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**The diversity and distributions of the beetles (Insecta: Coleoptera) of the northern Leeward Islands, Lesser Antilles (Anguilla, Antigua, Barbuda, Nevis, Saba, St. Barthélemy, St. Eustatius, St. Kitts, and St. Martin-St. Maarten**

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# INSECTA MUNDI

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The diversity and distributions of the beetles (Insecta: Coleoptera) of the northern Leeward Islands, Lesser Antilles (Anguilla, Antigua, Barbuda, Nevis, Saba, St. Barthélemy, St. Eustatius, St. Kitts, and St. Martin-St. Maarten)

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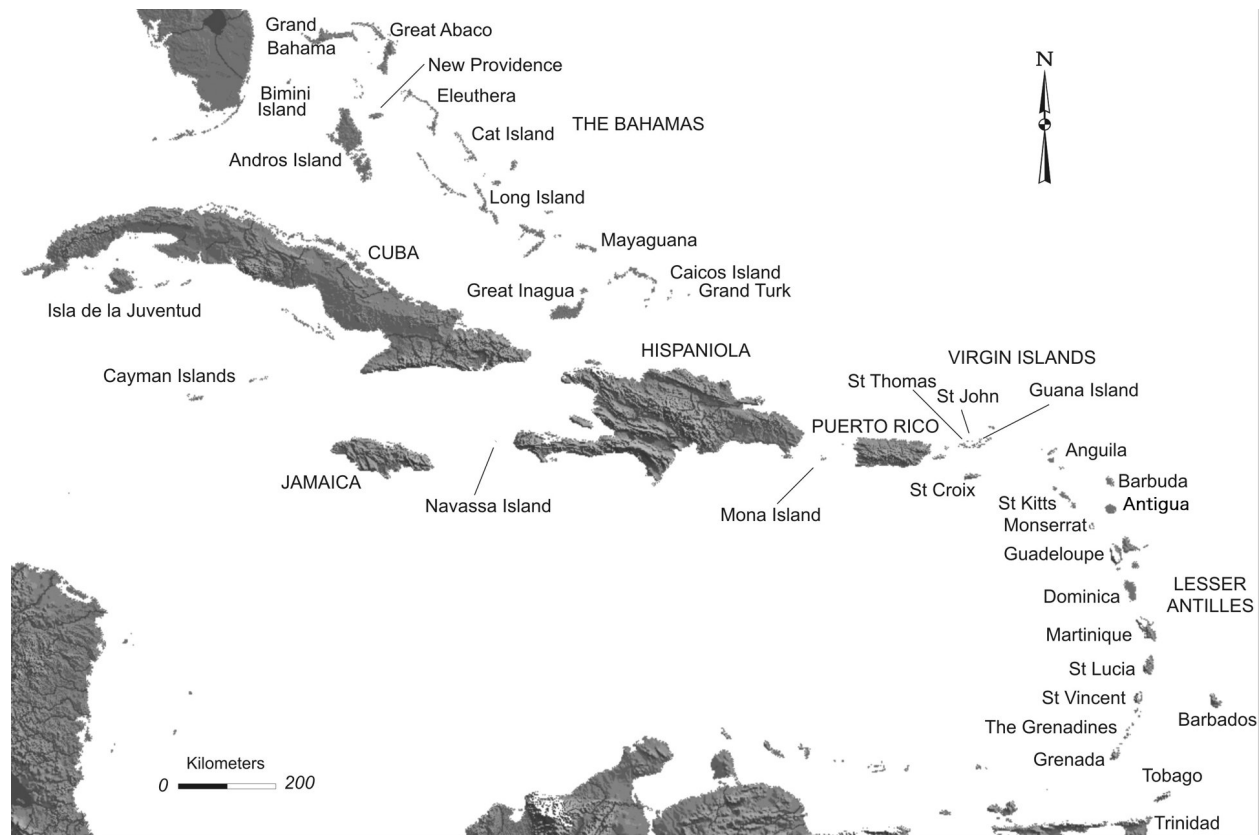
**Abstract.** This paper summarizes the published information on the beetle fauna of the northern Leeward Islands (Anguilla, Antigua, Barbuda, Nevis, Saba, St. Barthélemy, St. Eustatius, St. Kitts, St. Martin-St. Maarten, and smaller associated islands, excluding Montserrat). These islands are generally smaller, lower, and drier than the remaining Leeward and Windward islands of the Lesser Antilles island arc. The fauna contains 26 families, with 155 genera, and 218 species. The families with the largest number of recorded species are Staphylinidae (36), Cerambycidae (28), Scarabaeidae (25), Tenebrionidae (23), Curculionidae (18), and Carabidae (15). At least 7 species (3.2% of the fauna) were probably introduced to the island by human activities. Sixteen species (7.3%) are endemic (restricted) to a single paleo-island bank and likely speciated there. Twenty nine species (13.3%) are shared only with other islands of the Lesser Antilles (Lesser Antillean endemics), and 43 species (19.7%) are more widespread Antilles endemics. The remaining 123 species (56.4%) in the fauna are otherwise mostly widely distributed in the Antilles and the Neotropical Region. The local beetle fauna is largely an immigrant fauna and has mostly originated elsewhere than on the islands of the northern Leewards. Summary data on total species endemicity of the entire Lesser Antilles indicate the presence of at least 1278 endemic beetle species, which is a density of about 20.7 species per 100 km<sup>2</sup>. This is now equivalent to that of the endemic vascular plants of the Caribbean islands. This truly makes the Caribbean islands a biodiversity hotspot for beetles. For the northern Leewards, it is evident that the beetle diversity is markedly understudied, and that the actual number of species is many times higher than now known.

## Introduction

The islands of the West Indies (Figure 1) are recognized as the Caribbean Islands “hotspot” for species biodiversity (Myers et al. 2000, Myers 2003, Mittermeier et al. 2004, Conservation International 2010). This generalization is mostly based on data for only a few better-known groups such as vascular plants, terrestrial vertebrates, and butterflies (Ricklefs and Lovette 1999). The terrestrial animal groups that are actually the most species-rich are the insect orders Diptera, Lepidoptera, Hymenoptera and especially Coleoptera. Beetles alone are estimated to account for some 20% or more of all the world’s animal species known to science (Wilson 1992). The goal and purpose of this report is to provide a summary and analysis of the published diversity of the beetle fauna of the northern Leeward Islands (Figure 2), and to provide a starting point for future research on beetle species diversity on the islands. This is a continuation of a longterm project to understand the diversity, evolution, and distributions of the beetles of the Lesser Antilles (Peck 2006, 2009a, 2009b, 2009c, 2010).

## The islands

**Political geography.** The Lesser Antilles have had a long and complex history of past colonial administration and forest and agricultural exploitation. These islands were one of the most valuable, most coveted, and most bitterly contested corners of the world from the 1600s to the early 1800s. At the northern end of the Lesser Antillean chain, within the area here called the northern Leewards, the political affinities of many of the islands changed several times in the past and are now a complex mix of affiliations and independent countries, dependent states, and territories. Some of these islands have different names according to which language is used (e.g., English, French, Dutch). To simplify, I use the preferred name as used by the administrative body of the island. A result is that in one case a single island, split between



**Figure 1.** The islands of the central and eastern West Indies and adjacent continental land masses, showing in the east the main island arc of the Lesser Antilles.

two governments, has a hyphenated name (St. Martin-St. Maarten). These islands and groupings are listed below in alphabetical order, with their present political status or affiliation, following Morrissey (1998).

**Anguilla.** At one time a dependency of St. Christopher-Nevis; now a British Dependent Territory.

**Antigua** (pronounced an-tee-ga): one half of the dual island nation of Antigua and Barbuda, independent since 1981; it includes the uninhabited island of Redonda.

**Barbuda.** One half of the independent dual island nation of Antigua and Barbuda, see above.

**Montserrat.** A British Dependent Territory; it can be considered a part of the northern Leewards, but is not considered here because its beetles have been summarized by Ivie et al. (2008a, 2008b).

**Netherlands Antilles.** Consisting of two groups of islands associated in a Netherlands Antillean Federation; 1) a northern group called the Dutch Windward Islands (Saba, St. Eustatius, and St. Maarten; these are considered here); and 2) a southern group called the Dutch Leeward Islands (Aruba, Bonaire, and Curaçao) which are on or near the South American continental shelf, and close to Venezuela; these are not considered here.

**Nevis** (pronounced nee-vis). Part of the island nation of St. Kitts and Nevis.

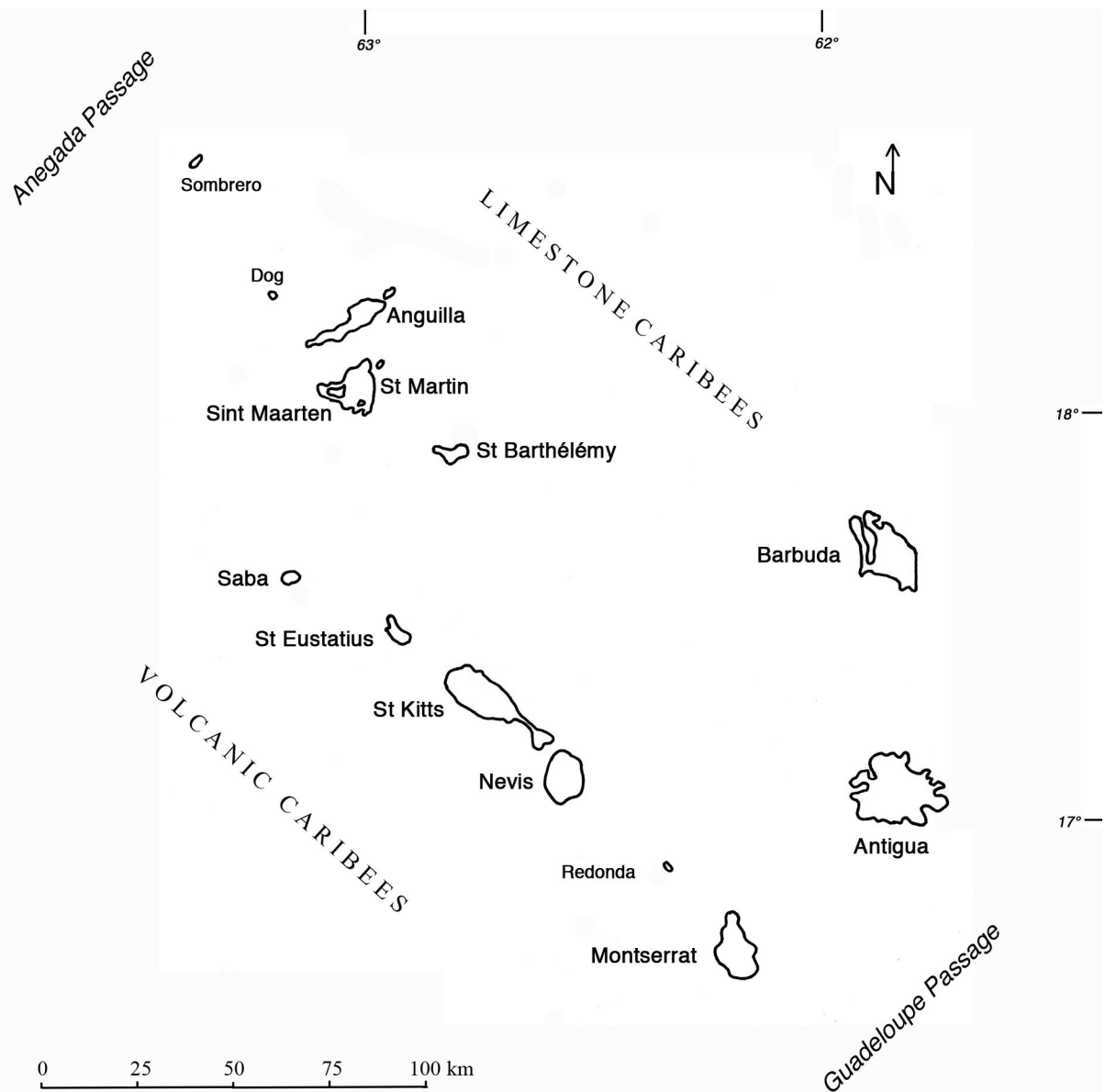
**Redonda.** An isolated and uninhabited rock belonging to Antigua and Barbuda.

**Saba** (pronounced say-bah). Formerly part of the Netherlands Antilles, and now administered directly by the Netherlands.

**St. Barthélemy.** Also written St. Barths and St. Barts; formerly an administrative part of St. Martin, which is a part of the Département of Guadeloupe; now a French Overseas Collectivity. This includes the tiny offshore island of Fourche.

**St. Christopher.** A former name, now changed to St. Kitts; see below.

**St. Eustatius.** Commonly known as Statia; administratively a part of the Netherlands Antilles (see above).



**Figure 2.** Principal islands of the northern Leeward Islands.

**St. Kitts.** Formerly St. Christopher, part of the nation of St. Kitts and Nevis; independent since 1983.

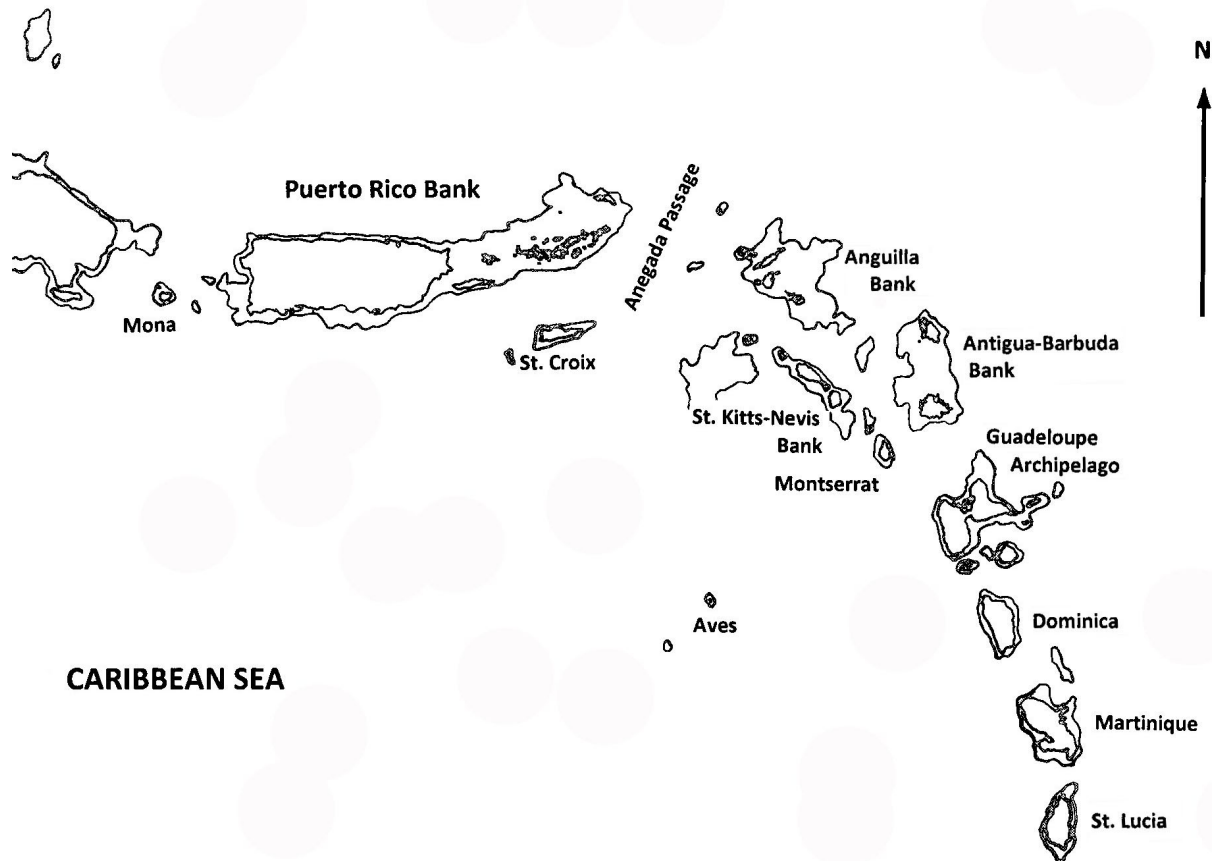
**St. Martin.** The French part of the island St. Martin-St. Maarten, politically a part of the French overseas Département of Guadeloupe. This includes the tiny offshore islands of Fourmarre and Tintamarre.

**St. Maarten.** The Dutch part of the island St. Martin-St. Maarten; formerly a part of the Dutch Windward Islands; now an independent nation within the Kingdom of the Netherlands.

**Sombbrero.** An uninhabited island; a part of the nation of St. Kitts and Nevis.

**Physical geography.** These islands are generally volcanic in origin, and comparatively small, dry, and low. General geographical and physical data for the islands are summarized in Table 1.

**Climate.** The islands lie near the intertropical convergence zone, and have a seasonal tropical maritime climate. There is generally a total of about 1250 mm of precipitation per year in low and coastal localities, with more at higher elevations. There are pronounced seasons, with the wet season generally from Au-



**Figure 3.** The major paleo- islands of the northeastern Caribbean at times of maximum low sea levels during the last glacial, about 26,000 to 20,000 years ago. Some of the present islands of the northern Lesser Antilles thus had considerably larger areas and were joined with other islands on their marine bank as continuous land, and these larger islands were closer to each other. The low glacial sea level bathymetry line is drawn at a generous -200 m below the present sea level. The evidence for sea level depression in the last glacial is for a decrease of as much as -150 m (Clark et al. 2009). The larger island areas are the exposed submarine banks which represent the true biogeographic islands which were isolated from each other. There were additional exposed banks which do not have emergent land at present sealevels.

gust to November producing about 150 mm of rain per month (often as hard showers), and a longer dry season, with 50 mm or less of rain per month. Mean monthly temperatures vary little and are in the range of 25-28°C, with the hottest months being June and July. Hurricanes are possible from June to December.

**Geological history.** The islands of the Lesser Antilles (except Barbados) form a double arc of two geologically distinct sets of islands of two age classes. The entire double island arc lies to the west of the deep oceanic trench into which the Atlantic (North American) seafloor plate is being subducted under the eastward moving Caribbean seafloor plate. The first set of islands is an outer arc of lower and older eroded volcanos which have been capped with thick and younger marine sediments and limestone deposits and then uplifted. These are called the Limestone Caribbees. The second island set of islands is an inner arc of younger and higher volcanic islands. The younger island arc is called the Volcanic Caribbees (Bouysson et al. 1985). The Anegada Passage, to the northwest of the Leewards, separates the Lesser Antilles from the Greater Antilles, which have a very different geological age and origin (Pindell and Barrett 1990).

The main geological difference between the volcanic and limestone islands is the age and composition of the surface bedrock, ranging from 38-10 million years in the outer limestone arc, and 7.7 million years and less in the inner volcanic arc (Briden et al. 1979, Maury et al. 1990). The outer and older arc of the Limestone Caribbees is the result of middle to late Oligocene volcanism followed by extensive erosion and

**Table 1.** Summary of major geographical and geological characteristics of the principal northern Leeward Islands, including Montserrat, listed in order of increasing island area. Data mostly from Morrissey 1998.

Island Name	Area (km <sup>2</sup> )	Maximum elevation (m)	Predominant surficial bedrock geology	Cental geographic coordinates	Biogeographic paleo-island group
Sombrero	0.38	12	limestone	18°60'N, 63°40'W	Sombrero Bank
Saba	13	877	volcanic	17°638N, 63°14'W	Saba Bank
St. Barthélemy	25	286	limestone	17°50'N, 62°50'W	Anguilla Bank
St Eustatius	31	600	volcanic	78°30'N, 62°58'W	St. Kitts-Nevis Bank
St. Martin-St. Maarten	87	484	limestone	18°60'N, 63°40'W	Anguilla Bank
Nevis	93	985	volcanic	18°08'N, 63°10'W	St. Kitts-Nevis Bank
Anguilla	96	59	limestone	18°15'N, 63°05'W	Anguilla Bank
Montserrat	104	969	volcanic	16°40'N, 62°10'W	Montserrat Bank
Barbuda	161	39	limestone	17°30'N, 61°50'W	Antigua-Barbuda Bank
St. Kitts	176	1156	volcanic	17°15'N, 62°45'W	St. Kitts-Nevis Bank
Antigua	281	402	mixed	17°00'N, 61°50'W	Antigua-Barbuda Bank

subsidence, then capped with late Oligocene-early Miocene marine limestones, with a subsequent late Miocene uplift. The Limestone Caribbees are comprised of Sombrero, Anguilla, St. Martin-St. Maarten, St. Barthlemy, Antigua, Barbuda, the Grand Terre half of Guadeloupe, and Marie-Galant. Originally they looked like typical volcanic islands before alteration by erosion, subsidence, and limestone deposition. They may be, at most, only of mid-Tertiary age, and available for terrestrial colonization only since the Miocene at the earliest (the past 15 million years).

The inner arc is more recently volcanic. The present wave of volcanic activity began some 7.7 million years ago and uplifted the older volcanic or metamorphosed cores. This group of islands are in an arc from Saba to Grenada as the major arc of the Lesser Antilles. They are typically higher mountainous islands over 500 m in elevation, and are mostly composed of rather recently erupted volcanic rocks of late Miocene and early Pliocene to recent age, with only limited sedimentary deposits. They may have achieved their present size through volcanic activity only since the late Pliocene or Pleistocene and most colonization may have been in the past 3 million years. Active volcanism occurred as recently as 1995-1997 on Montserrat and 1971-1972 on St. Vincent, farther south. The northern Leewards are smaller and lower because they have experienced less volcanic activity and more erosion in recent times than the islands to the south.

Both island arcs are on a combination of marine banks (submerged platforms), and were variously connected as emergent and larger paleo-islands at times of low sea level in the Pleistocene.

**Biogeographic (paleo-island) units.** It must be remembered that the areas of the islands have been dynamic and not fixed in time in their shorelines, area, or elevation. They have increased through volcanic activity and uplift, and have decreased through erosion and subsidence. The areas have also changed

**Table 2.** Alphabetical listing by family and genus of beetle species which are hypothesized to have been introduced to the northern Leeward Islands. All have probably been accidentally introduced except for *Microlarinus* which was intentionally brought to the Lesser Antilles as a biocontrol agent.

Family	Genus and Species	Probable place of origin	General habits or habitats	Probable Impact on humans
Bruchidae	<i>Zabrotes subfasciatus</i>	Mexico?	Stored products pest	Negative
Curculionidae	<i>Microlarinus lyriformis</i>	Old World	Feeds on puncture vine	Positive
Scarabaeidae	<i>Digitonthophagus gazella</i>	Afrotropical	Dung scavenger	Positive
Scarabaeidae	<i>Nialaphodius nigrita</i>	Afrotropical	Dung scavenger	Positive
Staphylinidae	<i>Phacophallus parumpunctatus</i>	Palaeartic	Predator in debris	Positive?
Tenebrionidae	<i>Trachyscelis aphodoides</i>	Mediterranean	Beach sand	Neutral
Tenebrionidae	<i>Ulumoides ocularis</i>	Philippines?	In some seed pods?	Negative?



**Table 3.** Alphabetical listing by family and genus of beetles now considered to be endemic to the northern Leeward Islands (excluding Montserrat).

