 1952:78 [Panama].

Berg, monotypic.

es].

ncon; Balboa;
33:189 [Barro Colorado
Panama].-- Johnson and

1941:76, 92 [Panama].--
ma].-- Usinger, 1939:39
ro Colorado; Chorrera;
Fairchild, 1943:579 [Barro
1:146 [Panama].-- Dias,
Ancon; Barro Colorado
ata Rosa, Colón Prov.].--
[Panama].-- Lent and
Panama].-- Schofield and

o Colorado Island];
and].-- Lent and Pifano,
].-- Fairchild. 1943:579
Island].-- Wygodzinsky,
Lent and Wygodzinsky,
ld and Dolling, 1993:493

Bugaba].
-- Del Ponte, 1921:55
, 1922:120 [Panama].--

Panstrongylus rufotuberculatus.-- Pinto, 1931:118 [Bugaba]; 1938:95 [Panama].-- Hase, 1932:599 [Panama].-- Neiva and Lent, 1936:177, 186 [Bugaba]; 1941:86, 92 [Panama].-- Lent and Pifano, 1940:633, 638 [Bugaba].-- Fairchild, 1943:579 [Barro Colorado Island; Bugaba].-- Wygodzinsky, 1949:72 [Panama].-- Dias, 1952:78 [Barro Colorado Island; Bugaba; Madden Dam; Trinidad River].-- Sousa and Galindo, 1972:249 [Darien Province, Cerro Quia].-- Lent and Wygodzinsky, 1979:395 [Panama].-- Maldonado, 1990:552 [Panama].-- Schofield and Dolling, 1993:493 [Panama].
Mestor rufotuberculatus.-- Usinger, 1940:459 [Panama]; 1944:45 [Barro Colorado Island; Madden Dam; Trinidad River].-- Costa Lima, 1940:196 [Panama].

Genus *Triatoma* Laporte

Triatoma Laporte, 1833:11. Type species: *Nabis gigas* Fabricius, a junior synonym of *Cimex rubrofasciatus* De Geer, monotypic.

Notes: (1) Usinger (1940:461) reported "two nymphs" from Panama under the name "*Meccus* species" [*Meccus* is now a junior synonym under *Triatoma*]. (2) The many records for the Panama occurrence of *Triatoma sanguisuga* (Leconte) listed below under that heading must be based on one or more misidentifications because that species is now known to be restricted to North America; perhaps most of those listings are based on Uhler's (1876) record.

Triatoma dimidiata (Latreille)

Reduvius dimidiatus Latreille, 1811:223 [new species-- Peru].
Conorhinus dimidiatus.-- Champion, 1899:206 [Veraguas].
Triatoma dimidiata.-- Neiva, 1914:36 [substitutes "Panama" for the "Colombia" of authors]; 1915:1 [Panama].-- Hussey, 1922:114 [Panama].-- Del Ponte, 1921:39 [Panama]; 1930:869 [Panama].-- Pinto, 1925:66 [substitutes "Panama" for "Colombia" of authors]; 1931:65 [substitutes "Panama" for "Colombia" of authors]; 1938:93 [Panama]; 1942:478 [Panama].-- Hase, 1932:596 [Panama].-- Rau, 1933:189 [Barro Colorado Island].-- Neiva and Lent, 1936:170, 186 [Panama]; 1941:76, 92 [Panama].-- Rozeboom, 1936:481 [Chorrera].-- Lent, 1939:594 [Panama].-- Usinger, 1941a:51 [Panama]; 1944:53 [Boquete; Bugaba; Cabima; La Chorrera].-- Fairchild, 1943:579 [Barro Colorado Island; Boquete; Chiriqui Province; Chorrera].-- Dias, 1952:75 [Barro Colorado Island; Boquete; Bugaba; Cabima; La Chorrera; Veraguas].-- Lent and Wygodzinsky, 1979:222 [Panama].-- Christensen, Sousa, and Vasquez, 1988:477 [Panama].-- Maldonado, 1990:554 [Panama].

Triatoma dispar Lent

Conorhinus venosus.-- Champion, 1899:209 [Volcan de Chiriqui].
Triatoma venosa.-- Usinger, 1944:61 [Panama].
Eutriatoma venosa.-- Fairchild, 1943:579 [Volcan de Chiriqui].
Triatoma dispar Lent, 1950:437 [new species-- Panama. Ecuador].-- Dias, 1952:78 [Volcan de Chiriqui].-- Galindo and Fairchild, 1963:229 [Bijao, Chiriqui; Cerro Campana].-- Sousa and Galindo, 1972:293 [Darien Province, Cerro Quia; Chiriqui Province, Volcan de Chiriqui].-- Lent and Wygodzinsky, 1979:225 [Panama].-- Christensen, Sousa, and Vasquez, 1988:477 [Panama].-- Maldonado, 1990:554 [Panama].-- Schofield and Dolling, 1993:493 [Panama].

Triatoma sanguisuga (Leconte)

Conorhinus sanguisuga Leconte, 1855:404 [new species-- United States of America].-- Uhler, 1876:331 [Panama].-- Champion, 1899:207 [Panama].

Triatoma sanguisuga.-- Neiva, 1914:63 [Panama].-- Pinto, 1925:61 [Panama]; 1931:84 [Panama].-- Blatchley, 1926:554 [Panama].-- Neiva and Lent, 1936:177, 186 [Panama]; 1941:87, 92 [Panama].-- Usinger, 1940:460 [Panama "possibly in error"].

Triatoma sanguisuga [sic].-- Pinto, 1925:61 [Panama]; 1938:95 [Panama].

Triatoma (*Triatoma*) *sanguisuga*.-- Costa Lima, 1940:203 [Panama].

Note: This species is to be deleted from the Panama list, but is maintained here until these records are properly placed. -- See "Note 2" under generic heading above.

Triatoma venosa (Stål)

Conorhinus venosus Stål, 1872:111 [new species-- Colombia].-- Champion, 1899:209 [Volcan de Chiriqui].

Eutriatoma venosa.-- Neiva and Lent, 1936:179 [Panama]; 1941:88 [Panama].-- Pinto, 1931:104 [Panama]; 1938:96 [Panama].-- Hase, 1932:598 [Panama].

Triatoma venosa.-- Hussey, 1922:121 [Panama].-- Pinto, 1925:67 [Panama].-- Del Ponte, 1930:903 [Panama]; 1931:1312 [Panama].--Usinger, 1939:461.

Note: *T. venosa* was listed only from Costa Rica and Colombia both in Lent and Wygodzinky (1979) and Maldonado (1990). Because those localities are north and south of Panama, it is not unreasonable to accept the above Panama records until the actual specimens can be re-examined.

FAMILY RHOPALIDAE AMYOT AND SERVILLE

Panama records for 14 species in four genera have been encountered. There should be several more species.

For a long time this group was treated as a subfamily of the Coreidae, usually with the name Corizinae. Under its current name and status, Chopra (1967) presented a revision of the higher classification of this family and included keys to subfamilies, tribes, and genera. Göllner-Scheiding (1983) published a world catalog of the family.

SUBFAMILY RHOPALINAE AMYOT AND SERVILLE

TRIBE HARMOSTINI STÅL

Genus *Harmostes* Burmeister

Harmostes Burmeister, 1835:307. Type species: *Harmostes dorsalis* Burmeister, monotypic.

Note: Göllner-Scheiding (1978) reviewed this genus and included a key (pages 307-310) to its two subgenera and 25 species; the following year (1979b) she presented additional information on the genus.

Harmostes formosus Distant

Harmostes formosus Distant, 1881a:167 [new species-- Mexico].-- Arnold, 1996:276 [Panama].

Harmostes fraterculus (Say)

Syrmastes fraterculus Say, 1832:10 [new species-- United States of America].

Harmostes fraterculus-- Distant, 1893:377 [Pena Blanca; Volcan de Chiriqui].-- Brailovsky and Soria, 1981:136 [Panama].

Harmostes nebulosus Stål

Harmostes nebulosus Stål, 1862b:307 [new species-- Mexico].-- Göllner-Scheiding, 1978:283 [Panama]; 1994:171 [Panama].

Harmostes serratus (Fabricius)

Acanthia serrata Fabricius, 1775:695 [new species-- no locality given].

Harmostes serratus-- Distant, 1893:376 [Bugaba; Caldera; Volcan de Chiriqui].-- Harris, 1942:28 [Panama].-- Brailovsky and Soria, 1981:145 [Panama].

TRIBE NIESTHREINI CHOPRA

Genus *Arhyssus* Stål

Corizus (*Arhyssus*) Stål, 1870:223. Type species: *Corizus bohemanii* Signoret, a junior synonym of *Corizus nigristernum* Signoret, designated by Van Duzee, 1916:15.

Arhyssus-- Baker, 1908:244.

Note: Chopra (1968) revised *Arhyssus* and provided a key to its 17 species.

Arhyssus lateralis (Say)

Coreus lateralis Say, 1825:320 [new species-- United States of America].

Corizus lateralis-- Distant, 1893:377 [Bugaba; David; Volcan de Chiriqui].

Note: Göllner-Scheiding (1983:48) listed Distant's (1893:above) paper under *A. lateralis*, but she gave the distribution of this species only as far south as Guatemala.

Arhyssus punctatus (Signoret)

Corizus punctatus Signoret, 1859:81 [new species-- Mexico].-- Distant, 1893:377 [Tole; Volcan de Chiriqui]. *Arhyssus punctatus*-- Arnold 1996:276 [Panama].

Genus *Niesthrea* Spinola

Niesthrea Spinola, 1837:245. Type species: *Lygaeus sidae* Fabricius, monotypic.

Note: Chopra (1973) revised *Niesthrea* and illustrated (page 445) the male pygophore of all 10 included species in lieu of a key.

Niesthrea pictipes (Stål)

Rhopalus pictipes Stål, 1859d:239 [new species-- "Tahiti." Brazil].

Corizus pictipes-- Distant, 1893:378 [Bugaba; Los Remedios; Pena Blanca; San Miguel in Pearl Islands; Volcan de Chiriqui].

Note: Chopra (1973:448) reports this species only for southern South America --Argentina,

Brazil, and Paraguay; Distant's Panama specimens must be reexamined.

Niesthrea sidae (Fabricius)

Lygaeus sidae Fabricius, 1794:169 [new species-- South America].

Corizus sidae.-- Torre Bueno, 1926a:108 [Gamboia].

Niesthrea sidae.-- Blöte, 1934:265 [Chiriqui].

Niesthrea vincentii (Westwood)

Corizus vincentii Westwood, 1842a:26 [new species-- St. Vincent Island].

Niesthrea vincentii.-- Chopra, 1973:447 [Panama].

SUBFAMILY SERINETHINAE STÅL

Genus *Jadera* Stål

Jadera Stål, 1862a:59. Type species: *Cimex sanguinolenta* Fabricius, monotypic.

Note: The 15 species of *Jadera* were revised by Göllner-Scheiding (1979a), who offered a key (pages 71-74) for their separation.

Jadera aeola (Dallas)

Serinetha aeola Dallas 1852:463 [new species-- Mexico].

Jadera aeola aeola.-- Göllner-Scheiding 1979a:49 [Panama].

Jadera aeola.-- Carroll and Loye 1987:375, 377 [Panama].-- Tanaka and Wolda, 1987:559 [Barro Colorado Island].

Jadera diaphona Göllner-Scheiding

Jadera diphona Göllner-Scheiding, 1982:462 [new species-- Nicaragua]; 1983:179 [Panama]; 1994:172 [Panama].

Jadera haematoloma (Herrich-Schaeffer)

Leptocoris haematoloma Herrich-Schaeffer, 1847:103 [new species-- Mexico].

Jadera haematoloma.-- Distant, 1893:378 [Tole; Volcan de Chiriqui].

Jadera hinnulea Göllner-Scheiding

Jadera hinnulea Göllner-Scheiding, 1979a:60 [new species-- United States of America. Mexico. Panama: Potreillos]; 1994:172 [Panama].-- Henry, 1988c:663 [Panama].-- Arnold 1995:12 [Panama].

Jadera bayardae Göllner-Scheiding, 1982:459, unnecessary new name [See "Note" below]; 1983:178 [United States of America. Mexico. British Honduras. Guatemala. Panama].

Note: The combination *Jadera hinnulea* was originally used in 1943 by Bayard in an unpublished dissertation. The first acceptably published version of this name was by Göllner-Scheiding (1979a, above) who described, illustrated, and reported a holotype and thus earned credit for its validation rather than for Bayard, who was there listed as author.

Jadera obscura (Westwood)

Pyrrotes obscura Westwood, 1842a:26 [new species-- Brazil].

Jadera obscura.-- Distant, 1893:378 [Bugaba; Volcan de Chiriqui].-- Tanaka and Wolda, 1987:559 [Barro Colorado Island].

FAMILY RHYPAROCHROMIDAE AMYOT AND SERVILLE

The following Panama records of 77 species in 38 genera will most certainly be markedly increased by further collecting.

The elevation of this group from subfamily position under the Lygaeidae to full family status with two subfamilies, Plinthisinae and Rhyparochrominae, resulted from Henry's (1997b:296) analysis. Sweet's (1967) revision of the tribal classification within the lygaeid "subfamily Rhyparochrominae" included a key (pages 210-212) to 14 tribes; Schuh and J. Slater (1995:259-260) also gave a key to 14 genera, including thereunder the "Plinthisini" which Henry (1997:296) later raised to subfamily level.

SUBFAMILY RHYPAROCHROMINAE AMYOT AND SERVILLE

TRIBE ANTILLOCORINI ASHLOCK

J. Slater's (1980) discussion of the tribe Antillocorini included a key (pages 208-209) to the 11 genera.

Genus *Botocudo* Kirkaldy

Salacia Stål, 1874a:154, preoccupied. Type species: *Aphanus diluticornis* Stål, designated by Scudder, 1962a:765.

Botocudo Kirkaldy, 1904b:280. Proposed as new name for preoccupied *Salacia* Stål.

Note: J. Slater and D. Polhemus (1987:484) reported a species of *Botocuda*, without specific name, from "El Valle, Panama."

Botocudo delineatus (Distant)

Salacia delineatus Distant, 1893:406 [new species-- Panama: Peña Blanca].-- Lethierry and Severin, 1894:202 [Panama].

