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The beetles of Martinique, Lesser Antilles (Insecta: Coleoptera);
diversity and distributions

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The beetles of Martinique, Lesser Antilles (Insecta: Coleoptera);
diversity and distributions

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Abstract. This paper summarizes the published information on the beetle fauna of the island of Martinique, in the Lesser Antilles. The fauna is known to contain 42 families, with 201 genera, and 270 species. The families with the largest numbers of species are Cerambycidae (57), Curculionidae (43), Scarabaeidae (42), Tenebrionidae (18), and Staphylinidae (17). At least 15 species (5.5%) were probably accidentally introduced to the island by human activities. Forty six species (17.0%) are endemic (restricted) to the island and likely speciated on the island. Sixty seven species (24.8%) are shared only with other islands of the Lesser Antilles (Lesser Antillean endemics), and 26 species (9.6%) are more widespread Antilles endemics. The remaining 116 species (42.8%) in the fauna are otherwise mostly widely distributed in the Antilles and the Neotropical Region. The Martinique beetle fauna has mostly originated elsewhere than on Martinique and is largely an immigrant fauna from other islands of the West Indies or the continental Neotropics. The numbers of Martinique species shared with other larger islands of the Lesser Antilles are (north to south) Montserrat (73), Guadeloupe (175), Dominica (98), St. Lucia (68), St. Vincent (93), and Grenada (88). Undoubtedly, the real number of species on Martinique is much higher than now reported and may actually be around 1600 or more species.

Introduction

The islands of the Caribbean are recognized as a “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). In reality, the terrestrial animal groups that are the most species diverse 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 records of the beetle fauna of the island of Martinique, and to provide a starting point for future research on beetle species diversity on the island. This is a contribution to a long-term project to understand the diversity, evolution, and distribution of the beetles of the Lesser Antilles (Peck 2006, 2009a, 2009b, 2009c, 2010, 2011).

The island. The island of Martinique lies in the Windward Islands group, near the middle of the Lesser Antilles chain of islands of the West Indies (Fig. 1). Politically, the island is an overseas Département of France (a political subunit of France equivalent to the status of Hawaii in the USA), so all is French in language, customs, laws, etc. Martinique lies between 14°23’ to 14°53’ N latitude and 60°48’ to 61°14’ W longitude. It lies between the island of Dominica (40 km to the north) and St. Lucia (30 km to the south). Martinique itself is roughly irregular-elongate oval in shape, and 62 km long and 24 km wide. With an area of 1080 km² (417 mi²) it is the second largest island in Lesser Antilles after the bipartite island of Guadeloupe. The terrain is punctuated by hills, plateaus, and mountains. It has a maximum elevation of 1397 m (4582 ft) at the summit of Mt. Pelée, an active volcano whose last major eruption in 1902 killed 30,000 people in and near the former capital city of St. Pierre. It is a lush tropical island most of which has been heavily altered by clearing for large and small scale agriculture, but with a significant area of coastal mangrove and regenerating or little-disturbed lowland seasonal (xeric) forest and submontane rainforest in the islands interior. Large areas, especially at higher elevations, are protected in Forest Reserves.

Geological history. The island is a composite of four originally separate volcanic centers which have now coalesced into a single island (Bouysson et al. 1985, Maury et al. 1990). The bedrock is all volcanic except for areas of uplifted calcareous marine sediments on the Caravelle Peninsula on the east coast, and the Salines Peninsula in the southeast. The geological age and origin of Martinique is similar

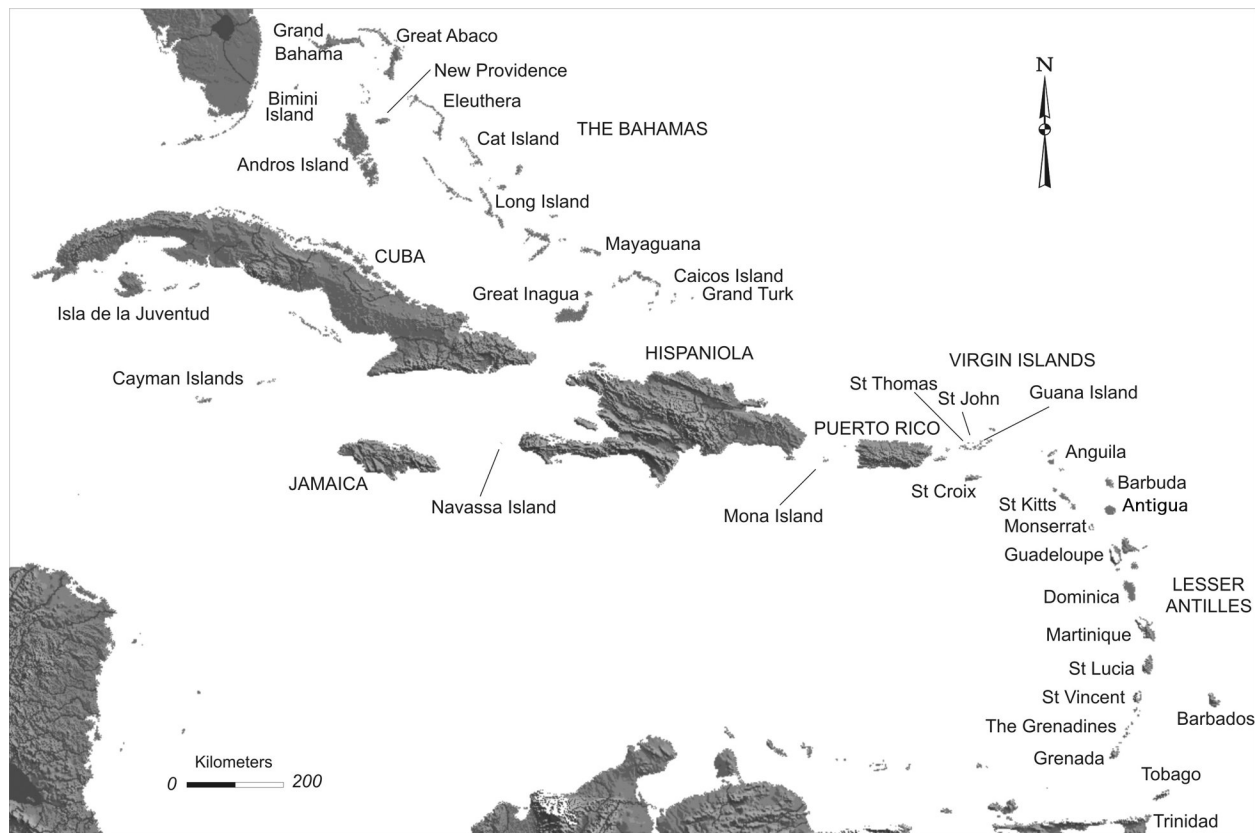


Figure 1. The islands of the central and eastern West Indies and adjacent continental land masses, showing in the east the main island arc of the Lesser Antilles and the relative position of Martinique in that island chain.

to that of the other high islands of the Lesser Antilles island arc which 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 island 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). It achieved its present size through volcanic activity only since the late Pliocene or Pleistocene (Bouysse et al. 1985, Maury et al. 1990). Most biotic colonization may have been in the past 3 million years. Martinique is on a submarine bank of its own, is surrounded by deep oceanic waters, and has had no dry land connection to other islands at times of Pleistocene low sea levels. The island area has also changed with eustatic sea level changes, which were perhaps as much as 170-200 m lower at various times in the past. At the height of the last glacial maximum, from 26,500 to 19,000 years ago, there was a sea level depression of 130 m (Clark et al. 2009). Thus, Martinique has always been an isolated oceanic island, never with a dry land bridge connection to any other islands (Donnelly 1988, Hedges 2001), and it is a natural biogeographic unit of its own. The biotic distributional patterns of Martinique are here seen to have been entirely formed through colonization by over-water dispersal. There is no obvious evidence of a vicariant separation of prior continuous biotic distributions existing on a proto-Lesser Antillean "Gaerlandia" land bridge, as in the model proposed by Iturralde-Vinent and MacPhee (1999) and Iturralde-Vinent (2006).

The beetle fauna. The beetles of the West Indies are still very poorly known. The first summary was in the listing 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, and a separate biogeographic unit from the other Virgin islands, all of which are on the Puerto Rico bank) at 310 species. Modern beetle faunal summaries for the Lesser Antilles are only available for Grenada and the Grenadines (Woodruff et al. 1998) with 507 species, Dominica with 347 named species (Peck 2006), Montserrat with a total of 718 known species (Ivie 2008a, 2008b), Barbados with 232 named species (Peck 2009a), St. Lucia with 175 named species (Peck 2009c), St. Vincent with 536 named species (Peck 2010), and the group of smaller islands of the northern Leewards with 218 species (Peck 2011).

In comparison with some other islands such as Guadeloupe, with 1366 named beetle species (Peck 2009b), Martinique has received comparatively little recent attention for a survey of its beetles or other insects. Guadeloupe was the focus of the detailed pioneering study of Fleutiaux and Sallé (1890) with supplements by Grouvelle (1898, 1902), Grouvelle and Raffray (1908, 1912), and Fleutiaux et al. (1947). These contain limited data on Martinique. Martinique was not sampled by Blackwelder (1943) in his 1936 field work for his study of the Staphylinidae of the West Indies.

More recent summary publications on beetles, with data on Martinique, are by Matthews (1966) on Scarabaeinae of the Lesser Antilles, Chalumeau (1977 and later) on Scarabaeidae of the Lesser Antilles, and Chalumeau and Touroult (2004a, 2004b, 2005a, 2005b) on Cerambycidae of the Lesser Antilles. A summary of Lesser Antilles vegetable crop pests, including beetles (Chrysomelidae and Coccinellidae) is in Ryckewaert (1998) but this does not mention individual island records. Other smaller contributions are cited in the species list.

Climate. The climate of Martinique is tropical maritime, with steady trade winds. The leeward (western) side of the island is drier, and the windward (eastern) side is wetter. The dry season is from December to May, with mean temperatures at sea level around 26°C. The rainy season is from June to November, with almost daily heavy showers. September is the rainiest month. The relative humidity is high and about 80% in March to 87% in October and November. It is cooler and rainier in the northern interior mountains which support luxuriant rain forests. Drier conditions exist on the coasts, and the southern part of the island is more seasonal.

Habitats. The natural vegetation has been much altered by a long history of clearing for both plantation and small-hold subsistence agriculture. The irregular coast line is cut by deep bays and coves. One third of the island is now forested, and the 15,748 ha of public forest lands are 15% of the total land area; this is administered by the Office National des Forêts. The rest is urban, suburban, small scale agriculture, and large agricultural plantations, especially sugarcane. There is a diversity of habitats from a fringe of coastal mangrove, dry coastal brushy thorn scrub, seasonally xeric forest and seasonal tropical humid forests to montane rain forest. There is much secondary regrowth. Much forest exists in the steep uplands along the "Route de la Trace." These are not easy of access except along a well developed system of hiking trails and forestry roads. The island center is dominated by the Pitons du Carbet moun-

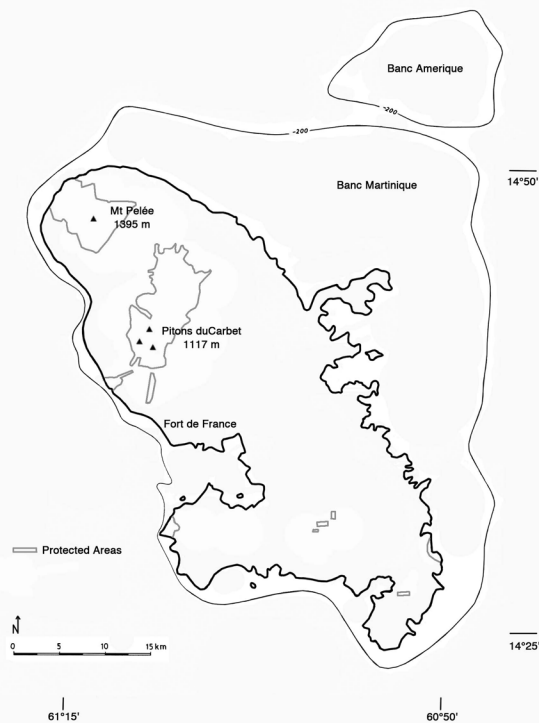


Figure 2. Outline map of Martinique indicating the main habitat areas which receive environmental protection from national, regional, and local agencies. Note the -200 m isobath lines outlining the extent of the Martinique Bank and adjacent American Bank. This approximately shows the maximum increased area of the island during Pleistocene glacials, when sea levels were lower than at present (Clark et al. 2009).

Table 1. Summary of distributional groupings of the named species of beetles of Martinique reported in the scientific literature. 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 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) (Darlington 1957).

Distributional Group	Characterization of Geographic Areas	Species
Introduced to Lesser Antilles	Not naturally occurring on Martinique; probably present through accidental human-assisted processes from elsewhere in the New or Old Worlds. Called adventive by some authors.	15 5.5%
Single island endemic	Naturally restricted to Martinique; originating on Martinique, and not moving beyond the island. Called precinctive by some authors.	46 17.0%
Lesser Antilles endemic	Naturally occurring only on Martinique and one or more Lesser Antilles islands; endemic to Lesser Antilles; originating somewhere in the Lesser Antilles.	67 24.8%
Widespread Antilles endemic	Naturally occurring on Martinique and on one or more islands of both the Lesser and Greater Antilles (including St. Croix and other Virgin Islands) and sometimes on other West Indian oceanic islands such as Bahamas, Caymans, or northern South American oceanic or continental shelf islands; originating somewhere in the Antilles; sometimes introduced elsewhere.	26 9.6%
Lesser Antilles and Latin America	Naturally occurring on Martinique and elsewhere in the Lesser Antilles and South America, not in the Greater Antilles; sometimes including Central America and/or Mexico; probably suggesting a South American origin.	35 12.9%
Widespread Antilles and North and/or Central America	Naturally occurring on Martinique and usually other Lesser Antillean islands and at least one island of the Greater Antilles; and at least one country of USA and/or Mexico-Central America, excluding South America; suggesting origin and natural dispersal from the north and west, not through South America.	7 2.6%
Widespread Antilles and South America	Naturally on Martinique and on at least one island of the Greater Antilles and one country of South America; excluding Mexico and Central America; suggesting a South American origin and dispersal from there.	3 1.1%
Widespread Antilles and Latin America	Naturally on Martinique and on at least one island of the Greater Antilles and Mexico and/or Central and South America; dispersal direction unclear. Suggesting origin in continental Neotropics.	27 10.0%
Widespread New World	Naturally on Martinique and on at least one island of the Greater Antilles and one country of North, Central, and South America; with varying northern and southern range limits; usually suggesting continental New World origin; dispersal direction to Lesser Antilles unclear; possibly partly introduced in parts of the range, especially if associated with humans; often pantropical in distribution; sometimes introduced to or from Old World, direction often unclear.	44 16.3%
	Total named species	270

Table 2. Alphabetical listing by family and genus of beetle species reported from Martinique which are hypothesized to have been accidentally introduced to Martinique and the Lesser Antilles and their effect from a human economic perspective. Undoubtedly, additional introduced species remain to be detected.

