Heteroptera or True Bugs of Ecuador: A Partial Catalog

RICHARD C. FROESCHNER

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S. Dillon Ripley  
Secretary  
Smithsonian Institution
Heteroptera or True Bugs of Ecuador: A Partial Catalog

Richard C. Froeschner
ABSTRACT

Froeschner, Richard C. Heteroptera or True Bugs of Ecuador: A Partial Catalog. *Smithsonian Contributions to Zoology*, number 322, 147 pages, 1981.—This catalog lists a total of 584 species in 290 genera: from continental Ecuador, 496 species in 264 genera; from the Galapagos Islands, 101 species in 57 genera with just 3 genera restricted to those islands. Only 13 species are reported for both areas. For continental Ecuador the numbers appear to represent a small fraction of probable forms; for the Galapagos Islands the number of species represents a doubling during the dozen years since Linsley and Usinger's 1966 report of 43 species of Heteroptera from those islands. Inclusion of most species is based on literature records only, sometimes with additional data, and not a few species are included solely on specimen records. Zoogeographical conclusions are mostly deferred until further planned collecting reveals more fully the Ecuadorian fauna. Three nomenclatorial innovations are included: (1) Signoret's *Pangaeus vicinus*, described from Ecuador, is transferred from synonymy under the North American *Pangaeus bilineatus* (Say) to synonymy under the common South American *Pangaeus aethiops* (Fabricius); (2) *Ectrichodia geniculosa* Walker, described from Ecuador, is transferred for convenience to the new combination *Rhiginia geniculosa*; and (3) the spelling of the Tingidae tribal name Phatnomini is emended to Phatnomatini.
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Heteroptera or True Bugs of Ecuador: A Partial Catalog

Richard C. Froeschner

Introduction

The list offered here is a contribution toward a catalog, admittedly still very incomplete, of the Heteroptera of Ecuador, including the Galapagos Islands. Its preparation was prompted by the challenges encountered in attempting to identify heteropterous specimens captured during the Ecuador-Peace Corps-Smithsonian Institution Aquatic Insect Survey under the directorship of Dr. Paul J. Spangler of the Smithsonian Institution.

The list includes all literature records of Ecuadorian occurrence I have encountered plus the first reports on specimens of some of the terrestrial Heteroptera collected on the first two field trips of the survey. No new species are described herein; they will be made known in subsequent papers after allowing reasonable time for larger series to be collected. Also being worked for future publications are the aquatic forms. Additional collecting is planned and will be reported on later. As the list now stands it contains 584 identified species, of which 101 are known from the Galapagos Islands. Only 13 species, or about 2% of the total, are known from both areas.

Comparison of the 507 species of Heteroptera here recorded for continental Ecuador with numbers of species of that order for certain well-collected areas might be of interest and should indicate how much remains to be done to reveal fully the Heteroptera fauna of that physiographically and ecologically varied land. Unfortunately, there are no well-worked recent Heteroptera lists for tropical countries, so the comparison must be made with some of the better collected areas in the temperate part of the world. Accepting in a broad sense the observation that numbers of species in a group increases equatorward, one should certainly expect the Heteroptera fauna of Ecuador, which lies astride the Equator, to exceed that of temperate region areas like New York, which lies poleward of the 41st line of north latitude and occupies about half the area. At the same time, Ecuador, with its Andean elevations of more than 6100 meters, is subject to another generalization which notes that numbers of species decrease with increases in altitude.

<table>
<thead>
<tr>
<th>Area</th>
<th>Area (sq km)</th>
<th>Species</th>
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<tbody>
<tr>
<td>Ecuador</td>
<td>270,681</td>
<td>507</td>
</tr>
<tr>
<td>British Isles</td>
<td>312,755</td>
<td>509</td>
</tr>
<tr>
<td>Florida</td>
<td>151,670</td>
<td>548</td>
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<tr>
<td>New York</td>
<td>128,402</td>
<td>727</td>
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Zoogeographic Comments

The very incomplete state of our knowledge of the Heteroptera of continental Ecuador prevents serious efforts at zoogeographic conclusions based on that order of insects, conclusions that could err in making the absence of knowledge, rather than

negative evidence, into scientific fact. Instead, such incomplete knowledge does serve as a challenge for careful and sustained collecting.

Whymper (1891) early generalized that the western lowlands of Ecuador had already received significant attention from collectors, but the difficulties of travel prevented ready access to the mountainous areas; limited evidence revealed that as one ascended the mountains he found that the individual insects were noticeably smaller and duller and were to be found only by “diligent searching.” In comments about the Hemiptera (or “Rhynchota,” as he termed them), he remarked that a straggler of the genus *Emesa*, a thread-legged assassin bug (Reduviidae), was taken at an elevation of about 5200 meters (more than 300 meters above the tree line) and was the only living thing found at that altitude. He further noted that the interior of Ecuador is rich in this order of insects.

The heteropterous fauna of Ecuador should be quite similar to that of the neighboring countries with which most of it is tied by several north-south bands of physiographic provinces that extend well beyond its borders. In addition, the southwest corner of the country receives the northernmost termination of the coastal desert which then extends south along Peru and Chile, and the eastern edge of Ecuador reaches onto the lands surrounding the headwaters of many of the rivers of the extensive Amazonian region. Further discussion of faunal relationships are appropriately deferred until later in the survey when more specimen data are available.

In contrast to the fragmentary knowledge of Heteroptera for continental Ecuador, the long sustained and intense interest in the Galapagos Islands (resulting in part from the islands’ historical significance to Darwinism and in part from their own biogeographic peculiarities marked by many endemic species) has yielded much information about their heteropterous fauna. Darwin (1846:164) commented on the meager insect population of the islands, an observation which was corroborated by Banning (1933:18), who reported on the Hancock Expedition of 1933 to the Galapagos, and by Linsley and Usinger’s (1966) summary of the 618 species of insects of the Galapagos Islands including 43 species of Heteroptera. Linsley’s (1977) supplemental list plus the present catalog raises to 108 the number of species of Heteroptera on those islands—the number more than doubling in the dozen years since the 1966 list. Although many of these 108 species are known solely from the Galapagos Islands, only three of the heteropteran genera—*Darwinysius* Ashlock (Lygaeidae), *Galapagocoris* Carvalho (Miridae) and *Galapagomiris* Carvalho (Miridae)—are so restricted, a fact which supports the idea that the heteropterous fauna of these islands is in an early stage of evolution.

The origin of most of the Galapagos fauna is generally conceded to be in the Americas, especially in the tropical regions. Outstanding exceptions may be noted in Scudder’s (1957) comments that in the entire animal kingdom only two genera have a Galapagos-Old World distribution—one in the Mollusca and one in the Heteroptera (see family Stenocephalidae, genus *Dicranocephalus*). All other genera shared by the Old World and the Galapagos Islands have significant tropical American representation from which the Galapagos forms appear to have been derived. In spite of the general agreement that the Neotropics was the source of nearly all of the Galapagos biota, there exist many explanations as to how the ancestors of the present forms got there.

Agassiz (1892) described a means of passive migration when he reported that oceanic currents near Panama carried floating materials in excess of 100 kilometers per day toward the Cocos Islands and the Galapagos Islands.

Van Duzee (1937:112) generalized as follows:

The insect fauna of the Galapagos Islands is strictly tropical or subtropical American. Many of the species are identical, others, especially those that have migrated to the higher interior portions of the islands, have become differentiated into species more or less distinct from their continental relations. The area of distribution of the Galapagos insect fauna apparently embraces the West Indies and Panama with a smaller representation of the Peruvian and Ecuadorian fauna, possibly indicating a former land connection to the north rather than to the east.

In contrast, Van Dyke (1953:1-3) expressed
the belief that the Galapagos Islands were once fused with each other and with the continent and were separated by “subsidence of the intervening area between the Islands and the mainland.” He claimed support by proposing that the Galapagos beetle (Coleoptera) fauna was derived from “barren grounds of western South America, especially Ecuador and Peru,” and that the evolution within the beetle fauna took place after the physical land connections of the various units were broken.

Apparently the matter is quite complex, and the present Galapagos Heteroptera fauna has relationships with species now living in a variety of directions from the Galapagos Islands. For instance, Polhemus (1968) for the Saldidae, and Froeschner (1976) for the Tingidae concluded that the endemic species found on the Galapagos were probably derived from ancestral forms that gave rise to the mainland species from Ecuador and southward rather than northward. But Ashlock (1972) found for the Orsilline Lygaeidae that while some endemic species are related to Ecuadorian and Colombian forms, one has its closest relative on the Lesser Antillean island of Guadeloupe, and the two species of the endemic genus Darwinysius are closest to another genus endemic to the more southerly Juan Fernandez Islands in the Pacific Ocean, nearly 650 kilometers west of central Chile. But with our present fragmentary knowledge of South American Heteroptera, for both modern and fossil species, such conclusions can only be most tentative. There is certainly a possibility that an earlier continental fauna, perhaps even a pre-Andean one, may have been ancestral to species in all of South America and the Galapagos Islands before its own characteristics underwent changes forced by timely geological events—for evolution does involve time as well as organisms and geography.

Kuschel (1963:94) summarized his investigations on the Galapagos and certain other islands with the following comments:

All the basement rock now visible on the islands is volcanic and young in geologic time, probably of the late Pliocene [ascertained by Cox and Dalrymple, 1966, to be about 2.4 million years old], and the date of the origin of life on the Galapagos is still an open field for speculation for, while the sea bottom soundings have provided no evidence for the presence of emerged land of any sort between the continent and the islands during the late Tertiary, the greater part of the Galapagos fauna, if not all of it, is relatively young.

This relative recency of formation of the Galapagos fauna is also concluded by Carlquist (1974:4), who states that the islands are “relatively young, relatively poor ecologically,” and that “with the exception of Darwin finches, the Galapagos biota best serves to show earlier stages in the evolution of insular groups.”

**Literature Useful for the Study of the Heteroptera of Ecuador**

Catalogs of the entire order or significantly large parts thereof are few and obsolete. These were Amyot and Serville’s (1843) “Histoire naturelle des Hemipteres”; Dallas’ (1851–1852) “List of the Specimens of Hemipterous Insects in the Collection of the British Museum”; Dohrn’s (1859) “Catalogus Hemipterorum”; Walker’s (1867–1873) “Catalogue of the Hemiptera-Heteroptera in the Collection of the British Museum”; Stal’s (1870–1876) “Enumeratio Hemipterorum”; and Lethierry and Severin’s (1893–1896) three-part “Catalogue general des Hemiptères” with Bergroth’s (1908, 1913) supplements to the first two parts. All records for Ecuador and the Galapagos Islands found in the above items are cited in the present list.

There are no comprehensive manuals or keys for identifying the heteropterous fauna of South America. The most useful works for that purpose include Stal’s (1870–1876) now obsolete but still useful “Enumeratio Hemipterorum,” which contains many synopses of various groups offered in addition to the identification tables which he had scattered through his earlier studies—these earlier works containing keys to genera known to Stal will be referred to at the appropriate places in the following list. Other useful works on tropical American Heteroptera, but treating especially the Central American forms rather than the South American forms, are the two Rhynchotal parts of the *Biologia Centrali-Americana: part I* by Distant...
(1880–1893) and part II by Champion (1897–1901). These abundantly illustrated publications are of real value in gaining some appreciation for the habitus of each group, but in large part treat species which are geographically remote from the Ecuadorian insect fauna. Champion’s volume is more helpful than Distant’s because it includes keys for various groups and an index which also covers Distant’s volume. Bachman (1977) presented a bibliography of the aquatic Heteroptera of southern South America, many of the included references actually having wider application for that continent.

Keys to the families of Heteroptera can be found in textbooks, including Costa Lima’s (1940a:21–27) “Insectos do Brasil.” A comprehensive key to the families and subfamilies of the Heteroptera for the world was given by China and Miller (1959). Even though shifts of some of the categories up or down the taxonomic hierarchy have taken place, China and Miller’s work is still very useful, especially if used in conjunction with subsequent papers on the status of the family-groups. Stys and Kerzhner (1975) summarized much of the nomenclatorial information dealing with family names and higher categories.

Several authors provided more-or-less order-wide coverage of the Heteroptera for certain South American countries, but all these works are now obsolete as to species included and to nomenclature. The series of contributions for Argentina by Berg (1877–1899) are of limited value for Ecuador because of the geographical remoteness of that country and because the series contains no keys or identification tables; for the same country, Pennington (1920–1922) presented a list of 531 species of known occurrence and a synopsis, with keys, to the family Coreidae in the broad sense. The early growth of knowledge of the Heteroptera of Chile is reflected in the studies by Spinola (1852, with descriptions of certain forms by Blanchard), Signoret (1863b), and Reed (1898–1901). The last of these would be of some use in Ecuador because it is more comprehensive and because Reed added occasional keys.

Attempts at order-wide coverage (all without keys) for continental Ecuador appeared in the following papers. Whymper (1891) included in the appendix to his “Travels” part of an illustrated paper by Distant on the Heteroptera of Ecuador, but this paper must be used in conjunction with Distant’s (1893) later offering of original descriptions for the species designated as “new” in the 1891 paper [see below for explanation of this divided contribution]. Of special significance is a series of papers by Campos (1900–1932), especially his lists (1919 and 1925) summarizing the species he knew to occur in Ecuador. In these writings Campos sometimes mentioned specimens under the generic name without species identifications; examination of those specimens must be made to determine just which species were represented. Later Yust (1955, 1958) published lists of Ecuadorian insects, including Heteroptera, identified by himself or outside authorities. In the 1958 paper the pages were not numbered, but each species in each order received a number and often the prefix letter “L.” Yust explained that the prefix “L” meant “collected primarily in the coastal areas,” while those without that prefix were “primarily from the sierra.”

For the Galapagos Islands seven papers listing all the species of Heteroptera known from those islands at the time of publication were presented by Butler (1877), Barber (1925, 1934), Van Duzee (1933, 1937), Linsley and Usinger (1966), and Linsley (1977).

References to papers dealing with taxa for Ecuador or the Galapagos Islands at the family level or below will be presented at the appropriate places in the following list.

Comments on the Whymper-Distant matter mentioned above might save time and perplexity for future students. The list of “Rhynchota” offered by Whymper (1891:111–120) is clearly labelled as having been prepared by W. L. Distant. In a footnote to the title, Whymper wrote:

It was found necessary to publish Mr. Distant’s contribution to the “Supplementary Appendix to Travels Amongst the Great Andes of the Equator” upon December 17, 1886, in advance of the volume. It is stated, however, that this paper contains errors; and as it has not been found possible
either to obtain corrections of these errors, or the return of specimens upon which the descriptions were founded, the descriptions are now omitted.

In spite of the deletion of the formal descriptions, the designation “n. sp.” after various scientific names was retained. Where illustrations or adequate comparative statements accompanied these names the new species must be considered as valid from this work—as was done by Carvalho (1957-1960) in his world catalogue of the Miriidae—and in the absence of such characterization the species must be considered nomina nuda.

Whymper’s statement “found necessary to publish... upon December 17, 1886” is misleading. I found no evidence that such a Distant publication appeared in 1886. Instead, it was not until 1893 that Distant published the original descriptions with the following comments:

The following descriptions were written eight years ago at the request of Mr. Whymper for inclusion in the Natural History Appendix to his “Travels amongst the Great Andes of the Equator.” This publication appeared in the spring of the present year, and my species and genera are only indicated by name, as I was refused an opportunity of correcting proof with the woodcuts inserted in the text, and therefore declined to allow the sheets to go to press. It thus becomes a duty I owe to my brother students of the order to publish the full descriptions, while the above explanations will serve as comment to a footnote which Mr. Whymper has chosen to place to the first page of my contribution. I also correct some errors in what was thus printed without my supervision.

Distant, in this later paper, apparently believed that Whymper’s deletion of the formal description of the new categories made all those names manuscript names. This is evident in his treatment wherein all the new names (except that of Nezara nebulosa, a true nomen nudum without illustration or descriptive comments) were repeated with the notation “n. sp. [or gen. nov.], Dist. in Whym. Trav. Great Andes, Append., p....” He did not mark Nezara nebulosa in this fashion because, as he explained, further study had convinced him that the specimen actually represented “N. stictica Dallas,” the latter being catalogued below in the combination Pellaea stictica.

**Explanations for the Catalog**

The republic of Ecuador consists of two widely separated parts, the continental area and the Galapagos Islands, or Colon Territory, about 1000 kilometers west in the Pacific Ocean. Because of the special zoogeographic significance in this separation, the literature records of distribution given in the list below are presented either as “Ecuador” for the continental area or as “Galapagos Islands” for the archipelago.

The catalog is, for convenience of the user, arranged alphabetically by families (also subfamilies and tribes, if appropriate), genera, and species. It includes an entry for each family known to occur or likely to be found in Ecuador. Under each family are listed only those genera and species for which literature or specimen records are available.

In the synonymies under each species, for each case where the author was describing his material as a new species, the distributional data in the brackets includes the names of all countries from which the species was described and may include the word “type” or “lectotype” after the geographic name encompassing the type-locality—the absence of both these words signifies that I have not yet located literature evidence that the type-locality has been fixed further than was done by the original author.

Those citations not indicating an original description deal only with records containing mention of Ecuador or the Galapagos Islands, kept separate in this list; all other countries mentioned are simply grouped under the inclusive abbreviation “etc.”

Specimen records are given in a separate paragraph with the heading “Survey Collection.”

Undoubtedly, examination of more specimens and more intensive study on each group will change some of the names used here and will add others.

Keys for identification of South American (here usually including Trinidad) genera of certain groups are inserted in appropriate places in the catalog to expand its usefulness, especially for
recognition of local occurrence of genera not otherwise listed. Admittedly, inclusion of keys to all genera of Heteroptera from South America would be desirable, but due to the state of our knowledge of the order, preparation of such inclusive keys for all families would seriously delay making available the main offering of this publication—a preliminary list of species of Heteroptera known to occur in Ecuador. Additional keys are planned for subsequent papers.

Original taxonomic and nomenclatorial changes are kept to a minimum, but three seem necessary and are signaled here for attention: (1) transfer of Signoret’s *Pangaenus vicinus*, described from Ecuador, from synonymy under the North American *Pangaenus bilineatus* (Say) to synonymy under the common South American *Pangaenus aethiops* (Fabricius); (2) transfer, for convenience, of *Ectrichodia geniculosa* Walker to the new combination *Rhiginia geniculosa*; and (3) a necessary spelling emendation called to my attention by Mr. George Steyskal, Systematic Entomology Laboratory, United States Department of Agriculture: the gender of the generic name *Phatnoma* is neuter and its stem is *Phatnomat-*; hence the tribal name based on it must be *Phatnomatini*.

**Acknowledgments.**—Most of the specimens reported in this paper were collected by members of the cooperative Ecuador–Peace Corps–Smithsonian Institution Aquatic Insects Survey of Ecuador under the guidance of Paul J. Spangler of the Smithsonian Institution. The persons involved are listed below and are hereby gratefully thanked for their efforts to include Heteroptera among their captures. To conserve space, their names are omitted from the records in the text.

Host-Country (Ecuador) investigators: Jose Donoso, Central University, Quito; Julio Molineros, Ministry of Agriculture, Quito. Peace Corps personnel: Tomas Guerrero P., Program Manager, Agriculture (Ecuador); Philip Lopes, former Peace Corps Country Director for Ecuador; Jeffrey Cohen, volunteer, Andrea Langley, volunteer. Smithsonian Institution personnel: Carlynne Nicholas, William Rowe, James Sherburne, Paul J. Spangler, Phyllis M. Spangler, Hollis Williams. Voluntary aides: Ashley B. Gurney, Patricia M. Turner, Paul Monnig.

Special thanks are gladly offered to J. C. M. Carvalho, L. H. Rolston, J. A. Slater, and P. Wygodzinsky for answers to taxonomic questions; to J. L. Herring and P. J. Spangler for reviewing the manuscript and making valuable suggestions; to J. F. Marquart and his staff at the Smithsonian Library for providing publication information as well as obtaining books and journals; and to S. B. West for patient and accurate typing of the manuscript. I also wish to thank those colleagues who, over the years, have kindly remembered the Hemiptera Reprint File with copies of their publications—copies which aided immensely with solving many of the literature problems accompanying this study.

**Catalog**

**Family ACANTHOSOMATIDAE Signoret**

The three species in three genera here reported for continental Ecuador, none for the Galapagos Islands, probably do not comprise a complete listing of the local representation of the Acanthosomatidae. But the family is small, so relatively few additional species can be expected. Campos’ (1925a:53) record of two unidentified species of *Acanthosoma* from Ecuador cannot be placed in the current classification of this family without examination of his specimens. That genus is known only from the Old World, and the subfamily to which it belongs is not now recognized from the Neotropics.

The accompanying keys to the subfamilies and tribes in South America are adapted from Kumar’s (1974) revision of the family. The keys to the genera of the same area are adapted partly from that work, partly from Rolston and Kumar’s (1975) key to the genera of this family occurring in the Americas, and are in part based on original study of specimens.

Kumar (1974:3) explained why this family name should be credited to Signoret instead of to Stal as has generally been done.
Key to Subfamilies of Acanthosomatidae in South America

Abdominal venter at base with a prominent median tubercle or spine directed anteriorly .................................. Subfamily **Blaudusinæ** Kumar
Abdominal venter at base regularly convex, without a tubercle or spine ........................................ Subfamily **Ditomotarsinae** Signoret

**Subfamily Blaudusinæ** Kumar

Key to Tribes of Blaudusinæ in South America

Abdomen with medioventral basal spine extremely elongate, attaining or surpassing anterior margin of mesosternum . . . Tribe **Blaudusini** Kumar
Abdomen with medioventral basal spine not projecting, not attaining median coxae ....................................... Tribe **Lanopini** Kumar

**Tribe Blaudusinæ** Kumar

Key to Genera of Blaudusini in South America

Humeral angles prolonged laterally as horizontal lobes with anterior and posterior margin subparallel and apex obliquely truncated. Abdomen with mediobasal ventral spine projecting anteriorly, extending under head ................................................................. **Bebaeus** Dallas
Humeral angles not produced laterally. Abdomen with mediobasal ventral spine extending anteriorly only as far as anterior coxae ...... **Blaudus** Stal

**Genus Bebæus** Dallas

*Bebæus* Dallas, 1851:197 [type-species: *Bebæus punctipes* Dallas, only included species].

**Bebæus punctipes** Dallas

*Bebæus punctipes* Dallas, 1851:312 [Colombia (lectotype); Venezuela].

*Survey Collection.*—Although no specimens have been collected during the survey, the United States National Museum of Natural History has two specimens collected earlier in Ecuador: Guayas (Guayaquil, 7 Jun 1935); Tunguahura (Banos, 30 Feb 1937).

**Genus Blaudus** Stal

*Blaudus* Stal, 1872a:61 [type-species: *Blaudus ruficornis* Stal, only included species].—Kumar, 1974:32 [Kumar reported this genus from Colombia and Ecuador; since only one species is known for the genus, his records must pertain to it].

**Blaudus ruficornis** Stal

*Blaudus ruficornis* Stal, 1872a:62 [Colombia (type)].—Kumar, 1974:32 [Ecuador; etc.].

**Tribe Lanopini** Kumar

Key to Genera of Lanopini in South America

1. Juga surpassing and contiguous anterior to apex of clypeus ..............

................................................................. **Sniploa** Signoret
Juga surpassing clypeus or not, never convergent nor contiguous anterior to it ......................................................... 2

2(1). Osteolar peritreme elongate, extending much more than half way from osteolar pore to lateral margin of metapleuron .................. 3
Osteolar peritreme short, extending not more than half way from osteolar pore to lateral margin of metapleuron .................. 4

3(2). Pronotum with anterolateral margins strongly serrate. Antennal segment I not surpassing apex of head ............... Pseudobebaeus Distant Pronotum with anterolateral margins not serrate. Antennal segment I slightly surpassing apex of head .................. Phorbanta Stal

4(2). Pronotum with humeral angle broadly, triangually prominent, projecting laterad of costal margin by a distance about equal to width of an eye; posterior margin of projection sinuately concave ............................ Lanopis Signoret Pronotum with humeral angle not or only slightly (less than one-fourth width of an eye) projecting laterad of costal margin .................. 5

5(4). Metapleural evaporatorium (dulled area) broadly extending more than three-fourths of way across metapleuron. Abdomen with mediobasal ventral projection reduced to a blunt, low but distinct, thick tubercle not reaching between posterior coxae ............ Acrophyyma Bergroth Metapleural evaporatorium confined to basal third or less (sometimes only forming a narrow halo around osteolar peritreme) of metapleuron. Abdomen with mediobasal ventral process projecting distinctly between posterior coxae as an elongate, compressed spine ........ 6

6(5). Pronotum with anterolateral angle projecting laterally as a distinct but short acute angle. Body length larger, 7.5 mm. or longer .......... 7 Pronotum with anterolateral angle evenly rounded, not forming an acute angle. Body length shorter, 5.5 mm or less .......... Hellica Stal

7(6). Jugum strongly, gradually narrowing, its apex not wider than apex of clypeus. Antennal segment I short, not or scarcely surpassing apex of head ............................................. Sinopla Signoret Jugum weakly narrowing, apex distinctly wider than apex of clypeus. Antennal segment I longer, surpassing apex of head by about one-third its own length ................................. Ea Distant

Subfamily DITOMOTARSINAE Signoret

Tribe DITOMOTARSINI Signoret

Key to Genera of Ditomotarsini in South America

1. Antenna with segment I on apical half about twice as wide as on basal half; segment II thicker than a tibial diameter. Hemelytral membrane narrowly extending basad along costa to a point about opposite mid-length of corio-membranal suture .............. Cylindrocynema Mayr
Antenna with segment I cylindrical; segment II narrower than diameter of a tibia. Membrane not thus extended along costa ............... 2

2. Scutellum near base with a transverse calloused yellow or cream band reaching almost to lateral margins. Pronotum with strongly curved calloused yellow band connecting humeral angles and curving forward onto anterior pronotal lobe ............... Tolono Rolston and Kumar
Scutellum and pronotum without calloused bands described above ....... 3

3. Osteolar peritreme elongate, reaching at least half way from osteolar pore to lateral margin of metapleuron. Costal margin and narrow border each side of clavocorial suture calloused yellow or cream .... Hyperbius Stal
Osteolar peritreme short, reaching about one-third or less of the way from osteolar pore to lateral margin of metapleuron. Wings without yellow marks described above ........................................ 4

4. Juga strongly surpassing apex of clypeus, distinctly incurved and sometimes contiguous anterior to it .............. Mazanoma Rolston and Kumar
Juga weakly or not at all surpassing apex of clypeus, not incurved ....... 5

5. Antenna with segment I with one-half or more of its length projecting beyond apex of head ........................................ Planois Signoret
Antennal segment I with not more than one-third its length projecting beyond apex of head ........................................ 6

6. Prosternum with a broad, mediolongitudinal groove. Length of insect 12 mm or more ........................................ Nopalis Signoret
Prosternum convex, without a mediolongitudinal groove. Length of insect less than 10 mm ........................................ 7

7. Antennal segment I slightly surpassing apex of head. Head and pronotum not colored as in other half of couplet ........... Ditomotarsus Spinola
Antennal segment I in no part surpassing apex of head. Head dorsally and pronotum red, contrasting with greenish color of scutellum and corium ........................................ Praesus Stal

Genus Tolono Rolston and Kumar
Tolono Rolston and Kumar, 1975:275 [type-species: Tolono decoratus Rolston and Kumar, only included species].

Tolono decoratus Rolston and Kumar
Tolono decoratus Rolston and Kumar, 1975:276 [Ecuador (type)].

Family Alydidae Amyot and Serville
Listed below are nine species in six genera, all from continental Ecuador and none from the Galapagos Islands. These totals may or may not include the three unidentified species listed under the genus Alydus by Campos; examination of his specimens must be made before species recognition of them is possible. Additional species probably will be found.

The following keys to the subfamilies, tribes, and 11 genera occurring in South America were compiled from a variety of sources and checked against specimens where convenient to do so. At this time there is no modern treatment of the family as a unit; Ahmad (1965) revised the subfamily Leptocorisinae, and his conclusions are adopted here.
Key to Subfamilies of Alydidae

1. Posterior femur distinctly thicker than anterior or median femur, with a row of spines on posteroventral margin
   --------------------------- **ALYDINAE** Amyot and Serville
   Posterior femur not thicker than anterior or median femur, without spines ventrally
   --------------------------- 2

2(1). Head about two-thirds as wide as greatest pronotal width. Labial segment II distinctly shorter than segments III and IV combined
   --------------------------- **LEPTOCORISINAE** Stål
   Head nearly or quite as wide as greatest pronotal width. Labial segment II longer than segments III and IV combined
   --------------------------- **MICRELYTRINAE** Stål

Subfamily **ALYDINAE** Amyot and Serville

Key to Genera of Alydinae in South America

1. Posterior tibia moderately to strongly curved, apex compressed, prolonged ventroapically as a prominent angle or a distinct spine almost as long as midlength diameter of tibia
   --------------------------- 2
   Posterior tibia virtually straight, terete, ventroapically either unspined or with a very small spine
   --------------------------- 3

2(1). Posterior coxae separated by a space nearly or quite as great as transverse diameter of one coxa
   --------------------------- **Apidaurus** Stål
   Posterior coxae separated by a space no more than half as great as transverse diameter of one coxa
   --------------------------- **Hyalymenus** Amyot and Serville

3(1). Antennal segment I shorter than segment II
   --------------------------- **Alydus** Fabricius
   Antennal segment I subequal to or longer than segment II
   --------------------------- 4

4(3). Posterior tibia ventroapically with a short acute spine or tooth (best seen by looking along ventral margin toward apex)
   --------------------------- **Burtinus** Stål
   Posterior tibia not spined apically
   --------------------------- **Megalotomus** Fieber

Genus **Alydus** Fabricius

*Alydus* Fabricius, 1803:248 [type-species: *Cimex calcaratus* Linnaeus, fixed by Curtis, 1831:369].—Campos, 1919:56, 1925a:57; 1932b:14 [Campos reported a minimum of three unidentified species of "Alydus" from Ecuador; his specimens need reexamination].

**Hyalymenus** Amyot and Serville

*Alydus* Fabricius, 1843:223 [type-species: *Alydus dentatus* Fabricius, fixed by Van Duzee 1916:13].

*Hyalymenus pulcher* (Stål)

*Alydus pulcher* Stål 1854:235 [Honduras (type)].

"Hyalymenus" pulcher.—Campos 1919:55 [Ecuador].

Genus **Megalotomus** Fieber

*Megalotomus* Fieber, 1860:58 [type-species: *Alydus limbatus* Herrich-Schaeffer, a junior synonym of *Cimex junceus*, fixed by Oshanin, 1912:24].

*Megalotomus rufipes* (Westwood)

*Alydus rufipes* Westwood, 1842:19 [Central America (type)].

**Megalotomus rufipes** (Westwood)

Survey Collection.—Manabi (59 km W Santo Domingo de los Colorados, 8 May 1975). Unusual variation and great extent of geographic range are attributed to this tropical American species. The present identification, based on a lone female, needs verification by examination of a male.
Subfamily LEPTOCORISINAE Stal

Ahmad (1965) published a very useful illustrated revision of the subfamily Leptocorisinae of the world. The following key to tribes and genera known to occur in South America is adapted from that work.

Key to the Tribes and Genera of Leptocorisinae in South America

Juga exceeding greatly and nearly or quite contiguous anterior to clypeus. Dorsal surface of pronotum (in lateral view) nearly horizontal. Tribe LEPTOCORISINI Stal ..................................................... Stenocoris Burmeister

Juga shorter than clypeus. Dorsal surface of pronotum (in lateral view) ascending from collar to posterior lobe. Tribe NOLIPHINI Ahmad .............................................................. Lyrnessus Stal

Tribe LEPTOCORISINI Stal

Genus Stenocoris Burmeister


Stenocoris americanus Ahmad

Stenocoris "americana" Ahmad, 1965:34 [Ecuador (type)].

Survey Collection.—Guayas (5 km N San Pablo, 27 Feb 1976); Los Ríos (10 km N Babahoyo, 22 Jun 1975); Manabi (35 km SE Bahía de Caráquez, 10 May 1975; Santo Domingo de los Colorados, 8 May 1975).

Stenocoris fabricii Ahmad

Stenocoris (Oryzocoris) fabricii Ahmad, 1965:62 [Peru (type)].

Subfamily MICRELYTRINAE Stal

Kormilev (1953) reviewed the subfamily Micrelytrinae for Argentina and included (pp. 52–53) a key to the genera and species treated there. Combining that work with Stal’s (1872a:85–86) offering yielded the following key.

Key to Genera of Micrelytrinae in South America

1. Pronotum with posterolateral angle bearing dorsally a sharp, suberect to erect spine. Juga neither longer than tylius nor approaching each other above it ................................................................. 2
   2. Pronotum with posterolateral angle without a spine. Juga nearly or quite contiguous above deflexed clypeus ................................................................. 4

2(1). Scutellum with erect spine near apex (Caution! May be broken, look for hollow stub) ................................................................................................................. 3
   3. Scutellum without erect spine .................................................. Calamocoris Breddin

3(2). Labial segment I long, reaching or surpassing base of head. Osteolar peritreme with a strongly elevated sub-auricular process apically ........................................... Cydamus Stal
Labial segment I not surpassing posterior margin of eye. Osteolar peritreme without an elevated process apically. 

Trachelium Herrich-Schaeffer

4(1). Head with lateral margins (both anterior and posterior to eyes) parallel. Antennae shorter than length of body. Bactrophya Breddin

Head with lateral margins behind eyes converging posteriorly. Antennae longer than length of body. Bactrocoris Kormilev

Genus Bactrophya Breddin

Bactrophya Breddin, 1901b:53.

Bactrophya aequatoriana Breddin

Bactrophya aequatoriana Breddin, 1901b:53 [Ecuador (type)].—Bergroth, 1913:158 [Ecuador].

Genus Calamocoris Breddin

Calamocoris Breddin, 1901b:52.

Calamocoris erubescens Breddin

Calamocoris erubescens Breddin, 1901b:52 [Ecuador (type)].—Bergroth, 1913:158 [Ecuador].

Calamocoris nigrolimbatus Breddin

Calamocoris nigrolimbatus Breddin, 1901b:52 [Ecuador (type)].—Bergroth, 1913:158 [Ecuador].

Genus Cydamus Stal

Cydamus Stal, 1858:33 [type-species: Cydamus adspersipes Stal, only included species].

Cydamus inauratus Distant

Cydamus inauratus Distant, 1893a:374 [Panama (type)].

Survey Collection.—Pastas (12 km W Puyo, 5 Feb 1976); Tungurauna (32 km E Baños, 28 Jan 1976).

Family Anthocoridae Amyot and Serville

Listed below are seven species in six genera: two species for continental Ecuador and four others for the Galapagos Islands, the seventh species being reported for both areas. Certainly more species can be expected in the former.

The two comprehensive classical works on this family by Reuter (1884) and Poppius (1909b) were superseded by Carayon's (1972) redefinitions in the suprageneric classification of the family. A practical key to the nearly 20 genera known from South America is not readily made at this time. Herring (1966a) provided a list of this family as it occurs on the Galapagos Islands.

Subfamily Anthocorinae Amyot and Serville

Tribe Oriini Carayon

Genus Orius Wolff

Orius Wolff, 1811:161 [type-species: Salda nigra Wolff, original designation].—Herring, 1966b [revision of New World forms with key to species].

Orius florentiae Herring

Orius florentiae Herring, 1966a:1095 [Colombia (type); Ecuador; Bolivia; Peru].

Survey Collection.—Tungurahua (Baños, 24 Jan 1976, 2000 km elevation).

Subfamily Lasiochilinae Carayon

Genus Lasiochilus Reuter

Lasiochilus Reuter, 1871:562 [type-species: Lasiochilus pallidulus Reuter, only included species].