Family	Genus and species	Island	Paleo-island bank
Anthribidae	<i>Ormiscus</i> n. sp. 53	St. Kitts	St. Kitts-Nevis
Anthribidae	<i>Ormiscus</i> n. sp. 54	Antigua	Antigua-Barbuda
Cantharidae	<i>Belotus marginicollis</i>	Antigua	Antigua-Barbuda
Cerambycidae	<i>Caribbomerus similis</i>	Antigua, Barbuda	Antigua-Barbuda
Cerambycidae	<i>Soleonoptera chalumeaui</i>	St. Martin-St. Maarten	Anguilla
Coccinellidae	<i>Scymnus cyanipennis</i>	Antigua	Antigua-Barbuda
Curculionidae	<i>Anchonus magister</i>	Antigua	Antigua-Barbuda
Curculionidae	<i>Anthonomus aestuans</i>	St. Barthélemy	Anguilla
Curculionidae	<i>Lachnopus memnonius</i>	St. Barthélemy	Anguilla
Histeridae	<i>Halacritus blackwelderi</i>	Antigua	Antigua-Barbuda
Lampyridae	<i>Cratomorphus dorsalis</i>	St. Barthélemy	Anguilla
Scarabaeidae	<i>Phyllophaga antiguae</i>	Antigua	Antigua-Barbuda
Scarabaeidae	<i>Phyllophaga tehlei</i>	St. Martin-St. Maarten	Anguilla
Staphylinidae	<i>Belonuchus antiguae</i>	Antigua	Antigua-Barbuda
Tenebrionidae	<i>Hymenorus anguillae</i>	Anguilla	Anguilla
Tenebrionidae	<i>Lobopoda antiguaensis</i>	Antigua	Antigua-Barbuda

with eustatic sea level changes, which lowered several times, and were perhaps as much as 170-200 m lower at various intervals. At the height of the last glacial maximum, from 26,500 to 19,000 years ago, there was a sea-level depression of 150 m (Clark et al. 2009). At times of lowest sea-levels some islands on shallow marine banks, not separated from each other by deep channels, were then united into larger islands and the flora and fauna had no marine barriers separating them on these larger paleo-islands. For instance, Barbuda and Antigua were united as a single island, as were others.

Speciation by island isolation is probably correlated with the extent of the banks. The banks were probably similar in area in earlier glacials, with the exception of growth by volcanic activity through the Pleistocene, and erosion of the islands which did not have volcanic activity. The paleo-islands are indicated on Figure 3. Thus, there were seven paleo-island units in the northern Leewards which functioned as separate biogeographic areas for biotic colonization and which have emergent land today. They are as follows.

The northern Leeward paleo-islands of the “Limestone Caribbees”

Sombrero Island

Anguilla Bank (Anguilla, St. Martin-St. Maarten, St. Barthélemy, and satellites)

Antigua Bank (Antigua, Barbuda, and satellites)

The northern Leeward paleo-islands of the “Volcanic Caribbees”

Saba Island

St. Kitts-Nevis (or Kittian) Bank (St. Eustatius, St. Kitts, Nevis)

Redonda Island

Montserrat Island

**Biotic colonization.** The northern Leewards have always been an archipelago of isolated oceanic islands, separated from the Greater Antilles, and never with a land bridge connection to any other islands to the west or south (Donnelly 1988, Hedges 2001). The biotic distributional patterns are here seen to have been entirely formed through colonization by overwater dispersal. In the past the larger paleo-islands provided larger targets for overwater colonizing species, whether they arrived through the air by wind or flight, or in or on vertebrates such as birds and mammals, or by rafting on floating debris and vegetation being carried northwards by ocean currents moving from other islands or from rivers on Trinidad, Venezuela (the Orinoco), or elsewhere (Darlington 1938). The last sea-level lowstand, at which time the paleo-islands were at their largest, was from 26,500 to 19,000 years ago (Clark et al. 2009) and was the last time for major faunal exchange. Sea level rise continued from then until the present with a level some few

**Table 4.** Summary of distributional groupings of the named species of beetles of the Lesser Antilles. The groupings are hypotheses of natural and human-aided distributions based on available data. The summary is only as good as the published taxonomy and knowledge of distributions. New data may change the summary totals of species in the groups, but the general patterns are expected to remain similar. Distributions are used to suggest general regions of origin of the species and their subsequent dynamics of dispersal. The underlying assumption is that speciation more likely occurred on larger land masses (continents or larger islands) and dispersal proceeded to smaller land masses (islands and smaller islands).

Distributional Group	Characterization of Geographic Areas	Species (%)
Introduced to northern Leewards and the Lesser Antilles	Not naturally occurring on the northern Leewards and in the Lesser Antilles; probably present through accidental human-assisted processes from elsewhere in the New or Old Worlds. Called adventive by some authors.	7 (3.2%)
Single island endemic	Naturally restricted to a single paleo-island bank of the northern Leewards; originating on this bank. Called precinctive by some authors.	16 (7.3%)
Lesser Antilles endemic	Naturally occurring only on the northern Leewards and one or more other Lesser Antilles islands; endemic to Lesser Antilles; originating somewhere in the Lesser Antilles.	29 (13.3%)
Widespread Antilles endemic	Naturally occurring on the northern Leewards and one or more islands of both the Lesser and Greater Antilles (including St. Croix and other Virgin Islands); originating somewhere in the Antilles; sometimes introduced elsewhere.	43 (19.7%)
Lesser Antilles and Latin America	Naturally occurring on the northern Leewards and usually elsewhere in the Lesser Antilles and South America; sometimes including Central America and/or Mexico; not in the Greater Antilles; probably suggesting a South American origin.	18 (8.3%)
Widespread Antilles and North and/or Central America	Naturally occurring on the northern Leewards and least one island of the Greater Antilles; and at least one country of USA and/or Mexico-Central America, excluding South America; suggesting natural dispersal from the north and west, not through South America.	19 (8.8%)
Widespread Antilles and South America	Naturally occurring on the northern Leewards and usually other Lesser Antilles islands, and at least one island of the Greater Antilles and in one country of South America; excluding Mexico and Central America; suggesting a South American origin.	3 (1.4%)
Widespread Antilles and Latin America	Naturally occurring on the northern Leewards and usually other Lesser Antilles islands, and at least one island of the Greater Antilles and in Mexico and/or Central and South America; dispersal direction unclear	31 (14.2)
Widespread New World	Naturally occurring on the northern Leewards and usually other Lesser Antilles islands, and at least one island of the Greater Antilles and one country of North, Central, and South America; with varying northern and southern range limits; dispersal direction to Lesser Antilles unclear; possibly partly introduced in parts of the range, especially if associated with humans; often tropicopolitan in distribution; sometimes introduced to or from Old World, direction often unclear.	52 (23.9%)
	Total named species	218

meters higher than at present about 6000 years ago, at a time called the hypsithermal, returning to its present level about 3000 years ago.

**Habitats.** The islands have been extensively altered by clearing for livestock grazing and plantation agriculture and are now mostly covered by dwellings, villages, towns, and small-farm agriculture and

**Table 5.** Summary of available comparative data on diversity of known beetle species of islands of the Lesser Antilles, in order of increasing island area. There is a total of at least 968 species known from a single island. The actual number of endemics on more than one island of the Lesser Antilles is 310 because of overlap in the patterns of sharing. The single and multiple island numbers of endemics of the Lesser Antilles alone thus totals at least 1278 (968 + 310) species and shows the known richness of the fauna. This makes the Lesser Antilles truly a biodiversity hot spot for beetles. Another 205 species (data not shown) in the Lesser Antilles are shared only with the Greater Antilles as Caribbean Islands endemics. Question marks indicate that data are not available or are incomplete.

Island or island group	Area (km <sup>2</sup> )	Total known species number	Accidentally and intentionally introduced species	Single island (or paleo-island) endemic species	Endemics shared with one or more other Lesser Antilles islands	Principal Data source
Montserrat	104	718	44?	66?	57?	Ivie et al. 2008a, 2008b (data in appendix 2 are incomplete)
Grenada and the Grenadines	344	507	?	75	?	Woodruff et al. 1998
St. Vincent	389	53	17	104	120	Peck 2010
Barbados	430	232	66	9	16	Peck 2009a
St. Lucia	616	175	3	23	27	Peck 2009c
Dominica	751	347	23	62	78	Peck 2006
Northern Leewards	948	218	7	16	29	This study
Martinique	1100	258	12	46	64	Peck in MS
Guadeloupe Archipelago	1510	1325	48	567	179	Peck et al. in MS
Totals	6192			968	570	

pastures. The natural vegetation of St. Kitts, Nevis, Antigua, Barbuda, and Anguilla in the late 1940s is described by Beard (1949). The other smaller islands were essentially deforested at that time. However, there are some remnants of original, little-modified, or regenerated vegetation, and some of these exist as preserves. The relatively dry nature of the islands produces a drought-tolerant natural vegetation, with seasonal deciduous thorn-scrub climax forest vegetation at lower elevations and mixed evergreen-deciduous and evergreen forest at higher elevations (Beard 1949). Native lowland forest vegetation types have also been called drought-deciduous and thorn woodlands.

**The beetle fauna.** The beetles of the West Indies are still very poorly known. The first summaries of West Indian beetles were those of Leng and Mutchler (1914, 1917). Blackwelder (1944-1957) summarized beetle data for the Neotropics, including the West Indies. A recent summary of the Greater Antillean island of Cuba lists 2673 beetle species (Peck 2005) compared to the 4675 species known in the nearby continental beetle fauna of Florida (Peck and Thomas 1998). Turnbow and Thomas (2008) summarize the beetle fauna of the Bahamas Archipelago, with 996 species in 74 families. The island of Hispaniola has 1810 listed beetle species (Pérez-Gelabert 2008). Puerto Rico (excluding the Virgin Islands) has 1098 recorded species (Wolcott 1950, Maldonado Capriles 1996). Tiny Guana Island in the British Virgin Islands (the eastern-most part of the Greater Antilles and on the Puerto Rico Bank) has received intensive attention and now has 405 documented beetle species (Valentine and Ivie 2005). Miskimen and Bond (1970) summarize the known beetle fauna of St. Croix, U. S. Virgin Islands (on a marine bank of its own) at 310 species. Modern beetle faunal summaries for the Lesser Antilles are based on available literature for Grenada and the Grenadines (Woodruff et al. 1998) with 507 species, Dominica with 347 named species (Peck 2006), Barbados with 232 named species (Peck 2009a), St. Lucia with 175 named species (Peck 2009c), and St. Vincent with 536 named species (Peck 2010). Only Montserrat has a summary

based on a modern and intensive field study, with a total of 718 known species (Ivie et al. 2008a, 2008b). In comparison with other islands, the northern Leewards have received comparatively little attention for a survey of their beetles or other insects. And most of this has probably focused on species of economic or other applied interest.

Other taxon-focused summary publications on beetles of the Lesser Antilles, with data on the northern Leewards, are by Matthews (1966) on Scarabaeinae of the Lesser Antilles, Chalumeau (1983a and later) on Scarabaeidae of the Lesser Antilles, and Chalumeau and Toroult (2005a) on Cerambycidae of the Lesser Antilles.

**Collecting.** Permits are needed for insect collecting and for export of specimens on some of the islands. For details and contact information see: [http://www.cites.org/common/directy/e\\_directy.html](http://www.cites.org/common/directy/e_directy.html).

## Materials and Methods

**Literature records.** Blackwelder (1944-1957) was used as the initial source of species records for the northern Leeward Islands, followed by a search of the Coleoptera sections of the Zoological Record from 1940 to 2009. A limitation of the Blackwelder (1944-1957) list and some other more recent catalogs is that references are given for the original species description, but are often not given for later literature records that added supplementary distributional information. Some records for the northern Leeward Islands are given by Blackwelder (1944-1957) based on his collections of 1936 (Blackwelder 1943) without indicating these as the source of the record. He collected on St. Kitts and Antigua from 13 July-28 September at 42 collecting stations with the result of a total of 22 (Antigua) and 11 (St. Kitts) species of Staphylinidae per island (excluding Aleocharinae). Additional data were drawn by Blackwelder (1944-1957) from the then existing numbers of the Junk Coleopterorum Catalogus. Undoubtedly, the vast taxonomic literature of family and generic revisions of beetles in the West Indies contains some records that I have missed. Sometimes literature records do not specifically mention northern Leeward Islands but vaguely group them with other islands as "West Indies," "Antilles," "Lesser Antilles," or "Leeward Islands." These general records are not included here. No effort is made here to give all earlier citations of a species if these are given in a more recent work that is cited. I give citations for original descriptions only from 1940 to present. Full citations for original descriptions and distributional records earlier than 1940 can be found in Blackwelder (1944-1957). To give these here would excessively lengthen the Literature Cited section of this summary.

**Synonyms.** Some of the species have been reported as synonyms of older names for species, as different combinations, as misidentifications, and as subspecies. Complete synonymies are not given, but original and subsequent generic assignments are provided when known. Only names which have been applied to populations in the Lesser Antilles are given.

**New records.** It is not the intention of this report to include new species records from museum specimens or recent field work. It is hoped that the availability of this summary of recorded information will be of use to other workers on West Indian beetles.

**Erroneous records.** Records that are in doubt in the literature are indicated with a question mark preceding the place name. A question mark preceding a genus or species name indicates uncertainty in the literature about the validity of that taxon name. An entry placed in brackets [ ] indicates a taxon which was published as being in the northern Leewards but is now known to be an erroneous record.

**Classification and taxonomy.** The family, subfamily, and tribal level classification system and sequence used here is that of Lawrence and Newton (1995) as modified in Arnett and Thomas (2000) and Arnett et al. (2002). The families are listed in the sequence presented there but are re-numbered to incorporate all the families of the world so that later additions can be more easily inserted into the list. The genera and species are arranged alphabetically under subfamily, tribe or subtribe.

**Distributions.** Data on distributions within and outside of the northern Leeward Islands are given from the literature. First are listed the names of West Indian oceanic islands in alphabetical order. The records for islands of the northern Leewards are given in bold to make them more evident. Then, continental mainland countries or continental shelf islands are listed separately. These are given in a roughly geographical order from north to south and in a counterclockwise order. After this is given a general distributional categorization as defined in Table 4. Incomplete data make some of these questionable and open for future correction with additional data. A conservative approach is taken in the construction of the distribution list. Many species reported to be widespread in the Lesser Antilles will probably be found to occur on the northern Leeward Islands as well but are not reported here if explicit records are not in the literature. Type localities are indicated if they are known and on an island of the Lesser Antilles.

## Results and Discussion

**Taxon diversity.** The list contains 155 genera, and 218 named species in 26 families. It is evident that many more families, genera, and species remain to be sampled and reported. The families with the largest number of species are Staphylinidae (36), Cerambycidae (28), Scarabaeidae (25), Tenebrionidae (23), Curculionidae (18), and Carabidae (15). These families are better known because they have received more detailed research attention, especially by Blackwelder (1943), Chalumeau (1983a and later), Chalumeau and Touroult (2005) or are of applied importance as pests of stored products, forestry or agriculture.

**Island diversity.** It is evident that the islands have received comparatively little attention to their beetle faunas. In order of decreasing numbers of species, the numbers known per island are: Antigua, 138; St. Kitts, 75; Barthélemy, 63, St. Martin-St. Maarten, 47; Nevis, 33; Barbuda, 18; St. Eustatius, 18, Saba, 13; Anguilla, 11; Tintamarre, 2; Fourche, 1; Fourmarre, 1. The higher numbers for Antigua and St. Kitts are because of the collecting on these islands in 1936 by Richard Blackwelder (1943). It is concluded that the true beetle fauna of the northern Leeward Islands is very poorly known, and that additional research is needed to more fully itemize their species diversity.

**Shared diversity.** It would be expected that the number of the northern Leeward Islands species shared with the other islands of the Lesser Antilles would be highest for immediately neighboring islands such as Montserrat and Guadeloupe, just to the south. Such predictable and probabilistic “stepping-stone dispersal” between other Lesser and Greater Antillean islands and tropical America would be expected to decline with distance from northern Leeward Islands. From north to south the number of northern Leeward Islands species known from the adjacent large and high islands (north to south) of the Lesser Antilles are: Montserrat, 111; Guadeloupe, 182; Dominica, 89; Martinique, 60; St. Lucia, 51; St. Vincent, 76; Barbados, 84; and Grenada, 67. These figures show a general trend of fewer shared species as the distance from the northern Leewards increases, but these probably also reflect the comparative amount of collecting and research effort on other islands and not the actual distributional pattern. These figures also suggest that the faunas of the northern Leewards are generally widely distributed.

**General distribution patterns.** Even though it is far from complete, the following listing might be viewed as a subset of the entire fauna of the northern Leeward Islands. It may serve as a random sample for the extraction of major patterns of distribution and evolution, which may possibly be reflective of the whole fauna.

Table 4 presents the numbers of species in different distributional groupings on the northern Leewards. The accuracy of the groupings depend on the accuracy of available taxonomic and distributional data in the literature. The varying distributions reflect the random opportunities and different dispersal abilities for active or passive dispersal in crossing oceanic water gaps and subsequent colonization ability on a new land mass. Each beetle species is probably not older than a few million years at most, so their distributions have been achieved by over-water dispersal after the species originated. That is, the distribution patterns have been dynamically formed through time, but are younger than the present islands.

**Introduced species.** Seven species seem to be introduced (adventive) in the northern Leeward islands and these are listed in Table 2. Only one record is known to me of a species having been intentionally introduced for biocontrol or other applied purposes to the northern Leeward islands. This is the weevil *Microlarinus lypriformis* (Wollaston), which is used for biocontrol of puncture vine on the island of St. Kitts (Bennett 1968). The other six species are recognized as possibly having been accidentally introduced to the northern Leeward Islands by human activities. From a viewpoint of importance to human concerns, two of these species may have some harmful effect, and four may be beneficial, especially as predators on arthropod pests. None seem to be detrimental in natural ecosystems. Thus, the beetle fauna of the northern Leeward Islands is more intact (less modified by intentionally or accidentally introduced species) than that of Barbados, which has 66 beetle species known or hypothesized to have been introduced (Peck 2009a). It is expected that considerably more accidentally introduced species will be discovered, especially in stored products and as agricultural pests.

**Endemics.** Sixteen species (7.3%) are endemic (known only from the northern Leeward Islands). These are individually listed on Table 3. These likely originated (speciated) there and have not dispersed outward from the islands. This shows that the northern Leeward Islands have been a minor center of species-level evolution. This is probably because of their small size, lower elevations, and drier climates.

Another 28 species (13.3%) are endemic to the Lesser Antilles. These have evolved on one of the islands, and have dispersed to at least one other island in the chain, but have not dispersed beyond the chain. This number shows that the Lesser Antilles as a group have been a significant center of species-level evolution, followed by outward dispersal from their island of origin.

Forty three species (19.7%) are endemic to the combined Greater and Lesser Antilles and evolved somewhere within this extensive island grouping. This was probably on one of the Greater Antilles and the dispersal has been to the Lesser Antilles. This is because species movements tend to be from larger land masses to smaller land masses (Darlington 1957). This shows that the combined Greater and Lesser Antilles as a group have also been a significant center of species-level evolution, followed by outward dispersal from the island where the species originated.

Some genera are known only from the West Indies. Genus-level endemism is not common in beetles in the Lesser Antilles. Genus-level endemism is more prevalent in the far larger and older Greater Antilles (Nichols 1988) and 187 genera were considered to be endemic to the oceanic islands of the West Indies at that time. The northern Leewards have one species in each of the following genera considered to be endemic to the West Indies: *Trientoma* Solier, 1835 (Tenebrionidae); *Nesanoplium* Chemsak, 1966 and *Caribbomerus* Vitali, 2003 (Cerambycidae). There are no known representatives of genera exclusively endemic to the Lesser Antilles.

**Patterns of wider distributions.** The remaining 123 species (56.4%) have probably originated outside of the combined Greater and Lesser Antilles and have since dispersed to northern Leeward Islands and/or other islands of the Lesser Antilles. The distribution pattern suggests that 21 (9.6%) these have dispersed into the Lesser Antilles exclusively from a South American source. A similar number (19, 8.8%) seems to have dispersed from North and/or Central America via the Greater Antilles into the Lesser Antilles and not from South America.

Eighty three species (38.1%) are of such wide distribution throughout Latin America or the New World that the direction of their dispersal is not evident. The dispersal of this group may have been partly aided by accidental human activity for achieving their wide distributions. These are often species which are eurytopic ecological generalists, anthropophilic tramp species, or pests of agriculture, forestry or stored products.

**The Lesser Antilles as a biodiversity hotspot for beetles.** Data for 25 world biodiversity hotspots have been tabulated for vascular plants, land mammals, birds, reptiles, amphibians, and freshwater fishes (Myers et al. 2000, Myers 2003, Mittermeier et al. 2004, Conservation International 2010). The Caribbean Islands hotspot ranks well up in the list of diversity of these global hotspots although numbers differ between references. On a species/area basis, the entire Caribbean hotspot, with some 6550 endemic vascular plants and 908 endemic vertebrates has a density of about 23 endemic plants/100 km<sup>2</sup>, and a density of 2.6 endemic vertebrates/100 km<sup>2</sup>.

The available data on the beetles endemic to the Lesser Antilles alone (Table 5) now indicates that there are 968 species known only from a single island, and 570 species known from more than one island, but, because of range overlap, this is an actual total of 1278 (968 + 310) endemic beetles. For the Lesser Antilles islands area of 6192 km<sup>2</sup>, this is presently about 20.7 endemics/100 km<sup>2</sup>. This is nearly equivalent to the density of the much better known endemic vascular plants of the entire Caribbean region (but keep in mind that the Lesser Antilles are only 10% of the land area of the entire Caribbean Islands hotspot). This density of endemic beetles in the Lesser Antilles can only increase with further study.

## SYSTEMATIC LIST

### SUBORDER ADEPHAGA

#### 10. FAMILY CARABIDAE, The predaceous ground beetles and tiger beetles

##### SUBFAMILY CARABINAE

###### TRIBE CARABINI

*Calosoma (Castridia) alternans* (Fabricius) 1792: 146 (*Carabus*); Gidaspow 1963: 298; overlooked in Erwin and Sims 1984: 423; Bennett and Alam 1985: 20. **Distribution.** Barbados, Dominica, Martinique, St. Croix, **St. Barthélemy**. Mexico to Colombia and Trinidad, northern Brazil (nominat subspecies) and *S. a. granulatus* Perty throughout most of Brazil, to Bolivia, Paraguay, and Uruguay; Lesser Antilles and Latin America. Greater Antilles records are in error (Gidaspow 1963: 300). **Note.** Adults and larvae of these large beetles are predators on lepidoptera larvae. Adults often appear in numbers at the start of the rainy season.

##### SUBFAMILY CICINDELINAE, the tiger beetles

###### TRIBE MEGACEPHALINI

*Megacephala sobrina* Dejean 1831: 202; Wagenaar Hummelinck 1955: 103, 1983: 108; Balazuc and Chalumeau 1978: 18; Ivie 1983: 192; Freitag 1992: 154; Valentine and Ivie 2005: 275. =*Tetracha sobrina antiguana* Leng and Mutchler 1916: 685 of Antigua. **Distribution.** Anegada, **Antigua**, **Barbuda**, Cuba, Curaçao, Guana, Hispaniola, Puerto Rico. **St. Barthélemy**, St. Croix, St. John, **St. Martin-St. Maarten**, St. Thomas. Mexico, Central America, Colombia, Venezuela; widespread Antilles and Latin America. **Notes.** The Barbados records of Ivie (1983: 194) and Bennett and Alam (1985: 19) are seemingly in error because they cannot be confirmed with specimens.

###### TRIBE CICINDELINI

*Cicindela (Cicindelidia) trifasciata* Fabricius 1781: 286; Fleutiaux and Sallé 1890: 358; Leng and Mutchler 1916: 692; Balazuc and Chalumeau 1978: 20 (*Cicindelidia*); Ivie 1983: 197; Erwin and Sims 1984: 425; Freitag 1992: 157; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 237; Turnbow and Thomas 2008: 12. **Distribution.** Anegada, **Anguilla**, **Antigua**, Bahamas, **Barbuda**, Bermuda, Cuba, Désirade, Dominica, Grand Cayman, Guadeloupe, Guana, Hispaniola, Jamaica, Montserrat, Puerto Rico, **St. Barthélemy**, St. Croix, St. John, **St. Martin-St. Maarten**, St. Thomas. USA (CA, NC to TX); Tobago, Tortola, Trinidad, Maragarita, Venezuela south to Chile, Galapagos; widespread New World.