Family	Genus and species	Probable place of origin	General habits or habitats	Probable impact on humans
Anthicidae	<i>Omonadus floralis</i>	Old world	Stored products pest	Negative?
Bruchidae	<i>Zabrotes subfasciatus</i>	Neotropics	Stored products pest	Negative
Carabidae	<i>Perigona nigriceps</i>	Old World	Predator	Beneficial?
Cerambycidae	<i>Oxymerus basalis</i>	Neotropics	Wood borer	Negative?
Coccinellidae	<i>Cryptolaemus montrouzieri</i>	Old World	Plant pest predator	Beneficial
Curculionidae	<i>Hypothenemus areccae</i>	SE Asia	Tree borer pest	Negative
Curculionidae	<i>Sternochetus mangiferae</i>	SE Asia	Mango fruit pest	Negative
Scarabaeidae	<i>Digitonthophagus gazella</i>	Old World	Dung scavenger	Beneficial
Scarabaeidae	<i>Labarrus lividus</i>	Old World	Dung scavenger	Beneficial
Scarabaeidae	<i>Labarrus pseudolividus</i>	Old World	Dung scavenger	Beneficial
Scarabaeidae	<i>Nialaphodius nigrata</i>	Old World	Dung scavenger	Beneficial
Scarabaeidae	<i>Onthophagus batesi</i>	Neotropics	Dung scavenger	Beneficial?
Scarabaeidae	<i>Onthophagus bituberculatus</i>	Afrotropics	Dung scavenger	Beneficial
Silvanidae	<i>Silvanus proximus</i>	Afrotropics	Stored products pest	Negative
Tenebrionidae	<i>Tribolium castaneum</i>	Old World	Stored products pest	Negative

tains, reaching 1207 m (3959 ft) and this is the core of the remaining forest. The vegetation types have been described by Beard (1949) and Stehlé (1941a, 1941b, 1945-1946).

Collecting. Permission for collecting can be arranged with the Office National de Forêts (main office at 78, route de Moutte, 97207, Fort de France, CEDEX); www.onf.fr/martinique; e-mail: dr.martinique@onf.fr. There is no formal need for permits for collecting or export of specimens except for the areas and species which are protected. There is a well developed system of environmental protection administered by DIREN (Direction Régionale de l'Environnement); www.martinique.ecologie.gouv.fr; e-mail: diren@developpement-durable.gouv.fr. The Direction de l'Agriculture et de la Forêt and Service de la Protection des Végétaux (SPV) may be contacted at Jardin Desclieux, 97200 Fort-de-France or e-mail: spv.daf972@agriculture.gouv.fr. Two terrestrial arthropod species were protected by law in 1995: the large mygalomorph spider (*Avicularia versicolor* (Walckenaer)) and *Dynastes hercules* (L.), a large scarab beetle.

Materials and Methods

Literature records. Leng and Mutchler (1914, 1917) and Blackwelder (1944-1957) were used as the initial source of species records for Martinique, 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 Martinique are given by Blackwelder (1944-1957) based on his collections of 1936 without indicating these as the source of the record. 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 Martinique records that I have missed. Sometimes literature records do not specifically mention Martinique but vaguely group it with other islands as "West Indies," "Antilles," "Lesser Antilles," or "Windward 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.

Table 3. Genera endemic (naturally restricted) to the greater West Indies or to the more restricted Lesser Antilles and which are reported from Martinique. One species in each genus is known from Martinique.

Genus name	Family	Region of endemicity
<i>Bonfilsia</i>	Cerambycidae	Lesser Antilles
<i>Cladis</i>	Coccinellidae	West Indies
<i>Ctesicles</i>	Tenebrionidae	Lesser Antilles
<i>Fortuneleptura</i>	Cerambycidae	Lesser Antilles
<i>Gourbeyrella</i>	Cerambycidae	Lesser Antilles
<i>Ixanchonus</i>	Curculionidae	Lesser Antilles
<i>Mesestola</i>	Cerambycidae	West Indies
<i>Nesanoplium</i>	Cerambycidae	West Indies
<i>Trientoma</i>	Tenebrionidae	West Indies

Synonyms. Some of the species were originally reported as synonyms of older names, 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 my field work. It will take much time to locate or to prepare such specimens and to make the needed indentifications. Two new records have been contributed by J. Touroult and Pierre-Damien Lucas. It is hoped that the availability of this summary of recorded information will be of more immediate use to other workers on West Indian beetles.

Erroneous records. Literature records wrongly attributed to Martinique are enclosed in brackets []. Records that are in doubt in the literature for Martinique and other localities 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 accuracy of that taxon name.

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 outside of Martinique are given from the literature. First are listed the names of Caribbean oceanic islands in alphabetical order. The records for Martinique are given in bold font to make them more evident. Then, continental mainland countries or continental shelf islands are listed separately after the Caribbean oceanic island localities. These are given in a roughly geographical order from north to south and in a counter clockwise order. These data are followed by a statement for a general distributional category for the species (Table 2). A conservative approach is taken in the construction of the distribution list. Many species reported to be widespread in the Lesser Antilles, or from both neighboring Dominica and St. Lucia, will probably be found to occur on Martinique as well but are not reported here if explicit records are not in the literature.

Results and Discussion

Diversity. The list contains 201 genera, and 270 species known by species name in 42 families. It is evident that many more families, genera, and species remain to be sampled and reported. A species/area calculation of the actual number of beetle species, based on the area of Martinique in comparison to that of Montserrat Island (Ivie 2008a, 2008b), suggests that somewhere around 1680 species could occur on Martinique (Peck 2009b). This suggests that some 1410 or more species may remain to be discovered on Martinique. Human-caused habitat change may have caused the loss of some of the original species but no examples are known.

The families with the largest number of species are Cerambycidae (57), Curculionidae (43), Scarabaeidae (42), Tenebrionidae (18), and Staphylinidae (17). These families are better known because they have

received more detailed research attention, especially by Blackwelder (1943), Chalumeau (1983a and later), and Chalumeau and Touroult (2005a), or are of applied importance as pests of stored products, forestry or agriculture.

Distribution patterns. Even though it is far from complete, the following listing might be viewed as a subset of the entire fauna of Martinique. 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 1 presents the numbers of species in different distributional groupings of species on Martinique that are shared with other islands or land masses. The accuracy of the groupings depends 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. The distribution patterns are dynamic and have been formed through time, but are younger than the present islands.

Introduced species. Fifteen (5.5%) species are recognized as probably having been accidentally introduced to Martinique by human activities. These are listed in Table 2. There are no records known to me of any species being intentionally introduced for biocontrol or other applied purposes. From a viewpoint of importance to human concerns, seven of these species may have some detrimental impact, and eight may be beneficial, especially as predators on arthropod pests. None seem to be detrimental in natural ecosystems but this should be studied. Thus, the beetle fauna of Martinique 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).

Endemics. A total of 46 species (17.0%) are endemic (known only from Martinique). These likely originated (speciated) there and have not dispersed outward from the island. This shows that Martinique has been a significant center of species-level evolution. These species are more often inhabitants of the interior wetter and higher elevation forests of the island.

Another 67 species (24.8%) 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 shows that the Lesser Antilles as a group have also been a significant center of species-level evolution, followed by outward dispersal from their island of origin.

Twenty six species (9.6%) 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, 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.

Genus-level endemism is more prevalent in the much larger and older islands of the Greater Antilles than in the Lesser Antilles. A total of 187 genera are listed as being endemic to the oceanic islands of the West Indies (Nichols 1988b). Only 30 genera of these are known in the Lesser Antilles and only 9 of these are reported from Martinique (Table 3).

Widespread species. The remaining 116 species (42.9%) have probably originated outside of the combined Greater and Lesser Antilles and have since dispersed to Martinique and/or other islands of the Lesser Antilles. The distribution pattern suggests that 38 (14.0%) have dispersed into the Lesser Antilles exclusively from a South American source. A smaller number (7, 2.6%) seem to have dispersed from North and/or Central America via the Greater into the Lesser Antilles and not from South America.

Seventy one species (26.3%) 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 and naturally occurring in the New World.

It would be expected that the number of Martinique species shared with the other islands would be highest for immediately neighboring islands such as Dominica and St. Lucia. 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 Martinique. The data do not show this. From north to

south the number of Martinique species known from the adjacent large and high islands (north to south) of the Lesser Antilles are: Montserrat, 73; Guadeloupe, 175; Dominica, 98; St. Lucia, 68; St. Vincent, 93, and Grenada, 88. These numbers are interpreted as an artifact that reflects the comparative amount of collecting and research effort on the different islands and not the actual distributional pattern.

SYSTEMATIC LISTING

SUBORDER ADEPHAGA

9. FAMILY RHYSODIDAE, The wrinkled bark beetles

Clinidium (Clinidium) microfossatum Bell and Bell 1985: 134; Bell 2001: 120. **Distribution.** Martinique; single island endemic.

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

SUBFAMILY CARABINAE

TRIBE CARABINI

Calosoma (Castridia) alternans (Fabricius) 1792: 146 (*Carabus*); Gidaspow 1963: 298; seemingly 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 (nominate 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 lepidopteran larvae. Adults often appear in numbers at the start of the rainy season.

SUBFAMILY CICINDELINAE, The tiger beetles

TRIBE CICINDELINI

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 SCARITINAE

TRIBE FORCIPATORINI

Stratiotes iracundus Putzeys 1863: 9; Nichols 1988a: 89. **Distribution.** Martinique; single island endemic. **Note.** Flightless, with reduced eyes.

TRIBE CLIVINI

Aspidoglossa schach (Fabricius) 1792: 153 (*Carabus*); Nichols 1988a: 99 (new combination); Ivie et al. 2008b: 237. =*Aspidoglossa semicrenata* Chaudoir 1843: 735; Fleutiaux and Sallé 1890: 364; Erwin and Sims 1984: 427. =*A. guadeloupensis* Putzeys 1846: 632 of Guadeloupe. **Distribution.** Dominica, Grenada, Guadeloupe, Hispaniola, **Martinique**, Montserrat, Mustique, Puerto Rico, St. Croix, St. Vincent. Venezuela, Trinidad, Tobago, French Guiana; widespread Antilles and South America. **Notes.** Fully winged halophobic hygrophile.

Clivina (Paraclivina) tuberculata Putzeys 1846: 615; Nichols 1988a: 95. **Distribution.** Barbados, Dominica, Guadeloupe, **Martinique**, St. Lucia. Colombia, Argentina; Lesser Antilles and Latin America. **Notes.** Winged halophobic hygrophile.

SUBFAMILY HARPALINAE

TRIBE PLATYNINI

Dyscolus ellipticus (Chaudoir) 1878: 312 (*Colpodes*); Liebherr 1987: 351, 1988: 138 (*Platynus*). **Distribution, Martinique;** single island endemic. **Note.** This is in the *Dyscolus ellipticus* species group, which is restricted to the Lesser Antilles, and in which the flight wings are completely or partially reduced.

TRIBE PERIGONINI

Perigona nigriceps Dejean 1831: 44; Erwin and Sims 1984: 443; Bennett and Alam 1985: 20; Valentine and Ivie 2005: 275; Ivie et al. 2008b: 238; Turnbow and Thomas 2008: 14; Pérez-Gelabert 2008: 81. **Distribution.** Bahamas, Barbados, Cuba, Dominica, Guadeloupe, Guana, Hispaniola, **Martinique**, Montserrat, Puerto Rico. Canada (PQ), USA (NH-FL-CA); introduced to Lesser Antilles. **Note.** Introduced to New World; an Old World (probably Asian) species widely distributed by commerce in the New World. Found around human dwellings, and probably living in decaying plant matter in and around gardens.

TRIBE LEBIINI

SUBTRIBE CALLEIDINA

Calleida decolor Chaudoir 1872: 131; Erwin and Sims 1984: 446; Casale 1998: 418. **Distribution. Martinique;** single island endemic. **Notes.** Known from a single female.

SUBORDER POLYPHAGA

SERIES STAPHYLINIFORMIA

SUPERFAMILY HYDROPHILOIDEA

18. FAMILY HYDROPHILIDAE, The water scavenger beetles

TRIBE HYDROPHILINI

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.

SUPERFAMILY STAPHYLINOIDEA

22. FAMILY HYDRAENIDAE, The minute moss beetles

SUBFAMILY HYDRAENINAE

Hydraena catherinae Bameul and Jach 2001: 275. **Distribution.** **Martinique**; single island endemic.

26. FAMILY SCYDMAENIDAE, The ant-like stone beetles

TRIBE SCYDMAENINI

Scydmaenus (Armatoscydmaenus) gouadeloupensis Franz 1984: 31, 1991: 41; Ivie et al. 2008b: 240. **Distribution.** Guadeloupe, **Martinique**, St. John, St. Thomas; widespread Antilles endemic.

[27. FAMILY SILPHIDAE, The carrion beetles

This family is absent from the West Indies except for the species *Nicrophorus hispaniola* Sikes and Peck (2000) from Hispaniola. Erroneous reports of *Nicrophorus americanus* Olivier 1790: 6 of Guadeloupe and of Martinique were made by Portevin (1903: 330) and were repeated by Hatch (1928: 132), and questioned by Blackwelder (1944-1957: 99). The species is limited to the United States and southeastern Canada, where it once was common and widespread, but now is limited to a few populations at the eastern and western margins of its former range (Majka 2010).]

28. FAMILY STAPHYLINIDAE, The rove beetles

SUBFAMILY PSELAPHINAE, The ant-like mold beetles

TRIBE TRICHONYCHINI

SUBTRIBE PANAPHANTINA

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

SUBFAMILY ALEOCHARINAE

TRIBE HOMALOTINI

SUBTRIBE DIESTOTINA

Diestota flavipennis (Erichson) 1839: 118 (*Homalota*); Blackwelder 1943: 552 (*Atheta*). **Distribution.** St. Thomas, **Martinique**. USA (FL), Colombia, Paraguay; widespread New World?

SUBFAMILY OSORIINAE

TRIBE THORACOPHORINI

SUBTRIBE THORACOPHORINA

Thoracophorus brevicristatus (Horn) 1871: 332 (*Glyptoma*); Blackwelder 1943: 150; Irmiler 1985: 48; Herman 2001: 1300. **Distribution.** Cuba, Guadeloupe, **Martinique**, Puerto Rico, St. Croix, St. Thomas. USA (AZ), Mexico to Costa Rica and Panama; introduced to Old World, Mascarene Islands and Philippines; widespread New World.