Lasiochilus pallidulus Reuter

Lasiochilus pallidulus Reuter, 1871:562 [United States (type)].—Herring 1966b:128 [Galapagos Islands; etc.].
Survey Collection.—Los Rios (Babahoyo, 21 Jun 1975; Quevedo, 11 May 1975).

Subfamily Lyctocorinae Reuter

Tribe Cardiastethini Carayon

Genus Alofa Herring
Alofa Herring, 1976:150 [type-species: Cardiastethus sodalis White, only included species.]

Alofa sodalis (White)
Cardiastethus sodalis White, 1878:372 [Hawaiian Islands (type)].
Buchananiella sodalis.—Herring, 1966a:127 [Galapagos Islands].

Genus Amphiareus Distant
Amphiareus Distant, 1904c:220 [type-species: Xylocoris fulvescens Walker, a junior synonym of Xylocoris constrictus Stal, the only included species].

Amphiareus constrictus (Stal)
Xylocoris constrictus Stal, 1858:44 [Brazil (type)].
Buchananiella constrictus.—Herring, 1966a:127 [Galapagos Islands; etc.].

Genus Brachysteles Mulsant and Rey
Brachysteles Mulsant and Rey, 1852:104 [type-species: Brachysteles pilosicornis Mulsant and Rey, a junior synonym of Anthocoris parvicornis Costa, only included species].—Campos, 1925a:61 [ Campos reported for Ecuador one unidentified species of this genus. As the modern concept of the genus restricts it to the Old World, Campos’ specimens must be reexamined to ascertain its correct generic and specific placements].

Genus Cardiastethus Fieber
Cardiastethus Fieber, 1860:266 [type-species: Cardiastethus luridellus Fieber, fixed by Kirkaldy 1906a:121].

Cardiastethus aequinoctialis Poppius
Cardiastethus aequinoctialis Poppius, 1909b:18 [Ecuador (type)].

Cardiastethus limbatellus (Stal)
Xylocoris limbatellus Stal, 1858:44 [Brazil (type)].
Cardiastethus limbatellus.—Herring, 1966a:127 [Galapagos Islands].

Tribe Scolopini Carayon

Genus Nidicola Harris and Drake
Nidicola Harris and Drake, 1941b:343 [type-species: Nidicola marginata Harris and Drake, only included species].—Drake and Herring, 1964 [revision of genus with key to species].

Nidicola mazda Herring
Nidicola mazda Herring, 1966a:129 [Galapagos Islands (type)].

Family Aradidae Spinola

The following list of 15 species of Aradidae in nine genera is undoubtedly far from a complete list for Ecuador. Exercise of the specialized collecting needed for obtaining insects of this group will certainly increase the list several fold.

The starting point for modern studies in South American Aradidae is Usinger and Matsuda’s (1959) monograph which incorporates and synthesizes the earlier literature with much original information and thought. It provides keys to the genera of the world and to the species of a number of genera. Numerous subsequent papers by Kormilev add South American genera and species not known at the time of Usinger and Matsuda’s study.

At this time a key to the more than fifty genera known to occur in South America is not practical.

Subfamily Aneurininae Douglas and Scott
Štys (1974) published notes on this subfamily and included a list of the species of the world.

Genus Aneurus Curtis
Aneurus Curtis, 1825:86 [type-species: Acanthia laevis Fabricius, only included species].
Aneurus equatoriensis Kormilev

*SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY*


Aneurus flavomaculatus Distant

*Aneurus flavomaculatus* Distant 1893b:92 [Ecuador (type). This species was listed for Ecuador by Distant, 1891:115, as a “n. sp.” but without description or figure, and hence was a nomen nudum there].—Lethierry and Severin, 1896:46 [Ecuador].—Campos, 1925a:62 [Ecuador].—Śtyś, 1974:102 [Ecuador].

Subfamily MEZIRINAE Amyot and Serville

Genus Dysodius Le Peletier and Serville

*Dysodius* Le Peletier and Serville, 1825:654 [type-species: *Acanthia lunata* Fabricius, only included species].—Champion, 1898:86 [key to four of the five species recognized in the genus *Dysodius*].

*Dysodius equatorianus* Kormilev

*Dysodius equatorianus* Kormilev, 1975:9 [Ecuador (type)].

*Dysodius lunatus* (Fabricius)

*Acanthia lunata* Fabricius, 1794:72 [“Indii” in error, type-locality corrected to South America by Fabricius, 1803:117].

*Dysodius lunatus*.—Campos, 1919:58 [Ecuador]; 1925a:61 [Ecuador].

Genus Mezira Amyot and Serville

*Mezira* Amyot and Serville, 1843:305 [type-species: *Mezira granulata* Amyot and Serville, preoccupied, a junior synonym of *Brachyrhynchus abdominalis* Stal, only included species].—Kormilev, 1971:282-292 [key to the species of *Mezira* in the Americas].

*Mezira equatoriana* Kormilev

*Mezira equatoriana* Kormilev, 1968:9 [Ecuador (type)].


*Mezira laeviventris* (Champion)

*Brachyrhynchus laeviventris* Champion, 1898:94 [Panama (type)].

*Mezira laeviventris*.—Kormilev, 1975:21 [Ecuador].

Mezira obscura (Distant)

*Cinyphus obscurus* Distant, 1891:115 [Ecuador (type); figured, but not described as a “n. sp.” Redescribed on the same material as a “n. sp.” under the same name by Distant, 1893b:91].—Campos, 1919:58 [Ecuador]; 1925a:6 [Ecuador].

*Brachyrhynchus obscurus*.—Lethierry and Severin, 1896:43 [Ecuador].


Genus Miorrhynchus Champion

*Miorrhynchus* Champion, 1898:75 [type-species: *Miorrhynchus longipes* Champion, only included species].—Kormilev, 1973b:744 [key to the species of *Miorrhynchus*].

*Miorrhynchus peruvianus* Kormilev

*Miorrhynchus peruvianus* Kormilev, 1960:4 [Peru (type)]; 1973b:744 [Ecuador; etc.].

Genus Nannium Bergroth

*Nannium Bergroth, 1898:100 [type-species: Nannium parvum Bergroth, original designation].

*Nannium elongatum* Bergroth

*Nannium elongatum* Bergroth, 1898:101 [Venezuela (type)].

Survey Collection.—Although no specimens have been collected during the survey, a specimen from Guayas (Guayaquil, May 1975) is in the United States National Museum.

Genus Neuroctenus Fieber

*Neuroctenus Fieber, 1861:34 [type-species: Neuroctenus brasiliensis Mayr, a junior synonym of *Brachyrhynchus punctulatus* Burmeister, fixed by Van Duzee, 1916:17].—Kormilev, 1973b:736-738 [key to the Neotropical species of *Neuroctenus*].

*Neuroctenus rossi* Kormilev

*Neuroctenus rossi* Kormilev, 1975:15 [Ecuador (type)].

*Neuroctenus schlingeri* Kormilev

*Neuroctenus schlingeri* Kormilev, 1975:14 [Peru (type); Ecuador].
Genus Notapictinus Usinger and Matsuda

*Notapictinus* Usinger and Matsuda, 1959:361 [type-species: *Pictinus dominicus* Usinger, original designation].—Kormilev, 1967:7-9 [key to the species of *Notapictinus* known at that time].

*Notapictinus equatoriensis* Kormilev

*Notapictinus equatoriensis* Kormilev, 1973a:438 [Ecuador (type)].

*Notapictinus quadraticeps* (Champion)

*Pictinus quadraticeps* Champion, 1898:83 [Panama (type)]. *Notapictinus quadraticeps*.—Kormilev, 1975:6 [Ecuador].

Genus Placogenys Usinger and Matsuda

*Placogenys* Usinger and Matsuda, 1959:352 [type-species: *Placogenys cockerelli* Usinger and Matsuda, only included species].—Kormilev, 1973a:436-437 [key to the species of *Placogenys*].

*Placogenys constrictus* Kormilev

*Placogenys constricta* Kormilev, 1973a:437 [Ecuador (type)].

Genus Ormenocoris Usinger and Matsuda

*Ormenocoris* Usinger and Matsuda, 1959:371 [type-species: *Ormenocoris stylatus* Usinger and Matsuda only included species; *Ormenocoris* contains only this one species].

*Ormenocoris stylatus* Usinger and Matsuda

*Ormenocoris stylatus* Usinger and Matsuda, 1959:373 [Ecuador (type)].

Family Belostomatidae Leach

The literature reports of Ecuadorian occurrence of five species in two genera of Belostomatidae probably does not represent the total numbers in the country—more than 50 species in three genera have been recorded for South America.

Significant family treatments of the Belostomatidae were given by Cummings (1933), and Lauck and Menke (1961). Those papers, particularly the latter, were the sources of information on which are based the keys offered below. In addition, a long series of papers by De Carlo contributed much to the taxonomy of various sections of the family, especially for South America.

Key to the Subfamilies and Genera of Belostomatidae in South America

1. Last pregenital segment (5th visible) of abdomen with 2 longitudinal sutures on each side between midline and spiracles (latter sometimes concealed by fine silken hairs) .......................... 2

2. Last abdominal segment of abdomen with but 1 longitudinal sulcus each side between midline and spiracles (latter sometimes concealed by fine silken hairs). Subfamily Belostomatinae Lauck and Menke ........................................ Belostoma Latreille

2. Anterior tarsus with 2 distinct segments; tarsal claws as long as or longer than vertical diameter of the supporting tarsal segment. Subfamily Lethocerinae Lauck and Menke ......................... Lethocerus Mayr

Anterior tarsus appearing unsegmented, the dividing suture vitrually or quite obliterated; tarsal claws vestigial, shorter than vertical diameter of supporting tarsal segment. Subfamily Horvathinae Lauck and Menke ........................................ Horvathinia Montandon
Subfamily BELOSTOMATINAE Lauck and Menke

Genus Belostoma Latreille

Belostoma Latreille, 1807:144 [type-species: Belostoma testaceopallidum Latreille, only included species].—Lauck, 1962-1964 [Lauck revised this genus in a series of papers containing keys to the species which he arranged in species-groups].

Belostoma asiaticum (Mayr)

Zaitha asiatica Mayr, 1863:354 ["Borneo" in error; lectotype is without a locality label].
Zaitha anura.—Distant, 1891:118 [Ecuador].
Belostoma species.—Brues, 1916:24 [Ecuador].
Zaitha boops.—Campos, 1919:49 [Ecuador].

Belostoma venezuela Lauck

Belostoma venezuela Lauck, 1962:76 [Venezuela (type); Ecuador].

Subfamily LETHOCERINAE Lauck and Menke

Genus Lethocerus Mayr

Lethocerus Mayr, 1852:15 [type-species: Lethocerus cordofanus Mayr, a junior synonym of Belostoma fakir Gistel; synonymized by Menke, 1976:176; only included species].—Brues 1916:160 [a "huge Belostoma" from Ecuador].—Cummings, 1933:198-199 [key to the species of Lethocerus known from the Western Hemisphere at the time].

Lethocerus annulipes (Herrich-Schaeffer)

Belostoma annulipes Herrich-Schaeffer, 1845:28 [South America (type)].—Uhler, 1869:326 [Ecuador].
Amorgius annulipes.—Campos, 1919:48 [Ecuador]; 1925b:46 [Ecuador].

Lethocerus camposi (Montandon)

Lethocerus camposi.—Cummings, 1933:204 [Ecuador].—De Carlo, 1964b:341 [Ecuador].
Lethocerus (Lethocerus) camposi.—Menke, 1963b:267 [Ecuador].

Lethocerus jimenezasuai De Carlo

Lethocerus jimenezasuai De Carlo, 1957:51 [Ecuador (type)].

Family BERYTIDAE Fieber

The present list contains Ecuadorian records of four species of Berytidae in three genera; of these, the single species known from the Galapagos Islands apparently has not been reported from the continent. Certainly others of the nearly 20 species in eight genera known from South America will be found in this country.

No comprehensive study of the family is extant. There are several regional synopses of which only Stusak and Cobben’s (1975) treats some Neotropical forms and those from the Netherlands Antilles. The partial key to South American genera given below was derived from a variety of sources, including the study of specimens.

Key to the Genera of Berytidae in South America

1. Pronotum with distinct long spines, sometimes only at each posterolateral angle .......................................................... 2
Pronotum without distinct spines ............................................. 4
2(1). Corium with veins bearing rows of long slender spines . . Hoplinus Stal
Corium without spines on veins ........................................... 3
3(2). Pronotum with a distinct spine on midline of anterior disc and 3 long tapering spines on posterior disc (1 at each posterolateral angle and 1 on midline) ........................................... Parajalysus Distant
Pronotum with posterior lobe bearing rows of spines along anterior and lateral margins and on midline .................. Acanthoberytus Stusak

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY
4(1). Pronotum with posterior margin broadly expanded, completely covering scutellum ................................................. *Xenoloma* Harris

Pronotum with posterior margin not broadly expanded, scutellum exposed ................................................. 5

5(4). Anterior pronotum with numerous calloused white tubercles ................................................................. *Phaconotus* Harris

Anterior pronotum without white tubercles .............................................. 6

6(5). Free part of osteolar peritreme with sulcus confined to lateral surface, with a stout spine projecting directly from its truncated apex .............................................

Free part of osteolar peritreme abruptly bent posteriorly, its sulcus extending along lateral surface of vertical part, thence following the convex side of the bend and ending dorsally ............................................. *Metacanthus* Costa and *Aknisus* McAtee

**Genus Aknisus** McAtee

*Aknisus* McAtee, 1919:81 [type-species: *Aknisus calvus* McAtee, by original designation].

*Aknisus galapagensis* Barber

*Jalysus* (*Metacanthus*) tenellus.—Heidemann, 1901:366 [Galapagos Islands].

*Aknisus galapagensis* Barber, 1934:284 [Galapagos Islands (type)].—Linsley and Usinger, 1966:134 [Galapagos Islands].

**Genus Jalysus** Stal


*Jalysus macer* (*Stal*)

*Metacanthus macer* Stal, 1859b:236 [Ecuador (type)]. Stal originally gave the source of his material as “Puna prope Guayaquil,” not Brazil as reported by Lethierry and Severin, 1894:132, and certain later authors.

*Jalysus sobrinus* Stal

*Jalysus sobrinus* Stal, 1862a:60 [Brazil (type)].—Pennington, 1918:336 [Ecuador; etc.].

*Survey Collection.*—Cotopaxi (117 km W Latacunca, 1 Jul 1975); Los Rios (46 km E Quevedo, 12 May 1977); Manabi (59 km W Sto. Domingo de los Colorados, May 1975); Pastaza (Puyo, 1–7 Feb 1976); Tungurahua (13 km E Baños, 22 Jan 1976).

**Genus Metacanthus** Costa

*Metacanthus* Costa, 1847:258 [type-species: *Brytus elegans* Costa, only included species].

*Metacanthus tenellus* Stal


*Jalysus tenellus.*—Stal, 1873:28 [Ecuador].—Barber, 1934:285 [Ecuador].—Harris, 1941:107 [Ecuador; etc.].

**Family CANOPIDAE** Amyot and Serville

Ecuadorian records are available for three species of the lone genus, *Canopus* Fabricius, of this family. McAtee and Malloch (1928a:12–14) furnished a key to the species of *Canopus*.

**Genus Canopus** Fabricius

*Canopus* Fabricius, 1803:27 [type-species, *Canopus obtectus* Fabricius, only included species].

*Canopus caesus* (Germar)

*Chlamocoris caesus* Germar, 1839b:23 [“Middle America” (type)].

*Canopus caesus.*—McAtee and Malloch, 1928a:17 [Ecuador; etc.].

*Canopus fabricii* McAtee and Malloch

*Canopus fabricii* McAtee and Malloch, 1928a:14 [Panama (type); Ecuador; etc.].
**Canopus germari** McAtee and Malloch

*Canopus germari* McAtee and Malloch, 1928a:15 [Ecuador (type); etc.].

**Family Ceratocombidae** Fieber

No records of Ceratocombidae for Ecuador or the Galapagos Islands have yet been found. Nevertheless, it is probable that still-undiscovered species of this family of tiny, poorly known bugs do occur in both places. So far, three species of the genus *Ceratocombus* Signoret (1852) are the only members of the family reported for South America.

Assignment of this group to family status follows Štyys (1970:41). His independent investigations on this family closely paralleled the appropriate parts of Emsley's (1969) study of the family Schizopteridae and its relatives, but differed principally in considering this group to represent a full family. The two papers mentioned above plus McAtee and Malloch's (1925a) paper form a helpful nucleus for studies in this family.

**Family Cimicidae** Latreille

To date there are records of two species of bed bugs, both in the genus *Cimex*, in Ecuador: the common bed bug, which also was reported from the Galapagos Islands, and the tropical bed bug.

Usinger (1966) presented a fully illustrated, broadly comprehensive monograph of the family Cimicidae. No effort is made here to abstract keys therefrom because the work is still available from the Thomas Say Foundation and is essential for any student of the group whether he be casually interested or vitally concerned. That work lists 11 species in eight genera for South America.

**Subfamily Cimicinae** Latreille

**Genus Cimex** Linnaeus


*Cimex hemipterus* (Fabricius)

*Acanthia hemiptera* Fabricius, 1803:113 [South America (type)].

*Cimex rotundatus*—Campos, 1925a:1961 [Ecuador].

**Cimex lectularius** Linnaeus


**Family Colobathristidae** Stal

Only one species has been reported as possibly from continental Ecuador, and none have been listed for the Galapagos Islands. At least several more of the approximately 40 species in 11 genera that have been attributed to South America will eventually be found in continental Ecuador.

The following key to South American genera of Colobathristidae was based in part on the generic keys by Horvath (1904:118–120) and Kormilev (1951:82–83) and in part on the study of specimens.

**Key to Genera of Colobathristidae Occurring in South America**

1. Head laterally ventrad of eye with a bare, elevated, curved, cross striate stridular ridge .................................................. 2
   Head laterally ventrad of eye without such a stridular ridge .............. 7
2(1). Scutellum apically with a distinct erect or suberect spine longer than scutellum [Caution! Spine may be broken off; look for hollow stub] .................................................. 3
   Scutellum apically unarmed or with a horizontal spine shorter than scutellum .................................................. 6
3(2). Ocelli far apart, space between them equal to or greater than distance from ocellus to eye. Head between ocelli with a sharp T-shape sulcus, its stem extending anteriorly along median line ........................................... *Discopoea* Horvath

Ocelli close together, space between them much less than distance from ocellus to eye. Head without above described T-shaped sulcus, but may have a median or approximate pair of short sulci anterior to ocellus .............................................................. 4

4(3). Vertex anterior to ocelli with 2 close-set parallel or convergent short, sharp sulci. Antennal segment IV longer than III ................. 5

Vertex anterior to ocelli with a single median sulcus. Antennal segments IV and III subequal in length .................. *Calliseidus* Horvath

5(4). Antennal segment IV with a broad white ring basally. Scutellar spine without hairs ...................... *Neocolobathristes* Kormilev

Antennal segment IV unicolorous, without a basal white ring. Scutellar spine with numerous long suberect hairs .. *Trichocentrus* Horvath

6(2). Anterior tibia along anteroventral margin with a series of distinct, triangular spines. Pronotum with anterior lobe weakly to strongly gibbosely swollen ........................................... *Peruda* Distant

Anterior tibia not spined as above. Pronotum with anterior lobe not swollen ........................................... *Perudella* Kormilev

7(1). Scutellum apically with an erect or suberect spine longer than the scutellum [Caution: Spine may be broken off; look for hollow stub] .......................................................... 8

Scutellum apically without an erect or suberect spine, sometimes with a horizontal spine shorter than the scutellum .................. 9

8(7). Male with eight sternite (first genital segment) posteriorly strongly produced as a prominent acute angle ventrad of the genital capsule. Space between ocelli about half the space between an ocellus and the nearest eye. Labial segment III shorter than IV ...................................................... *Carvalhoia* Kormilev

Male with eight sternite not angularly produced. Space between ocelli equal to or slightly less than space between an ocellus and nearest eye. Labial segments III and IV subequal in length. .......................................................... *Colobathristes* Burmeister

9(7). Vertex immediately anterior to ocelli with a single short sulcus along midline. Space between ocelli greater than space between an ocellus and nearest eye ........................................... *Labradoria* Kormilev

Vertex immediately anterior to ocelli with 2 close-set [but not on midline] sulci or fovea. Space between ocelli equal to or less than space between an ocellus and nearest eye .................. 10

10(9). Abdomen broad, the connexivum widely exposed on each side of combined hemelytra at rest. Anterior femur ventrally with several irregular rows of fine but distinct denticles for full length in addition to the strong subapical spine ................. *Piptocentrus* Horvath
Abdomen across connexiva narrower than combined hemelytra at rest. Anterior femur ventral with no or very few extremely fine denticles in addition to the strong subapical spine ... **Colobasiastes** Breddin

### Genus *Peruda* Distant

*Peruda* Distant, 1888:x (type-species, *Peruda typica* Distant, only included species).—Kormilev, 1949:382 [key to the species of *Peruda*].

### *Peruda monrosi* Kormilev

*Peruda monrosi* Kormilev, 1949:378 (“Patria ignota (probablemente Peru o Ecuador)”)

### Family Coreidae Leach

The Coreidae, one of the large families of Heteroptera, is represented in the following list by 58 species in 30 genera for continental Ecuador and but one species for the Galapagos Islands. Certainly, many additional species will be found in mainland Ecuador. Without a modern catalog of this family, an estimation of the South American genera and species is difficult to make, but these numbers would certainly include a minimum of 100 genera.

The classical classification of the Coreidae, the one followed most closely here, is Stal’s (1870, 1873) “Enumeratio” catalog (and its supporting literature) which has served as a base for approximately a century. Subsequent studies suggesting changes to be made in the classification are usually too fragmentary in their coverage of genera for complete acceptance. The most recent consideration for the Coreidae is Schaefer’s (1964, 1965, and 1968) four-part study on “The Morphology and Higher Classification of the Coreoidea.” The structures used there suggested several changes in arrangement of forms, but since some of those characters are not readily available on undissected specimens and because some of the changes presented as desirable were not formalized by taxonomic names, the results are inappropriate for inclusion here.

The present state of knowledge about the taxonomy of this family makes impractical the construction of keys for large parts of its South American fauna; however, offered here is a key to the three subfamilies reported for the Americas and a key to the two tribes of the subfamily Meropachydinae. The only significant treatment of this family for a South American country was Pennington’s (1921, 1922) two-part study of the Coreidae of Argentina. The keys offered therein are useful but, unfortunately, are quite incomplete for the family as it occurs in the northern half of the continent.

### Key to the Subfamilies of Coreidae As They Occur in South America

1. Scent peritreme on or mesad of imaginary line connecting apices of meso- and metathoracic coxal cavities. Posterior tibia apicoventrally prolonged as a distinct, though sometimes small, spine ... **Meropachydinae** Stal
   Scent peritreme distinctly laterad of imaginary line connecting apices of meso- and metathoracic coxal cavities. Posterior tibia apicoventrally not prolonged as a spine ................................................................. 2
2. Elytral membrane with basal crossvein subparallel to and widely separated (more than diameter of middle tibia) from apical margin of corium ........................................... **Pseudophloeinae** Stal
   Elytral membrane with basal crossvein at least in part almost or quite touching apical margin of corium ........................................... **Coreinae** Leach
Subfamily Coreinae Leach

Tribe Acanthocephalini Stal

Barber's (1939:308–310) key to the tribes of the subfamily Coreinae in the Americas is not repeated here because of the complexity of the wording and the difficulty of using it without much previous knowledge and experience. Hopefully a more practical key can be prepared for a later study of the Ecuadorian Coreidae.

Genus Acanthocepha I Laporte

Acanthocepha I Laporte, 1833:29 [type-species: Lygaeus compressipes Fabricius, a junior synonym of Cimex latipes Drury, only included species]—Campos, 1919:53 [two species for Ecuador, one unidentified, the other listed below].

Acanthocepha I granulosa (Dallas)

Metapodium granulosa Dallas, 1852:430 [Honduras (type)].

Acanthocepha I granulosa.—Campos, 1919:53 [Ecuador]; 1925a:54 [Ecuador].

Survey Collection.—Zamora (Zamora, 6–10 Jun 1976).

Genus Laminiceps Costa

Laminiceps Costa, 1863:250.

Laminiceps haenschi Breddin

Laminiceps haenschi Breddin, 1901b:42 [Ecuador (type)].

Laminiceps “Haenschi”.—Bergroth, 1913:130 [Ecuador].

Laminiceps proximus Breddin

Laminiceps proximus Breddin, 1901b:42 [Ecuador (type)].—Bergroth, 1913:130 [Ecuador].

Laminiceps viduus Breddin

Laminiceps viduus Breddin, 1901b:42 [Ecuador (type)].—Bergroth, 1913:130 [Ecuador].

Genus Leptopetalops Breddin

Leptopetalops Breddin, 1901b:52 [type-species: Leptopetalops gracilis Breddin, only included species].

Leptopetalops gracilis Breddin

Leptopetalops gracilis Breddin, 1901b:52 [Ecuador (type)].—Bergroth, 1913:130 [Ecuador].

Genus Petalops Amyot and Serville

Petalops Amyot and Serville, 1843:201 [type-species: Nematus elegans Serville, a junior synonym of Cimex thoracicus Thunberg, only included species].

Petalops distinguendus Breddin

Petalops distinguendus Breddin, 1901b:41 [Ecuador (type)].—Bergroth, 1913:130 [Ecuador].

Petalops virago Breddin

Petalops virago Breddin 1901b:41 [Ecuador (type)].—Bergroth, 1913:130 [Ecuador].

Tribe Anisoscelidini Amyot and Serville

Genus Anisoscelis Latreille

Anisoscelis Latreille, 1829:197 [type-species: Lygaeus foliacus Fabricius, fixed by Laporte, 1833:31].

Anisoscelis bilineatus (Fabricius)

Lygaeus bilineatus Fabricius, 1803:213 [Brazil (type)].

Anisoscelis bilineatus.—Campos, 1919:54 [Ecuador]; 1925a:55 [Ecuador].

Anisoscelis discolor (Stal)

Diactor discolor Stal, 1854:235 [“Taiti” (type): Stal himself queried this locality (1870:159)].

Anisoscelis discolor.—Campos, 1919:54 [Ecuador]; 1925a:55 [Ecuador].

Anisoscelis foliacus (Fabricius)

Lygaeus foliacus Fabricius, 1803:210 [“America meridionale” (type)].

Anisoscelis foliacus.—Uhler, 1869:323 [“between Napo and Maranon”].

Anisoscelis marginellus (Dallas)

Leptoscelis marginella Dallas, 1852:457 [Brazil (type)].

Anisoscelis marginellus.—Campos, 1919:54 [Ecuador]; 1925a:54 [Ecuador].

Genus Belonomus Uhler

Belonomus Uhler, 1869:323 [type-species: Belonomus annulaticornis Uhler, only included species].
Belonomus annulaticornis Uhler

Belonomus annulaticornis Uhler 1869:323 ["between Napo and Maranon" (type)].

Genus Leptoglossus Guerin

Leptoglossus Guerin, 1831: Atlas, pl. 12, fig. 9 [type-species: Leptoglossus dilatiiolus Guerin, only included species].—Allen, 1969:35-140 [revision; key to species, pages 54-60].

Leptoglossus gonagra (Fabricius)

Cimex gonagra Fabricius, 1775:708 [St. Thomas Island (type)].

Leptoglossus "gonager".—Campos, 1919:54 [Ecuador]; 1925a:54 [Ecuador].

Leptoglossus ingens (Mayr)

Theognis ingens Mayr, 1865:434 [Brazil].

Survey Collection.—Tungurahua (Baños, 24 Jan 1976; all adults had a distinct, irregular, transverse cream-colored fascia crossing both elytra).

Leptoglossus stigma (Herbst)

Cimex stigma Herbst, 1784:258 [Surinam (type)].

Leptoglossus stigma.—Allen, 1969:120 [Ecuador; etc.].

Leptoglossus zonatus (Dallas)

Anisoscelis zonata Dallas, 1852:452 [Mexico (type)].

Leptoglossus zonatus.—Campos, 1919:54 [Ecuador]; 1925a:54 [Ecuador].—Allen 1969:110 [Ecuador; etc.].

Tribe Coreini Leach

Genus Acanthocerus Palisot de Beauvois


Acanthocerus clavipes (Fabricius)

Coreus clavipes Fabricius, 1803:196 [South America (type)].

Acanthocerus clavipes.—Campos, 1919:53 [Ecuador]; 1925a:54 [Ecuador].


Genus Archimerus Burmeister


Archimerus camposi Montandon

Archimerus camposi Montandon, 1897:246 [Ecuador (type)].

Archimerus humeralis (Distant)


Genus Capaneus Stal


Capaneus obscuratus Montandon


Capaneus rubropictus Montandon


Survey Collection.—Zamora (Sabanilla, 3 Jun 1976); Napo (110–146 km W Lago Agrio, 18 May 1975); Pastaza (Puyo, 31 Jan 1976); Tungurahua (20 km E Banos, 28 Jan 1976).

Genus Machtima Amyot and Serville

Machtima Amyot and Serville, 1843:215 [type-species: Lygaeus cruciger Fabricius, only included species].

Machtima crucigera (Fabricius)

Lygaeus cruciger Fabricius, 1775:709 [Brazil (type)].

Machtima crucigera.—Torre-Bueno, 1915:218 [Ecuador; etc.].—Campos, 1919:55 [Ecuador]; 1925a:54 [Ecuador].
Genus *Melucha* Amyot and Serville

*Melucha* Amyot and Serville, 1843:195 [type-species: *Melucha lineicollis* Amyot and Serville, only included species].

**Melucha aculeata** Montandon

*Melucha aculeata* Montandon, 1895:5 [Brazil (type)].—Campos, 1925a:55 [Ecuador].

Genus *Nematopus* Latreille

*Nematopus* Latreille, 1829:197 [type-species: *Nematopus nervosus* Laporte, fixed by Laporte, 1832:30].—Campos, 1919:53 [two unidentified species from Ecuador]; 1925a:54 [two unidentified species from Ecuador]; 1932b:13 [two unidentified species from Ecuador].

**Nematopus nigriventris** Breddin

*Leptoscelis limbativentris* Breddin, 1901a:25 [Ecuador (type)].—Bergroth, 1913:143 [Ecuador].

Genus *Pachylis* Le Peletier and Serville

*Pachylis* Le Peletier and Serville, 1825:62 [type-species: *Cimex pharaonis* Herbst, fixed by Laporte, 1845, pl. 89, fig. 4].

**Pachylis laticornis** (Fabricius)

*Lygaeus laticornis* Fabricius, 1798:538 [Brazil (type)].


Genus *Thasus* Stal


**Thasus heteropterus** (Latreille)

*Coreus heteropterus* Latreille, 1811:189 [Colombia (type)].

**Thasus heteropterus**.—Yust, 1958; no. 32 [Ecuador].

Survey Collection.—Napo (Sta. Cecilia, 16 May 1975).
Phthia lunata (Fabricius)
Cimex lunatus Fabricius, 1787:289 [French Guiana (type)].
Coreus lunatus.—Latreille, 1811:187 [Ecuador].
Phthia lunata.—Distant, 1881a:128 [Ecuador, etc.].—Le-thierry and Severin, 1894:51 [Ecuador; etc.].

Survey Collection.—Napo (65 km W, Lago Agrio, 18 May 1975).

Phthia picta (Drury)
Cimex pictus Drury, 1770:107 [Antigua (type)].
Phthia picta.—Campos, 1925a:55 [Ecuador].


Phthia smaragdina (Walker)
Sphictyrtus smaragdina Walker, 1871:137 [Ecuador (type)].
Phthia smaragdina.—Bergroth, 1913:143 [Ecuador].

Phthia sponsa Breddin
Phthia sponsa Breddin, 1901b:52 [Ecuador (type)].—Bergroth 1913:143 [Ecuador].

Genus Sparpoceria Laporte
Spartocera Laporte, 1833:43 [type-species: “Spartocerus” geni-culatus Burmeister, a junior synonym of Cimex fusca Thunberg, fixed by Kirkaldy, 1903:232].—Campos, 1919:54 [one unidentified species, as well as the ortonedai listed below, for Ecuador].

Spartocera pantomima (Distant)
Sephina pantomima Distant, 1881b:393 [Colombia (type)].
Spartocera ortonedai Montandon, 1897:249 [Ecuador (type)].
Spartocera “Ortonedai”.—Campos, 1919:54 [Ecuador]; 1925a:55 [Ecuador].

Tribe SYRTOMASTINI Stal
Genus Althos Kirkaldy
Margus Dallas 1852:523 preoccupied [type-species: Margus pectoralis Dallas, fixed by Van Duzee, 1916:12].
Althos Kirkaldy, 1904b:280 [proposed as a new name for Margus Dallas, hence must take the same type-species].

Althos tibialis (Distant)
Margus tibialis Distant, 1893b:84 [Ecuador (type)]. Was a nomen nudum when listed for Ecuador by Distant, 1891:113, with neither description nor figure].—Campos, 1919:55 [Ecuador]; 1925a:55 [Ecuador].


Genus Anasa Amyot and Serville
Anasa Amyot and Serville, 1843:209 [type-species: Anasa cor-nuta Amyot and Serville, only included species].—Campos, 1925a:56 [in addition to A. andresii and A. trilineata (see below), two undetermined species were recorded for Ecuador].

Anasa andresii (Guerin)
Gonocerus andresii Guerin, 1857:383 [Cuba (type)].
Anasa “Andresii”.—Campos, 1919:55 [Ecuador]; 1925a:56 [Ecuador].
**Anasa obscura Dallas**


**Anasa trilineata Stal**

*Anasa trilineata* Stal, 1870:190 [Colombia (type)].—Campos, 1919:55 [Ecuador]; 1925a:56 [Ecuador].

**Genus Catorhintha Stal**

*Catorhintha* Stal, 1859c:470 [type-species: *Lygaeus guttula Fabricius*, fixed by Van Duzee, 1916:12].

*Catorhintha guttula* (Fabricius), 1794:162 ["Americae Insulis" (type)].

"Catorhintha"guttula.—Campos. 1919:55 [Ecuador]; 1925a:56 [Ecuador].

**Genus Cebrenis Stal**

*Cebrenis* Stal,1862b:298 [type-species: *Hyselonotus pulchellus Herrich-Schaeffer*, a junior synonym of *Hyselonotus centrolineata Westwood*, only included species].

*Cebrenis haenschi* Breddin

*Cebrenis haenschi* Breddin, 1901a:26 [Ecuador (type)].

*Cebrenis "Haenschi".—Bergroth, 1913:150 [Ecuador].

**Genus Hypselonotus Hahn**


**Note:** The two most recent treatments of this genus differ markedly in concept of how many species are represented. Horvath (1913) considered it to contain 20 species, and several of these to have color varieties worthy of names. Whitehead (1974), accepting the same limits of the genus and making “a short study of chromatic variation,” redefined the species mostly on color characters and reduced the number to nine full species; while he did recognize some infraspecific units, he did not apply names to them. Identification of species through use of either paper is interfered with by variations in the degree of development of the denticles proximal to the subapical ventral spines on the anterior femora of some species and the great variation in color patterns as well as color details. Actually, available specimens include color variations excluded by the wording of the descriptive literature, but at this time none of them appear to merit a name.

A detailed revision of the genus, with study of type-specimens and controlled rearing experiments, probably will find Horvath's number of species excessive; but until that revision appears, the categories are here identified by his “splitting” method in the belief that later students will find it easier to combine the names than to reassemble the specimens for re-identification if that becomes necessary.

**Hypselonotus aberrans Horvath**

*Hypselonotus aberrans* Horvath, 1913:366, 367 [Ecuador; Peru; here erroneously credited to Breddin].—Bergroth, 1913:150 [Ecuador; etc.].