Cligenes delineata.-- Bergroth, 1895b:143 [Panama].-- Torre-Bueno, 1946:110 [Peña Blanca].-- Barber, 1948a:157 [Panama].

Botocudo delineatus.-- J. Slater, 1964:847 [Panama].-- Scudder, 1967:262 [Peña Blanca].

Botocudo picturatus (Distant)

Salacia picturata Distant, 1893:406 [new species-- Guatemala. Panama: Bugaba; Volcan de Chiriqui].

Cligenes picturata.-- Barber, 1948a:157 [Panama].

Botocudo picturatus.-- J. Slater, 1964:847 [Panama].-- Scudder, 1967:277 [Bugaba: V. de Chiriqui].

Genus *Caeneusia* Strand

Caeneus Distant, 1893:404, preoccupied. Type species: *Caeneus novitia* Distant, a junior synonym of *Rhyparochromus quadristillatus* Stål, monotypic.

Caeneusia Strand, 1928:47. Proposed as a new name for preoccupied *Caeneus* Distant.

Notes: A key to the two known species was given by J. Slater (1980:209).

Caeneusia quadristillata (Stål)

Rhyparochromus (Plociomerus) quadristillatus Stål, 1860:41 [new species-- Brazil].

Caeneus novitius Distant, 1893:404 [new species-- Nicaragua. Panama: Bugaba].-- Lethierry and Severin, 1894:189 [Panama].

Bathydema quadristillata.-- Scudder, 1967:275 [Bugaba].

Caeneusia quadristillata.-- J. Slater, 1980:209 [Cerro Campana].

Genus *Cligenes* Distant

Cligenes Distant, 1893:405. Type species: *Cligenes distinctus* Distant, monotypic.

Cligenes distinctus Distant

Cligenes distinctus Distant 1893:405 [new species-- Panama: Caldera].-- Lethierry and Severin, 1894:198 [Panama].-- Bergroth, 1895b:143 [Panama].-- Barber, 1954a:348 [Panama].-- J. Slater, 1964:849 [Panama].-- Scudder, 1967:264 [Caldera].

Genus *Paradema* J. Slater

Paradema J. Slater, 1980:212. Type species: *Paradema oculata* J. Slater, original designation.

Note: J. Slater (1980:213) gave a key to the five known species.

Paradema englemani J. Slater

Paradema englemani J. Slater, 1980:217 [new species-- Panama: Cerro Campana, Panama Province; 6 miles W. El Volcan, Chir.].-- J. Slater and O'Donnell, 1995:107 [Panama].

Genus *Paurocoris* J. Slater

Paurocoris J. Slater, 1980:220. Type species: *Paurocoris wygodzinskyi* J. Slater, original designation.

Note: A key to the two species was given by J. Slater (1980:221).

Paurocoris punctatus (Distant)

Salacia punctata Distant, 1893:406 [new species-- Panama: Peña Blanca].-- Lethierry and Severin, 1894:202 [Panama].

Cligenes punctatus.-- Bergroth, 1895b:143 [Panama].

Antillocoris punctatus.-- Torre-Bueno, 1946:110 [Panama].-- J. Slater, 1964:846 [Panama].

Stygnocoris punctatus.-- Scudder, 1967:278 [Peña Blanca].

Bathydema punctata-- Ashlock, 1977:578 [Panama].

Paurocoris punctatus-- J. Slater, 1980:222 [Peña Blanca].-- J. Slater and Brailovsky, 1994:16 [Panama].

Genus *Schuhocoris* J. Slater

Schuhocoris J. Slater, 1985:34. Type species: *Schuhocoris gracilis* J. Slater, original designation.

Schuhocoris gracilis J. Slater

Schuhocoris gracilis J. Slater, 1985:38 [new species-- Panama: Bocas d. T., Corriente Grande. Peru. Brazil].--J. Slater and O'Donnell, 1995:16 [Panama].

Genus *Scythinus* Distant

Scythinus Distant, 1893:405. Type species: *Scythinus splendens* Distant, monotypic.

Scythinus splendens Distant

Scythinus splendens Distant, 1893:405 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:197 [Panama].-- J. Slater, 1964:980 [Panama].-- Scudder, 1967:281 [Volcan de Chiriqui].

TRIBE GONIANOTINI STÅL

A key to the six genera of this tribe known to occur in North and Central America was provided by Brailovsky (1978a:521-522).

Genus *Atrazonotus* J. Slater and Ashlock

Atrazonotus J. Slater and Ashlock, 1966:152. Type species: *Dorachosa illuminatus umbrosus* Distant, monotypic.

Atrazonotus umbrosus (Distant)

Dorachosa illuminatus umbrosus Distant, 1893:409 [new species-- United States of America. Mexico. Guatemala. Panama: Volcan de Chiriqui].

Aphanus umbrosus-- Torre-Bueno, 1946:118 [Panama].

Delochilocoris umbrosus-- J. Slater, 1964:1419 [Panama].

Atrazonotus umbrosus-- J. Slater and Ashlock, 1966:152 [Volcan de Chiriqui].

Genus *Delochilocoris* Bergroth

Dorachosa Distant, 1893:409, preoccupied. Type species: *Dorachosa illuminatus* Distant, monotypic.

Delochilocoris Bergroth, 1893:154. New name for preoccupied *Dorachosa* Distant.

Delochilocoris caliginosus (Distant)

Trapezonotus caliginosus Distant, 1882:216 [new species-- Guatemala. Panama: Volcan de Chiriqui].-- Lethierry J. Slater, 1964:1484 [Panama].

Note: This species was transferred to *Delochilocoris* by J. Slater and Ashlock (1966:153).

TRIBE LETHAEINI STÅL

Genus *Cistalia* Stål

Cistalia Stål, 1874 :164. Type species: *Lygaeus signoreti* Guérin-Méneville, designated by Van Duzee, 1916 :23.

Note: J. Slater and Baranowski (1973) reviewed the genus and provided a key (p. 264) to the four species.

Cistalia neotropicalis J. Slater and Baranowski

Cistalia neotropicalis J. Slater and Baranowski, 1973:267 [new species-- Panama: Canal Zone: Bohio, Carazal, Paraiso, Porto Bello, Tabernilla; La Chorrera. Venezuela. Bolivia. Brazil. Ecuador].-- J. Slater and O'Donnell, 1995:96 [Panama].

Genus *Cryphula* Stål

Cryphula Stål, 1874:164. Type species: *Cryphula parallelogramma* Stål, monotypic.

Note: Barber (1955) revised *Cryphula* and gave a key (pages 136-137) to seven species.

Cryphula fasciata (Distant)

Trapezus fasciatus Distant, 1882:217 [new species-- Guatemala. Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1894:214 [Panama].

Cryphula fasciata.-- Barber, 1955:137 [Panama].-- J. Slater, 1964 :815 [Panama].-- O'Donnell, 1991:455 [Tole]. *Criphula* [sic] *fasciata*.-- McGuire and Crandall, 1967:69 [Panama].

Genus *Gonatoides* J. Slater

Gonatas Distant, 1882:219, preoccupied. Type species: *Gonatas typicus* Distant, original designation by use of name "*typicus*."

Gonatoides J. Slater, 1957:37. Proposed as new name for preoccupied *Gonatas* Distant.

Gonatoides typicus (Distant)

Gonatas typicus Distant, 1882:219 [new species-- Guatemala. Panama: Volcan de Chiriqui]; 1893:408 [Volcan de Chiriqui; Tolé].-- Lethierry and Severin, 1894:227 [Panama].

Gonatoides typicus.-- J. Slater, 1964:822 [Panama].-- Scudder, 1967:282 [Bugaba].

Genus *Lipostemmata* Berg

Lipostemmata Berg, 1880:16. Type species: *Lipostemmata humeralis* Berg, monotypic.

Note: Ashlock (1970) revised the genus and provided a key (page 302) to three species.

Panama: Volcan de
lock (1966:153).

Lipostemmata humeralis Berg

Lipostemmata humeralis Berg, 1880:16 [new species-- Argentina].-- Ashlock, 1970:304 [Barro Colorado Island; El Real, Monte Lirio; Tres Rios Plantation, Gatun Lake].

Lipostemmata scutellatus Ashlock

Lipostemmata scutellatus Ashlock, 1970:302, 305 [new species-- Panama: Fort Clayton, Canal Zone. Brazil. Paraguay. Uruguay. Argentina].

Note: This species name was misspelled "*scutellum*" in the key (page 302) accompanying the original description.

le, designated by Van
d a key (p. 264) to the

Genus *Paragonatus* Barber

Paragonatus Barber, 1939:362. Type species: *Gonatas divergens* Distant, original designation.

Paragonatus costaricensis (Distant)

Panama: Canal Zone:
ezulea. Bolivia. Brazil.

Gonatas costaricensis Distant, 1903:526 [new species-- Costa Rica].
Paragonatus costaricensis.-- O'Donnell, 1991:463 [Maje Station].

Paragonatus divergens (Distant)

monotypic.
seven species.

Gonatas divergens Distant, 1882:219 [new species-- Guatemala. Panama: Bugaba]; 1893:409 [San Feliz; Tole; Volcan de Chiriqui].-- Lethierry and Severin, 1894:227 [Panama].-- Osborn, 1904:202 [Panama].
Paragonatus divergens.-- Barber, 1939:363 [Panama]; 1954a:351 [Panama]; 1954c:7 [Panama].-- Scudder, 1958:147 [Panama].-- J. Slater, 1964:838 [Panama].

Volcan de Chiriqui].--

Genus *Petissius* Distant

Panama].-- O'Donnell,
all, 1967:69 [Panama].

Petissius Distant, 1893:407. Type species: *Petissius assimilandus* Distant, original designation.

Petissius assimilandus Distant

Distant, original

Petissius assimilandus Distant, 1893:407 [new species-- Guatemala. Panama: Bugaba].-- J. Slater, 1964:839 [Panama].-- O'Donnell. 1991:464 [Las Cumbres].

onatas Distant.

Genus *Valtissius* Barber

Valtissius Barber, 1918b:62. Type species: *Petissius diversus* Distant, monotypic.

Valtissius diversus (Distant)

Volcan de Chiriqui];
894:227 [Panama].
[Bugaba].

Petissius diversus Distant, 1893:407 [new species-- Guatemala. Panama: David].
Valtissius diversus.-- Barber, 1918b:62 [Panama].-- Blatchley, 1926:435 [Panama].-- Torre-Bueno, 1946:135 [Panama].-- J. Slater, 1964:841 [Panama].-- Scudder, 1967:264 [David].

rg, monotypic.
o three species.

Genus *Xestocoris* Van Duzee

Xestocoris Van Duzee, 1906:389. Type species: *Xestocoris nitens* Van Duzee, monotypic.

Xestocoris collinus (Distant)*Rhaptus collina* Distant, 1893:410 [new species-- Guatemala].*Xestocoris collinus*-- Swezey, 1945:370 [Canal Zone].-- J. Slater, 1964:842 [Panama].

TRIBE MYODOCHINI STÅL

Harrington's (1980) generic-level revision of this tribe included a key (pp. 69-77) to the world's 56 genera; and for each genus a checklist of included species, but without distribution.

Genus *Bacacephalus* Harrington

Bacacephalus Harrington, 1980:76, 97. Type species: *Pamera globiceps* Stål, original designation.

Bacacephalus globiceps (Stål)

Pamera globiceps Stål, 1874a:150 [new species-- Colombia].-- Distant, 1882:208 [Volcan de Chiriqui].

Pachybrachius globiceps-- J. Slater, 1964:1126 [Panama].

Note: The species *globiceps* was transferred to her new *Bacacephalus* by Harrington (1980:97) when she made it the type species of *Bacacephalus*.

Genus *Catenes* Distant

Catenes Distant, 1893 :397. Type species: *Catenes porrectus* Distant, monotypic.

Catenes porrectus Distant

Catenes porrectus Distant, 1893:397 [new species-- Guatemala. Panama: Volcan de Chiriqui].-- J. Slater, 1964:1071 [Panama].

Genus *Cholula* Distant

Cholula Distant, 1882:211. Type species: *Cholula bicolor* Distant, designated by J. Slater, 1964:742.

Notes: This genus was transferred from the subfamily Heterogastrinae to the subfamily Rhyparochrominae, tribe Myodochini, by Sweet (1967:224).

Cholula discoloria Distant

Cholula discoloria Distant, 1893:400 [new species-- Panama: Caldera].-- Lethierry and Severin, 1894:195 [Panama].-- J. Slater, 1964:472 [Panama].-- Brailovsky, 1981a:67 [Panama].

Cholula firma (Distant)

Neocattarus firmus Distant, 1882:213 [new species-- Panama: Caldera].-- Lethierry and Severin, 1894:197 [Panama].-- J. Slater, 1964:1105 [Panama].-- Scudder, 1967:265 [Caldera].

Cholula firmus [sic],-- Brailovsky, 1981a:54 [Caldera].

Cholula parva (Distant)

Neocattarus parvus Distant, 1882:215 [new species-- Guatemala].-- J. Slater, 1964:1105 [Panama].

Note: Brailovsky (1981a:53) suggested that J. Slater's (1964:1105) record of *Cholula* (as *Neocattarus*, now a junior synonym of *Cholula parvus*) for Panama was probably a typographical error.

Cholula vigens (Distant)

Neocattarus vigens Distant, 1882:214 [new species-- Guatemala. Panama: Bugaba]; 1893:403 [Caldera].-- Lethierry and Severin, 1894:197 [Panama].-- J. Slater, 1964:1106 [Panama].-- Brailovsky, 1981a:53 [Bugaba; Caldera]

Genus *Distingphyses* Scudder

Distingphyses Scudder, 1962b:981. Type species: *Pephyssena insignis* Distant, original designation.

Distingphyses insignis (Distant)

Pephyssena insignis Distant, 1882:212 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1894:195 [Panama].

Distingphyses insignis.-- Scudder, 1962b:981 [Panama]; 1967:269 [Bugaba].-- J. Slater, 1964:1074 [Panama].

Genus *Dushinckanus* Brailovsky

Dushinckanus Brailovsky, 1979a:547. Type species: *Dushinckanus ocellatus* Brailovsky, original designation.