*Cicindela (Plectographa) suturalis* Fabricius 1798: 62; Leng and Mutchler 1916: 693; Balazuc and Chalumeau 1978: 23 (*Cylindera*); Ivie 1983: 196; Erwin and Sims 1984: 424; Freitag 1992: 157; Valentine and Ivie 2005: 275; Touroult 2005: 88. =*Cicindela hebraea* Klug 1834: 20; Fleutiaux and Sallé 1890: 358; Erwin and Sims 1984: 425. =*C. guadeloupensis* Fleutiaux and Sallé 1890: 358 of Guadeloupe; Chalumeau 1984: 175 as subspecies. =*Cylindera suturalis balazuci* Chalumeau 1984: 175 of Martinique; Touroult 2005: 88. =*Cylindera suturalis grenadensis* Chalumeau 1984: 176 of Grenada. **Distribution.** **Anagada**, **Antigua**, Barbados, Barbuda, Cuba, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Martinique, Puerto Rico, **St. Barthélemy**, **St. Kitts**, St. John,

**St. Martin**, St. Thomas, St. Vincent. Colombia, Venezuela, Trinidad, Tobago, to Brazil; widespread Antilles and South America. **Notes.** Chalumeau (1984) describes the polymorphisms of the species and recognizes six subspecies, of which four occur in the Lesser Antilles.

## SUBFAMILY TRECHINAE

### TRIBE BEMBIDIINI

#### SUBTRIBE BEMBIDIINA

*Bembidion spretum* Dejean 1831: 70; Erwin and Sims 1984: 432. **Distribution.** Antigua, Hispaniola, Puerto Rico. Mexico; widespread Antilles and North and/or Central America.

#### SUBTRIBE TACHYINA

*Tachys vittiger* LeConte 1852: 193; Erwin and Sims 1984: 430; Turnbow and Thomas 2008: 15 (cf.). =*Tachys ensinada* Mutchler 1934: 3; Blackwelder 1944-1957: 31; Ramos 1946: 31; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 238. **Distribution.** Antigua, Bahamas, Guana, Mona, Montserrat, Puerto Rico, Vieques. Ecuador (Galapagos Islands), USA (CA); widespread New World.

## SUBFAMILY HARPALINAE

### TRIBE HARPALINI

#### SUBTRIBE HARPALINA

#### SELENOPHORINI GROUP

*Selenophorus chalybaeus* Dejean 1829: 110; Fleutiaux and Sallé 1890: 366; Ball 1992: 85; Ivie et al. 2008b: 238; Turnbow and Thomas 2008: 14; Pérez-Gelabert 2008: 79. **Distribution.** Antigua, Bahamas, Dominica, Guadeloupe, Hispaniola, Montserrat, Puerto Rico. Central and South America; Lesser Antilles and Latin America.

*Selenophorus discopunctatus* Dejean 1829: 92; Erwin and Sims 1984: 440; Ball 1992: 85; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 238; Turnbow and Thomas 2008: 14. **Distribution.** Antigua, Bahamas, Cayman Islands, Cuba, Dominica, Guana, Hispaniola, Jamaica, Montserrat, Puerto Rico, unspecified Windward Islands. SE USA, Central and South America; widespread New World.

*Selenophorus propinquus* Putzeys 1874: 118; Fleutiaux and Sallé 1890: 366; Erwin and Sims 1984: 440; Ball 1992: 85; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 238; Turnbow and Thomas 2008: 14. **Distribution.** Antigua, Bahamas, Dominica, Guadeloupe, Guana, Montserrat. South America; Lesser Antilles and Latin America. **Notes.** Records of *Selenophorus integer* (Fabricius) 1801: 196 (*Harpalus*) in Fleutiaux and Sallé 1890: 366 and Erwin and Sims 1984: 440 (*Harpalus*) for Lesser Antilles are this species; *S. integer* is confined to the Greater Antilles.

*Selenophorus sinuatus* Gyllenhal 1806: 203; Fleutiaux and Sallé 1890: 366; Ramos 1946: 31; Erwin and Sims 1984: 441; Ball 1992: 85; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 238; Turnbow and Thomas 2008: 15. **Distribution.** Antigua, Bahamas, Cayman Islands, Cuba, Dominica, Guadeloupe, Guana, Hispaniola, Jamaica, Les Saintes, Mona, Montserrat, Puerto Rico; widespread Antilles endemic.

### TRIBE PENTAGONICINI

*Pentagonica flavipes flavipes* (LeConte) 1853: 377 (*Didetus*); Reichardt 1968; Bell 1985: 323; Miskimen and Bond 1970: 79; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 238; Turnbow and Thomas 2008: 14; Pérez-Gelabert 2008: 81. =*Rhombodera picea* Fleutiaux and Sallé 1890: 362 of Guadeloupe. **Distribution.** Antigua, Bahamas, Cuba, Dominica, Grand Cayman, Guadeloupe, Guana, Hispaniola,



Montserrat, St. Croix. SE USA, Mexico, Central America, Colombia, Trinidad, Brazil; widespread New World. The subspecies *P. f. picipes* Darlington occurs on Hispaniola, Jamaica, Puerto Rico, and St. Croix.

#### TRIBE PLATYNINI

*Glyptolenus chalybaeus* Dejean 1831: 720; Fleutiaux and Sallé 1890: 368 (as *Colpodes*); Erwin and Sims 1984: 435 (as *Platynus*); Liebherr 1997: 90; Ivie et al. 2008b: 238. **Distribution.** Dominica, Grenada, Guadeloupe, Montserrat, **St. Kitts**, St. Vincent. Nicaragua, Costa Rica, Panama, Brazil; Lesser Antilles and Latin America.

#### TRIBE LEBIINI

##### SUBTRIBE APENINA

*Apenes chalumeaui* Ball and Shpeley in Ball 1992: 115; Ivie et al. 2008b: 238. **Distribution.** Guadeloupe (type locality), Montserrat, **St. Kitts**, unspecified Windward Islands; Lesser Antilles endemic. *Apenes variegatus* Dejean 1825: 217; Erwin and Sims 1984: 44 as synonym of *A. pallipes* (Fabricius); Ball 1992: 88. = *Apenes guadeloupensis* Gory 1833: 196. **Distribution.** **Antigua**, Dominica, Guadeloupe, Jamaica, Hispaniola, unspecified Leeward Islands, Puerto Rico, unspecified Windward Islands. Central and South America; widespread Antilles and Latin America. **Note.** Lesser Antilles records (e. g. Fleutiaux and Sallé 1890: 360 as *Cymindis*) for *Apenes pallipes* (Fabricius) 1792: 159 (*Carabus*), which is a North American species of *Agonum*, are of this species.

#### TRIBE GALERITINI

*Galerita americana* (Linnaeus) 1758: 415 (*Carabus*); Fleutiaux and Sallé 1890: 359; Reichardt 1967: 63. = *Galerita geniculata* Dejean 1831: 297 of Guadeloupe. **Distribution.** Guadeloupe, **St. Martin-St. Maarten**. Widespread from Guatemala to Panama, to Trinidad, south to Brazil, Paraguay, and Bolivia; widespread Antilles and Latin America.

### 11. FAMILY GYRINIDAE, The whirligig beetles

#### SUBFAMILY GYRININAE

##### TRIBE ENHYDRINI

*Dineutus metallicus* Aubé 1838: 781; Fleutiaux and Sallé 1890: 374; Ochs 1924: 4; Blackwelder 1944-1957: 81. **Distribution.** **Antigua**, Cuba, Guadeloupe, Jamaica, Puerto Rico, St. John, St. Thomas; widespread Antilles endemic.

##### TRIBE ORECTOCHILINI

*Gyretes morio* Aubé 1838: 756; Fleutiaux and Sallé 1890: 374; Ochs 1924: 6; Blackwelder 1944-1957: 82. **Distribution.** **Antigua**, Guadeloupe; Lesser Antilles endemic.

### 12. FAMILY HALIPLIDAE, The crawling water beetles

*Halipplus gravidus* Aubé 1838: 26; Blackwelder 1944-1957: 72; Vondel and Spangler 2008: 94; Pérez-Gelabert 2008: 77. = *Halipplus robustus* Sharp 1877: 120 of Antigua; Fleutiaux and Sallé 1890: 369 of Guadeloupe. **Distribution.** **Antigua**, Barbados, Bonaire, Curaçao, Guadeloupe, Hispaniola, Marie-Galante, Puerto Rico, St. Lucia, **St. Martin-St. Maarten**. Mexico, Guatemala, Costa Rica, Panama, Colombia, Margarita to Venezuela and Trinidad, south to Argentina, Bolivia, Brazil; Galapagos Islands; widespread Antilles and Latin America.

**14. FAMILY NOTERIDAE, The burrowing water beetles**

*Suphis cimicoides* Aubé 1836: 209; Fleutiaux and Sallé 1890: 369; Blackwelder 1944-1957: 72; Mouchamps 1955: 3. **Distribution.** **Antigua**, Guadeloupe. Venezuela, French Guiana, Brazil, Argentina, Paraguay; Lesser Antilles and Latin America.

**17. FAMILY DYTISCIDAE, The predaceous diving beetles****SUBFAMILY COPELATINAE**

*Rhantus (Rhantus) calidus* (Fabricius) 1792: 193 (*Dytiscus*); Fleutiaux and Sallé 1890: 372; Blackwelder 1944-1957: 79; Ramos 1946: 32; Wolcott 1950: 232; Miskimen and Bond 1970: 80; Nilsson 2001: 48; Ivie et al. 2008b: 239; Turnbow and Thomas 2008: 36. **Distribution.** Bahamas, Cuba, Guadeloupe, Hispaniola, Mona, Montserrat, **Nevis**, Puerto Rico, St. Croix, **St. Kitts**. USA (NY-FL-TX), Mexico to Brazil and Argentina; widespread New World.

**SUBFAMILY LACCOPHILINAE**

*Laccophilus proximus* Say 1823: 101; Blackwelder 1944-1957: 74; Miskimen and Bond 1970: 80; Harrison and Rankin 1976: 279; Larson et al. 2000: 66; Nilsson 2001: 249; Bass 2007: 24; Ivie et al. 2008b: 239; Turnbow and Thomas 2008: 36. **Distribution.** **Antigua**, Bahamas, Cuba, Dominica, Hispaniola, Guadeloupe, Montserrat, **Nevis**, Puerto Rico, St. Croix, St. John, St. Lucia, **St. Kitts**, St. Vincent. Canada (southern), USA (widespread), Mexico; widespread Antilles and North and/or Central America. **Notes.** In stony bottomed running waters in lowlands.

*Laccophilus subsignatus* Sharp 1882: 296; Blackwelder 1944-1957: 74; Harrison and Rankin 1976: 279, 291; Nilsson 2001: 251; Bass 2006a: 13, 2006b: 33; Turnbow and Thomas 2008: 35. **Distribution.** **Antigua**, Bahamas, Dominica, Guadeloupe, **Nevis**, **St. Kitts**, St. Vincent. Panama, Venezuela; Lesser Antilles and Latin America. **Notes.** In marshes and stony bottomed running waters.

**SUBFAMILY HYDROPORINAE****TRIBE METHLINI**

*Celina dufau* Legros 1948: 103; Nilsson 2001: 231. =*Celina grossula* LeConte 1863: 22 of Antigua, Bass 2006a: 13 (probable misidentification). **Distribution.** ?**Antigua**, Guadeloupe (type locality); Lesser Antilles endemic.

**TRIBE HYPHYDRINI**

*Pachydrus globosus* (Aubé) 1838: 457 (*Hyphydrus*); Fleutiaux and Sallé 1890: 371; Blackwelder 1944-1957: 75; Nilsson 2001: 230. =? *Pachydrus* sp. Leng and Mutchler 1914: 399; Blackwelder 1944-1957: 75 of Antigua. **Distribution.** **Antigua**, Guadeloupe, Puerto Rico. Brazil, Paraguay, Argentina; widespread Antilles and Latin America.

**SUBFAMILY DYTISCINAE****TRIBE ACILIINI**

*Thermonectus basillaris* (Harris) 1829: 1 (*Dytiscus*); Fleutiaux and Sallé 1890: 372 (as *Thermonectes*); Blackwelder 1944-1957: 79; Ramos 1946: 32; Wolcott 1950: 233; Spangler 1981: 154; Larson et al. 2000: 826; Nilsson 2001: 85; Bass 2003: 279, 2004: 28, 2006a: 13, 2006b: 33; Ivie et al. 2008b: 239; Turnbow and Thomas 2008: 37. =*Acilius incisus* Aubé 1838: 147 of Guadeloupe, of St. Barthélemy). **Distribution.** **Antigua**, Cuba, Bahamas, Barbados, Guadeloupe, Grenada, Hispaniola, Jamaica,

Mona, Montserrat, **Nevis**, Puerto Rico, **St. Barthélemy**. Canada (southern Ontario), USA (eastern), Mexico to Brazil; widespread New World.

*Thermonectus circumscriptus* (Latreille) 1809: 223 (*Dytiscus*); Fleutiaux and Sallé 1890: 372 (as *Thermonectes*); Blackwelder 1944-1957: 79; Wolcott 1950: 233; Miskimen and Bond 1970: 80; Spangler 1981: 154; Nilsson 2001: 85; Turnbow and Thomas 2008: 37; Pérez-Gelabert 2008: 78. =*Hydaticus insularis* Laporte 1835: 91 of Guadeloupe. **Distribution.** **Antigua**, Bahamas, Cuba, Guadeloupe, Hispaniola, Jamaica, Mona, Puerto Rico, St. Croix, St. Thomas. Mexico to Brazil and Argentina; widespread Antilles and Latin America.

*Thermonectus margineguttatus* (Aubé) 1838: 149 (*Acilius*); Fleutiaux and Sallé 1890: 373 (as *Thermonectes*); Blackwelder 1944-1957: 80; Spangler 1981: 154; Tremouilles 1989: 105; Nilsson 2001: 85; Turnbow and Thomas 2008: 37. **Distribution.** **Antigua**, Bahamas, Cuba, Guadeloupe, Hispaniola, Puerto Rico. Mexico to Brazil and Argentina; widespread Antilles and Latin America.

#### TRIBE ERETINI

*Eretes occidentalis* Erichson 1847: 73; Larson et al. 2000: 829; Nilsson 2001: 99; Valentine and Ivie 2005: 275. =*Eretes sticticus* (Linnaeus) 1767: 666 [limited to Old World, Nilsson 2001: 99]; Fleutiaux and Sallé 1890: 373 of Guadeloupe; Bennett and Alam 1985: 20; Tucker 1952: 340; Miskimen and Bond 1970: 79 of St. Croix; Bass 2006b: 33; Turnbow and Thomas 2008: 35. **Distribution.** Bahamas, Barbados, Guadeloupe, Guana, Puerto Rico, **St. Barthélemy**, St. Croix, St. Kitts; the only New World species in the genus, widespread from southern USA south to Peru, including West Indies and Galapagos Islands; widespread New World. **Notes.** An inhabitant of temporary pools in dry regions; colonizing temporary water bodies; often attracted to lights; larval stages completed in 9-10 days.

#### TRIBE CYBISTRINI

*Megadytes (Bifurcitus) giganteus* (Laporte) 1835: 99 (*Dytiscus*); Blackwelder 1944-1957: 80; Miskimen and Bond 1970: 80; Bennett and Alam 1985: 20; Nilsson 2001: 94; Bass 2003: 279; Ivie et al. 2008b: 239; Turnbow and Thomas 2008: 36; Pérez-Gelabert 2008: 77. =*Cybister lherminieri* Laporte 1835: 99 of Guadeloupe; Fleutiaux and Sallé 1890: 374 (*Megadytes*). =*Megadytes levigatus* Olivier 1795: 14, Fleutiaux and Sallé 1890: 373 of Guadeloupe. =*Megadytes fraterna* Sharp 1882: 99, Blackwelder 1944-1957: 80 of Antigua and Guadeloupe; Miskimen and Bond 1970: 80 of St. Croix; Turnbow and Thomas 2008: 36 of Bahamas; Pérez-Gelabert 2008: 77 of Hispaniola. **Distribution.** **Antigua**, Bahamas, Barbados, Cuba, Guadeloupe, Hispaniola, Montserrat, Puerto Rico, St. Croix. Mexico to Argentina; widespread Antilles and Latin America. **Notes.** The larvae are predaceous on tadpoles of the introduced giant toad *Rhinella marina* (Linnaeus), formerly known as *Bufo marinus* Linnaeus. This beetle is apparently a serious limiting factor to population build-up of this agriculturally beneficial but otherwise environmentally undesirable amphibian which has been introduced to several islands in the Caribbean.

#### SUBORDER POLYPHAGA

#### SERIES STAPHYLINIFORMIA

#### SUPERFAMILY HYDROPHILOIDEA

#### 18. FAMILY HYDROPHILIDAE, The water scavenger beetles

#### SUBFAMILY HYDROPHILINAE

#### TRIBE BEROSINI

*Berosus (Berosus) stribalus* d'Orchymont 1946: 13; Spangler 1981: 156; Hansen 1999: 94. **Distribution.** Bahamas, **Barbuda**, Cuba, Dominica, Grand Cayman, Guadeloupe, Hispaniola, Jamaica, Mona,

Puerto Rico, St. John, St. Lucia, St. Thomas. USA (TX); widespread Antilles and North and/or Central America.

*Derallus rudis* Sharp 1887: 765; Fleutiaux and Sallé 1890: 377; Blackwelder 1944-1957: 169; Hansen 1999: 97; Bass 2006a: 13, 2006b: 33. **Distribution.** **Antigua**, Cuba, Guadeloupe, **Nevis**. Mexico; not South America; widespread Antilles and North and/or Central America.

#### TRIBE ANACAEINI

*Paracymus confusus* Wooldridge 1966: 719, 1971: 402; Nilsson 2001: 110; Bass 2006a: 13, 2006b: 33; Ivie et al. 2008b: 240; Turnbow and Thomas 2008: 41. **Distribution.** **Antigua**, Bahamas, Montserrat, **Nevis**. USA (widespread), Canada (BC), Mexico; widespread Antilles and North and/or Central America.

*Paracymus nanus* (Fall) 1910 (*Creniphilus*); Wooldridge 1966: 715, 1971: 403; Nilsson 2001: 112; Bass 2003: 279; Bass 2006b: 33. ?*Paracymus* sp., Uttenboogaart 1902: 113 of Barbados. **Distribution.** Bahamas, Barbados, **St. Kitts**. USA (FL, MS, LA); widespread Antilles and North and/or Central America?

#### TRIBE HYDROPHILINI

##### SUBTRIBE ACIDOCERINA

*Enochrus pseudochraceus* Gundersen 1977: 256; Hansen 1999: 186; Short 2004: 355; Bass 2003: 279, 2006a: 13, 2006b: 33. =*E. ochraceus* (Melsheimer) 1844: 101, Wolcott 1950: 244 of Puerto Rico. **Distribution.** **Antigua**, Barbados, Cuba, Dominica, Grand Cayman, Hispaniola, Jamaica, Puerto Rico, St. John, **St. Kitts**. Mexico to Panama; widespread Antilles and North and/or Central America.

*Helochares (Sindolus) femoratus* (Brullé) 1841: 59; Orchymont 1926: 236, 1943: 15; Blackwelder 1944-1957: 172; Hansen 1999: 158; Bass 2006: 33. **Distribution.** ?**Antigua**, **Nevis**. Argentina, Brazil, ?Colombia, French Guiana; Lesser Antilles and Latin America.

##### SUBTRIBE HYDROPHILINA

*Hydrobiomorpha (Hydrobiomorpha) phallica* (Orchymont) 1928: 165 (*Neohydrophilus*); Blackwelder 1944-1957: 171; Mouchamps 1959: 331; Hansen 1999: 216; Bass 2003: 279, 2006b: 33. =*Hydrocharis tenebrioides* Jacquelin du Val 1856: 50; Fleutiaux and Sallé 1890: 375 of Guadeloupe. =*Hydrobiomorpha casta* Say, Miskimen and Bond 1970: 81 of St. Croix. **Distribution.** Barbados, Guadeloupe, Hispaniola, Martinique, Puerto Rico, St. Croix, **St. Kitts**. Panama, “probably all of Central America”; Venezuela; widespread Antilles and Latin America.

*Hydrophilus (Hydrophilus) insularis* Laporte 1840: 50; Fleutiaux and Sallé 1890: 374; Uyttenboogaart 1902: 113; Leng and Mutchler 1914: 399 (*Stethorus*); Blackwelder 1944-1957: 171; Wolcott 1950: 243; Miskimen and Bond 1970: 81; Hansen 1999: 230; Bass 2003: 279, 2006a: 13, 2006b: 33; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 239; Turnbow and Thomas 2008: 41. **Distribution.** **Antigua**, Bahamas, Barbados, Cuba, Guadeloupe, Guana, Hispaniola, Martinique, Mona, Montserrat, **Nevis**, St. Croix, **St. Kitts**, Puerto Rico. USA (CA-TX-FL), Mexico to Costa Rica; widespread Antilles and North and/or Central America. Not South America, contra Blackwelder 1944-1957: 171.

*Tropisternus (Tropisternus) lateralis* (Fabricius) 1775: 228 (*Hydrophilus*); Fleutiaux and Sallé 1890: 375; Uyttenboogaart 1902: 113; Blackwelder 1944-1957: 170; Ramos 1946: 32; Bennett and Alam 1985: 20; Hansen 1999: 223; Bass 2003: 279, 2006a: 13, 2006b: 33; Ivie et al. 2008b: 240; Turnbow and Thomas 2008: 41. **Distribution.** **Antigua**, Bahamas, Barbados, **Barbuda**, Cuba, Dominica, Grand Cayman, Guadeloupe, Hispaniola, Jamaica, Mona, Montserrat, **Nevis**, Puerto Rico, St. Croix, **St. Kitts**, St. Lucia, St. Thomas (probably all *T. l. lateralis*). USA, Mexico to Ecuador (including Galapagos), Brazil, Uruguay, Argentina (all other subspecies); widespread New World, including Hawaii (introduced).

**SUPERFAMILY STAPHYLINOIDEA****21. FAMILY HISTERIDAE, The Clown Beetles****SUBFAMILY ABRAEINAE****TRIBE ABRAEINI**

*Halacritus blackwelderi* Wenzel 1944: 63; Mazur 1984: 28. **Distribution.** Antigua; single island endemic.

**28. FAMILY STAPHYLINIDAE, The rove beetles****SUBFAMILY PSELAPHINAE, The ant-like mold beetles****TRIBE TRICHONYCHINI****SUBTRIBE TRIMIINA**

*Melba (Rameloidea) temporalis* Raffray 1909: 16; Park et al. 1976: 46. **Distribution.** Antigua, Martinique; Lesser Antilles endemic.

**TRIBE INIOCYPHINI****SUBTRIBE INIOCYPHINA**

*Dalmodes ensipes* (Raffray) 1891: 316 (*Buris*); Park et al. 1976: 19. **Distribution.** Antigua, Trinidad, Venezuela; Lesser Antilles and Latin America.

**SUBFAMILY TACHYPORINAE****TRIBE TACHYPORINI**

*Coproporus pulchellus* (Erichson) 1839: 247 (*Tachinus*); Blackwelder 1943: Campbell 1975: 185; Herman 2001: 832. **Distribution.** Antigua, Cuba, Dominica, Grenada, Hispaniola, Jamaica, Puerto Rico, St. Lucia, St. Vincent. USA (AL, CA, FL), Mexico, Guatemala to Colombia, Trinidad, Brazil; widespread New World; introduced to Old World; Azores, Canary Islands.