*Hypselonotus interruptus.—Whitehead, 1974:226 [Ecuador; etc.].

**Hypselonotus aequatorialis Horvath**


*Hypselonotus linea.—Whitehead, 1974:228 [Ecuador; etc.].

**Hypselonotus andinus Breddin**


*Hypselonotus interruptus.—Whitehead, 1974:226 [Ecuador; etc.].
Hypselonotus atratus Distant
Hypselonotus atratus Distant, 1881a:152 [Costa Rica (type)].—Campos, 1919:55 [Ecuador]; 1925a:56 [Ecuador].

Hypselonotus interruptus Hahn
Hypselonotus interruptus Hahn, 1833:187 [Brazil (type)].—Whitehead, 1974:226 [Ecuador; etc; here includes aberrans and andinus].

Hypselonotus linea (Fabricius)
Lygaeus linea Fabricius, 1803:220 [South America].
Hypselonotus linea.—Uhler, 1869:325 [Ecuador].—Campos, 1919:55 [Ecuador]; 1925a:56 [Ecuador].—Whitehead, 1974:228 [Ecuador; etc; here includes aequatorialis].

Hypselonotus lineatus Stal
Hypselonotus lineatus Stal, 1862b:297 [Mexico (type)].—Torre-Bueno, 1915:218 [Ecuador; etc].—Whitehead, 1974:229 [Ecuador; etc].

Genus Paryphes Burmeister

Paryphes smaragdus Breddin
Paryphes smaragdus Breddin, 1901b:41 [Ecuador (type)].—Horvath, 1913:338 [Ecuador; etc].—Bergroth, 1913:151 [Ecuador].
Paraphes smaragdus var. trimaculatus Blöte, 1935:202 [Ecuador].

Genus Sundarus Amyot and Serville
Sundarus Amyot and Serville, 1843:202 [type-species: Sundarus nemator Amyot and Serville, a junior synonym of Charesterus regalis Westwood, only included species].—Horvath, 1913:359–360 [key to species of Sundarus].

Sundarus inca Breddin
Sundarus inca Breddin, 1901b:41 [Ecuador (type)].—Bergroth, 1913:151 [Ecuador].

Sundarus muggei Schmidt
Sundarus muggei Schmidt, 1926: 142 [Ecuador (type)].

Sundarus splendidus (Distant)
Sundarus splendidus.—Horvath, 1913:363 [Ecuador].

Genus Sphictyrtus Stal
Sphictyrtus Stal, 1859c:462.

Sphictyrtus sumtuosus (Stal)
Paraphes sumtuosus Stal, 1854:234 [Ecuador (type)]; 1859b: 232 [Ecuador].
Sphictyrtus sumtuosus.—Stal, 1859c:463 [Ecuador]; 1870:203 [Ecuador; etc].—Campos, 1925a:56 [Ecuador].
Sphictyrtus "sumptuosus".—Walker, 1871:137 [Ecuador].—Lethierry and Severin, 1894:83 [Ecuador; etc].

Genus Paryphes Burmeister

Zicca Amyot and Serville
Zicca Amyot and Serville, 1843:240 [type-species: Zicca mas-sulata Amyot and Serville, a junior synonym of Cimex nigropunctatus (De Geer), only included species].

Zicca inornata Breddin
Zicca inornata Breddin, 1902b:2 [Ecuador (type)].—Bergroth, 1913:150 [Ecuador].

Survey Collection.—Pichincha (29 km W Sto Domingo de los Colorados, 7 May 1975).

Zicca taeniola (Dallas)
Clavigralla taeniola Dallas, 1852:514 [Venezuela (type)].
Zicca taeniola.—Campos, 1919:55 [Ecuador]; 1925a:56 [Ecuador].

Subfamily Meropachydinae Stal
The tribal classification presented in the key below is adapted from Kormilev (1954).
Key to Tribes of Meropachydinae in South America

1. Scutellum triangular, short, reaching onto base of claval commissure, that commissure visible for virtually full length .......................... 2
   Scutellum lanceolate or ligulate, long, reaching or surpassing apex of claval commissure, completely covering that commissure .......................... MEROPACHYDINAE Stal
2. Scutellum with disc elevated tumidly or conically, apex elevated as a small knob .......................... MEROCORINAE Stal
   Scutellum with neither disc nor apex prominently elevated .......................... SPATHOPHORINAE Kormilev

Tribe MEROCORINAE Stal

Genus Merocoris Perty

Merocoris Perty, 1813:170 [type-species: Merocoris tristis Perty, only included species].—Kormilev, 1954:157 [key to three species in South America].

Merocoris elevatus (Spinola)

Corynocoris elevatus Spinola, 1837:128 [Brazil (type)].

Survey Collection.—Manabi (Sto. Domingo de los Colorados, 8 May 1975); Tungurahua (32–39 km E Baños, 25–28 Jan 1976); Zamora (Zamora, 1–5 Jun 1976).

Subfamily PSEUDOPHLOEINAE Stal

The lone South American genus of Pseudoephoeinae is Vilga Stal, which was revised recently by Dolling (1977, key to species on page 30).

Family CORIXIDAE Leach

The following list of 10 species in five genera includes eight species from continental Ecuador alone, one from both mainland Ecuador and the Galapagos Archipelago, and one only from the Galapagos Islands—the last two species both belong to the genus Trichocorixa. Of the 69 species in eight genera known from South America, additional species quite likely will be collected in Ecuador.

The older literature and definitions of groups in this family are so scattered, confused, and unreliable that a would-be scholar of the group is forced to arbitrarily skip over much of it to accept a more recent point of relatively clear definition from which to work forward as well as backward. Such a point is found in Hungerford's (1948) well-illustrated monograph which provides definitions and keys, and makes corrections of the older literature. This work was reprinted in 1977 almost exactly as in the original, except for Sailer's corrected key to the species of the genus Trichocorixa and an addendum to update the list of publications. The excellent illustrations and keys in Nieser's (1975) study of the Corixidae in the Guyana Region should be of considerable help to students of this family as it occurs in northern South America.

Key to Subfamilies of Corixidae in South America

1. Posterior margin of pronotum broadly, shallowly concave, sub-parallel to anterior margin .......................... Micronectinae Jaczewski
   Posterior margin of pronotum convex to roundingly angulate .......................... 2
2. In lateral view, ventral angle of eye much closer to anterior margin of head than to posterior margin. A posteriorly directed suture arising from ventral angle of eye or very near to it Heterocorixinae Hungerford
In lateral view, ventral angle of eye midway between posterior and anterior margins of head. Posteriorly projecting suture, when present, arising from near middle of posterior margin of eye ....... CORIXINAE Leach

Subfamily CORIXINAE Leach

Genus Centrocorisa Lundblad

*Centrocorisa* Lundblad, 1928a:68 [type-species: *Corisa kollarii* Fieber, only included species].

*Centrocorisa kollarii* (Fieber)

*Corisa kollarii* Fieber, 1851:227 [Brazil (lectotype); Cuba].

*Corisa kollarii.*—Kirkaldy, 1899a:2 [Ecuador; etc.].

*Corisa (Callicorixa) kollarii.*—Kirkaldy, 1899b:6 [Ecuador].—Campos, 1925a:44 [Ecuador].

*Callicorixa kollarii.*—Kirkaldy and Torre-Bueno, 1909:194 [Ecuador; etc.].

*Centrocorisa kollarii.*—Hungerford, 1948:442 [Ecuador; etc.].

—Nieser, 1969a:142 [Ecuador; etc.].

Genus Neosigara Lundblad

*Neosigara* Lundblad, 1928b:222 [type-species: *Neosigara colombiensis* Lundblad, only included species].

*Neosigara griffini* (Kirkaldy)

*Corixa (Callicorixa) “Griffini”* Kirkaldy, 1899a:7 [Ecuador (type); 16 days before this original description, Kirkaldy, 1899a:2, listed the species under the same combination “Corixa Griffini,” which at that time was a nomen nudum].—Campos, 1925a:44 [Ecuador].

*Corixa williamsi* Hungerford, 1928b:175 [Ecuador (type)].

*Sigara griffini.*—Jaczewski, 1933:333 [Ecuador].—Hungerford, 1939:3-72 [Ecuador].

*Neosigara griffini.*—Hungerford, 1948:429 [Ecuador; etc.].

Genus Trichocorixa Kirkaldy


*Trichocorixa beebei* Sailer

*Trichocorixa* species Hutchinson, 1931:474 [Galapagos Islands].

Trichocorixa beebei Sailer, 1948:306 [Galapagos Islands (type)].

*Trichocorixa reticulata* (Guerin)

*Corisa reticulata* Guerin, 1857:423 [Cuba (lectotype)].

*Trichocorixa reticulata.*—Sailer, 1948:343 [Ecuador; Galapagos Islands; etc.].—Linsley and Usinger, 1966:136 [Galapagos Islands].—Nieser, 1969a:153 [Ecuador; Galapagos Islands; etc.]; 1970a:66 [Ecuador; Galapagos Islands; etc.]; 1975:217 [Ecuador; Galapagos Islands; etc.].

Subfamily HETEROCORIXINAE Hungerford

The Heterocorixinae contains the lone genus *Heterocorixa* White, which occurs in the Western Hemisphere.

Genus Heterocorixa White

*Corixa (Heterocorixa) White, 1879a:272 [type-species: *Corixa (Heterocorixa) hesperia* White, only included species].

*Heterocorixa.*—Hungerford, 1928a:99.

*Heterocorixa boliviensis* Hungerford

*Heterocorixa boliviensis* Hungerford, 1928a:100 [Bolivia (type)]; 1948:121 [Ecuador; etc.].—Nieser, 1970a:53 [Ecuador; etc.]; 1975:222 [Ecuador; etc.].

*Heterocorixa brasiliensis* Hungerford

*Heterocorixa brasiliensis* Hungerford, 1928a:101 [Brazil (type)]; 1948:107 [map record for Ecuador on page 136, but text only says in Brazil].

Subfamily MICRONECTINAE Jaczewski

The Micronectinae is represented in the Western Hemisphere by the single genus *Tenagobia* Bergroth.

Genus Tenagobia Bergroth

*Tenagobia* Bergroth, 1899:282 [type-species: *Tenagobia marmorata* Bergroth, only included species].—Deay, 1935:403-477
[revision from which keys, descriptions, and plates were reproduced in Hungerford, 1948:54-98].—Nieser, 1977a: 1-56 [revision with keys to subgenera and species].

Tenagobia constricta Deay

Tenagobia constricta Deay, 1930:176 [Ecuador (type)]; 1935: 401-425 [Ecuador].
Tenagobia (Romanogobia) constricta.—Nieser, 1977a:33 [Ecuador].

Tenagobia schadei Lundblad

Tenagobia schadei Lundblad, 1928c:23 [Paraguay (type)].
Tenagobia (Schadegobia) schadei.—Nieser, 1977a:44 [Ecuador; etc.].

Tenagobia testacea Nieser

Tenagobia (Tenagobia) testacea Nieser, 1977a:11 [Colombia (type); Ecuador].

Tenagobia truncata Deay

Tenagobia (Tenagobia) truncata.—Nieser, 1977a:12 [Ecuador; etc.].

Family CYDNIDAE Billberg

The following list of 10 species in four genera scarcely can be considered exhaustive for the Ecuadorian fauna of this family; one of these species also occurs on the Galapagos Islands.

The following keys to the subfamilies and genera occurring in South America are adapted basically from Froeschner's (1960) treatment of the family for the Western Hemisphere which also contains keys to the species of each genus. That work plus two later papers by Becker (1967) and Froeschner (1975) provide records and treatments of 73 species in 13 genera for South America.

Key to Subfamilies of Cydnidae in South America

1. Clavi meeting behind short scutellum and forming a commissure almost as long as scutellum .................................................. AMNESTINAE Hart
   Clavi not meeting behind scutellum, not forming a commissure ........ 2

2. Anterior tibia much produced beyond tarsal insertion, tarsus appears to arise at midlength of tibia ..................SCAPTOCORINAE Froeschner
   Anterior tibia not produced beyond tarsal insertion, tarsus arising at or very close to apex of tibia ...................... CYDNINAE Billberg

Subfamily AMNESTINAE Hart

This subfamily contains but one genus.

Genus Amnestus Dallas

Amnestus Dallas, 1851:126 [type-species: Cydnus spinifrons Say, only included species].

Amnestus bolivari (Signoret)

Pachymeroides “Bolivari” Signoret, 1880:vii [Ecuador (type); type, the only known specimen, consists of but two legs].—Lethierry and Severin, 1893:75 [Ecuador].
Amnestus bolivari.—Froeschner, 1960:638 [Ecuador].

Amnestus pusio (Stal)

Magoa pusio Stal, 1858:14 [Brazil (type)].
Amnestus pusio.—Froeschner, 1960:654 [Ecuador; etc.].

Survey Collection.—Los Rios (Quevedo, 11 May 1975); Napo (3 km NE Lago Agrio, 17 May 1975; Sta. Cecilia, 16 May 1975); Pastaza (12 km W Puyo, 2 Feb 1976; 22 km W Puyo, 3 Feb 1976); Pichincha (20 km W Sto. Domingo de los Colorados, 7 May 1977).
Subfamily Cydninae Billberg

Key to Genera of Subfamily Cydninae in South America

1. Pronotum anteriorly with a sharply impressed line (sometimes enclosing punctures) paralleling anterior margin from side to side, never broken into a row of punctures .............. Pangaeus Stal
   Pronotum anteriorly without a sharply impressed anterior line, sometimes with a row of punctures paralleling anterior margin .......... 2

2(1). Osteolar peritreme laterad of osteolar pore broader than peritreme mesad of osteolar pore, lateral part modified into a distinctly differentiated loop or lobe which is in part of wholly polished .......... 3
   Osteolar peritreme laterad of osteolar pore not broader than peritreme mesad of osteolar pore, lateral part neither shaped nor polished as above; sometimes with a hook or flap projecting caudad from posterior face ........................................ 6

3(2). Hemelytron with membrane occupying half its length .............. Ectinopus Dallas
   Hemelytron with membrane occupying less than one-third its length . 4

4(3). Metapleural evaporatorium (dulled area) very limited, just outlining peritreme, not approaching metapleural lamella posterior .................. Microporus Uhler
   Metapleural evaporatorium extensive, occupying more than half of supporting sclerite and nearly or quite reaching base of metapleural lamella posteriorly ........................................ 5

5(4). Terminal process of osteolar peritreme scoop-shaped or auricular, with osteolar pore conspicuously visible ventrally at its base .................. Onalips Signoret
   Terminal process of osteolar peritreme flat, expanded posteriorly as a more or less polished lobe. Osteolar pore opening posteriorly, not visible in ventral view ...................... Melanaethus Uhler

6(2). Labial segment II with a large, semicircular, foliaceous lobe this often concealed between anterior coxae . Prolobodes Amyot and Serville
   Labial segment II somewhat compressed, but without large foliaceous lobe ........................................ 7

7(6). Posterior tibia conspicuously compressed, anterior and posterior faces broad, glabrous, not spined, spines of posteroventral margin conspicuously longer, thinner, and more tapering than those of dorsal margin ...................... Cyrtomenus Amyot and Serville
   Posterior tibia not conspicuously compressed, spines of dorsal and ventral margins about equally developed .................. 8

8(7). Head with a complete row (extending from eye to apex of jugum) of coarse, usually more or less contiguous punctures giving rise to numerous long hairs and also to a row of short, blunt pegs ...................... Tominotus Mulsant and Rey
   Head without a complete row (absent or extending not more than three-
fourths of way to apical angle of jugum) of coarse setigerous punctures, pegs never present .......................... Dallasiellus Berg

Genus Cyrtomenus Amyot and Serville
Cyrtomenus Amyot and Serville 1843:90 [type-species: Cyrtomenus castaneus Amyot and Serville, a junior synonym of Pentatoma ciliata (Beauvois), fixed by Kirkaldy, 1903:230].

Cyrtomenus grossus Dallas
Cyrtomenus grossus Dallas 1851:111 [Colombia (type)].
Cyrtomenus (Syllobus) grossus.—Froeschner 1960:520 [Ecuador; etc.].

Cyrtomenus teter (Spinola)
Cydnus teter Spinola, 1837:332 [Brazil (type)].

Survey Collection.—Bolivar (7 km W Bal- zapamba, 20 Jun 1975, alt 1524 m).

Genus Dallasiellus Berg
Stenocoris Signoret, 1880:xliv preoccupied [type-species: Aethus longulus Dallas, only included species].
Dallasiellus Berg, 1901:281 [proposed as a new name for Stenocoris Signoret, hence takes the same type-species].

Dallasiellus levipennis (Signoret)
Geotomus levipennis Signoret, 1883:35 [French Guiana (type)].
Dallasiellus (Dallasiellus) levipennis.—Froeschner, 1960:609 [Ecuador; etc.].

Dallasiellus longulus (Dallas)
Aethus longulus Dallas, 1851:119 [Brazil (type)].

Survey Collection.—Bolivar (7 km SW Bal- zapamba, 20 Jun 1975).

Dallasiellus lugubris (Stal)
Aethus lugubris Stal, 1858:13 [Brazil (type)].
Aethus nigrocinctus.—Distant, 1891:111 [Ecuador; etc.].
Geotomus nigrocinctus.—Campos, 1925a:49 [Ecuador].

Survey Collection.—Los Rios (Quevedo, 11 May 1975).

Dallasiellus murinus (Van Duzee)
Geotomus murinus Van Duzee, 1933:26 [Galapagos Islands (type)].—Barber, 1934:282 [Galapagos Islands].
Dallasiellus (Dallasiellus) murinus.—Froeschner, 1960:616 [Ecuador; Galapagos Islands].

Genus Ectinopus Dallas
Ectinopus Dallas, 1851:121 [type-species: Cydnus holomelas Burmeister, only included species].—Campos, 1919:50 [two unidentified species for Ecuador]; 1925a:49 [two unidentified species for Ecuador].

Genus Melanaethus Uhler
Melanaethus Uhler 1876:280 [type-species, Melanaethus elongatus Uhler, preoccupied, a synonym under Aethus subglaber Walker, only included species].

Melanaethus subglaber (Walker)
Aethus subglaber Walker 1867:150 (“North America” (type)).

Genus Pangaeus Stahl
Pangaeus Stal, 1862b:95 [type-species: Aethus margo Dallas, a junior synonym of Cimex aethiops Fabricius, fixed by Van Duzee, 1914:378].

Pangaeus aethiops (Fabricius)
Cimex aethiops Fabricius, 1787:269 [French Guiana (type)].
Pangaeus (Homaloporus) bilineatus.—Froeschner, 1960:459 [Froeschner examined no Ecuadorian specimens but assigned Signoret’s (supra) “Pangaeus” vicinus to this synonymy—see note below].
Pangaeus (Pangaeus) aethiops.—Froeschner, 1960:504 [Ecuador; etc.].
Note: *Pangaeus vicinus* was described from Guayaquil by Signoret. Froeschner (1960:459), on the basis of a Signoret-determined Mexican specimen in the Signoret collection, assigned it as a junior synonym of *Pangaeus bilineatus* (Say). The latter specimen, besides being far from the locality reported for *Pangaeus vicinus*, differed from the original description in several characters. Here reconsidering the matter and recognizing that a South American species is not likely to be a member of the Nearctic subgenus *Homaloporus* to which *Pangaeus bilineatus* belongs, I conclude that Signoret's Mexican specimen is simply misidentified, and that the true *Pangaeus vicinus* (type-specimen still unlocated) must belong to the South American nominate subgenus *Pangaeus*.

The significant features mentioned in the original description are the type-locality, the 7 mm length, the single costal setigerous puncture, and the presence of only two setigerous punctures on each jugum. Within the subgenus *Pangaeus* these characters combined to suggest the widely ranging *Pangaeus aethiops*, which is known to occur in Ecuador, and the *Pangeaus laevigatus* Signoret reported only from Brazil. Because the original description gives no significant character for separating *Pangaeus vicinus* from either of those species, I here simply elect to transfer it to synonymy under the older name, *Pangaeus aethiops* (Fabricius), a new synonymy.

**Survey Collection.**—Guayaquil (Olon, 29 Feb 1976).

*Pangaeus docilis* (Walker)

*Aethus docilis* Walker, 1867:154 [Brazil (type)].

*Pangaeus* (*Pangaeus*) *docilis*.—Froeschner, 1960:484 (Ecuador; etc.).

**Subfamily SCAPTOCORINAE Froeschner**

The latest taxonomic revision of the Scaptocorinae was by Becker (1967), and the following key to genera is derived from it.

**Key to the Genera of Scaptocorinae in South America**

Anterior and middle legs with tarsi. Osteolar orifice covered by apex of peritreme; latter abruptly terminated apically, not fused with surrounding cuticula

*Scaptocoris* Perty

Anterior and middle legs without tarsi. Osteolar orifice not covered by apex of peritreme; latter not abruptly terminated apically, fusing with surrounding cuticula

*Atarsocoris* Becker

**Family DINIDORIDAE Stal**

No record for occurrence of this family in Ecuador or the Galapagos Islands was encountered during this study. The family is known in the Americas only by the genus *Dinidor* Latreille, which contains about five South American species. One or more of these might be looked for in Ecuador.

A key to the included genera with a checklist of species was presented by Schouteden (1913), who treated this group as subfamily of the family Pentatomidae.

**Family DIPSOCORIDAE Dohrn**

(CRYPTOSTEMMATIDAE Bergroth)

No Ecuadorian records of Dipsocoridae were encountered during preparation of this list. For South America, two species in the genus *Cryptostemma* have been reported. But this group of tiny insects is very poorly known, and undoubtedly specialized collecting will reveal many more species for South America and much of the rest of the world.

Family status for this group of insects is in
keeping with Stys’ (1970) studies. His findings closely agreed with those of Emsley (1969) except that the latter author considered this particular group to be a part of his more comprehensive “Cryptostemmatidae,” a name which is now assigned to synonymy under the older name Dipsochoridae. Two other groups in Emsley’s “Cryptostemmatidae” were raised by Stys to family status as Ceratocombidae and Hypsipterygidae.

A helpful nucleus for studies in this group would include the two above-mentioned papers plus the revision by McAtee and Malloch (1925).

Family Enicocephalidae Stal

The two species, each in a different genus, for which Ecuador records have been found [none for the Galapagos Islands] must be far less than the number of species occurring in that country. In fact, the listing of only a half dozen species in four genera for all South America does not compare well with other faunal areas. Recognition of the cryptic habits of these insects and use of the special collecting techniques needed for their capture will undoubtedly greatly increase the number of tropical American species.

Works helpful to a study of the South American members of this family include the two comprehensive works, Jeannel’s (1942) “Monographic” with keys down to species, and Usinger’s (1945) “Classification” with a key to the world genera (pages 324–325). More recently, Stys (1970) reanalyzed some of the morphology and proposed certain suprageneric changes; and Kritsky (1977) provided for the genera of the family in the Western Hemisphere a key from which the following was abstracted.

Key to the Subfamilies and Genera of Enicocephalidae in South America

1. Pronotum divided by two distinct transverse sutures into three lobes. Subfamily Enicocephalinaceae Stal ........................................ 2
   Pronotum entire, not divided by transverse grooves. Subfamily Aenictotechinateae Usinger ......................................................... Gamostolus Berg

2. Anterior tarsus with a single large claw. Scutellum ending in a knob .......................................................... Enicocephalus Westwood
   Anterior tarsus with two distinct claws. Scutellum not knobbed apically .. ........................................................................................................ 3

3. Middle pronotal lobe with a distinct longitudinal impression each side of deep median impression .......................... Enicocephalus Stal
   Middle pronotal lobe without a longitudinal impression each side of median impression ........................................ Systelloderes Blanchard

Subfamily Enicocephalinaceae Stal

Genus Enicocephalus Stal
Enicocephalus Stal, 1855:44 [type-species: Enicocephalus nasutus Stal, only included species].—Kritsky, 1978:194–198 [review and key for the Neotropical species].

**Enicocephalus concolor** (Champion)

Hymenocoris (Hymenocoris) concolor Jeannel, 1942:329 [Ecuador; etc.].

Genus Systelloderes Blanchard
Systelloderes Blanchard, 1852:224 [type-species: Systelloderes moschatus Blanchard, only included species].

**Systelloderes moschatus** Blanchard
Systelloderes moschatus Blanchard, 1852:224 [Chile (type)].—Yust 1955:427 [Ecuador]; 1958, no. 210 [Ecuador].
Family GELASTOCORIDAE Champion

Available records list 10 species in two genera for continental Ecuador; the family has not yet been reported for the Galapagos Islands. Certainly more species can be anticipated because the two known genera of this family have a combination of 28 species already reported for South America.

The following key to South American subfamilies and genera is adopted from Todd’s (1955) well-illustrated work containing keys to and discussions of species. That paper and Todd’s (1961) up-dated checklist are essential points of departure for studies on the Neotropical members of the family. Nieser (1975) adopted several modifications of Todd’s studies, especially in resurrecting certain genera. At present, this list is following Todd’s more comprehensive considerations.

Key to Subfamilies and and Genera of Gelastocoridae

Anterior tarsus not fused to tibia, articulate; with 2 well-developed claws. Labium arising from apex of head, directed posteriorly. Subfamily GELASTOCORINAE Champion

Anterior tarsus fused with tibia; with only 1 well-developed claw. Labium appearing to arise on ventral surface of head, decurved so as to be directed ventrally or anteriorly. Subfamily NERTHRINAE Kirkaldy

Subfamily GELASTOCORINAE Champion

Genus Gelastocoris Kirkaldy

Galgulus Latreille, 1802:253, preoccupied [type-species: Neauris oculata Fabricius, only included species].—Campos, 1919:49 [one unidentified species from Ecuador as well as G. flavus listed below as a synonym of G. major].

Gelastocoris Kirkaldy, 1897:258 [proposed as a new name for Galgulus Latreille, hence takes the same type-species].

Gelastocoris fuscus Martin

Gelastocoris fuscus Martin 1929:364 [Ecuador (type); etc.].—Todd, 1955:336 [Ecuador; etc.]; 1961:462 [Ecuador; etc.].—Nieser, 1975:37 [Ecuador; etc.]; 1977b:294 [Ecuador; etc.].

Gelastocoris major Montandon

Gelastocoris major Montandon, 1910:2 [no locality given].—Todd, 1955:327 [Ecuador; etc.]; 1957:147 [Ecuador; etc.]; 1961:463 [Ecuador; etc.].—Nieser, 1977b:294 [Ecuador; etc.].

Galgulus flavus.—Campos, 1919:49 [Ecuador]; 1925a:47 [Ecuador].

Gelastocoris duplicatus Martin, 1929:364 [Ecuador (type)].

Gelastocoris andinus Melin, 1929:159 [Mexico; Panama; Colombia; Ecuador; Brazil].

SURVEY COLLECTION—Santo Domingo de los Colorados (79 km W Manabi, 8 May 1975).

Gelastocoris nebulosus (Guerin)

Galgulus nebulosus Guerin, 1844:351 [Brazil (type); Bolivia].

Gelastocoris flavus.—Melin, 1929:161 [Ecuador; etc.].

Gelastocoris nebulosus.—Todd, 1955:331 [Ecuador; etc.]; 1961:463 [Ecuador; etc.].

Subfamily NERTHRINAE Kirkaldy

Genus Nerthra Say

Nerthra Say, 1832:37 [type-species: Nerthra stygica Say, only included species].

Nerthra amplicollis (Stal)

Mononyx amplicollis Stal, 1854:239 [Colombia (type)].—Kirkaldy and Torre-Bueno, 1909:180 [Ecuador; etc.].

Nerthra amplicollis.—Todd, 1955:384 [Ecuador; etc.].—Nieser, 1977b:299 [Ecuador; etc.].
Nerthra ecuadorensis (Melin)

Mononyx amplisollis var. ecuadorensis Melin, 1929:185 [Ecuador (type); etc.].

Nerthra ecuadorensis Todd, 1955:387 [Ecuador; etc.].

Nerthra lata (Montandon)

Mononyx lata Montandon, 1899b:399 [Ecuador (type)].—Melin, 1929:186 [Ecuador; etc.].


Nerthra lata.—Todd, 1955:50 [Ecuador; etc.]; 1961:469 [Ecuador; etc.].

Nerthra lata (Montandon)

Mononyx fuscipes variety rudis Melin, 1929:182 [Mexico (type); etc.].

Nerthra rudis.—Todd, 1955:391 [Ecuador; etc.]; 1957:150 [Ecuador; etc.]; 1961:472 [Ecuador; etc.].—Nieser, 1977b:297 [Ecuador; etc.].

Nerthra terrestris (Kevan)

Mononyx bipunctatus Kevan, 1948:813 [new name for Mononyx bipuncatus Melin].

Nerthra terrestris.—Todd, 1957:149 [Ecuador]; 1961:474 [Ecuador; etc.].—Nieser, 1975:44 [Ecuador; etc.].

Subfamily CHARMOMETRINAE Matsuda

Genus Brachymetra Mayr

Brachymetra Mayr, 1865:455 [type-species: Halobates albinervus Amyot and Serville, only included species].—Shaw, 1934:221–333 [revision with key to species].—Harris and Drake, 1945:211–212 [list of species].

Brachymetra albinervus (Amyot and Serville)

Halobates albinervus Amyot and Serville 1843:412 [Brazil (type)].

Brachymetra albinervus.—Shaw, 1934:228 [Ecuador; etc.].

Brachymetra "albinervus".—Nieser, 1970c:121 [Ecuador; etc.].

Brachymetra kleopatra (Kirkaldy)

Gerris kleopatra Kirkaldy, 1899b:3 [Ecuador (type); in a paper which appeared 16 days earlier than this one (1899a:2). this combination, as a nomen nudum, was included in a list].

Family GERRIDAE Amyot and Serville

The following list of literature records for Ecuadorian occurrences of waterstriders includes 17 species in seven genera for the continental area and five species in the oceanic genus Halobates for the Galapagos Islands—three of those five species of Halobates are also found near the coast of the mainland (and are counted in the totals above). This appears to be considerably less representation than would be expected from the approximately 80 species in 17 genera known from South America.

A family-wide classification proposed by Hungerford and Matsuda (1960) consisted of keys to subfamilies, tribes, and genera; its was accompanied by a lengthier paper by Matsuda (1960) giving the morphological details and evolutionary sequences of that classification. Later Andersen (1975) modified the above classification by elevating to subfamilies all the tribes of Hungerford and Matsuda’s (supra) subfamily Gerrinae and presented a reclassification, with key, to the genera of his newly restricted subfamily Gerrinae (i.e., the tribe Gerrini of Hungerford and Matsuda). Significant and useful to study of the South American members of the family are Drake and Harris’ (1934) review of the Gerrinae of the Western Hemisphere with its keys through species and Kuitert’s (1942) updating of some of those keys to species.
Brachymelra kleopatra.—Hungerford and Matsuda, 1957:19 [Ecuador; etc.; corrects Shaw’s (supra) concept of this species].

**Genus Charmometra Kirkaldy**

Charmometra Kirkaldy, 1899a:509 [type-species: *Brachymetra bakeri* Kirkaldy, only included species].

*Brachymetra bakeri* (Kirkaldy)

*Brachymetra bakeri* Kirkaldy, 1898:101 [Colombia (type)]; 1899c:509 [Ecuador; etc.—this species binomen is here a “lapsus” because it is placed under the generic heading “Charmatomelra gen. n.” for which the type-species is cited as “C. bakeri”].—Kirkaldy and Torre-Bueno, 1909:211 [Ecuador; etc.].

**Subfamily Gerrinae Amyot and Serville**

**Genus Eurygerris Hungerford and Matsuda**


*Eurygerris cariniventris* (Champion)

Eurygerris cariniventris Champion, 1898:148 [Mexico; Guatemala; Costa Rica; Panama].—Kuitert, 1942:123 [Ecuador; etc.].

*Eurygerris flavolineatus* (Champion)

Eurygerris flavolineatus Champion, 1898:149 [Mexico; Guatemala; Costa Rica; Panama].—Kuitert, 1942:123 [Ecuador; etc.].

*Eurygerris fuscinervis* (Berg, original designation).—Drake, 1963:95 [Ecuador; etc.].

*Eurygerris kahli* (Drake and Harris)

Eurygerris kahli Drake and Harris, 1934:199 [Venezuela (type)].—Kuitert, 1942:124 [Ecuador].

**Genus Gerris Fabricius**

Gerris Fabricius, 1794:187 [type-species: *Gimes lacustris* Linnaeus, fixed by Latreille, 1810:434].—Kirkaldy, 1899b:1 [from Ecuador, Kirkaldy reported two probable new species of “subgenus Limnometra” and “Nymphs” of one or two unidentified species].—Kuitert, 1942:117-119 [key to males of species in New World].

**Genus Limnogonus Stal**


**Limnogonus aduncus Drake and Harris**

Limnogonus aduncus Drake and Harris, 1933:110 [Brazil (type)]; 1934:209 [Ecuador; etc.].—Nieser, 1970c:106 [Ecuador; etc.].

**Limnogonus hyalinus** (Fabricius)

Hydrometra hyalina Fabricius, 1803:258 [South America].—Kirkaldy, 1899b:1 [Ecuador].—Campos, 1925a:48 [Ecuador].—Drake and Harris, 1934:208 [Ecuador; etc.].—Nieser, 1970c:104 [Ecuador; etc.].

**Genus Tachygerris Drake**

Tachygerris Drake, 1957a:111 preoccupied [type-species: *Tenagogonus adamsom* Drake, original designation].

Tachygerris Drake, 1957b:193 [proposed as a new name for *Tachygonus* Drake, hence takes same type-species].

**Tachygerris opacus** (Champion)

Limnometra opaca Champion, 1898:150 [Panama (type)].—Kuitert, 1942:133 [Ecuador; etc.].—Nieser, 1970c:115 [Ecuador; etc.].—Roback and Nieser, 1974:36 [Ecuador; etc.].

**Subfamily Halobatinae Bianchi**

**Genus Halobates Eschscholtz**

Halobates Eschscholtz, 1822:106 [type-species: *Halobates micans* Eschscholtz, fixed by Laporte, 1832:24].—Banning 1933:
20 [during exploration of Galapagos Islands and adjacent waters, “Halobates—attracted by the brilliant light at the gangway of the ship” and several were taken in “nightly plankton hauls”].—Herring, 1961 [monograph with key (pages 241–246) to species].

Note: Geographic localization of animals of the open ocean is not always clear, but for convenience they may be associated as part of the fauna of the land to which they come close or onto which they sometimes are washed by strong winds. Such treatment is here accorded to the several species of Halobates which occur on the open ocean near Ecuador and the Galapagos Islands.

**Halobates micans** Eschscholtz


**Halobates robustus** Barber


*Halobates “sp.”* Heidemann, 1901:369 [Galapagos Islands; placed as *H. robustus* by Barber, 1934:289].—Beebe, 1924:83–86, 432 [placed as *H. robustus* by Barber, 1925:253].

**Halobates sericeus** Eschscholtz

*Halobates sericeus* Eschscholtz, 1822:108 [Pacific Ocean “near the Equator” (type)].—Herring, 1961:227, 252 [Ecuador; Galapagos Islands; etc.].

**Halobates sobrinus** White

*Halobates sobrinus* White, 1883:46 [“Taiti” in error; known only from west coast of South America].—Herring, 1961:229, 251 [Ecuador; Galapagos Islands; etc.].—Linsley and Usinger, 1966:136 [“near Galapagos” Islands].

**Halobates splendens** Witlaczil

*Halobates splendens* Witlaczil, 1886:178 [west coast of South America (type)].—Usinger, 1938:84 [“near the Galapagos” Islands].—Herring, 1961:229, 248 [Ecuador; Galapagos Islands; etc.].