Note: Harrington's (1987) revision of *Dushinckanus* contained a key (page 82-83) to five species.

Dushinckanus crassicornis Brailovsky

Dushinckanus crassicornis Brailovsky, 1981c:217 [new species-- Guatemala].-- Harrington, 1987:83 [Barro Colorado; Fort Amador; La Mesa above El Valle].

Dushinckanus inermibus (Distant)

Myodocha inermibus Distant, 1882:204 [new species-- Panama: Volcan de Chiriqui]; 1893:397 [Bugaba].--Lethierry and Severin, 1894:190 [Panama].

Myodocha inermibus.-- J. Slater, 1964:1101 [Panama].

Dushinckanus inermibus.-- Harrington, 1987:88 [Bugaba; Cerro Campana].

Genus *Froeschneria* Harrington

Froeschneria Harrington, 1980:70 and 101. Type species: *Ligyrocoris multispinus* Stål, original designation.

Note: Harrington (1980:101) made the following two combinations when she transferred them to her new genus.

Froeschneria multispina (Stål)

Ligyrocoris multispinus Stål, 1874:145 [new species-- Mexico].-- Distant, 1893:393 [Bugaba; Volcan de Chiriqui].-- J. Slater, 1964:1081 [Panama].

Froeschneria piligera (Stål)

Ligyrocoris piligerus Stål, 1862b:312 [new species-- Mexico].-- J. Slater, 1964:1092 [Panama].
Ligyrocoris abdominalis.-- Distant, 1893:393 [Bugaba; Volcan de Chiriqui].

Genus *Heraeus* Stål

Heraeus Stål, 1862b:314. Type species: *Plociomera triguttata* Guérin-Méneville, monotypic.

Heraeus guttatus (Dallas)

Orthaea guttata Dallas, 1852:580 [new species-- Jamaica].

Heraeus guttatus.-- Barber, 1939:354 [Panama].

Heraeus guttata [sic].-- J. Slater, 1964:1083 [Panama].

Heraeus illitus Distant

Heraeus illitus Distant, 1882:205 [new species-- Guatemala. Panama: Volcan de Chiriqui]; 1893:397 [Bugaba].-- J. Slater, 1964:1083 [Panama].

Genus *Myodocha* Latreille

Myodocha Latreille, 1807:126. Type species: *Myodocha serripes* Olivier, designated by Blanchard, 1840:134 and by International Commission on Zoological Nomenclature, 1963, Opinion 669.

Myodocha unispinosa Stål

Myodocha unispinosa Stål, 1874a:147 [new species-- Paraguay].-- Distant, 1882:204 [Volcan de Chiriqui]; 1893:397 [Bugaba].-- Lethierry and Severin, 1894:191 [Panama].-- J. Slater, 1964: 1104 [Panama].

Genus *Neopamera* Harrington

Neopamera Harrington, 1980:75, 107. Type species: *Pamera bilobata* Say, original designation.

Note: Rau's (1933:189) record of "*Orthaea teneoides*" from Barro Colorado Island must belong to one of the following three species; but because the specimen was discarded when it was

identified by McAtee and returned to Rau, no further evidence as to its status is available. J. Slater (1964:1142) recorded *N. teneoides* Burmeister only from Brazil and British Guiana.

Neopamera albocincta (Barber)

Pachybrachius albocinctus Barber, 1953c:216 [new species-- United States of America. Mexico. Guatemala. Honduras Panama: Trinidad R.; Panama. Brazil. Colombia. Ecuador. West Indies]. J. Slater, 1964:1110 [Panama].

Neopamera bilobata (Say)

Pamera bilobata Say, 1832:17 [new species-- United States of America. Mexico].-- Distant, 1893:398 [Bugaba; Volcan de Chiriqui].

Pachybrachius bilobatus.-- J. Slater, 1964:1113 [Panama].--McGuire and Crandall, 1967:92 [Panama].

Neopamera neotropicalis (Kirkaldy)

Lygaeus serripes Fabricius, 1803:236, preoccupied [new species--"Amer. merid."].

Pamera serripes.-- Distant, 1893:398 [Bugaba; Volcan de Chiriqui].-- Kuhlitz and Melichar, 1902:249 [Panama].

Orthaea neotropicalis Kirkaldy, 1909b:31. New name for preoccupied *Lygaeus serripes* Fabricius.

Pachybrachius neotropicalis.-- J. Slater, 1964:1132 [Panama].

Genus *Orthaea* Dallas

Orthaea Dallas, 1852:580. Type species: *Orthaea consuta* Dallas, monotypic.

Orthaea alveusicola Harrington

Orthaea alveusicola Harrington, 1986:326 [new species-- Panama: La Mesa above El Valle].-- J. Slater and O'Donnell, 1995:152 [Panama].

Genus *Paracholula* Harrington

Paracholula Harrington, 1980:74, 79. Type species: *Neocattarus thoracicus* Distant, original designation.

Note: In transferring species into her new genus, Harrington established the following two combinations.

Paracholula pictus (Fabricius)

Coreus pictus Fabricius, 1803:202 [new species-- "Amer. merid."].

Neocattarus vegetus Distant, 1882:214 [new species-- Panama: Bugaba].-- Lethierry and Severin, 1894:197 [Panama].-- J. Slater, 1964:1106 [Panama].-- Scudder, 1967:283 [Bugaba].

Note: Scudder (1970:101) synonymized *vegetus* with *pictus*; and Harrington (1980:79) established this combination.

Paracholula thoracica (Distant)

Neocattarus thoracicus Distant, 1893:403 [new species-- Guatemala. Panama: Bugaba].-- J. Slater, 1964:1105 [Panama]; 1972:146 [Ancon].-- Scudder, 1967:282 [Bugaba].

Note: Harrington (1980:79) established the combination with *Paracholula*.

Genus *Paromius* Fieber

Stenocoris Rambur, 1839:139, preoccupied. Type species: *Stenocoris gracilis* Rambur, monotypic.

Paromius Fieber, 1861:170. Proposed as new name for preoccupied *Stenocoris* Rambur.

Paromius longulus (Dallas)

Rhyparochromus longulus Dallas, 1852:578 [new species-- unknown locality].

Pamera longula.-- Distant, 1882:206 [Volcan de Chiriqui]; 1893:398 [Caldera].

Paromius longulus.-- Lethierry and Severin, 1894:189 [Panama].-- J. Slater, 1964:1155 [Panama].-- McGuire and Crandall, 1967:93 [Panama].

Genus *Pephysena* Distant

Pephysena Distant, 1882:211. Type species: *Pephysena levis* Distant, designated by Barber, 1954b:218.

Note: Harrington's (1981) revision contained a key (pages 189-190) to five species.

Pephysena levis Distant

Pephysena levis Distant, 1882:210 [new species-- Guatemala].-- J. Slater, 1964:1159 [Panama].

Genus *Prytanes* Distant

Prytanes Distant, 1893:401. Type species: *Prytanes globosus* Distant, designated by J. Slater, 1964:1163.

Note: When Harrington (1980:87) made *Exptochiomera* Barber (1928:175) a junior synonym of *Prytanes*, the following four species took a new combination with *Prytanes* as their generic name.

Prytanes confusa (Barber)

Exptochiomera confusa Barber, 1953a:21 [new species-- United States of America. Mexico. Guatemala. Panama. Ecuador. Cuba].-- J. Slater, 1964:1077 [Panama].

Prytanes formosus (Distant)

Plochiomera formosa Distant, 1882:210 [new species-- Guatemala]; 1893:399 [Volcan de Chiriqui].

Exptochiomera formosa.-- Barber, 1928:176 [Panama].-- J. Slater, 1964:1078 [Panama].

Prytanus oblongus (Stål)

Plochiomera oblonga Stål, 1862b:313 [new species-- Mexico].-- Distant, 1882:209 [Volcan de Chiriqui]; 1893:399 [Bugaba].-- Lethierry and Severin, 1894:195 [Panama].
Exptochiomera oblonga.-- Barber, 1928:176 [Panama].--J. Slater, 1964:1080 [Panama].

Prytanus tumens (Stål)

Plochiomera tumens Stål, 1874a:153 [new species-- Colombia].-- Distant, 1893:400 [Volcan de Chiriqui].
Exptochiomera tumens.-- J. Slater, 1964:1081 [Panama].

Genus *Pseudopachybrachius* Malipatil

Pseudopachybrachius Malipatil, 1978:63. Type species: *Rhyparochromus gutta* Dallas, original designation.

Note: Zheng and J. Slater (1984) revised this genus and keyed (page 103) its seven species.

Pseudopachybrachius basalis (Dallas)

Rhyparochromus basalis Dallas, 1852:575 [new species-- N. America].-- Zheng and J. Slater, 1984:111 [Ancon; Chepo; Coco Solo Hospital; Las Cumbres; Madden Dam].

Pseudopachybrachius vinctus (Say)

Pamera vincta Say, 1832:16 [new species-- United States of America].
Pamera parvula Distant, 1882:206 [new species-- Volcan de Chiriqui].-- Lethierry and Severin, 1894:193 [Panama].
Pachybrachius vinctus.-- J. Slater, 1964:1144 [Panama].
Pseudopachybrachius vinctus.-- Zheng and J. Slater, 1984:108 [Panama].

Genus *Stridulocoris* Harrington

Stridulocoris Harrington, 1980:74, 81. Type species: *Neocattarus gracilis* Distant, monotypic.

Stridulocoris gracilis (Distant)

Neocattarus gracilis Distant, 1882:215 [new species-- Guatemala]; 1893:403 [Volcan de Chiriqui].

Note: Apparently Distant's (1893:403) Panama record has not been mentioned subsequently.

Genus *Xenydrium* Bergroth

Xenydrium Bergroth, 1921:75. Type species: *Xenydrium formiciforme* Bergroth, monotypic.

Xenydrium formiciforme Bergroth

Xenydrium formiciforme Bergroth, 1921:75 [new species--Venezuela].-- Brailovsky and Barrera, 1984a:58 [Barro Colorado Island; Galeta Island; Gamboa; La Sabana].

TRIBE OZOPHORINI SWEET

A key to the seven New World genera of this tribe was provided by Ashlock and J. Slater (1982 :739-742), who also gave an indication of the distribution of all included species.

Genus *Balboa* Distant

Balboa Distant, 1893 :408. Type species: *Balboa variabilis* Distant, monotypic.

Balboa germana (Distant)

Eremocoris germanus Distant, 1893:407 [new species-- Guatemala. Panama: Volcan de Chiriqui].

Bergidia germanus [sic].-- Scudder, 1962d:1066 [Panama].

Bergidea [sic] *germana*.-- J. Slater, 1964 :1042 [Panama].

Balboa variabilis Distant

Balboa variabilis Distant, 1893:408 [new species-- Guatemala. Panama: Volcan de Chiriqui].-- J. Slater, 1964:1040 [Panama].-- Scudder, 1967:283 [V. de Chirique [sic]].

Genus *Ozophora* Uhler

Ozophora Uhler, 1871:102. Type species: *Ozophora picturata* Uhler, monotypic,

Note: J. Slater (1983) presented a revision of the 21 Panamanian species and keyed (pages 3-5) them. Panama records for *O. atropicta* Barber were transferred to *O. atropictoides* by J. Slater and Baranowski (1995:315), who wrote that *O. atropicta* "appears to be confined to the Greater Antilles" and (page 318) that the J. Slater and Hassey (1981) Panama records belong to their new species *O. atropictoides*.

Ozophora atropictoides J. Slater and Baranowski

Ozophora atropicta.-- J. Slater and Hassey, 1981:257 [Barro Colorado Island; Cocle; Coco Solo Hospital; Fort Amador; Fort Sherman; Los Cumbres; Rio Las Lajas near Coronado Beach; Rio Hato; Roviera; Trinidad River].-- J. Slater, 1983:26 [Barro Colorado Island; Cocle; Coco Solo Hospital; Fort Amador; Fort Sherman; Los Cumbres; Rio Las Lajas near Coronado Beach; Rio Hato; Rovira; Trinidad River].

Ozophora atropictoides J. Slater and Baranowski, 1995:316 [new species-- Mexico. Honduras. Costa Rica. Panama. Venezuela. Trinidad].-- J. Slater and O'Donnell, 1995:136 [Panama].

Ozophora attagenis J. Slater

Ozophora attagenis J. Slater, 1983:5 [new species-- Panama: Cerro Campana, Dist. Chame].-- J. Slater and O'Donnell, 1995:136 [Panama].

Ozophora baliocoris J. Slater

Ozophora baliocoris J. Slater, 1983:6 [new species-- Mexico. Honduras. Costa Rica. Panama: B de T Rio Changulnola; Barro Colorado Island; Rovira, Province Chiriqui. Ecuador].-- J. Slater and O'Donnell, 1995:136 [Panama].

Ozophora baranowskii J. Slater and O'Donnell

Ozophora baranowskii J. Slater and O'Donnell, 1979:164 [new species-- Mexico. Honduras. Panama: "ex banana boat ex Puerto Armuelles"; Rovira, Prov. Chiriqui. Venezuela. Bolivia. Peru].-- J. Slater and O'Donnell, 1995:136 [Panama].-- J. Slater, 1983:25 [Altos de Maje (District Chepo); Rovira, Chiriqui Province].

Ozophora brunnea J. Slater

Ozophora brunnea J. Slater, 1983:16 [new species-- Costa Rica. Panama: Barro Colorado, Canal Zone; Coco Solo Hospital, Canal Zone; Mojinga Swamp, Gatun Lake, Canal Zone].-- J. Slater and O'Donnell, 1995:136 [Panama].

Ozophora concava (Distant)

Davila concava Distant, 1893:395 [new species-- Mexico. Guatemala. Panama: Bugaba; Caldera; Volcan de Chiriqui].

Ozophora concava.-- Blatchley, 1926:417 [Panama].-- Torre-Bueno, 1946:96 [Panama].-- J. Slater, 1964:1050 [Panama]; 1983:26 [Alhajuelo; Barro Colorado Island, Canal Zone; Bella Vista; Cabima; Chepo; Coco Solo Hospital; Darien, Rio Tuquesa; Diablo Heights; Fort Sherman; French Canal; Gamboa; Las Gumbres; Madden Forest; Mojinga Swamp; Ponte Farahon, Cocle Province; Rio Hato, Cocle Province; Rovira, Chiriqui Province].-- Scudder, 1967:261 [Bugaba; Caldera; Volcan de Chiriqui].