SUBTRIBE GLYPTOMINA

Espeson euplectoides Fauvel 1902: 37; Blackwelder 1943: 145; Scheerpeltz 1969: 118; Herman 2001: 1240. **Distribution.** Dominica, Guadeloupe, **Martinique**, St. Vincent. Trinidad; Lesser Antilles and Latin America.

Espeson moratus Schaufuss 1882: 168; Blackwelder 1943: 146; Scheerpeltz 1969: 118; Herman 2001: 1240; Ivie et al. 2008b: 242. **Distribution.** Cuba, Grenada, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Montserrat, Puerto Rico, St. Lucia, St. Thomas, St. Vincent. Trinidad; widespread Antilles and South America.

Pseudespeson crassulus (Fauvel) 1902: 35 (*Espeson*); Blackwelder 1943: 144; Scheerpeltz 1969: 116; Herman 2001: 1248; Ivie et al. 2008b: 242. **Distribution.** Grenada, Guadeloupe (type locality), **Martinique**, Montserrat, St. Lucia, St. Vincent; Lesser Antilles endemic.

Lispinodes nitens (Fauvel) 1902: 36 (*Espeson*); Blackwelder 1943: 147 (*Espeson*); Herman 2001: 1249 (*Pseudespeson*). **Distribution.** Grenada, Guadeloupe, **Martinique**. Trinidad, Venezuela, Brazil; Lesser Antilles and Latin America.

SUBFAMILY OXYTELINAE

TRIBE THINOBIINI

Apocellus ustulatus Erichson 1840: 813; Blackwelder 1943: 89; Herman 2001: 1411; Ivie et al. 2008b: 243. **Distribution.** Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Montserrat, Puerto Rico, St. Croix, St. John; widespread Antilles endemic.

Carpelimus fulvipes (Erichson) 1840: 804 (*Trogophloeus*); Blackwelder 1943: 62; Herman 2001: 1664. **Distribution.** Cuba, Grenada, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Puerto Rico, St. Croix, St. Vincent. Mexico; widespread Antilles and North and/or Central America.

SUBFAMILY PAEDERINAE

TRIBE PAEDERINI

SUBTRIBE MEDONINA

Lithocharis limbata Erichson 1840: 621; Blackwelder 1943: 246, 1944-1957: 117; Ivie et al. 2008b: 243. **Distribution.** Barbados, Dominica, Grenada, Guadeloupe, Hispaniola, **Martinique**, Montserrat, Puerto Rico, St. Croix, St. Lucia, St. Vincent. Guatemala, Panama, Colombia, Trinidad; widespread Antilles and Latin America.

SUBTRIBE ECHIASTERINA

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

Echiaster impressicollis Cameron 1913: 338; Blackwelder 1943: 374, 1944-1957: 127. **Distribution.** Grenada, **Martinique**, St. Vincent; Lesser Antilles endemic.

Echiaster microps Blackwelder 1943: 370, 1944-1957: 127; Ivie et al. 2008b: 243. **Distribution.** ?Cuba, Hispaniola, **Martinique**, Montserrat; widespread Antilles endemic.

Echiaster waterhousei Cameron 1913: 336; Blackwelder 1943: 371, 1944-1957: 128. **Distribution.** ?Cuba, Grenada (type locality), Hispaniola, Jamaica, **Martinique**, St. Vincent; widespread Antilles endemic.

SUBTRIBE PAEDERINA

Paederus tricolor Erichson 1840: 663; Frank 1988: 135. =*Paederus homonymus* Blackwelder 1943: 323 (unnecessary replacement name), 1944-1957: 123. =*P. thoracicus* Marshall 1878: xxx (preoccupied name) of Martinique. **Distribution.** **Martinique**, St. Vincent (type locality); Lesser Antilles endemic; not Guatemala.

SUBFAMILY STAPHYLININAE

SUBTRIBE PHILONTHINA

Belonuchus bugnioni Fauvel 1901: 86; Blackwelder 1943: 428; Herman 2001: 2521. =*B. eximius* Bernhauer 1917: 105 of Guadeloupe. **Distribution.** Guadeloupe, **Martinique** (type locality); Lesser Antilles endemic.

Philonthus flavolimbatus Erichson 1840: 471; Blackwelder 1943: 414; Smetana 1995: 200; Herman 2001: 2824. **Distribution.** Carriacou, Grenada, **Martinique**. Canada, USA (widespread), Mexico to Venezuela to Argentina; widespread New World.

SERIES SCARABAEIFORMIA

SUPERFAMILY SCARABAEOIDEA

31. FAMILY PASSALIDAE, The peg or bess beetles

Passalus unicornis Lepeltier and Audinet-Serville 1825: 20; Fleutiaux and Sallé 1890: 394 (*Neleus*); Blackwelder 1944-1957: 195; Paulian 1947a: 22; Cartwright and Chalumeau 1978: 4; Chalumeau and Gruner 1974: 786; Chalumeau 1978: 43, 1983a: 35; Ivie and Gillogly 1998: 4; Marquet and Roguet 2003: 9. =*Passalus abortivus* (Percheron) 1835: 87 (*Phoronous*); Fleutiaux and Sallé 1890: 393 (*Epiphanus*); Paulian 1947a: 23; Chalumeau 1980: 80 of Guadeloupe. **Distribution.** Dominica, Guadeloupe, Jamaica, **Martinique**, St. Lucia, Trinidad, probably Venezuela; widespread Antilles and Latin America; other Central and South American records are doubtful (J. Schuster, 2008, in litt.).

Spasalus crenatus (MacLeay) 1819: 106 (*Paxillus*); Fleutiaux and Sallé 1890: 393; Chalumeau 1983a: 33; Ivie and Gillogly 1998: 1; Ivie et al. 2008b: 244. =*S. puncticollis* (Lepeltier and Audinet-Serville) 1825: 21 (*Passalus*); Paulian 1947a: 20; Cartwright and Chalumeau 1978: 4; Chalumeau 1978: 43; Chalumeau and Gruner 1974: 785 (*Paxillus*); Chalumeau 1983a: 33 (synonymy). =*Paxillus robustus* Percheron 1835: 35, Fleutiaux and Sallé 1890: 394 of Guadeloupe; Paulian 1947a: 21; Blackwelder 1944-1957: 191 (in South America, not Lesser Antilles); Chalumeau 1980: 79 (lectotype), 1983a: 34. **Distribution.** Cuba, Dominica, Guadeloupe, Hispaniola, **Martinique**, Montserrat, Mustique, Puerto Rico, St. John, St. Lucia, St. Thomas, Tortola. Brazil, French Guyana, Surinam, Argentina; widespread Antilles and Latin America.

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; Marquet and Roguet 2003: 11; 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. 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

Labarrus lividus (Olivier) 1789: 86 (*Scarabaeus*); Arrow 1903 502 (as *Aphodius*); Chapin 1940: 6; Paulian 1947a: 36 (*Nialus*); Chalumeau and Gruner 1974: 794; Cartwright and Chalumeau 1978: 7; Chalumeau 1983a: 57 (as *Aphodius* (*Nialus*)); Valentine and Ivie 2005: 276; generic synonymy in Gordon and Skelley 2007: 262; Skelley et al. 2007: 5. **Distribution.** Cuba, Désirade, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Les Saintes, Marie-Galante, **Martinique**, Puerto Rico, St. Croix; perhaps on practically all West Indian islands. Nearly cosmopolitan; probably from USA to Mexico to Argentina; native to the Old World and introduced to the New World; introduced to Lesser Antilles. **Notes.** This species has commonly been confused with *Labarrus pseudolividus* and all island records listed above (mostly from Chapin 1940: 6) need confirmation (Gordon and Skelley 2007: 263). Common in cow dung and other excrement.

Labarrus pseudolividus (Balthasar) 1941: 148 (*Aphodius*); Marquet and Roguet 2003: 11; Gordon and Skelley 2007: 263; Skelley et al. 2007: 5; Ivie et al. 2008b: 244 (*Aphodius*); Turnbow and Thomas 2008: 49. **Distribution.** Bahamas, **Martinique**; Montserrat; introduced to Lesser Antilles. Introduced to and now widespread in the New World; probably on most of the islands listed for *L. lividus* above, with which it has been commonly confused. **Notes.** Material must be reexamined to accurately delimit the distribution of this species; keys to separate the two are in Gordon and Skelley (2007).

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; Chalumeau 1983a: 58; Bennett and Alam 1985: 22; Woodruff et al. 1998: 32 (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 brevicollis (Wollaston) 1854: 229 (*Oxyomus*); Chalumeau and Gruner 1974: 807; Chalumeau 1978: 42, 1983a: 77; Stebnicka 2007a: 58, 2007b: 63; Ivie et al. 2008b: 244; Turnbow and Thomas 2008: 48. =*Ataenius sulcatulus* Chevrolat 1864: 413 of Cuba; Fleutiaux and Sallé 1890: 397 and Paulian 1947a: 42 of Guadeloupe. =*Ataenius lherminieri* Paulian 1947a: 43 of Guadeloupe; Chalumeau 1983a: 77. **Distribution.** Bahamas, Cuba, Désirade, Guadeloupe, Hispaniola, Jamaica, Les Saintes, **Martinique**, Montserrat. USA (FL, MS, TX); widespread Antilles and North and/or Central America. Introduced to Madeira, Canary Islands, Portugal; anthropophilic. **Notes.** The synonymy of *A. lherminieri* is in doubt, and the species has not been seen again (F. Chalumeau, pers. comm., December, 2010).

- Ataenius carinator* Harold 1874: 20; Stebnicka 2007b: 76; Turnbow and Thomas 2008: 48. =*Ataenius vincentiae* Arrow 1903: 513; Chapin 1940: 19; Chalumeau and Gruner 1974: 801; Cartwright and Chalumeau 1978: 11; Chalumeau 1983a: 65; Marquet and Roguet 2003: 11; Ivie et al. 2008b: 244. **Distribution.** Bahamas, Dominica, Guadeloupe, Hispaniola, **Martinique**, Montserrat, Puerto Rico, St. Vincent. USA (FL), Mexico to Costa Rica, Venezuela to Bolivia, Brazil, Peru; widespread New World. **Notes.** Adults attracted to lights; found in cow dung. F. Chalumeau (pers. comm., December, 2010) does not agree with Stebnicka's placement of *A. vincentiae* as a junior synonym, but views it as a distinct species.
- Ataenius cribrithorax* Bates 1887: 95; Cartwright and Chalumeau 1978: 14; Stebnicka 2007b: 16. **Distribution.** Cuba, Dominica, Jamaica, **Martinique**, St. Thomas. Mexico to Panama; widespread Antilles and North and/or Central America. **Notes.** Adults attracted to lights; found in cow dung. The possibility needs to be checked that this is a synonym of *A. nugator* (F. Chalumeau, pers. comm., December, 2010).
- 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; Marquet and Roguet 2003: 11; 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. Canada, United States; throughout the Neotropics (Argentina, Chile, Colombia, Peru, Galapagos Islands); widespread New World. **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 morator* Harold 1869: 103, Stebnicka 2003: 243, 2007b: 32. =*A. picipes* Fleutiaux and Sallé 1890: 397, Paulian 1947a: 43; Chalumeau and Gruner 1974: 804; Cartwright and Chalumeau 1978: 13; Chalumeau 1978: 44, 1983a: 71 (synonymy). =*A. tenebrosus* Arrow 1903: 512; Chapin 1940: 23; Chalumeau and Gruner 1974: 804 (as synonym of *A. picipes*). **Distribution.** Barbados, Dominica, Grenada, Guadeloupe, Hispaniola, **Martinique**, Puerto Rico, St. Lucia, Vieques. Trinidad, Venezuela south to Argentina; widespread Antilles and Latin America. **Notes.** In rotting materials, especially dung; frequent in light traps. Fortuné Chalumeau (pers. comm., December, 2010) does not agree with Stebnicka's placement of *A. tenebrosus* as a junior synonym, but views it as a distinct species.
- A. nugator* Harold 1880: 41; Chalumeau and Gruner 1974: 812; Chalumeau 1983a: 83; Marquet and Roguet 2003: 11; Stebnicka 2007b: 15. **Distribution.** Cuba, Dominica, Jamaica, **Martinique**, St. Thomas. Mexico to Panama, Colombia and Venezuela to Brazil, Bolivia, Peru; widespread Antilles and Latin America. **Notes.** Adults attracted to lights; found in cow dung.
- [*Ataenius platensis* (Blanchard) 1837-1846: 185 (*Oxyomus*); Hinton 1937: 177; Stebnicka 2005: 124, 2007b: 50; Turnbow and Thomas 2008: 48. **Distribution.** Bahamas, Mexico to Venezuela to Chile and Argentina; widespread Antilles (but not present in the Lesser Antilles). Not Martinique (erroneous record in Hinton 1937: 177, questioned by Chalumeau 1983a: 215).]
- Ataenius picinus* Harold 1867: 281; Chalumeau and Gruner 1974: 810; Cartwright and Chalumeau 1978: 14; Chalumeau 1978: 44, 1983a: 80; Marquet and Roguet 2003: 11; Stebnicka 2004: 224, 2007b: 42. =*A. elongatus* Palisot de 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 valid species and it is not known from the Lesser Antilles (Stebnicka 2007b: 27). =*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. **Notes.** Fortuné Chalumeau (pers. comm., December, 2010) indicates that Stebnicka's placement of *A. havanensis* as a synonym is wrong and that it is a valid species.

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; Marquet and Roguet 2003: 11; 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 of Grenada. =*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. 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 strigicaudus Bates 1887: 96; Chapin 1940: 32; Paulian 1947a: 40; Chalumeau and Gruner 1974: 810; Cartwright and Chalumeau 1978: 13; Chalumeau 1983a: 81; Bennett and Alam 1985: 22; Woodruff et al. 1998: 33; Marquet and Roguet 2003: 11; Stebnicka 2004: 214, 2007b: 40. **Distribution.** Bahamas, Barbados, Bequia, Cuba, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Puerto Rico, St. Croix, St. Lucia, St. Thomas, St. Vincent. Mexico to Trinidad, Chile and Argentina; widespread Antilles and Latin America. **Notes.** Adults attracted to lights; found in cow dung.

TRIBE PSAMMODIINI

Platytomus parvulus (Chevrolat) 1864: 415 (*Psammadius*); Paulian 1947a: 47; Chapin 1940: 8; Chalumeau and Gruner 1974: 815; Cartwright and Chalumeau 1978: 15; Chalumeau 1983a: 91 (all *Diastictus*); Woodruff et al. 1998: 34; Marquet and Roguet 2003: 12 (*Platytomus*). **Distribution.** Cuba, Dominica, Grenada, Guadeloupe, Jamaica, **Martinique**, St. Croix, St. Vincent. Colombia, Trinidad; widespread Antilles and Latin America. **Notes.** A humus feeder in soil, flying at dusk and attracted to lights.