**Subfamily Ptilomerinae** Bianchi

**Genus Potamobates** Champion

*Potamobates* Champion, 1898:154 [type-species: *Potamobates unidentatus* Champion, fixed by Kirkaldy, 1906a:155].—Kuitert, 1942:140 [key to species of New World].

**Potamobates bidentatus** Champion

*Potamobates bidentatus* Champion, 1898:155 [Mexico (type)].—Kirkaldy, 1899a:2 [Ecuador]; 1899b:1 [Ecuador].—Campos, 1925a:48 [Ecuador].

**Potamobates williamsi** Hungerford

*Potamobates williamsi* Hungerford, 1932:228 [Ecuador (type)].—Drake and Harris, 1934:228 [Ecuador].—Kuitert, 1942:141 [Ecuador].

**Family Hebridae** Amyot and Serville

The family Hebridae is represented in the following list by literature records for four species in two genera from continental Ecuador and none from Galapagos Islands. Several additional species may be found in Ecuador.

Drake and Harris (1943) discussed this family as it occurs in the Western Hemisphere; the list of species was brought up-to-date by Drake and Chapman (1958:324–325), who enumerated 13 species in two genera for South America. The appended key based on classical separating characters should permit ready recognition of those two genera.
Key to Genera of Hebridae in South America

Antennae with 5 distinct, elongate segments ....................... *Hebrus* Curtis
Antennae with 4 elongate segments ............................... *Merragata* White

**(including *Lipogomphus* Berg)**

**Genus *Hebrus* Curtis**
*Hebrus* Curtis, 1833:198 [type-species: *Lygaeus pusillus* Fallen, only included species].

**Hebrus camposi** Drake and Chapman

**Hebrus ecuadorensis** Drake and Harris

**Hebrus hungerfordi** Drake and Harris
*Hebrus hungerfordi* Drake and Harris, 1943:58 [Ecuador (type)].—Drake and Chapman, 1958:325 [Ecuador].

**Genus *Merragata* White**
*Merragata* White, 1877:113. [type-species, *Merragata hebroides* White, only included species].

**Merragata hebroides** White
*Merragata hebroides* White, 1877:114 [Hawaiian Islands (type)].—Drake and Harris, 1943:43 [Ecuador; etc.].—Drake and Cobben, 1960b:36 [Ecuador; etc.].

**Family *HELOTREPHIDAE* Esaki and China**

The lack of Ecuadorian records for this family probably results from inadequate collecting rather than from its non-occurrence.

Two genera are known from South America. They can be separated by the following couplet abstracted from China’s (1940:123–124) key to the genera of the subfamily Neotrephinae to which they both belong.

Key to the Genera of Helotrepidae in South America

Anterior margin of pronotum with two deep, angular emarginations separated by a broad, convex, central lobe. Labium not reaching posterior coxae .......................... *Neotrephes* China
Anterior margin of pronotum virtually straight, without emarginations. Labium reaching between posterior coxae .................. *Paratrephes* China

**Family *HYDROMETRIDAE* Billberg**
The present list contains literature records of two species in a single genus for Ecuador and none for the Galapagos Islands. Surely more of South America’s more than 20 species in three genera should be found there.

Key to the Subfamilies and Genera of Hydrometridae in South America

1. Antennal segment I much longer than II, surpassing apex of head by more than half its own length. Antennal segment II arising subapically from segment I. **Subfamily *HETEROCLEPTINAE* Villiers. *Veliometra* Andersen**
Antennal segment I subequal to or shorter than II, usually only barely surpassing apex of head. Antennal segment II arising apically from segment I. Subfamily HYDROMETRINAE Billberg

2. Mesosternum with a longitudinal median sulcus \textit{Bacillometra} Esaki
Mesosternum not sulcate \textit{Hydrometra} Latrielle

Subfamily HYDROMETRINAE Billberg

Genus \textit{Hydrometra} Latrielle

\textit{Hydrometra} Latrielle, 1796:86 [type-species, \textit{Cimex stagnorum} Linnaeus, fixed by Latrielle, 1810:434].

\textit{Hydrometra caraiba} Guerin

\textit{Hydrometra caraiba} Guerin, 1857:413 [Cuba (type)].—Drake and Lauck, 1959:50 [Ecuador; etc.].—Nieser, 1970d:143 [Ecuador; etc.].

\textit{Hydrometra williamsi} Hungerford and Evans

\textit{Hydrometra williamsi} Hungerford and Evans, 1934:97 [Ecuador (type)].—Drake and Lauck, 1959:52 [Ecuador].

Family LARGIDAE Amyot and Serville

The following text contains records of four species in two genera of Largidae from continental Ecuador and none from the Galapagos Islands. Undoubtedly the list eventually will include more of the 60 species in seven genera that have been described from South America.

The family was cataloged by Hussey (1929) in its older traditional position as the subfamily Euryophthalminae of 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).

The seven South American genera can be separated by the following key which is partly original and partly based on Stal's (1870:90–91) key.

Key to Genera of Largidae in South America

1. Head with a cylindrical neck about half as long as globular part of head \textit{Thaumastaneis} Kirkaldy
Head without a long neck \textit{Astemma} Le Peletier and Serville

2. Pronotum with posterior angles rectangular or acute, usually projecting distinctly laterad of costal margins \textit{Astemma} Le Peletier and Serville
Pronotum with posterior angles rounded or vaguely angled, not projecting laterad of costal margins \textit{Fibrenus} Stal

3. Anterior coxa with a strong oblique spine anterolaterally near apex. Male with anterior pronotal lobe distinctly convex, as high as or higher than posterior lobe; female with anterior lobe not elevated \textit{Fibrenus} Stal
Anterior coxa unarmed. Neither sex with anterior pronotal lobe elevated.

4. Body stout, oblong to oval. Hemelytra with costal margins weakly to strongly convex, their combined widths greater than width of pronotum \textit{Largus} Hahn
Body slender, nearly or quite parallel-sided. Hemelytra with costal margins virtually straight, their combined widths not greater than width of pronotum
5. Head dorsally between eyes moderately to strongly concave ............ 6
Head dorsally between eyes flat or slightly convex .......... *Stenomacra* Stal
6. Eyes supported on elongate, oblique stalks about as long as the dorsal
width of an eye ............................................. *Acinocoris* Hahn
Eyes not stalked ............................................. *Theraneis* Spinola

**Genus Acinocoris Hahn**

*Acinocoris* Hahn, 1834:113 [type-species, *Acinocoris calidus*
Hahn, not Fabricius, a variety of *Cimex lunaris* Gmelin, only included species].—Schmidt, 1931:4-6 [key to species of *Acinocoris*].

*Acinocoris includens* Walker

*Acinocoris includens* Walker, 1873a:38 [Ecuador (type)].—
Schmidt, 1931:11 [Ecuador; etc.].
*Acinocoris bilineatus* var. *includens*.—Hussey, 1929:12 [Ecuador].

**Genus Largus Hahn**

*Largus* Hahn, 1831:13 [type-species: *Cimex humilis* Drury, only included species].

*Largus cinctus* Herrich-Schaeffer

*Largus cinctus* Herrich-Schaeffer, 1842:6 [Mexico].
*Largus "cinctus?".—Campos, 1925a:59 [Ecuador].

*Largus haenschi* Schmidt

*Largus "Haenschi"* Schmidt, 1931:28 [Ecuador (type)].

*Largus martinezi* Bolivar

*Largus martinezi* Bolivar, 1879:141 [Ecuador (type)].
*Euryphthalus martinezi*.—Hussey, 1929:18 [Ecuador].

**Family Lygaeidae** Shilling

For this large family, only 24 species in 17 genera are reported for continental Ecuador, and nine species in seven genera are reported for the Galapagos Islands; of these species just one, *Cymoninus notabilis* (Distant), is known from both areas. The total numbers involved are 33 species in 19 genera. The continental records were taken primarily from Slater's (1964) catalog which gives access to all the literature of the family; the Galapagos Islands' records were taken primarily from Ashlock's (1972) study of "The Lygaeidae of the Galapagos Islands," which gives keys and discussions for all forms known from that archipelago.

As no comprehensive keys for the many genera of this large group in tropical America are available, none can be adapted, and the time and materials for making an original one are not now available.

**Subfamily Blissinae** Stal

**Genus Blissus Burmeister**


**Genus Ischnodemus Fieber**

*Ischnodemus* Fieber, 1837:337 [type-species: *Ischnodemus quadratus* Fieber, only included species].—Campos, 1919:57 [one unidentified species from Ecuador]; 1925a:58 [one unidentified species from Ecuador].

**Subfamily Cyminae** Baerensprung

**Tribe Ninini Barber**

**Genus Cymoninus Breddin**

*Cymoninus* Breddin, 1907a:38. [type-species: *Cymoninus subunicolor* Breddin, a junior synonym of *Ninus sechellensis* Bergrloth, original designation].
Cymoninus notabilis (Distant)

Ninus notabilis Distant, 1882:191 [Guatemala (type)].

Cymoninus notabilis.—Ashlock, 1972:97 [Galapagos Islands; Ecuador; etc].—Linsley, 1977:11 [Galapagos Islands].

Subfamily GEOCORINAE Baerensprung

Genus Geocoris Fallen

Geocoris Fallen, 1814:10 [type-species: Cimex gryllodes Linnaeus, fixed by Oshanin, 1912:30].—Campos 1919:57; [one unidentified species from Ecuador]; 1925a:58 [one unidentified species from Ecuador].

Subfamily LYGAEINAE Amyot and Serville

Genus Acroleucus Stal


Acroleucus heros Breddin


Acroleucus pothus Breddin


Genus Craspeduchus Stal


Craspeduchus aequatorialis (Breddin)

Spilostethus (Craspeduchus) aequatorialis Breddin, 1912:353 [Ecuador (type)].

Craspeduchus aequatorialis.—Slater, 1964:47 [Ecuador].

Genus Lygaeus Fabricius

Lygaeus Fabricius, 1794:113 [type-species: Cimex equestris Linnaeus, fixed by Curtis, 1833:481].—Campos, 1919:56 [two unidentified species from Ecuador; no clue as to a modernly restricted genus in which they would be placed today]; 1925a:58 [two unidentified species from Ecuador; see note for 1919].

Genus Nicuesa Distant

Nicuesa Distant, 1893a:385 [type-species: Nicuesa speciosa Distant, only included species].

Nicuesa affinis Distant

Nicuesa affinis Distant, 1901b:538 [Ecuador (type)].—Slater, 1964:151 [Ecuador].

Genus Ochrostomus Stal

Lygaeus (Ochrostomus) Stal, 1874:105, 110 [type-species: Ly-gaeus pulchellus Fabricius, fixed by Van Duzee, 1916:18].

Ochrostomus confraternus (Uhler)

Lygaeus confraternus Uhler, 1869:325 [“between Napo and Maranon” (type)].

Genus Oncopeltus Stal

Lygaeus (Oncopeltus) Stal, 1868:70, 75 [type species, Cimex famelicus Fabricius, fixed by Distant 1904a:4].

Oncopeltus.—Stal, 1872b:40.

Oncopeltus fasciatus (Dallas)

Lygaeus fasciatus Dallas, 1852:538 [U.S.A.; Mexico; Brazil; British Guiana; Colombia].

Oncopeltus fasciatus.—Campos, 1919:56 [Ecuador]; 1925a:58 [Ecuador].

Oncopeltus (Erythrischius) fasciatus.—Slater, 1964:175 [Ecuador; etc].

Oncopeltus varicolor (Fabricius)

Lygaeus varicolor Fabricius, 1794:149 [Trinidad (type)].

Oncopeltus varicolor.—Campos, 1919:56 [Ecuador]; 1925a:58 [Ecuador].

Oncopeltus (Oncopeltus) varicolor.—Slater, 1964:174 [Ecuador; etc].

Subfamily ORSILLINAE Stal

Ashlock (1967) published a reclassification of the world genera of the subfamily Orsillinae with keys and numerous illustrations. His tribal arrangement of genera differs, in significant part, from that in the Slater catalog.
Tribe METRARGINI Breddin

Genus Darwinysius Ashlock

*Darwinysius* Ashlock, 1967:42 [type-species: *Nysius marginalis* Dallas, only included species].

*Darwinysius marginalis* (Dallas)


*Darwinysius* wenmanensis Ashlock


Genus Xyonysius Ashlock and Lattin

*Xyonysius* Ashlock and Lattin, 1963:702 [type-species: *Nysius californicus* Stal, original designation].

*Xyonysius californicus* (Stal)


*Xyonysius naso* (Van Duzee)

*Nysius (Ortholomus) naso* Van Duzee, 1933:27 [Galapagos Islands (type)].

*Ortholomus naso*.—Barber, 1934:285 [Galapagos Islands].


Tribe NYSIINI Uhler

Genus *Nysius* Dallas


*Nysius procerus* Distant

*Nysius procerus* Distant, 1893b:86 [Ecuador (type)]; Distant (1891:113) listed this combination as a "n.sp." from Ecuador but had neither a description nor an illustration, hence it was a nomen nudum there].—Campos, 1919:56 [Ecuador]; 1925a:58 [Ecuador].—Slaten, 1964:291 [Ecuador].

*Nysius usitatus* Ashlock


Tribe ORSILLINI Stal

Genus *Ortholomus* Stal

*Nysius (Ortholomus) Stal, 1872b:43 [type-species: *Heterogaster punctipennis* Herrich-Schaeffer, only included species].

*Ortholomus jamaicensis* (Dallas)

*Nysius jamaicensis* Dallas, 1852:335 [Jamaica (type)].

*Ortholomus sparcus*.—Campos, 1919:56 [Ecuador]; 1925a:58 [Ecuador].

*Ortholomus jamaicensis*.—Slaten, 1964:335 [Ecuador; etc.].

*Ortholomus usingeri* Ashlock


Subfamily PACHYGRONTHINAE Stal

This subfamily was monographed by Slater (1955) with keys to genera and species.

Tribe PACHYGRONTHINI Stal

Genus *Pachygrontha* Germar

*Pachygrontha* Germar, 1837b:152 [type-species: *Pachygrontha lineata* Germar, only included species].
Pachygrontha oedancalodes carvalhoi Slater

Pachygrontha oedancalodes carvalhoi Slater, 1955:38 [Brazil (type); etc.]; 1956:3 [Ecuador]; 1964:725 [Ecuador; etc.]

Subfamily RHYPAROCHROMINAE Amyot and Serville

Tribe CLERADINI Stal

Genus Clerada Signoret

Clerada Signoret, 1863a:28 [type-species: Clerada apicicornis Signoret, only included species].

Clerada apicicornis Signoret

Clerada apicicornis Signoret, 1863a:28 [Reunion Island; St. Thomas Island; Venezuela].—Leon and Leon, 1953:54 [Ecuador; etc.]

Tribe LETHAEINII Stal

Genus Cistalia Stal


Cistalia neotropicalis Slater and Baranowski

Cistalia neotropicalis Slater and Baranowski, 1973:267 [Venezuela (type); Ecuador; etc.].

Genus Cryphula Stal

Cryphula Stal, 1874:164 [type-species: Cryphula parallelogramma Stal, only included species].—Campos, 1919:57 [two unidentified species from Ecuador]; 1925a:59 [two unidentified species from Ecuador].—Scudder, 1962:766 [key to species].

Cryphula affinis (Distant)

Trapezus affinis Distant, 1901c:500 [Guatemala (type)].
Cryphula trimaculata.—Barber, 1955:137 [Ecuador; etc.].—Slater, 1964:815 [Ecuador; etc.].

Genus Paragonatus Barber

Paragonatus Barber, 1939:363 [type-species: Gonatas divergens Distant, original designation].

Paragonatas divergens (Distant)


Genus Exptochiomera Barber

Exptochiomera Barber, 1928:175 [type-species: Lygaeus (Bessus) minimus Guerin, original designation].

Exptochiomera confusa Barber

Exptochiomera confusa Barber, 1953a:21 [United States (type); Ecuador; etc.].—Slater, 1964:1077 [Ecuador; etc.].

Genus Heraeus Stal

Heraeus Stal, 1862b:314 [type-species: Lygaeus triguttatus Guerin, only included species].

Heraeus pacificus Barber


Genus Myodocha Latreille

Myodocha Latreille, 1807:126 [type-species: Myodocha serripes Latreille, fixed by Latreille, 1810:255].—Campos, 1919:57 [one unidentified species from Ecuador]; 1925a:59 [one unidentified species from Ecuador].

Genus Pachybrachius Hahn

Pachybrachius Hahn, 1826:18 [type-species: Pachybrachius luridus Hahn, only included species].

Pachybrachius albocinctus Barber

Pachybrachius albocinctus Barber, 1953b:216 [United States (type); Ecuador; etc.].—Slater, 1964:1110 [Ecuador; etc.].
**Pachybrachius bilobatus** (Say)


**Pachybrachius bilobatus**.—Slater, 1964:1113 [Ecuador; etc.].

**Pachybrachius insularis** (Barber)


**Pachybrachius nesovinctus** Ashlock


**Pachybrachius procinctus** (Breddin)

*Pamela procincta* Breddin, 1901c-1902a:59 [Ecuador (type)].

**Pachybrachius procinctus**.—Slater, 1964:1139 [Ecuador].

**Pachybrachius recinctus** (Breddin)

*Pamela recincta* Breddin, 1901c-1902a:59 [Ecuador (type)].

**Pachybrachius recinctus**.—Slater, 1964:1140 [Ecuador].

**Pachybrachius vinctus** (Say)

*Pamela vincta* Say, 1832:16 [United States (type)].

**Pachybrachius vinctus**.—Slater, 1964:144 [Ecuador; etc.].

**Pepysena picta** Barber


**Family MACROVELIIDAE** McKinstry

No member of this family is known from Ecuador. The only species reported from South America is the lone member of the genus *Chepulvelia* China (1963:17), and it may be confined to Chile.

Drake and Chapman (1963) presented keys to subfamilies, tribes, and genera of Macroveliiidae.

**Family MEGARIDIDAE** McAtee and Malloch

The only genus belonging to this family, *Megaris* Stal, is restricted to tropical America where it ranges as far north as Trinidad and Mexico. Although there are as yet no literature records for Ecuador, the family undoubtedly will be found there.

McAtee and Malloch (1928a:5-6) presented a key to the species known to them and then (1928b:46) described an additional species from South America.

**Family MESOVELIIDAE** Douglas and Scott

At this time records are available for two species, each in a separate genus, from continental Ecuador and none from the Galapagos Islands. Certainly more of the seven South American species, all in the two genera mentioned above, will be found in Ecuador. This catalog follows Drake and Chapman (1963) and other authors who considered Mesoveliidae and Macroveliiidae as separate families (see Macroveliiidae earlier in this list).

Landmark literature treating this family as a unit includes Horvath's (1915) monograph and (1929) world catalog. For the Western Hemisphere the most recent checklist of species was given by Drake (1948b:147).

The following key to the two genera in South America was adapted from Hungerford's (1929:288-289) description of the genus *Mesoveloidea*. **Genus Pepysena Distant**

*Pepysena* Distant, 1882:211 [type-species: *Pepysena levis* Distant, fixed by Barber, 1954:218].
Key to the South American Genera of Mesoveliidae

Antennal insertion separated from eye by a space almost equal to diameter of any eye ........................................... *Mesovelia* Mulsant and Rey
Antennal insertion close to an eye, space between not greater than diameter of antennal segment I ........................ *Mesoveloidea* Hungerford

**Genus Mesovelia** Mulsant and Rey
*Mesovelia* Mulsant and Rey, 1852:138 [type-species: *Mesovelia furcata* Mulsant and Rey, only included species].

*Mesovelia hambletoni* Drake and Harris
*Mesovelia hambletoni* Drake and Harris, 1946:8 [Ecuador (type)].—Drake, 1948b:147 [Ecuador].

**Genus Mesoveloidea** Hungerford
*Mesoveloidea* Hungerford, 1929:288 [type-species: *Mesoveloidea williamsi* Hungerford, only included species].

*Mesoveloidea williamsi* Hungerford
*Mesoveloidea williamsi* Hungerford, 1929:289 [Ecuador (type)].—Jaczewski, 1931:64 [Ecuador].—Hungerford, 1938:218 [Ecuador; etc.].—Harris and Drake, 1941a:277 [Ecuador; etc.].—Drake and Harris, 1946:8 [Ecuador].—Drake, 1948b:147 [Ecuador; etc.].

**Family Miridae** Hahn

Listed below are Miridae records for 60 species in 40 genera for continental Ecuador and 40 species in 16 genera from the Galapagos Islands. Of the species reported from the Galapagos Islands, 34 are known only from that archipelago; of the other five, three are virtually cosmopolitan and two are widespread in the Neotropics.

The number of species in the Miridae approaches all of the other Heteroptera together, hence many, many more can be expected in continental Ecuador and at least several more on the Galapagos Islands. Carvalho alone and with coworkers described many species and provided keys for parts of the family. His (1955) classical “Keys to the Genera of Miridae of the World” and his (1957–1960) “Catalogue of the Miridae of the World” must be used by any aspiring student of the family for previous literature. Significant modifications of parts of those world works, as they are important to Neotropical studies, will be referred to at appropriate points in the following list. The Galapagos Islands’ Miridae fauna was reviewed by Carvalho and Gagne (1968) in a single paper with keys to species in which each author was individually responsible for large parts and joined in coauthorship for the remainder. A key to subfamilies based on nymphs was given by Akingbohungbe (1974:693).

For purposes of this list, the suprageneric classification of the Carvalho “Catalogue” is followed. Some of the subsequently proposed rearrangements may have merit, but an established comprehensive system is more easily followed than is piecemeal change.

**Subfamily Bryocorinae** Baerensprung

**Tribe Bryocorini** Baerensprung

**Genus Cyrtocapsus** Reuter
*Cyrtocapsus* Reuter, 1876:78 [type-species: *Capsus caliginosus* Stal, only included species].

*Cyrtocapsus andinus* Carvalho
*Cyrtocapsus andinus* Carvalho, 1954a:13 [Peru (type); etc.].—Yust, 1955:438 [Ecuador]; 1958:190 [Ecuador].

**Genus Eccritotarsus** Stal
*Eccritotarsus* Stal, 1858:57 [type-species: *Eccritotarsus nigrocrusiatus* Stal, fixed by Kirkaldy, 1906a:135].—Yust, 1958, nos. 168, 169 [Yust reports two unidentified species as “sp. No. 1” and “sp. No. 2”].—Carvalho and Gomes, 1971b: 185–188 [key to known species].
Genus *Eccritotarsus* Carvalho

*Eccritotarsus* Carvalho, 1966:233 [Ecuador (type)].

*Eccritotarsus nigrocruciatus* Stal

*Eccritotarsus nigrocruciatus* Stal, 1858:57 [Brazil (type)].—Carvalho, 1957:99 [Ecuador; etc.].

*Eccritotarsus paracruciatus* Carvalho and Gomes

*Eccritotarsus ecuadorensis* Carvalho and Gomes, 1971a:226, preoccupied [Ecuador (type)].

*Eccritotarsus paracruciatus* Carvalho and Gomes, 1971b:186 [proposed as new name for preoccupied combination *Eccritotarsus ecuadorensis* Carvalho and Gomes].

Genus *Monalocoris* Dahlbom

*Monalocoris* Dahlbom, 1851:209 [type-species: *Cimex Jilicis* Linnaeus, only included species].

*Monalocoris neotropicalis* Carvalho and Gomes

*Monalocoris neotropicalis* Carvalho and Gomes, 1969a:228 [Ecuador (type)].

Genus *Neofurius* Distant

*Neofurius* Distant, 1884:292 [type-species: *Neofurius affinis* Distant, fixed by Kirkaldy 1906a:147].—Campos, 1925a:60 [one unidentified species for Ecuador].

*Neofurius discovittatus* Carvalho and Hsiao

*Neofurius discovittatus* Carvalho and Hsiao, 1954:143 [Ecuador (type)].—Carvalho, 1957:114 [Ecuador].

Genus *Pycnoderes* Guerin

*Pycnoderes* Guerin, 1857:404 [type-species: *Pycnoderes quadrimaculatus* Guerin, only included species].—Yust, 1958, no. 202 [for Ecuador “Pycnoderes sp. new”].

*Pycnoderes ecuadorensis* Carvalho and Gomes

*Pycnoderes ecuadorensis* Carvalho and Gomes, 1971d:472 [Ecuador (type)].

Genus *Tenthecoris* Scott

*Tenthecoris* Scott, 1886:65 [type-species: *Tenthecoris bicolor* Scott, only included species].—Carvalho, 1948b:281-282 [key to species of *Tenthecoris*].

*Tenthecoris ecuadorensis* Carvalho

*Tenthecoris ecuadorensis* Carvalho, 1954b:104 [Ecuador (type)]; 1957:130 [Ecuador].

Tribe Monalonini Reuter

Genus *Monalonion* Herrich-Schaeffer


*Monalonion annulipes* Signoret

*Monalonion annulipes* Signoret, 1858b:500 [Mexico (type)].—Carvalho, 1972:121, 123 [Ecuador; etc.].

*Monalonion atratum* Distant

*Monalonion atratum* Distant, 1883:247 [Panama (type)].—Kirkaldy, 1902a:264 [Ecuador].—Carvalho, 1957:137 [Ecuador; etc.]; 1972:121, 127 [Ecuador; etc.].

*Monalonion pilosipes* Kirkaldy, 1902a:264 [Ecuador (type)].

*Monalonion dissimulatum* Distant

*Monalonion dissimulatum* Distant, 1883:247 [Guatemala (type)].—Carvalho, 1972:121, 134 [Ecuador; etc.].

*Monalonion megistion* Kirkaldy, 1902a:264 [Amazon (type); Ecuador].—Distant, 1917:382 [Ecuador; etc.].—Carvalho, 1957:139 [Ecuador; etc.].

Tribe Cylapini Kirkaldy

Genus *Pelidocylapus* Poppius

*Pelidocylapus* (Pellidocylapus) Poppius, 1909a:12 [type-species: *Valdasius rugosus* Distant, fixed by Carvalho, 1957:31].

*Pelidocylapus*.—Carvalho and Fontes, 1968b:273-277 [elevated to full genus; reviewed; list of species].
*Peltidoclyapus scutellaris* (Poppius)

_Cylapus (Peltidoclyapus) scutellaris_ Poppius, 1909a:12 [Ecuador (type)].—Carvalho, 1957:31 [Ecuador].

*Peltidoclyapus scutellaris*—Carvalho and Fontes, 1968b:276 [Ecuador].

**Tribe FULVIINI Uhler**

Schmitz and Stys (1973:401) elevated this tribe to subfamily status.

**Genus Fulvius Stal**

_Fulvius_ Stal, 1862b:322 [type-species: _Fulvius anchoreides_ Stal, only included species].

**Fulvius brevicornis** Reuter


_Fulvius geniculatus_ Van Duzee


**Subfamily DERAEOCORINAE Douglas and Scott**

**Tribe CLIVINEMATINI Reuter**

Carvalho and Gomes (1971a:89-90) provided an updated key to genera of “Clivinemini.” Steyskal (1973:204) gave an explanation for the spelling of the tribal name.

**Genus Admetus Distant**

_Admetus_ Distant, 1883:250 [type-species: _Admetus fimbriatus_ Distant, only included species].

**Admetus sulinus** Carvalho and Gomes

_Admetus sulinus_ Carvalho and Gomes 1969a:225 [Ecuador (type)].

**Tribe HYALIODINI Carvalho and Drake**

**Genus Antias Distant**

_Antias_ Distant, 1884:298 [type-species: _Antias subaerialus_ Distant, fixed by Kirkaldy, 1906a:146].

_Antias gaucha_ Carvalho and Gomes 1972:147 [Brazil (type): Ecuador].

**Genus Hyaliodocoris Knight**

_Hyaliodocoris_ Knight, 1943:119 [type-species: _Hyaliodocoris frosti_ Knight, only included species].

_Hyaliodocoris frosti_ Knight, 1943:119 [Ecuador (type)].—Carvalho, 1957:49 [Ecuador].

**Genus Knightonia Carvalho and Drake**

_Knightiella_ Carvalho and Drake, 1943:87, preoccupied [type-species: _Knightiella knighti_ Carvalho and Drake, only included species].

_Knightonia_ Carvalho and Drake, 1944:239 [proposed as a new name for _Knightiella_ Carvalho and Drake, hence takes same type-species].

_Knightonia knighti_ (Carvalho and Drake)

_Knightiella knighti_ Carvalho and Drake, 1943:87 [Ecuador (type)].

_Knightonia knighti_.—Carvalho, 1953c:171 [Ecuador]; 1957:49 [Ecuador].

**Genus Lyde Distant**

_Lyde_ Distant, 1891:113 [type-species: _Lyde translucida_ Distant, only included species].

_Lyde translucida_ Distant, 1891:114 [Ecuador (type): figured but not described, except for length].—Campos, 1925a:61 [Ecuador].
Eccritotarsus ecuadorensis Carvalho

Eccritotarsus ecuadorensis Carvalho, 1966:233 [Ecuador (type)].

Eccritotarsus nigrocruciatus Stal

Eccritotarsus nigrocruciatus Stal, 1858:57 [Brazil (type)].—Carvalho, 1957:99 [Ecuador, etc.].

Eccritotarsus paracruciatus Carvalho and Gomes

Eccritotarsus ecuadorensis Carvalho and Gomes, 1969a:226, preoccupied [Ecuador (type)].

Eccritotarsus paracruciatus Carvalho and Gomes, 1971b:186 [proposed as new name for preoccupied combination Eccritotarsus ecuadorensis Carvalho and Gomes].

Genus Monalocoris Dahlbom

Monalocoris Dahlbom, 1851:209 [type-species: Cimex filicis Linnaeus, only included species].

Monalocoris neotropicalis Carvalho and Gomes

Monalocoris neotropicalis Carvalho and Gomes, 1969a:228 [Ecuador (type)].

Genus Neofurius Distant

Neofurius Distant, 1884:292 [type-species: Neofurius affinis Distant, fixed by Kirkaldy 1906a:147].—Campos, 1925a:60 [one unidentified species for Ecuador].

Neofurius discovittatus Carvalho and Hsiao

Neofurius discovittatus Carvalho and Hsiao, 1954:143 [Ecuador (type)].—Carvalho, 1957:114 [Ecuador].

Genus Pycnoderes Guerin


Pycnoderes ecuadorensis Carvalho and Gomes

Pycnoderes ecuadorensis Carvalho and Gomes, 1971d:472 [Ecuador (type)].

Genus Tenthecoris Scott

Tenthecoris Scott, 1886:65 [type-species: Tenthecoris bicolor Scott, only included species].—Carvalho, 1948b:281–282 [key to species of Tenthecoris].

Tenthecoris ecuadorensis Carvalho

Tenthecoris ecuadorensis Carvalho, 1954b:104 [Ecuador (type)]; 1957:130 [Ecuador].

Tribe Monaloniiini Reuter

Genus Monalonion Herrich-Schaeffer

Monalonion Herrich-Schaeffer, 1853:168 [type-species, Monalonion parvisicera Herrich-Schaeffer, only included species].—Carvalho, 1972:119–143 [revision, key to known species pp. 121–122].

Monalonion annulipes Signoret

Monalonion annulipes Signoret, 1858b:500 [Mexico (type)].—Carvalho, 1972:121, 123 [Ecuador; etc.].

Monalonion atratum Distant

Monalonion atratum Distant, 1883:247 [Panama (type)].—Kirkaldy, 1902a:264 [Ecuador].—Carvalho, 1957:137 [Ecuador; etc.]: 1972:121, 127 [Ecuador; etc.].

Monalonion dissimulatum Distant

Monalonion dissimulatum Distant, 1883:247 [Guatemala (type)].—Carvalho, 1972:121, 134 [Ecuador; etc.].

Tribe Cylapini Kirkaldy

Genus Pellicapillus Poppius

Pellicapillus (Pellicapillus) Poppius, 1900a:12 [type-species: Valdasus rugosus Distant, fixed by Carvalho, 1957:31].
Pellicapillus.—Carvalho and Fontes, 1968b:275–277 [elevated to full genus; reviewed; list of species].
**Peltidocylapus scutellaris** (Poppius)

*Cylapus (Peltidocylapus) scutellaris* Poppius, 1909a:12 [Ecuador (type)].—Carvalho, 1957:31 [Ecuador].

*Peltidocylapus scutellaris.*—Carvalho and Fontes, 1968b:276 [Ecuador].

**Tribe Fulviini Uhler**

Schmitz and Stys (1973:401) elevated this tribe to subfamily status.

**Genus Fulvius Stal**

*Fulvius* Stal, 1862b:322 [type-species: *Fulvius anthocorides* Stal, only included species].

*Fulvius brevicornis* Reuter


*Fulvius geniculatus* Van Duzee


**Subfamily Deraeocorinae Douglas and Scott**

**Tribe Clivinematini Reuter**

Carvalho and Gomes (1971a:89–90) provided an updated key to genera of “Clivinemini.” Steyskal (1973:204) gave an explanation for the spelling of the tribal name.

**Genus Admetus Distant**

*Admetus* Distant, 1883:250 [type-species: *Admetus fimbriatus* Distant, only included species].

*Admetus sulinus* Carvalho and Gomes

*Admetus sulinus* Carvalho and Gomes 1969a:225 [Ecuador (type)].

**Tribe Hyaliodini Carvalho and Drake**

**Genus Antias Distant**

*Antias* Distant, 1884:298 [type-species: *Antias subaratus* Distant, fixed by Kirkaldy, 1906a:146].

*Antias gaucha* Carvalho and Gomes

*Antias gaucha* Carvalho and Gomes 1972:147 [Brazil (type): Ecuador].

**Genus Hyaliodocoris Knight**

*Hyaliodocoris* Knight, 1943:119 [type-species: *Hyaliodocoris frosti* Knight, only included species].

*Hyaliodocoris frosti* Knight

*Hyaliodocoris frosti* Knight, 1943:119 [Ecuador (type)].—Carvalho, 1957:49 [Ecuador].

**Genus Knightonia Carvalho and Drake**

*Knightiella* Carvalho and Drake, 1943:87, preoccupied [type-species: *Knightiella knighti* Carvalho and Drake, only included species].

*Knightonia Carvalho and Drake, 1944:239* [proposed as a new name for *Knightiella* Carvalho and Drake, hence takes same type-species].

*Knightonia knighti* (Carvalho and Drake)

*Knightiella knighti* Carvalho and Drake, 1943:87 [Ecuador (type)].

*Knightonia knighti.*—Carvalho, 1953c:171 [Ecuador]; 1957:49 [Ecuador].

**Genus Lyde Distant**

*Lyde* Distant, 1891:113 [type-species: *Lyde translucida* Distant, only included species].

*Lyde translucida* Distant

*Lyde translucida* Distant, 1891:114 [Ecuador (type); figured but not described, except for length]; 1893b:90 [Ecuador; described as a “n. sp.”].—Campos, 1925a:61 [Ecuador].
Subfamily Mirinae Hahn

Tribe Mirini Hahn

Genus Adphytocoris Carvalho and Gomes

Adphytocoris Carvalho and Gomes, 1969b:430 [type-species: Calocoris montanus Distant, original designation].

Adphytocoris collinus (Distant)

Lygus collinus Distant, 1893b:89 [Ecuador (type); Distant’s (1891:114) record as a “n. sp.” from Ecuador had neither a description nor an illustration and hence was a nomen nudum there].—Campos, 1925a:60 [Ecuador].—Carvalho, 1959:118 [Ecuador].

Adphytocoris longilineus Carvalho and Gomes

Adphytocoris longilineus Carvalho and Gomes, 1969b:432 [Ecuador (type)].

Adphytocoris montanus (Distant)

Calocoris montanus Distant, 1893b:89 [Ecuador (type). Distant’s (1891:114) record as a “n. sp.” from Ecuador had neither a description nor an illustration and hence was a nomen nudum there].—Campos, 1925a:60 [Ecuador].—Carvalho, 1959:42 [Ecuador].

Adphytocoris montanus.—Carvalho and Gomes, 1969b:431 [Ecuador].