Ozophora consanguinea (Distant)

Davila consanguinea Distant, 1893:395 [new species-- Mexico. Guatemala].

Ozophora consanguinea.-- J. Slater, 1983:25 [Barro Colorado Island; Campina; Cerro Campana, Panama Province; Coco Solo Hospital; Fortuna; French Canal; GML Station, Maje, Panama Province; Las Cumbres; Mojinga Swamp; Porto Bello; San Jose, Pearl Island; Renacimiento, Chiriqui Province].-- A. Slater, 1988:104 [Panama].

Ozophora costaricensis J. Slater and O'Donnell

Ozophora costaricensis J. Slater and O'Donnell, 1979:171 [new species-- Costa Rica].-- J. Slater, 1983:25 [Cerro Campana, Chame District; Cerro Campana, Panama Province; Fortuna; Rovira, Chiriqui Province].

Ozophora englemani J. Slater

Ozophora englemani J. Slater, 1983:7 [new species-- Panama: Coco Solo Hospital, Canal Zone; Arraijan; Barro Colorado Island; Bella Vista; Cano Saddle, Gatun Lake; Cerro Campana, Panama Province; Contadora Island, Perlas; Chiru Ride; area Ft. Gulick; Las Cumbres; Mojina Swamp, Barro Colorado Island; Tabernilla. Surinam].-- J. Slater and O'Donnell, 1995:137 [Panama].

Ozophora festiva J. Slater

Ozophora festiva J. Slater, 1983:9 [new species-- Mexico. Guatemala. Nicaragua. Costa Rica. Panama: Renacimiento, Station Clara, Chiriqui Province; Elvira Farm, Rovira, Province Chiriqui. Venezuela. Trinidad].-- J. Slater and O'Donnell, 1995:137 [Panama].

Ozophora maculata J. Slater and O'Donnell

Ozophora maculata J. Slater and O'Donnell, 1979:167 [new species-- United States of America. Mexico. Guatemala].-- J. Slater, 1983:24 [Cerro Campana, Panama Province].

Ozophora maculosa J. Slater

Ozophora maculosa J. Slater, 1983:12 [new species-- Panama: Las Cumbres].-- J. Slater and O'Donnell, 1995:138 [Panama].

Ozophora notabilis J. Slater

Ozophora notabilis J. Slater, 1983:15 [new species-- Mexico. Belize. Costa Rica. Panama: Renacimiento, Santa Clara, Chiriqui District; Cerro Campana, Panama Province; Fortuna, Chiriqui Province; Cocle Province; Rovira, Chiriqui Province; Volcan de Chiriqui. Ecuador].-- J. Slater and O'Donnell, 1995:138 [Panama].

Ozophora pallescens (Distant)

Davila pallescens Distant, 1893:395 [new species-- Panama: Caldera; Volcan de Chiriqui].-- Lethierry and Severin, 1894:189 [Panama].

Ozophora pallescens.-- Barber, 1939:361 [Panama]; 1954a:346 [Panama].-- J. Slater, 1964:1058 [Panama]; 1983:23 [Cerro Campana, Panamá Province; Coco Solo Hospital, Canal Zone; El Valle de Cocle; Tres Rios Plantation, Gatun Lake].-- Scudder, 1967:276 [Volcan de Chiriqui].-- Ashlock and J. Slater, 1982:744 [Panama].-- Baranowski and J. Slater, 1983:452 [Panama].

Ozophora parapicta J. Slater and Hassey

Ozophora parapicta J. Slater and Hassey, 1981:257 [new species--Panama: Barro Colorado Island; Coco Solo Hospital].-- J. Slater, 1983:26 [Barro Colorado Island; Coco Solo Hospital].-- J. Slater and O'Donnell, 1995:138 [Panama].

Ozophora parva J. Slater

Ozophora parva J. Slater, 1983:23 [new species-- Panama: Fortuna].-- J. Slater and O'Donnell, 1995:138 [Panama].

Ozophora robusta J. Slater

Ozophora robusta J. Slater, 1983:17 [new species-- Costa Rica. Panama: Coco Solo Hospital, Canal Zone; Cerro Campana, Panama Province].-- J. Slater and O'Donnell, 1995:138 [Panama].

Ozophora rubrolinea J. Slater

Ozophora rubrolinea J. Slater, 1987a:153 [new species-- Mexico. Belize. Guatemala. Honduras. Costa Rica. Panama: Cumbres. Venezuela. Jamaica. Dominican Republic].

Ozophora scutellata J. Slater

Ozophora scutellata J. Slater, 1983:14 [new species-- Mexico. Honduras. Costa Rica. Panama:

Barro Colorado, Canal Zone; Cabima; Coco Solo Hospital, Canal Zone; Las Cumbres; Mojinga, Canal Zone; Rovira, Chiriqui Province].-- J. Slater and O'Donnell, 1995:139 [Panama].

Ozophora singularis J. Slater

Ozophora singularis J. Slater, 1983:21 [new species-- Panama: Cerro Campana; Achiotte Road, Canal Zone; Fortuna; Volcan de Chiriqui].-- J. Slater and O'Donnell, 1995:139 [Panama].

Ozophora versicolor J. Slater

Ozophora versicolor J. Slater, 1983:19 [new species-- Mexico Belize. Nicaragua. Costa Rica. Panama: Renacimiento, Santa Clara, Chiriqui Province; Barro Colorado Island, Canal Zone; Boquete, Chiriqui Province; Cerro Campana, Panama Province; Las Cumbres; Rovira, Chiriqui Province; Santa Fe, Darien Province. Colombia].-- J. Slater and O'Donnell, 1995:139 [Panama].

Ozophora villosa J. Slater

Ozophora villosa J. Slater, 1983:13 [new species-- Panama: Fortuna].-- J. Slater and O'Donnell, 1995:139 [Panama].

Genus *Pamozophora* Ashlock and J. Slater

Pamozophora Ashlock and J. Slater, 1982:744. Type species: *Pamozophora englemani* Ashlock and J. Slater, original designation.

Pamozophora englemani Ashlock and J. Slater

Pamozophora englemani Ashlock and J. Slater, 1982:745 [new species-- Panama: Cerro Campana. Venezuela].-- J. Slater and O'Donnell, 1995:139 [Panama].

FAMILY SALDIDAE AMYOT AND SERVILLE

Panamanian records of eight species in five genera are listed below.

A catalog of the saldid species of the world was published in Schuh, Galil, and J. Polhemus (1987). Keys to the genera and species in Middle America were given by J. Polhemus (1985).

SUBFAMILY CHILOXANTHINAE COBBEN

Genus *Paralosalda* J. Polhemus and Evans

Paralosalda J. Polhemus and Evans, 1969:572. Type species: *Paralosalda innova* J. Polhemus and Evans, original designation.

Paralosalda innova J. Polhemus and Evans

Paralosalda innova J. Polhemus and Evans, 1969:573 [new species-- Costa Rica. Panama: Culebra; Isla Montuosa; Punta Paitilla, Panamá City. Colombia].-- J. Polhemus 1976b:232, 253 [latter with Panama map record]; 1985:114 [Panama map record].--

Schuh, Galil, and J. Polhemus, 1987:269 [Panama].-- J. Polhemus and Manzano, 1992:303, 312 [Culebra Island; Isla Montuosa: Old Panama City; Panama City; Punta Paitilla].

Genus *Pentacora* Reuter

Pentacora Reuter, 1912:10. Type species: *Salda signoreti* Guérin-Ménéville, original designation.

Pentacora signoreti (Guérin-Ménéville)

Salda signoreti Guérin-Ménéville, 1857:401 [new species-- Cuba]
Pentacora signoreti.-- J. Polhemus and Manzano, 1992:313 [Panama].

Pentacora sphaelata (Uhler)

Salda sphaelata Uhler, 1877:124 [new species-- United States of America].
Pentacora sphaelata.-- J. Polhemus, 1985:124 [Panama].-- J. Polhemus and Manzano, 1992:313 [Panama].

SUBFAMILY SALDINAE AMYOT AND SERVILLE

TRIBE SALDOIDINI REUTER

Genus *Micracanthia* Reuter

Micracanthia Reuter, 1912:16. Type species: *Salda marginalis* Fallén, original designation.

Micracanthia quadrimaculata (Champion)

Salda quadrimaculata Champion, 1900:342 [new species-- Panama: Peña Blanca].
Acanthia quadrimaculata.-- Kirkaldy and Torre-Bueno, 1909a:177 [Panama].
Micracanthia quadrimaculata.-- Drake and Hottes, 1950:52 [Panama].-- Drake and Chapman, 1952:147 [Panama].-- Schuh, Galil, and J. Polhemus, 1987:313 [Panama].

Genus *Rupisalda* J. Polhemus

Rupisalda J. Polhemus, 1985:151. Type species: *Rupisalda petricola* J. Polhemus, original designation.

Rupisalda ventralis (Stål)

Salda ventralis Stål, 1860:81 [new species-- Brazil].
Saldula ventralis.-- Champion, 1900:342 [Caldera; David].-- Drake and Hoberlandt, 1951b:11 [Panama].
Acanthia ventralis.-- Kirkaldy and Torre-Bueno, 1909a:178 [Panama].
Rupisalda ventralis.-- Schuh, Galil, and J. Polhemus, 1987:317 [Panama].

Genus *Saldula* Van Duzee

Saldula Van Duzee, 1914:387. Type species: *Cimex saltatorius* Linnaeus, original designation.

Saldula dentulata (Hodgden)

Salda dentulata Hodgden, 1949:151 [new species-- Grenada].

Salda sectilis Hodgden, 1949:160 [new species-- Panama: Paraiso, Canal Zone; Red Tank, Canal Zone; XX Plantation, 6 miles east of Porto Bello].

Saldula sectilis-- Drake and Hoberlandt, 1951b:10 [Progreso, Chiriqui Province]-- Drake and Hussey, 1951a:1 [Progreso, Chiriqui Province].

Saldula dentulata-- Schuh, Galil, and J. Polhemus, 1987:328 [Panama].

Saldula pallipes (Fabricius)

Acanthia pallipes Fabricius, 1794:71 [new species-- Denmark].

Salda tropicalis Champion, 1900:341 [new species-- Guatemala. Panama: Volcan de Chiriqui].

Acanthia tropicalis-- Kirkaldy and Torre-Bueno, 1909a:178 [Panama].

Saldula pallipes-- Schuh, Galil, and J. Polhemus, 1987:342 [Panama].

Saldula sulcicollis (Champion)

Salda sulcicollis Champion, 1900:340 [new species-- Panama: Volcan de Chiriqui. Guatemala. Mexico].

Acanthia sulcicollis-- Kirkaldy and Torre-Bueno, 1909:178 [Panama].

Saldula sulcicollis-- Drake and Hottes, 1950:56 [Panama]-- Schuh, Galil, and J. Polhemus, 1987:354 [Panama].

FAMILY SCHIZOPTERIDAE REUTER

The following treatment lists 12 species in five genera for Panama. Undoubtedly more described and undescribed species will be found there.

Two authors who studied this family, Emsley (1969) and Štys (1970), essentially agreed on its limits except that the former author considered it to be divisible into three subfamilies, while the latter author decided to use but two subfamilies. Emsley included a list of the world's species. Both authors placed all genera known from Panama as members of the subfamily Schizopterinae. An earlier review emphasizing the American genera and species was offered by McAtee and Malloch (1925b); it forms a satisfactory starting point for studying the New World members of this family.

SUBFAMILY SCHIZOPTERINAE REUTER

Genus *Ceratocomboides* McAtee and Malloch

Ceratocomboides McAtee and Malloch, 1925b:12. Type species: *Ceratocomboides prima* McAtee and Malloch, monotypic.

Ceratocomboides prima McAtee and Malloch

Ceratocomboides prima McAtee and Malloch, 1925b:12 [new species-- Panama: Porto Bello]-- Wygodzinsky, 1951:264 [Panama].

Genus *Corixidea* Reuter

Schizoptera (*Corixidea*) Reuter, 1891:18. Type species: *Schizoptera* (*Corixidea*) *lunigera* Reuter, monotypic.

Corixidea.-- McAtee and Malloch, 1925b:25.

Corixidea crassa McAtee and Malloch

Corixidea crassa McAtee and Malloch, 1925b:25 [new species-- Panama: Ancon, Canal Zone].

Corixidea lunigera (Reuter)

Schizoptera (*Corixidea*) *lunigera* Reuter, 1891:24 [new species-- Brazil].

Corixidea lunigera.-- McAtee and Malloch, 1925b:26 [Ancon, Canal Zone; Trinidad Rio].

Genus *Membracioides* McAtee and Malloch

Membracioides McAtee and Malloch, 1925b:27. Type species: *Membracioides parallela* McAtee and Malloch, monotypic.

Membracioides zschokkei Wygodzinsky

Membracioides zschokkei Wygodzinsky, 1953a:61 [new species--Panama: Tres Rios Plantation, Gatun Lake].

Genus *Nannocoris* Reuter

Nannocoris Reuter, 1891:18. Type species: *Schizoptera nubulifera* Reuter, designated by Kirkaldy, 1906a:148.

Nannocoris flavomarginatus McAtee and Malloch

Nannocoris flavomarginata [*sic*] McAtee and Malloch, 1925b:29 [new species-- Panama; Paraiso, Canal Zone].-- Blatchley, 1926:651 [Canal Zone].

Nannocoris schwarzi McAtee and Malloch

Nannocoris schwarzi McAtee and Malloch, 1925b:29 [new species-- Panama: Porto Bello].

Genus *Schizoptera* Fieber

Schizoptera Fieber, 1861:269. Type species: *Schizoptera cicadina* Fieber, monotypic.

Schizoptera clodius McAtee and Malloch

Schizoptera (*Odontorhagus*) *clodius* McAtee and Malloch, 1925b:16 [new species-- Panama: Paraiso, Canal Zone].

Schizoptera decius McAtee and Malloch

Schizoptera (Odontorhagus) decius McAtee and Malloch, 1925b:17 [new species-- Panama: Cabima; Gatun, Canal Zone].