*Coproporus sharpi* Cameron 1922: 123; Blackwelder 1943: 513; Herman 2001: 836; Ivie et al. 2008b: 240. **Distribution.** Antigua, Montserrat, St. Lucia, St. Vincent (type locality); widespread Antilles endemic.

**SUBFAMILY ALEOCHARINAE****TRIBE MESOPORINI**

*Oligota minuta* (Cameron) 1931: 82; Blackwelder 1943: 537; Frank 1972: 136; Frank et al. 1992:377; Ivie et al. 2008b: 241; Turnbow and Thomas 2008: 52. **Distribution.** Antigua, Bahamas, Cuba, Grenada, Jamaica, Montserrat, St. Croix, St. Kitts. US Virgin Islands. USA (FL), Colombia, Trinidad, Tobago, Surinam and Guyana to Brazil; widespread New World. **Notes.** This has been used as a biocontrol agent as a predator on the tetranychid plant-feeding cassava green mite, *Mononychellus tanajoa* (Bondar), and is also known to feed on other tetranychid genera and species.

## SUBFAMILY PIESTINAE

*Piestus penicillatus* (Dalman) 1821: 375 (*Ziophorus*); Blackwelder 1943: 46; Herman 2001: 1793. **Distribution.** Cuba, Grenada, Guadeloupe, Hispaniola, Jamaica, Puerto Rico, **St. Barthélemy**, St. Lucia, Mexico, French Guiana, Surinam, Guyana, Brazil; widespread Antilles and Latin America.

## SUBFAMILY OXYTELINAE

## TRIBE THINOBIINI

*Bledius punctatissimus* Le Conte 1877: 226; Herman 2001: 1599. = *Bledius exposus* Blackwelder 1943: 114 of Antigua. **Distribution.** **Antigua**, Jamaica, Little Cayman, Puerto Rico, St. John, St. Thomas. USA (CA, LA to FL to NC), Mexico, Colombia, Ecuador (including Galapagos); widespread New World.

*Carpelimus petomus* Blackwelder 1943: 76. **Distribution.** **Antigua**, Jamaica, Puerto Rico, St. Thomas; widespread Antilles endemic.

## TRIBE OXYTELINI

*Anotylus insignitus* (Gravenhorst) 1806: 188 (*Oxytelus*); Fleutiaux and Sallé 1890: 381; Blackwelder 1943: 92; Herman 2001: 1359; Ivie et al. 2008b: 242. **Distribution.** **Antigua**, Cuba, Dominica, Grenada, Grenadines (probably Mustique), Guadeloupe, Hispaniola, Jamaica, Montserrat, Puerto Rico, St. Croix, St. Lucia, St. Thomas, St. Vincent. Canada, USA (NY to FL to KS), Mexico to Panama, Colombia to Tobago, Trinidad, Argentina, Peru, Brazil, Europe; Atlantic Islands; Tahiti; Réunion, Mauritius; introduced to Old World?; widespread New World.

*Oxytelus incisus* Motschulsky 1857: 504; Blackwelder 1943: 96; Ramos 1946: 32; Woodruff et al. 1998: 40; Bennett and Alam 1985: 21; Herman 2001: 1433; Ivie et al. 2008b: 243. = *O. ferrugineus* Kraatz 1859: 173 in Fauvel 1901: 71 of Guadeloupe, of St. Vincent. **Distribution.** **Antigua**, Barbados, Bermuda, Cuba, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, Mona, Montserrat, Mustique, Puerto Rico, St. Croix, **St. Kitts**, St. Lucia, St. Thomas, St. Vincent. Canada, USA (FL, TX), Mexico to Panama, Colombia, Trinidad, Tobago, Guyana, Brazil; Orient; Africa; Indian and Pacific ocean islands, Australia; introduced to Old World; widespread New World. **Note.** Perhaps the most common and widespread staphylinid in the West Indies.

*Platystethus spiculus* Erichson 1840: 784; Blackwelder 1943: 110; Bennett and Alam 1985: 21; Herman 2001: 1487. **Distribution.** **Antigua**, Barbados, Bermuda, Carriacou, Cuba, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, Puerto Rico, St. Croix, St. Lucia, St. Vincent. USA (CA-TX-FL), Argentina, Mexico, Guatemala, Panama, Colombia, Venezuela, Trinidad, Galapagos; Tahiti (introduced); widespread New World.

## SUBFAMILY PAEDERINAE

## TRIBE PAEDERINI

## SUBTRIBEMEDONINA

*Lithocharis dorsalis* Erichson 1840: 616; Fleutiaux and Sallé 1890: 380; Blackwelder 1943: 247, 1944-1957: 117; Ivie et al. 2008b: 243. **Distribution.** **Antigua**, Barbados, Cuba, Grenada, Guadeloupe, Hispaniola, Jamaica, Montserrat, Puerto Rico, St. Croix, St. Lucia, St. Vincent. Trinidad; widespread Antilles and South America.

*Lithocharis ochracea* (Gravenhorst) 1802: 58 (*Paederus*); Blackwelder 1943: 242, 1944-1957: 117. **Distribution.** **Antigua**, Barbados, Cuba, Dominica, Grenada, Guadeloupe, Jamaica, Puerto Rico, St. John, **St. Kitts**. Canada (intro.), USA (CA), Mexico, Guatemala, Galapagos, Brazil, Chile; Europe; n Africa; Oriental, Australian regions; widespread New World.

*Lithocharis secunda* Blackwelder 1943: 244, 1944-1957: 117; Ivie et al. 2008b: 243. **Distribution.** Antigua, Guadeloupe, Hispaniola, Jamaica, Montserrat, Puerto Rico, St. Croix, St. Lucia; widespread Antilles endemic.

*Lithocharis sororcula* Kraatz 1859: 140; Blackwelder 1943: 241, 1944-1957: 117; Ivie et al. 2008b: 243. **Distribution.** Antigua, Barbados, Grenada, Guadeloupe, Jamaica, Montserrat, Puerto Rico, St. Croix, St. Kitts, St. Lucia, St. Vincent. Orient (introduced?); widespread Antilles endemic?

*Sciocharis exilis* (Erichson) 1840: 627 (*Lithocharis*); Blackwelder 1943: 237, 1944-1957: 116 (*Thinocharis*); Scheerpeltz 1970: 247; **Distribution.** Antigua, Cuba, Dominica, St. Lucia. USA (AL, FL), Guatemala, Panama, Colombia, Brazil, Argentina; widespread New World.

*Sunius debilicornis* (Wollaston) 1857: 19 (*Lithocharis*); Blackwelder 1943: 267, 1944-1957: 118; Ivie et al. 2008b: 243. **Distribution.** Antigua, Cuba, Grand Cayman, Grenada, Guadeloupe, Jamaica, Montserrat, St. Croix, St. Lucia, St. Vincent. USA (SC-FL-TX), Mexico, Trinidad, Argentina; Europe; Africa, Asia; Australia, Pacific Islands. widespread New World.

#### SUBTRIBE ECHIASTERINA

*Echiaster bupthalmus* Cameron 1913: 337; Blackwelder 1943: 373, 1944-1957: 127. **Distribution.** Antigua, Grenada, Martinique, Mustique, St. Vincent. Trinidad; Lesser Antilles and Latin America.

#### SUBTRIBE CRYPTOBIINA

*Biocrypta fulvipes* (Erichson) 1840: 566 (*Cryptobium*); Blackwelder 1943: 337, 1944-1957: 125; Ivie et al. 2008b: 243. **Distribution.** Antigua, Grenada, Guadeloupe, Montserrat, Puerto Rico. Colombia, Venezuela, Ecuador; widespread

#### PAEDERINI; UNPLACED IN SUBTRIBE

*Suniophacis hubbardi* Blackwelder 1943: 347, 1944-1957: 126. **Distribution.** Antigua, Jamaica; widespread Antilles endemic.

### SUBFAMILY STAPHYLININAE

#### TRIBE XANTHOLININI

*Neohypnus attenuatus* (Erichson) 1839: 330 (*Xantholinus*); Blackwelder 1943: 478; Herman 2001: 3708; Ivie et al. 2008b: 244. **Distribution.** Antigua, Barbados, Cuba, Dominica, Grenada, Guadeloupe, Jamaica, Montserrat, Puerto Rico, St. Kitts, St. Thomas, St. Vincent. USA (CA-TX-FL), Mexico, Venezuela, Trinidad, Tobago, Argentina, Brazil, Paraguay; St. Helena (introduced); widespread New World.

*Neohypnus humeralis* (Erichson) 1839: 327 (*Xantholinus*); Blackwelder 1943: 479; Herman 2001: 3799; Ivie et al. 2008b: 244. **Distribution.** Antigua, Cuba, Dominica, Hispaniola, Montserrat, Puerto Rico, St. Croix, St. John, St. Vincent; widespread Antilles endemic.

*Phacophallus parumpunctatus* (Gyllenhal) 1827: 481 (*Staphylinus*); Blackwelder 1943: 494 (*Leptacinus*); Tucker 1952: 341; Bennett and Alam 1985: 21; Herman 2001: 3738. =*P. fauveli* Cameron 1922: 114 of Grenada, and of St. Vincent. **Distribution.** Antigua, Bahamas, Barbados, Cuba, Grenada, Jamaica, Puerto Rico, St. Kitts, St. Vincent. Widespread: USA-Canada; Africa; Asia; Pacific Islands; introduced to Lesser Antilles. Cosmopolitan; introduced to New World, native to Palearctic region; now widely distributed in North, but seemingly not in Central and South America (Smetana 1982: 108). **Notes.** In decaying organic matter, especially in synanthropic situations; in chicken manure and cow dung.

#### TRIBE STAPHYLININI

#### SUBTRIBE TANYGNATHININA

*Atanygnathus laticollis* (Erichson) 1839: 289 (*Tanygnathus*); Blackwelder 1943: 472; Herman 2001: 3562. **Distribution.** **Antigua**, Cuba, Hispaniola, Puerto Rico, St. Vincent (type locality). Trinidad; widespread Antilles and Latin America.

## SUBTRIBE PHILONTHINA

*Belonuchus antiguae* Blackwelder 1943: 434; Herman 2001: 2519. **Distribution.** **Antigua**; single island endemic.

*Cafius bistriatus* (Erichson) 1840: 502 (*Philonthus*); Blackwelder 1943: 43; Ramos 1946: 33; Frank et al. 1986: 149, 158; Woodruff et al. 1998: 42; Herman 2001: 2569, Ivie et al. 2008b: 243; Turnbow and Thomas 2008: 52. **Distribution.** **Antigua**, Bahamas, Barbados, Carriacou, Cuba, Dominica, Grenada, Guadeloupe, Jamaica, Mona, Montserrat, Puerto Rico, St. Croix, St. John, **St. Kitts**, St. Lucia, St. Thomas. Canada (NB, NS, PQ), USA (ME-FL-TX), Mexico to Trinidad, Tobago; widespread New World. **Note.** Found under seaweed and drift on beaches.

*Cafius caribeanus* Bierig 1934: 68; Blackwelder 1943: 437; Frank et al. 1986: 149; Woodruff et al. 1998: 42; Herman 2001: 2571. **Distribution.** **Antigua**, Carriacou, Cuba, Dominica, Grenada, Guadeloupe, Jamaica, Puerto Rico, St. Croix. USA (FL), Mexico, Panama, Venezuela, Brazil; widespread New World. **Note.** Found under seaweed and drift on beaches.

*Cafius subtilis* Cameron 1922: 121; Blackwelder 1943: 436; Ramos 1946: 33; Frank et al. 1986: 149; Herman 2001: 2578; Ivie et al. 2008b: 243. **Distribution.** **Antigua**, Cuba, Dominica, Guadeloupe, Jamaica, Mona, Montserrat, Puerto Rico, St. Croix, **St. Kitts**. USA (FL); widespread Antilles and North and/or Central America. **Note.** Found under seaweed and drift on beaches.

*Gabronthus thermarum* (Aubé) 1850: 316 (*Philonthus*); Blackwelder 1943: 403; Frank 1983: 476; Smetana 1995: 481; Herman 2001: 2670; Pérez-Gelabert 2008: 91. **Distribution.** **Antigua**, Grenada, Guadeloupe, Hispaniola, Jamaica, Puerto Rico, St. Croix, **St. Kitts**. USA (e), Mexico, Costa Rica, French Guiana, Africa, Europe, Asia. Indian and Pacific ocean islands; widespread New World.

*Philonthus discoideus* (Gravenhorst) 1802: 38 (*Staphylinus*); Blackwelder 1943: 407; Smetana 1995: 184; Herman 2001: 2807; Ivie et al. 2008b: 244. **Distribution.** **Antigua**, Cuba, Grenada, Guadeloupe, Hispaniola, Jamaica, Montserrat, Puerto Rico, St. Croix, **St. Kitts**. North America (widespread), Mexico to Venezuela; Atlantic Islands; Europe; Asia; Africa; widespread New World.

*Philonthus havaniensis* (Laporte) 1835: 116 (*Staphylinus*); Blackwelder 1943: 418; Ramos 1946: 33; Herman 2001: 2836; Ivie et al. 2008b: 244. **Distribution.** **Antigua**, Cuba, Grand Cayman, Hispaniola, Jamaica, Mona, Montserrat, Puerto Rico, St. Croix, St. John; widespread Antilles endemic.

*Philonthus hepaticus* Erichson 1840: 451; Blackwelder 1943: 401; Bennett and Alam 1985: 21; Smetana 1995: 175; Herman 2001: 2837; Ivie et al. 2008b: 244; Turnbow and Thomas 2008: 53. **Distribution.** **Antigua**, Bahamas, Barbados, Cuba, Dominica, Grenadines, Guadeloupe, Hispaniola, Jamaica, Les Saintes, Montserrat, Puerto Rico, St. Croix, **St. Kitts**, St. Thomas, St. Vincent. Canada (NB), USA (widespread), Mexico to Panama, Colombia, Tobago, Trinidad, Venezuela, Argentina, Chile; widespread New World; Australia, New Zealand.

*Philonthus longicornis* Stephens 1832: 237; Blackwelder 1943: 410; Smetana 1995: 245; Herman 2001: 2866; Ivie et al. 2008b: 244. **Distribution.** **Antigua**, Cuba, Grenada, Hispaniola, Montserrat, Puerto Rico, **St. Kitts**. Cosmopolitan; tropicopolitan; widespread New World.

*Philonthus trepidus* Erichson 1840: 489. **Distribution.** **Antigua**, Puerto Rico, Virgin Islands; widespread Antilles endemic.

*Philonthus ventralis* (Gravenhorst) 1802: 174 (*Staphylinus*); Fleutiaux and Sallé 1890: 380; Blackwelder 1943: 404; Ramos 1946: 33; Woodruff et al. 1998: 43; Bennett and Alam 1985: 21; Smetana 1995: 190; Herman 2001: 2996; Ivie et al. 2008b: 244. **Distribution.** **Antigua**, Barbados, Cayman Islands, Cuba, Culebra, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, Mona, Montserrat, Puerto Rico, St. Croix, **St. Kitts**, St. Lucia, St. Thomas, St. Vincent. USA (widespread), Mexico, Costa Rica, French Guiana, Tobago, Trinidad; Africa; Asia; Europe; cosmopolitan; widespread New World.



## SUBTRIBE HYPTIOMINA

*Holius guildingii* Erichson 1839: 300; Blackwelder 1943: 462; Herman 2001: 2512. **Distribution.** **Antigua**, Puerto Rico, St. Lucia, St. Vincent (type locality); widespread Antilles endemic.

## SERIES SCARABAEIFORMIA

## SUPERFAMILY SCARABAEOIDEA

## 33. FAMILY TROGIDAE, The hide beetles

*Omorgus suberosus* (Fabricius) 1775: 31 (*Trox*); Fleutiaux and Sallé 1890: 398; Blackwelder 1944-1957: 219; Ramos 1946: 40; Paulian 1947a: 25; Miskimen and Bond 1970: 96; Chalumeau and Gruner 1974: 787; Chalumeau 1983a: 38; Bennett and Alam 1985: 21; Valentine and Ivie 2005: 276; Ivie et al. 2008b: 244. **Distribution.** Barbados, Cuba, Dominica, Guadeloupe, Guana, Hispaniola, Jamaica, Marie-Galante, Martinique, Mona, Montserrat, Puerto Rico, St. Croix, **St. Martin-St. Maarten**, St. Vincent; probably throughout the Lesser Antilles. USA to Argentina and Brazil (Vaurie 1955); widespread New World.

41. FAMILY SCARABAEIDAE, The scarab beetles  
(including dung beetles, June beetles, and lamellicorn beetles)

## SUBFAMILY APHODIINAE

## TRIBE APHODIINI

*Nialaphodius nigrita* (Fabricius) 1801: 73 (*Aphodius*); Gordon and Skelley 2007: 265; Ivie et al. 2008b: 244 (*Aphodius*). =*A. cuniculus* Chevrolat 1864: 411, Chapin 1940: 7; Ramos 1946: 41; Wolcott 1950: 248 of Puerto Rico, of Mona, of Vieques; synonymy in Bordat 1990: 62; Paulian 1947a: 37 (*Nialus*); Chalumeau and Gruner 1974: 795; Cartwright and Chalumeau 1978: 8; Bennett and Alam 1985: 22; Woodruff et al. 1998: 32; Chalumeau 1983a: 58 (all as *Aphodius* (*Nialus*)); Valentine and Ivie 2005: 276; generic synonymy in Skelley et al. 2007; Turnbow and Thomas 2008: 49. =*A. granarius* variety *guadeloupensis* Fleutiaux and Sallé 1890: 395. **Distribution.** **Antigua**, Barbados, Carriacou, Cuba, Désirade, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Les Saintes, Jamaica, Marie-Galante, Martinique, Mona, Montserrat, Mustique, Puerto Rico, St. Croix, St. John, **St. Kitts**, St. Lucia, St. Thomas, St. Vincent, Tortola, Vieques. Widespread southern USA, Mexico to widespread South America, Tobago; introduced to Lesser Antilles. Introduced to New World from Afro-tropical region; worldwide in tropics and subtropics. **Notes.** Common in cow dung.

## TRIBE EUPARIINI

*Ataenius gracilis* (Melsheimer) 1845: 137 (*Oxyomus*); Fleutiaux and Sallé 1890: 397; Chapin 1940: 25; Paulian 1947a: 44; Chalumeau and Gruner 1974: 806; Cartwright and Chalumeau 1978: 12; Chalumeau 1978: 44, 1983a: 74; Bennett and Alam 1985: 22; Woodruff et al. 1998: 33; Stebnicka 2007b: 79; Ivie et al. 2008b: 244; Turnbow and Thomas 2008: 48. =*A. chilensis* Solier 1851: 72 of Barbados in Woodruff et al. 1998: 33. **Distribution.** **Antigua**, Bahamas, Barbados, Cuba, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, Marie-Galante, Martinique, Montserrat, Puerto Rico, St. Croix, **St. Kitts**, St. Vincent, Vieques. United States, Canada; throughout the Neotropics (Argentina, Chile, Colombia, Peru, Galapagos Islands); widespread New World. **Notes.** Adults attracted to lights; found in cow dung.

*Ataenius howdeni* Chalumeau 1978: 51; Stebnicka 2002: 269, 2007b: 21; Ivie et al. 2008b: 244. **Distribution.** **Antigua**, Montserrat; Lesser Antilles endemic.

*Ataenius liogaster* Bates 1887: 94; Chapin 1940: 29; Paulian 1947a: 44; Chalumeau and Gruner 1974: 813; Stebnicka and Lago 2005: 60 (synonymy); Stebnicka 2007b: 36; Ivie et al. 2008b: 244. =*A. edwardsi*

Chapin 1940: 26; Cartwright and Chalumeau 1978: 14; Chalumeau 1983a: 82, 174; Bennett and Alam 1985: 22; Woodruff et al. 1998: 33. Stebnicka and Lago 2005: 60. **Distribution.** Antigua, Barbados, Carriacou, Cuba, Dominica (overlooked in Stebnicka and Lago 2005: 61), Grenada, Guadeloupe, Hispaniola, Jamaica, Montserrat, Puerto Rico, St. Croix, St. Lucia, St. Vincent. Mexico to Panama, Ecuador (including Galapagos), Trinidad, Venezuela; Micronesia; widespread Antilles and Latin America. **Notes.** Adults attracted to lights; found in cow dung.

*Ataenius luteomargo* Chapin 1940: 36; Paulian 1947a: 41; Chalumeau and Gruner 1974: 811; Cartwright and Chalumeau 1978: 12; Chalumeau 1983a: 84; Bennett and Alam 1985: 22; Woodruff et al. 1998: 33; Stebnicka 2002: 270, 2007b: 22. =*A. terminalis* Fleutiaux and Sallé 1890: 396; Uyttenboogaart 1902: 116 of Barbados; Arrow 1903: 512 (not Chevrolat). =*A. versicolor* Hinton 1937: 183 (not Schmidt) of Barbados. **Distribution.** Antigua, Barbados, Désirade, Dominica (type locality), Grenada, Guadeloupe, Hispaniola, Les Saintes, Marie-Galante, Martinique, Montserrat, Puerto Rico, St. Kitts, St. Lucia; not Jamaica. Panama, Surinam, Venezuela; widespread Antilles and Latin America. **Notes.** Adults attracted to lights, found in cow dung.

*Ataenius picinus* Harold 1867: 281; Chalumeau and Gruner 1974: 810; Cartwright and Chalumeau 1978: 14; Chalumeau 1978: 44, 1983a: 80; Stebnicka 2004: 224, 2007b: 42. =*A. elongatus* Beauvois 1811: 104, Fleutiaux and Sallé 1890: 397 of Guadeloupe. =*A. darlingtoni* Hinton 1937: 179; Chapin 1940: 30; Ramos 1946: 41; Paulian 1947a: 40. **Distribution.** Antigua, Cuba, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, Marie-Galante, Martinique, Mona, Puerto Rico, St. Croix, St. Vincent. widespread New World; nearly cosmopolitan; United States, Argentina, Brazil, Uruguay; Australia, Fiji, New Caledonia, New Hebrides, New Zealand. The most widely distributed species in the genus, and undoubtedly on all islands of the Lesser Antilles. **Notes.** Adults attracted to lights; found in cow dung.

*Ataenius scabrellus* Schmidt 1909: 118; Chalumeau and Gruner 1974: 807; Stebnicka 2003: 227, 2007b: 27; Ivie et al. 2008b: 244; Turnbow and Thomas 2008: 48. =*A. havanensis* Balthasar 1938: 56; Chalumeau and Gruner 1974: 807; Chalumeau 1983a: 75. =*A. miamii* Chapin 1940: 41; Ramos 1946: 41; Bennett and Alam 1985: 22; Tucker 1952: 342 of Barbados; Miskimen and Bond 1970: 97 of St. Croix. =*A. fleutiauxi* Paulian 1947a: 42 of Guadeloupe. **Distribution.** Bahamas, Barbados, Cuba, Bahamas, Désirade, Hispaniola, Jamaica, Les Saintes, Puerto Rico, Guadeloupe, Martinique, Mona, Montserrat, St. Croix, St. Kitts. USA (FL); Venezuela, Guyana; widespread Antilles and Latin America.

*Ataenius scutellaris* Harold 1867: 82; Chalumeau and Gruner 1974: 803; Cartwright and Chalumeau 1978: 14; Chalumeau 1978: 44, 1983a: 69; Bennett and Alam 1985: 22; Valentine and Ivie 2005: 276; Stebnicka 2007a: 48, 2007b: 59; Ivie et al. 2008b: 244. =*Ataenius frater* Arrow 1903: 512 of St. Vincent; Chapin 1940: 32; Woodruff et al. 1998: 33. =*A. elongatus* Beauvois 1811: 104; Fleutiaux and Sallé 1890: 397 of Guadeloupe. **Distribution.** Antigua, Bahamas, Barbados, Cuba, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Marie-Galante, Martinique, Montserrat, Puerto Rico, St. Croix, St. Kitts, St. Lucia, St. Martin-St. Maarten, St. Thomas, St. Vincent, Tortola. Mexico to Bolivia and Brazil, Trinidad; widespread Antilles and Latin America; introduced to Vanuatu (New Hebrides), Seychelles, Mascarenes, Malaya. **Notes.** Adults attracted to lights; found in cow dung.