Genus Alda Reuter

Alda Reuter, 1909b:4 [type-species: Alda fusciennis Reuter, only included species].

Alda ecuatoriana Carvalho and Gomes

Alda ecuatoriana Carvalho and Gomes 1969b:427 [Ecuador (type)].

Alda pechinchaniana Carvalho and Gomes

Alda pechinchaniana Carvalho and Gomes 1969b:429 [Ecuador (type)].

Genus Creontiades Distant

Creontiades Distant, 1883:237 [type-species: Megacoelum rubi-nervum Stal, only included species].

Creontiades castaneus Van Duzee


Creontiades citrinus Carvalho


Creontiades fernandinus Carvalho


Creontiades fuscusus Barber


Creontiades punctatus Carvalho


Creontiades vittatus Carvalho


Creontiades willowsi Van Duzee

Genus *Dagbertus* Distant

*Dagbertus* Distant, 1904b:203 [type-species: *Capsus darwini* Butler, fixed by Kirkaldy, 1906a:123].—Carvalho and Gagne, 1968:218 [for Galapagos Islands, three unnamed species as species A, B, and C].

*Dagbertus darwinii* (Butler)  

*Dagbertus formosus* Carvalho  

*Dagbertus lineatus* Gagne  

*Dagbertus marmoratus* Carvalho  

*Dagbertus nigrifrons* Gagne  

*Dagbertus pallidus* Gagne  

*Dagbertus quadrimotatus* (Walker)  

*Dagbertus spoliatus* (Walker)  

Genus *Galapagomiris* Carvalho  
*Galapagomiris* Carvalho in Carvalho and Gagne, 1968:187 [type-species: *Galapagomiris longirostris* Carvalho, only included species].

*Galapagomiris longirostris* Carvalho  

Genus *Garganus* Stal  
*Garganus* Stal, 1862b:231 [type-species: *Garganus albidivittis* Stal, fixed by Kirkaldy, 1906a:137].—Carvalho, 1945a:115 [revision; key to species, page 9].

*Garganus gracilentus* (Stal)  
*Gheelicoris gracilentus* Stal, 1858:53 [Brazil (type)].—*Garganus gracilentus*.—Yust, 1958, no. L166 [Ecuador].
**Garganus magnus** Carvalho and Gomes

*Garganus magnus* Carvalho and Gomes, 1969a:230 [Ecuador (type)].

**Genus Horcias Distant**

*Horcias* Distant, 1884:277 [type-species: *Horcias variegatus* Distant, fixed by Kirkaldy, 1906a:141].—Carvalho and Jurberg, 1974:49-65 [classical genus *Horcias* broken into three genera separated in a key to six closely related genera].

**Horcias albiventris** Distant

*Horcias albiventris* Distant, 1904b:200 [Ecuador (type)].—Carvalho, 1959:100 [Ecuador].

**Horcias chiriquinus** Distant


**Horcias lateiclavus** Distant

*Horcias lateiclavus* Distant, 1904b:200 [Ecuador (type)].—Carvalho, 1959:102 [Ecuador].

**Genus Horciasinus Carvalho and Jurberg**

*Horciasinus* Carvalho and Jurberg, 1974:49 [type-species: *Capsus signoreli* Stal, original designation]; 1976:811–834 [revision, key to known species].

**Horciasinus amazonicus** Carvalho and Jurberg

*Horciasinus amazonicus* Carvalho and Jurberg, 1976:815 [Brazil (type); Ecuador; etc.].

**Genus Lygus Hahn**


**Lygus excelsus** Distant

*Lygus excelsus* Distant, 1893b:89 [Ecuador (type). Distant’s (1891:114) listing of this as a “n. sp.” from Ecuador had neither a description nor an illustration and hence was a nomen nudum there].—Campos, 1925a:61 [Ecuador].—Carvalho, 1959:129 [Ecuador].

**Lygus sublimatus** Distant

*Lygus sublimatus* Distant, 1893b:89 [Ecuador (type). Distant’s (1891:114) listing of this as a “n. sp.” from Ecuador had neither a description nor an illustration and hence was a nomen nudum there].—Campos, 1925a:61 [Ecuador].—Carvalho, 1959:129 [Ecuador].

**Genus Phytocoris Fallen**

*Phytocoris* Fallen, 1814:10 [type-species, *Cimex populi* Linnaeus, fixed by Westwood, 1840:12].—Yust, 1955:428 [unidentified species reported from Ecuador]; 1958, no. L133 [unidentified species reported from Ecuador].—Carvalho and Gomes, 1970:115–117 [key to subgenera; list of Neotropical species; the species “*Phytocoris sugestivus*” listed on p. 116 from Ecuador has been confirmed by Carvalho (in correspondence) as a nomen nudum].

**Phytocoris lojaensis** Carvalho and Gomes


**Phytocoris rieleonensis** Carvalho and Gomes


**Phytocoris variegatus** (Distant)

*Dioniza variegata* Distant, 1891:114 [Ecuador (type); figured but not described except for length]; 1893b:88 [Ecuador; described as a “n. sp.”].—Campos, 1925a:60 [Ecuador].

**Phytocoris vilis** (Distant)

*Compsocerocoris vilis* Distant; 1893a:260 [Guatemala; Panama].

**Phytocoris vilis**.—Carvalho and Gomes, 1969b:424 [Ecuador; etc.]; 1970:116 [Ecuador; etc.].

**Genus Piasus Distant**

*Piasus* Distant, 1883:242 [type-species: *Piasus illuminatus* Distant, a junior synonym of *Deraeocoris cricriellis* Stal, only included species].
**Piasus cribicollis** (Stal)

*Piasus cribicollis* Stal, 1858:48 [Brazll (type)].

*Piasus cribicollis.*—Bergroth, 1922:12 [Ecuador; etc.].—Carvalho, 1946:16 [Ecuador; etc.]; 1959:225 [Ecuador; etc.].

**Genus Polymerus** Hahn

*Polymerus* Hahn, 1831:27 [type-species: *Polymerus holosericeus* Hahn, only included species].—Carvalho and Gomes, 1969c:478 [key to species in Chile].

*Poeciloscylus.*—Van Duzee, 1937:117 [in addition to *Poeciloscylus vegatus*, a junior synonym of *nigrilulus* as listed below, Van Duzee reported an unidentified species from Ecuador].

*Polymerus nigritulus* (Walker)


*Resthenia nigritulus.*—Atkinson, 1890:59 [Galapagos Islands].


*Polymerus testaceipes* (Stal)

*Deraeocoris testaceipes* Stal, 1858:50 [Brazil (type)].

*Polymerus* "testaceipes".—Yust, 1959, no. L133 [Ecuador].

**Genus Proba** Distant

*Proba* Distant, 1884:269 [type-species: *Proba gracilis* Distant, only included species].

*Proba sallei* (Stal)

*Lygus sallei* Stal, 1862b:321 [Mexico (type)].

*Proba sallei.*—Yust, 1955:428, 440 [Ecuador]; 1958, nos. 84, 149, 267, 293 [Ecuador].

**Genus Quitocoris** Carvalho and Gomes

*Quitocoris* Carvalho and Gomes, 1969b:425 [type-species: *Quitocoris quitoensis* Carvalho and Gomes, only included species].

*Quitocoris quitoensis* Carvalho and Gomes, 1969b:426 [Ecuador (type)].

**Genus Taedia** Distant

*Taedia* Distant, 1883:263 [type-species, *Taedia bimaculata* Distant, preoccupied, renamed by Carvalho, 1954c:426, as *Taedia distans*, only included species].—Carvalho, 1975b:167-206 [review, key to known species].

*Taedia pacifica* Carvalho and Gomes

*Taedia pacifica* Carvalho and Gomes, 1971c:250, 252, 272 [Ecuador (type); etc.].—Carvalho, 1975b:182 [Ecuador; etc.].

**Genus Taylorilygus** Leston

*Lygus* (*Taylorilygus*) Leston, 1952a:219 [type-species: *Lygus simonyi* Reuter, original designation].


*Taylorilygus pallidulus* (Blanchard)

*Phytocoris pallidulus* Blanchard, 1852:193 [Chile (type)].


**Tribe RESTHENINI** Reuter

*Note:* Carvalho and Fontes (1971:141-144) presented an illustrated key to genera of this tribe.

**Genus Lampsophorus** Reuter


*Lampsophorus ecuadorensis* Carvalho and Ferreira

*Lampsophorus ecuadorensis* Carvalho and Ferreira, 1968:209 [Ecuador (type)].
Genus *Mimoncopeltus* Kirkaldy

*Lygus* Distant, 1883:242, preoccupied [type-species: *Lygus simulans* Distant, only included species].

*Mimoncopeltus* Kirkaldy, 1906b:374 [proposed as a new name for *Lygus* Distant, hence takes same type-species].

*Mimoncopeltus albido fasciatus* (Reuter)

*Lygus albido fasciatus* Reuter, 1910:16 [Ecuador (type)].

*Mimoncopeltus albido fasciatus*.—Carvalho, 1959:327 [Ecuador; etc.].

*Mimoncopeltus ecuadorensis* Carvalho

*Mimoncopeltus ecuadorensis* Carvalho, 1953b:82 [Ecuador (type)]; 1959:327 [Ecuador].

*Mimoncopeltus variabilis* Carvalho

*Mimoncopeltus variabilis* Carvalho, 1953b:85 [Ecuador (type)]; 1959:328 [Ecuador].

Genus *Prepops* Reuter

*Resthenia* (*Prepops*) Reuter, 1905:15 [type-species: *Resthenia* (*Prepops*) *fronitalis* Reuter, only included species].

*Prepops*.—Bergroth 1922:4.

*Prepops cruxnigra* (Reuter)

*Platyylellus cruxnigra* Reuter, 1910:31 [Ecuador (type)].


Genus *Resthenia* Spinola

*Resthenia* Spinola, 1837:185 [type-species, *Resthenia scutata* Spinola, only included species].—Campos, 1919:57 [from Ecuador, an unidentified species of *Resthenia*, a name used in a more inclusive sense at that time]; 1925a:60 [see note for 1919].—Carvalho and Fontes, 1968a:235-242 [review of genus].

*Resthenia poppiusi* Reuter


Tribe STENODEMINI China

Carvalho (1975a:121-122) presented a key to the Neotropical genera of Stenodemi.

Genus *Collaria* Provancher

*Collaria* Provancher, 1872:79 [type-species: *Collaria meieuxii* Provancher, only included species].

*Collaria oleosa* (Distant)

*Trachelomiris oleosus* Distant, 1883:238 [Guatemala; Panama].

*Collaria oleosa*.—Yust 1958, no. L133 [Ecuador].

Genus *Dolichomiris* Reuter

*Dolichomiris* Reuter, 1882a:29 [type-species: *Dolichomiris linearis* Reuter, only included species].—Eyles and Carvalho, 1975:257-260 [revision, key to species, pp. 258-259]

*Dolichomiris linearis* Reuter


Genus *Neotropicomiris* Carvalho and Fontes

*Neotropicomiris* Carvalho and Fontes, 1969:332 [type-species: *Neotropicomiris pilosus* Carvalho and Fontes, original designation; key to known species].

*Neotropicomiris ecuadorensis* Carvalho and Fontes

*Neotropicomiris ecuadorensis* Carvalho and Fontes, 1969:336 [Ecuador (type)].

*Neotropicomiris nordicus* Carvalho and Fontes

*Neotropicomiris nordicus* Carvalho and Fontes, 1969:338 [Venezuela (type); Ecuador].—Carvalho, 1975a:122 [Ecuador; etc.].
Genus **Ophthalmomiris** Berg

*Ophthalmomiris* Berg, 1883:6 [type-species: *Ophthalmomiris rueteri* Berg, only included species].

**Ophthalmomiris spurius** (Stal)

*Miris spurius* Stal, 1859b:254 [Ecuador (type)].—Walkar, 1873a:52 [Ecuador].—Atkinson, 1890:35 [Ecuador].

*Stenodema spurius*.—Bergroth, 1922:2 [Ecuador].

**Ophthalmomiris** spurius.—Carvalho, 1959:298 [Ecuador].

Genus **Stenodema** Laporte

*Stenodema* Laporte, 1833:40 [type-species: *Miris virens* Fabricius, a junior synonym of *Cimex virens* Linnaeus, only included species].—Yust, 1955:428 [one unidentified species from Ecuador]; 1958, nos. 150, 210 [one unidentified species from Ecuador].—Carvalho, 1975a:137 [key to neotropical species].

**Stenodema andina** Carvalho

*Stenodema andina* Carvalho, 1975a:122, 128 [Argentina (type); Ecuador; etc.].

**Stenodema praecelsa** (Distant)

*Neomiris praecelsus* Distant, 1891:113 [Ecuador (type); figured but not described except for length]; 1893b:87 [described from Ecuador as a “n. sp.”].—Campos, 1925a:60 [Ecuador].

*Stenodema* (Stenodema) praecelsus.—Carvalho, 1959:306 [Ecuador].—Carvalho and Fontes, 1969:331 [Ecuador; etc.].—Carvalho, 1975a:123, 125 [Ecuador; etc.].

Genus **Trigonotylus** Fieber

*Trigonotylus* Fieber, 1858:302 [type-species: *Miris ruficornis* Fallen, a junior synonym of *Cimex ruficornis* Geoffroy, only included species].

**Trigonotylus lineatus** (Butler)


**Subfamily ORTHOTYLINAE** Van Duzee

**Tribe ORTHOTYLINI** Van Duzee

Genus **Falconia** Distant

*Falconia* Distant, 1884:298 [type-species: *Falconia caduca* Distant, a junior synonym of *Falconia poetica* Distant, fixed by Kirkaldy, 1906a:146].

**Falconia andina** Carvalho

*Falconia andina* Carvalho, 1953a:35 [Ecuador (type)]; 1958b:61 [Ecuador].

**Falconia minor** Carvalho

*Falconia minor* Carvalho, 1945b:184 [Brazil (type)].

*Falconia “major”* Yust, 1958, no. 29 [Ecuador; in the absence of a species name “Falconia major,” this record is assigned to *minor* in the tentative belief that an inadvertent substitution of the opposite term was made].

Genus **Galapagocoris** Carvalho

*Galapagocoris* Carvalho in Carvalho and Gagne, 1968:179 [type-species: *Diaphnidia crockeri* Van Duzee, only included species].

**Galapagocoris crockeri** (Van Duzee)


Genus **Hyalochloria** Reuter


**Hyalochloria denticornis** Hsiao

Genus *Paraproba* Distant

*Paraproba* Distant, 1884:270 [type-species: *Paraproba fasciata* Distant, fixed by Kirkaldy, 1906a:138].

*Paraproba singularis* Carvalho and Gomes

*Paraproba singularis* Carvalho and Gomes, 1969a:228 [Ecuador (type)].

Subfamily *Phylinae* Douglas and Scott

Tribe *Dicyphini* Reuter

Genus *Cyrtopeltis* Fieber

*Cyrtopeltis* Fieber, 1860:76, 323 [type-species: *Cyrtopeltis gemculata* Fieber, fixed by Fieber, 1861:323].

*Cyrtopeltis affinis* Gagne


*Cyrtopeltis arida* Gagne


*Cyrtopeltis floreana* Gagne


*Cyrtopeltis gummiferae* Gagne


*Cyrtopeltis helleri* Gagne


*Cyrtopeltis modesta* (Distant)

*Neoitsia modestus* Distant, 1893a:447 [Guatemala (type)].

*Engytatus gemculatus*.—Van Duzez, 1937:116 [Galapagos Islands; etc.].

*Cyrtopeltis (Engytatus) "modestus"*.—Carvalho, 1959a:186 [Ecuador; Galapagos Islands].

*Cyrtopeltis modesta*.—Linsley and Usinger, 1966:136 [Galapagos Islands].

*Cyrtopeltis (Engytatus) modesta*.—Carvalho and Gagne, 1968:177 [Galapagos Islands; etc.].—Linsley, 1977:14 [Galapagos Islands].

Genus *Dicyphus* Fieber

*Dicyphus Fieber*, 1858:326 [type-species: *Capsus pallidus* Herrich-Schaeffer, fixed by Kirkaldy, 1906a:127].

*Dicyphus cucurbitaceus* (Spinola)

*Phytocoris cucurbitaceus* Spinola, 1852:196 [Chile (type)].


*Dicyphus "cucurbitaceus"*.—Yust, 1958, nos. 87, 293 [Ecuador].

Genus *Macrolophus* Fieber


*Macrolophus innotatus* Carvalho


*Macrolophus praeclarus* (Distant)

*Pandama praeclarus* Distant, 1884:271 [Guatemala (type)].

*Macrolophus praeclarus*.—Yust, 1955:441 [Ecuador].

*Macrolophus "praeclarus"*.—Yust, 1958, no. L86 [Ecuador].

*Macrolophus punctatus* Carvalho

Tribe PHYLINI Douglas and Scott

Genus Campylomma Reuter

Campylomma Reuter, 1878:52 [type-species: Campylomma nigronasuta Reuter, fixed by Distant, 1904a:483].

Campylomma citrinum Carvalho


Genus Psallus Fieber

Psallus Fieber, 1858:321 [type-species: Cimex roseus Fabricius, fixed by Distant, 1904a:482].

Psallus insularis Barber


Psallus longirostris Carvalho


Psallus mella (Van Duzee)


Psallus usingeri Carvalho


Genus Rhinacloa Reuter

Rhinacloa Reuter, 1876:88 [type-species: Rhinacloa forticornis Reuter, only included species].

Rhinacloa aricana Carvalho

Rhinacloa aricana Carvalho, 1948a:9 [Chile (type); etc.].—Yust, 1955:433, 440 [Ecuador]; 1958, nos. 80, 88 [Ecuador].

“Chinacloa arica”.—Yust, 1958, no. 70 [Ecuador].

Rhinacloa forticornis Reuter

Rhinacloa forticornis Reuter, 1876:89 [United States (type)].—Yust, 1955:428 [Ecuador]; 1958, nos. 267, 293 [Ecuador].

Rhinacloa rubescens Carvalho


Rhinacloa subpallicornis Knight


Family NABIDAE Costa

Of the approximately 35 species of Nabidae in six genera reported for South America, only four species in two genera are listed below for Ecuador; another three species in one of these genera have been reported for the Galapagos Islands. Many more species should be found in Ecuador.

The following key to subfamilies is adapted from China and Miller (1959), while the keys to genera are a combination of original effort and adaptations from several sources. The genus Aphelotonotus Uhler is now considered as a member of the family Pachynomidae. The genus Nabis is keyed in its former broad sense as a practical expedience. More study and more specimens of South American species of this "genus" are
needed before a practical key to its modern components can be offered in a subsequent paper.

The species of the Galapagos Islands were treated by Kerzhner (1968).

**Key to Subfamilies of Nabidae**

1. Metathoracic scent osteoles and elevated peritremes distinct between middle and posterior coxae. Tarsi 3 segmented ........................................ 2
   Metathoracic scent osteoles and peritreme obsolete, not distinct. Tarsi 1 segmented .................................. **Carthasinae** Blatchley

2. Posterior margin of pronotum laminately expanded backwards on each side of base of scutellum .............................. **Arachnocorinae** Reuter
   Posterior margin of pronotum not laminately expanded backwards on each side of base of scutellum .................................................. 3

3. Anterior coxal cavities completely encircled by prosternum ........................................
   Anterior coxal cavities not surrounded by prosternum posteriorly ...... 4

4. Pronotum with a broad collar distinctly set off posteriorly by a sharply incised suture. Claval commissure longer than scutellum .................................
   Pronotum without a distinct suture setting off a collar. Claval commissure shorter than scutellum ............................. **Prostemmae** Reuter

**Subfamily Arachnocorinae** Reuter

Contains the lone genus *Arachnocoris* Scott which is restricted to the American tropics. China (1946:121-122) provided a key to the known species.

**Subfamily Gorpinae** Reuter

Contains the lone genus *Carthasis* Champion which is confined to the American tropics. Harris (1928:75-76) provided a key to the known species.

**Subfamily Nabinae** Reuter

**Key to Genera of Nabinae in the Neotropics**

Antennal segment I twice as long as head, apical fourth to third slightly but abruptly swollen ........................................ **Metatropiphorus** Reuter

Antennal segment I less than twice as long as head, apical part not swollen ........................................ **Nabis** Latreille

**Genus Nabis Latreille**

**Nabis capsiformis** Germar

*Nabis capsiformis* Germar, 1837b:132 [South Africa].

**Survey Collection.**—Manabi (59 km W Sto. Domingo de los Colorados, 8 May 1975).

**Nabis consimilis** (Reuter)

*Reduviolus consimilis* Reuter, 1912a:23 [Ecuador (type)].
*Nabis consimilis.*—Kerzhner, 1968:85 [Ecuador; Galapagos Islands; etc.]—Linsley, 1977:12 [Galapagos Islands].

**Nabis galapagoensis** Kerzhner

*Nabis galapagoensis* Kerzhner, 1968:86 [Galapagos Islands].

Subfamily PROSTEMMINAE Reuter

**Key to Genera of Prostemminae Represented in the Neotropics**

1. Each abdominal segment sublaterally with subhorizontal carina extending from base to apex. Abdominal segment I with a distinct, compressed lobe projecting anteriorly between posterior coxae ............. *Phorticus* Stal

   Abdomen without modifications described above ......................... 2

2. Antennal segment I distinctly shorter than II .... *Alloepheborhynchus* Fieber

   Antennal segments I and II subequal in length ..................... *Pagasa* Stal

**Genus Phorticus** Stal

*Phorticus* Stal 1858:69 [type-species, *Phorticus viduaus* Stal, fixed by Distant 1904a:395].

**Phorticus collaris** Stal

*Phorticus collaris* Stal 1873:109 [Texas (type)].

**Survey Collection.**—Los Rios (Quevedo, 11 May 1975; 19 agrees well with Mexican specimens).

**Family NAUCORIDAE** Stal

Only two species in two genera are here listed for Ecuador. None have been reported for the Galapagos Islands. The discovery of many more species in Ecuador can be expected because more than 100 species in 10 genera have been credited to South America.

The present treatment follows La Rivers’ (1971) “Catalogue” and his two supplements (1974 and 1976) to it. He followed Usinger’s (1941a) classification, but did make some changes of his own and acknowledged Popov’s (1970, 1971a, and 1971b) review of the superfamily.

Subfamily AMBRYSINAE Usinger

**Genus Ambrysus** Stal

*Ambrysus* Stal, 1862b:459 [type-species: *Ambrysus signoretii* Stal, fixed Kirkaldy, 1906a:151].
**Ambrysus fossatus** Usinger


**Subfamily CRYPHOCRICINAE Montandon**

**Genus Cryphocricos** Signoret

*Cryphocricos* Signoret, 1850:290 [type-species: *Cryphocricos barozzi* Signoret, only included species].

*Cryphocricos breddini* Montandon

“*Cryphocricus* breddini” Montandon, 1911:88 [Ecuador (type)].—Usinger, 1947:341 [Ecuador; etc.].—La Rivers, 1971:79 [Ecuador; etc.].

**Subfamily NAUCORINAE Stal**

**Genus Pelocoris** Stal

*Pelocoris* Stal, 1876:142 [type-species: *Naucoris femoratus* Beauvois, fixed by Kirkaldy, 1906a:150].—Campos, 1919:49 [one unidentified species from Ecuador]; 1926:6 [one unidentified species from Ecuador].

**Family NEPIDAE Latreille**

The following Ecuadorian records of four species in two genera of Nepidae must represent only a small fraction of the species that might be expected, because South America is already known to have nearly one hundred species in four genera. The family is not known to occur on the Galapagos Islands.

For a useful but admittedly incomplete nucleus of works with which to begin a study of South American Nepidae, the following may be consulted: De Carlo (1946, 1951, and 1956) and Nieser (1975). The supra-generic classification within the Nepidae was discussed by Menke and Stange (1964), and by Lansbury (1974).

**Key to the Subfamilies, Tribes, and Genera of Nepidae in South America**

1. Pronotum across anterior angles distinctly wider than head. Abdomen ventrally on each side of the 4 pregenital segments with 2 longitudinal sutures between the midline and the row of spiracles. Subfamily Nepinae Latreille ........................................ 2
   Pronotum across anterior angles not wider, often narrower, than head. Abdomen ventrally in each side of the 4 pregenital segments with but 1 longitudinal sulcus between midline and row of spiracles. Subfamily Ranatrinae Douglas and Scott ................. 3

2(1). Length of body (excluding terminal respiratory tubes) 5 or more times as long as greatest width of body. Tribe Curictrini Menke and Stange ........................................... Curictria Stal
   Length of body not more than 3 times as long as greatest width of body. Pronotum wider than long. Tribe Nepini Latreille ..................................................... Telmatotrephes Stal

3(1). Eyes transversely ovate, mesal margin shorter than transverse diameter; eye projecting laterad .................................. Ranatra Fabricus
   Eyes not transversely ovate, mesal margin about as long as width of eye; eye extending anteriorly forming a deep, acute cleft between itself and side of head ............... Amphischizops Montandon
**Subfamily Nepinae Latreille**

**Tribe Nepini Latreille**

**Genus Telmatotrephes Stal**


*Telmatotrephes ecuadorensis* Lansbury

*Telmatotrephes ecuadorensis* Lansbury, 1972:273, 279 [Ecuador (type)].

**Subfamily Ranatrinae Douglas and Scott**

**Genus Ranatra Fabricius**


*Ranatra attenuata* Kuitert


*Ranatra camposi* Montandon


*Ranatra ecuadorensis* De Carlo

*Ranatra annulipes.—De Carlo, 1946:14 [Ecuador records only].

*Ranatra ecuadorensis* De Carlo, 1950b:525 [Ecuador (type)]; 1964a:160 [Ecuador].

**Family Notonectidae Latreille**

The number of species listed below for continental Ecuador—six species in two genera—most certainly will increase greatly with study of the aquatic Heteroptera taken during the survey. No report of any species for the Galapagos Islands was found.

The higher classification of the Notonectidae rests on studies by Hungerford (1933) which were accepted by Truxal (1949) and China and Miller (1959), and modified by Lansbury (1965b). The present key is adapted from those works. Each of the three genera known to have species in South America has a relatively recent revision referred to below under the appropriate generic name. Štys and Kerzhner (1975) pointed out that Latreille, and not Leach, deserves authorship of this family-group name.

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**Key to the Subfamilies, Tribes, and Genera of Notonectidae in South America**

1. Hemelytral commissure about twice as long as scutellum, with a distinct pit anteriorly. Subfamily Anisopinae Hutchinson. .......................... Buenoa Kirkaldy

2. Middle femur with a distinct protuberance or spine subapically on posteroventral margin. Anterolateral margin of prothorax not foveolate. Tribe Notonectini Latreille. .......................... Notonecta Linnaeus

Middle femur without such a modification. Anterolateral margin of prothorax with a large, distinct fovea. Tribe Nychni Hungerford .......................... Martarega White
Subfamily ANISOPINAE Hutchinson

Genus Buenoa Kirkaldy

*Buenoa* Kirkaldy, 1904a:120 [type-species: *Anisops antigone* Kirkaldy, original designation].—Truxal, 1953:1351–1523 [revision with key to species].

*Buenoa antigone* (Kirkaldy)

*Anisops antigone* Kirkaldy, 1899d:30 [Jamaica (type)]; 1899a: 2 [Ecuador; etc.]; 1899b:8 [Ecuador].—Nieser, 1968:130 [Ecuador; etc.]; 1969b:92 [Ecuador; etc.]; 1970b:81 [Ecuador; etc.].

*Buenoa antigone* antigone.—Kirkaldy, 1904a:122 [Ecuador; etc.].—Kirkaldy and Torre-Bueno, 1909:200 [Ecuador; etc.].

*Anisops* “Antigone”.—Campos, 1925a:44 [Ecuador].

*Anisops* sp. 2 (immature) Kirkaldy, 1899b:8 [Ecuador].—Nieser, 1968:130 [Ecuador; etc.]; 1969b:92 [Ecuador; etc.].

*Anisops* sp. 3 (imperfect) Kirkaldy, 1899b:8 [Ecuador].—Nieser, 1968:130 [Ecuador; etc.]; 1969b:92 [Ecuador; etc.].

*Anisops* sp. 3 (immature) Kirkaldy, 1899b:8 [Ecuador].—Nieser, 1968:130 [Ecuador; etc.]; 1969b:92 [Ecuador; etc.].

*Buenoa pallipes* (Fabricius)

*Notonecta pallipes* Fabricius, 1803:103 [“Americae Insulis” (type)].

*Anisops elegans*.—Kirkaldy, 1899a:2 [Ecuador; etc.]; Truxal (1953:1453) reported the type-specimen of *Anisops elegans* Fieber, 1851, is a true *Anisops* and agrees with an African species; thus its locality for tropical America must be erroneous. Assignment of subsequent American records before examination of their base specimens is uncertain and is arbitrarily made here; 1899b:9 [Ecuador].—Campos, 1925a:45 [Ecuador].

*Buenoa pallipes*.—Kirkaldy, 1904a:123 [Ecuador; etc.].—Kirkaldy and Torre-Bueno, 1909:201 [Ecuador; etc.].

Tribe NYCHINI Hungerford

Genus Martarega White

*Martarega* White, 1879a:271 [type-species: *Martarega membranacea* White, only included species].—Truxal, 1949:1–24 [revision with key to species on pages 6–7].

*Martarega membranacea* White


*Martarega williamsi* Truxal

*Martarega williamsi* Truxal, 1949:13 [Ecuador (type); etc.].—Nieser, 1970b:79 [Ecuador; etc.]; 1975:205 [Ecuador; etc.].

Family OCHTERIDAE Kirkaldy

Ecuadorean records for four species in two genera compare well with the five species in only two genera reported from South America. No reports of this family on the Galapagos Islands have been found.

The latest revision of the family in the Western Hemisphere was by Schell (1943), who provided keys to and discussions of the species. In a subsequent paper Drake and Menor described the second South American genus of the family.
Key to Genera of Ochteridae in South America

Pronotum with flat expanded lateral margin as wide as width of an eye .................. Ocyochterus Drake and Gomez-Menor
Pronotum not explanate or with narrow expanded margin distinctly less than width of an eye .................. Ochterus Latreille

Genus Ochterus Latreille

Ochterus Latreille, 1807:142 [type-species: Ochterus marginatus Latreille, only included species].—Drake, 1952b:74-75 [list of species].

Ochterus aeneifrons (Champion)

Pelogonus aeneifrons Champion, 1901:344 [Mexico; Guatemala; Panama; Grenada; St. Vincent].
Ochterus aeneifrons.—Schell, 1943:43 [Ecuador; etc.].

Ochterus parvus Schell

Ochterus parvus Schell, 1943:39 [Ecuador (type)].—Drake, 1952b:74 [Ecuador].

Ochterus perbosci (Guerin)

Pelogonus perbosci Guerin, 1843:113 [Mexico (type)].
Ochterus perbosci.—Schell, 1943:33 [Ecuador; etc.].—Nieser, 1975:28 [Ecuador; etc.].

Genus Ocyochterus Drake and Gomez-Menor

Ocyochterus Drake and Gomez-Menor, 1954:157 [type-species: Pelogonus victor Bolivar, only included species].

Ocyochterus victor (Bolivar)

Pelogonus victor Bolivar, 1879:144 [Ecuador (type)].—Champion, 1901:344 [Ecuador].
Pelogonus splendidulus Montandon, 1898:73 [Ecuador (type)].—Campos, 1925a:47 [Ecuador].
Pelogonus “Victor”.—Campos, 1925a:47 [Ecuador].
Ochterus splendidulus.—Schell, 1943:33 [Ecuador].—Drake, 1952b:75 [Ecuador].

Family Pachynomidae Stal

Records are given below for two species in one genus in Ecuador (none in the Galapagos Islands).

The family Pachynomidae, as defined by Carayon and Villiers’ (1968) study, reported about nine species in two genera, including Aphelonotus Uhler, which had formerly been in the Nabidae, for South America. Probably a few more of these, and possibly some new ones, will be found in Ecuador. The following key was abstracted from descriptions in literature and tried on specimens at hand.

Key to Subfamilies and Genera of Pachynomidae in South America

Mesocorium (between clavus and radial vein) no longer than clavus, its posterior margin transverse; exocorium (between costa and radial vein) extending broadly along costal margin of membrane as a long lobe more than twice its basal width. Ocelli present. Subfamily APHELONOTINAE Carayon and Villiers. .................. Aphelonotus Uhler
Mesocorium and exocorium with posterior margins forming a continuous, straight, oblique line. Ocelli absent. Subfamily PACHYNOMINAE Stal ...... Camarochilus Harris
Subfamily APHELONOTINAE Carayon and Villiers

Genus Aphelotus Uhler

*Aphelotus* Uhler, 1894:208 [type-species: *Aphelotus similus* Uhler, only included species].—Carayon 1968:733 [placed in family Pachynomidae].

*Aphelotus fraterculus* Harris

*Aphelotus fraterculus* Harris, 1931:18 [Panama (type); Ecuador; etc.]; 1943:261 [Ecuador; etc.].

*Aphelotus similus* Uhler

*Aphelotus similus* Uhler, 1894:209 [type; Kirkaldy, 1901a:225 [Ecuador].

Family PENTATOMIDAE Leach

This catalog lists 87 species in 46 genera for Ecuador and eight species in six genera for the Galapagos Islands; of these, three species are in two genera have been reported for both areas. The total of five genera is shared by them. The totals involved are 92 species in 47 genera. Comparison with Kirkaldy’s (1909) “Catalogue” of about 1000 species in nearly 90 genera for South America strongly suggests many more should be found in Ecuador.

The large size of this family and the confusion resulting from the diverse concepts of its contents as used by various authors have combined to make difficult a comprehensive synopsis of the group. Stal (1867) published a series of keys to genera of Pentatomidae in the New World and later (1872) cataloged the family for that region. The more recent catalog of the family for the world was by Kirkaldy (1909), “Cimicidae” for the name of the family for which he used “Alcaeorrhynchus” Bergroth, 1891:235 [proposed as new name for preoccupied *Mutyca* Stal, hence takes same type-species].

Other authors have presented revisions of various parts of the family and of these, the ones that treatments of the Neotropical members of Pentatomidae will be mentioned at the appropriate places in the following list.

Several records of Ecuadorian occurrence of certain Pentatomidae cannot be placed in the present partial list for the reasons given below. Walker (1867:415) described the genus *Ebora* for four species, three from Australia and the new species *E. plana* from Ecuador; the genus *Ebora* with its Australian species was synonymized under the genus *Notius* Dallas by Kirkaldy (1909:186) without assigning *E. plana* to a genus. Hopefully, specimens will be collected during the survey so that this species might be placed in an appropriate genus. Campos (1919:52) reported for Ecuador a badly broken specimen indicated as probably representing a new genus of the subfamily Phyllocephalinae; because that subfamily is otherwise known only from the Old World, Campos’ specimen must be assumed to belong to some other subfamily, probably the Pentatominae. Campos (1919:50) also reported for Ecuador two unidentified species of the genus *Podops* Laporte, a genus whose modern definition restricts it also to the Old World; because Campos did not report these forms in subsequent papers and because the subfamily Graphosomatinae to which the genus *Podops* belongs has no other reported representation in South America, the assumption must be made here also that his material belongs to another subfamily, most likely to the Pentatominae.

Subfamily ASOPINAE Amyot and Serville

Schouteden (1907) presented a generic synopsis, with keys to genera, and lists of the species of this subfamily for the world.

Genus Alcaeorrhynchus Bergroth

*Mutyca* Stal, 1862a:58, preoccupied [type-species: *Canthecona grandis* Dallas, only included species].

*Alcaeorrhynchus* Bergroth, 1891:235 [proposed as new name for preoccupied *Mutyca* Stal, hence takes same type-species].