Schizoptera hirta McAtee and Malloch

Schizoptera (Schizoptera) hirta McAtee and Malloch, 1925b:20 [new species-- Guatemala. Panama:Bohio; Paraiso].

Schizoptera licinius McAtee and Malloch

Schizoptera (Schizoptera) licinius McAtee and Malloch, 1925b:23 [new species-- Panama: Frijoles, Canal Zone].

Schizoptera sulcata McAtee and Malloch

Schizoptera (Lophopleurum) sulcata McAtee and Malloch, 1925b:24 [new species-- Panama: Ancon, Canal Zone. Grenada, West Indies].

Schizoptera tenuispina McAtee and Malloch

Schizoptera (Lophopleurum) tenuispina McAtee and Malloch, 1925b:24 [new species-- Panama: Gatun, Canal Zone].

FAMILY SCUTELLERIDAE LEACH

The present list contains Panama records for 13 species in nine genera. Certainly additional species occur there.

Schouteden's (1904) well-illustrated work forms a good starting point for study in this group as it contains keys to the world's genera and lists of species.

Eger and Lattin's (1997) paper, dealing with scutellerid name placements, included some new synonymies.

SUBFAMILY PACHYCORINAE DALLAS

Genus *Agonosoma* Laporte

Eurygaster (Agonosoma) Laporte, 1832:69. Type species: *Eurygaster flavolineata* Laporte, monotypic.

Agonosoma.-- Bergroth, 1891:235.

Note: Paleari's (1992) revision of *Agonosoma* included a key (pages 508-509) to the four species. She used the species name *A. trilineatum* (Fabricius, 1781) whose original combination, *Cimex trilineatus*, was preoccupied, having previously been used by Müller (1776:106) and by Schrank (1781:285) [Fide Kirkaldy, 1909a:278 and Sherborn, 1902:994]. See *A. trivittata* below.

Agonosoma trivittata (Panzer)

Cimex trivittatus Panzer, 1797:111 [new species-- "America meridionali"].

Agonosoma trilineatum.-- Distant, 1889:313 [Matachin].-- Paleari, 1992:519 [map record for Panama].

Agonosoma trilienata [sic].-- Lethierry and Severin, 1893:35 [Panama].

Agonosoma trivitatta.-- Kirkaldy, 1909a:278 [Panama].

Genus *Camirus* Stål

Camirus Stål, 1862a:57. Type species: *Pachycoris conicus* Germar, *vide* Kirkaldy, 1909a:365.

Camirus conicus (Germar)

Pachycoris conicus Germar, 1839b:106 [new species-- Brazil].

Camirus conicus.-- Distant, 1889:316 [Bugaba].-- Kirkaldy, 1909a:288 [Panama].

Genus *Crathis* Stål

Crathis Stål, 1861b:142. Type species: *Crathis longifrons* Stål, monotypic.

Crathis ansata (Distant)

Lobothyreus ansatus Distant, 1889:313 [new species-- Panama: Volcan de Chiriqui].

Crathis ansata.-- Lethierry and Severin, 1893:36 [Panama].-- Schouteden, 1904:67 [Panama].-- Kirkaldy, 1909a:277 [Panama].

Genus *Galeacius* Distant

Galeacius Distant, 1889:316. Type species: *Galeacius tessellatus* Distant, monotypic.

Galeacius tessellatus Distant

Galeacius tessellatus Distant, 1889:316 [new species-- Panama: Volcan de Chiriqui].-- Lethierry and Severin, 1893:37 [Panama].-- Schouteden, 1904:62 [Panama].-- Kirkaldy, 1909a:281 [Panama].

Genus *Pachycoris* Burmeister

Pachycoris Burmeister, 1835:348, 391. Type species: *Pachycoris fabricii* of Burmeister not Linnaeus, a junior synonym of *Cimex torridus* Scopoli, *vide* Kirkaldy, 1903a:213.

Pachycoris torridus (Scopoli)

Cimex torridus Scopoli, 1772:110 [new species-- "America"].

Pachycoris torridus.-- Distant, 1889:311 [Bugaba; Tolé; Volcan de Chiriqui].

Genus *Polytes* Stål

Polytes Stål, 1867:492. Type species: *Polytes hebraicus* Stål, a junior synonym of *Pachycoris lineolatus* Dallas, monotypic.

Note: This genus was revised by Eger (1990), who gave a key (pages 117-118) to its 18 species.

Polytes lineolatus (Dallas)

Pachycoris lineolatus Dallas, 1851:33 [new species-- Colombia].

Polytes lineolatus-- Eger, 1992:154 [Chiriqui, Dst. Renacimiento, Oeste Clara].

Genus *Sphyrocoris* Mayr

Sphyrocoris Mayr, 1864:904. Type species: *Pachycoris obliquus* Germar, monotypic.

Sphyrocoris elongatus Distant

Sphyrocoris elongatus Distant, 1880:21 [new species-- Mexico]; 1889:314 [Panama].--

Schouteden, 1904:59 [Panama].-- Kirkaldy, 1909a:279 [Panama].

Genus *Symphylus* Dallas

Symphylus Dallas, 1951:5, 37. Type species: *Symphylus obtusus* Dallas, designated by Schouteden, 1904:60.

Symphylus albomaculatus Distant

Symphylus albomaculatus Distant, 1889:315 [new species-- Panama: Bugaba; David].--

Lethierry and Severin, 1893:37 [Panama].-- Schouteden, 1904:61 [Panama].-- Kirkaldy, 1909a:280 [Panama].

Symphylus cyphonoides (Walker)

Pachycoris cyphonoides Walker, 1867:50 [new species-- Brazil].

Symphylus vernus Distant, 1889:315 [new species-- Mexico. Panama: Bugaba].-- Lethierry and Severin, 1893:37 [Panama].

Symphylus "cyphonoides"-- Schouteden, 1904:61 [Panama].

Symphylus cyphonoides-- Kirkaldy, 1902a:280 [Panama].

Symphylus deplanatus (Herrich-Schaeffer)

Pachycoris deplanatus Herrich-Schaeffer, 1839:3 [Brazil].

Symphylus deplanatus--Distant, 1889:314 [Bugaba; Caldera; David; Tolé].-- Lethierry and Severin, 1893:37 [Panama].-- Kirkaldy, 1909a:280 [Panama].-- Torre-Bueno, 1915:218 [Panama].

Symphylus modestus Distant

Symphylus modestus Distant, 1880:23 [new species-- Guatemala]; 1889:315 [Bugaba; Volcan de Chiriqui].-- Schouteden 1904:6 [Panama].-- Kirkaldy, 1909a:280 [Panama].

Symphylus obtusus Dallas

Symphylus obtusus Dallas, 1851:37 [new species-- Colombia].-- Schouteden, 1904:61 [Panama].--Kirkaldy, 1909a:280 [Panama].

Symphylus gibbosus-- Distant, 1889:315 [Bugaba].

Symphylus rivulosus (Walker)*Pachycoris rivulosus* Walker, 1867:51 [new species-- Brazil].*Symphylus plagiatus*-- Distant, 1889:315 [Caldera; Matachin].-- Lethierry and Severin, 1893:37 [Panama].*Symphylus rivulosus*-- Kirkaldy, 1909a:281 [Panama].

SUBFAMILY SCUTELLERINAE LEACH

Genus *Augocoris* Burmeister*Augocoris* Burmeister, 1835:349, 396. Type species: *Augocoris gomesii* Burmeister, designated by Brullé, 1835:404.*Augocoris illustris* (Fabricius)*Cimex illustris* Fabricius, 1781:340 [new species-- "South Africa" in error! Should be Brazil].*Augocoris sexpunctatus*-- Distant, 1880:25 [Panama].-- Lethierry and Severin, 1893:46 [Panama].*Augocoris illustris*-- Kirkaldy, 1909a:290 [Panama].

FAMILY TERMITAPHIDIDAE SILVESTRI

Both of the known genera in the family occur in the American tropics, but only a single species has been reported for Panama.

Usinger's (1942) revision of the family included a key (pages 158-159) to the two genera and their nine species.

Genus *Termitaradus* Myers*Termitaradus* Myers, 1924:270. Type species: *Termitaradus panamensis* Myers, original designation.**Note:** Myers (above) included a key (page 273) to seven species.*Termitaradus panamensis* Myers*Termitaradus panamensis* Myers, 1924:273 [new species-- Panama: Barro Colorado Island, Canal Zone; Fort Sheridan, Canal Zone; Rio Aejeta, Canal Zone].-- Torre-Bueno, 1939a:277 [Panama].-- Usinger, 1942:159 [Panama].**Note:** Myers (1924, above) reported the specimens of the type series were taken with the termites *Cornitermes acignathus* Silvestri, *Leucotermes convexinotatus* Snyder, and *Leucotermes tenuis* Hagen.

FAMILY TESSARATOMIDAE SCHILLING

The New World is home for three species of this family, one of which has been reported for Panama.

A world catalog of the Tessaratomidae was prepared by Rolston, Aalbu, Murray, and Rider (1993).

✓SUBFAMILY ONCOMERINAE STÅL

✓Genus *Piezosternum* Amyot and Serville

Piezosternum Amyot and Serville, 1843:161. Type species: *Pentatoma mucronatum* Palisot, a junior synonym of *Cimex subulatus* Thunberg, monotypic.

✓*Piezosternum subulatum* (Thunberg)

Cimex subulatus Thunberg, 1783:41 [new species-- no locality given].

Piezosternum subulatum.-- Distant, 1881a:102 [Chiriqui]; 1890:351 [Bugaba; Tolé].-- Lethierry and Severin, 1893:225 [Panama].-- Kirkaldy, 1909a:348 [Panama].-- Rolston, Aalbu, Murray, and Rider, 1993:52 [Panama].

FAMILY THAUMASTOCORIDAE KIRKALDY

Although there appear to be no records of this family for Panama, its occurrence there cannot be ruled out because it is known from the Greater Antilles as well as from South America. The habit of feeding and breeding on newly developing and terminal leaves of palm trees shields these insects from the casual collector and demands close examination of its ecological niche.

Keys to the known genera of Thaumastocoridae were given by Drake and J. Slater (1957:321-323) in their revision of the family. Later, J. Slater and Drake (1958) discussed the group's relationships to the other families of Hemiptera; and J. Slater and Brailovsky (1983b) returned the xylastodorins to subfamily status in the Thaumastocoridae. Schuh and Slater (1995:167) keyed the two subfamilies.

FAMILY TINGIDAE LAPORTE

So far, records of 65 species in 30 genera have been found for Panama. Additional collecting should yield more.

The Drake and Ruhoff (1965) catalog of the Tingidae of the world is a convenient point of departure for study in this family.

SUBFAMILY CANTACADERINAE STÅL

Keys to the world's 10 genera of this subfamily, with lists of included species, were given by Froeschner (1996).

TRIBE PHATNOMATINI DRAKE AND DAVIS

Genus *Phatnoma* Fieber

Phatnoma Fieber, 1844:57. Type species: *Phatnoma laciniata* Fieber, monotypic.

Phatnoma annulipes Champion

Phatnoma annulipes Champion, 1897:4 [new species-- Mexico. Guatemala. Panama: Volcan de Chiriqui].-- Gibson, 1919a:184 [Panama].-- Monte, 1941b:73 [Volcan de Chiriqui];

1946:253 [Panama].-- Drake and Ruhoff, 1965:35 [Volcan de Chiriqui].-- Froeschner, 1996:31 [Panama].

Phatnoma marmoratum Champion

Phatnoma marmorata Champion, 1897:3 [new species--Panama: Bugaba; Caldera; David].-- Gibson, 1919a:182 [Panama].-- Drake, 1922b:352 [Panama].-- Monte, 1941b:72 [Bohio, Canal Zone; Bugaba; Caldera; David, Chiriqui; Paraiso, Canal Zone; Poto Bello]; 1946:253 [Panama].-- Drake and Hambleton, 1944:120 [Panama].-- Drake and Ruhoff, 1965:37 [David, Chiriqui].

Phatnoma filetia Gibson, 1919a:185 [new species-- Panama: Porto Bello].

Phatnoma spinosa Gibson, 1919a:185 [new species-- Panama: Bohio, Canal Zone].

Phatnoma marmoratum.-- Froeschner, 1996:31 [Panama].

Genus *Zetekella* Drake

Zetekella Drake, 1944:139. Type species: *Zetekella zeteki* Drake, monotypic.

Zetekella zeteki Drake

Zetekella zeteki Drake, 1944:140 [new species-- Panama: Barro Colorado Island, Canal Zone]; 1950a:166 [Panama].-- Drake and Ruhoff, 1965:41 [Barro Colorado Island].-- Froeschner 1996:37 [Panama].

SUBFAMILY TINGINAE STÅL

TRIBE LITADEINI DRAKE AND RUHOFF

Froeschner (1969:129) discussed the contents of this tribe.

Genus *Aristobyrsa* Drake and Poor

Aristobyrsa Drake and Poor, 1937a:164. Type species: *Leptobyrsa latipennis* Champion, monotypic.

Aristobyrsa latipennis (Champion)

Leptobyrsa latipennis Champion, 1897:25 [new species-- Panama: Bugaba].

Aristobyrsa latipennis.-- Drake and Poor, 1937a:164 [Panama].-- Monte, 1940c:375 [Bugaba]; 1941b:79 [Bugaba]; 1947:432 [Panama].-- Hurd, 1946:472 [Panama].-- Drake and Ruhoff, 1965:91 [Bugaba].-- Carvalho and Costa, 1992a:440 [Bugaba].

Genus *Stragulotingis* Froeschner

Stragulotingis Froeschner, 1969:130. Type species: *Leptobyrsa plicata* Champion, original designation.

Note: Froeschner (1991:770) presented a key to five species.

Stragulotingis englemanni Froeschner

Stragulotingis englemanni Froeschner, 1991:770 [new species-- Panama: Gatun Spillway, Canal Zone].

Stragulotingis plicata (Champion)

Leptobyrsa plicata Champion, 1897:26 [new species-- Panama].

Pleseobyrsa plicata-- Drake and Poor, 1937a:165 [Panama]-- Monte, 1940b:286 [Bugaba]-- Drake and Ruhoff, 1965:343 [Panama].

Stragulotingis plicata-- Froeschner, 1969:132 [Panama]; 1991:769 [Panama].