*Ataenius temperei* Chalumeau and Gruner 1974: 799; Cartwright and Chalumeau 1978: 12; Chalumeau 1983a: 64; Stebnicka 2007b: 69; Ivie et al. 2008b: 244. **Distribution.** Dominica, Guadeloupe (type locality), Montserrat, St. Kitts; Lesser Antilles endemic. **Notes.** Adults attracted to lights; not found on cow dung.

## SUBFAMILY SCARABAEINAE

### TRIBE ATEUCHINI

*Ateuchus illaesum* (Harold) 1868: 53 (*Choeridium*); Leng and Mutchler 1914: 438; Blackwelder 1944-1957: 204; Matthews 1966: 46; Chalumeau and Gruner 1974: 789; Chalumeau 1983a: 48. =*Choeridium insulare* Fleutiaux and Sallé 1890: 395; Leng and Mutchler 1914: 438, 1917: 207; Paulian 1947a: 31; Matthews 1966: 46 (synonymy); Chalumeau 1983a: 49 (as valid species); Ivie et al. 2008b: 244. **Distribution.** Carriacou, Grenada, Guadeloupe, Martinique, Montserrat, Mustique, St. Kitts, St.

Vincent. Mexico (type locality), Colombia; Lesser Antilles and Latin America. **Notes.** Found in open lowland pastures and in lowland xerophytic forest.

#### TRIBE ONTHOPHAGINI

*Digitonthophagus gazella* (Fabricius) 1787: 377 (*Scarabaeus*); Huchet 1992: 298; Touroult 2005 : 85; Ivie and Philips 2008: 10; Ivie et al. 2008b: 244. **Distribution.** Anguilla (2004), Antigua, Guadeloupe (Basse-Terre, 1992), Hispaniola, Jamaica, Marie-Galante (1992), **Martinique** (first Lesser Antilles report in Huchet 1992), Montserrat (2000), Puerto Rico, St. Croix, St. Kitts (2003), St. Vincent, Union; introduced to Lesser Antilles. The species is native to much of the hotter and drier parts of Africa, and ranges into Madagascar, Asia Minor, India, and Ceylon. Introduced to the New World via Texas in 1972. By 1977 it was distributed from California to Florida, south to Mexico and Guatemala (Hoebeke and Beucke 1997) and is expanding its range in the Caribbean (Ivie and Philips 2007; dates above are year of first Lesser Antilles records). **Notes.** Introduced to Texas to speed the removal of livestock dung in pastures. It has a rapid reproduction rate and high mobility. It may be a threat to the native dung beetles of the West Indies (Ivie and Philips 2008). This is a species of open habitats so it may not directly compete with the native dung scarabs which are mostly inhabitants of forested or shady habitats, and have different dung preferences.

#### SUBFAMILY MELOLONTHINAE

##### TRIBE MELOLONTHINI

*Phyllophaga (Cnemerachis) antiguae* (Arrow) 1920a: 191 (*Lachnosterna*); Blackwelder 1944-1957: 223 (*Cnemerachis*); Chalumeau 1980: 87, 1985a: 28. **Distribution.** **Antigua**; not Dominica; single island endemic.

*Phyllophaga (Cnemerachis) cneda* Saylor 1940: 310; Chalumeau 1985a: 31; Ivie et al. 2008b: 244. **Distribution.** Montserrat, **St. Kitts**; Lesser Antilles endemic.

*Phyllophaga (Cnemerachis) montserratensis* (Arrow) 1920a: 191 (*Lachnosterna*); Chalumeau 1980: 87 (lectotype), 1985a: 30; Ivie et al. 2008b: 244. **Distribution.** **Antigua**, Montserrat, **St. Kitts**; Lesser Antilles endemic.

*Phyllophaga (Cnemerachis) sanbarthensis* Chalumeau and Gruner 1976: 97; Chalumeau 1985a: 31. **Distribution.** **St. Barthélemy** (type locality), **St. Martin-St. Maarten**; Lesser Antilles endemic.

*Phyllophaga (Cnemerachis) stehlei* Chalumeau 1985a: 28. **Distribution.** **St. Martin-St. Maarten**; single island endemic.

#### SUBFAMILY RUTELINAE

##### TRIBE ANOMALINI

*Anomala insularis* (Laporte) 1840: 136 (*Euchlora*); Fleutiaux and Sallé 1890: 399; Paulian 1947a: 62; Chalumeau and Gruner 1976: 106; Cartwright and Chalumeau 1978: 24; Chalumeau 1978: 43, 1983a: 131, 1985b: 248. =*Anomala marginata* (Fabricius) 1792: 164 and *A. cincta latreillei* Blanchard 1850: 188 of Guadeloupe, of Martinique. **Distribution.** Désirade, Dominica, Guadeloupe, Les Saintes, Martinique, Marie-Galante; **St. Kitts** (*A. i. liamaigae* Chalumeau 1985b: 249); not Hispaniola (contra Pérez-Gelabert 2008: 95 and Blackwelder 1944-1957); Lesser Antilles endemic. **Notes.** Adults attracted to lights at many sites; larvae found in decaying breadfruit and mangos.

##### TRIBE GENIATINI

*Leucothyreus guadulpiensis* Burmeister 1844: 501; Fleutiaux and Sallé 1890: 401; Paulian 1947a: 64; Chalumeau and Gruner 1976: 107; Cartwright and Chalumeau 1978: 22; Chalumeau 1978: 43, 1983a: 133; Chalumeau 1985b: 254; Ivie et al. 2008b: 244. **Distribution.** Dominica, Guadeloupe, Marie-

Galante, Montserrat, **St. Kitts**; Lesser Antilles endemic. **Notes.** Adults feed on citrus leaves at night.

## SUBFAMILY DYNASTINAE

### TRIBE CYCLOCEPHALINI

*Chalepides barbatus barbatus* (Fabricius) 1787: 10 (*Scarabaeus*); Blackwelder 1944-1957: 253; Paulian 1947a: 73; Chalumeau and Gruner 1977: 590 (suggesting labelling error); Chalumeau 1983a: 216 (doubting Guadeloupe record); Endrödi 1985: 172; Audreau: 2001: 426. **Distribution.** Barbados, Cuba, Guadeloupe, Hispaniola, Puerto Rico, **St. Barthélemy**, St. Croix, St. Lucia, **St. Martin-St. Maarten**. Other subspecies are from Guatemala to Argentina; widespread Antilles and Latin America. **Notes.** Introduced to lower Lesser Antilles according to Chalumeau (1983a 216). Some records are placed in *Chalepus* M'Leay 1819: 149 (*Scarabaeidae*) which is preoccupied by *Chalepus* Thunberg 1805: 282 (*Chrysomelidae*). Wolcott (1950: 263) discusses the natural history of this detritus feeding and non-economic beetle in Puerto Rico.

*Cyclocephala immaculata* (Olivier) 1789: 29 (*Melolontha*); Arrow 1947: 221; Paulian 1947a: 69; Chalumeau and Gruner 1977: 582; Chalumeau 1983a: 143; Endrödi 1985: 101. =*C. danforthi* Chapin 1935: 69 of St. Martin-St. Maarten. **Distribution.** Anegada, Désirade, Guadeloupe (type locality), **St. Barthélemy**, **St. Kitts**, **St. Martin-St. Maarten**. French Guiana (*C. i. ferruginea* (Fabricius) 1798: 170 (*Melolontha*)); Lesser Antilles and Latin America.

*Cyclocephala mafaffa* Burmeister 1847: 69; Chalumeau and Gruner 1977: 581; Chalumeau 1983a: 141; Endrödi 1985: 85; Ivie et al. 2008b: 245. =*Cyclocephala mafaffa grandis* Burmeister 1847: 69; Chalumeau 1983a: 141 =*Cyclocephala grandis* Olivier 1847: 69, Fleutiaux and Sallé 1890: 401; Paulian 1947a: 67 of Guadeloupe. **Distribution.** Guadeloupe, Montserrat, **St. Kitts**. S USA, Mexico to Panama, Venezuela, Trinidad; widespread New World.

### TRIBE ORYCTINI

*Strategus talpa* (Fabricius) 1792: 32 (*Scarabaeus*); Paulian 1947a: 78; Ratcliffe 1976: 150; Chalumeau and Gruner 1977: 595; Turnbow and Thomas 2008: 49. **Distribution.** Bahamas, **Antigua**, Guana, Mona, Puerto Rico, **St. Barthélemy** (type locality), St. Croix, St. John, St. Thomas, Tortola, Vieques; widespread Antilles endemic.

*Tomarus cuniculus* (Fabricius) 1801: 20 (*Geotrupes*); Paulian 1947a: 76 (*Ligyris*); Chalumeau and Gruner 1977: 591; Cartwright and Chalumeau 1978: 27; Chalumeau 1978: 44, 1983a: 154; Cooter 1983: 185; Bennett and Alam 1985: 22; Valentine and Ivie 2005: 276; Ivie et al. 2008b: 245 (*Ligyris*); Turnbow and Thomas 2008: 49. =*Ligyris antillarum* Palisot de Beauvois 1805: 104, Fleutiaux and Sallé 1890: 402 of Guadeloupe. =*Ligyris tumulosus* Burmeister 1847: 101; Ramos 1946: 41 of Mona; Uyttenboogaart 1902: 116 of Barbados. **Distribution.** **Anguilla**, **Antigua**, Bahamas, Barbados, Bermuda, Cuba, Désirade, Dominica, Guadeloupe, Guana, Hispaniola, Les Saintes, Jamaica, Marie-Galante, Martinique, Mona, Montserrat, **Nevis**, Puerto Rico, **St. Barthélemy**, St. Croix, St. John, **St. Martin-St. Maarten**, St. Thomas, St. Vincent. United States to Trinidad, French Guiana, Brazil; widespread New World. **Notes.** Adults attracted to lights; larvae a serious pest of roots of sugar cane, or may be saprophagous or coprophagous where sugar cane is absent.

*Tomarus ebenus* (DeGeer) 1774: 317 (*Scarabaeus*); Paulian 1947a: 76 (*Ligyris*); Chalumeau and Gruner 1977: 592; Cartwright and Chalumeau 1978: 26; Chalumeau 1978: 44, 1983a: 156. =*Ligyris cordatus* Fabricius 1792: 31, Fleutiaux and Sallé 1890: 402 of Guadeloupe. **Distribution.** Dominica, Guadeloupe, Hispaniola, Marie-Galante, Martinique, St. Lucia, **St. Martin-St. Maarten**. Mexico, Colombia, Venezuela, Guyana, Surinam, Brazil; widespread Antilles and Latin America. **Notes.** Adults attracted to lights; larvae feed on small tubers of Dioscoraceae and Convolvulaceae and may damage gardens.

## TRIBE PHILEURINI

*Phileurus valgus* Linnaeus 1758: 347; Fleutiaux and Sallé 1890: 403; Ratcliffe 1988: 52. =*Phileurus castaneus antillarum* Prell 1912: 179; Paulian 1947a: 82; Ivie et al. 2008b: 245. =*P. valgus antillarum* Prell 1912: 179; Chalumeau and Gruner 1977: 599; Cartwright and Chalumeau 1978: 27; Chalumeau 1983a: 168 of Guadeloupe, of Dominica, and of Martinique; Turnbow and Thomas 2008: 49. = *P. valgus capra* Bates 1889: 341 of Guadeloupe, of Martinique, of St. Martin-St. Maarten, and of St. Barthélemy in Endrödi 1985: 726. **Distribution.** Bahamas, Barbados, Cuba, Désirade, Dominica, Grenada, Guadeloupe, Jamaica, Martinique, Montserrat, Puerto Rico, **St. Barthélemy**, St. Croix, **St. Martin-St. Maarten**, St. Vincent. Venezuela. The nominate subspecies is in USA (FL) and Central and South America to Argentina; widespread New World. **Notes.** Adults attracted to lights; adults and larvae collected in decaying logs of *Inga* sp.

## SERIES ELATERIFORMIA

## SUPERFAMILY BYRRHOIDEA

## 57. FAMILY HETERO CERIDAE, The variegated mud-loving beetles

## SUBFAMILY HETERO CERINAE

## TRIBE HETERO CERINI

*Tropicus pusillus* (Say) 1823a: 200 (*Heterocerus*); Pacheco 1964: 106. **Distribution.** Antigua, Cuba, Jamaica. Canada (ON) and widespread USA to Mexico to Panama; widespread Antilles and North and/or Central America.

## SUPERFAMILY ELATEROIDEA

## 69. FAMILY ELATERIDAE, The click beetles

## SUBFAMILY ELATERINAE

## TRIBE PHYSORHININI

*Glyphonyx quadraticollis* Champion 1896: 536; Blackwelder 1944-1957: 296. **Distribution.** Antigua. USA, Mexico to Costa Rica; widespread Antilles and North and/or Central America?

## SUBFAMILY AGRYPNINAE

## TRIBE AGRYPNINI

*Lacon subcostatus* (Candeze) 1857: 51, 69 (*Adelocera*); Fleutiaux and Sallé 1890: 407; Fleutiaux 1911: 246; Blackwelder 1944-1957: 281; Fleutiaux 1947: 107; Valentine and Ivie 2005: 276; Chassain 2005: 181; Chassain and Sautière 2007: 141; Ivie et al. 2008b: 245; Turnbow and Thomas 2008: 38. **Distribution.** Antigua, Bahamas, Cuba, Guadeloupe, Guana, Montserrat; widespread Antilles endemic.

## TRIBE OOPHORINI

*Heteroderes amplicollis* (Gyllenhal) 1817: 141 (*Elater*); Fleutiaux and Sallé 1890: 412; Fleutiaux 1911: 258; Blackwelder 1944-1957: 289; Fleutiaux 1947: 119; Cooter 1983: 185 as *H.* sp.; Ivie et al. 2008b: 245. =*Heteroderes laurentii* (Guérin-Méneville) 1838: 31 (*Elater*); Champion 1897a: 285; Fleutiaux 1911: 258; Blackwelder 1944-1957: 289; Tucker 1952: 342; Bennett and Alam 1985: 22; Chassain 2005: 188; Chassain and Sautière 2007: 142. **Distribution.** Barbados, Cuba, Dominica, Grenada,

Guadeloupe, Martinique, Montserrat, Mustique, Puerto Rico, **St. Barthélemy**, St. Vincent. USA (CA-TX-AL-FL); probably native to southern South America; Argentina, Brazil, Paraguay, Peru (H. Douglas, pers. comm., 2007); widespread New World..

## 76. Family Lampyridae, The firefly beetles

### SUBFAMILY LAMPYRINAE

#### TRIBE CRATOMORPHINI

*Aspisma ignitum* (Linnaeus) 1767: 645 (*Lampyris*); Gorham 1898a: 318; Leng and Mutchler 1922: 451; Mutchler 1923a: 12; Blackwelder 1944-1957: 356; Paulian 1947b: 159; Bennett and Alam 1985: 23; Cooter 1983: 185; Ivie et al. 2008b: 246. **Distribution.** **Antigua**, Barbados, Cuba, Dominica, Grenada, Guadeloupe, Hispaniola, Martinique, Montserrat, Mustique, **St. Kitts**, St. Vincent, Union. USA (southernmost FL, TX), Mexico, Central America to Colombia, Venezuela, Trinidad, French Guiana; widespread New World. **Notes.** Larvae predaceous on various terrestrial molluscs.

*Cratomorphus dorsalis* (Gyllenhal) in Schönherr 1817: 67 (*Lampyris*); Leng and Mutchler 1922: 481; Blackwelder 1944-1957: 356; McDermot 1966: 28. **Distribution.** **St. Barthélemy**; single island endemic. Not Brazil, not Argentina.

#### TRIBE PHOTININI

[*Macrolampis perelegans* Gorham 1880: 31 of Antigua (Blackwelder 1944-1957: 357) as well as Guatemala to Panama; this record of Antigua was considered an error by Leng and Mutchler 1922: 449 (listed as *Macrolapmis*) for the West Indies fauna]

## 78. FAMILY CANTHARIDAE, The soldier beetles

### SUBFAMILY CANTHARINAE

*Tylocerus crassicornis* (Dalman) 1823: 57 (*Telephorus* (*Tylocerus*)); Leng and Mutchler 1922: 494; Paulian 1947b: 163; Blackwelder 1944-1957: 363. **Distribution.** Guadeloupe, **St. Barthélemy** (type locality); Lesser Antilles endemic. Not Jamaica.

### SUBFAMILY CHAULIOGNATHINAE

#### TRIBE ICHTHYURINI

*Belotus marginicollis* Mutchler 1923b: 8 (*Tytthonyx*); Blackwelder 1944-1957: 374. **Distribution.** **Antigua**; single island endemic.

### SERIES BOSTRICHIFORMIA

### SUPERFAMILY BOSTRICOIDEA

## 83. FAMILY BOSTRICHIDAE (+ Lyctinae), The branch and twig borers and horned powder-post beetles

### SUBFAMILY POLYCAONINAE

*Melalgus gonagrum* (Fabricius) 1798: 156 (*Apate*); Blackwelder 1944-1957: 398 (*Heterarthron*); Lepesme 1947: 205; Ramos 1946: 40; Fisher 1950: 6; Miskimen and Bond 1970: 90; Spilman 1971: 3; Valentine and Ivie 2005: 277. =*Heterarthron caribbeanum* Lesne 1906: 396 of Guadeloupe, Blackwelder 1944-1957: 398; Ivie et al. 2008b: 246 of Montserrat. =*Heterarthron femoralis* Fabricius 1792: 361; Gorham

1898a: 328 of St. Vincent; Fleutiaux and Sallé 1890: 419 (*Polycaon*) of Guadeloupe. **Distribution.** Cuba, Dominica, Guadeloupe, Guana, Hispaniola, Jamaica, Mona, Montserrat, Puerto Rico, **St. Barthélemy**, St. Croix, St. Thomas, St. Vincent. Guyana, Trinidad; Lesser Antilles and Latin America.

## SUBFAMILY BOSTRICHINAE

### TRIBE BOSTRICHINI

*Amphicerus cornutus* Pallas 1772: 8; Blackwelder 1944-1957: 399; Lepesme 1947: 206; Fisher 1950: 70; Miskimen and Bond 1970: 90; Valentine and Ivie 2005: 277; Ivie et al. 2008b: 246; Turnbow and Thomas 2008: 7. =*Bostrychus bicornutus* Latreille 1833: 65, Fleutiaux and Sallé 1890: 419 of Guadeloupe. **Distribution.** **Antigua**, Bahamas, Barbados, Cuba, Guadeloupe, Guana, Jamaica, Marie-Galante, Martinique, Montserrat, Puerto Rico, St. Croix, **St. Martin-St. Maarten**, St. Thomas. USA to Mexico to Panama and Brazil, Hawaii (introduced); widespread New World. **Notes.** Adults and larvae bore in many tree species.

### TRIBE XYLOPERTHINI

*Xylomeira tridens* (Fabricius) 1792: 362 (*Apate*); Fisher 1950: 120; Valentine and Ivie 2005: 277; Ivie et al. 2008b: 246. =*Xylomeira torquata* (Fabricius) 1801: 382 (*Apate*); Lepesme 1947: 208; Blackwelder 1944-1957: 400; Ramos 1946: 40; Miskimen and Bond 1970: 90; Spilman 1971: 4 Turnbow and Thomas 2008: 8. **Distribution.** **Antigua**, Bahamas, Cuba, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Martinique, Mona, Montserrat, Puerto Rico, St. Croix, St. John, St. Lucia, St. Thomas (type locality), Tortola. USA (TX, FL), Mexico; widespread Antilles and North and/or Central America. **Notes.** Adults and larvae bore in wood of *Parkinsonia* spp., *Poinciana* spp., *Acacia* spp., and *Tamarindus* spp.

## 84. FAMILY ANOBIIDAE, The drug-store, death-watch, and spider beetles

### SUBFAMILY PTININAE, The spider beetles

*Pitnus (Pitnus) antillanus* Bellés 1992: 183; Schiller 2004: 2; Valentine and Ivie 2005: 277. **Distribution.** Guana, Mona, Puerto Rico, St. Croix, **St. Kitts**; widespread Antilles endemic. **Notes.** West Indian *Pitnus* spp. are leaf miners (Philips et al. 1998), commonly in seaside lavender.

### SUBFAMILY DORCATOMINAE

#### TRIBE DORCATOMINI

*Dorcatoma castanea* Gyllenhal 1808: 114; Blackwelder 1944-1957: 406; Lepesme 1947: 228. **Distribution.** **St. Barthélemy**. South America; Lesser Antilles and Latin America.

#### TRIBE TRICORYNINI

*Cryptorama carinatum* White 1984: 91; Valentine and Ivie 2005: 277; Ivie et al. 2008b: 247. **Distribution.** **Barbuda**, Guana, Montserrat, Tortola, Virgin Gorda; widespread Antilles endemic.

## 97. FAMILY NITIDULIDAE, The sap beetles

### SUBFAMILY CILLAEINAE

*Conotelus conicus* (Fabricius) 1801: 603 (*Stenus*); Fleutiaux and Sallé 1890: 385; Champion 1898: 396; Blackwelder 1944-1957: 411; Jelinek and Nicholas Evans 1982: 234; Ivie et al. 2008b: 249. **Distribu-**

tion. Bequia, Cuba, Grenada, Guadeloupe, Jamaica, Montserrat, Mustique, Puerto Rico, St. Croix, St. Martin-St. Maarten, St. Thomas, St. Vincent; widespread Antilles endemic.

#### SUBFAMILY CYBOCEPHALINAE

*Cybocephalus nipponicus* Endrödy-Younga 1971: 244; Smith and Cave 2007: 170; Turnbow and Thomas 2008: 35. **Distribution.** Bahamas, Barbados, Grand Cayman, Nevis, St. Kitts. Eastern North America, Asia, southern Europe, Micronesia, South Africa; widespread Antilles and North and/or Central America? **Notes.** Reported feeding on at least 14 species of armored scales world wide and on *Aspidiotus destructor* Signoret and *A. yasumatsui* Signoret in the West Indies. It was introduced to Barbados from Florida and helps control scales on cycads.

### 122. FAMILY COCCINELLIDAE, The lady beetles

#### SUBFAMILY STICHOLOTIDINAE

##### TRIBE MICROWEISIINI

*Coccidophilus cariba* Gordon 1978: 206; Ivie et al. 2008b: 251. **Distribution.** Antigua, Curaçao, Dominica, Guadeloupe, Montserrat, Nevis, St. Kitts; widespread Antilles endemic.

##### TRIBE SERANGIINI

*Delphastus diversipes* (Champion) 1913: 126 (*Lioscymnus*); Bennett and Simmonds 1964: 89; Gordon 1994: 125 (who does not give West Indian records, so the following island records could be suspect). **Distribution.** Curaçao, Jamaica, St. Eustatius. Mexico to Honduras, Trinidad; widespread Antilles and Latin America.

#### SUBFAMILY SCYMNINAE

##### TRIBE SCYMNILLINI

*Scymnillus badius* Weise 1929: 32; Gordon 1978: 208. **Distribution.** Nevis. Trinidad; Lesser Antilles and Latin America.