*Alcaeorrhynchus grandis* (Dallas)

*Canthecona grandis* Dallas, 1851:91 [Colombia; Mexico].

*Mutica* grandis.—Campos, 1925a:53 [Ecuador].

*Alcaeorrhynchus grandis*.—Barber, 1934:281, 283 [Galapagos...

**Genus Apateticus Dallas**

*Apateticus* Dallas, 1851:105 [type-species: *Apateticus halys* Dallas, a junior synonym of *Halys lineolatus* Herrich-Schaeffer, only included species].

*Apateticus lineolatus* (Herrick-Schaeffer)

*Halys lineolatus* Herrich-Schaeffer, 1840:69 [Mexico (type)].

*Podisus lineolatus*.—Campos, 1919:50 [Ecuador]; 1925a:49 [Ecuador].

**Genus Euthyrhynchus Dallas**

*Euthyrhynchus* Dallas, 1851:77 [type-species: *Cimex floridanus* Linnaeus, fixed by Schouteden, 1907:56].

*Euthyrhynchus floridanus* (Linnaeus)

*Cimex floridanus* Linnaeus, 1767:719 [“Carolina” (type)].

**Genus Mineus Stal**

*Mineus* Stal, 1867:498 [type-species: *Podisus strigipes* Herrich-Schaeffer, only included species].

*Mineus triangularis* (Walker)

*Strachia triangularis* Walker, 1867:323 [Ecuador (type)].


**Genus Oplomus Spinola**

*Oplomus* Spinola, 1837:355 [type-species: *Cimex tripustulatus* Fabricius, a junior synonym of *Asopus salamandra* Burmeister, fixed by Schouteden, 1907:34].

*Oplomus chrysomela* Breddin


*Oplomus chrysomela*.—Bergroth, 1908:180 [Ecuador].

**Oplomus salamandra** (Burmeister)

*Asopus salamandra* Burmeister, 1835:381 [Peru (type)].

*Oplomus chrysomelas* Walker, 1867:121 [Ecuador (type)].

*Oplomus tripustulatus*.—Distant, 1880:30 [Ecuador; etc.].—Lethierry and Severin, 1893:205 [Ecuador; etc.].—Kirkaldy, 1909:8 [Ecuador; etc.].

**Genus Podisus Herrich-Schaeffer**

*Podisus* Herrich-Schaeffer, 1851:296 [type-species: *Podisus vitripennis* Herrich-Schaeffer, a junior synonym of *Arma nigriptena* Dallas, fixed by Kirkaldy, 1908b:124].

*Podisus argilliventris* Bergroth


*Podisus neniator* Breddin


*Podisus sordidus* (Stal)

*Arma sordida* Stal, 1859b:221 [Galapagos Islands (type)].

*Podisus* (*Podisus*) *sordidus*.—Stal, 1870:51 [Galapagos Islands].


*Podisus sordidus*.—Schouteden, 1907:72 [Galapagos Islands; etc.].

*Podisus sordidus*.—Kirkaldy, 1909:21 [Galapagos Islands; etc.].

*Podisus (Arma) sordidus*.—Barber, 1925:241 [Galapagos Islands].

**Genus Stiretrus Laporte**

**Stiretrus bifrenatus** Breddin

*Stiretrus bifrenatus* Breddin, 1906:194 [Ecuador (type)].—Bergroth, 1908:180 [Ecuador].


**Genus Supputius** Distant

*Supputius* Distant, 1889:321 [type-species: *Telepta palchricornis* Stal, fixed by Schouteden, 1907:59].

**Supputius obscurus** Breddin


**Subfamily Cyrtocorinae** Distant

Horvath (1916) and Kormilev (1955b) reviewed the subfamily, the latter giving a key to three of the four known genera, omitting the Brazilian *Pseudoqrrtocoris* of Jensen-Haarup (1926:53).

**Genus Cyrtocoris** White

*Coptosoma* (*Oxynotus*) Laporte, 1832:74 preoccupied [type-species, *Tryra gibba* Fabricius, only included species].

*Cyrtocoris* White, 1842:89 [proposed as a replacement name for *Oxynotus* Laporte, hence takes same type-species].

**Cyrtocoris trigonus** (Gemar)

*Oxynotus trigonus* Germar, 1839b:44 [Brazil].

**Survey Collection.—** Napo (3 km NE Lago Agrio, 17 May 1975).

**Subfamily Discocephalinae** Fieber

**Genus Alcippus** Stal

*Alcippus* Stal 1867:500 [type-species, *Coriplatus reticulatus* Stal, fixed by Stal, 1872a:10, first included species].

**Alcippus dimidiatus** Ruckes

*Alcippus dimidiatus* Ruckes 1959:97 [Ecuador (type)].

**Genus Antiteuchus** Dallas


**Antiteuchus maculosus** Ruckes

*Antiteuchus maculosus* Ruckes, 1964:81 [Ecuador (type)].

**Antiteuchus marmoratus** (Erichson)

*Comex marmoratus* Erichson, 1848:609 [British Guiana (type)].

*Dinocoris marmoratus*.—Campos, 1919:50 [Ecuador]; 1925a:49 [Ecuador].

**Genus Braunus** Distant

*Braunus* Distant, 1899:422 [type-species: *Coriplatus sciocorinus* Walker, only included species].

**Braunus sciocorinus** (Walker)

*Coriplatus sciocorinus* Walker, 1867:197 [Ecuador (type)].


**Genus Callostethus** Ruckes

*Callostethus* Ruckes, 1961:153 [type-species: *Edessa guttatopunctatus* Fabricius, only included species].

**Callostethus guttatopunctatus** (Fabricius)

*Edessa guttatopunctatus* Fabricius, 1803:152 [South America (type)].

*Antiteuchus fratermus* Uhler, 1869:321 ["near the Napo River" (type); [type-specimen not located, but description allows confident placement here].

**Genus Discocephalesa** Kirkaldy

*Platyscarus* (*Discocephalesa*) Kirkaldy, 1909:215 [type-species: *Discocephala notulata* Stal, original designation].

**Discocephala andina** (Breddin)

*Discocephala andina* Breddin, 1904b:58 [Ecuador (type)].—Bergroth, 1913:180 [Ecuador].
*Platycarenus* (*Discocephala*) *andina*.—Kirkaldy, 1909:215 [Ecuador].
*Discocephala andina*.—Ruckes, 1966b:21 [Ecuador].

**Genus Dysccephala Laporte**

*Discocephala* Laporte, 1833:55-56 [type-species: *Dysccephala brullei* Laporte, only included species].—Ruckes, 1966c:1-31 [revision; key to species, pages 5-7].

**Dryptocephala obtusiceps** Stal

*Dryptocephala obtusiceps* Stal, 1872a:4 [Columbia (type)].—Ruckes, 1966c:24 [Ecuador, etc.].

**Genus Eurystethus Mayr**

*Eurystethus* Mayr, 1864:907 [type-species: *Eurystethus nigropunctatus* Mayr, only included species].—Ruckes, 1966a:6-8 [keys to subgenera and species].

**Eurystethus nigricornis** Ruckes

*Eurystethus nigricornis* Ruckes, 1966a:25 [Ecuador (type)].

**Genus Mecistorhinus Dallas**

*Mecistorhinus* Dallas, 1851:162 [type-species: *Mecistorhinus rupestris* Dallas, only included species].

**Mecistorhinus variegatus** Ruckes

*Mecistorhinus variegatus* Ruckes, 1966d:223 [Ecuador (type)].

**Genus Platycarenus Fieber**

*Platycarenus* Fieber 1860:77 [type-species: *Cydnus umbraculatus* Fabricius, designated by Fieber 1861:327, first included species].—Ruckes, 1966b:1-42 [revision; key (pp. 10-11) to this and related genera].

**Platycarenus umbraculatus** (Fabricius)

*Cydnus umbraculatus* Fabricius 1803:186 [South America (type)].
*Platycarenus umbraculatus*.—Ruckes 1966b:13 [Ecuador; etc.].

**Genus Trincaevllius Distant**

*Trincaevllius Distant*, 1900:163 [type-species: *Sciornis galapagoensis* Butler, only included species].

**Trincaevllius galapagoensis** (Butler)

*Sciornis galapagoensis* Butler, 1877:88 [Galapagos Islands (type)].

**Subfamily PENTATOMINAE Leach**

**Tribe EDESSINI Kirkaldy**

**Genus Edessa Fabricius**

*Edessa* Fabricius, 1803:145 [type-species: *Cimex cervus* Fabricius].—Uhler, 1869:323 ["Acratodes sp." from "between Napo and Maranon"; cannot be better placed at this time].—Campos, 1919:52 [four unidentified species, in addition to *E. helix* included below, from Ecuador].

**Edessa addax** Breddin


**Edessa bibos** Breddin


**Edessa brontes** Kirkaldy

*Edessa brontes* Kirkaldy, 1903e:131, preoccupied [Ecuador (type); not "Columbia" as given by Kirkaldy, 1909:155].—Bergroth, 1908:178 [Ecuador].

**Edessa cervus** (Fabricius)

*Cimex cervus* Fabricius, 1787:282 [French Guiana (type)].
*Edessa cervus*.—Uhler, 1869:323 ["between Napo and Maranon"];
Edessa civilis Breddin


Edessa cordifera (Walker)

*Acaratodes cordifera* Walker, 1868:452 [Mexico (type)].

*Edessa cordifera*.—Piran, 1963a:108 [Ecuador].

Edessa dolosa Breddin


Edessa cubica Breddin


Edessa graminicolor Breddin


Edessa haedulus Breddin


Edessa helix Erichson

*Edessa helix* Erichson, 1848:610 [British Guiana (type)].—Campos, 1919:52 [Ecuador]; 1925a:52 [Ecuador].

Edessa ibex Breddin


Edessa incomis Breddin


Edessa leucoryxs Breddin


Edessa necopinata Breddin


Edessa obscuricornis Stal

*Edessa obscuricornis* Stal, 1858:27 [Brazil (type)].—Campos, 1925a:52 [Ecuador].

Edessa pacifica Breddin


Edessa pugil Breddin


Edessa quadridens Fabricius

*Edessa quadridens* Fabricius, 1803:148 [South America (type)].—Breddin, 1904a:140 [Ecuador; etc.].—Kirkaldy, 1909:163 [Ecuador; etc.].

Edessa reversa Walker


Edessa rufomarginata (DeGeer)

*Cimex rufomarginatus* DeGeer, 1773:330 [America (type)].

*Edessa rufomarginata*.—Campos, 1925a:52 [Ecuador].

Edessa rupicapra Breddin

Edessa sternalis Breddin


Edessa tragelaphus Breddin


Edessa urus Breddin


Edessa vernicosa Breddin


Edessa vinula Stal

*Edessa vinula* Stal, 1862a:115 [Mexico (type)].—Campos, 1925a:52 [Ecuador].

Tribe HALYINI Stal

Genus Lincus Stal

*Lincus* Stal, 1867:524 [type-species: *Pentatoma rufospilota* Westwood, only included species].—Kirkaldy, 1909:186 ("Ecuador" record for *Lincus secučer* Breddin apparently in error as the species was originally described from "Bolivia," a locality not listed by Kirkaldy).

*Lincus dentiger* Breddin


Genus Melanodermus Stal

*Melanodermus* Stal, 1867:524 [type-species: *Ochlerus circummaculatus* Stal, fixed by Kirkaldy 1909:185].

Genus Melanodermus dilutipes Breddin


Genus Tetrochlerus Breddin

*Tetrochlerus* Breddin, 1904:153 [type-species: *Tetrochlerus fissiceps* Breddin, only included species].

*Tetrochlerus fissiceps* Breddin


Genus Typhoeocoris Breddin

*Typhoeocoris* Breddin, 1903d: 122 [type-species: *Typhoeocoris fulvifemur* Breddin, only included species].

*Typhoeocoris fulvifemur* Breddin

*Typhoeocoris fulvifemur* Breddin, 1903d:122 [Ecuador (type)].—Bergroth, 1908:152 [Ecuador].—"Typhoeocoris" fulvifemur.—Kirkaldy, 1909:368 [Ecuador].

Tribe PENTATOMINI Leach

Genus Acrosternum Fieber


*Acrosternum laetum* (Stal)


*Acrosternum marginatum* (Beauvois)

*Pentatoma marginata* Beauvois, 1817:147 [Santo Domingo (type)].—Nezara marginata.—Campos, 1919:51 [Ecuador]; 1925a:51 [Ecuador].
**Acrosternum runaspis (Dallas)**

*Rhaphigaster runaspis* Dallas, 1851:280 [Ecuador (type)].
*Nezara runaspis*.—Stal, 1872a:43 [Ecuador].
*Nezara “Runaspis”*.—Lethierry and Severin, 1893:166 [Ecuador].
*Acrosternum (Acrosternum) runaspis*.—Kirkaldy, 1909:121 [Ecuador].

**Acrosternum viridans (Stal)**

*Rhaphigaster viridans* Stal, 1859b:228 [Galapagos Islands; Panama].
*Acrosternum (Nezara) viridans*.—Barber, 1925:241 [Galapagos Islands; etc.].
*Acrosternum vindans*.—Barber, 1934:281-282 [Galapagos Islands; etc.].—Linsley and Usinger, 1966:133 [Galapagos Islands].

**Genus Agroecus Dallas**


**Agroecus ecuadoriensis Jensen-Haarup**

*Agroecus* ecuadoriensis Jensen-Haarup 1937:171 [Ecuador (type)].
*Agroecus “ecuadoriensis”*.—Buckup 1957:17 [Ecuador].

**Genus Arocera Spinola**

*Arocera* Spinola, 1837:316 [type-species: *Arocera aurantiaca* Spinola, a junior synonym of *Pentatoma acroleuca* Perty, only included species].

**Arocera apta (Walker)**

*Strachia apta* Walker, 1867:323 [“Amazon Region” (type)].
*Arocera (Eupta) apta*.—Becker and Grazia-Vieira, 1977:55 [Ecuador; etc.].

**Arocera crucigera Haglund**

*Arocera crucigera* Haglund, 1868:157 [“Amazon” (type)].—Campos, 1919:51 [Ecuador]; 1925a:51 [Ecuador].

**Arocera protea Distant**

*Arocera protea* Distant, 1880:73 [Guatemala (type)].

**Arocera splendens (Blanchard)**

*Pentatoma splendens* Blanchard, 1841:148 [Colombia (type)].
*Arocera splendens*.—Distant, 1891:112 [Ecuador; etc.].—Campos, 1919:50 [Ecuador]; 1925a:51 [Ecuador].

**Genus Arvelius Spinola**

*Arvelius* Spinola, 1837:344 [type-species: *Cimex gladiator* Fabricius, a junior synonym of *Cimex albopunctatus* De Geer, fixed by Kirkaldy, 1909:150].

**Arvelius albopunctatus (De Geer)**

*Cimex albopunctatus* De Geer, 1773:331 [Surinam (type)].
*Arvelius “albo-punctatus”*.—Campos, 1919:52 [Ecuador].
*Arvelius albopunctatus*.—Campos, 1925a:52 [Ecuador].

**Genus Banasa Stal**

*Banasa* Stal, 1858:24 [type-species: *Banasa induta* Stal, fixed by Kirkaldy 1909:115].—Campos, 1925a:52 [two unidentified species from Ecuador].

**Genus Berecynthus Stal**

*Berecynthus* Stal 1862b:101 [type-species: *Proxys crenatus* Amyot and Serville, a junior synonym of *Cimex delicator* Fabricius, only included species].

**Berecynthus imitator Jensen-Haarup**

*Berecynthus imitator* Jensen-Haarup 1937:324 [Ecuador (type)].
Genus *Brachystethus* Laporte

*Edessa* (*Brachystethus*) Laporte, 1833:63 [Type-species: *Edessa* (*Brachystethus*) *marginatus* Laporte, a junior synonym of *Cimex geniculatus* Fabricius, fixed Kirkaldy, 1909:152].

*Brachystethus*.—Herrich-Schaeffer, 1845:1.—Campos, 1919:52 [two unidentified species, plus *B. vicinus* (see below), from Ecuador].

*Brachystethus cribrus* (Fabricius)

*Cimex cribrum* Fabricius, 1781:357 [America (type)].

*Brachystethus* "cribrum?".—Campos, 1925a:52 [Ecuador].

*Brachystethus geniculatus* (Fabricius)

*Cimex geniculatus* Fabricius, 1787:292 [French Guiana (type)].

*Brachystethus geniculatus*.—Uhler, 1869:323 [Ecuador].

*Brachystethus tricolor* Bolivar

*Brachystethus tricolor* Bolivar, 1879:138 [Ecuador (type)].—Kirkaldy, 1909:152 [Ecuador].

*Brachystethus vicinus* Signoret

*Brachystethus vicinus* Signoret, 1851:344 [Brazil (type)].—Campos, 1925a:52 [Ecuador]; 1925a:52 [Ecuador].

Genus *Eysarcoris* Hahn


Genus *Lopadusa* Stal


*Lopadusa fuscopunctata* (Distant)

*Bothrocoris fuscopunctatus* Distant, 1880:84 [Panama; Guiana].—Piran, 1963a:108 [Ecuador; etc.].

Genus *Chlorocoris* Spinola

*Chlorocoris* Spinola, 1837:288 [type-species: *Chlorocoris tau* Spinola, only included species].—Campos, 1919:51 [one unidentified species, as well as *C. depressus*, from Ecuador].

*Chlorocoris depressus* (Fabricius)

*Halys depressus* Fabricius, 1803:182 [South America (type)].

*Chlorocoris depressus*.—Campos, 1919:51 [Ecuador]; 1925a:51 [Ecuador].

Genus *Euschistus* Dallas

*Euschistus* Dallas, 1851:193, 201 [type-species: *Euschistus api- calis* Dallas, a junior synonym of *Cimex heros* Fabricius, fixed by Kirkaldy, 1909:63].—Campos, 1919:51 [six unidentified species from Ecuador]; 1925a:50 [six unidentified species from Ecuador]; 1932b:13 [one unidentified species from Ecuador].

*Euschistus bifibulus* (Beauvois)

*Pentatoma bifibula* Beauvois, 1817:148 [Santo Domingo (type)].

*Euschistus bifibulus* var. *guayaquilinus* Kuhlgatz, 1903:254 [Ecuador (type); listed from Ecuador by Therese von Bayern, 1903:247, without description].

*Euschistus bifibulus*.—Kirkaldy, 1909:64 [Ecuador; etc.].

*Euschistus bifibulus* (Beauvois)


Genus *Loxa* Amyot and Serville


*Loxa flavicollis* (Drury)

*Cimex flavicollis* Drury, 1773b:67 [Jamaica (type)].

*Loxa flavicollis*.—Campos, 1919:51 [Ecuador]; 1925a:51 [Ecuador].—Becker and Grazia-Vieira, 1977:59 [Ecuador; Galapagos Islands; etc.].

*Loxa picticornis* Horvath

*Loxa picticornis* Horvath, 1925:312 [Brazil; Ecuador; Galapagos Islands; Panama].
Genus _Mormidea_ Amyot and Serville

_Mormidea_ Amyot and Serville, 1843:134 [type-species: _Cimex ypsilon_ Linnaeus, fixed by Kirkaldy, 1903:231].—Campos, 1925a:50 [two unidentified species from Ecuador].

_Mormidea montandoni_ Kirkaldy

_Mormidea montandoni_ Kirkaldy, 1902b: 165 [Ecuador (type)]; 1909:61 [Ecuador].


Genus _Nezara_ Amyot and Serville

_Nezara_ Amyot and Serville, 1843:143 [type-species: _Cimex smaragdulus_ Fabricius, a junior synonym of _Cimex viridula_ Linnaeus, fixed by Kirkaldy, 1903:231].

_Nezara viridula_ (Linnaeus)

_Cimex viridula_ Linnaeus, 1758:444 [India (type)].

_Nezara viridula._—Campos, 1919:51 [Ecuador]; 1925a:51 [Ecuador].

Genus _Oebalus_ Stal

_Oebalus_ Stal, 1862b:102 [type-species: _Cimex typhoeus_ Fabricius, a junior synonym of _Cimex viridula_ Linnaeus, fixed by Kirkaldy, 1903:231].

_Oebalus poecilus_ (Dallas)

_Mormidea poecila_ Dallas, 1851:213 [North America (type)].

_Solubea poecila._—Sailer, 1944:121 [Ecuador; etc.].

Genus _Padaeus_ Stal

_Padaeus_ Stal, 1862b:101 [type-species: _Cimex irroratus_ Herrich-Schaeffer, preoccupied, a synonym of _Mormidea vidua_ Vollenhoven, fixed by Kirkaldy, 1909:68].

_Padaeus vidua_ (Vollenhoven)

_Mormidea vidua._—Vollenhoven, 1868:180 [Guatemala (type)].

"_Padaeus irroratus_?".—Campos, 1925a:50 [Ecuador].

Genus _Pellaea_ Stal

_Nezara (Pellaea)_ Stal, 1872a:40 [type-species: _Rhaphigaster sticticus_ Dallas, fixed Kirkaldy, 1909:115].

_Pellaea stictica_ (Dallas)

_Rhaphigaster sticticus_ Dallas, 1851:281 [British Guiana; Colombia; Mexico].


_Nezara stictica._—Distant, 1893b:83 [Ecuador; etc.].—Campos, 1919:51 [Ecuador]; 1925a:51 [Ecuador].

Genus _Pharypia_ Stal

_Pharypia_ Stal, 1861b: 139 [type-species: _Cimex pulchellus_ Drury, only included species].

_Pharypia pulchella_ (Drury)

_Cimex pulchellus_ Drury, 1782:67 ["Bay of Honduras" (type)].

_Pharypia pulchella._—Campos, 1919:52 [Ecuador]; 1925a:51 [Ecuador].

Genus _Piezodorus_ Fieber

_Piezodorus_ Fieber, 1860:78 [type-species: _Piezodorus degeeri_ Fieber, a junior synonym of _Cimex lituratus_ Fabricius, fixed by Fieber, 1861:329, first included species].

_Piezodorus guildinii_ (Westwood)

_Rhaphigaster guildinii_ Westwood, 1837:31 [St. Vincent, West Indies (type)].

_Piezodorus "Guildinii").—Distant, 1891:112 [Ecuador; etc.].—Campos, 1925a:52 [Ecuador].

Genus _Proxys_ Spinola

_Proxys_ Spinola, 1837:325 [type-species: _Cimex victor_ Fabricius, only included species].—Campos, 1919:51 [Campos reported _P. victor_ and one undetermined species from Ecuador]; 1925a:50 [repeat of 1919 information].

_Proxys victor_ (Fabricius)

_Cimex victor_ Fabricius, 1775:705 [Brazil (type)].

_Proxys victor._—Campos, 1919:51 [Ecuador]; 1925a:50 [Ecuador].
Survey Collection.—Pichincha (Sto. Domingo de los Colorados, May 1975).

Genus Runibia Stal

Runibia Stal, 1861b:140 [type-species: Cimex perspicuus Fabricius, fixed by Kirkaldy, 1909:110].

Runibia decorata (Dallas)

Strachia decorata Dallas, 1851:266 [Brazil (type)].


Genus Sibaria Stal

Sibaria Stal, 1872b:23 [type-species: Mormidea armata Dallas, only included species].—Rolston, 1976:218-225 [review; key to species page 220].

Sibaria andicola Breddin

Sibaria andicola Breddin, 1904b:49 [Ecuador; Peru].—Bergroth, 1908:16 [Ecuador; etc.].—Kirkaldy, 1909:62 [Ecuador].—Rolston, 1976:224 [Ecuador; etc.].

Sibaria armata (Dallas)

Mormidea armata Dallas, 1851:215 [Brazil (type)].

Sibaria armata.—Rolston, 1976:223 [Ecuador; etc.].

Genus Thyanta Stal


Thyanta antiquensis (Westwood)

Pentatoma antiquensis Westwood, 1836:36 [Antigua (type)].—Torre-Bueno, 1915:218 [Ecuador; etc.].—Campos, 1925a:50 [Ecuador].

Thyanta humilis Bergroth

Thyanta humilis Bergroth, 1891:226 [Brazil (type)].

Thyanta humilis var. viridescens Kuhlbgätz, 1903:256 ["zwischen Panama und Guayaquil"].—Therese, 1903:247 [Ecuador].

Thyanta perditor (Fabricius)

Cimex perditor Fabricius, 1794:102 [Insular America (type)].

Thyanta perditor.—Distant, 1891:111 [Ecuador; etc.].—Therese, 1903:247 [Ecuador; etc.].—Campos, 1925a:50 [Ecuador].

Thyanta setigera Buckes


Thyanta similis Van Duzee


Genus Tibilis Stal

Tibilis Stal, 1858:26 [type-species: Tibilis subconspersa Stal, only included species].

Tibilis glabriuscula Breddin


Genus Tibraca Stal

Tibraca Stal, 1858:18 [type-species: Tibraca limbaticentris Stal, only included species].

Tibraca similima Barber

Tibraca similima Barber, 1941:110 [Ecuador (type)].

Family Phloeiidae Amyot and Serville

No Ecuadorian reference to occurrence of this South American family has been encountered. Whether or not any of the three included species actually occurs in Ecuador remains to be seen.

Leston’s (1953) review of the family was expanded by Lent and Jurberg (1965); each work gave a key to genera.
Key to the Genera of Phloeidae

Narrowed apical part of scutellum elongate, at least as long as broad basal part. Labium distinctly surpassing midlength of abdomen ........................................ Phloeophana Kirkaldy

Narrowed apical part of scutellum not more than two-thirds as long as broad basal part. Labium not surpassing midlength of abdomen ........................................ Phloca Le Peletier and Serville

Family PHYMATIDAE Laporte

The present placement of this group as a full family follows the contentions of the specialist on it, N.A. Kormilev, and reflects the frequent textbook treatment at that level. Nevertheless, there is a general tendency among heteropterists to follow Carayon, et al. (1958) and place it as a subfamily of the Reduviidae.

As encountered to date, the only Ecuadorian records for the family are those of Campos, who reported three unidentified species in two genera. There are no indications that it is represented on the Galapagos Islands. The reported South American occurrence of nearly 90 species in six genera suggests numerous species, especially of the genera Phymata and Macrocephalus, should be found in Ecuador.

Two subfamilies occur in South America. For the subfamily Phymatinae, Kormilev (1962a) gave keys for and treatments of the genera, subgenera, and species; for the Macrocephalinae, one must return to the monograph by Handlirsch (1897) for a comprehensive-at-the-time point of departure.

Key to Subfamilies of Phymatidae in South America

Head dorsad of eye and propleuron just ventrad of lateral margin with a distinct, broad, longitudinal groove into which antenna fits at rest ........................................ PHYMATINAЕ Laporte

Head and propleuron without groove described above ........................................ MACROCEPHALINAЕ Handlirsch

Subfamily MACROCEPHALINAЕ Handlirsch

Key to Genera of Macrocephalinae in South America

Posterior pronotal lobe with a strong, transverse carina across anterior margin. Scutellum with elevated median line widened on basal fourth to half, reduced to carinate line posteriorly .................................. Macrocephalus Swederus

Posterior pronotal lobe without transverse carina anteriorly. Scutellum with elevated median line similarly developed for full length ........................................ Lophoscutus Kormilev

Genus Macrocephalus Swederus

Macrocephalus Swederus, 1787:183 [type-species: Macrocephalus cimicoides Swederus, only included species].—Campos, 1925a:62 [one unidentified species, “proxima a la M. cimicoides Swed.,” from Ecuador].
Subfamily Phymatinae Laporte

Key to Genera of Phymatinae in South America

1. Middle and posterior tibiae dorsally carinate laterally and sulcate along midline. Anterior femur swollen, subtriangular in lateral view
   .......................................................... Phymata Latreille

   Middle and posterior tibiae convex dorsally, neither carinate nor sulcate. Anterior femur triangular or not
   .......................................................... 2

2. First visible labial segment twice as long as second segment. Sutures between abdominal sternal segments II to V indistinct
   .......................................................... Kelainocoris Kormilev

   First visible labial segment almost as long as second
   .......................................................... 3

3. Anterior femur subtriangular with lateral surface convex, granulated, dull. Suture between abdominal sternites II and III clearly visible
   .......................................................... Anthylla Stal

   Anterior femur elongately oval with lateral surface flat, smooth, glossy as if polished. Suture between abdominal sternites II and III indistinct
   .......................................................... Neoanthylla Kormilev

Genus Phymata Latreille

Phymata Latreille, 1802:247 [type-species: Acanthia crassipes Fabricius, only included species].—Campos, 1919:58 [one unidentified species from Ecuador]; 1925a:62 [two unidentified species from Ecuador].

Family Piesmatidae Amyot and Serville

Only two species, each in a different genus of the subfamily Piesmatinae, have been reported from South America. The Chilean species Miespa Drake may be confined to that country; but the Pan-American form, Piesma cinereum (Say), reported from southern Canada south to Argentina, undoubtedly will be found in continental Ecuador.

Drake and Davis (1958) reviewed the family morphologically, taxonomically, and biologically and presented keys to the world genera and to the American species. The following key is adapted therefrom.

Subfamily Piesmatinae

Key to the Genera of Piesmatinae in South America

Juga strongly surpassing apex of clypeus (by a distance several times their own diameter). Abdomen ventrally with visible spiracles (usually on low polished tubercles) on last two pregenital segments
   .......................................................... Piesma Lethierry and Severin

Juga not or only very slightly surpassing apex of clypeus. Abdomen ventrally with visible spiracles only on last pregenital segment
   .......................................................... Miespa Drake

Family Pleidae Fieber

As yet no records of occurrence of Pleidae in Ecuador or on the Galapagos Islands have been found. The only genus known from South America, Neolea Esaki and China, is credited with having five species on that continent—undoubtedly some of them will be found in Ecuador.

The classical cosmopolitan genus Plea Leach was divided into three subgenera by Esaki and
Family PLOKIOPHILIDAE China

No records of the existence of this family in Ecuador have been found. Štys (1967, 1972) provided a discussion and redefinition of the family and reduced its contents to three monotypic genera, two of which occur in South America. The three genera are keyed in Štys’ earlier paper; a modified version of that key follows.

Key to the South American Genera of Plokiophilidae

Anterior and middle legs stout, femora less that three times as long as high and with a ventral row of acute teeth. Labium slightly surpassing anterior coxae ........................................... Embiophila China
Anterior and middle legs elongate, femora almost eight times as long as high, unarmed. Labium attaining posterior coxae ............. Lipokophila Štys

Family POLYCTENIDAE Westwood

The absence of reports of this family for Ecuador will probably continue until the necessary examination of their hosts, the bats, is performed. The single genus known for the Western Hemisphere, Hesperoctenes Kirkaldy, already includes nine species from South America (for key to species see Ronderos, 1960:179–181). Unquestionably, some of these have been carried into Ecuador by their host bats.

The points of departure for studies within this family are Ferris and Usinger’s (1939) copiously illustrated monograph, a world catalog by Usinger (1946b), and an updated checklist with bibliography by Ryckman and Casdin (1977). The first two contain considerable discussion and extensive bibliographies. Subsequent studies on South American Polyctenidae were published by Ferris and Usinger (1945) and by Ronderos (1960, 1962, 1964).

Family PYRRHOCORIDAE Amyot and Serville

Recorded in the following list are 14 species from a single genus. Of these, 13 occur on the continent and one is shared by the continent and the Galapagos Islands; a second species known from the Galapagos Islands has not yet been reported from continental Ecuador.

Hussey (1929) listed but one genus of the Pyrrhocoridae (in the restricted sense) from South America, Dysdercus Guerin, which was subsequently revised by Doesburg (1968) with a key to species. Previous literature records not placed by Doesburg and subsequent records based on them are here given (with a preceding question mark) an apparently appropriate species assignment.

Campos (1919:57) reported one undescribed species of “Pyrrhocoris” from Ecuador, but the proper generic placement of that species is an up-to-date classification is not possible at this time—Pyrrhocoris now being restricted to the Eurasian land mass.

Genus Dysdercus Guerin

Dysdercus Guerin, 1831: Atlas, pl. 12, fig. 16 [type-species: Dysdercus peruvianus Guerin, only included species].—Doesburg, 1968:1–215 [monograph, including dorsal photograph of each species, host plants, natural enemies, and key to species, pp. 19–23].

Dysdercus basialbus Schmidt

Dysdercus basialbus Schmidt, 1932:268 [Colombia (type)].
Dysdercus basialbus silaceus Doesburg, 1968:170 [Bolivia (type); Ecuador; etc.].

Dysdercus bimaculatus Stal

Dysdercus bimaculatus Stal, 1854:236 [no locality given, see Doesburg, 1968]; 1859b:233 [Ecuador; etc.].—Sailer,
1947:15–19 [Sailer restored *D. bimaculatus* as valid species; attempted to sort out and correctly place literature records resulting from former treatment of this species as a synonym under *D. obliquus* Herrich-Schaeffer—these placements are followed in the present paper because subsequent literature did not dispute them].—Doesburg, 1968:75 [Panama (lectotype); Ecuador, text p. 79 but not on map on p. 79; etc.].

*Dysdercus obliquus.*—Stal, 1870:121 [part of records, including Ecuador].—Distant 1883:232 [Ecuador record credited to Stal 1859, 1870].—Lethierry and Severin, 1894:254 [part of records, including Ecuador].—Hussey, 1929:97 [part of records, including Ecuador].—Beccari and Gerini, ?1970:45, 61 [Ecuador; etc.; this paper probably in press when Doesburg’s paper appeared].

*Dysdercus bloetei* Doesburg

*Dysdercus bloetei* Doesburg, 1968:39 [Ecuador (type)].

*Dysdercus chaquensis* Freiberg

*Dysdercus chaquensis* Freiberg, 1948:121 [Argentina (type)].—Doesburg, 1968:134 [Ecuador; etc.].

*Dysdercus collaris* Blöte


*Dysdercus concinnus* Stal


*Dysdercus concinnus mundus.*—Doesburg, 1968:72 [Ecuador; etc.].

*Dysdercus imitator* Blöte

*Dysdercus imitator* Blöte, 1931:123 [Peru (type); etc.].—Doesburg, 1968:26 [Ecuador; etc.].


*Dysdercus imitator* Blöte

*Dysdercus imitator* Blöte, 1931:123 [Peru (type); etc.].—Doesburg, 1968:26 [Ecuador; etc.].


*Dysdercus lunulatus* Uhler

*Dysdercus lunulatus* Uhler, 1861:24 [Mexico (neotype)].—Doesburg, 1968:88 [Galapagos Islands; etc.].

*Dysdercus maurotaurus* Distant

*Dysdercus maurotaurus* Distant, 1901d:590 [Brazil (type)].—Doesburg, 1968:128 [Ecuador on map, p. 132, but not in text; etc.].

*Dysdercus mimuloides* Blöte

*Dysdercus mimuloides* Blöte, 1933:599 [Panama (type)].—Doesburg, 1968:58 [Ecuador; etc.].

*Dysdercus mimus* (Say)

*Capsus mimus* Say, 1832:20 [Mexico (neotype)].


*Dysdercus albidiventris.*—Hussey, 1927:235 [Ecuador].

*Dysdercus mimus* distanti.—Doesburg, 1968:34 [Ecuador; etc.].

*Dysdercus mimus ecuadorensis* Doesburg, 1968:39 [Ecuador (type)].

**Survey Collection:**—Numerous specimens of the subspecies *D. mimus ecuadorensis*: Los Rios (10 km N Babahoyo, 22 Jun 1975; Quevedo, 11 May 1975); Manabi (35 km SE Bahia de Caráquez, 10 May 1975); Pichincha (29 km W Sto. Domingo de los Colorados, 7 May 1975).
Dysdercus obscuratus incertus.—Doesburg, 1968:103 [Ecuador; etc.].
Dysdercus obscuratus lugubris.—Doesburg, 1968:104 [Ecuador; etc.].