TRIBE TINGINI LAPORTE

Genus *Acanthocheila* Stål

Monanthia (Acanthocheila) Stål, 1860:61. Type species: *Monanthia armigera* Stål, designated by Van Duzee, 1916:26.

Acanthochila [sic]-- Stål, 1873:127.

Note: Froeschner (1995) reviewed this genus, separated from it the new genus *Carvalhotingis*, and gave keys to the species in each.

Acanthocheila armigera (Stål)

Monanthia (Acanthocheila) armigera Stål, 1860:61 [new species-- Brazil].

Acanthochila [sic] armigera-- Champion, 1897:28 [Bugaba; Peña Blanca; San Lorenzo; Volcan de Chiriqui].

Acanthocheila armigera-- Drake, 1932:100 [Bella Vista]-- Drake and Poor, 1937b:306 [Panama]-- Monte, 1941b:74 [Bugaba; Bella Vista; Canal Zone; Peña Blanca; San Lorenzo; Volcan de Chiriqui]-- Drake and Ruhoff, 1965:57 [Panama]-- Froeschner 1995:336 [Panama].

Genus *Acysta* Champion

Acysta Champion, 1898a:46. Type species: *Acysta integra* Champion, designated by Van Duzee, 1916:26.

Acysta interrupta Champion

Acysta interrupta Champion, 1898a:47 [new species-- Panama: Bugaba; David]-- Heidemann, 1908:104 [Panama]-- Drake, 1922a:39 [Canal Zone]-- Monte, 1941b:77 [Bugaba; David]-- Hurd, 1946:459 [Panama]-- Drake and Ruhoff, 1965:61 [Bugaba].

Genus *Aepycysta* Drake and Bondar

Aepycysta Drake and Bondar, 1932:93. Type species: *Aepycysta undosa* Drake and Bondar, original designation.

Aepycysta schwarzi (Drake)

Galeatus schwarzi Drake, 1922a:39 [new species-- Panama: Paraiso, Canal Zone].
Aepycysta schwarzi-- Drake and Hambleton, 1935:154 [Panama].-- Monte, 1941b:77 [Paraiso, Canal Zone].-- Hurd, 1946:478 [Panama].-- Drake and Ruhoff, 1965:62 [Paraiso].
Aepycysta schwarzii [sic].-- Monte, 1941a:94 [Paraiso].

Genus *Amblystira* Stål

Amblystira Stål, 1873:120, 129. Type species: *Monanthia pallipes* Stål, monotypic.

Amblystira fuscitarsis Champion

Amblystira fuscitarsis Champion, 1897:30 [new species-- Guatemala. Panama: Peña Blanca].-- Drake and Hambleton, 1945:358 [Panama].-- Hurd, 1946:456 [Panama].-- Drake and Ruhoff, 1965:80 [Panama].

Amblystira marginata Drake

Amblystira marginata Drake, 1922b:362 [new species-- Panama: Paraiso, Canal Zone].-- Monte, 1941a:96 [Panama]; 1941b:79 [Paraiso, Canal Zone].-- Hurd, 1946:456 [Panama].-- Drake and Ruhoff, 1965:81 [Paraiso].

Amblystira opaca Champion

Amblystira opaca Champion, 1897:30 [new species-- Guatemala].-- Hurd, 1946:456 [Panama].-- Drake and Ruhoff, 1965:81 [Panama].

Genus *Atheas* Champion

Atheas Champion, 1898a:44. Type species: *Atheas nigricornis* Champion, designated by Van Duzee, 1916:26.

Atheas flavipes Champion

Atheas flavipes Champion, 1898a:45 [new species-- Panama: Bugaba].-- Drake and Hambleton, 1938:46 [Bugaba].-- Monte, 1939:65 [Bugaba]; 1941b:80 [Bugaba].-- Hurd, 1946:469 [Panama].-- Drake and Ruhoff, 1965:92 [Bugaba].

Genus *Corycera* Drake

Corycera Drake, 1922b:368. Type species: *Corycera comptula* Drake, original designation.

Corycera panamensis Drake and Poor

Corycera panamensis Drake and Poor, 1938:30 [new species-- Panama: Canal Zone].-- Monte, 1941b:86 [Panama].-- Hurd, 1946:458 [Panama].-- Drake and Ruhoff, 1965:134 [Canal Zone].

Genus *Corythaica* Stål

Corythaica Stål, 1873:120, 128. Type species: *Tingis monacha* Stål, monotypic.

Note: Hurd's (1945) "Monograph" of this genus contained a key (pages 81-82) to the 13 species.

Corythaica cyathicollis (Costa)

Tingis cyathicollis Costa, 1864:146 [new species-- no locality given].

Corythaica planaris-- Drake, 1932:100 [Red Tank, Canal Zone].-- Drake and Cobben, 1960b:89 [Panama].

Corythaica cyathicollis-- Drake and Ruhoff, 1965:137 [Canal Zone].

Genus *Corythucha* Stål

Corythucha Stål, 1873:119, 122. Type species: *Tingis fuscigera* Stål, designated by Van Duzee, 1916:25.

Corythucha gossypii (Fabricius)

Acanthia gossypii Fabricius, 1794:78 [new species-- "Americae meridionalis, Insulis Dom."].

Corythucha decens-- Champion, 1897:7 [Bugaba; Volcan de Chiriqui].

Corythucha gossypii-- Gibson, 1918:96 [Paraiso, Canal Zone].-- Leonard and Mills, 1931:309 [Bella Vista; Canal Zone].-- Monte, 1941b:90 [Bugaba; Paraiso].-- Drake and Ruhoff, 1965:150 [Panama].-- Lopez et al, 1982:19 [Panama].

Corythucha unifasciata Champion

Corythucha unifasciata Champion, 1897:7 [new species-- Mexico. Guatemala. Panama: Volcan de Chiriqui].-- Monte, 1941b:91 [Volcan de Chiriqui].-- Hurd, 1946:484 [Panama].-- Drake and Ruhoff, 1965:161 [Panama].

Genus *Dichocysta* Champion

Dichocysta Champion, 1898a:33. Type species: *Dichocysta pictipes* Champion, monotypic.

Dichocysta pictipes Champion

Dichocysta pictipes Champion, 1898a:34 [new species-- Panama: Bugaba; David; San Feliz].-- Heidemann, 1899:339 [Panama].-- Blatchley, 1926:485 [Panama].-- Monte, 1941b:153 [Bugaba; David; San Feliz].-- Hurd, 1946:454 [Panama].-- Drake and Ruhoff, 1965:178 [Panama].-- Froeschner, 1988h:721 [Panama].

Genus *Dictyla* Stål

Dictyla Stål, 1874b:57. Type species: *Monanthia platyoma* Fieber, monotypic.

Dictyla monotropidia (Stål)

Monanthia (Physatocheila) monotropidia Stål, 1860:63 [new species-- Brazil].

Monanthia monotropidia-- Champion, 1898a:47 [Bugaba; David; Taboga; Volcan de

Chiriqui].-- Drake, 1922b:354 [Panama]; 1932:100 [Gamboa].-- Fenton, 1934:199 [Panama].-- Drake and Poor, 1937b:301 [Panama].-- Monte, 1939:77 [Buaba; David; Taboga; Volcan de Chiriqui]; 1941b:124 [Panama].-- Hurd, 1946:451 [Panama].

Dictyla monotropidia.-- Drake and Ruhoff, 1965:190 [Panama].

Genus *Dicysta* Champion

Dicysta Champion, 1897:5. Type species: *Dicysta vitrea* Champion, monotypic.

Dicysta sagillata Drake

Dicysta sagillata Drake, 1922b:376 [new species-- Panama: Porto Bello].-- Hurd, 1946:478 [Panama].-- Drake and Ruhoff, 1965:199 [Porto Bello].

Dicysta vitrea Champion

Dicysta vitrea Champion, 1897:5 [new species-- Panama: Volcan de Chiriqui].-- Drake, 1922c:270 [Volcan de Chiriqui].-- Drake and Bondar, 1932:93 [Porto Bello].-- Monte, 1939:68 [Volcan de Chiriqui]; 1941b:93 [Volcan de Chiriqui].-- Hurd, 1946:478 [Panama].-- Kormilev, 1955c:67 [Volcan de Chiriqui].-- Drake and Ruhoff, 1965:199 [Volcan de Chiriqui].

Note: Drake (1922c:270) erred in placing the original locality "Volcan de Chiriqui" in Brazil instead of in Panama.

Genus *Eurypharsa* Stål

Eurypharsa Stål, 1873:122, 133. Type species: *Tingis nobilis* Guérin-Ménéville, monotypic.

Eurypharsa fenestrata Champion

Eurypharsa fenestratus Champion, 1898a:44 [new species-- Panama: Bugaba]; 1898b:64 [refers to this, without a name, as a "species described by me from the State of Panama"].-- Hurd, 1946:469 [Panama].-- Drake and Ruhoff, 1965:214 [Bugaba].

Genus *Gargaphia* Stål

Monanthia (*Gargaphia*) Stål, 1862b:324. Type species: *Monanthia patricia* Stål, designated by Van Duzee, 1916:25.

Gargaphia.-- Stål, 1873:119.

Gargaphia jucunda Drake and Hambleton

Gargaphia jucunda Drake and Hambleton, 1942:80 [new species-- Panama: Panama City].-- Hurd, 1946:480 [Panama].-- Drake and Ruhoff, 1965:226 [Panama City].

Gargaphia nigrinervis Stål

Gargaphia nigrinervis Stål, 1873:125 [new species-- Colombia].-- Champion, 1897:10 [Bugaba; David; San Lorenzo].-- Gibson, 1919b:192 [Panama].-- Drake and Poor, 1937b:311 [Panama].-- Monte, 1940a:104 [Panama]; 1941b:101 [Bugaba; David; San Lorenzo].-- Drake and Cobben, 1960b:87 [Panama].-- Drake and Ruhoff, 1965:228 [Panama].

].-- Fenton, 1934:199
1939:77 [Buaba; David;
5:451 [Panama].

typic.

-- Hurd, 1946:478

Chiriqui].-- Drake,
Porto Bello].-- Monte,
Chiriqui].-- Hurd, 1946:478
and Ruhoff, 1965:199

"de Chiriqui" in Brazil

neville, monotypic.

gaba]; 1898b:64 [refers
of Panama"].-- Hurd,

cia Stål, designated by

panama: Panama City].--
na City].

ion, 1897:10
a].-- Drake and Poor,
l [Bugaba; David; San
and Ruhoff, 1965:228

Gargaphia panamensis Champion

Gargaphia panamensis Champion, 1897:10 [new species-- Panama: Caldera in Chiriqui].-- Gibson, 1919b:190, 193 [Panama].-- Monte, 1941b:101 [Caldera in Chiriqui].-- Drake and Ruhoff, 1965:230 [Caldera, Chiriqui].

Gargaphia patricia (Stål)

Monanthia (Phyllontochila) patricia Stål, 1862b:324 [new species-- Mexico].
Gargaphia patricia.-- Champion, 1897:9 [Peña Blanca; Volcan de Chiriqui].-- Gibson, 1919b:196 [Panama].-- Drake and Ruhoff, 1965:231 [Panama].

Gargaphia paula Drake

Gargaphia paula Drake, 1939:68 [new species-- Panama: Barro Colorado Island, Canal Zone].-- Monte, 1941b:101 [Barro Colorado, Canal Zone].-- Hurd, 1946:480 [Canal Zone].-- Drake and Hambleton, 1945:366 [Canal Zone].-- Drake and Ruhoff, 1965:231 [Canal Zone].

Genus *Leptodictya* Stål

Leptodictya Stål, 1873:121, 127. Type species: *Monanthia ochropa* Stål, designated by Oshanin, 1912:45.

Leptodictya circumcincta Champion

Leptodictya circumcincta Champion, 1897:24 [new species-- Panama: San Feliz].-- Monte, 1941b:108 [San Feliz, Chiriqui].-- Hurd, 1946:453 [Panama].
Leptodictya fusca Drake, 1928:50 [new species-- Panama: Canal Zone].-- Hurd, 1946:453 [Panama].
Leptodictya (Hanuala) fusca.-- Drake, 1931b:121 [Panama].-- Monte, 1941b:108 [Canal Zone].
Leptodictya (Hanuala) circumcincta.-- Drake, 1931b:121 Panama].-- Drake and Ruhoff, 1965:261 [San Feliz].

Leptodictya evidens Drake

Leptodictya evidens Drake, 1928:49 [new species-- Panama: Tabernilla].-- Hurd, 1946:453 [Panama].
Leptodictya (Hanuala) evidens.-- Drake, 1931b:121 [Panama].-- Drake and Ruhoff, 1965:263 [Tabernilla].

Leptodictya tabida (Herrich-Schaeffer)

Monanthia tabida Herrich-Schaeffer, 1840:86 [new species-- Mexico].
Leptodictya tabida.-- Heidemann, 1913:249 [Panama].-- Nguyen and Hall, 1991:1 [Panama].
Leptodictya (Hanuala) tabida.-- Drake and Ruhoff, 1965:268 [Panama].

Genus *Leptopharsa* Stål

Leptopharsa Stål, 1873:122, 126. Type species: *Leptopharsa elegantula* Stål, designated by Drake, 1922b:370.

Leptopharsa constricta (Champion)

Leptostyla constricta Champion, 1897:20 [new species-- Guatemala. Panama: Bugaba].

Leptopharsa constricta.--Monte, 1941b:120 [Bugaba].-- Hurd, 1946:466 [Panama].-- Drake and Ruhoff, 1965:272 [Panama].

Leptopharsa divisa (Champion)

Leptostyla divisa Champion, 1897:19 [new species-- Panama: Volcan de Chiriqui].

Leptopharsa divisa.-- Monte, 1941b:120 [Volcan de Chiriqui].-- Hurd, 1946:466 [Panama].-- Drake and Ruhoff, 1965:273 [Volcan de Chiriqui].

Leptopharsa furculata (Champion)

Leptostyla furculata Champion, 1897:15 [new species-- Guatemala. Panama: Bugaba].

Leptopharsa furculata.-- Monte, 1941b:121 [Bugaba].-- Hurd, 1946:466 [Panama].-- Drake and Ruhoff, 1965:276 [Bugaba].