Rhyparus spilmani Cartwright and Chalumeau in Chalumeau 1977a: 76; Cartwright and Chalumeau 1978: 8; Chalumeau 1983a: 93; Marquet and Roguet 2003: 12; Touroult 2005: 83. **Distribution.** Dominica, Guadeloupe, **Martinique**; Lesser Antilles endemic. **Notes.** Collected at light traps and by sifting plant debris.

Saprosites dufau Paulian 1947a: 46; Chalumeau and Gruner 1974: 815; Chalumeau 1983a: 88; Marquet and Roguet 2003: 12; Stebnicka 2009: 46. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic. **Notes.** Found under bark at 600 m. The Martinique record needs confirmation. *Saprosites* species live under the bark of dead branches and are rarely collected. More material is needed for a revision of the West Indian fauna.

Saprosites exaratus (Fleutiaux and Sallé) 1890: 397 (*Ataenius*); Chalumeau and Gruner 1974: 815; Chalumeau 1983a: 89; Touroult 2005: 84; Stebnicka 2009: 46. **Distribution.** Dominica, Guadeloupe, **Martinique**; Lesser Antilles endemic.

Saprosites grenadensis Arrow 1903: 574; Chapin 1940: 11; Stebnicka 2009: 47. =*Saprosites wirthi* Cartwright and Chalumeau in Chalumeau 1977a: 72; Cartwright and Chalumeau 1978: 16; Chalumeau 1983a: 90; Marquet and Roguet 2003: 12; Stebnicka 2009: 46 (synonymy). **Distribution.** Grenada, **Martinique**, Trinidad, Venezuela; Lesser Antilles and Latin America. **Notes.** Adults and immatures taken in decaying heart of *Euterpe* palm.

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; Marquet and Roguet 2003: 11. =*Choeridium insulare* Fleutiaux and Sallé 1890: 395 of Guadeloupe; Leng and Mutchler 1914: 438, 1917: 207; Paulian 1947a: 31; Matthews 1966: 46 (synonymy); Chalumeau 1983a: 49 (recognized as a valid species of Guadeloupe); 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 2008; dates above are year of first island 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.

Onthophagus antillarum Arrow 1903: 510; Blackwelder 1944-1957: 211; Paulian 1947a: 35; Matthews 1966: 17; Chalumeau and Gruner 1974: 792; Cartwright and Chalumeau 1978: 5; Chalumeau 1983a: 52; Marquet and Roguet 2003: 11. =*Onthophagus femoralis* Kirsch 1870: 362; Fleutiaux and Sallé 1890: 395 (misidentification); Leng and Mutchler 1914: 438; Blackwelder 1944-1957: 211. **Distribution.** Bequia, Dominica, Grenada, Guadeloupe, **Martinique**, St. Vincent (type locality); Lesser Antilles endemic. **Notes.** Collected in cow and human dung in forests up to 800 m.

Onthophagus batesi Howden and Cartwright 1963: 21; Matthews 1966: 21; Chalumeau and Gruner 1974: 793; Chalumeau 1983a: 53; Marquet and Roguet 2003: 11. **Distribution.** **Martinique** (introduced). USA (extreme south TX), Mexico to Panama; introduced to Lesser Antilles; native to mainland Neotropics.

Onthophagus bituberculatus (Olivier) 1789: 131 (*Scarabaeus*); Matthews 1966: 23; Chalumeau and Gruner 1974: 793; Chalumeau 1983a: 53; Marquet and Roguet 2003: 11. **Distribution.** **Martinique** (introduced, and now the most common *Onthophagus* on the island); introduced to Lesser Antilles; native to West Africa (from Congo to Senegal), Sudan, Egypt, Arabia.

SUBFAMILY MELOLONTHINAE

TRIBE PACHYDEMINI

Madiniella christinae Chalumeau and Gruner 1976: 102; Chalumeau 1983a: 124; Marquet and Roguet 2003: 12. **Distribution.** **Martinique**; single island endemic.

TRIBE MELOLONTHINI

Phyllophaga (Cnemarachis) abudantuni Chalumeau and Gruner 1976: 89; Chalumeau 1983a: 105; Marquet and Roguet 2003: 12. **Distribution.** **Martinique**; single island endemic.

Phyllophaga (Cnemarachis) delplanquei Chalumeau and Gruner 1976: 88; Chalumeau 1983a: 104; Marquet and Roguet 2003: 12. **Distribution. Martinique**; single island endemic.

Phyllophaga (Cnemarachis) lacroixi Paulian 1947a: 54; Chalumeau and Gruner 1976: 96; Chalumeau 1983a: 103; Marquet and Roguet 2003: 12. **Distribution. Martinique**; single island endemic.

[*Phyllophaga (Cnemarachis) plaei* (Blanchard) 1850: 137 (*Ancylonycha*); =*P. pleei*, Paulian 1947a: 55, unjustified emendation; Chalumeau and Gruner 1976: 96; Chalumeau 1980: 80 (lectotype), 1983a: 116, 1985c: 27. =*P. portoricensis* Smyth 1917: 65. **Distribution.** Guadeloupe, Puerto Rico, St. Croix, St. John, St. Thomas, Tortola; not Martinique, contra Blanchard 1850: 137.]

TRIBE MACRODACTYLINI

Plectris martinicensis Chalumeau 1982a: 331. **Distribution. Martinique**; 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, 1985a: 248. =*Anomala marginata* (Fabricius) 1792: 164 and *A. cincta* Blanchard 1850: 188 of Guadeloupe, of Martinique. **Distribution.** Désirade, Dominica, Guadeloupe, Les Saintes, **Martinique**, Marie-Galante; St. Kitts (*A. i. liamaigae* Chalumeau 1985a: 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.

Anomala luciae Blanchard 1851: 187; Chalumeau 1980: 84 (lectotype), 1983a: 132, 1985b: 250; Marquet and Roguet 2003: 12. =*Anomala inconstans* Burmeister 1844: 252, Blackwelder 1944-1957: 244; Chalumeau 1985b: 250 of Mexico to Colombia, Brazil. Not Martinique, not St. Lucia, not St. Vincent, see Chalumeau 1985b: 250. **Distribution. Martinique**, St. Lucia, St. Vincent; Lesser Antilles endemic.

TRIBE RUTELINI

Rutela striata (Olivier) 1789: 79 (*Cetonia*); Fleutiaux and Sallé 1890: 400; Paulian 1947a: 61; Blackwelder 1944-1957: 239; Chalumeau and Gruner 1976: 104; Chalumeau 1978: 44, 1983a: 127, 1985a: 241; Jameson 1997: 102; Ivie et al. 2008b: 244. =*R. s.* variety *guadelupensis* Laporte 1840: 120 of Guadeloupe. =*R. s.* variety *marginicollis* Laporte 1840: 120 of Guadeloupe. **Distribution.** *Rutela striata striata*: Désirade, Guadeloupe, Les Saintes, Montserrat; *Rutela striata antiqua* Ohaus 1922: 325 (= *R. s. martinicensis* Chalumeau and Gruner 1976: 105; Touroult 2005: 85; Marquet and Roguet 2003: 12), **Martinique**, St. Lucia (Jameson 1997: 104); Lesser Antilles endemic. Not Venezuela.

TRIBE GENIATINI

Leucothyreus nolleti Paulian 1947a: 64; Chalumeau and Gruner 1976: 108; Chalumeau 1983a: 134, 1985b: 255; Marquet and Roguet 2003: 12. **Distribution. Martinique**; single island endemic.

Leucothyreus pinchoni Chalumeau and Gruner 1976: 109; Chalumeau 1983a: 136, 1985b: 255; Marquet and Roguet 2003: 12. **Distribution. Martinique**; single island endemic.

SUBFAMILY DYNASTINAE

TRIBE CYCLOCEPHALINI

Chalepides barbatus barbatus (Fabricius) 1787: 10 (*Scarabaeus*); Blackwelder 1944-1957: 253; Paulian 1947a: 73 (*Chalepus*); Chalumeau and Gruner 1977: 590 (suggesting labeling error); Chalumeau 1982a: 343, 1983a: 216; Endrödi 1985: 172; Audreau: 2001: 426. **Distribution.** Barbados, Cuba,

Guadeloupe (Paulian, 1947), Hispaniola, **Martinique**, Puerto Rico, St. Barthélemy, St. Croix, St. Lucia, St. Martin. 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* MacLeay 1819: 149 (Scarabaeidae) which is preoccupied by *Chalepus* Thunberg 1805: 282 (Chrysomelidae). Wolcott 1950: 263 discusses the natural history of this detritus feeding non-economic beetle in Puerto Rico.

Cyclocephala melanocephala (Fabricius) 1775: 36 (*Melolontha*); *C. m. rubiginosa* Burmeister 1847: 59; Paulian 1947a: 71; Chalumeau and Gruner 1977: 584; Cartwright and Chalumeau 1978: 25; Chalumeau 1978: 43, 1982a: 337, 1983a: 145; Endrödi 1985: 103; Marquet and Roguet 2003: 12. =*Cyclocephala dimidiata* Burmeister 1847: 57; Blackwelder 1944-1957: 251 of Grenada. **Distribution.** Localities for the subspecies *C. m. rubiginosa*: Dominica, Guadeloupe, Les Saintes, Marie-Galante, **Martinique**. The Grenada record may be a South American subspecies. The species ranges from the Lesser Antilles to Brazil and Argentina; Lesser Antilles and Latin America.

Cyclocephala tridentata (Fabricius) 1801: 170 (*Melolontha*); Fleutiaux and Sallé 1890: 401; Paulian 1947a: 68; Chalumeau and Gruner 1977: 587; Chalumeau 1978: 44, 1982a: 337, 1983a: 149; Endrödi 1985: 99; Marquet and Roguet 2003: 12. **Distribution.** Barbados, Guadeloupe, **Martinique**, St. Lucia; Dominica (*C. t. dominicensis* Cartwright and Chalumeau in Chalumeau 1977a: 135; Cartwright and Chalumeau 1978: 250; Chalumeau 1983a: 151; not Dominican [Domineekan] Republic. Colombia, Surinam; Lesser Antilles and Latin America.

TRIBE DYNASTINI

Dynastes hercules (Linnaeus) 1758: 345 (*Scarabaeus*); Fleutiaux and Sallé 1890: 402; Paulian 1947a: 80; Chalumeau and Gruner 1977: 597; Cartwright and Chalumeau 1978: 21; Chalumeau 1983a: 162; Chalumeau and Reid 2002. =*Dynastes lagaii* Verrill 1906: 318 of Dominica. =*Dynastes vulcan* Verrill 1906: 319 of Dominica. **Distribution.** Dominica and Guadeloupe (type locality) for the nominate subspecies. The subspecies *D. h. alcides* (Olivier) 1789: 7 [=*D. h. reidi* Chalumeau 1977: 237; =*D. baudrii* Pinchon 1976 (*nomen nudum*)] is of **Martinique** and of St. Lucia. The full range of the species, with nine subspecies, includes these islands and from Mexico to Panama, and throughout northern South America to Bolivia and Brazil (Chalumeau and Reid 2002; Silvestre 1996); Lesser Antilles and Latin America. It is seemingly absent on St. Vincent and Grenada. **Notes.** Gruner and Chalumeau (1977) summarize the biology of the species in Guadeloupe. Adults are attracted to lights, even during nights of full moon; larvae found in decaying trees. In contrast to the nominal subspecies of Guadeloupe, *D. h. alcides* is rather uncommon. Rather common, and the largest beetle species in the Lesser Antilles. The polymorphism in the male horns led to several names being applied to this species. The species is protected by law in Martinique and Guadeloupe. **Notes.** Fortuné Chalumeau (pers. comm., December, 2010) now recognizes *D. alcides* as a full and valid species, although this is not generally accepted. Lauchaume (1985) examined the type of *D. alcides* and found it to be conspecific with *D. h. hercules*, the type locality for which is Guadeloupe.

TRIBE ORYCTINI

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; Marquet and Roguet 2003: 12; 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, 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. 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; Marquet and Roguet 2003: 12. =*Ligyris cordatus* Fabricius 1792: 31; Fleutiaux and Sallé 1890: 402 of Guadeloupe. **Distribution.** Dominica, Guadeloupe, Hispaniola, Marie-Galante, **Martinique**, St. Lucia, St. Martin. Mexico, Colombia, Venezuela, Guyana, Surinam, Brazil; widespread Antilles and Latin America. **Notes.** Adults attracted to lights; larvae feed on small tubers of Dioscoreaceae and Convolvulaceae and may damage gardens.

TRIBE PHILEURINI

Phileurus didymus (Linnaeus) 1758: 347 (*Scarabaeus*); Chalumeau and Gruner 1977: 600; Cartwright and Chalumeau 1978: 27; Chalumeau 1983a: 169; Woodruff et al. 1998: 34. **Distribution.** Dominica, Grenada, Guadeloupe, **Martinique**, Puerto Rico, St. Vincent. Mexico to Colombia, Venezuela, Trinidad to Brazil; widespread Antilles and Latin America. **Notes.** Adults attracted to lights; larvae found in decaying palm trees.

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; Marquet and Roguet 2003: 12; Turnbow and Thomas 2008: 49. =*P. valgus capra* Bates 1889: 341 of Guadeloupe, of Martinique, of St. Martin, 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. Vincent. Venezuela. The nominate subspecies is widespread in eastern USA and Central and South America to Argentina; widespread New World. **Notes.** Adults are attracted to lights; adults and larvae are collected in various decaying logs.

SERIES ELATERIFORMIA

SUPERFAMILY BUPRESTOIDEA

51. FAMILY BUPRESTIDAE, The metallic wood-boring beetles

SUBFAMILY BUPRESTINAE

TRIBE ACTENODINI

Actenodes marmorata (Laporte and Gory) 1837: 31 (*Chrysobothris*); Fisher 1925: 84; Paulian 1947b: 146; not listed in Bellamy 2008-2009. **Distribution.** **Martinique**; single island endemic. **Note.** Leng and Mutchler 1914: 430 record *Actenodes fulminata* Schönherr 1817: 121 from Martinique, but Fisher 1925: 87 takes this as a misapplication of the name to a record of *A. marmorata*.

TRIBE CHRYSOBOTHRINI

Chrysobothris bella Fisher 1925: 106; Paulian 1947b: 148; Touroult 2005: 87; Bellamy 2008-2009: 1601. **Distribution.** Grenada, **Martinique**, Mustique, Union; Lesser Antilles endemic. *Polycesta depressa* (Linnaeus) 1771: 533 (*Buprestis*); Fisher 1925: 25; Paulian 1947c: 145; Cobos 1981: 68; Touroult 2005: 87; Bellamy 2008-2009: 370. =*Polycesta porcata* Laporte and Gory 1837: 2 of Guadeloupe; Wolcott 1950: 275; Valentine and Ivie 2005: 276. =*Polycesta karakera* Chevrolat 1838: 55; Fleutiaux and Sallé 1898: 404 of Guadeloupe. **Distribution.** Désirade, Guadeloupe, Guana, Jamaica, Les Saintes, **Martinique**, Petit Terre, Puerto Rico, St. Lucia. French Guiana, Guyana, Venezuela; Lesser Antilles and Latin America. **Notes.** The Martinique record is a new one contributed by J. Touroult (one specimen, reared from dead wood of Myrtaceae, Morne Larcher, Diamant, emerged XII, 2008, J. Touroult leg.). The species may be distributed by commerce in wood and prod-

ucts such as furniture (Wolcott 1950: 276). Larvae are known to develop in wood of species of *Pimenta* sp., *Eugenia* spp., *Melicococcus* sp., *Bucida* sp., *Averrhoa* sp. and *Coccoloba uvifera* L.