**Survey Collection.**—Specimens of subspecies D. obscuratus incertus: Los Ríos (Quevedo, 11 May 1975); Pichincha (29 km W Sto. Domingo de los Colorados, 7 May 1975).

**Dysdercus peruvianus** Guerin

*Dysdercus peruvianus* Guerin, 1831:pl.12, fig. 16 [Peru (type)].—Stal, 1870:121 [Ecuador; etc.].—Walker, 1872:184 [Ecuador; etc.].—Lethierry and Severin 1894:254 [Ecuador; etc.].—Hussey, 1929:99 [Ecuador record credited to Stal, 1870:121; etc.].—Doesburg, 1968:144 [Ecuador; etc.].—Beccari and Gerini, 1970:47, 61 [Ecuador; etc.; this paper probably in press when Doesburg’s paper appeared].

**Dysdercus ruficeps** (Perty)

*Lygaeus ruficeps* Perty, 1833:172 [Brazil (type)].
*Dysdercus ruficeps*.—Uhler, 1869:326 [“near the Napo River”].—Hussey, 1929:100 [Ecuador; etc.].—Doesburg, 1968:60 [Ecuador; etc.].—Beccari and Gerini, 1970:49, 61 [Ecuador; etc.; this paper probably in press when Doesburg’s paper appeared].


**Family Reduviidae Latreille**

In spite of the number of species of Reduviidae identified from continental Ecuador and from the Galapagos Islands, no species or genus of the family appears to be shared by the two areas. The numbers involved are 66 species in 35 genera for Ecuador and eight species in three genera for the Galapagos Islands.

Combining Wygodzinsky’s (1949) list of American Reduviidae with his (1966) monograph of the Emesinae produced a total of nearly 800 South American species in more than 60 genera. Further collecting and study should bring the total of Ecuadorian species of Reduviidae to several times the numbers reported here.

Studies on the suprageneric classification of the superfamily Reduviioidea during the past few decades resulted in some disagreement as to the number of such categories to be recognized and the hierarchical status to be assigned to them. Recognition of this unsettled state and the absence of a comprehensive practical key to the categories in a present-day concept leads me to use Usinger’s (1943) classification of the Reduviioidea. The chief subsequent modifications affecting the American members of Usinger’s classification [and not used here] are Carayon et al.’s (1958) treatment of the classical family Phymatidae as a subfamily of the Reduviidae and Davis’ (1969) devaluation of the old subfamily Apioninae to tribal status under the subfamily Harpactorinae. The key to subfamilies presented below was derived from a variety of sources including Usinger (1943), but in considerable part from specimens on which most characters were verified.

**Key to the Subfamilies of Reduviidae in South America**

1. Always macropterous, membrane with 3 simple veins not forming closed cells. Body extremely flattened (aradid-like) ........... .......................... **Elasmominae** Lethierry and Severin

   When macropterous, membrane with 1 or more closed cells .... 2

2(1). Venter of head for full length on each side of midline distinctly produced to form sides of a more or less distinct mediolongitudinal groove ........................................... **Phimorphinae** Handlirsch

   Venter of head without such a groove .............................. 3

3(2). Anterior coxae elongate. Usually 4-5 times as long as wide. Anterior legs strongly raptorial, i.e., ventral margins of femora and tibiae with rows of spines, tibia capable of being folding along ventral
surface of femur. Body extremely slender, almost stick-like ...... 4
Anterior coxae usually less than twice as long as wide. Anterior legs
may or may not be raptorial. Body not slender and stick-like ...... 5

4(3). Anterior coxal cavities shifted to open anteriorly. Ocelli
absent .................................................. EMESINAE Amyot and Serville
Anterior coxal cavities wholly or in large part opening ventrally.
Ocelli present .................................................. BACTRODINAE Stal

5(3). Transverse pronotal constriction distinctly posterior to midlength of
pronotum ................................................................. 6
Transverse pronotal constriction close to or anterior to midlength of
pronotum ................................................................. 7

6(5). Anterior tibiae not produced beyond tarsal insertion, with an apical
spongy fossa .................................................. PEIRATINAE Stal
Anterior tibiae produced beyond tarsal insertion as a stout spine, not
provided with apical spongy fossae .................................................. VESCIINAE Fracker and Bruner

7(5). Ocelli absent ................................................................. 8
Ocelli present ................................................................. 9

8(7). Labial segment II swollen at base. Elytral membrane, when present,
with 2 or more closed cells ........................................ SAICINAE Stal
Labial segment II not swollen at base. Elytral membrane with but 1
closed cell .................................................. CHRYXINAE Champion

9(7). Corium with a distinct 4-6-sided “cubital” cell in or close to inner
apical angle ................................................................. 10
Corium without a cell in or near inner apical angle .......... 12

10(9). Cubital cell 6-sided (sometimes 5-sided). Antennal segment I porrect,
appearing thicker and more heavily scleritized than other antennal
segments .................................................. STENOPODAINAE Amyot and Serville
Cubital cell 4-sided. Antennal segment I porrect or not, appearing no
more heavily sclerotized than other segments .................... 11

11(10). Ocelli more widely separated than eyes; each ocellus distinctly ele-
vated, directed laterally. Antennal segment I not or but slightly
longer than head. Anterior tarsi generally not as strongly developed
as other tarsi. Tarsal claws simple (without teeth or
appendages) .................................................. APIOMERINAE Amot and Serville
Ocelli not as widely separated as eyes; not directed laterally. Antennal
segment I longer, generally distinctly more than head. Anterior
tarsi as well developed as others. Tarsal claws dentate or
appendiculate .................................................. HARPACTORINAE Amyot and Serville

12(9). Scutellum apically terminated by 2–3 prongs arranged in a horizontal
series (disregard spines or prongs on midline of dorsal surface of
scutellum) .................................................. ECTRICHODIINAE Spinola
Scutellum apically terminated as a more or less acute angle or as a
single spine or prong .................................................. 13

13(12). Antennal segment II subdivided into 8 or more somewhat beadlike
pseudosegments. Ocelli located between eyes .................................................. MICROATOMINAE Schumacher
Antennal segment II not subdivided. Ocelli located on or behind imaginary line connecting posterior margins of eyes ........................................ 14

14(13). Antenniferous tubercles elevated, projecting anteriorly distinctly beyond decurved apex of head .................................................. 15
Antenniferous tubercles not projecting beyond apex of head .......... 16

15(14). Anterior tarsi 2 segmented, lateral margin of connexivum with a long stout spine near apex of each segment ........................................... Salavatininae Amyot and Serville
Anterior tarsi 3 segmented. Margin of connexivum without spines Sphaeridopinae Amyot and Serville 16(14). Ocelli (sometimes obscure) widely separated, located laterally on posterior lobe of head ....................... Triatominae Jeannel
Ocelli prominent, close together on a single elevation near or between posterior margins of eyes .................................................. 17

17(16). Postocular part of head, strongly, concavely narrowed, eyes appearing very strongly stalked. Metapleuron in posterolateral angle with a small, somewhat spiraclelike pore (serves as opening for the Brindley glands) ....................... Cetherininae Jeannel
Postocular part of head, when narrowed, not making eyes appear strongly stalked. Metapleuron without pore in posterolateral angle ........................................... Reduviinae Latreille

Subfamily Apiomerinae Amyot and Serville

A key to the genera of this subfamily was given by Costa Lima, Hathaway, and Seabra (1948: 761–763). Davis (1969:84) reduced this group to a tribe under the subfamily Harpactorinae.

Genus Apiomerus Hahn

Apiomerus Hahn, 1831:29 [type-species: Reduvius hirtipes Fabricius, only included species].—Costa Lima, Seabra, and Hathaway, 1951:273–442 [revision; keys to species, p. 284–298 (Spanish), 299–312 (English)].

Apiomerus lobulatus Breddin


Apiomerus pilipes (Fabricius)

Ecuador probably belong in Rhiginia, Ectrichodia no longer recognized from the New World; 1919:59 [three undetermined species of “Ectrichodia”; from Ecuador, see note for 1918:18].

**Rhiginia bimaculata** Breddin


**Rhiginia conspersa** Breddin

*Rhiginia conspersa* Breddin, 1901c:75 [Ecuador (type)]. — Wygodzinsky, 1949:24 [Ecuador].

**Rhiginia crudelis** Stal


**Rhiginia geniculosa** (Walker), new combination

*Ectrichodia geniculosa* Walker, 1873c:59 [Ecuador (type)]. — Wygodzinsky, 1949:25 [Ecuador; but of uncertain generic placement].

**Rhiginia haenschi** Breddin


**Rhiginia immarginata** Stal


**Survey Collection. — Pastaza (Santa Clara, 30 Jun 1976).**

**Genus Santainezia** Miller

*Santainezia* Miller, 1956:4 [type-species: *Santainezia bicolor* Miller, only included species].

**Santainezia bicolor** Miller

*Santainezia bicolor* Miller, 1956:5 [Ecuador (type)].

**Genus Zirta** Stal

*Zirta* Stal, 1859d:175 [type-species: *Reduvius hirticornis* Fabricius, only included species].

**Zirta granulata** (Walker)


**Subfamily EMESINAE Amyot and Serville**

Wygodzinsky (1966) provided a well-illustrated, definitive monograph of this subfamily in which are supplied clear keys to tribes, genera and species.

Several of the records of Emesinae for Ecuador reported by Campos (1919:59; 1925a:62-63; 1928:63) were made with generic but no specific determinations. At present some of these records, because of the generic names used by Campos, are confusing, and for convenience are here entered in apparently appropriate places; Campos’ specimens must be studied before more confidently accurate placements can be made.

**Tribe EMESINI Amyot and Serville**

**Genus Gardenia** Dohrn

*Gardenia* Dohrn, 1860:214 [type-species: *Gardenia melinarthrum* Dohrn, only included species].

*Emesa.— Distant, 1891:117 [“Emesa sp.” from Ecuador; because Distant noted this specimen as allied to E. longipes, his “sp.” is here placed in the genus Gardenia to which *E. longipes* is now assigned]. — Campos, 1925a:62 [Campos cites Whymper’s (actually Distant’s) 1891:117, Ecuadorian record of “Emesa sp.”]; 1928:63 [three species of “Emesa” from Ecuador and citation of Whymper’s (actually Distant’s), 1891:117, Ecuadorian record of “Emesa sp.”].

**Genus Stenolemus** Signoret

*Stenolemus* Signoret, 1858a:251 [type-species: *Stenolemus spiniventris* Signoret, only included species].

**Stenolemus anduzei** Wygodzinsky

*Stenolemus anduzei* Wygodzinsky, 1947b:131 [Venezuela (type)]; 1966:322 [Ecuador; etc.].
Tribe LEISTARCHINI Stal

Genus Ploiaria Scopoli

Ploiaria Scopoli, 1786:60 [type-species: Ploiaria domestica Scopoli, only included species].—Campos, 1919:59 [one unidentified species of Ploiaria from Ecuador]; 1925a:63 [two unidentified species of Ploiaria from Ecuador]; 1928:63 [four unidentified species of Ploiaria from Ecuador].

“Gen. Emesina”.—Campos 1919:59 [three unidentified species of “Gen. Emesina” from Ecuador; “Emesina” is not a generic name but a junior synonym of the tribal name Leistarchini, a tribe represented in the Western Hemisphere only by the genus Ploiaria]; 1925a:62 [comments under 1919:59 apply here].

Emesodema.—Campos, 1919:59 [two unidentified species from Ecuador]; 1925a:63 [two unidentified species from Ecuador].

Ploiaria macrophthalma (Dohrn)

Luteva macrophthalma Dohrn, 1860:244 [Brazil; Colombia].

Tribe METAPTERINI Stal

Genus Barce Stal

Barce Stal, 1865a:163 [type-species: Ploiaria fraterna Say, only included species].

Barce fraterna (Say)

Ploiaria fraterna Say, 1832:33 [United States of America (type)].
Barce fraterna.—Wygodzinsky, 1966:441 [Ecuador; etc.].—Cobben and Wygodzinsky, 1975:3 [Ecuador; etc.].

Genus Ghinalelia Wygodzinsky

Ghinalelia Wygodzinsky, 1966:485 [type-species: Ghilianella globifera Bergroth, original designation].—Villiers, 1970:230–237 [in addition to four species listed below, Villiers reported two unidentified nymphs: one previously reported by McAtee and Malloch, 1925a:100, as Ghilianella galapagensis Heidemann here listed as “Ghilianella sp. A”; the other as “Ghinalella sp. B”].—Villiers, 1978:49–50 [key to species on Galapagos Islands].

Ghinalelia galapagensis (Heidemann)


Ghinalelia leleuporum Villiers


Ghinalelia schaeferi Villiers

Ghinalelia schaeferi Villiers, 1978:49 [Galapagos Islands].

Ghinalelia usingeri Villiers


Ghinalelia vagvolgyiana Villiers

Ghinalelia vagvolgyiana Villiers, 1978:46 [Galapagos Islands].

Subfamily HARPACTORINAE Amyot and Serville

Genus Arilus Hahn

Arilus Hahn, 1831:33 [type-species: Cimex serratus Fabricius, a junior synonym of Cimex carinatus Forster, only included species].

Arilus carinatus (Forster)

Cimex carinatus Forster, 1771:72 [Brazil (type)].


Prionotus serratus.—Campos, 1918:20 [Ecuador].

Arilus gallus (Stal)

Prionotus gallus Stal, 1872a:72 [Colombia (type)].—Campos, 1925a:64 [Ecuador]; 1928:69 [Ecuador].
**SURVEY COLLECTION.**—Cotopaxi (117 km W Latacunga, 1 Jul 1975).

**Genus Corcia Stal**

*Corcia* Stal, 1859d:368 [type-species: *Corcia columbica* Stal, fide Wygodzinsky, 1949:37].

**Corcia aequatoria** Breddin

*Corcia aequatoria* Breddin, 1901c:59 [Ecuador (type)].—Wygodzinsky, 1949:37 [Ecuador].

**Corcia columbica** Stal

*Corcia columbica* Stal, 1859d:369 [Colombia (type)].

**SURVEY COLLECTION.**—Napo (Baeza, 72 km E 16 May 1975; Lago Agrio 110 km W, 18 May 1975); Pastaza (22 km W Puyo, 5 Feb 1976); Tungurahua (32 km E Baños, 28 Jan 1976; 39 km E Baños, 25 Jan 1976).

**Genus Doldina Stal**

*Doldina* Stal, 1859d:366, 368 [type-species: *Doldina carinulata* Stal, only included species].—Hussey and Elkins, 1956:261-278 [revision; key to species, pp. 276-277].

**Doldina penalea** Hussey and Elkins

*Doldina penalea* Hussey and Elkins, 1956:269 [Honduras (type); Ecuador; etc.].

**Genus Heza Amyot and Serville**


**Heza similis** Stal

*Heza similis* Stal, 1859d:199 [Colombia (type)].

**SURVEY COLLECTION.**—Los Ríos (20 km N Babahoyo, 22 Jun 1975).

**Genus Montina Amyot and Serville**

*Montina* Amyot and Serville, 1843:363 [type-species: *Reduvius simus* Le Peletier and Serville, only included species].—Campos, 1919:62 [one unidentified species from Ecuador]; 1925a:66 [one unidentified species from Ecuador]; 1928:70 [one unidentified species from Ecuador].

**Montina fumosa** (Stal)

*Aristippus fumosus* Stal, 1866:300 [Brazil (type)].

**SURVEY COLLECTION.**—Pastaza (Santa Clara, 4 Jul 1976); Zamora-Chinchipe (Yanzaza, 16 Jun 1976).

**Genus Ploeogaster Amyot and Serville**


**Ploeogaster pallidula** (Walker)

*Helonotus pallidulus* Walker, 1873c:90 [Ecuador (type)].

**Genus Repipta Stal**


**Repipta annulipes** Barber

"*Cosmoclopius* (Harpactor) sp.?" Heidemann, 1901:366 [Galapagos Islands].


"Cosmoclopius sp.?" Barber, 1934:287 [Galapagos Islands].

**Genus Ricolla Stal**


**Ricolla pallidinervis** Stal

*Ricolla pallidinervis* Stal, 1859d:367 [Venezuela (type)].—Fracker and Bruner, 1924:172 [Ecuador].
Genus *Sinea* Amyot and Serville

*Sinea* Amyot and Serville, 1843:375 [type-species: *Reduvius diadema* Fabricius, fide Van Duzee, 1916:31].—Caudell, 1901:11 [revision; key to species, pp. 2–3].—Campos, 1919:61 [*Sinea raptoria* as listed below and an unidentified species of *Sinea* from Ecuador]; 1925a:66 [same as 1919:61]; 1928:70 [same as 1919:61].

*Sinea raptoria* Stal


Genus *Zelus* Fabricius


*Zelus filicauda* Bergroth


Subfamily *MICROTOMINAE* Schumacher

Genus *Homalocoris* Perty

*Platycoris* Perty, 1833:175 [type-species: *Platycoris varia* Perty, only included species].

*Homalocoris* Perty, 1833:216 [proposed as replacement name for *Platycoris* Perty, hence takes same type-species].

*Homalocoris maculicollis* Stal


Subfamily *PHIMOPHORINAE* Handlirsch

The following genus contains the only New World member of this subfamily.

Genus *Phimophorus* Bergroth

*Phimophorus* Bergroth, 1886:53 [type-species: *Phimophorus spissicornis* Bergroth, only included species].

*Phimophorus spissicornis* Bergroth

*Phimophorus spissicornis* Bergroth, 1886:54 [Brazil (type)].—Carayon, et al., 1958:270 [Ecuador; etc.].

Subfamily *PEIRATINAE* Amyot and Serville

The long-used “Piratinae” must yield to the above spelling because, as Kerzhner (1974:92, of translation) pointed out, the International Rules of Zoological Nomenclature make it necessary to use Serville’s (1831:213) original spelling of the type-genus, *Peirates*, and to include under it as a junior synonym Burmeister’s (1835:239) emended spelling “Pirates.”

The following key to genera is a modified version of Stal’s (1872a:104–105) key to which is added the subsequently described genus *Eidmannia* Taeuber.

Key to Genera of Peiratinae in South America

1. Head with preocellar transverse groove deeply impressed. Anterior coxa elongate, apical third to half extended caudad of prosternal process.

2. Head with preocellar suture obsoletely or not at all impressed. Anterior coxa short, apex not or only very slightly extending caudad of prosternal process

6
2(1). Intermediate tibia without a ventral apical pad .... *Sirthenea* Spinola

Intermediate tibia with a ventral apical pad occupying a fifth or more
of tibial length ................................................................. 3

3(2). Metapleural sulcus straight, horizontal, located halfway between median
coxal cavity and lateral margin of supporting sclerite .... *Tydides* Stal

Metapleural sulcus distinctly curved along or near lateral margin of
supporting sclerite ............................................................. 4

4(3). Anterior tibia with ventral apical pad confined to apical third of tibia.

Hemelytra, when present, uniformly fuscous to black. ..................

......................................................... *Melanolestes* Stal

Anterior tibia with ventral apical pad extending three-fourths or more
of way to base of tibia. Hemelytra contrastingly bicolored ............ 5

5(4). Eye small, in dorsal view about half as wide as interocular space.

Scutellum with apical prolongation distinctly upcurved, apical part
erect ................................................................. *Eidemania* Tauber

Eye large, in dorsal view as wide or wider than interocular space.

Scutellum with apical prolongation horizontal or oblique, apex not
erect ......................................................... *Rasahus* Amyot and Serville

6(1). Posterior lobe of head abruptly converging from eyes to neck. Body
broad, spaces between middle coxae and between posterior coxae
wider than a coxal width ............................................... *Thymbreus* Stal

Posterior lobe of head abruptly converging to collar from a point
considerably caudad to eyes. Body narrow, space between middle
coxae and between posterior coxae narrower than a coxal
width ................................................................. *Phorastes* Kirkaldy

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**Genus Melanolestes** Stal

*Melanolestes* Stal, 1866:251, 259 [type-species: *Pirates picipes*
Herrich-Schaeffer, fide Van Duzee, 1916:29].

**Melanolestes argentinus** Berg

*Melanolestes argentinus* Berg, 1879:163 [Argentina (type)].—
Campos, 1918:20 [Ecuador]; 1919:61 [Ecuador]; 1925a:66
[Ecuador]; 1926:69 [Ecuador].

**Melanolestes morio** (Erichson)

*Pirates morio* Erichson, 1848:613 [British Guiana (type)].

*Melanolestes morio*.—Torre-Bueno, 1915:219 [Ecuador; etc.].

**Genus Rasahus** Amyot and Serville

*Rasahus* Amyot and Serville, 1843:325 [type-species: *Pirates*
sulcicollis* Serville, fide Van Duzee, 1916:29].

**Rasahus hamatus** (Fabricius)

*Reduvius hamatus* Fabricius, 1781:381 [French Guiana
(type)].

*Rasahus hamatus*.—Campos, 1918:18 [Ecuador]; 1919:61 [Ecu-
dador]; 1925a:65 [Ecuador]; 1928:68 [Ecuador].

**Rasahus sulcicollis** (Serville)

*Pirates sulcicollis* Serville, 1831:219 [French Guiana (type)].

*Rasahus sulcicollis*.—Campos, 1918:19 [Ecuador]; 1919:61
[Ecuador]; 1920:53 [Ecuador]; 1925a:65 [Ecuador]; 1928:
68 [Ecuador].

**Genus Sirthenea** Spinola

*Sirthenea* Spinola, 1837:100 [type-species: *Reduvius carinatus*
Fabricius, only included species].
Sirthenea anduzei Drake and Harris

Sirthenea anduzei Drake and Harris, 1945:55 [Venezuela (type); etc.].

Survey Collection.—Napo (Lago Agrio, 17 May 1975, 22 Aug 1975); Pastaza (Puyo, 8–11 Feb 1976).

Subfamily REDUVIINAE Latreille

Lent and Wygodzinsky (1947b:342–343) presented a key to the American genera of Reduviinae.

Genus Opisthacidius Berg

Spiniger (Opisthacidius) Berg, 1879:172 [type-species: Platymeris rubrotica Herrich-Scheffer, only included species].

Opisthacidius.—Lent and Wygodzinsky, 1947b:351 [elevated to genus; revision; key to species, pp. 353–354].

Opisthacidius pertinax (Breddin)

Spiniger pertinax Breddin, 1903b:114 [Bolivia (type)].

Zelurus domesticus.—Lent and Wygodzinsky, 1946:263 [Ecuador; etc.].


Genus Zelurus Hahn

Zelurus Hahn, 1826, pl. 6 [type-species: Zelurus ocellatus Hahn, a junior synonym of Reduvius flavipes Le Peletier and Serville, only included species].—Campos, 1918:18 [Campos reported five species of "Spiniger"—a junior synonym of Zelurus—from Ecuador, including four undetermined species plus the "Spiniger limbatis" listed below as a junior synonym of Zelurus circumcinctus]; 1919:60 [same as 1918:18]; 1925a:64 [same as 1918:18].—Costa Lima, 1940:1–123 [revision; keys to subgenera, pp. 7–9 to species, pp. 14–27].

Zelurus alcides (Stal)

Spiniger alcides Stal, 1863:56 [Brazil (type)].

Zelurus alcides.—Lent and Wygodzinsky, 1957:22 [Ecuador; etc.].

Zelurus anthracinus Lent and Wygodzinsky

Zelurus anthracinus Lent and Wygodzinsky, 1968:324 [Ecuador (type)].

Zelurus audax (Breddin)

Spiniger audax Breddin, 1901c:83 [Ecuador (type)].

Spiniger (Spiniger) audax.—Costa Lima, 1940b:55 [Ecuador].


Zelurus camposi Lent and Wygodzinsky


Zelurus circumcinctus (Hahn)

Reduvius limbatis Le Peletier and Serville, preoccupied, 1825:275 [Brazil (type)].

Acrocoris circumcinctus Hahn, 1835, pl. LXXX, fig. 246 [no locality given].

Spiniger limbatis.—Campos, 1918:18 [Ecuador]; 1925a:64 [Ecuador]; 1928:68 [Ecuador].

Spiniger (Spiniger) circumcinctus.—Costa Lima, 1940b:92 [Ecuador; etc.].

Zelurus circumcinctus.—Lent and Wygodzinsky, 1955:135 [Ecuador; etc.]; 1966:159 [Ecuador].

Zelurus fugax (Breddin)

Spiniger fugax Breddin, 1903b:114 [Ecuador (type)].

Spiniger (Spiniger) fugax.—Costa Lima, 1940b:97 [Ecuador].


Zelurus nugax (Breddin)

Spiniger nugax Breddin, 1903b:108 [Ecuador (type)].

Spiniger (Spiniger) nugax.—Costa Lima, 1940b:82 [Ecuador].


Zelurus petax (Breddin)

Spiniger petax Breddin, 1901c:75 [Ecuador (type)].

Spiniger (Spiniger) petax.—Costa Lima, 1940b:52 [Ecuador].

**Zelurus tenax (Breddin)**

Spiniger tenax Breddin, 1901c:83 [Ecuador (type)].
Spiniger (Spiniger) tenax.—Costa Lima, 1940b:72 [Ecuador].

**Zelurus vorax (Breddin)**

Spiniger vorax Breddin, 1903b:114 [Ecuador (type)].
Spiniger (Spiniger) vorax.—Costa Lima, 1940b:68 [Ecuador].

**Subfamily SAICINAE Stal**

The following key to the American genera of the subfamily Saicinae was adapted from Monte (1943:361).

**Key to American Genera of Saicinae**

1. Anterior femora and tibiae with rows of stout spines arising from stouter prominent tubercles .................................................. 2
   Anterior femora and tibiae without spines, sometimes with rows of dense hairs which may clump together and appear superficially spine-like 4
2(1). Pronotum without spines ........................................... Tagalis Stal
   Pronotum dorsally with spines, at least in posterolateral angles ...... 3
3(2). Anterior pronotal lobe with 4 erect spines. Apparent scutellum with 2 curved erect spines ....................... Paratagalis Monte
   Anterior pronotal lobe without spines. Apparent scutellum with low tubercles but no elongate spines .... Bagriella McAtee and Malloch
4(1). Apparent scutellum with a long, triangular structure terminating in a long, horizontal apical spine .................. Oncerotrachelus Stal
   Apparent scutellum consisting of 3 parts, each with a dorsal erect or oblique tubercle or spine, never with a horizontal apical spine ...... ............................... Saica Amyot and Serville

**Genus Oncerotrachelus Stal**

Oncerotrachelus Stal, 1868:130 [type-species: Reduvius acuminatus Say, only included species].

**Oncerotrachelus acuminatus (Say)**

Reduvius acuminatus Say, 1832:32 [United States of America (type)].
Oncerotrachelus "acuminatus var.".—Campos, 1925a:64 [Ecuador]; 1928:63 [Ecuador].

**Genus Saica Amyot and Serville**

Saica Amyot and Serville, 1843:371 [type-species: Saica rubella Amyot and Serville, a junior synonym of Zelus recurvatus Fabricius, only included species].

**?Saica fokkeri Montandon**

Saica “Fokkeri”.—Campos, 1925a:64 [Ecuador; species credited to Montandon, but I have not yet found a published description of the species]; 1928:64 [Ecuador; see note for 1925a:64].

**Saica ochracea Distant**


**Subfamily STENOPODAINAE Amyot and Serville**

Barber’s (1929–1930) revision of this subfamily for the New World was followed by a key to the
neotropical genera given by Costa Lima and Seabra (1945:507–510) [in the United States National Museum reprint copies of the latter appears a handwritten correction interchanging “Pnohirmus” from couplet 1 with “Pnirontis” from couplet 7].

To resolve a conflict with the Crustacean name Stenopodidae, the International Commission of Zoological Nomenclature ruled in Opinion 868 (1969) that the name for this group of insects should be spelled Stenopodainae.

**Genus Oncocephalus Klug**

*Reduvis (Oncocephalus)* Klug, 1830:2 [type-species: *Oncocephalus notatus* Klug, fide Distant, 1903:227].

*Oncocephalus.*—Fieber, 1861:42.—Reuter, 1882b:673–758 [monograph; key to species, pp. 674–682].—Campos, 1925a:64 [two unidentified species of *Oncocephalus* from Ecuador].

*Oncocephalus antipodus* Reuter


**Genus Pnirontis Stal**


*Pnirontis infirma* Stal

*Pnirontis infirma* Stal, 1859d:382 [United States (type)].

**Survey Collection.**—Napo (Sta. Cecilia, 16 May 1975).

*Pnirontis pallescens* Stal

*Pnirontis pallescens* Stal, 1859d:382 [Brazil (type)].—Campos, 1925a:63 [Ecuador]: 1928:64 [Ecuador].

**Genus Pnohirmus Stal**

*Pnohirmus* Stal, 1859d:384 [type-species: *Pnohirmus violentus* Stal, only included species].

*Pnohirmus whymperi* Distant

*Pnohirmus whymperi* Distant, 1891:117 [Ecuador (type); illustrated but not described].—Barber, 1930:182 [Ecuador].—Wygodzinsky, 1949:68 [Ecuador].


**Genus Pygolampis Germar**

*Pygolampis* Germar, 1817:286 [type-species: *Acanthia denticulata* Rossi, a junior synonym of *Cimex bidentatus* Goeze, only included species].—Campos, 1918:18 [in addition to *Pygolampis spura* listed below, Campos reported an unidentified species from Ecuador]: 1919:59 [see notes under 1918:18].

*Pygolampis spura* Stal


**Genus Stenopoda Laporte**

*Stenopoda* Laporte, 1833:26 [type-species: *Stenopoda cinerea* Laporte, only included species].—Campos, 1919:60 [in addition to *Stenopoda scutellata* listed below, Campos reported an unidentified species of *Stenopoda* from Ecuador]: 1925a:63 [see note for 1919:60]; 1928:64 [see note for 1919:60].—Maldonado, 1976a:357–360 [modified generic limits].

*Stenopoda cana* Stal

*Stenopoda cana* Stal, 1859d:384 [Brazil (type)].

**Survey Collection.**—Pastaza (27 km N Puyo, 4 Feb 1976).

*Stenopoda scutellata* Distant

Subfamily TRIATOMINAE Jeannel

The following key to tribes and genera resulted from adjusting Usinger's (1944:27–28) key by incorporating Martinez and Carcavallo's (1977) new subfamily, by deleting and adding certain genera, and by testing characters and their descriptions against specimens when possible. (See Lent and Wygodzinsky, 1979.)

Key to Tribes and Genera of Triatominae in South America

1. Genae (lying on each side of clypeus beyond apex of juga) extending anteriorly beyond apex of head as 2 short points or vertical plates. Ocelli (inconspicuous among coarse head granules) located on anterior half of posterior lobe of head. Tribe BOLBODERINI Usinger

Genae not extending anteriorly beyond apex of head. Ocelli variously located on posterior lobe of head

2(1). Scutellar apex prolonged as a cylindrical, blunt spine reaching apex of clavus. Femora ventrally with 2–3 spines on each margin

......................... Belminus Stal

Scutellar apex broadly truncate, extending only to apical third of clavus. Femora ventrally each with a single pair of stout spines subapically

............. Parabelminus Lent

3(1). Ocelli inconspicuous, located in or near transverse postocular groove. Corial veins scarcely elevated, almost obsolete. Tribe CAVERNICOLINI Usinger

Ocelli conspicuous, each located on elevation in or near posterolateral angles of posterior lobe of head. Corium with 1 or more distinctly formed veins

.............. Cavernicola Barber

4(3). Interocular space broad, equal to or broader than width of an eye. Head without a longitudinal interocellar groove. Middle and posterior femora without tubercles ventrally

Interocular space distinctly narrower than an eye. Head with a deep, longitudinal, interocellar groove. All femora with tubercles ventrally. Tribe ALBERPROSENIINI Martinez and Carcavallo

Alberprosenia Martinez and Carcavallo

5(4). Clypeus distinctly narrowing apically. Genae subparallel or slightly converging anteriorly. Postocular lobe of head without a callosity behind each eye. Tribe TRIATOMINI Jeannel

Clypeus more or less widening apically. Genae divergent. Postocular lobe of head with a callosity behind each eye. Tribe RHODNIINI Pinto

6(5). Head short; anteocular lobe broad, about twice as long as length of an eye

Head elongate, anteocular lobe slender, 3 or more times as long as an eye

Psammolestes Bergroth

Rhodnius Stal

7(5). Scutellar apex prolonged as a long, tapering, upcurved sharp spine

Eratyrus Stal

Scutellar apex various, but never prolonged as a long, tapering, up-
curved sharp spine ................................................. 8

8(7). Base of scutellum on each side of midline with an anteriorly directed small but distinct bent fingerlike tubercle . Nesotriatoma Usinger
Base of scutellum without spines .................................. 9

9(8). Antennae inserted near to or anterior to midlength of long, slender, preocular lobe of head ........................................... 10
Antennae inserted well behind midlength of preocular lobe of head. 11

10(9). Each abdominal sternite delimited laterally by a suture remote from abdominal margin by a space about equal to a femoral diameter. Antennal segment II without long, stiff bristles. Length less than 35 mm .................................... Triatoma Laporte
Each abdominal sternite extending uninterrupted (i.e., no suture) to or virtually to margin of abdomen. Antennal segment II with numerous long, stiff bristles, some of which are twice as long as diameter of the segment. Length 38 mm ............... Dipetalogaster Usinger

11(9). Pronotum with prominent conical tubercles discally and laterally. Scutellar apex blunt, upturned. Anterior and middle femora ventrally with a single pair of small spines .......... Mestor Kirkaldy
Pronotum with discal and lateral spines inconspicuous or absent. Scutellar apex prolonged as long, cylindrical, horizontal spine. Anterior and middle femora ventrally usually with several pairs of small spines .................... Panstrongylus Berg

Genus Eratyrus Stal


Eratyrus cuspidatus Stal

Eratyrus cuspidatus Stal, 1859a:103, 104 [Colombia (type)].—Lent and Jurberg, 1970:306 [Ecuador; etc.].

Genus Panstrongylus Berg


Panstrongylus chinai Del Ponte

Panstrongylus chinai Del Ponte, 1929:4 [Peru (type)].—Leon and Leon, 1953:53 [Ecuador; etc.].—Lent, 1960:167 [Ecuador, on map].—Lent and Jurberg, 1975:386 [Ecuador; etc.].

Panstrongylus geniculatus (Latreille)

Reduvius geniculatus Latreille, 1811:225 [Peru (type)].
Panstrongylus geniculatus.—Lent, 1960:167 [Ecuador, on map].—Lent and Jurberg, 1968:499 [Ecuador; etc.].

Panstrongylus howardi Neiva

Triatoma howardi Neiva, 1911:240 [Africa (type)].
Panstrongylus howardi.—Lent, 1960:164 [Ecuador, correction of original locality].—Lent and Jurberg, 1975:404 [Ecuador].

Panstrongylus rufotuberculatus (Champion)

Lamus rufotuberculatus Champion, 1899:210 [Panama (type)].
Panstrongylus rufotuberculatus.—Neiva and Lent, 1936:177 [Ecuador; etc.].—Lent and Pifano, 1940:633, 638 [Ecuador; etc.].—Neiva and Lent, 1941:86 [Ecuador; etc.].—Leon and Leon, 1953:50 [Ecuador; etc.].—Lent, 1960:167 [Ecuador, on map].—Lent and Jurberg, 1975:426 [Ecuador; etc.].
**Genus Rhodnius Stal**


**Rhodnius ecuadoriensis** Lent and Leon


**Rhodnius pictipes** Stal

*Rhodnius pictipes* Stal, 1872a:110 [Brazil (type)].—Dias, 1952:320, 323 [Ecuador; etc.].—Leon and Leon, 1953:53 [Ecuador; etc.].—Lent, 1954:244 [Ecuador; etc.; on map fig. 11, not in text].—Lent and Jurberg, 1969:498, 535 [Ecuador; etc.].