Leptopharsa vesiculosa.-- Monte, 1941b:121 [Bugaba].

Leptopharsa fuscofasciata (Champion)

Leptostyla fuscofasciata Champion, 1897:15 [new species-- Panama: Bugaba].

Leptopharsa fuscofasciata.-- Monte, 1941b:121 [Bugaba].-- Hurd, 1946:466 [Panama].-- Drake and Ruhoff, 1965:176 [Bugaba].

Leptopharsa setigera (Champion)

Leptostyla setigera Champion, 1897:14 [new species-- Panama: Bugaba].

Leptopharsa sitigera [sic].-- Monte, 1941b:121 [Bugaba (spelling of species name corrected to *setigera* in "Corrigenda")].

Leptopharsa setigera.-- Hurd, 1946:466 [Panama].-- Drake and Ruhoff, 1965:285 [Bugaba].

Leptopharsa unicarinata Champion

Leptopharsa unicarinata Champion, 1897:21 [new species-- Panama: Volcan de Chiriqui].-- Monte, 1941b:121 [Volcan de Chiriqui].-- Hurd, 1946:466 [Panama].-- Drake and Ruhoff, 1965:286 [Volcan de Chiriqui].

Leptopharsa zeteki Drake

Leptopharsa zeteki Drake, 1939:69 [new species-- Panama: Barro Colorado, Canal Zone; Colon, Canal Zone].-- Monte, 1941b:121 [Barro Colorado, Canal Zone].-- Hurd, 1946:466 [Panama].-- Drake and Ruhoff, 1965:287 [Barro Colorado, Canal Zone].

Genus *Leptoypa* Stål

Leptoypa Stål, 1873:121, 129. Type species: *Tingis mutica* Stål, monotypic.

Leptoypa morrisoni Drake

Leptoypa morrisoni Drake, 1922a:43 [new species-- Dominican Republic].-- Drake and Hambleton, 1939:155 [Canal Zone].-- Hurd, 1946:457 [Canal Zone].-- Drake and Ruhoff, 1965:290 [Canal Zone].-- Froeschner, 1988h:727 [Panama].

Genus *Macrotingis* Champion

Macrotingis Champion, 1897:22. Type species: *Macrotingis biseriata* Champion, designated by Drake and Poor, 1936:387.

Macrotingis biseriata Champion

Macrotingis biseriata Champion, 1897:22 [new species-- Panama: Volcan de Chiriqui].-- Monte, 1941b:154 [Bugaba; Volcan de Chiriqui].-- Hurd, 1946:469 [Panama].-- Drake and Ruhoff, 1965:294 [Panama].

Macrotingis zeteki Drake

Macrotingis zeteki Drake, 1950b:299 [new species-- Panama: Barro Colorado Island, Canal Zone].-- Drake and Ruhoff, 1965:294 [Barro Colorado, Canal Zone].

Genus *Megalocysta* Champion

Megalocysta Champion, 1897:5. Type species: *Megalocysta pellucida* Champion, monotypic.

Megalocysta pellucida Champion

Megalocysta pellucida Champion, 1897:6 [new species-- Panama: Volcan de Chiriqui].-- Drake, 1922a:38 [Panama].-- Monte, 1941b:123 [Bugaba; Volcan de Chiriqui]; 1942b:301 [Panama].-- Hurd, 1946:475 [Panama].-- Drake and Ruhoff, 1965:296 [Panama].

Genus *Phymacysta* Monte

Phymacysta Monte, 1942b:106. Type species: *Leptostyla tumida* Champion, monotypic.

Phymacysta tumida (Champion)

Leptostyla tumida Champion, 1897:13 [new species-- Guatemala].

Phymacysta tumida: Drake and Hambleton, 1945:362 [Panama].-- Drake and Ruhoff, 1965:327 [Panama].

Phymacysta vesiculosa (Champion)

Leptostyla vesiculosa Champion, 1897:13 [new species-- Panama: Bugaba].-- Monte, 1941b:121 [Bugaba].

Phymacysta vesiculosa.-- Hurd, 1946:477 [Panama].-- Drake and Ruhoff, 1965:328 [Bugaba].

Genus *Pleseobyrsa* Drake and Poor

Pleseobyrsa Drake and Poor, 1937a:165. Type species: *Pleseobyrsa boliviana* Drake and Poor, original designation.

Note: Froeschner (1991) reviewed this genus and gave a key (page 768) to its six species.

Pleseobyrsa chiriquensis (Champion)

Leptobyrsa chiriquensis Champion, 1897:27 [new species-- Panama: Bugaba; Volcan de Chiriqui].

Pleseobyrsa chiriquensis.-- Drake and Poor, 1937a:165 [Panama].-- Monte, 1941b:129 [Bugaba; Volcan de Chiriqui]; 1942a:97 [Bugaba; Volcan de Chiriqui].-- Hurd, 1946:471 [Panama].-- Drake and Ruhoff, 1965:342 [Panama].-- Froeschner, 1991:768 [Panama].

Pleseobyrsa nigriceps (Champion)

Leptobyrsa nigriceps Champion, 1897:27 [new species-- Guatemala. Panama: Volcan de Chiriqui].

Pleseobyrsa nigriceps.-- Drake and Poor, 1937a:165 [Panama].-- Monte, 1941b:129 [Panama].-- Hurd, 1946:471 [Panama].-- Drake and Ruhoff, 1965:342 [Panama].-- Froeschner, 1991:768 [Panama].

Genus *Stenocysta* Champion

Stenocysta Champion, 1897:28. Type species: *Stenocysta pilosa* Champion, monotypic.

Stenocysta pilosa Champion

Stenocysta pilosa Champion, 1897:29 [new species-- Panama: Bugaba].-- Monte, 1941b:132 [Bugaba].-- Hurd, 1946:473 [Panama].-- Drake and Ruhoff, 1965:353 [Bugaba].

Genus *Teleonemia* Costa

Teleonemia Costa, 1864:144. Type species: *Teleonemia funerea* Costa, monotypic.

Teleonemia atrata Champion

Teleonemia atrata Champion, 1898a:38 [new species-- Panama: Bugaba].-- Monte, 1941b:142 [Bugaba].-- Hurd, 1946:488 [Panama].-- Drake and Ruhoff, 1965:372 [Bugaba].

Teleonemia bifasciata Champion

Teleonemia bifasciata Champion, 1898a:38 [new species-- Guatemala. Panama: Bugaba].-- Kirkaldy, 1905a:216 [Panama].-- Drake and Hambleton, 1940:534 [Panama].-- Monte, 1941b:143 [Bugaba].-- Drake and Ruhoff, 1965:373 [Bugaba].

Teleonemia forticornis Champion

Teleonemia forticornis Champion, 1898a:36 [new species-- Panama: Bugaba].-- Drake and Poor, 1939b:95 [Panama].-- Monte, 1939:79 [Bugaba]; 1941b:136 [Bugaba; Paraiso].-- Hurd, 1946:448 [Panama].-- Drake and Ruhoff, 1965:375 [Bugaba].

Teleonemia notata Champion

Teleonemia notata Champion, 1898a:40 [new species-- Guatemala. Panama: Bugaba; San Miguel on Pearl Island; Volcan de Chiriqui].-- Monte, 1941b:143 [Bugaba; San Miguel on Pearl Island; Volcan de Chiriqui].-- Hurd, 1946:448 [Panama].-- Drake and Ruhoff, 1965:379 [Panama].

Teleonemia ochracea Champion

Teleonemia ochracea Champion, 1898a:36 [new species-- Panama: Volcan de Chiriqui].-- Monte, 1941b:143 [Volcan de Chiriqui].-- Hurd, 1946:448 [Panama].-- Drake and Ruhoff, 1965:380 [Volcan de Chiriqui].

Teleonemia picta Champion

Teleonemia picta Champion, 1898a:42 [new species-- Panama: Bugaba; Caldera].-- Monte, 1941b:143 [Bugaba; Caldera].-- Hurd, 1946:448 [Panama].-- Drake and Ruhoff, 1965:380 [Caldera].

Teleonemia prolixa (Stål)

Lacometopus prolixus Stål, 1860:65 [new species-- Brazil].

Teleonemia prolixa.-- Champion, 1898a:39 [Boquete; Bugaba; Tolé; Volcan de Chiriqui].-- Drake, 1932:100 [Barro Colorado].-- Drake and Poor, 1937b:304 [Panama].-- Drake and Ruhoff, 1965:380 [Panama].

Teleonemia rugosa Champion

Teleonemia rugosa Champion, 1898a:37 [new species-- Guatemala. Panama: Volcan de

Chiriqui].-- Monte, 1941b:143 [Volcan de Chiriqui].-- Hurd, 1946:448 [Panama].-- Drake and Ruhoff, 1965:381 [Panama].

Teleonemia sacchari (Fabricius)

Acanthia sacchari Fabricius, 1794:77 [new species-- "*Americae meridionales insulis*"].
Teleonemia sacchari.-- Drake, 1932:100 [Bella Vista].-- Monte, 1941b:139 [Bella Vista].--
 Drake and Cobben, 1960b:79 [Panama].-- Drake and Ruhoff, 1965:382 [Panama].

Teleonemia sandersi Drake and Hambleton

Teleonemia sandersi Drake and Hambleton, 1944:123 [new species-- Panama: Canal Zone].--
 Drake and Ruhoff, 1965:382 [Canal Zone].

Teleonemia scrupulosa Stål

Teleonemia scrupulosa Stål, 1873:132 [new species-- Colombia. Brazil].-- Champion, 1898a:40
 [Bugaba; Peña Blanca; San Lorenzo; Volcan de Chiriqui].-- Drake and Ruhoff, 1965:383
 [Panama].

Teleonemia tricolor (Mayr)

Monanthia (Gargaphia) tricolor Mayr, 1865:442 [new species-- Venezuela].
Teleonemia albomarginata Champion, 1898a:43 [new species-- Panama: Bugaba. Brazil].--
 Drake, 1922b:359 [Panama]; 1931a:226 [Panama]; 1932:100 [Barro Colorado].-- Monte,
 1939:79 [Bugaba]; 1941b:133 [Barro Colorado; Bugaba].-- Hurd, 1946:448 [Panama].
Teleonemia (Americia) albomarginata.-- Horvath, 1925a:219 [Panama].
Teleonemia tricolor.-- Drake and Ruhoff, 1965:385 [Panama].

Teleonemia validicornis Stål

Teleonemia validicornis Stål, 1873:132 [new species-- Colombia].-- Hurd, 1946:448
 [Panama].-- Drake and Cobben, 1960b:73 [Panama].-- Drake and Ruhoff, 1965:386
 [Panama].

Genus *Tigava* Stål

Tigava Stål, 1860:63. Type species: *Tigava praecellens* Stål, monotypic.

Tigava convexicollis Champion

Tigava convexicollis Champion, 1898a:33 [new species-- Panama: Volcan de Chiriqui].-- Drake
 and Hambleton, 1935:143 [Panama].-- Monte, 1941b:146 [Volcan de Chiriqui]; 1944:159
 [Panama].-- Hurd, 1946:499 [Panama].-- Drake and Ruhoff, 1965:388 [Volcan de
 Chiriqui].

Genus *Tingis* Fabricius

Tingis Fabricius, 1803:124. Type species: *Cimex cardui* Linnaeus, designated by Latreille,

:448 [Panama].-- Drake

1810:433, confirmed by Direction 4, International Commission on Zoological Nomenclature, 1954.

Tingis gamboana Drake and Hambleton

ales insulis".
b:139 [Bella Vista].--
65:382 [Panama].

Tingis gamboana Drake and Hambleton, 1945:357 [new species-- Panama: Gamboa, Canal Zone].

Tingis (Tropidocheila) gamboana.-- Hurd, 1946:465 [Panama].-- Drake and Ruhoff, 1965:410 [Gamboa, Canal Zone].

panama: Canal Zone].--

SUBFAMILY VIANAIDINAE KORMILEV

-- Champion, 1898a:40
e and Ruhoff, 1965:383

Štys and Kerzhner (1975) discussed the taxonomic level of this group and placed it at the family level; Schuh and J. Slater (1995:182) followed the Drake and Ruhoff (1965:443) catalog and treated it as a subfamily under the Tingidae. Two species have been described subsequent to Drake and Ruhoff's (1965:18) keying of the genera and species.

Genus *Anommatocoris* China

Anommatocoris China, 1945:126. Type species: *Anommatocoris minutissimus* China, original designation.

ela].
ma: Bugaba. Brazil].--
Barro Colorado].-- Monte,
d, 1946:448 [Panama].

Anommatocoris zeteki Drake and Froeschner

Anommatocoris zeteki Drake and Froeschner, 1962:8 [new species-- Panama: Barro Colorado Island].-- Drake and Ruhoff, 1965:444 [Barro Colorado Island].

d, 1946:448
and Ruhoff, 1965:386

FAMILY VELIIDAE AMYOT AND SERVILLE

Panama records listed below are for 36 species in five genera in three subfamilies. Schuh and Slater (1995:99) keyed five subfamilies. More described and undescribed species should be encountered in Panama.

SUBFAMILY MICROVELIINAE AMYOT AND SERVILLE

TRIBE MICROVELIINI AMYOT AND SERVILLE

Genus *Microvelia* Westwood

n de Chiriqui].-- Drake
n de Chiriqui]; 1944:159
1965:388 [Volcan de

Microvelia Westwood, 1834:647. Type species: *Velia (Microvelia) pulchella* Westwood, monotypic, as explained by Drake and Hussey (1955:96-97).

Note: Drake and Hussey (1955:113-115) listed 70 species of *Microvelia*, a number of which have since been transferred to other genera.

Microvelia albonotata Champion

nated by Latreille,

Microvelia albonotata Champion, 1898a:129 [new species-- Guatemala].-- Drake and Hussey, 1951b:137 [Panama].

Microvelia ancona Drake and Chapman

Microvelia ancona Drake and Chapman, 1954:153 [new species-- Panama: Ancon, Canal Zone].--Drake and Hussey, 1955:113 [Panama].-- J. Polhemus and D. Polhemus, 1991:213 [Panama map record].

Microvelia capitata Guérin-Méneville

Microvelia capitata Guérin-Méneville, 1857:417 [new species-- Cuba].-- Frick, 1949:77 [Balboa Heights; Chiva trail 4 mi from Balboa].