SUPERFAMILY BYRRHOIDEA

53. FAMILY ELMIDAE, The riffle beetles

SUBFAMILY LARAINAE

Hexanchorus caraibus (Coquerel) 1851: 601 (*Potamophilus*); Fleutiaux and Sallé 1890: 393; Legros 1947: 86; Blackwelder 1944-1957: 272; Harrison and Rankin 1976: 282; Spangler and Santiago-Fragoso 1992: 48; Bass 2007: 24. **Distribution.** Dominica, Guadeloupe, **Martinique**, St. Lucia, St. Vincent; Lesser Antilles endemic. **Notes.** An inhabitant of stony bottom streams, in vegetation in mountain torrents, and in estuarine pools.

SUPERFAMILY ELATEROIDEA

63. FAMILY CALLIRHIPIDAE, The cedar beetles

Callirhipis lherminieri Laporte 1834: 250; Fleutiaux and Sallé 1890: 414 (*Callirhipis*); Champion 1897a: 290; Fleutiaux 1947: 139; Spilman 1971: 7; Touroult 2005: 86. =*C. brunnea* Laporte 1834: 251 of Guadeloupe. =*C. lacordairei* Laporte 1834: 249, Fleutiaux and Sallé 1890: 414 of Guadeloupe. =*C. insularis* Laporte 1834: 256 ; Fleutiaux and Sallé 1890: 414 of Guadeloupe. **Distribution.** Dominica, Guadeloupe (type locality), **Martinique**, St. Vincent; Lesser Antilles endemic. **Notes.** Adults common; taken at lights and in malaise traps; larvae found in rotten wood.

67. FAMILY EUCNEMIDAE, The false click beetles

SUBFAMILY MELASINAE

TRIBE MELASINI

Isorhipis picteti Bonvouloir 1871: 97, 102; Fleutiaux 1911: 245 (*Tharops*), 1947: 131; Blackwelder 1944-1957: 279; Chassain 2005: 184, 185 (redescription). **Distribution.** Guadeloupe, **Martinique**. Mexico, French Guiana, Brazil; Lesser Antilles and Latin America.

TRIBE DIRRHAGINI

Entomophthalmus americanus Bonvouloir 1872: 514, 516; Fleutiaux 1911: 243, 1947: 132; Blackwelder 1944-1957: 278; Chassain 2005: 186. **Distribution.** Guadeloupe, **Martinique**. Mexico to Panama, to Brazil and Peru; Lesser Antilles and Latin America.

SUBFAMILY EUCNEMINAE

TRIBE NEMATODINI

Nematodes guadelupensis Fleutiaux 1911: 244, 1947: 130; Chassain 2005: 184; Chassain and Sautière 2007: 144. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic. **Notes.** On dry leaves of banana and *Cecropia obtusa* at 600-700 m.

69. FAMILY ELATERIDAE, The click beetles

SUBFAMILY ELATERINAE

TRIBE AMPEDINI

Dicrepidius inornatus (Candeze) 1859: 100 (*Ischiodontus*); Fleutiaux and Sallé 1890: 409; Champion 1897a: 285 (*Ischiodontus*); Fleutiaux 1947: 121 (*Ischiodontus*); Fleutiaux 1911: 249 (*Dipropus*); Blackwelder 1944-1957: 300; Chassain and Sautière 2007: 142. =*Ischiodontus separatus* Fleutiaux 1911: 249 of Guadeloupe; Blackwelder 1944-1957: 300. **Distribution.** Grenada, Guadeloupe, **Martinique**, Mustique, St. Vincent. Colombia; Lesser Antilles and Latin America.

TRIBE PHYSORHININI

Anchastus insularis (Candeze) 1889: 120 (*Monelasmus*); Fleutiaux 1911: 259, 1947: 115; Blackwelder 1944-1957: 290 (*Monelasmus*), 301 (*Anchastus*). **Distribution. Martinique**; single island endemic.

SUBFAMILY AGRYPNINAE

TRIBE AGRYPNINI

Lacon modestus (Boisduval) 1835: 108 (*Adelocera*); Fleutiaux 1911: 246, 1947: 106; Blackwelder 1944-1957: 281. =*A. modesta* variety *guadeloupensis* Fleutiaux and Sallé 1890: 407 of Guadeloupe. **Distribution.** Guadeloupe, **Martinique**. Mexico; Australia, New Caledonia, Philippines, Japan, Borneo, Indochina, Ceylon, Seychelles, Madagascar; cosmopolitan; Lesser Antilles and Latin America.

TRIBE OOPHORINI

Aeolus sp. aff. *circumscriptus* (Germar) 1824: 46 (*Elater*); Blackwelder 1944-1957: 289; Chassain and Sautière 2007: 142. **Distribution. Martinique**, Puerto Rico. Mexico, Belize, Nicaragua, Colombia; Lesser Antilles and Latin America?

Conoderus castaneus (Fabricius) 1792: 226; Fleutiaux and Sallé 1890: 412; Fleutiaux 1911: 252, 1947: 117; Valentine and Ivie 2005: 276; Chassain 2005: 182; Chassain and Sautière 2007: 142. =*Conoderus castaneipes* Fabricius. 1801: 234; Blackwelder 1944-1957: 287. **Distribution.** Cuba, Guadeloupe, Guana, **Martinique**; widespread Antilles endemic.

Conoderus delauneyi Fleutiaux and Sallé 1890: 411; Fleutiaux 1911: 253; Fleutiaux 1947: 117; Blackwelder 1944-1957: 287 (*Conoderus castaneipes* variety *delauneyi* Fleutiaux and Sallé 1890: 411 of Martinique). **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

Conoderus memorabilis (Candeze) 1859: 249 (*Monocrepidius*); Blackwelder 1944-1957: 280. **Distribution.** Cuba, **Martinique**, Puerto Rico; widespread Antilles endemic.

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.

TRIBE PYROPHORINI

Lygelater ignitus (Fabricius) 1787: 167 (*Elater*); Fleutiaux 1911: 262 (*Pyrophorus*); Blackwelder 1944-1957: 285 (*Pyrophorus*); Costa 1975: 107; Chassain 2005: 182; Chassain and Sautière 2007: 141. **Distribution.** Guadeloupe, **Martinique**, St. Lucia. French Guiana, Colombia, Venezuela, Brazil; Lesser Antilles and Latin America.

Pyrophorus mellifluus Costa 1972: 211, 1976: 147. **Distribution.** Cuba, Hispaniola, **Martinique**, St. Lucia. Mexico to Colombia, Trinidad; widespread Antilles and Latin America.

Pyrophorus phosphorescens Laporte 1840: 236; Fleutiaux and Sallé 1890: 414; Fleutiaux 1911: 261; Fleutiaux 1947: 110; Blackwelder 1944-1957: 286; Costa 1972: 206, 1975: 147; Chassain 2005: 182; Chassain and Sautière 2007: 141. **Distribution.** Dominica, Guadeloupe (type locality), **Martinique**. Mexico to Panama, Trinidad, Guiana, Brazil; Lesser Antilles and Latin America.

TRIBE HEMIRHIPINI

Chalcolepidius obscurus Laporte 1836: 13; Fleutiaux 1911: 247, 1947: 109; Blackwelder 1944-1957: 283; Miskimen and Bond 1970: 86; Casari 2002: 318; Chassain 2005: 182; Chassain and Sautière 2007: 141. **Distribution.** Cuba, Dominica, Guadeloupe, **Martinique**, Montserrat, St. Croix, St. Vincent; widespread Antilles endemic. **Notes.** Earlier records of Mexico, Trinidad and Virgin Islands are not substantiated by Casari 2002: 319.

Chalcolepidius virens (Fabricius) 1777: 234 (*Elater*); Champion 1897a: 282; Blackwelder 1944-1957: 283; Casari 2002: 335, 339 (who does not confirm the questioned Guadeloupe record of Blackwelder). =*Chalcolepidius porcatus* variety *virens* Fabricius 1787: 172, Fleutiaux 1911: 247. =*Chalcolepidius sulcatus* Fabricius 1777: 234 of Martinique; Fleutiaux 1911: 246, 1947: 108. **Distribution.** Barbados, Dominica, Grenada, ?**Martinique**. Tobago, Trinidad, Venezuela to Surinam, Colombia, Peru, Bolivia, Brazil; Lesser Antilles and Latin America. **Notes.** Earlier records of Guadeloupe, of Martinique, of St. Croix and of St. Lucia are seemingly misidentifications of other species (Casari 2002: 341).

73. FAMILY LYCIDAE, The net-winged beetles

SUBFAMILY LYCINAE

TRIBE CALOPTERINI

Mesopteron insularum Chalumeau and Roguet 1984: 30. **Distribution.** **Martinique**; single island endemic.

76. FAMILY LAMPYRIDAE, The firefly beetles

SUBFAMILY LAMPYRINAE

TRIBE CRATOMORPHINI

Aspisoma ignitum (Linnaeus) 1767: 645 (*Lampyrus*); 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 mollusks.

TRIBE PHOTININI

Photinus littoralis (Motschulsky) 1853: 35 (*Ellipolampis*); Leng and Mutchler 1922: 475; McDermott 1966: 41 (variety *vittiger*). **Distribution.** **Martinique**. Trinidad; Lesser Antilles and Latin America. *Robopus infernus* (E. Olivier) 1912: 31 (*Pyrolampis*); McDermott 1966: 51. =*Photinus vittiger* variety *infernus* Leng and Mutchler 1922: 476 of **Martinique**. **Distribution.** **Martinique**; single island endemic.

Robopus vittiger (Gyllenhal) 1817: 21 (*Lampyrus*); Leng and Mutchler 1922: 475; Paulian 1947b: 161; Blackwelder 1944-1957: 359; McDermott 1955: 50 (*Diphodus*), 1966: 53. **Distribution.** **Martinique**; single island endemic.

SERIES BOSTRICHIFORMIA

82. FAMILY DERMESTIDAE, The skin or larder beetles

SUBFAMILY DERMESTINAE

TRIBE DERMESTINI

Dermestes peruvianus Laporte 1840: 33; Lepsme 1947: 180. **Distribution.** **Martinique**; misidentified or introduced? USA, Mexico, Peru, Chile, Argentina, Bolivia; widespread New World; Europe (introduced to Old World).

SUBFAMILY ATTAGENINAE

Attagenus fasciatus (Thunberg) 1795: 105 (*Anthrenus*); Mroczkowski 1968: 85. =*Attagenus gloriosus* Fabricius 1801: 107; Lepsme 1947: 189; Blackwelder 1944-1957: 396. **Distribution.** Barbados, Cuba, **Martinique**. Widespread New World; nearly cosmopolitan. **Notes.** The wardrobe beetle. A stored products pest.

Attagenus unicolor (Brahm) 1791: 144 (*Dermestes*); Mroczkowski 1968: 93. =*Attagenus piceus* Olivier 1790: 10; Lepsme 1947: 180; Blackwelder 1944-1957: 396; Miskimen and Bond 1970: 87. **Distribution.** Cuba, **Martinique**, Puerto Rico, St. Croix. USA, Mexico; widespread New World; cosmopolitan. **Notes.** The black carpet beetle. A stored products pest.

SUBFAMILY MEGATOMINAE

TRIBE ANTHRENINI

Anthrenus verbasci (Linnaeus) 1767: 568 (*Byrrhus*); Lepsme 1947: 193; Mroczkowski 1968: 146. **Distribution.** **Martinique**. Widespread New World; cosmopolitan. **Notes.** The varied carpet beetle. In various dried stored products (see Beal 1998: 310).

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

SUBFAMILY BOSTRICHINAE

TRIBE BOSTRICHINI

Amphicerus cornutus Pallas 1772: 8; Blackwelder 1944-1957: 399; Lepsme 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. 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*); Lepsme 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.

SUBFAMILY DINODERINAE

Rhyzopertha dominica Fabricius 1792: 359; Lepesme 1947: 200; Miskimen and Bond 1970: 90; Pérez-Gelabert 2008: 104. **Distribution.** Barbados, Cuba, Guadeloupe, Hispaniola, **Martinique**, Puerto Rico, St. Croix. Mexico to Brazil, ?USA; widespread New World; cosmopolitan. **Notes.** In stored products; also attacking books.

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

SUBFAMILY PTININAE, The spider beetles

Gibbium psyllioides Czempinski 1778: 51; Blackwelder 1944-1957: 401; Lepesme 1947: 230; Miskimen and Bond 1970: 87. =*Gibbium scotias* Fabricius 1781: 74; Gorham 1898a: 324 of St. Vincent. **Distribution.** Cuba, **Martinique**, Montserrat, St. Croix, St. John, St. Vincent. Cosmopolitan; widespread New World. **Notes.** A stored products pest; in buildings.

Ptinus fur Linnaeus 1758: 393; Lepesme 1947: 231. **Distribution.** **Martinique.** Cosmopolitan; widespread New World. **Notes.** A stored products pest.

SUBFAMILY ANOBIINAE

TRIBE STEGOBIINI

Stegobium paniceum (Linnaeus) 1761: 145 (*Dermestes*); Pic 1909: 171 (*Sitodrepa*); Blackwelder 1944-1957: 402; Lepesme 1947: 214; Miskimen and Bond 1970: 89; Pérez-Gelabert 2008: 104. **Distribution.** Barbados, Guadeloupe, Hispaniola, **Martinique**, Puerto Rico, St. Croix. USA to Argentina, Old World; cosmopolitan; widespread New World. **Notes.** The drug store beetle. A pest in a wide variety of stored organic materials.

SUBFAMILY XYLETINAE

TRIBE LASIODERMINI

Lasioderma serricorne (Fabricius) 1792: 241 (*Ptinus*); Fleutiaux and Sallé 1890: 418; Gorham 1898a: 326; Pic 1909: 172; Blackwelder 1944-1957: 404; Ramos 1946: 40; Lepesme 1947: 217; Wolcott 1950: 293; Miskimen and Bond 1970: 89; Pérez-Gelabert 2008: 105. **Distribution.** Barbados, Cuba, Grenada, Guadeloupe, Hispaniola, **Martinique**, Mona, Puerto Rico, St. Croix. USA through Mexico to Paraguay; Old World; cosmopolitan; widespread New World. **Notes.** The tobacco or cigarette beetle. A pest of stored tobacco and a wide variety of dry organic materials (Wolcott 1950: 293).