**Rhodnius prolixus** Stal

*Rhodnius prolixus* Stal, 1859a: 104 [Venezuela (type)].—Da Matta, 1919:611 [Ecuador].—Leon, 1949:574 [Ecuador, etc.].—Dias, 1952:320, 323 [Ecuador; etc.].—Leon and Leon, 1953:53 [Leon and Leon refuted Da Matta’s 1919 record for Ecuador].—Lent, 1954:244 [Ecuador; etc.; on map fig. 11, not in text].—Lent and Jurberg, 1969:498, 540 [Ecuador; etc.].

**Rhodnius robustus** Larrousse

*Rhodnius robustus* Larrousse, 1927:85 [French Guiana; Brazil].—Lent and Jurberg, 1969:498, 550 [Ecuador; etc.].

**Genus Triatoma Laporte**

*Triatoma* Laporte, 1832:11 [type-species: *Nabis gigas* Fabricius, a junior synonym of *Cimex rubrofasciatus* De Geer, only included species].

*Conorhinus*.—Campos, 1919:61 [two unidentified species of *Conorhinus* from Ecuador, the Naranjapata specimen later designated by Lent (1950) as holotype of his new species *Triatoma dispar*].

**Triatoma carrioni** Larrousse


*Triatoma “Carrioni”*.—Campos, 1928:65 [Ecuador].

*Eutriatoma “Carrioni”*.—Pinto, 1931:87 [Ecuador].


*Triatoma (Eutriatoma) carrioni*.—Costa Lima, 1940a:199 [Ecuador].

**Triatoma dimidiata** (Latreille)

*Reduvius dimidiatus* Latreille, 1811:223 [Peru (type)].


*Triatoma dimidiata maculipennis*.—Hussey, 1922:114 [Ecuador; etc.].


**Triatoma dispar** Lent

*Conorhinus*.—Campos, 1919:61 [of three unidentified specimens reported, the Naranjapata specimen was designated by Lent (1950) as holotype of his new species *Triatoma dispar*].

*Eutriatoma venosa*.—Del Ponte, 1930:904 [Ecuador].—Pinto, 1931:104 [Ecuador; etc.].—Neiva and Lent, 1941:88, 91 [Ecuador; etc.].

*Triatoma venosa*.—Neiva and Lent, 1936:179, 184 [Ecuador; etc.].—Usinger 1940:61 [Ecuador; etc.].—Dias, 1952:320, 323 [Ecuador].—Leon and Leon, 1953:50 [Ecuador; etc.].

*Triatoma (Eutriatoma) venosa*.—Costa Lima, 1940a:198 [Ecuador; etc.].

*Triatoma “venososa”*.—Leon, 1949:574 [Ecuador; etc.].

*Triatoma dispar* Lent, 1950:437 [Ecuador (type)].—Dias, 1952:320, 323 [Ecuador; etc.].
Subfamily VESCIINAE Fracker and Bruner

Wygodzinsky’s (1943) well-illustrated work on this group was followed by China and Usinger’s (1949b) review and list of the Vesciinae; the latter was modified by Wygodzinsky (1950), who transferred the genus Mirambulus from the subfamily Reduviinae to the Vesciinae.

Genus Mirambulus Breddin

Mirambulus Breddin, 1901c:74 [type-species: Mirambulus niger Breddin, only included species].—Wygodzinsky, 1950: 265-268 [transferred genus Mirambulus from subfamily Reduviinae to subfamily Vesciinae].

Mirambulus niger Breddin

Mirambulus niger Breddin, 1901c:75 [Ecuador (type)].—Wygodzinsky, 1949:56 [Ecuador]; 1950:266 [Ecuador; etc.].

Family RHOPALIDAE Amyot and Serville

Listed below are seven species in four genera for Ecuador and three species in three genera for the Galapagos Islands; three genera, but as yet no species, have been reported from both areas. Additional species can be expected from Ecuador because more than 30 species in five genera of Rhopalidae are already known for South America.

A classification, including useful keys, for the Rhopalidae from genus upward was presented by Chopra (1967). It was from that paper that the following key to subfamilies, tribes, and genera in South America was adapted.

Key to the Subfamilies, Tribes, and Genera of Rhopalidae in South America

1. Lateral margin of pronotum with a distinct notch delimiting the collar posteriorly. Suture between visible abdominal segments III and IV as strong and deep as suture between sternites IV and V. Subfamily Serinethinae Stal ................................. Jadera Stal.
   Lateral margins of pronotum not notched immediately posterior to collar. Suture between visible abdominal segments III and IV much shallower and weaker than other suture. Subfamily Rhopalininae Amyot and Serville ........................... 2

2(1). Posterior femur thicker than median or anterior femora, ventrally with several strong spines ................................. 3
   Posterior femur not thicker than anterior or median femora, no spines ventrally ................................. 4

3(2). Anterolateral angle of pronotum produced anteriorly as an acute tooth.
   Clypeus acutely projecting beyond juga. Tribe Harmostini Stal ................................. Harmostes Burmeister
   Anterolateral angle of pronotum not produced. Clypeus bluntly rounded apically, not or slightly (less than own width) surpassing juga. Tribe Chorosomini Douglas and Scott ................................. Xenogenus Berg

4(2). Pronotum with a sharp transverse suture delimiting anterior collar; surface between collar and calli elevated, calloused, impunctate (sometimes flecked with fuscous or red). Tribe Rhopalini Amyot and Serville ................................. Liorhyssus Stal
   Pronotum without a delimited anterior collar; surface between collar and calli distinctly punctate, neither elevated nor calloused. Tribe Niesthrini Chopra ................................. 5

5(4). Last connexival segment dorsally with an inconspicuous oblique suture
setting off lateral basal angle (generally, membrane must be lifted to see this suture).  Labium not surpassing posterior coxae.

Arhyssus Stal

Last connexival segment without a dividing suture.  Labium reaching or surpassing third abdominal sternite

Niethrea Spinola

Subfamily RHOPALINAe Amyot and Serville

Tribe HARMOSTINI Stal

Genus Harmostes Burmeister

Harmostes Burmeister, 1835:307 [type-species: Harmostes dorsalis Burmeister, only included species].—Harris 1944: 192–195 [included list of species and a key to 27 of the 30 known species].

Harmostes coronatus Distant

Harmostes coronatus Distant, 1893b:85 [Ecuador (type); Distant, 1891:113, listed this as a “n. sp.” for Ecuador with neither description nor figure, hence as a nomen nudum].—Campos, 1925a:57 [Ecuador].

Harmostes disjunctus Barber

Harmostes serratus.—Heidemann, 1901:365 [Galapagos Islands].

Harmostes disjunctus Barber, 1925:241 [Galapagos Islands (type)]; 1934:283 [Galapagos Islands].—Harris, 1944:195 [Galapagos Islands].

Harmostes montivagus Distant

Harmostes montivagus Distant, 1893b:85 [Ecuador (type); Distant, 1891:113, listed this as a “n. sp.” for Ecuador with neither description nor figure, hence as a nomen nudum].—Campos, 1925a:57 [Ecuador].

Harmostes serratus (Fabricius)

Acanthia serrata Fabricius 1775:695 [no locality given].

Harmostes reflexus.—Torre-Bueno, 1915:219 [Ecuador; etc.].—Campos, 1925a:57 [Ecuador].

Tribe NIESTHRINI Chopra

Genus Niethrea Spinola

Niethrea Spinola, 1837:245 [type-species: Lygaeus sidae Fabricius, only included species].

Niethrea pictipes (Stal)

Rhopalus pictipes Stal, 1859b:239 [Brazil (type)].

Corizus pictipes.—Campos, 1919:56 [Ecuador]; 1925a:57 [Ecuador].

Niethrea sidae (Fabricius)

Lygaeus sidae Fabricius, 1794:169 [South America (type)].

Rhopalus sidae.—Torre-Bueno, 1915:219 [Ecuador; etc.].—Campos, 1925a:56 [Ecuador].

Tribe RHOPALINI Amyot and Serville

Genus Liorhyssus Stal

Corizus (Liorhyssus) Stal, 1870:222 [type-species: Lygaeus hyalinus Fabricius, fixed by Reuter, 1888:763].


Liorhyssus hyalinus (Fabricius)

Lygaeus hyalinus Fabricius, 1794:168 ["Americae Insulis" (type)].


Corizus lugens Signoret, 1859:92 [Galapagos Islands (type); described but indicated as a “Stal, Mss.” name].—Berg, 1879:95 [Galapagos Islands]; 1884:47 [Galapagos Islands];—Lethierry and Severin, 1894:118 [Galapagos Islands; etc.].—Barber, 1934:284 [Galapagos Islands; etc.].

Corizus (Liorhyssus) lugens.—Stal, 1870:222 [Galapagos Islands].

Corizus hyalinus.—Barber, 1925:245 [Galapagos Islands]; 1934:284 [Galapagos Islands].

Liorhyssus hyalinus.—Linsley and Usinger, 1966:134 [Galapagos Islands].

Liorhyssus lineatoventris (Spinola)

Merocoris "lineato-ventris" Spinola, 1852:168 [Chile (type)].

Rhapalus "rufescens".—Torre-Bueno, 1915:219 [Ecuador; etc.].—Campos, 1925a:56 [Ecuador].
Subfamily Serinethinae Stal

Genus Jadera Stal

Jadera Stal, 1862a:59 [type-species: Cimex sanguinolenta Fabricius, fixed by Van Duzee, 1916:15].

Jadera aeola (Dallas)

Serinetha aeola Dallas, 1852:463 [Mexico (type)].

Jadera aeola.—Campos, 1919:56 [Ecuador]; 1925a:57 [Ecuador].

Jadera sanguinolenta (Fabricius)

Cimex sanguinolentus Fabricius, 1775:721 ["America" (type)].

Jadera sanguinolenta.—Heidemann, 1901:365 [Galapagos Islands; etc.].—Barber, 1934:284 [Barber noted Heidemann’s Galapagos Islands specimens too damaged to confirm identification].—Linsley and Usinger, 1966:134 [Galapagos Islands].

Family Saldidae Amyot and Serville

The present catalogue includes for Saldidae records of three species in two genera for continental Ecuador, and two species in two genera for the Galapagos Islands; no species and only one genus are reported as occurring in both areas. Polhemus (1968a) reported on the Saldidae fauna of the Galapagos Islands. Undoubtedly, more species will be found in Ecuador because about 30 species in six genera are known to occur in South America.

Several authors working in this group give indications of pending changes, hence no attempt will be made here to construct a generic key to the family as it occurs in South America. However, the present arrangement follows Cobben’s (1959) suprageneric classification.

Subfamily Chiloanthinae Cobben

Genus Pentacora Reuter

Pentacora Reuter, 1912b:10 [type-species: Acanthia signoreti Guerin, original designation].

Pentacora sphaelata (Uhler)

Salda sphaelata Uhler, 1877:434 [United States of America (type)].

Salda rubromaculata Heidemann, 1901:368 [Galapagos Islands (type)].

Acanthia rubromaculata.—Kirkaldy and Torre-Bueno, 1909:179 [Galapagos Islands].

Pentacora rubromaculata.—Barber, 1934:289 [Galapagos Islands].


Subfamily Saldinae Amyot and Serville

Tribe Chartoscirtini Cobben

Genus Pseudosaldula Cobben

Pseudosaldula Cobben, 1961:96 [type-species: Acanthia rogeri Kirkaldy, original designation].

Pseudosaldula andensis (Distant)

Acanthia andensis Distant, 1891:118 [Ecuador (type); figured as “n. sp.” but not described]; 1893b:93 [Ecuador; described as “n. sp.”].—Kirkaldy and Torre-Bueno, 1909:175 [Ecuador].

Salda andensis.—Lethierry and Severin, 1896:216 [Ecuador].

Saldula andensis.—Drake and Hoberlandt, 1950:7 [Ecuador].

Orekora andensis.—Drake, 1962:122 [Ecuador; etc.].

Pseudosaldula bucayana (Drake)

Pentacora bucayana Drake, 1955:157 [Ecuador (type)].

Genus Saldula Van Duzee

Saldula Van Duzee, 1914:387 [type-species: Cimex saltatorius Linnaeus, original designation].

Saldula galapagosana Polhemus


Saldula sectilis (Hodgden)

Salda sectilis Hodgden, 1949:160 [Panama Canal Zone (type)].

Saldula sectilis.—Polhemus, 1968a:22 [Ecuador].
Family Schizopteridae Reuter

As yet no Ecuadorian records of the Schizopteridae have been encountered, but the probability of its presence cannot be doubted. Some 60 species of these tiny infrequently collected insects in 11 genera already have been reported for South America. Specialized collecting probably will increase that number several fold.

The two most comprehensive studies for this family in the Western Hemisphere are those by McAtee and Malloch (1925b), and Emsley (1969). McAtee and Malloch presented partial keys to the genera and species known to them from the New World, a coverage which is quite incomplete when compared to our modern knowledge of the family. Emsley discussed numerous characters and suggested a subfamily classification into which he assigned most of the genera; however his only keys are to genera and species known to occur on Trinidad. A practical key to the described genera in South America has yet to be made.

Family Scutelleridae Leach

The following list contains six species of Scutelleridae in four genera from Ecuador and none for the Galapagos Islands. Certainly many more of the 73 species in 23 genera reported for South America in the Kirkaldy (1909) "Catalogue" will be found in Ecuador.

A world review of the group, as a subfamily of Pentatomidae, containing keys down to genera and subgenera and lists of species, was published by Schouteden (1904). Leston's (1952b) examination of the genitalia of this group found the suprageneric units to be of unequal value and led him to rearrange the suprageneric hierarchy.

Subfamily Tetryrinae Amyot and Serville

Genus Homaemus Dallas

Homaemus Dallas, 1851:4, 36 [type-species: Pachycoris exilis Herrich-Schaeffer, a junior synonym of Scutellera aeneifrons (Say), fixed by Schouteden, 1904:59].—Campos, 1925a:52 [two unidentified species from Ecuador].

Genus Pachycoris Burmeister

Pachycoris Burmeister, 1835:348, 391 [type-species: Pachycoris fabricii Burmeister, a junior synonym of Cimex torridus Scopoli, fide Kirkaldy, 1903:213].—Campos, 1919:50 [three unidentified species from Ecuador]; 1925a:49 [three unidentified species from Ecuador].

Pachycoris chrysomelinus Walker


Genus Polytes Stal

Polytes Stal, 1867:492 [type-species: Polytes hebraicus Stal, a junior synonym of Pachycoris lineolatus Dallas, only included species].

Polytes granulatus (Walker)

Symphylus granulatus Walker, 1868:516 [Ecuador (type)].
Polytes granulatus.—Kirkaldy, 1909:286 [Ecuador].

Polytes rubromaculatus Distant

Polytes rubromaculatus Distant, 1911:243 [Ecuador (type)].

Genus Symphylus Dallas

Symphylus Dallas, 1851:5, 37 [type-species: Symphylus obtusus Dallas, fixed by Schouteden, 1904:60].

Symphylus deplanatus (Herrich-Schaeffer)

Pachycoris deplanatus Herrich-Schaeffer, 1837:3 [Brazil (type)].
Symphylus deplanatus.—Torre-Bueno, 1915:218 [Ecuador; etc.].

Symphylus lativittatus Breddin

Subfamily Scutellerinae Leach

Genus Augocoris Burmeister

Augocoris Burmeister, 1835:349, 396 [type-species: Augocoris gomesii Burmeister, fixed by Brulle, 1835:404].

Augocoris gomesii Burmeister, 1835:396 [Brazil (type)].
Augocoris "Gomesii" Campos, 1919:50 [Ecuador]; 1925a:49 [Ecuador].

Family Stenocephalidae Dallas

The family Stenocephalidae appears to be restricted to the Old World except for the species Dicranocephalus insularis (Dallas), which is reported only from the Galapagos Islands. Scudder (1957:156), after confirming the generic assignment of this species, remarked:

This confirmation of the generic assignment of the Galapagos species is rather surprising as such an Old World plus Galapagos distribution is unknown elsewhere in the animal kingdom except for one instance in the Mollusca. One would suspect this family is also present but as yet undiscovered or unrecognized in the New World.

After a history of conflicting assignments in classifications of the Heteroptera, this group now appears to be firmly established as a full family. The most recent revision of the Stenocephalidae was by Lansbury (1965a–1966), who discussed the morphology, distribution, and infrafamilial taxonomy; he included keys to genera and species (pp. 62–63).

Genus Dicranocephalus Hahn

Dicranocephalus Hahn, 1826:1 [type-species: Coreus nugax Brabricius, a junior synonym of Coreus agilis Scopoli, only included species].

Dicranocephalus insularis (Dallas)


Note: Lansbury (1965a:72) remarked that this species, even after the lapse of a century and a quarter, is still known only from two specimens collected on the Galapagos Islands by Charles Darwin in the 1830's during the famous voyage of the Beagle! Absence of subsequent collections raises questions about it truly being a member of that archipelago's fauna or simply another case of mislabelling. Even if the latter were true, there still is no explanation for the lack of additional specimens from the Old World. Collectors should be alert to rediscover this species.

Family Termitaphididae Silvestri

No records of this termitophilous family of bugs in Ecuador have been encountered.

The two known genera of this family occur in the American tropics, including South America, and may be separated by the following couplet abstracted from Usinger's (1942a:158) revision of the Termitaphididae, which also gives keys to the species of the two genera (pp. 158–159).

Key to the Genera of Termitaphididae

Body flattened dorsoventrally; marginal lamina shallowly crenulate, not divided into separate lobes .......................... Termitaradus Myers
Body almost as high as wide; marginal lamina divided into distinct, deeply and widely separated lobes .......................... Termitaphis Wasman
Family TESSARATOMIDAE Schilling

One of the two South American species of this family has been reported from Ecuador.

A series of papers by Leston (1954, 1955), Kumar (1969a, 1969b), and Kumar and Ghauri (1970) has changed in various ways the concept of this group as catalogued by Kirkaldy (1909: 343–361), including elevating it from subfamily to family status, transferring the American group Pantochlorini to the Pentatomidae, and leaving two of the species of the genus Piezosternum as the only New World members of the family.

Subfamily ONCOMERINAE Stal

Genus Piezosternum Amyot and Serville

Piezosternum Amyot and Serville, 1843:161 [type-species: Pentatom monocentata Beauvois, a junior synonym of Cimex subulatus (Thunberg), only included species].

Piezosternum subulatum (Thunberg)

Cimex subulatus Thunberg, 1783:41 [no locality].
Piezosternum subulatum.—Campos, 1925a:52 [Ecuador].

Family THAUMASTOCORIDAE Kirkaldy

No Ecuadorian records for this family have been found.

The two genera of the subfamily Xylastodorinae occur in the Western Hemisphere, and of these, only Discocoris Kormilev (1955a:8) has been reported from South America (Argentina). A comprehensive review of the Thaumastocoridae with keys to subfamilies, genera, and species was given by Drake and Slater (1957).

Family THYREOCORIDAE Amyot and Serville

So far, this lists accounts for a single species of Thyreocoridae in Ecuador and none for the Galapagos Islands. The probable existence of many more species in Ecuador is evident from the numbers, 135 species in six genera, reported for South America in McAtee and Malloch’s (1933) “Revision” of the group as a subfamily of Pentatompidae.

The above-mentioned revision includes keys down to subspecies and many useful illustrations. The key to genera presented below was adapted therefrom and checked against specimens.

Key to the Genera of Thyreocoridae in South America

1. Costal margin with a fine longitudinal carina delimited mesad by a narrow longitudinal impression of row of punctures. Spiracles on all visible pregenital abdominal segments about equidistant from lateral and basal margins of the segment .................................................. 2
   Costal margin thickly rounded, with neither a fine carina nor a sublateral impression of row of punctures. Spiracles on last 3 pregenital segments much closer to lateral margin than to basal margin of segment .......................................................... Corimelaena White

2. Abdominal sternites, except first-visible, each with 1 or 2 long, stout bristles near lateral margin .......................................................... 3
   Abdominal sternities either without long stout bristles or bristles present on only 1 or 2 segments ........................................ Pericrepis Horvath

3. Posterior tibia convex dorsally ................. Galgupha Amyot and Serville
   Posterior tibia dorsally distinctly flattened or broadly sulcate ................. 4

4. Posterior tibia with a fine longitudinal carina along posterior face. Pronotum on posterior half distinctly lineate-rastrate. Amyssonotum Horvath
   Posterior tibia without carina posteriorly. Pronotum not rastrate...................... Alkindus Distant
Genus Corimelaena White

Corimelaena White, 1839:539 [type-species: Tetyra lateralis Fabricius, original designation].—Torre-Bueno, 1939:186 [Torre-Bueno reduced McAtee and Malloch's (1933:358) generic name Allocoris to a junior synonym of Corimelaena].—Sailer, 1945:129 [Sailer explains synonymy of Allocoris under Corimelaena].

Corimelaena tibialis (Fabricius)

Tetyra tibialis Fabricius, 1803:144 [South America (type)].
Allocoris (Allocoris) tibialis.—McAtee and Malloch, 1933:379 [Ecuador; etc.].

Survey Collection.—Manabi (Sto. Domingo de los Colorados, May 1975).

Family Tingidae Laporte

The following list contains 33 species of lace bugs in 17 genera from continental Ecuador and five species in two genera from the Galapagos Islands. So far, the two areas share two genera but no species. The above numbers do not comprise a very large percentage of the more than 450 species in 55 genera already reported from South America; undoubtedly, many more species of the family will be found in Ecuador. The Galapagos Islands lace bug fauna was treated in a synopsis by Drake and Froeschner (1967), and the subsequent description of a fifth species by Froeschner (1976).

Most of the following literature records were taken from the Drake and Ruhoff (1965) world catalog of Tingidae, a work that is indispensable for studies in the family and includes keys to subfamilies and tribes (pp. 16–17); a few subsequent papers are cited also. A key to the world genera is in preparation, but it is not yet complete enough to adapt as a guide to all the genera known from South America.

Subfamily Cantacaderiniae Stal

Tribe Phatnomatini Drake and Davis, new emendation

Genus Phatnoma Fieber

Phatnoma Fieber, 1844:57 [type-species: Phatnoma laciniata Fieber, only included species].

Phatnoma biordinatum Froeschner

Phatnoma biordinatum Froeschner, 1976:183 [Galapagos Islands (type)].

Phatnoma ecuadoris Drake


Phatnoma eremaeum Drake and Froeschner


Subfamily Tinginiae Laporte

Tribe Tingini Laporte

Genus Acanthocheila Stal


Acanthocheila Stal, 1873:127.

Acanthocheila armigera (Stal)

Monanthis (Acanthocheila) armigera Stal, 1858:61 [Brazil (type)].

Acanthocheila armigera.—Drake and Hambleton, 1945:359 [Ecuador].—Drake and Ruhoff, 1965:56 [Ecuador; etc.].

Genus Amblystira Stal

Amblystira Stal, 1873:120, 129 [type-species: Monanthis pallipes Stal, only included species].

Amblystira machalana Drake

Amblystira machalana Drake, 1948a:22 [Ecuador (type)].—Drake and Ruhoff, 1965:80 [Ecuador; etc.].

Amblystira “machalana.—Yust, 1958, nos. 1–165 [Ecuador].

Genus Ambotingis Drake and Ruhoff

Ambotingis Drake and Ruhoff, 1960:29 [type-species: Monanthis senta Drake and Hambleton, only included species].
**Ambotingis senta** (Drake and Hambleton)


*Ambotingis senta.*—Drake and Ruhoff, 1965:83 [Ecuador; etc.].

**Genus Atheas** Champion

*Atheas* Champion 1898:44 [type-species, *Atheas nigricomis* Champion, fixed by Van Duzee 1916:26].

**Atheas nigricomis** Champion

*Atheas nigricomis* Champion 1898:45 [Mexico; Guatemala].—Drake and Ruhoff 1965:93 [Ecuador; etc.].

**Genus Corythaica** Stal

*Corythaica* Stal, 1873:120, 128 [type-species: *Tingis monacha* Stal, only included species].—Hurd, 1945:79–99 [monograph; key to species pp. 81–82].

**Corythaica costata** Gibson


**Corythaica cytharina** (Butler)

*Mona*ntia cytharina Butler, 1877:90 [Galapagos Islands (type)].


*Corythaica renormata* Barber, 1925:251 [Galapagos Islands (type)].


**Corythaica darwiniana** Drake and Froeschner


**Corythaica wolfiana** Drake and Froeschner


**Genus Corythucha** Stal


**Corythucha globigera** Breddin

*Corythucha globigera* Breddin, 1901c:82 [Ecuador (type)].—Monte, 1941:90 [Ecuador; etc.].—Drake and Hambleton, 1944:129 [Ecuador; etc.].—Hurd, 1945:82, 86 [Galapagos Islands].—Drake and Ruhoff, 1965:149 [Ecuador; etc.].

**Corythucha gossypii** (Fabricius)

*Acanthia gossypii* Fabricius, 1774:78 [“Americae meridionalis, Insulin Dom.” (type)].

*Corythucha gossypii.*—Drake and Hambleton, 1945:366 [Ecuador; etc.].—Drake and Ruhoff, 1965:149 [Ecuador; etc.].

**Corythucha nocens** Drake and Hambleton

*Corythucha nocens* Drake and Hambleton, 1942:330 [Peru (type)].—1945:366 [Ecuador; etc.].

**Genus Dictyla** Stal

*Dictyla* Stal, 1874:57 [type-species: *Monanthia platyoma* Fieber, only included species].

**Dictyla berryi** (Drake)

*Monanthia berryi* Drake, 1943:141–142 [Peru (type)].—Drake and Hambleton, 1945:357 [Ecuador; etc.].

*Dictyla berryi.*—Drake and Ruhoff, 1965:182 [Ecuador; etc.].
Genus Gargaphia Stal


*Gargaphia*.—Stal, 1873:119, 124.

**Gargaphia neivai** Drake and Poor

*Gargaphia neivai* Drake and Poor, 1940:227 [Paraguay (type); Ecuador].—Drake and Hambleton, 1945:365 [Ecuador; etc.]—Yust, 1958, no. 202 [Ecuador; etc.]—Drake and Ruhoff, 1965:228 [Ecuador; etc.].

Genus Leptobyrsa Stal

*Leptobyrsa* Stal, 1873:119, 123 [type-species: *Tingis steini* Stal, only included species].

**Leptobyrsa decora** Drake

*Leptobyrsa decora* Drake, 1922:375 [Colombia (type); Ecuador].—Drake and Hambleton, 1945:164 [Ecuador; etc.]—Monte, 1938:130 [Ecuador].—Yust, 1958, no. 207 [Ecuador].—Drake and Ruhoff, 1965:258 [Ecuador; etc.].

**Leptodictya colombiana** Drake

*Leptodictya colombiana* Drake, 1928:48 [Colombia (type)].

**Leptodictya ecuadoris** Drake and Hambleton

*Leptodictya ecuadoris* Drake and Hambleton, 1945:362 [Ecuador; (type)].

**Leptodictya formositis** Drake


**Leptodictya leinahoni** (Kirkaldy)

*Hanuala leinahoni* Kirkaldy, 1905:217 [Bolivia (type); Peru].

**Leptodictya luculenta** Drake

*Leptodictya luculenta* Drake, 1928:49 [Ecuador (type)].—Monte, 1941:108 [Ecuador].

**Leptodictya vulgata** Drake

*Leptodictya vulgata* Drake, 1928:46 [Ecuador (type)].—Monte, 1941:108 [Ecuador].

**Leptodictya williamsi** Drake

*Leptodictya williamsi* Drake, 1928:47 [Ecuador (type)].—Monte, 1941:108 [Ecuador].

**Leptodictya circumcincta** Champion

*Leptodictya circumcincta* Champion, 1897:24 [Panama (type)].

**SURVEY COLLECTION.**—Cotopaxi (117 mi W Latacunga, 1 Jul 1975).
Genus *Leptopharsa* Stal

*Leptopharsa* Stal, 1873:122, 126 [type-species: *Leptopharsa elegantula* Stal, fixed by Drake, 1922:370].

*Leptopharsa deca* Drake and Hambleton


*Leptopharsa elegantula* Stal

*Leptopharsa elegantula* Stal, 1873:126 [Colombia (type)].—Drake and Ruhoff, 1965:274 [Ecuador; etc.].

*Leptopharsa jubaris* Drake and Hambleton


*Leptopharsa lauta* Drake and Hambleton


*Leptopharsa luxa* Drake and Hambleton


*Leptopharsa machalana* Drake and Hambleton


Genus *Nyctotingis* Drake

*Nyctotingis* Drake, 1922:362 [type-species: *Nyctotingis osborni* Drake, only included species].

*Nyctotingis osborni* Drake

*Nyctotingis osborni* Drake, 1922:363 [Brazil (type)]; 1928:42 [Ecuador].—Monte, 1938:132 [Ecuador; etc.].—Drake and Ruhoff, 1965:307 [Ecuador; etc.].

Genus *Oedotingis* Drake

*Oedotingis* Drake 1942:19 [type-species: *Australotingis williamsi* Drake, only included species].

*Oedotingis williamsi* (Drake)

*Australotingis williamsi* Drake, 1928:51 [Ecuador (type)].


Genus *Phymacysta* Monte

*Phymacysta* Monte, 1942:106 [type-species: *Leptostyla tumida* Champion, original designation].

*Phymacysta tumida* (Champion)

*Leptostyla tumida* Champion, 1897:14 [Guatemala (type)].

*Phymacysta tumida*.—Drake and Hambleton, 1945:362 [Ecuador; etc.].—Drake and Cobben, 1960a:85 [Ecuador; etc.].—Drake and Ruhoff, 1965:327 [Ecuador; etc.].

Genus *Sphaerocysta* Stal

*Sphaerocysta* Stal, 1873:120 [type-species: *Tingis globifera* Stal, only included species].

*Sphaerocysta nosella* Drake and Hambleton

*Sphaerocysta nosella* Drake and Hambleton, 1945:358 [Ecuador (type)].—Drake and Ruhoff, 1965:352 [Ecuador].

Genus *Teleonemia* Costa

*Teleonemia* Costa, 1864:144 [type-species: *Teleonemia funerea* Costa, only included species].

*Teleonemia prolixa* (Stal)

*Lacometopus prolixus* Stal, 1858:65 [Brazil (type)].

*Teleonemia prolixa*.—Drake, 1929:35 [Ecuador; etc.].—Drake and Hambleton, 1945:358 [Ecuador].—Drake and Ruhoff, 1965:381 [Ecuador; etc.].

*Teleonemia tricolor* (Mayr)

*Monanthia* (Gargaphia) tricolor Mayr, 1865:442 [Venezuela (type)].

*Teleonemia dispersa* Drake, 1931b:227 [Ecuador (type)].—Monte, 1938:132 [Ecuador; etc.].

*Teleonemia tricolor*.—Drake and Ruhoff, 1965:383 [Ecuador; etc.].

Family *Velidae* Amyot and Serville

The 15 species in three genera here reported for Ecuador—plus one species for the Galapagos
Islands—certainly must be a fraction of the number that should be expected when considering the 150 or more species in 10 genera already described from South America.

Comprehensive keys to subfamilies and genera were given by China and Usinger (1949a). Since that time, the subfamily Macroveliinae has been elevated to full family status, Macroveliidae, a status which is utilized in this catalog of Ecuadorian Heteroptera. Štys’ (1976) modifications of that study are important, but do not affect this list because he continues to accept the family Macroveliidae.

**Genus Microvelia Westwood**

*Microvelia* Westwood, 1834, pl. 6, fig. 5 [type-species: *Microvelia pulchella* Westwood, only included species, as explained by Drake and Hussey, 1955:96-97].—Drake and Hussey, 1955:113-115 [list of American species].

- *Microvelia ashlocki* Polhemus

- *Microvelia braziliensis* McKinstry
  *Microvelia braziliensis* McKinstry, 1937:36 [Brazil (type)].—Drake and Hussey, 1951:143 [Ecuador; etc.]; 1955:113 [Ecuador; etc.].

- *Microvelia longipes*Uhler

- *Microvelia mimula* White
  *Microvelia mimula* White, 1879b:487 [Brazil (type)].—Drake and Hussey, 1951:144 [Ecuador; etc.]; 1955:114 [Ecuador; etc.].—Drake and Plaumann, 1953:414 [Ecuador; etc.].

- *Microvelia pulchella* Westwood
  *Veia (Microvelia) “Pulchella”* Westwood, 1834, pl. 6, fig. 5 [St. Vincent (type); described later on p. 647].
  *Microvelia pulchella*.—Campos, 1925a:48 [Ecuador].

**Microvelia stellata** Kirkaldy

*Microvelia stellata* Kirkaldy, 1902c:281 [Ecuador (type)].—Campos, 1925a:48 [Ecuador].—Drake and Hussey, 1955:115 [Ecuador; etc.].

**Genus Paravelia Breddin**

*Paravelia* Breddin, 1898:159 [type-species: *Paravelia basalis* Breddin, original designation].—Polhemus, 1976:509-513 [Polhemus noted the American species assigned to *Velia* Latreille (1804) were not congeneric with Old World members of that genus and had to be transferred in part to *Paravelia* and in part to *Struldvelia* Hungerford].

**Paravelia inveruglas** (Kirkaldy)

*Veia inveruglas* Kirkaldy, 1899b:4 [Ecuador (type); in a paper which appeared 16 days earlier than this one, Kirkaldy, 1899a:2, used the combination *Paravelia inveruglas*, but then it was a nomen nudum].—Hungerford, 1930:120 [Ecuador].

**Genus Rhagovelia Mayr**

*Rhabɝovelian* Mayr, 1865:445 [type-species *Velia nigricans* Burmeister, fixed by Kirkaldy, 1901b:285].—Bacon, 1956:695-913 [revision; keys to species scattered in text].

- *Rhagovelia augustipes* Uhler

- *Rhagovelia castanea* Gould

- *Rhagovelia festae* Kirkaldy
  *Rhagovelia festae* Kirkaldy, 1899b:4 [Ecuador (type); in a paper which appeared 16 days earlier than this one, 1899a:2, this combination, as a nomen nudum, was included in a list].—Gould, 1931:37 [Ecuador].—Bacon, 1956:723 [Ecuador].
  *Rhagovelia festae*.—Campos, 1925a:48 [Ecuador].
**Rhagovelia longipes Gould**

*Rhagovelia longipes* Gould, 1931:35 [Ecuador (type)]; 1933:469 [Ecuador].—Bacon, 1956:729 [Ecuador; etc.].

**Rhagovelia sinuata Gould**


**Rhagovelia spinosa Gould**

*Rhagovelia spinosa* Gould, 1931:43 [Ecuador (type)].—Bacon, 1956:737 [Ecuador; etc.].—Drake and Hussey, 1957:1 [Ecuador; etc.].

**Rhagovelia tenuipes Champion**

*Rhagovelia tenuipes* Champion, 1898:137 [Mexico (type)].—Bacon, 1956:741 [Ecuador; etc.].—Roback and Nieser, 1974:36 [Ecuador; etc.].

**Rhagovelia obscura Gould**

*Rhagovelia obscura* Gould, 1931:38 [Ecuador].

**Rhagovelia conjusa Gould**

*Rhagovelia conjusa* Gould, 1931:23 [Ecuador (type)].

**Rhagovelia williamsi Gould**


**Family VIANAIDIDAE Kormilev**

No records of this family are available for either continental Ecuador or the Galapagos Islands—but, because both known genera occur on the South American continent, there is a probability that these small, myrmecophilous insects may be discovered in Ecuador.

The Vianaididae and Tingidae are generally conceded to be closely allied, but their exact relationship is still unsettled. Drake and Ruhoff (1965:443) followed Drake and Davis (1960:88) and others in cataloging the group as a subfamily of the Tingidae; Štys and Kerzhner (1975:71) called attention to the contradictory studies and then listed it as a full family. Drake and Ruhoff's (1965:18) key to the genera and species accounted for all the forms except the species subsequently described from Surinam by Doesburg (1977:185).
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