Microvelia intonsa Drake

Microvelia crinata Drake, 1951a:76, preoccupied [new species-- Panama: Barro Colorado Island, Canal Zone].

Microvelia intonsa Drake, 1951c:37 [proposed as new name for preoccupied *M. crinata* Drake].--Drake and Hussey, 1955:114 [Panama].

Microvelia limaiana Drake

Microvelia limaiana Drake, 1951a:79 [new species-- Panama: Barro Colorado, Canal Zone. Brazil].-- Drake and Hussey, 1955:114 [Panama].

Microvelia marginata Uhler

Microvelia marginata Uhler, 1893:719 [new species-- St. Vincent].-- Drake and Hussey, 1951b:139 [Barro Colorado, Canal Zone]; 1955:114 [Panama].

Microvelia mimula White

Microvelia mimula White, 1879c:487 [new species-- Brazil].-- Drake and Hussey, 1955:114 [Panama].-- Nieser, 1977c:357 [Panama].

Microvelia munda Drake

Microvelia munda Drake, 1951a:75 [new species-- Panama: Canal Zone].-- Drake and Hussey, 1955:114 [Panama].

Microvelia panamensis Champion

Microvelia panamensis Champion, 1898a:128 [new species-- Panama: David; Volcan de Chiriqui].-- Kirkaldy and Torre-Bueno, 1909:207 [Panama].-- Drake and Hussey, 1955:114 [Panama].-- Torre-Bueno, 1924:194 [Panama].

Microvelia paura J. Polhemus

Microvelia paura J. Polhemus, 1974:213 [new species-- Mexico. El Salvador. Panama: Cerro Campana].

Microvelia summersi Drake and Harris

Microvelia summersi Drake and Harris, 1928b:8 [new species-- Grenada, West Indies].-- Drake and Hussey, 1951b:137 [Canal Zone]; 1955:115 [Panama].

SUBFAMILY RHAGOVELIINAE CHINA AND USINGER

Genus *Rhagovelia* Mayr

Rhagovelia Mayr, 1865:445. Type species: *Velia nigricans* Burmeister, designated by Kirkaldy, 1901:285.

Note: Bacon's (1956) revision of this genus gave keys to species-groups and the species within each. A morphological study supplemental to Bacon's (above) paper was presented by Matsuda (1956). D. Polhemus (1997) provided an analysis of *Rhagovelia* species, except the "angustipes complex," and gave keys to 94 species, leaving two unplaced names; he also reduced *Trochopus* Carpenter (1898a:78) to a junior synonym of *Rhagovelia*.

Rhagovelia acuminata Bacon

Rhagovelia acuminata Bacon, 1956:817 [new species-- Panama: Potrerillos].-- D. Polhemus, 1997:214 [Chiriqui (Santa Clara; 1 km E Jaramillo)].

Rhagovelia angustipes Uhler

Rhagovelia angustipes Uhler, 1894a:215 [new species-- Grenada].-- Kirkaldy, 1899a:1 [Darien]; 1899b:2 [Darien].-- Kirkaldy and Torre-Bueno, 1909:205 [Panama].-- Gould, 1931:15 [Panama].-- Bacon, 1956:713 [Panama].

Rhagovelia calopa Drake and Harris

Rhagovelia calopa Drake and Harris, 1927:135 [new species-- Guatemala].-- Bacon, 1956:718 [Coiba; Fort Clapton, Canal Zone].

Rhagovelia chiriqui D. Polhemus

Rhagovelia chiriqui D. Polhemus, 1997:95 [new species-- Panama: Bocas del Toro (S. of Chiriqui Grande; 3.2 km N. of Continental Divide; 2.9 km E of Jaramillo Arriba)].

Rhagovelia citata Drake

Rhagovelia citata Drake, 1953:146 [new species-- Panama: Barro Colorado, Canal Zone. Venezuela].-- Bacon, 1956:879 [Canal Zone].-- Drake and Hussey, 1957:6 [Panama].-- D. Polhemus, 1997:225 [Canal Zone].

Rhagovelia crassipes Champion

Rhagovelia crassipes Champion, 1898a:133 [new species-- Panama: Peña Blanca; Tolé].-- Kirkaldy and Torre-Bueno, 1909:205 [Panama].-- Gould, 1931:25 [Panama].-- Bacon, 1956:783 [El Valle; Peña Blanca; Potrerillos; Tolé].-- D. Polhemus, 1997:226 [Canal Zone]

(Piña Road); Chiriqui; El Valle; Peña Blanca; Tole). Panama (Campana Hill; Cerro Campana)].

Rhagovelia elegans Uhler

Rhagovelia elegans Uhler, 1894a:216 [new species-- Grenada].-- D. Polhemus, 1997:119 [Bocas del Toro (Nessin's Farm; Silencia Arriba). Canal Zone (Barro Colorado; Gamboa). Panama (Altos del Cerro Azul; Pearl Islands; Taboga Island). Trinidad River].

Rhagovelia insularis Champion, 1898a:139 [new species-- Panama; San Miguel on Pearl Islands].--Kirkaldy and Torre-Bueno, 1909:206 [Panama].-- Gould, 1931:34 [Panama].-- Drake, 1948:141 [Barro Colorado Island; Pearl Islands].-- Bacon, 1956:772 [Barro Colorado, Canal Zone; Fort Clayton, Canal Zone; San Miguel in Pearl Islands; Taboga Is.].

Note: *R. insularis* Champion synonymized by D. Polhemus (1997:119).

Rhagovelia femoralis Champion

Rhagovelia femoralis Champion, 1898a:134 [new species-- Panama: Peña Blanca].-- Kirkaldy and Torre-Bueno, 1909:206 [Panama].-- Gould, 1931:30 [Panama].-- Bacon, 1956:786 [Peña Blanca; Potrerillos].-- D. Polhemus, 1997:97 [Bocas del Toro (6.6 km N of Continental Divide on road to Chiriqui Grande). Chiriqui (1 km E of Jaramillo; Pena Blanca; Reserva Fortuna). Cocle (El Valle). Panama Pena Road to Cerro Campana). San Blas (Pena Road). San Blas (5 km E of Nusagandi). Veraguas (nr. Santa Fe)].

Rhagovelia henryi D. Polhemus

Rhagovelia henryi D. Polhemus, 1997:101 [new species-- Panama: Canal Zone (Barro Colorado). Brazil].

Note: D. Polhemus (1997:102) questioned the accuracy of the labels on the above Panama specimens.

Rhagovelia johnpolhemi D. Polhemus

Rhagovelia johnpolhemi D. Polhemus, 1997:156 [new species-- Costa Rica. Panamá: Panama (stream to Cerro Campana)].

Rhagovelia merga Bacon

Rhagovelia merga Bacon, 1956:774 [new species-- Panama: Boquete, Chiriqui Prov.].-- D. Polhemus, 1997:123 [Chiriqui (Boquete; 3.2 km NE of Cerro Punta)].

Rhagovelia panamensis D. Polhemus

Rhagovelia panamensis D. Polhemus, 1977:246 [new species-- Panama: Canal Zone (La Cascada, 4 km S of Maria Eugenia); Cocle (4.5 km E of El Valle); Panama (3 km S of Ipete); Veraguas (nr Santa Fe)].

Rhagovelia plumbea Uhler

Rhagovelia plumbea Uhler, 1894a:217 [new species-- United States of America. Grenada.

Island of St. Vincent].

Rhagovelia salina.-- Gould, 1931:34 [Panama].

Notes: (1) Drake and Harris (1935b:35) wrote that University of Kansas specimens identified as *R. salina* by Gould (1931:41) were in reality specimens of *T. plumbea*, but they did not say if these specimens included his Panamanian material. (2) Drake and Doesburg (1966:68) again cited Gould's (1931 above) listing of *R. salina* in the synonymy under *T. plumbeus* but did not include Panama in their distribution for that species. (2) The general distribution given for *T. plumbeus* in the latter paper extended from the United States into the West Indies and through Central America to Venezuela and thus implies its occurrence in Panama. (3) D. Polhemus (1997:379) transferred *plumbea* to *Rhagovelia* when he made *Trochopus* a junior synonym of *Rhagovelia*.

Rhagovelia salina (Champion)

Trochopus salinus Champion, 1898a:140 [new species-- Panama: San Miguel in the Pearl Islands].-- Drake and Doesburg, 1966:72 [San Miguel, Pearl Islands; "Old Panama"].

Rhagovelia salinus.-- Kirkaldy and Torre-Bueno, 1909:206 [Panama].-- Gould, 1931:41.-- Bacon, 1956:736 [San Miguel, Pearl Islands].-- J. Polhemus and Manzano, 1992:320 [Old Panama City; San Miguel on Pearl Island].

Notes: (1) See "Notes" under *S. plumbea* (above) for Gould's (1931:42) "Panama" records. (2) D. Polhemus (1997:379) transferred *salina* to *Rhagovelia* when he made *Trochopus* a junior synonym of *Rhagovelia*.

Rhagovelia scabra Bacon

Rhagovelia scabra Bacon, 1956:831 [new species-- Costa Rica. Panama: Potrerillos].-- D. Polhemus, 1997:257 [Chiriqui (Bambito; Boquet; 1 km E of Jaramillo; 2 km NE of Piedra de Candela; Reserva La Fortuna; Rio Caldera; Rio Candela; Santa Clara)].

Rhagovelia stibea Drake

Rhagovelia stibea Drake, 1958:138 [new species-- Panama: Canal Zone].

Rhagovelia tantilla Drake and Harris

Rhagovelia tantilla Drake and Harris, 1933:49 [new species-- British Honduras].-- Bacon, 1956:739 [Fort Clayton, Canal; Zone].

Rhagovelia uncinata Champion

Rhagovelia uncinata Champion, 1898a:138 [new species-- Panama: Bugaba].-- Kirkaldy and Torre-Bueno, 1909:206 [Panama].-- Gould, 1931:46 [Panama].-- Hungerford, 1939:588 [Panama]; 1944:129 [Panama].-- Drake, 1948:141 [Panama].-- Bacon, 1956:776 [Bugaba; El Valle].-- D. Polhemus, 1997:124 [Bocas del Toro (Oyo de Agua), Canal Zone (Barro Colorado Island). Chiriqui (Balnero). Cocle (El Valle). Panama (3 km S of Ipeti Colono)].

Rhagovelia venezuelana D. Polhemus

Rhagovelia venezuelana D. Polhemus, 1997:175 [new species-- Venezuela. Colombia. Panama: Canal Zone].

Note: D. Polhemus (1997:above) expressed doubt about the Panamanian specimens being properly labelled.

Rhagovelia zeteki Drake

Rhagovelia zeteki Drake, 1953:145 [new species-- Panama: Barro Colorado Island, Canal Zone].-- Bacon, 1956:887 [Barro Colorado, Canal Zone].-- D. Polhemus, 1997:181 [Canal Zone (Barro Colorado Island; at km 7.3 on Pipeline Road), Panama (Altos del Cerro Azul; 3 km S of Ipete on Darien Road)].

SUBFAMILY VELIINAE AMYOT AND SERVILLE

Andersen (1981b:355) provided a key to the seven genera and four subgenera of this subfamily.

Genus *Paravelia* Breddin

Paravelia Breddin, 1898:159. Type species: *Velia basalis* Spinola, original designation.

Notes: (1) J. Polhemus (1976a:509) revalidated the genus and listed (pages 512-513) the 41 species. (2) J. Polhemus and D. Polhemus (1993a) removed nine species to their new genus *Platyvelia* and five species to their new genus *Steinovelia*.

Paravelia recens (Drake and Harris)

Velia recens Drake and Harris, 1935a:192 [new species-- Panama: Monte Sirio, Gatuneillo, Canal Zone; Porto Bello].-- Drake and Maldonado, 1952:47 [Panama].-- Drake and Hussey, 1954:133 [Panama].

Paravelia recens.-- J. Polhemus, 1976a:512 [Panama].-- Nieser and Alkins-Koo, 1991:62 [Panama].-- J. Polhemus and D. Polhemus, 1991a:210 [Canal Zone: Monte Sirio, Gatuneillo River].

Paravelia virtutis (Drake and Harris)

Velia virtutis Drake and Harris, 1935a:191 [new species-- Panama: Barro Colorado Island; Port Sherman, Canal Zone; Tobago Island].

Paravelia virtutis.-- J. Polhemus and D. Polhemus, 1984:339 [Panama].

Genus *Platyvelia* J. Polhemus and D. Polhemus

Platyvelia J. Polhemus and D. Polhemus, 1993a:391. Type species: *Velia brachialis* Stål, original designation.

Note: The paper with the original description of this genus contained (page 394) a list of its nine species.

Platyvelia brachialis (Stål)

Velia brachialis Stål, 1860:82 [new species-- Brazil].-- Champion, 1898a:141 [Panama City].-- Kirkaldy and Torre-Bueno, 1909:204 [Panama].-- Blatchley, 1926:1001 [Panama].

Note: J. Polhemus and D. Polhemus (1993a:394) transferred this species to *Platyvelia*.

Platyvelia egregia (Drake and Harris)

Velia egregia Drake and Harris, 1935a:192 [new species-- Costa Rica. Panama: Juan Dic; Las Gracias].

Paravelia egregia-- J. Polhemus, 1976a:512 [Panama].

Platyvelia egregia-- J. Polhemus and D. Polhemus, 1993a:394.

Genus *Stridulivelia* Hungerford

Velia (*Stridulivelia*) Hungerford, 1929b:55. Type species: *Velia raspa* Hungerford, original designation.

Stridulivelia-- J. Polhemus, 1976a:509.

Note: Drake and Menke (1962:415) presented a key to the four species of the *Stridulivelia* occurring in Middle America.

Stridulivelia cinctipes (Champion)

Velia cinctipes Champion, 1898a:143 [new species-- Panama: Panama City].-- Kirkaldy and Torre-Bueno, 1909:205 [Panama].

Velia (*Stridulivelia*) *cinctipes*-- Drake and Menke, 1962:416 [Panama City].

Note: The combination *Stridulivelia cinctipes* was implied by J. Polhemus (1976a:509) when he elevated *Stridulivelia* to full generic status.

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