SUBFAMILY DORCATOMINAE

TRIBE PROTHECINI

Stichtoptychus dufau (Pic) 1911: 183 (*Cathorama*); Blackwelder 1944-1957: 405 (*Catorama*); White 1980: 12; Ivie et al. 2008b: 247 (as *Stichtoptenus*). **Distribution.** Dominica, Guadeloupe, **Martinique**, Montserrat; Lesser Antilles endemic.

87. FAMILY TROGOSSITIDAE, The bark-gnawing beetles

SUBFAMILY TROGOSSITINAE

Nemosoma landesi Lèveillé 1901: 318; Lepesme 1947: 176; Blackwelder 1944-1957: 392. **Distribution.** **Martinique**; single island endemic.

89. FAMILY CLERIDAE, The checkered beetles

SUBFAMILY KORYNETINAE

Necrobia ruficollis Fabricius 1775: 57; Lepesme 1947: 175; Blackwelder 1944-1957: 391; Wolcott 1950: 286. **Distribution.** Cuba, **Martinique**, Puerto Rico. Mexico to Argentina; cosmopolitan; widespread New World. **Notes.** The red-shouldered ham beetle. In stored products.

SUPERFAMILY CUCUJOIDEA

97. FAMILY NITIDULIDAE, The sap beetles

SUBFAMILY NITIDULINAE

Mystrops insularis Grouvelle 1898a: 352; Blackwelder 1944-1957: 409; Gillogly 1955: 202. **Distribution.** **Martinique**; single island endemic. **Notes.** In palm flowers.

99. FAMILY MONOTOMIDAE, The root-eating beetles

SUBFAMILY MONOTOMINAE

TRIBE EUROPINI

Europs sp. near *rhizophagoides* Reitter 1872: 41; Champion 1898: 409; Blackwelder 1944-1957: 424. **Distribution.** Grenada, ?**Martinique**, St. Vincent; Lesser Antilles endemic.
Hesperobaenus apicalis Reitter 1872: 19; Fleutiaux and Sallé 1890: 391; Blackwelder 1944-1957: 424 (*Europs*). **Distribution.** Guadeloupe, Jamaica, ?**Martinique**, Puerto Rico; widespread Antilles endemic.

103. FAMILY SILVANIDAE, The flat bark beetles

SUBFAMILY SILVANINAE

Silvanus proximus Grouvelle 1904: 183; Halstead 1973: 61, 1993: 182; Thomas 1993: 25. =*Silvanus planatus* Germar 1824: 466; Fleutiaux and Sallé 1890: 390; Blackwelder 1944-1957: 420; Halstead 1973: 64 of Guadeloupe; likely a misidentification of *S. proximus*. =*Silvanus unidentatus* Olivier 1790: 9; Champion 1898: 405 of Grenada?; Blackwelder 1944-1957: 421 of Grenada?; Halstead 1973: 65; likely a misidentification. **Distribution.** Grenada, Guadeloupe, **Martinique**, St. Thomas; from Mexico to Brazil; introduced to Neotropics, native to and widespread in Africa; introduced to Lesser Antilles. **Notes.** Occasionally in stored products; also at lights and in forest litter.

106. FAMILY LAEMOPHLOEIDAE, The flat bark beetles

Cryptolestes unicolornis (Reitter) 1876: 45 (*Microbrontes*); Fleutiaux and Sallé 1890: 389; Champion 1898: 405; Blackwelder 1944-1957: 419 (*Laemophloeus*); Thomas 1988: 56, 1993: 49, 2002: 153 (key); Ivie et al. 2008b: 249; Turnbow and Thomas 2008: 42. =*Laemophloeus iteratus* Sharp 1899: 528; Grouvelle 1876: 502 (as *Microbrontes unicolornis* Reitter, according to Sharp 1899: 528); Blackwelder 1944-1957: 419. **Distribution.** Bahamas, Cuba, Grenada, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Montserrat, Mustique, Puerto Rico, St. Vincent, Virgin Islands. USA (FL) to Mexico to Surinam to Argentina; southern Nearctic, widespread Neotropical; widespread New World.

108. FAMILY PHALACRIDAE, The shining flower or shining mold beetles

Acylomus insularis Guillebeau 1896: 304; Blackwelder 1944-1957: 430. **Distribution.** **Martinique**; single island endemic.

117. FAMILY BOTHRIDERIDAE, The dry bark beetles**SUBFAMILY BOTHRIDERINAE****TRIBE BOTHRIDERINI**

Bothrideres chevrolati (Grouvelle) in Grouvelle and Raffray 1908: 50 (*Taphrideres*); Blackwelder 1944-1957: 473; Slipinski et al. 1989: 176. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

121. FAMILY ENDOMYCHIDAE, The handsome fungus beetles**SUBFAMILY MEROPHYSIINAE**

Holoparamecus kunzei (Aubé) 1843: 245 (*Calyptobium*); Blackwelder 1944-1957: 435. **Distribution.** Hispaniola, **Martinique**. USA, Brazil, Old World; widespread New World?

122. FAMILY COCCINELLIDAE, The lady beetles**SUBFAMILY MICROWEISEINAE****TRIBE DIOMINI**

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. 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* Signoret, *Aleurodicus cocois* Curtis, *A. disperses* Russell, *Planococcus* sp., *P. citri* (Risso), *Ferrisia virgata* (Cockerell) and *Phenacoccus gossypii* Townsend and Cockerell.

SUBFAMILY SCYMNINAE**TRIBE SCYMNINI**

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

Notes. Predator on aphids: *Aleurodicus* spp.

Cryptolaemus montrouzieri Mulsant 1853: 268; Blackwelder 1944-1957: 445; Bennett and Alam 1985: 25; Gordon and Hillburn 1990: 271; Duverger 2001; Ivie et al. 2008b: 251; Pérez-Gelabert 2008: 109. **Distribution.** Barbados, Hispaniola, Martinique (record of Pierre-Damien Lucas), Montserrat, Puerto Rico. Bermuda, USA, Central America; introduced to New World; introduced to Lesser Antilles; native to Australia. **Notes.** Called the mealybug destroyer (Wolcott 1950: 207). Introduced to New World from Australia as biocontrol agent against *Saccharicoccus sacchari* (Cockerell) *Nipaecoccus nipae* (Maskell), *Pseudococcus longispinus* (Targioni-Tozzetti).

SUBFAMILY CHILOCORINAE

TRIBE CHILOCORINI

Cladis nitidula Fabricius 1792: 286; Fleutiaux and Sallé 1890: 483; Blackwelder 1944-1957: 451; Bennett and Simmonds 1964: 92. **Distribution.** Barbados, Cuba, Dominica, Guadeloupe, **Martinique**, Puerto Rico, St. Lucia; widespread Antilles endemic. Genus endemic to West Indies. **Notes.** Predator on *Asterolecanium* sp.

Chilocorus cacti (Linnaeus) 1767: 584 (*Coccinella*); Blackwelder 1944-1957: 451; Ramos 1946: 37; Wolcott 1950: 311; Bennett and Simmonds 1964: 91; Miskimen and Bond 1970: 90; Bennett and Alam 1985: 25; Gordon 1985: 646; Ivie et al. 2008b: 251 (*Chilocerus*); Turnbow and Thomas 2008: 27; Pérez-Gelabert 2008: 108. **Distribution.** Bahamas, Barbados Cuba, Dominica, Hispaniola, **Martinique**, Mona, Montserrat, Puerto Rico (introduced), St. Croix. USA to Mexico to Trinidad, Guyana, South America; widespread New World. **Notes.** An important introduced biocontrol agent; predaceous on Barbados on *Planococcus citri*, *Phenacoccus gossypii*, *Icerya purchasi* Maskell, *Aspidiotus destructor*, *Aleurodicus cocois*, *A. dispersus*, *Coccus viridis*, *Geococcus coffeae*, *Lepidosaphes beckii*, and *Asreroecanium bambusae* (Boisduval).

Curinus coeruleus Mulsant 1850: 472; Bennett and Simmonds 1964: 92. **Distribution.** Barbados (probably introduced, det. R. D. Gordon), **Martinique**, Puerto Rico (introduced from Martinique, Wolcott 1950: 312). USA (FL), Mexico to Trinidad and Brazil; widespread New World. **Notes.** Predator on *Asterolecanium bambusae*.

SUBFAMILY COCCINELLINAE

TRIBE COCCINELLINI

Coleomegilla maculata (DeGeer) 1775: 392 (*Coccinella*); Fleutiaux and Sallé 1890: 482 (*Megilla*); Gorham 1898b: 339; Blackwelder 1944-1957: 453; Tucker 1952: 344; Bennett and Simmonds 1964: 93; Miskimen and Bond 1970: 90; Bennett and Alam 1985: 25. **Distribution.** Barbados, Cuba, Curaçao, Grenada, Guadeloupe, Jamaica, **Martinique**, St. Croix, St. Vincent. USA, Mexico to Colombia, Venezuela, Trinidad to Argentina; widespread New World. **Notes.** Predaceous on aphids (*Aphis* spp.), eggs of *Spodoptera* spp. and on other soft bodied insects on Barbados.

Cycloneda sanguinea (Linnaeus) 1763: 10 (*Coccinella*); Fleutiaux and Sallé 1890: 483 (*Neda*); Gorham 1898b: 339; Leng 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* (Forbes), *Aphis* spp., *Toxoptera auranti* (Boyer de Fonscolombe), *Myzus persicae* (Sulzer), *Saccharosydne saccharivora* (Westwood), *Orthezia* spp., *Diatraea saccharalis* (Fab.), *Spodoptera* spp., *Anornis* spp., and the moths *Pseudoplusia includens* (Walker), *Trichoplusia ni* Hübner, *Plutella xylostella* (L.), and *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.

123. FAMILY CORYLOPHIDAE, The minute hooded beetles**SUBFAMILY RHYPOBIINAE****TRIBE RHYPOBIINI**

Rhyphobius brevicornis Matthews 1899: 174; Blackwelder 1944-1957: 431. **Distribution.** **Martinique**, St. Vincent; Lesser Antilles endemic.

SUPERFAMILY TENEBRIONOIDEA**128. FAMILY CIIDAE, The minute tree-fungus beetles****SUBFAMILY CIINAE**

Cis melliei Coquerel 1849: 441; Blackwelder 1944-1957: 549; Valentine and Ivie 2005: 278; Ivie et al. 2008b: 252. **Distribution.** Guana, **Martinique**, Montserrat; widespread Antilles endemic?.

135. FAMILY ZOPHERIDAE, The zopherid beetles**SUBFAMILY ZOPHERINAE****TRIBE PYCNOMERINI**

Pycnomerus biimpressus Reiter 1877: 355; Blackwelder 1944-1957: 472; Ivie and Slipinski 1989: 69; Ivie et al. 2008b: 253. **Distribution.** Cuba, Dominica, Grenada, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Montserrat, Puerto Rico, St. Vincent, Tortola. Guatemala, Peru, Brazil; widespread Antilles and Latin America.

Pycnomerus infimus (Grouvelle) 1902: 464 (*Penthelispa*); Leng and Mutchler 1914: 413; Blackwelder 1944-1957: 47 (as *infirma*); Ivie and Slipinski 1989: 78. =*Penthelispa longior* Grouvelle in Grouvelle and Raffray 1912: 294 of Guadeloupe; Leng and Mutchler 1914: 413; Blackwelder 1944-1957: 472. =*Penthelispa* sp. Champion 1898: 401 of St. Vincent; Leng and Mutchler 1914: 413; Blackwelder 1944-1957: 472. **Distribution.** Dominica, Guadeloupe, **Martinique**, St. Vincent. Brazil; Lesser Antilles and Latin America.

140. FAMILY TENEBRIONIDAE, The darkling beetles**SUBFAMILY PHRENAPATINAE****TRIBE TRIENTOMINI**

Trientoma martinicensis Allard 1883: 14; Blackwelder 1944-1957: 513; Marcuzzi and d'Aguilar 1971: 79; Marcuzzi 1984: 74. **Distribution.** **Martinique**; single island endemic. Genus endemic to West Indies.

SUBFAMILY DIAPERINAE**TRIBE PHALERIINI**

Phaleria testacea Say 1824: 280; Marcuzzi 1984: 84; Triplehorn and Watrous 1979: 289; Watrous and Triplehorn 1982: 19; Triplehorn 1991: 266; 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, Marie-Galante, **Martinique**, Mona, Mustique, Nevis, Puerto Rico, St. Barthélemy, St. Eustatius, St. Martin, Virgin Islands; most Caribbean islands. Trinidad, Venezuela (including Margarita), French Guiana, Atlantic coastal from NE USA (Maine) to Argentina; widespread New World.

TRIBE TRACHYSCELINI

Trachyscelis aphodioides 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); Touroult 2005: 88; Valentine and Ivie 2005: 279. **Distribution.** Barbuda, Guadeloupe, Guana, Marie-Galante, **Martinique**, Puerto Rico, St. Barthélemy, St. Martin, 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

Ammodonus ciliatus (Champion) 1896: 9 (*Scaptus*); Blackwelder 1944-1957: 525; Marcuzzi and d'Aguilar 1971: 81; Chalumeau 1982b: 192; Marcuzzi 1984: 83. **Distribution.** Désirade, Guadeloupe, Les Saintes, Marie-Galante, **Martinique**, St. Lucia, St. Vincent. Eastern Venezuela (including Margarita); Lesser Antilles and Latin America. **Notes.** In coastal sand dunes.

Ctesicles insularis Champion 1896: 7; Blackwelder 1944-1957: 524; Marcuzzi 1977: 25, 1984: 79. **Distribution.** **Martinique**, St. Vincent; Lesser Antilles endemic. Genus endemic to Lesser Antilles.

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 mulsanti Marcuzzi 1954: 9; Marcuzzi and d'Aguilar 1971: 79; Marcuzzi 1984: 77. =*Diastolinus hummelincki* Marcuzzi 1962: 28. **Distribution.** ?**Martinique**, St. John, St. Thomas; 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 1982b: 192. **Distribution.** Anguilla, Fourche, Guadeloupe, Désirade, Les Saintes, Marie-Galante, **Martinique**, St. Barthélemy, St. Croix, St. Martin, Tintamarre; Lesser 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. **Distribution.** Antigua, Barbados, Bequia, Dominica, Grenada, Guadeloupe, Jamaica, Les Saintes, Marie-Galante, **Martinique**, Montserrat, Mustique, Nevis, St. Croix, St. Kitts, St. Lucia, 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 ULOMINI

Alegoria laportei (Fleutiaux and Sallé) 1890: 425 (*Allegoria*); Leng and Mutchler 1914: 462; Blackwelder 1944-1957: 531; Marcuzzi 1984: 94; Marcuzzi and d'Aguilar 1971: 86; Chalumeau 1982b: 190, 193 (lectotype). **Distribution.** Dominica, Guadeloupe (type locality), **Martinique**; Lesser Antilles endemic.