##### TRIBE STETHORINI

*Stethorus caribus* Gordon and Chapin 1983: 245; Bennett and Alam 1985: 27; Valentine and Ivie 2005: 278. **Distribution.** Antigua, Barbados, Cuba, Grenada, Guana, Hispaniola, Nevis, Puerto Rico. St. Eustatius, St. Lucia; widespread Antilles endemic. **Notes.** Predaceous on sugarcane thrips (*Fulmekiola serrata* Kobus) and probably on Acarina on Barbados.

##### TRIBE SCYMNINI

*Clitostethus dispar* Siccard 1929: 530; Blackwelder 1944-1957: 444; Bennett and Simmonds 1964: 82. **Distribution.** Curaçao, Dominica, St. Martin-St. Maarten. Trinidad, Guyana; Lesser Antilles and Latin America. **Notes.** Predator on aphids, *Aleurodiscus* spp..

*Scymnus cyanipennis* Mulsant 1850: 952; Blackwelder 1944-1957: 444; Bennett and Simmonds 1964: 83. **Distribution.** Antigua; single island endemic.

*Scymnus floralis* Fabricius 1792: 260; Ramos 1946: 36; Bennett and Simmonds 1964: 83; Ivie et al. 2008b: 251. =*Scymnus lowei* Mulsant 1850: 980; Blackwelder 1944-1957: 444; Bennett and Simmonds 1964: 83; probably for all Lesser Antilles records. **Distribution.** Antigua, Mona, Montserrat, Puerto Rico, Saba, St. Eustatius. Tobago; Curaçao, widespread Antilles and Latin America. **Notes.** Predator on the scale insects *Aleurothrixus* spp. and *Aspidiotus destructor* Signoret.



## TRIBE DIOMINI

*Diomus ochroderus* (Mulsant) 1850: 951 (*Scymnus*); Fleutiaux and Sallé 1890: 484 (*Scymnus*); Gorham 1898b: 341 (*Scymnus*); Blackwelder 1944-1957: 445; Bennett and Simmonds 1964: 83 (*Scymnus*); Bennett and Alam 1985: 25; Valentine and Ivie 2005: 278; Ivie et al. 2008b: 251. **Distribution.** Barbados, Cuba, Curaçao, Dominica, Grenada, Guadeloupe, Guana, Montserrat, Mustique, Puerto Rico, **St. Barthélemy**, St. Vincent; widespread West Indies; not known from mainland South America; widespread Antilles endemic. **Notes.** Predaceous on Barbados on the plant pests *Orthezia insignis* Browne, *Sipha flava* (Forbes), *Toxoptera aurantii* (Boyer de Fonscolombe), *Aphis* spp., *Aleurothrixus floccosus* (Maskell), *Aleurodicus cocois* Curtis and *A. dispersus* Russell. What may be this species is reported as *Diomus* sp. Bennett and Alam 1985: 25 on Barbados as predaceous on *Icerya purchasa* Maskell; and *Diomus* sp. nr. *ochroderus* (Mulsant) by Bennett and Alam 1985: 25; Tucker 1952: 344 as predaceous on *Toxoptera aurantii*.

*Diomus roseicollis* (Mulsant) 1853: 270 (*Scymnus*); Fleutiaux and Sallé 1890: 480; Gorham 1898b: 342 (*Scymnus*); Blackwelder 1944-1957: 445 (*Scymnus*); Ramos 1946: 36 (*Scymnus*); Bennett and Simmonds 1964: 84; Gordon 1999: 74; Valentine and Ivie 2005: 278; Ivie et al. 2008b: 251; Turnbow and Thomas 2008: 27; Pérez-Gelabert 2008: 109. **Distribution.** Antigua, Bahamas, Barbados, Bequia, Cuba, Curaçao, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Martinique, Mona, Montserrat, Mustique, Puerto Rico, St. John, St. Lucia, **St. Martin-St. Maarten**, St. Thomas, St. Vincent, Vieques (island records from USNM, mostly unpublished). Central America, South America, USA (southern FL); widespread New World. **Notes.** Predaceous on Barbados on the plant pests *Aleurocanthus woglumi* Ashby, *Coccus viridis* (Green), *Geococcus coffeae* Green, *Lepidosaphes beckii* (Newman), *Aspidiotus destructor*, *Aleurodicus cocois*, *A. dispersus*, *Planococcus* sp., *P. citri* (Risso), *Ferrisia virgata* (Cockerell) and *Phenacoccus gossypii* Townsend and Cockerell.

## TRIBE HYPERASPIDINI

*Hyperaspis connectens* Thunberg 1808: 157; Gorham 1898b: 340; Blackwelder 1944-1957: 446; Bennett and Simmonds 1964: 87; Pérez-Gelabert 2008: 109. **Distribution.** Hispaniola, Jamaica, Puerto Rico, Saba, **St. Barthélemy**, **St. Eustatius**, **St. Kitts**. USA, Mexico to Nicaragua; widespread Antilles and North and/or Central America. **Notes.** Predator on *Aspidiotus destructor*. Ivie et al. 2008b: 251 list an undetermined species from Montserrat.

*Hyperaspis donzeli* Mulsant 1850: 638; Blackwelder 1944-1957: 447; Bennett and Simmonds 1964: 87. **Distribution.** **St. Eustatius**. Trinidad, Curaçao; Lesser Antilles and Latin America? **Notes.** Predator on scale insects, *Phenacoccus* spp. and *Orthezia* spp.

## SUBFAMILY COCCIDULINAE

## TRIBE AZYINI

*Pseudoazyia trinitatis* (Marshall) 1912: 320 (*Azya*); Blackwelder 1944-1957: 451; Wolcott 1950: 311; Tucker 1952: 344; Bennett and Simmonds 1964: 90 (*Azya*); Gordon 1980: 194; Bennett and Alam 1985: 26; Valentine and Ivie 2005: 278. **Distribution.** Barbados, Bequia, Dominica, Grand Cayman, Grenada, Guadeloupe, Guana, **Nevis**, Puerto Rico (introduced), St. Croix, **St. Eustatius**, **St. Kitts**; St. Lucia, St. Vincent. Colombia, Tobago, Trinidad, Venezuela, Guyana, Surinam; widespread Antilles and Latin America; introduced to Old World, Fiji. **Notes.** Introduced to Barbados from Trinidad against *Aspidiotus destructor*; established.

## SUBFAMILY COCCINELLINAE

## TRIBE COCCINELLINI

*Cycloneda sanguinea* (Linnaeus) 1763: 10 (*Coccinella*); Fleutiaux and Sallé 1890: 483 (*Neda*); Gorham 1898b: 339; Leng and Mutchler 1914: and Mutchler 1917: 200; Blackwelder 1944-1957: 452; Ramos 1946: 37; Tucker 1952: 344; Bennett and Simmonds 1964: 93; Miskimen and Bond 1970: 90; Cooter

1983: 185; Bennett and Alam 1985: 25; Vandenberg 2002: 228; Valentine and Ivie 2005: 278; Ivie et al. 2008b: 251; Turnbow and Thomas 2008: 27. **Distribution.** **Antigua**, Bahamas, Barbados, Bequia, Carriacou, Cuba, Culebra, Curaçao, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Martinique, Mona, Montserrat, Puerto Rico, St. Croix, St. Lucia, St. Vincent, Union, Vieques. USA through Central America to Trinidad, to Argentina and Chile; widespread New World. **Notes.** Chapin (1957) notes the subspecies *C. s. limbifer* to be widespread in the West Indies as far south as St. Lucia (Vandenberg 2002: 232). A general predator on Barbados; predaceous on *Sipha flava*, *Aphis* spp., *Toxoptera auranti* (Boyer de Fonscolombe), *Myzus persicae* (Sulzer), *Saccharosydne saccharivora* (Westwood), *Orthezia* spp., *Diatraea saccharalis* (Fabricius), *Spodoptera* spp., *Anornis* spp., *Pseudoplusia includens* (Walker), *Trichoplusia ni* Hübner, *Plutella xylostella* (Linnaeus), *Heliothis* spp.

#### TRIBE HALYZINI

*Psyllobora lineola* Fabricius 1792: 283; Fleutiaux and Sallé 1890: 482; Blackwelder 1944-1957: 455; Ramos 1946: 37; Bennett and Simmonds 1964: 94; Miskimen and Bond 1970: 91; Valentine and Ivie 2005: 278; Ivie et al. 2008b: 251. **Distribution.** Guadeloupe, Guana, Jamaica, Martinique, Mona, Montserrat, Puerto Rico, **Saba**, St. Croix; widespread Antilles endemic.

#### SUPERFAMILY TENEBRIONOIDEA

##### 131. FAMILY MORDELLIDAE, The tumbling flower beetles

###### SUBFAMILY MORDELLINAE

###### TRIBE MORDELLSTENINI

*Glipostenoda pallida* (Champion) 1896: 50 (*Mordellistena*); Blackwelder 1944-1957: 478; Ivie et al. 2008b: 252. **Distribution.** **Antigua**, Guadeloupe, Montserrat, St. Vincent; Lesser Antilles endemic.

##### 140. FAMILY TENEBRIONIDAE, The darkling beetles

###### SUBFAMILY PIMELIINAE

###### TRIBE TRIENTOMINI

*Trientoma guadeloupensis* Fleutiaux and Sallé 1890: 421; Blackwelder 1944-1957: 513; Marcuzzi 1962: 25, 1977: 6; 1984: 74; Marcuzzi and d'Aguilar 1971: 79. Chalumeau 1982: 190 (lectotype). **Distribution.** **Antigua**, **Barbuda**, Désirade, Guadeloupe (type locality), Les Saintes, **St. Eustatius**, **St. Kitts**; Lesser Antilles endemic. Genus endemic to West Indies.

###### SUBFAMILY DIAPERINAE

###### TRIBE PHALERIINI

*Phaleria fulva* Fleutiaux and Sallé 1890: 423; Leng and Mutchler 1914: 461; Champion 1896: 10; Marcuzzi and d'Aguilar 1971: 84; Marcuzzi 1977: 35; 1984: 84; Watrous and Triplehorn 1982: 18; Cooter 1983: 185; Woodruff et al. 1998: 44; Ivie et al. 2008b: 254. **Distribution.** **Antigua**, **Barbuda**, Cannouan, Dominica, Grenada, Guadeloupe (type locality), Hispaniola, Islote de Aves, Les Saintes, Los Roques, Margarita, Montserrat, Mustique, Orchilla, **St. Barthélemy**, St. Lucia, **St. Martin-St. Maarten**. Venezuela (mainland and Margarita,); widespread Antilles and South America. **Notes.** A scavenger in sea beach sand. Some earlier literature records of this species may be based on specimens of *P. thinophila* Watrous and Triplehorn and need checking.

*Phaleria picipes* Say 1824: 280; Fleutiaux and Sallé 1890: 422; Leng and Mutchler 1914: 461; Blackwelder 1944-1957: 526; Triplehorn 1991: 266; Triplehorn and Watrous 1979: 291; Watrous and Triplehorn 1982: 19; Marcuzzi 1984: 84; Valentine and Ivie 2005: 279; Ivie et al. 2008b: 254; Turnbow and Thomas 2008: 57. **Distribution.** Bahamas, Cayman Islands, Cuba, Grenada, Guadeloupe, Guana, Hispaniola, Islote de Aves, Jamaica, Marguerita, Montserrat, Mustique, Las Roques, Les Saintes, Puerto Rico, **St. Barthélemy, St. Martin-St. Maarten.** Coastal USA (NJ-FL), Mexico, Belize, Honduras, Panama; widespread Antilles and North and/or Central America.

*Phaleria punctipes* LeConte 1878: 421; Triplehorn 1991: 268; Triplehorn and Watrous 1979: 281; Watrous and Triplehorn 1982: 13; Marcuzzi 1984: 84; Valentine and Ivie 2005: 279; Turnbow and Thomas 2008: 57. =*P. guadeloupensis* Fleutiaux and Sallé 1890: 423 of Guadeloupe; Marcuzzi and d'Aguilar 1971: 83; Marcuzzi 1977: 35 of Les Saintes and of St. Martin-St. Maarten, 1984: 84. **Distribution.** Anagada, **Antigua**, Bahamas, Cuba, Guadeloupe, Guana, Jamaica, Les Saintes, **St. Barthélemy, St. Martin-St. Maarten.** USA (FL); widespread Antilles and North and/or Central America.

*Phaleria testacea* Say 1824: 280; Marcuzzi 1984: 84; Triplehorn 1991: 266; Triplehorn and Watrous 1979: 289; Watrous and Triplehorn 1982: 19; Valentine and Ivie 2005: 279; Pérez-Gelabert 2008: 112. =*P. angustata* Chevrolat 1878: ccxlviii; Ramos 1946: 39; Marcuzzi 1962: 39; Marcuzzi and d'Aguilar 1971: 83; Turnbow and Thomas 2008: 57. =*P. chevrolati* Fleutiaux and Sallé 1890: 423 of Guadeloupe; Champion 1896: 9; Marcuzzi and d'Aguilar 1971: 83. =*P. chevrolati* variety *quadrinotata* Fleutiaux and Sallé 1890: 423 of Guadeloupe. =*P. chevrolati* variety *thoracica* Fleutiaux and Sallé 1890: 423 of Guadeloupe. =*P. maculipennis* Marcuzzi 1962: 37; Marcuzzi and d'Aguilar 1971: 84; Marcuzzi 1977: 36. **Distribution.** Bahamas, Barbados, Désirade, Grenada, Guadeloupe, Guana, Hispaniola, Les Saintes, Margarita, Marie-Galante, Martinique, Mona, Mustique, **Nevis**, Puerto Rico, **St. Barthélemy, St. Eustatius, St. Martin-St. Maarten**, Virgin Islands; most Caribbean islands. Trinidad, Venezuela, French Guiana, coastal from NE USA (Maine) to Argentina; widespread New World.

#### TRIBE DIAPERINI

##### SUBTRIBE DIAPERINA

*Ulomoides ocularis* (Casey) 1891: 65 (*Palembus*); Blackwelder 1944-1957: 527; Miskimen and Bond 1970: 92; Marcuzzi 1977: 38, 1984: 87; Triplehorn 1965: 388; Chalumeau 1982: 193; Valentine and Ivie 2005: 279; Ivie et al. 2008b: 254; Turnbow and Thomas 2008: 57. **Distribution.** **Anguilla**, Bahamas, Guana, Cuba, Dominica, Guadeloupe, Hispaniola, Jamaica, Montserrat, Puerto Rico, St. Croix, **St. Martin-St. Maarten**, St. Thomas, St. Vincent. USA (FL). Introduced to New World; introduced to Lesser Antilles; native to the Philippines. **Notes.** Sometimes a pest in tamarind pods.

#### TRIBE CRYPTICINI

*Gondwanocrypticus filicornis* (Chevrolat) 1878b: 222 (*Crypticus*); Blackwelder 1944-1957: 528 (*Platydemia*); Chalumeau 1982: 193; Marcuzzi 1984: 85; Pérez-Gelabert 2008: 113. **Distribution.** Hispaniola, Jamaica, **St. Barthélemy**; widespread Antilles endemic. **Notes.** In sand of back-beach. Cooter 1983: 185 (as *Crypticus*) and Ivie et al. 2008b: 254 list an undetermined species from Montserrat.

#### TRIBE TRACHYSCELINI

*Trachyscelis aphodoides* Latreille 1809: 379, Fleutiaux and Sallé 1890: 422; Steiner 2004: 335. =*Trachyscelis flavipes* Melsheimer 1846: 61; Leng and Mutchler 1914: 461; Marcuzzi and d'Aguilar 1971: 83; Marcuzzi 1977: 39, 1984: 83; Chalumeau 1982b: 193; Steiner 2004: 335 (synonymy); Valentine and Ivie 2005: 279. **Distribution.** **Barbuda**, Guadeloupe, Guana, Puerto Rico, **St. Barthélemy, St. Martin-St. Maarten**, St. Thomas; Turks and Caicos. USA (MD, VA, NC, FL, LA; but maybe not now established because there are no records since the 1950's); Brazil; introduced to New World; introduced to Lesser Antilles; native to Mediterranean Europe and north Africa. **Notes.** An inhabitant of pure fine sand in washed-up debris, at or just above high tide line.

## SUBFAMILY OPATRINAE

## TRIBE OPATRINI

- Blapstinus opacus* Mulsant and Rey 1859: 186; Fleutiaux and Sallé 1890: 422; Leng and Mutchler 1914: 461; Blackwelder 1944-1957: 525; Marcuzzi 1962: 36, 1977: 29, 1984: 81; Marcuzzi and d'Aguilar 1971: 81; Chalumeau 1982: 192; Valentine and Ivie 2005: 279; Ivie et al. 2008b: 253. **Distribution.** **Anguilla, Barbuda, Désirade, Fourche, Fourmarre,** Guadeloupe, Guana, Islote de Aves, Marie-Galante, Montserrat, St. Croix, ?**St. Barthélemy, St. Eustatius, St. Kitts, St. Martin-St. Maarten** (as *B. opacus martinensis* Marcuzzi 1977: 29), St. John, **Tintamarre**; Lesser Antilles endemic.
- Blapstinus striatulus* Mulsant and Rey 1859: 183; Leng and Mutchler 1914: 461; Blackwelder 1944-1957: 525; Wolcott 1950: 327; Chalumeau 1982b: 192; Marcuzzi 1984: 81. **Distribution.** ?Puerto Rico, **St. Barthélemy**; Lesser Antilles endemic?
- Diastolinus barbudensis* Marcuzzi 1962: 29; 1977: 11; Marcuzzi 1984: 77. **Distribution.**, **Barbuda** (type locality), Montserrat, **Nevis; Antigua, Saba** (*D. b. antiguanus* Marcuzzi 1962: 30, 1977: 11; endemic subspecies); Lesser Antilles endemic. Ivie et al. 2008b: 253 report a species near this from Montserrat.
- Diastolinus clavatus* Mulsant and Rey 1859: 155; Blackwelder 1944-1957: 524; Marcuzzi 1977: 13; Marcuzzi 1984: 77; Valentine and Ivie 2005: 279. **Distribution.** Guana, Mona, **Nevis,** Puerto Rico, **St. Barthélemy, St. Martin-St. Maarten,** St. Thomas; widespread Antilles endemic.
- Diastolinus costipennis* Mulsant and Rey 1859: 149; Marcuzzi 1962: 27; Marcuzzi and d'Aguilar 1971: 80; Marcuzzi 1984: 77. **Distribution.** Hispaniola, Martinique, **St. Kitts**; widespread Antilles endemic.
- Diastolinus perforatus* Sahlberg 1823: 15; Mulsant and Rey 1859: 141; Fleutiaux and Sallé 1890: 421; Blackwelder 1944-1957: 524; Marcuzzi 1962: 27, 1977: 19, 1984: 78; Marcuzzi and d'Aguilar 1971: 80; Chalumeau 1982: 192. **Distribution.** **Anguilla, Fourche,** Guadeloupe, Désirade, Les Saintes, Marie-Galante, Martinique, **St. Barthélemy, St. Croix, St. Martin-St. Maarten, Tintamarre**; Lesser Antilles endemic.
- Diastolinus puncticollis* Mulsant and Rey 1859: 147; Blackwelder 1944-1957: 524; Marcuzzi 1962: 26, 1977: 22, 1984: 78; Ivie et al. 2008b: 253. **Distribution.** **Anguilla,** ?**Antigua, Barbuda,** Hispaniola, Marie-Galante, Montserrat, **Nevis,** Puerto Rico, Saba, **St. Eustatius, St. Kitts**; widespread Antilles endemic.
- Diastolinus sallei* Mulsant and Rey 1859: 144; Blackwelder 1944-1957: 524; Marcuzzi 1962: 25, 1977: 22, 1984: 78. **Distribution.** ?**Anguilla, Antigua, Barbuda,** Dominica, Hispaniola, Désirade, Saba; widespread Antilles endemic.
- Sellio coarctatus* Mulsant and Rey 1859: 170; Leng and Mutchler 1914: 461; Blackwelder 1944-1957: 525; Marcuzzi 1962: 31, 1984: 82. **Distribution.** Hispaniola, **St. Kitts**; widespread Antilles endemic?

## TRIBE PLATYNOTINI

- Opatrinus (Opatrinus) clathratus* (Fabricius) 1792: 90 (*Opatrum*); Iwan 1995: 16. =*Opatrinus gemellatus* (Olivier) 1795: 9; Fleutiaux and Sallé 1890: 421; Champion 1896: 6; Blackwelder 1944-1957: 524; Marcuzzi 1962: 31, 1977: 22, 1984: 78; Miskimen and Bond 1970: 92; Marcuzzi and d'Aguilar 1971: 80; Bennett and Alam 1985: 27 (as *O. geminatus* Erichson 1848: 565); Ivie et al. 2008b: 253. =*Diastolinus clathratus* Fabricius 1792: 109; Mulsant and Rey 1859: 138; Blackwelder 1944-1957: 524; Marcuzzi 1962: 27, 1977: 13; Marcuzzi and d'Aguilar 1971: 80; Marcuzzi 1984: 77. **Distribution.** **Antigua,** Barbados, Bequia, Dominica, Grenada, Guadeloupe, Jamaica, Les Saintes, Marie-Galante, Martinique, Montserrat, Mustique, **Nevis,** St. Croix, **St. Kitts, St. Lucia, St. Martin-St. Maarten.** St. Vincent, Union. Mexico (introduced), Colombia, Venezuela (mainland and Frailes, Margarita, Testigos), Tobago, Trinidad, French Guiana, Guyana, Surinam, Brazil; widespread Antilles and Latin America.

## SUBFAMILY TENEBRIONINAE

## TRIBE ALPHITOBINI

*Alphitobius laevigatus* (Fabricius) 1781: 90 (*Opatrum*); Blackwelder 1944-1957: 532; Marcuzzi 1962: 38, 1977: 39, 1984: 95; Miskimen and Bond 1970: 92; Marcuzzi and d'Aguilar 1971: 89; Ardoin 1977: 391. =*Alphitobius piceus* (Olivier) 1792: 50 (*Helops*); Fleutiaux and Sallé 1890: 427; Champion 1896: 24. **Distribution.** Antigua, Aruba, Barbados, Cuba, Curaçao, Guadeloupe, Puerto Rico, Saba, St. Croix, St. Martin-St. Maarten, St. Vincent. Mexico to Trinidad, Brazil; widespread Antilles and Latin America; Old World; cosmopolitan. **Notes.** The black fungus beetle. In caves, stored products, chicken coops.

#### TRIBE TENEBRIONINI

*Zophobas atratus* Fabricius 1775: 256; Marcuzzi and d'Aguilar 1971: 90; Bennett and Alam 1985: 27; Chalumeau 1982: 194; Pérez-Gelabert 2008: 114. =*Z. morio* Fabricius 1776: 241; Fleutiaux and Sallé 1890: 427; Champion 1896: 25; Leng and Mutchler 1914: 463; Blackwelder 1944-1957: 534. =*Z. rugipes* Kirsch 1866: 197; Leng and Mutchler 1914: 463; Blackwelder 1944-1957: 534; Marcuzzi 1962: 39, 1977: 42; 1984: 98; of Guadeloupe. =*Zophobas laticollis* Motschulsky 1872: 35; Champion 1896: 26; Leng and Mutchler 1914: 463; Blackwelder 1944-1957: 534 of Grenada. =?*Zophobas* sp., Uyttenboogaart 1902: 116. **Distribution.** Barbados, Cuba, Culebra, Dominica, Grenada, Guadeloupe, Hermanos, Hispaniola, Jamaica, Martinique, Puerto Rico, Saba, St. Barthélemy; St. Croix, St. Martin-St. Maarten, St. Thomas, St. Vincent. USA (CA-FL), Mexico to Panama, Ecuador (including Galapagos), Venezuela (Testigos, Margarita), Aruba, Bonaire, Curaçao, Trinidad to Paraguay; widespread New World. **Notes.** Many references have cited *Z. atratus*, *Z. morio*, and *Z. rugipes* as separate species but Tschinkel (1984) found no way to separate them so they are treated as one species here.

#### SUBFAMILY ALLECULINAE, The comb-clawed bark beetles

##### TRIBE ALLECULINI

##### SUBTRIBE ALLECULINA

*Hymenorus anguillae* Campbell 1971: 76. **Distribution.** Anguilla; single island endemic.  
*Hymenorus antillensis* Campbell 1971: 77; Ivie et al. 2008b: 254. **Distribution.** Antigua, Barbuda, Montserrat (or near this species), Redonda; Lesser Antilles endemic.  
*Lobopoda (Mesolobopoda) antiguaensis* Campbell 1971: 39. **Distribution.** Antigua; single island endemic.

#### 143. FAMILY OEDEMERIDAE, The false blister beetles

##### SUBFAMILY OEDEMERINAE

##### TRIBE ASCLERINI

*Hypasclera simplex* (Waterhouse) 1878: 308 (*Copdita*); Champion 1896: 39; Blackwelder 1944-1957: 490 (*Copdita*); Arnett 1961: 58 (*Alloxaxis*), 1983: 6; Miskimen and Bond 1970: 85; Valentine and Ivie 2005: 279; Ivie et al. 2008b: 255. =*Asclera suturalis* Fleutiaux and Sallé 1890: 434 of Guadeloupe; Blackwelder 1944-1957: 490 (*Micronacerdes*); Arnett 1961: 58. =*M. s.* variety *dufau* Pic 1929: 8. **Distribution.** Antigua, Guadeloupe, Guana, Jamaica, Montserrat, Mustique, Puerto Rico, St. Croix, St. Barthélemy (type locality), St. Vincent; widespread Antilles endemic.  
*Oxycopsis vittata* (Fabricius) 1775: 125 (*Lagria*); Fleutiaux and Sallé 1890: 434; Leng and Mutchler 1914: 466 (*Sessinia*); Blackwelder 1944-1957: 490; Ramos 1946: 38; Arnett 1953: 4 (*Oxaxis*), 1957: 6, 1984: 2; Miskimen and Bond 1970: 85 (*Sessinia*); Valentine and Ivie 2005: 279; Turnbow and Thomas 2008: 46. =*Oxycopsis lateralis* (Waterhouse) 1878: 307 (*Copdita*); Champion 1896: 41 of St. Vincent; Blackwelder 1944-1957: 490; Bennett and Alam 1985: 27. **Distribution.** Antigua, Bahamas, Barbados, Cuba, Dominica, Grenada, Guana, Hispaniola, Jamaica, Guadeloupe, Martinique, Mona, Montserrat, Mustique, Puerto Rico, St. Croix, St. Lucia, Vieques. USA (FL, Keys and Dade Co.);

widespread Antilles endemic. **Note.** Arnett (1983: 3) does not list the Lesser Antilles records which he provided in 1953 and 1957.

## SUPERFAMILY CHRYSOMELOIDEA

### 155. FAMILY CERAMBYCIDAE, The longhorned wood boring beetles

#### SUBFAMILY PRIONINAE

##### TRIBE MACROTOMINI

*Nothopleurus maxillosus* (Drury) 1773: 86 and Plate 38, fig. 3 (*Cerambyx*); Gahan 1895: 83; Blackwelder 1944-1957: 552; Villiers 1980b: 141; Chalumeau and Touroult 2005a: 45; Ivie et al. 2008b: 257. = *Stenodontes exsertus* Olivier 1795: 17; Fleutiaux and Sallé 1890: 460, misidentification, of Guadeloupe. **Distribution.** Antigua, Barbados (needs verification), Barbuda (type locality), Cuba, Dominica, Guadeloupe, **Martinique**, Montserrat, Puerto Rico (seemingly absent in Virgin Islands), St. Barthélemy, St. Kitts, St. Kitts, St. Martin; widespread Antilles endemic. **Notes.** Larvae attack healthy and unhealthy wood of orange, mango, *Bursera* spp. and other trees.

##### TRIBE SOLENOPTERINI

*Soleonoptera chalumeaui* Villiers 1979a: 23; Villiers 1980b: 148; Galileo and Martins 1993: 432. **Distribution.** **St. Martin-St. Maarten**; single island endemic. **Notes.** In dry forests.

#### SUBFAMILY CERAMBYCINAE

##### TRIBE METHIINI

*Methia necydalea* (Fabricius) 1798: 148 (*Saperda*); Gahan 1895: 122; Ramos 1946: 41; Villiers 1980a: 130; Philips and Ivie 1998: 72; Chalumeau and Touroult 2005: 71; Dalens and Touroult 2007: 291; Valentine and Ivie 2005: 280; Touroult 2007: 6; Ivie et al. 2008b: 257; Turnbow and Thomas 2008: 20. = *Methia pusilla* Fleutiaux and Sallé 1890: 468 of Guadeloupe. **Distribution.** **Antigua**, Bahamas, Barbados, Cayman Islands, Cuba, Désirade, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Les Saintes, Marie-Galante, Martinique, Mona, Montserrat, **Nevis**, Puerto Rico, **St. Barthélemy**, St. Croix, St. John, **St. Kitts**, St. Lucia, **St. Martin-St. Maarten**, **Nevis**, St. Thomas, St. Vincent, Union. USA (TX-FL-VA) to Mexico, Belize to Argentina; widespread New World. **Notes.** Taken at lights, mostly in dry forests. Host trees: *Sloanea* spp., *Inga* spp., *Laguncularia* spp., *Conocarpus* spp., *Rhizophora* spp., *Avicennia* spp..

##### TRIBE ACHRYSONINI

*Achryson surinamum* (Linnaeus) 1767: 632 (*Cerambyx*); Fleutiaux and Sallé 1890: 461; Gahan 1895: 92; Chemsak 1966: 211; Villiers 1980a: 130; Chalumeau and Touroult 2005: 74; Dalens and Touroult 2007: 291; Touroult 2007: 6; Ivie et al. 2008b: 257. **Distribution.** **Antigua**, Barbados, Carriacou, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, Les Saintes, Marie-Galante, Martinique, Montserrat, Puerto Rico, St. Lucia, **St. Martin-St. Maarten**, St. Vincent. SW USA to Trinidad to Argentina; widespread New World. **Notes.** Host trees: *Acacia* spp., *Leucaena* spp., *Lonchocarpus* spp., *Tamarindus* spp.

##### TRIBE EBURIINI

*Eburia decemmaculata* (Fabricius) 1775: 181 (*Stenocorus*); Fleutiaux and Sallé 1890: 462 (*Dissacanthus*); Gahan 1895: 94; Blackwelder 1944-1957: 563; Chemsak 1966: 212; Villiers 1980a: 130, 1980c: 277;

Cooter 1983: 185; Bennett and Alam 1985: 28; Chalumeau and Touroult 2005: 78; Vitali and Touroult 2005: 67 (larva); Ivie et al. 2008b: 257. **Distribution.** **Antigua**, Dominica, Guadeloupe, ?Martinique, Montserrat, **St. Barthélemy**, St. Croix, **St. Eustatius**, **St. Kitts**, **St. Martin-St. Maarten**; Lesser Antilles endemic. **Notes.** Host trees: *Delonix* spp., *Hippomane mancinella* L., *Leucaena* spp., *Acacia* spp.. In dry zone forests.

*Eburia octomaculata* Chevrolat 1862: 265; Fleutiaux and Sallé 1890: 462 (*Dissacanthus*); Gahan 1895: 96; Villiers 1980a: 130, 1980c: 280; Monné and Hovore 2005: 41; Bennett and Alam 1985: 28; Chalumeau and Touroult 2005a: 77; Ivie et al. 2008b: 257. **Distribution.** Barbados, Cuba, Dominica, Guadeloupe, Les Saintes, **Martinique**, Montserrat, **St. Kitts**; widespread Antilles endemic. **Notes.** Host trees: *Citrus* spp., *Eugenia* spp., *Inga* spp., *Tamarindus* spp. In dry to mid-humid forests. This species, common in Guadeloupe, was not known from Martinique, where it was collected near Fort-de-France (Chalumeau and Touroult 2005a: 77). It may be a recent introduction.

#### TRIBE ELAPHIDIINI

*Anelaphus nanus* (Fabricius) 1792: 300; Chalumeau and Touroult 2005: 104; Valentine and Ivie 2005: 280. =*Anelaphus cinereum* (Olivier) 1795: 69 (*Callidium*); Ivie 1985: 307. =*Anelaphus subtropicus* (Casey) 1924: 245 (*Anoplium*); Villiers 1980c: 289. =*Elaphidion nanum* Gahan 1895: 103. **Distribution.** Bahamas, Cuba, Guana, Hispaniola, Jamaica, Puerto Rico, **St. Barthélemy**, St. Croix, **St. Martin-St. Maarten**, St. John, St. Thomas, Tortola, Virgin Gorda. USA (FL); Curaçao; widespread Antilles and North and/or Central America. **Notes.** Host plants: *Conocarpus* spp., *Guaicum* spp., *Casuarina* spp., *Erythroxylum* spp.. In dry zone forests.

*Curtomerus flavus* (Fabricius) 1775: 191 (*Callidium*); Ramos 1946: 42 (*Cylindera*); Chemsak 1966: 212; Villiers 1980a: 131, 1980c 282; Bennett and Alam 1985: 28; Ivie 1985: 309; Chalumeau and Touroult 2005: 88; Valentine and Ivie 2005: 280; Touroult 2007: 7; Ivie et al. 2008b: 257; Turnbow and Thomas 2008: 17. =*Cyrtomerus pilicornis* Fleutiaux and Sallé 1890: 465 of Guadeloupe; Gahan 1895: 108 (*Cylindera*). **Distribution.** **Anguilla**, Bahamas, Barbados, **Barbuda**, British Virgin Islands (Guana, Virgin Gorda), Cuba, Désirade, Dominica, Grand Cayman, Grenada, Guadeloupe, Hispaniola, Jamaica, Les Saintes, Marie-Galante, Martinique, Mona, Monserrat, Puerto Rico, **St. Kitts**, St. Croix, St. John, St. Lucia, **St. Martin-St. Maarten**, St. Vincent. USA (FL), Central and South America; widespread New World; widely spread by commerce; to Hawaii, Tahiti, Marquesas Islands, and Philippines. **Notes.** Polyphagous on many tree genera.

*Elaphidion conspersum* Newman 1841: 110; Ramos 1946: 42; Villiers 1979b: 97 (neotype), 1980c: 285; Ivie 1985b: 309; Vitali and Touroult 2006: 3 (larva); Chalumeau and Touroult 2005: 96; Valentine and Ivie 2005: 280; Turnbow and Thomas 2008: 18. **Distribution.** Bahamas, Bonaire, Cuba, Curaçao, Guadeloupe, Guana, Hispaniola, Mona, Puerto Rico, St. Croix, St. John, **St. Martin-St. Maarten**, St. Thomas; widespread Antilles endemic.

*Elaphidion glabratum* (Fabricius) 1792: 295 (*Stenocorus*); Gahan 1895: 100; Blackwelder 1944-1957: 565; Chemsak 1966: 212; Villiers 1979b: 96 (lectotype), 1980c: 287; Ivie 1985b: 310; Chalumeau and Touroult 2005: 101; Ivie et al. 2008b: 257; Turnbow and Thomas 2008: 18. =*Elaphidion insulare* Newman 1840: 27 of Nevis, Gahan 1895: 100; Ramos 1946: 42 of Mona. =*Elaphidion cobbeni* Gilmour 1963: 81 of St. Eustatius. =*Elaphidion hummelincki* Gilmour 1963: 84 of St. Martin-St. Maarten. **Distribution.** **Antigua**, Bahamas, Dominica, Guadeloupe, Mona, Montserrat, **Nevis**, Saba, **St. Barthélemy**, St. Croix, **St. Eustatius**, St. John, **St. Kitts**, St. Lucia, **St. Martin-St. Maarten**, St. Thomas, Tortola; widespread Antilles endemic. **Notes.** *E. glabratum pseudonomon* Ivie 1986: 311 occurs in the Virgin Islands (Anagada, St. John St. Thomas, Tortola, Virgin Gorda). Host trees: *Acacia* spp., *Citrus* spp..

*Elaphidion irroratum* (Linnaeus) 1767: 633 (*Cerambyx*); Fleutiaux and Sallé 1890: 463; Gahan 1895: 99; Ramos 1946: 42; Chemsak 1969: 186; Miskimen and Bond 1970: 93; Villiers 1979b: 97, 1980c: 285; Chalumeau and Touroult 2005: 97; Valentine and Ivie 2005: 280; Turnbow and Thomas 2008: 18. **Distribution.** Bahamas, Bonaire, Cuba, Curaçao, Guadeloupe (type locality), Guana, Hispaniola, Jamaica, Mona, Puerto Rico, St. Croix; **St. Barthélemy** and **St. Martin-St. Maarten** (*E. irroratum debieni* Chalumeau and Touroult 2004b: 754, 2005a: 98). USA (FL), Mexico to Panama; widespread

Antilles and North and/or Central America. **Notes.** Host trees: *Spondias* spp., *Rhizophora* spp., *Laguncularia* spp.

*Nesanoplium puberulum* (Fleutiaux and Sallé) 1890: 464 (*Cyrtomerus*); Gahan 1895: 108; Blackwelder 1944-1957: 571; Chemsak 1966: 214; Villiers 1980a: 131, 1980c: 283; 1980f: 98 (lectotype); Chalumeau and Touroult 2005a: 89; Turnbow and Thomas 2008: 21. **Distribution.** Bahamas, Dominica, Grenada, Guadeloupe (type locality), Hispaniola, Jamaica, Martinique (record needs confirmation, possibly confused with *N. dalensi* Chalumeau and Touroult 2005a of St. Lucia), **St. Barthélemy**, St. Vincent, Tortola; not Montserrat; widespread Antilles endemic. Genus endemic to West Indies. **Notes.** Host trees: *Inga* spp., *Hymenaea* spp., *Tamarindus* spp., *Acacia* spp., *Cyatharexylum* spp., *Coccoloba uvifera* L. In dry and moist forests.

#### TRIBE IBIDIONINI

*Neocompsa cylindricollis* (Fabricius) 1798: 146 (*Heterachthes*); Chalumeau and Touroult 2005: 109 (*Stenocorus*); Valentine and Ivie 2005: 280; Touroult 2007: 7; Ivie et al. 2008b: 257. =*Heterachthes quadrimaculata* Haldeman 1847: 43 (not Fabricius 1792: 328); Fleutiaux and Sallé 1890: 464 (*Ibidion*); Gahan 1895: 107 (*Compsa*); Chemsak 1966: 215; Woodruff et al. 1998: 16. =*N. quadrimaculata* (Fabricius) 1792: 328; Fleutiaux and Sallé 1890: 464; Villiers 1980a: 131, 1980c: 291, 1980e: 595; Vitali and Touroult 2005: 68 (larva), Chalumeau and Touroult 2005: 109; Dalens and Touroult 2007: 291. **Distribution.** **Antigua**, Barbados, **Barbuda**, Cuba, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Les Saintes, Martinique, Montserrat, Mustique, Puerto Rico, Saba, St. Croix, **St. Kitts**, St. Lucia, **St. Martin-St. Maarten**, St. Thomas, St. Vincent, Tortola. Trinidad; widespread Antilles and Latin America. **Notes.** Polyphagous on many tree genera.

#### TRIBE CALLIDIOPINI

*Caribbomerus attenuatus* (Chevrolat) 1862: 263 (*Lampromerus*); Gahan 1895: 109 (*Merostenus*); Ramos 1946: 42; Chemsak 1966: 214; Villiers 1979b: 97, 1980a: 131; Chalumeau and Touroult 2005: 110; Valentine and Ivie 2005: 280 (*Merostenus*); Ivie et al. 2008b: 257; Turnbow and Thomas 2008: 17. **Distribution.** Bahamas, British Virgin Islands (Guana, Jost Van Dyke, Tortola, Virgin Gorda), Cuba, Dominica, Grenada, Guadeloupe, Jamaica, Mona, Montserrat, Puerto Rico, **St. Barthélemy**, **St. Martin-St. Maarten**; widespread Antilles endemic. Genus endemic to West Indies. **Notes.** In dry and moist forests.

*Caribbomerus similis* (Fisher) 1932: 53 (*Merostenus*); Chalumeau and Touroult 2005: 111. **Distribution.** **Antigua**, **Barbuda**; single island endemic.

#### TRIBE CLYTINI

*Neoclytus araneiformis* (Olivier) 1795: 61 (*Callidium*); Fleutiaux and Sallé 1890: 467; Gahan 1895: 115; Villiers 1980c: 299; Chalumeau and Touroult 2005: 118. **Distribution.** Guadeloupe, Hispaniola, Puerto Rico, **Saba**, St. Croix, St. John; widespread Antilles endemic. **Notes.** Polyphagous on many tree species.

#### TRIBE TORNEUTINI

##### SUBTRIBE BOTHRIOSPIILINA

*Chlorida festiva* (Linnaeus) 1758: 389 (*Cerambyx*); Fleutiaux and Sallé 1890: 462; Gahan 1895: 93; Miskimen and Bond 1970: 93; Villiers 1980a: 130, 1980c: 274; Bennett and Alam 1985: 28; Woodruff et al. 1998: 15; Chalumeau and Touroult 2005: 130; Touroult 2007: 7; Ivie et al. 2008b: 257; Pérez-Gelabert 2008: 119. **Distribution.** **Antigua**, Barbados, Dominica, Grenada, Guadeloupe, Hispaniola, Marie-Galante, Martinique, Montserrat, St. Croix, St. Lucia, St. Vincent. USA (FL), Central and South America to Argentina; widespread New World. Introduced to Old World; São Tome, Gulf of Guinea. **Notes.** Polyphagous on many tree genera.



## TRIBE TRACHYDERINI

## SUBTRIBE TRACHYDERINA

*Trachyderes (Trachyderes) succinctus* (Linnaeus) 1758: 391 (*Cerambyx*); Fleutiaux and Sallé 1890: 467; Gahan 1895: 119; Villiers 1980c: 304; Chalumeau and Touroult 2005: 134; Pérez-Gelabert 2008: 119. **Distribution.** Barbados, Grenada, Guadeloupe, Hispaniola, Martinique, St. Croix, **St. Martin-St. Maarten**, St. Thomas, Union. Honduras to Argentina; widespread Antilles and Latin America. **Notes.** Larvae bore in wood of many tree genera.

## SUBFAMILY LAMIINAE

## TRIBE APOMECCYNINI

*Adetus lherminieri* Fleutiaux and Sallé 1890: 468; Gahan 1895: 122; Blackwelder 1944-1957: 597; Villiers 1980d: 465, 1980e: 543, 1980f: 86 (lectotype); Chalumeau and Touroult 2005: 144; Touroult 2007: 8. =*A. leewardensis* Breuning 1940: 38 of St. Vincent. =*A. grossepunctatus* Breuning 1940: 38 of Grenada and of Mustique. **Distribution.** Barbados, Canouan, Dominica (subspecies *dominicensis* Breuning 1971: 307), Grenada, Guadeloupe (type locality), Marie-Galante, Martinique, Montserrat, Mustique, Petit St. Vincent, St. Lucia, **St. Kitts**, St. Vincent, Union; Lesser Antilles endemic. **Notes.** Host plants: *Coccoloba* spp., *Cordia* spp., *Gossypium* spp., *Hibiscus* spp., *Thespia* spp..

## TRIBE ACANTHOCININI

*Amniscus assimilis* (Gahan) 1895: 136 (*Leptostylus*); Gahan 1895: 136; Gilmour 1963: 59 (*Leptostylopsis*); Villiers 1980d: 466, 1980e: 571, 1980f: 90 (*Leptostyloides*); Monné and Hovore 2005: 246; Chalumeau and Touroult 2005: 179; Vitali 2001: 153 (larva); Valentine and Ivie 2005: 280; Dalens and Touroult 2007: 291. =*Leptostylopsis bidentatus* (Fabricius) 1775: 165 (*Cerambyx*); Fleutiaux and Sallé 1890: 471 of Guadeloupe; Gahan 1895: 136 (*Leptostylus*) of Nevis. =*Leptostylus bidentatus* in part, Fleutiaux and Sallé 1890: 471; Gilmour 1963: 59 (new combination). **Distribution.** Barbados, Désirade, Dominica, Guadeloupe (type locality), Guana, Martinique, Montserrat, **Nevis, St. Kitts**, St. Lucia; widespread Antilles endemic (the Guana record places it into the Greater Antilles). Mexico record in doubt. **Notes.** Polyphagous on many tree genera.

*Amniscus praemorsus* (Fabricius) 1792: 275 (*Lamia*), Fleutiaux and Sallé 1890: 472; Gahan 1895: 135 (*Leptostylus*); Chalumeau and Touroult 2005: 180. =*Leptostyloides praemorsus* (Fabricius) 1792: 275 (*Lamia*); Fleutiaux and Sallé 1890: 472 (*Leptostylus*) of Guadeloupe; Villiers 1980e: 571, 1980f: 91. **Distribution.** **Antigua**, Barbados, Bermuda (introduced), Dominica, Guadeloupe, **St. Barthélemy, St. Kitts**, St. Lucia, **St. Martin-Sint Maarten**; Lesser Antilles endemic. Mexico record in doubt.

*Amniscus similis* (Gahan) 1895: 136 (*Leptostylus*); Gahan 1895: 136; Villiers 1980d: 466, 1980e: 572, 1980f: 91 (lectotype) (*Leptostyloides*); Chalumeau and Touroult 2005: 178; Vitali and Touroult 2006: 5 (larva); Touroult 2007: 11. =*Leptostylus bidentatus* in part; Fleutiaux and Sallé 1890: 471 of Guadeloupe; Gahan 1895: 136. =*Leptostyloides turbidus* Gilmour 1963: 63 of St. Eustatius. =*Paratrypanidius antiguae* Gilmour 1963: 15 of Antigua. =*Leptostylopsis testaceus* (Froelich) 1792: 141 (*Leptostylus*); Gilmour 1963: 59. Literature records of *Leptostylopsis testaceus* (Froelich) 1792: 141 for Dominica (Woodruff et al. 1998: 16, as *Leptostylus*) may be *Amniscus* (= *Leptostyloides*) *similis* Gahan (Chalumeau and Touroult 2005: 199). **Distribution.** **Antigua**, Barbados, Bermuda, Désirade, Dominica, Grenada (type locality), Guadeloupe, Guana, Iles des Saintes, Marie-Galante, Martinique, Puerto Rico, Saba, St. Croix, **St. Eustatius**, St. Lucia, St. Vincent, Tortola, Virgin Gorda, Mexico, Trinidad; widespread Antilles and Latin America. **Notes.** Host trees: *Tabebuia*, *Delonix*, *Hippomane mancinella*, *Mangifera indica* L., *Artocarpus*, *Cecropia*, *Clusia* sp.

*Lagocheirus araneiformis* (Linnaeus) 1767: 625 (*Cerambyx*); Fleutiaux and Sallé 1890: 471; Gahan 1895: 130; Gilmour 1963: 58; Villiers 1980d: 465, 1980e: 564; Chalumeau 1983b: 223; Bennett and Alam 1985: 28; Chalumeau and Touroult 2005a: 213; Valentine and Ivie 2005: 280; Touroult 2007: 12;

Turnbow and Thomas 2008: 20; Wolcott 1950. **Distribution.** **Antigua**, Bahamas, Bequia, Cuba, Dominica, Grand Cayman, Guana, Grenada, Guadeloupe, Hispaniola, Jamaica, Martinique, Mustique, St. Croix, St. Lucia, St. Thomas, St. Vincent, Union. The subspecies *L. a. guadeloupensis* Dillon 1957: 150 is reported in Puerto Rico, **St. Barthélemy, St. Eustatius, St. Martin-St. Maarten, St. John**. The subspecies *L. a. insulorum* Dillon 1957: 150 is distributed on various islands of the southern Lesser Antilles, including Martinique. Five other subspecies are elsewhere in the West Indies (Aruba, Bonaire, Curaçao), USA (FL), Mexico to Panama, and northern South America; widespread New World. Introduced to Tahiti and Hawaii. **Notes.** Polyphagous on many tree genera, especially *Bursera simaruba* (L.) Sarg. especially in dry zones. The emergence holes of adult beetles from the tree are through large, conspicuous, circular “trap-doors” cut through the bark of the host tree, which are sometimes still attached to the tree. The holes under the bark are feeding chambers and pupation takes place deeper in the tree.