Antimachus ardoini Chalumeau 1982b: 188; Marcuzzi 1984: 94. **Distribution.** **Martinique**; single island endemic.

Uloma retusa Fabricius 1801: 149; Fleutiaux and Sallé 1890: 426; Leng and Mutchler 1914: 462; Blackwelder 1944-1957: 532; Spilman 1971: 7, 8; Marcuzzi and d'Aguilar 1971: 87; Chalumeau 1982b: 184; Ivie et al. 2008b: 253. **Distribution.** Dominica, Guadeloupe, **Martinique**, Montserrat, Puerto Rico, St. Lucia. Mexico to Colombia, to Peru, Argentina, Brazil; widespread Antilles and Latin America.

TRIBE TRIBOLIINI

Tribolium castaneum (Herbst) 1797: 282 (*Colydium*); Leng and Mutchler 1914: 462; Blackwelder 1944-1957: 531; Ramos 1946: 40; Wolcott 1950: 328; Miskimen and Bond 1970: 92; Marcuzzi 1977: 38, 1984: 93; Ivie et al. 2008b: 253. =*Uloma rubens* Laporte 1840: 220. =*Tribolium ferrugineum* Fabricius 1781: 324, Fleutiaux and Sallé 1890: 425 of Guadeloupe; Champion 1896: 19. **Distribution.** Barbados, Cuba, Curaçao, Grenada, Guadeloupe, Hispaniola, Jamaica, Margarita, **Martinique**, Mona, Montserrat, Puerto Rico, St. Croix, St. Vincent. USA to Argentina; introduced to New World; introduced to Lesser Antilles; native to Old World; cosmopolitan. **Notes.** The red flour beetle. A pest in many kinds of stored products; also under tree bark.

TRIBE ALPHITOBIIINI

Alphitobius diaperinus (Panzer) 1797: 16 (*Tenebrio*); Blackwelder 1944-1957: 532; Miskimen and Bond 1970: 92; Marcuzzi and d'Aguilar 1971: 87; Marcuzzi 1977: 39, 1984: 95; Ardoin 1977: 383; Turnbow and Thomas 2008: 53; Pérez-Gelabert 2008: 112. **Distribution.** Bahamas, Barbados, Cuba, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Puerto Rico, St. Croix. Mexico, Trinidad, USA; widespread New World; cosmopolitan. **Notes.** The lesser mealworm beetle. Spread by commerce; pest in many kinds of dried materials, and especially in spoiled grain.

TRIBE TENEBRIONINI

Zophobas atratus Fabricius 1775: 256; Marcuzzi and d'Aguilar 1971: 90; Bennett and Alam 1985: 27; Chalumeau 1982b: 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* spec?, Uyttenboogaart 1902: 116 of Barbados. **Distribution.** Aruba, Barbados, Bonaire, Cuba, Culebra, Curaçao, Dominica, Grenada, Guadeloupe, Hermanos, Hispaniola, Jamaica, Margarita; **Martinique**, Puerto Rico, Saba, St. Barthélemy; St. Croix, St. Martin, St. Thomas, St. Vincent. USA (CA-FL), Mexico to Panama, Ecuador including Galapagos, Venezuela (Testigos), 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.

TRIBE AMARYGMINI

Cymatotheres nebulosa (Fabricius) 1781: 158 (*Pyanisia*); Marcuzzi and d'Aguilar 1971: 95; Chalumeau 1982b: 195; Marcuzzi 1984: 104. =*Cymatotheres undata* (Fabricius) 1792: 122 (*Pyanisia*); Fleutiaux and Sallé 1890: 429 of Guadeloupe; Blackwelder 1944-1957: 544. **Distribution.** Cuba, Guadeloupe, Hispaniola, **Martinique**. Mexico to Panamá, to Brazil and Argentina; widespread Antilles and Latin America.

SUBFAMILY COELOMETOPINAE

TRIBE COELOMETOPINI

Cyrtosoma martiniquensis Marcuzzi 1999: 83. **Distribution.** Martinique; single island endemic.

TRIBE STRONGYLIINI

Strongylium chalconotum Mäklin 1864: 323; Leng and Mutchler 1914: 464; Blackwelder 1944-1957: 545; Marcuzzi and d'Aguilar 1971: 05; Marcuzzi 1984: 105. **Distribution.** Martinique; single island endemic.

143. FAMILY OEDEMERIDAE, The false blister beetles

SUBFAMILY OEDEMERINAE

TRIBE ASCLERINI

Hypasclera floridana (Horn) 1896: 397; Arnett 1983: 6. **Distribution.** Bahamas, Jamaica, Martinique. USA (AL, FL); widespread Antilles and North and/or Central America.

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, 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.

Paroxaxis antillarum (Champion) 1896: 39 (*Oxaxis*); Blackwelder 1944-1957: 491. **Distribution.** Martinique, St. Vincent. Tobago; Lesser Antilles and Latin America.

145. FAMILY MELOIDAE, The blister beetles

SUBFAMILY NEMOGNATHINAE

TRIBE NEMOGNATHINI

Pseudozonitis marginata (Fabricius) 1781: 159 (*Lagria*); Selander and Bouseman 1960: 214, 1961: 191; Valentine and Ivie 2005: 279; Ivie et al. 2008b: 252; Turnbow and Thomas 2008: 43. =*Epicauta annulicornis* Chevrolat 1877: ix; Blackwelder 1944-1957: 482. =*Lytta delauneyi* Fleutiaux and Sallé 1890: 433 of Guadeloupe. =*Zonitis lineatus* Champion 1896: 53 of Grenada. **Distribution.** Bahamas, Barbados, Cuba, Dominica, Grenada, Guadeloupe, Guana, Hispaniola, Jamaica, Martinique, Montserrat, Puerto Rico, St. Croix, St. Lucia; widespread Antilles endemic.

151. FAMILY SALPINGIDAE, The narrow-waisted bark beetles

SUBFAMILY INOPEPLINAE

Inopeplus praeustus (Chevrolat) 1858: 212 (*Ino*); Fleutiaux and Sallé 1890: 388; Champion 1898: 403; Blackwelder 1944-1957: 108 (in Staphylinidae); Spilman 1971: 4 (in Inopeplidae); Valentine and Ivie 2005: 279; Ivie et al. 2008b: 254. **Distribution.** Cuba, Dominica, Guadeloupe, Guana, Martinique, Montserrat, St. Vincent; widespread Antilles endemic.

152. FAMILY ANTHICIDAE, The antlike flower beetles**SUBFAMILY ANTHICINAE****TRIBE ANTHICINI**

Omonadus floralis (Linnaeus) 1758: 420 (*Anthicus*); Champion 1896: 47; Blackwelder 1944-1957: 433; Ramos 1946: 39; Bonadona 1981: 282; Pollock and Ivie 1996: 235. **Distribution.** Cuba, Grenada, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Mona, Puerto Rico, St. Croix. USA, Central and South America; introduced to Lesser Antilles; introduced to New World; cosmopolitan (Werner 1983: 232 (*Anthicus*)). **Notes.** The narrow-necked grain beetle; in stored grain and dried fruit.

SUPERFAMILY CHRYSOMELOIDEA**155. FAMILY CERAMBYCIDAE, The longhorned wood boring beetles****SUBFAMILY PARANDRINAE****TRIBE PARANDRINI**

Parandra (*Parandra*) *pinchoni* Villiers 1979c: 182; 1980a: 129, 1980b: 137; Chemsak et al. 1992: 13; Monné and Hovore 2005: 2; Chalumeau and Touroult 2005a: 43. **Distribution.** Dominica, **Martinique**; Lesser Antilles endemic. **Notes.** Found in rotted logs and tree trunks.

SUBFAMILY PRIONINAE**TRIBE MACROTOMINI**

Mallodon spinibarbis (Linnaeus) 1758: 390 (*Cerambyx*); Gahan 1895: 83; Chalumeau and Touroult 2005a: 47. **Distribution.** Curaçao, **Martinique**, St. Lucia, St. Vincent. Mexico to Argentina, Aruba; Lesser Antilles and Latin America. **Notes.** In several tree species in dry and humid forest zones.

Nothopleurus maxillosus (Drury) 1773: 86 and Plate 38, Figure 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 simaruba* (L.) Sarg. and other trees.

TRIBE SOLENOPTERINI

Solenoptera canaliculata (Fabricius) 1787: 130 (*Prionus*); Gahan 1895: 86; Blackwelder 1944-1957: 554 (*Derancistrus*); Villiers 1979a: 24, 1980b: 145; Galileo and Martins 1993: 441; Chalumeau and Touroult 2005a: 54; Vitali and Touroult 2005: 65 (larva), 2006: 3 (pupa). **Distribution.** Bequia, Guadeloupe (subspecies *S. c. asteria* Gahan), **Martinique** (invalid subspecies *asteria* Gahan), Mustique, St. Lucia, St. Vincent, Union. Trinidad; Lesser Antilles and Latin America. **Notes.** In trunks of live trees such as *Acacia* spp., *Eugenia* spp., and *Pimenta* spp.

Solenoptera metallescens Thomson 1860: 306; Villiers 1979a: 24; 1980b: 148; Galileo and Martins 1993: 432; Monné and Hovore 2005: 12; Chalumeau and Touroult 2005a: 58; Touroult 2007: 12. **Distribution.** Dominica, **Martinique** (type locality); Lesser Antilles endemic. Not Cuba.

Solenoptera quadrilineata (Olivier) 1795: 66 (*Prionus*); Gahan 1895: 87; Leng and Mutchler 1914: 444; Villiers 1979a: 24 (neotype), 1980b: 150; Galileo and Martins 1993: 447; Chalumeau and Touroult 2005a: 57. **Distribution.** Guadeloupe (type locality, needs confirmation), **Martinique**; Lesser Antilles endemic.

Solenoptera sulcicollis Thomson 1860: 306; Fleutiaux and Sallé 1890: 460 (*Elateropsis*); Gahan 1895: 86; Villiers 1980b: 147; Galileo and Martins 1993: 442; Chalumeau and Touroult 2005a: 56; Vitali and Touroult 2006: 3 (larva). **Distribution.** **Martinique**, Guadeloupe (type locality); Lesser Antilles endemic. Not Cuba. **Notes.** Larvae bore into wood of orange and other trees; in urban areas and dry to wet forests.

[*Solenoptera thomae* (Linnaeus) 1767: 623 (*Cerambyx*); Villiers 1979a: 24 (neotype); 1980b: 149; Galileo and Martins 1993: 429; Chalumeau and Touroult 2005a: 61. **Distribution.** Cuba, Hispaniola, Jamaica, Puerto Rico, St. Croix, St. Thomas; Guadeloupe (type locality, needs confirmation; and Martinique records are also questionable), Greater Antilles endemic?, probably not in Lesser Antilles, J. Touroult pers. comm., December, 2010].

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 2005a: 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, 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 quadrimaculatum (Fabricius) 1792: 328 (*Callidium*); Chalumeau and Touroult 2005a: 75. =*A. surinamum* sensu Fleutiaux and Sallé 1890: 461 of Guadeloupe. =*Achryson ornatipenne* Perroud 1855: 383; Gahan 1895: 92; Villiers 1980c: 272 (error), corrected in Villiers 1980e: 595 (synonymy). **Distribution.** Guadeloupe, **Martinique**. Trinidad, Aruba, Costa Rica to Argentina; Lesser Antilles and Latin America.

Achryson surinamum (Linnaeus) 1767: 632 (*Cerambyx*); Fleutiaux and Sallé 1890: 461; Gahan 1895: 92; Chemsak 1966: 211; Villiers 1980a: 130; Chalumeau and Touroult 2005a: 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. 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 2005a: 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; Lesser Antilles endemic. **Notes.** Host trees: *Delonix* spp., *Hippomane mancinella* L., *Leucaena* spp., *Acacia* spp. In dry zone forests.

Eburia dejeani Gahan 1895: 94; Villiers 1980c: 278; Chalumeau and Touroult 2005a: 80. **Distribution.** **Martinique**, not Guadeloupe; single island endemic. **Notes.** In dry zone forests, especially mangroves.

[*Eburia inermis* (Fleutiaux and Sallé) 1890: 461 (*Pantomallus*); Gahan 1895: 93; Villiers 1980c: 280; Chalumeau and Touroult 2005a: 84; Ivie et al. 2008b: 257. **Distribution.** Guadeloupe (type locality), Montserrat; not Martinique (misidentification of specimen of *E. insulana* by Villiers); Lesser Antilles endemic. **Notes.** In dry to wet forests.]

Eburia insulana Gahan 1895: 93; Villiers 1979b: 96 (lectotype), 1980c: 280; Chalumeau and Touroult 2005a: 82; Touroult 2007: 6. **Distribution.** **Martinique**, St. Lucia, St. Vincent (type locality), Union; Lesser Antilles endemic.

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, until it was recently collected near Fort-de-France (Chalumeau and Touroult 2005a: 77). It may be a recent introduction.

TRIBE ELAPHIDIINI

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 2005a: 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, Montserrat, Puerto Rico, St. Kitts, St. Croix, St. John, St. Lucia, St. Martin, 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.

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., *Cytharexylum* spp., *Coccoloba wifera*. In dry and moist forests.

Stizocera daudini Chalumeau and Touroult 2004b: 751, 2005a: 93. **Distribution.** **Martinique**; single island endemic. **Notes.** Reared from dead branches.

TRIBE IBIDIONINI

Neocompsa cylindricollis (Fabricius) 1798: 146 (*Heterachtes*); Chalumeau and Touroult 2005a: 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 2005a: 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. Thomas, St. Vincent, Tortola. Trinidad; widespread Antilles and Latin America. **Notes.** Polyphagous on many tree genera.

Neocompsa fulgens (Fisher) 1932: 48 (*Heterachtes*); Villiers 1979b: 97, 1980a: 131, 1980c: 292; Chemsak et al. 1992: 52; Monné and Hovore 2005: 82; Chalumeau and Touroult 2005a: 108. **Distribution.** Dominica (type locality), Guadeloupe, **Martinique**, Union; Lesser Antilles endemic. **Notes.** Host trees: *Hippomane mancinella*, *Piscidia* spp., *Thespesia* spp.

TRIBE PLECTROMERINI

Plectromerus fasciatus (Gahan) 1895: 109 (*Pentomacrus*); Chalumeau and Touroult 2005a: 112, 2005b: 158 (lectotype); Touroult 2007: 12; Nearn and Branham 2008: 33; Ivie et al. 2008b: 257. **Distribution.** Grenada, **Martinique**, St. Vincent; not Montserrat, not Cuba; Lesser Antilles endemic.