*Styloleptus inermis* (Fabricius) 1801: 293 (*Lamia*); Fleutiaux and Sallé 1890: 472; Gahan 1895: 134 (*Leptostylus*); Ivie 1985a: 315; Chalumeau and Touroult 2005: 206. =*Styloleptus bredini* (Chemsak) 1966: 217 (*Leptostylus*); Chalumeau 1983b: 230. **Distribution.** **Antigua, ?St. Barthélemy, St. Croix, St. Eustatius**; widespread Antilles endemic.

*Styloleptus posticalis* (Gahan) 1895: 133 (*Leptostylus*); Villiers 1980d: 467, 1980e: 573, 1980f: 93 (lectotype); Chalumeau 1983b: 228, 229; Chalumeau and Touroult 2005: 204; Touroult 2007: 11, 12. =*Styloleptus inermis* Fabricius 1801: 293, Fleutiaux and Sallé 1890: 472 of Guadeloupe. =*Styloleptus albosuturalis* Villiers 1980c: 467, 1980f: 93; Chalumeau 1983b: 230; Chemsak et al. 1992: 146; Monné and Hovore 2005: 271; Chalumeau and Touroult 2004a: 194 (synonymy). =*S. bonfilsii* Villiers 1980e: 575, 1980f: 93 of Guadeloupe; Chalumeau 1983b: 229 as subspecies; Chalumeau and Touroult 2004a: 194 (synonymy). =*Leptostylopsis posticalis* (Gahan) 1895: 133; Gilmour 1963: 59. **Distribution.** Barbados, Bermuda (introduced), Dominica, Grenada, Guadeloupe, Marie-Galante, Martinique, Montserrat, **St. Barthélemy, St. Lucia, St. Vincent**; Lesser Antilles endemic. **Notes.** Polyphagous on many tree genera.

*Trypanidius spilmani* Villiers 1980d: 467, 1980e: 577, 1980f: 95; Chalumeau 1983b: 224; Chemsak et al. 1992: 148; Chalumeau and Touroult 2005: 209. **Distribution.** Nominate subspecies on Dominica, Martinique, St. Lucia; the subspecies *T. s. liamaigae* Chalumeau 1983b: 225 is on **St. Kitts**; Lesser Antilles endemic.

*Urgleptes clarkei* Chemsak 1966: 218; Chalumeau 1983b: 235; Chalumeau and Touroult 2005: 189. **Distribution.** **Antigua**, Peter Island (British Virgin Islands); widespread Antilles endemic.

*Urgleptes cobbeni* Gilmour 1963: 85; Villiers 1980e: 580; Chalumeau 1983b: 233; Chalumeau and Touroult 2005a: 188; Dalens and Touroult 2007: 291 (reporting on this species from Martinique). **Distribution.** Barbados, Désirade, Guadeloupe, Les Saintes, Marie-Galante, Montserrat, Saba, **St. Barthélemy, St. Eustatius, St. Martin-St. Maarten**; Lesser Antilles endemic. Curaçao and Bonaire records are in error. **Notes.** In dry to wet forests; developing in branches of many species of trees.

## 156. FAMILY BRUCHIDAE, The bean weevils

### SUBFAMILY AMBLYCERINAE

#### TRIBE SPERMOPHAGINI

*Zabrotes subfasciatus* (Boheman) 1833: 111 (*Spermophagus*); Miskimen and Bond 1970: 96; Kingsolver 1970: 487, 2004: 52. =*Amblycerus semifasciatus* Boheman 1839: 137, Blackwelder 1944-1957: 763; **Distribution.** Cuba, Jamaica, Hispaniola, Martinique, Puerto Rico, **St. Barthélemy, St. Croix**; introduced to Lesser Antilles? Tropicopolitan, nearly cosmopolitan. **Notes.** The Mexican bean bruchid. Pest of stored beans, probably native to Mexico or SW USA. Hosts: many leguminous genera.

### SUBFAMILY BRUCHINAE

#### TRIBE ACANTHOSCELIDINI

- Acanthoscelides desmanthi* Johnson 1990: 364. **Distribution.** **Antigua**, Curaçao, **Nevis**. Puerto Rico, **St. Eustatius**. USA, Mexico, Colombia, Venezuela, Brazil; widespread New World.
- Acanthoscelides flavescens* (Fahraeus) 1839: 32 (*Bruchus*); Blackwelder 1944-1957: 759; Johnson and Kingsolver 1981: 414; Bennett and Alam 1985: 28; Johnson 1990: 384; Kingsolver 2004: 111; Valentine and Ivie 2005: 280; Turnbow and Thomas 2008: 8. =*Acanthoscelides ochraceicolor* (Pic) 1913: 110 (*Bruchus*); Blackwelder 1944-1957: 760; Kingsolver 1969: 53. **Distribution.** **Antigua**, Barbados, Bahamas, Bonaire, Cuba, Curaçao, Grand Cayman, Grenada, Grenadines, Guana, Hispaniola, Jamaica, Monserrat, Puerto Rico, St. Croix, **St. Kitts**, St. Vincent (type locality), Tortola, Union. USA (FL, LA, TX) and Mexico to Panama, Colombia, Aruba, Trinidad, Surinam; Ecuador, Peru, Bolivia, Brazil; widespread New World. **Note.** Hosts: *Abutilon hypoleucus*, *Galactia striata*, *Rhynchosia minima*, *R. longeracemosa*, *Vicia* spp., and *Eriosema voilaceum*.
- Acanthoscelides indigoferestes* Johnson 1990: 399. **Distribution.** Hispaniola, **St. Eustatius**. Panama, Colombia, Venezuela; widespread Antilles and Latin America. **Note.** Hosts: *Indigofera* spp. (Leguminosae).
- Caryedes podagrica* Fabricius 1801: 399; Blackwelder 1944-1957: 758; Johnson and Kingsolver 1981: 417. **Distribution.** **St. Barthélemy**. Brazil; Lesser Antilles and Latin America.
- Sator monachus* (Sharp) 1885b: 471 (*Bruchus*); Blackwelder 1944-1957: 760; Johnson and Kingsolver 1976: 42; Ivie et al. 2008b: 255. =*Sator dufau* (Pic) 1927: 11 (*Bruchus*) of Guadeloupe; Blackwelder 1944-1957: 759 (*Acanthoscelides*); Kingsolver 1972: 220. **Distribution.** **Antigua**, Guadeloupe, Montserrat, Puerto Rico, St. John, St. Thomas, St. Vincent, Tortola. Mexico, Guatemala, Panama, Brazil; widespread Antilles and Latin America. **Notes.** Not listed in Kingsolver's (1972) synopsis of *Sator* Bridwell of the West Indies. Hosts: in seeds and flowers of *Inga* spp., *Acacia* spp., *Piscidia* spp.

## 159. FAMILY CHRYSOMELIDAE, The leaf beetles

### SUBFAMILY CRIOCERINAE

#### TRIBE CRIOCERINI

#### TRIBE LEMIINI

- Neolema dorsalis* (Olivier) 1791: 201 (*Lema*); Jacoby 1897: 250 (*Lema*); Blackwelder 1944-1957: 629; Cooter 1983 (*Lema*); Valentine and Ivie 2005: 280; Ivie et al. 2008b: 255. =*Lema dorsalis* (Olivier) 1791: 201, Blackwelder 1944-1957: 629; Takizawa 2003: 6. =*Lema nigricornis* Fabricius 1798: 91; Jacoby 1897: 250. **Distribution.** Cuba, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Martinique, Montserrat, Puerto Rico, **St. Kitts**, St. Vincent. USA (s TX) to Panama, Colombia to Argentina and Peru; widespread New World. **Notes.** On *Commelina* spp. (Commelinaceae) in south Texas.

### SUBFAMILY HISPINAE

#### TRIBE MESOMPHALIINI

- Chelymorpha cribraria* (Fabricius) 1775: 90 (*Cassida*); Fleutiaux and Sallé 1890: 480; Blackwelder 1944-1957: 744; Takizawa 2003: 99; Ivie et al. 2008b: 255. =*Chelymorpha multipunctata* Olivier 1790: 384; Blackwelder 1944-1957: 745; Woodruff et al. 1998: 17; Takizawa 2003: 99 (synonymy). **Distribution.** **Antigua**, Dominica, Grenada, Guadeloupe, Hispaniola, Montserrat, Puerto Rico, **St. Barthélemy**, St. John, St. Vincent. USA (FL), Central America, Colombia, French Guiana, Paraguay, Brazil; widespread New World. **Notes.** Feeds on species of *Ipomoea* spp. and other members of Convolvulaceae.
- Chelymorpha multipunctata* Olivier 1790: 384. =*C. polysticha* Boheman 1854: 56; Fleutiaux and Sallé 1890: 480 of Guadeloupe; Champion 1897b: 279 of St. Vincent. **Distribution.** Dominica, Grenada, Guadeloupe, Puerto Rico, **St. Barthélemy**, St. Vincent; widespread Antilles endemic.

## TRIBE CASSIDINI

*Charidotella sexpunctata* (Fabricius) 1781: 109 (*Cassida*); Takizawa 2003: 98; Cooter 1983: 185 (*Metriona trisignata*) according to Ivie et al. 2008b: 255. =*Coptocyclus bicolor* (Fabricius) 1798: 83 (*Cassida*); Champion 1897b: 279; Blackwelder 1944-1957: 751 (*Metriona*). =*Coptocyclus bistrispunctata* Olivier 1790: 382; Fleutiaux and Sallé 1890: 481 of Guadeloupe. **Distribution.** Antigua, Bequia, Dominica, Grenada, Guadeloupe, Montserrat, St. Croix, **St. Kitts**, St. Lucia, St. Vincent. USA, Mexico to Costa Rica, Venezuela to Argentina; widespread New World. **Notes.** Feeds on species of *Ipomoea* spp. and various Convolvulaceae.

## SUBFAMILY GALERUCINAE

## TRIBE LUPERINI

*Diabrotica fucata* (Fabricius) 1787: 381 (*Crioceris*); Blackwelder 1944-1957: 681; Takizawa 2003: 45. **Distribution.** Martinique, **St. Barthélemy** (type locality). French Guiana; Lesser Antilles and Latin America.

## TRIBE ALTICINI

*Asphaera albicollis* (Fabricius) 1787: 76 (*Chrysomela*); Takizawa 2003: 65. **Distribution.** Antigua, Barbados, Dominica, Hispaniola, Puerto Rico, St. Croix, St. Thomas, Vieques. Trinidad, British and French Guiana, Brazil, Peru; widespread Antilles and Latin America.

*Monomacra blakea* (Bechyne) 1958: 661 (*Omophoita*). **Distribution.** Antigua, Dominica, Jamaica, Puerto Rico, St. Croix, **St. Kitts**, St. Lucia, St. Thomas. Colombia, Ecuador, Trinidad; widespread Antilles and Latin America.

*Omophoita albicollis* (Fabricius) 1787: 76 (*Chrysomela*); Blackwelder 1944-1957: 707; Blake 1931: 77; Cooter 1983: 185 (as *Homophoeta*); Takizawa 2003: 88; Ivie et al. 2008b: 256. **Distribution.** Antigua, Barbados, Hispaniola, Montserrat, Puerto Rico, St. Croix, St. Thomas. Trinidad to Brazil, Peru; widespread Antilles and Latin America.

## SUPERFAMILY CURCULIONOIDEA

## 161. FAMILY ANTHRIBIDAE, The fungus weevils

## SUBFAMILY ANTHRIBINAE

## TRIBE ZYGAENODINI

*Ormiscus* n. sp. 53, Valentine 2004: 63. **Distribution.** **St. Kitts**; single island endemic.

*Ormiscus* n. sp. 54, Valentine 2004: 63. **Distribution.** Antigua; single island endemic.

## 167. FAMILY CURCULIONIDAE, The snout beetles and true weevils

## SUBFAMILY DRYOPHTHORINAE

## TRIBE RHYNCHOPHORINI

## SUBTRIBE LITOSOMINA

*Sitophilus linearis* (Herbst) 1797: 5 (*Rhynchophorus*); Fleutiaux and Sallé 1890: 456 (*Calandra*); Hustache 1932: 385; Cooter 1983: 185; Bennett and Alam 1985: 30; Valentine and Ivie 2005: 281; Ivie et al. 2008b: 276; Pérez-Gelabert 2008: 137. **Distribution.** Barbados, Cuba, Dominica, Guadeloupe, Guana, Hispaniola, Jamaica, Montserrat, Puerto Rico, **St. Barthélemy**, St. Croix. USA (FL, LA), Costa

Rica, South America, Old World; widespread New World. **Notes.** Adults are often found in fallen tamarind pods.

#### SUBTRIBE SPHENOPHORINA

*Metamasius hemipterus* (Linnaeus) 1758: 377 (*Curculio*); Fleutiaux and Sallé 1890: 454; Hustache 1932: 380; Ivie et al. 2008b: 276; Pérez-Gelabert 2008: 137. = *M. sericeus* Olivier 1807: 84; Blackwelder 1944-1957: 913. **Distribution.** **Antigua**, Barbados, Bequia, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, Martinique, Montserrat, Puerto Rico, St. Croix, **St. Kitts**, St. Lucia, St. Thomas, St. Vincent. Mexico to Panama, South America; widespread Antilles and Latin America. **Notes.** The common name is West Indian sugarcane borer (Vaurie 1966). This species is associated with a variety of monocot plants, especially those that are rotting, broken, damaged or weakened. Banana and sugarcane are the two plants most frequently mentioned in the literature; however, the species has also been recorded from coconut and royal palm sheaths, stumps of *Iriarteia ventricosa* Martius and *Jessenia batua* Burret in Brazil, and has been intercepted at customs in a stem of *Chamaedorea* sp. In Costa Rica, numerous adults have been collected on fermenting palm trunks. Adults have also been recorded on a variety of rotting fruits. **Economic significance.** Woodruff and Baranowski (1985) report that there is debate over the economic status of this species. Certainly the species has been associated with both banana and sugarcane but its impact, especially on the former, is uncertain. The beetles appear to prefer unhealthy or injured plants and thus may not be primary pests but rather of a secondary nature. Regardless, the adult feeding and larval infestations cause serious damage, at least in sugarcane, especially if the plants have already been damaged by other insects or rats. Populations may build in damaged plants left out to rot and may reinfest subsequent crops.

#### SUBFAMILY CURCULIONINAE

##### TRIBE ANTHONOMINI

*Anthonomus aestuans* (Fabricius) 1792: 445 (*Curculio*). = *A. infirmus* Gyllenhal 1836: 353. **Distribution.** **St. Barthélemy**; single island endemic.

*Anthonomus homunculus* Gyllenhal 1836: 356; Fleutiaux and Sallé 1890: 444; Hustache 1929: 259. = *A. h. variety differens* Hustache 1929: 260 of Guadeloupe. **Distribution.** Guadeloupe, **St. Barthélemy**; Lesser Antilles endemic.

*Anthonomus macromalus* Gyllenhal 1836: 352; Hustache 1929: 255; Clark 1992: 286 (lectotype); Valentine and Ivie 2005: 281. = *Anthonomus bidentatus* Boheman 1843: 238 of St. Vincent; Hustache 1929: 255. = *Anthonomus malpighiae* Clark and Burke 1985: 121; Wibmer and O'Brien 1989: 13; Clark 1992: 286 (synonymy). **Distribution.** **Antigua**, Grenadines, Guadeloupe, Guana, Hispaniola, Martinique, Puerto Rico, **St. Barthélemy** (type locality), St. Croix, St. John, **St. Kitts**, St. Lucia, St. Thomas, St. Vincent Tortola. USA (FL), South America; widespread New World.

*Anthonomus modicellus* Gyllenhal 1836: 355; Fleutiaux and Sallé 1890: 444. **Distribution.** Cuba, Guadeloupe, Martinique, **St. Barthélemy**; widespread Antilles endemic.

*Huaca pacha* Clark 1993: 11. **Distribution.** **Nevis**, **St. Kitts**; Lesser Antilles endemic.

#### SUBFAMILY CRYPTORHYNCHINAE

##### TRIBE CRYPTORHYNCHINI

##### SUBTRIBE TYLODINA

*Eusepes postfasciatus* (Fairmaire) 1849: 513 (*Cryptorhynchus*); Turnbow and Thomas 2008: 31. **Distribution.** **Antigua**, Bahamas, Barbados, Cuba, Grenada, Jamaica, **Nevis**, Puerto Rico, St. Croix, **St. Kitts**, St. Lucia, St. Vincent, Virgin Islands. USA (CA; HI); South America; widespread New World; Tahiti; Old World. **Notes:** This is the West Indian sweet potato weevil. For information on its biology

see <http://keys.lucidcentral.org/keys/sweetpotato/key/Sweetpotato%20Diagnoses/media/html/TheProblems/Pest-Root&StemInsects/WestIndianSPWeevil/WestIndianWeevil.htm>.

## SUBFAMILY ENTIMINAE

### TRIBE EUSTYLINI

*Diaprepes famelicus* (Olivier) 1790: 544 (*Curculio*); Fleutiaux and Sallé 1890: 438; Hustache 1929: 197 (*Prepodes*); Miskimen and Bond 1970: 99; Cooter 1983: 186; Whitwell 1991; Ivie et al. 2008b: 279; Pérez-Gelabert 2008: 134. =*Curculio affinis* (Fabricius) 1801: 531. =*Diaprepes lepidopterus* Gyllenhal 1834: 14. =*Exophthalmus leucopterus*: (Leng and Mutchler 1914: 469 [error]. =subspecies *barbadensis* Marshall 1916: 451 of Barbados. =subspecies *elegantulus* Gyllenhal 1834: 13 [also incorrectly attributed to Leng and Mutchler 1914: 469] of Cuba, of Martinique. =subspecies *esuriens* Gyllenhal 1834: 15. **Distribution.** **Antigua**, Barbados, Cuba, Dominica, Guadeloupe, Hispaniola, Martinique, Montserrat, **Nevis**, **St. Barthélemy**, St. Croix, **St. Kitts**; widespread Antilles endemic. **Notes.** This and other species in the genus are a pest in citrus nurseries (Lapointe 2000). The biology is likely similar to that of the important citrus pest *Diaprepes abbreviatus* (Linnaeus).

### TRIBE GEONEMINI

*Lachnopus curvipes* (Fabricius) 1787: 113 (*Curculio*). Fleutiaux and Sallé 1890: 440; Hustache 1929: 199 (*Prepodes*); Valentine and Ivie 2005: 282; Ivie et al. 2008b: 279. =*Curculio curvipes* variety *calcaratus* (Olivier) 1807: 350 of Guadeloupe; not Oware (Africa), an error. **Distribution.** Guadeloupe, Guana, Hispaniola, Jamaica, Montserrat, **Nevis**, Puerto Rico, **St. Barthélemy**, St. Croix, **St. Kitts**, St. Thomas, St. Vincent, Tortola; widespread Antilles endemic. **Notes.** Recorded from sea-grape (*Coccoloba uvifera* Linnaeus) by Wolcott (1950) in Puerto Rico.

*Lachnopus memnonius* (Gyllenhal) 1834: 42 (*Ptilopus*). **Distribution.** **St. Barthélemy**; single island endemic.

### TRIBE NAUPACTINI

*Artipus corycaeus* Sahlberg 1823: 22; Tucker 1952: 348; O'Brien and Wibmer 1982: 31; Bennett and Alam 1985: 29. **Distribution.** Barbados, **St. Barthélemy**; Lesser Antilles endemic. **Notes.** Attacks seeds of crab's eye vine (*Caesalpinia* spp.) and horse-nicker (*Abrus precatorius* L.)

*Litostylus pudens* (Boheman) 1833: 623 (*Cyphus*); Fleutiaux and Sallé 1890: 436 (*Neocyphus*); Hustache 1929: 188; Cooter 1983: 186; Ivie et al. 2008b: 279. **Distribution.** **Antigua**, Montserrat, **St. Barthélemy** (type locality), St. Vincent; Lesser Antilles endemic. **Notes.** A possible pest of citrus.

## SUBFAMILY LIXINAE

### TRIBE LIXINI

*Microlarinus lypriformis* (Wollaston) 1861: 102 (*Rhinocyllus*); Bennett 1968; Stegmaier 1973: 235; Wibmer and O'Brien 1898: 9, 77; Turnbow and Thomas 2008: 32. **Distribution.** Bahamas, Curaçao, Jamaica, Puerto Rico, **St. Kitts**; introduced to Lesser Antilles. USA (AZ, FL, NM, NV, TX, UT, WA). The species is native to India, the Near East, and Mediterranean region. **Notes.** The weevil bores into several plant species in the New World. The common name is the puncturevine stem weevil, and it was introduced to the New World, and is used as a biocontrol agent against puncture vine (*Tribulus terrestris* L.), a native but noxious plant of tropical and subtropical New World. After its introduction it may have partly dispersed through the commercial movement of animal feed, such as horse feed.

## SUBFAMILY MOLYTINAE

### TRIBE ANCHONINI

*Anchonus magister* Faust 1893: 416. =*Anchonus magister* variety *vecors* Faust 1893: 416 of **Antigua**.  
**Distribution.** **Antigua**; single island endemic.

*Anchonus suillus* (Fabricius) 1792: 402 (*Curculio*); Fleutiaux and Sallé 1890: 442; Hustache 1929: 236; Miskimen and Bond 1970: 98; Valentine and Ivie 2005: 282; Ivie et al. 2008b: 279; Turnbow and Thomas 2008: 29. =*Curculio sordidus* (Fabricius) 1792: 402. =*Anchonus pudens* Faust 1892: 43 of Guadeloupe of authors; Voisin 1992: 400. **Distribution.** Bahamas, Cuba, Guadeloupe, Guana, Hispaniola, Martinique, Montserrat, Puerto Rico, **St. Barthélemy**, St. Croix; widespread Antilles endemic.

## SUBFAMILY Scolytinae, the bark and ambrosia beetles

### TRIBE SCOLYTINI

#### SUBTRIBE SCOLYTINA

*Cnemonyx vagabundus* (Wood) 1961: 89 (*Loganius*); Bright 1981: 153, 1985: 171; Wood and Bright 1992: 318; Valentine and Ivie 2005: 282; Bright and Torres 2006: 394; Ivie et al. 2008b: 280. **Distribution.** **Antigua**, Guana, Hispaniola, Jost Van Dyke, Mona, Montserrat, Puerto Rico, St. Vincent. USA (s FL); Panama; widespread Antilles and North and/or Central America.

#### SUBTRIBE CRYPHALINA

*Hypothenemus eruditus* Westwood 1836: 34; Bright 1985: 175; Wood and Bright 1992: 919; Cognato and Bright 1996: 72; Bright and Torres 2006: 407; Ivie et al. 2008b: 280; Turnbow and Thomas 2008: 32; Pérez-Gelabert 2008: 138. =*H. sacchari* Hopkins 1915: 17 of Nevis. **Distribution.** Bahamas, Cuba, Dominica, Guadeloupe, Hispaniola, Jamaica, Montserrat, **Nevis**, Puerto Rico. Widespread in North and Central America; Trinidad; widespread New World; introduced to Old World to Africa, Asia, Europe, and Australia (Wood 1977). **Notes.** Found in many species of woody plants.

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