TRIBE CALLICHRMATINI

Mionochroma rufescens (Gahan) 1895: 113 (*Callichroma*); Villiers 1980c: 296, 1980f: 98 (lectotype); Chalumeau and Touroult 2005a: 116. **Distribution.** Guadeloupe, **Martinique**, St. Lucia (type locality), ?St. Thomas; Lesser Antilles endemic?; not Mexico and Guyana.

TRIBE TILLOMORPHINI

Bonfilsia pejoti Chalumeau and Touroult 2004a: 189; 2005a: 127. **Distribution.** **Martinique**; single island endemic. Genus endemic to Lesser Antilles. **Notes.** Probably a mimic of ants.
Gourbeyrella madininae Chalumeau and Touroult 2004a: 192, 2005a: 125, Touroult 2007: 12. **Distribution.** **Martinique**; single island endemic. **Notes.** Genus endemic to Lesser Antilles.

TRIBE BOTHRIOSPIILINI

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 2005a: 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

[*Oxymerus basalis* (Dalman) 1823: 65 (*Trachyderes*); Villiers 1980c: 306. **Distribution.** **Martinique** (introduced, cited from a single old specimen, not established); introduced to Lesser Antilles. Venezuela to Brazil, Peru, Bolivia.]

Trachyderes (Dendrobias) maxillosus Dupont 1834: 44; Villiers 1980c: 303; Chalumeau and Touroult 2005a: 135. **Distribution.** **Martinique**; single island endemic. Not Nicaragua.

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

SUBFAMILY LEPTURINAE

TRIBE LEPTURINI

Fortuneleptura cameneni Villiers 1979a: 26, 1980b: 157; Chalumeau 1985b: 150; Chalumeau and Touroult 2005a: 68. **Distribution.** **Martinique**; single island endemic. **Notes.** A diurnal resident of wet forests; a mimic of *Photinus vittiger* firefly beetles, *Anchastus* (= *Achrestus*) sp. elaterids, and *Pseudozonitis marginatus* (Fab) meloids. Genus endemic to Lesser Antilles.

SUBFAMILY LAMIINAE

TRIBE LAMIINI

Taeniotes leucogrammus Thomson 1865: 554; Gahan 1895: 121; Villiers 1980e: 558; Chalumeau and Touroult 2005a: 140; Touroult 2007: 7. **Distribution.** **Martinique** (type locality), St. Lucia; Lesser Antilles endemic. **Notes.** Touroult 2007: 7 has described the subspecies *T. l. luciae* of St. Lucia.

[*Taeniotes pulverulentus* (Olivier) 1790: 302 (*Lamia*); Gahan 1895: 121; Villiers 1980e: 558; Chalumeau and Touroult 2005a: 138. **Distribution.** Grenada; not Guadeloupe and not Martinique. Costa Rica to Paraguay; Lesser Antilles and Latin America. **Notes.** This is listed as a synonym of *T. farinosus* (Linnaeus) 1758: 390 in Monné and Hovore 2005: 270, which occurs from Costa Rica to Peru.]

[*Taeniotes scalaris* Fabricius 1781: 213; Gahan 1895: 121; Villiers 1980e: 556; Chalumeau and Touroult 2005a: 138. **Distribution.** Cuba, Grenada, Martinique (record needs confirmation, probably not established); not Guadeloupe. Mexico, Central and South America; widespread Antilles and Latin America? **Notes.** Host trees; *Ficus* spp., *Morus* spp., *Artocarpus* spp., *Castilloa* spp. Listed as a synonym of *T. scalatus* Gmelin 1790: 1825 in Monné and Hovore 2005: 271.]

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 2005a: 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 uvifera*, *Cordia* spp., *Cossypium* spp., *Hibiscus* spp., *Thespia* spp.

Bebelis picta Pascoe 1875: 73; Chalumeau and Touroult 2005a: 149. =*Dorcasta obtusa* Bates 1885: 372, Gahan 1895: 127 of St. Vincent. =*Bebelis lignosa* Thomson 1864: 110; Breuning 1971: 300 of St. Vincent. **Distribution.** **Martinique**, St. Vincent. Mexico, Guatemala, and Brazil; Lesser Antilles and Latin America. Probably not Cuba.

Rosalba hovorei Touroult 2007:13, Chalumeau and Touroult 2005a: 147 (misidentification as *R. arawakiana* Villiers 1980e: 545 of Guadeloupe). **Distribution.** **Martinique**; single island endemic.

TRIBE ONCIDERINI

Cacostola ornata Fleutiaux and Sallé 1890: 470; Gahan 1895: 125; Villiers 1980e: 551, 1980f: 87 (lectotype); Chalumeau and Touroult 2005a: 158; Dalens and Touroult 2007: 291; Touroult 2007: 8. **Distribution.** Bequia, Barbados, Dominica, Grenada, Guadeloupe, **Martinique**, Montserrat, Mustique, St. Lucia; Lesser Antilles endemic. **Notes.** Host trees: *Mangifera indica* L., *Chrysobalanus* spp., *Avicenia* spp.

Hypsioma grisea (Fleutiaux and Sallé) 1890: 469 (*Hypomia*); Gahan 1895: 125; Villiers 1980d: 466, 1980e: 549, 1980f: 87 (lectotype) (*Tritania*); Monné and Hovore 2005: 204; Chalumeau and Touroult 2005a: 154; Vitali and Touroult 2005: 72 (larva); Dalens and Touroult 2007: 292; Touroult 2007: 8. =*Hypsioma picticornis* Bates 1865: 111; Gahan 1895: 125 of Grenada. **Distribution.** Barbados, Dominica, Grenada, Guadeloupe, **Martinique**, St. Lucia, St. Vincent, Union; Lesser Antilles endemic. **Notes.** Host trees: *Piscidia* spp., *Lonchocarpus* spp., *Mangifera indica*. dry and moist zone forests.

Oncideres amputator (Fabricius) 1792: 276 (*Lamia*); Fleutiaux and Sallé 1890: 470; Gahan 1895: 125; Villiers 1980d: 466, 1980e: 547; Chalumeau and Touroult 2005a: 151; Vitali and Touroult 2005: 74 (larva); Touroult 2007: 8. **Distribution.** Dominica, Grenada, Guadeloupe, Jamaica, Les Saintes, **Martinique**, St. Lucia, St. Vincent; Lesser Antilles endemic. **Notes.** The female of this beetle lays its eggs in a small tree branch and then girdles the branch with its mandibles until the branch drops to the forest floor. The larva develops in the fallen branch. Host trees are: "bois doux" (*Inga* spp., with a diameter up to 20 mm), *Coccoloba uvifera*, *Lonchocarpus* spp., *Diospyros* spp., *Acacia* spp., *Sloanea* spp., *Citrus* spp., etc.

Trestonia signifera Buquet 1859: 49; Fleutiaux and Sallé 1890: 469; Gahan 1895: 125 (*Trestonia*); Villiers 1980e: 549; Chalumeau and Touroult 2005a: 157. **Distribution.** Guadeloupe (type locality), **Martinique**; Lesser Antilles endemic.

TRIBE POGONOCHERINI

Ecyrus hirtipes Gahan 1895: 127; Villiers 1980d: 466, 1980e: 561, 1980f: 88 (lectotype); Chemsak 1969: 189; Ivie and Chemsak 1983: 199; Chalumeau and Touroult 2005a: 163; Valentine and Ivie 2005: 280; Dalens and Touroult 2007: 291; Touroult 2007: 8; Turnbow and Thomas 2008: 17. **Distribution.** Bahamas, Barbados, Cuba, Dominica, Grenada (type locality), Guadeloupe, Guana, Hispaniola, **Martinique**, Montserrat, Puerto Rico, St. John, St. Lucia, St. Thomas, Union; widespread Antilles endemic. **Notes.** Polyphagous on many host trees.

TRIBE DESMIPHORINI

Estola rogueti Chalumeau and Touroult 2005a: 167, 2005b: 158. **Distribution.** **Martinique**; single island endemic. **Notes.** In dry zone forests.

Mimestoloides benardi Breuning 1980: 70; Villiers 1980e: 559; Chalumeau and Touroult 2005a: 166; Touroult 2007: 8. **Distribution.** Guadeloupe (type locality), **Martinique**, Montserrat, St. Lucia; Lesser Antilles endemic. **Notes.** In dry and moist zone forests; reared from branches of *Artocarpus* spp. and captured on *Clusia plukenetii* Urban.

TRIBE ANISOCERINI

Onychocerus crassus (Voet) 1778: 10 (*Cerambyx*); Villiers 1980e: 586; Chalumeau and Touroult 2005a: 168. **Distribution.** Grenada, **Martinique**. Panama to Trinidad, Tobago, to Argentina; Lesser Antilles and Latin America. **Notes.** Host plants: *Spondias* spp., *Hura* sp.

TRIBE ACANTHODERINI

Oreodera glauca (Linnaeus) 1758: 390 (*Cerambyx*); Fleutiaux and Sallé 1890: 471; Gahan 1895: 128; Villiers 1980d: 467, 1980e: 583; Chalumeau and Touroult 2005a: 169; Touroult 2007:11; Turnbow and Thomas 2008: 21. **Distribution.** Bahamas, Dominica, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Puerto Rico, St. Lucia. Mexico to Panama, Argentina; widespread Antilles and Latin America. **Notes.** An anthropophile and possibly introduced to some islands. Host trees: *Ficus* spp., *Artocarpus* spp., *Coccoloba uvifera*, etc.

Steirastoma breve (Sulzer) 1776: 45 (*Cerambyx*); Villiers 1980e: 584; Chalumeau and Touroult 2005a: 171. =*Cerambyx depressum* Fabricius 1781: 214; Gahan 1895: 128. **Distribution.** Grenada, Jamaica, **Martinique**, Puerto Rico, St. Lucia. USA (FL), Costa Rica to Trinidad, Argentina; widespread New World.

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 2005a: 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; Lesser Antilles endemic. Mexico record in doubt. **Notes.** Polyphagous on many tree genera.

Amniscus similis (Gahan) 1895: 136 (*Leptostylus*); Gahan 1895: 136; Villiers 1980d: 466, 1980e: 572, 1980f: 91 (lectotype) (*Leptostyloides*); Chalumeau and Touroult 2005a: 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 antiquae* Gilmour 1963: 15 of Antigua. =*Leptostylopsis testaceus* (Froelich) 1792: 141 (*Leptostylus*); Gilmour 1963: 59. **Distribution.** Antigua, Barbados, Bermuda, Désirade, Dominica, Grenada (type locality), Guadeloupe, Guana, Les 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* spp., *Delonix* spp., *Hippomane mancinella*, *Mangifera indica*, *Artocarpus* spp., *Cecropia* spp., *Clusia* spp.
- Anisopodus dominicensis* Villiers 1980d: 467, 1980e: 581, 1980f: 96; Chemsak et al. 1992: 134. =*Lepturges brochieri* Chalumeau and Touroult 2004a: 193; Chalumeau and Touroult 2005a: 194 (synonymy). **Distribution.** Dominica, **Martinique**; Lesser Antilles endemic. **Notes.** In moist forest.
- 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. 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 and species, 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.
- Leptostylopsis martinicensis* Villiers 1980e: 569, 1980f: 91; Chalumeau 1983b: 226; Chalumeau and Touroult 2005a: 200; Touroult 2007:11, 12. =*Leptostylopsis rogueti* Chalumeau 1983b: 227. **Distribution.** **Martinique**, St. Lucia; Lesser Antilles endemic. **Notes.** In dry and moist zone forests; reared from branches of *Lonchocarpus punctatus* Kunth and found on *Mangifera indica* and *Inga* spp.
- Nealcidion socium* (Gahan) 1895: 131 (*Alcidion*); Villiers 1980e: 567, 1980f: 89 (lectotype); Chalumeau and Touroult 2005a: 211. **Distribution.** Grenada, **Martinique**, St. Vincent (type locality). Trinidad, Venezuela; Lesser Antilles and Latin America.
- Oedopeza fleutiauxi* (Villiers) 1980f: 95 (*Chaetanes*); Villiers 1980c: 467, 1980e: 578; Chemsak et al. 1992: 144; Monné and Hovore 2005: 266; Chalumeau and Touroult 2005a: 183; Vitali 2001: 152 (larva). **Distribution.** Dominica, Guadeloupe, **Martinique**; Lesser Antilles endemic. **Notes.** Under bark of *Dacryodes* sp.
- Styloleptus posticalis* (Gahan) 1895: 133 (*Leptostylus*); Villiers 1980d: 467, 1980e: 573, 1980f: 93 (lectotype); Chalumeau 1983b: 228, 229; Chalumeau and Touroult 2005a: 204; Touroult 2007: 11, 12. =*Styloleptus inermis* Fabricius 1801: 293, *sensu* 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), Gilmour 1963: 59. **Distribution.** Barbados, Bermuda (introduced), Dominica, Grenada, Guadeloupe, Marie-Galante, **Martinique**, Montserrat, St. Barthélemy, St. Lucia, St. Vincent; Lesser Antilles endemic. The nominate subspecies is limited to Grenada and St. Vincent. **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 2005a: 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 cobbeni* Gilmour 1963: 85; Villiers 1980e: 580; Chalumeau 1983b: 233; Chalumeau and Touroult 2005a: 188; Dalens and Touroult 2007: 291. **Distribution.** Barbados, Désirade, Guadeloupe, Les Saintes, Marie-Galante, **Martinique**, Montserrat, Saba, St. Barthélemy, St. Eustatius, St. Martin;

Lesser Antilles endemic. Curaçao and Bonaire records are in error. **Notes.** In dry to wet forests; developing in branches of many species of trees.

Urgleptes guadeloupensis (Fleutiaux and Sallé) 1890: 472 (*Lepturges*); Gahan 1895: 136; Ramos 1946: 42; Villiers 1980d: 467, 1980e: 579, 1980f: 94 (lectotype); Chalumeau 1983b: 233; Chalumeau and Touroult 2005a: 190; Touroult 2007: 11, 12; Turnbow and Thomas 2008: 22. **Distribution.** Bahamas, Barbados, Cuba, Curaçao, Dominica, Grenada, Guadeloupe, Hispaniola, Les Saintes, **Martinique**, Mona, Montserrat, Mustique, ?Puerto Rico, St. Croix, St. Lucia, St. Vincent; widespread Antilles endemic. **Notes.** Polyphagous on many tree genera.

Urgleptes leopaulini Touroult 2004: 66; Chalumeau and Touroult 2005a: 192; Touroult 2007:12. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

TRIBE CYRTININI

Cyrtinus hubbardi Fisher 1926: 38; Villiers 1980d: 467, 1980e: 588; Chalumeau and Touroult 2005a: 217. **Distribution.** Dominica, Guadeloupe, **Martinique**, Montserrat; Lesser Antilles endemic. **Notes.** Larvae develop in branches of *Inga* spp., *Lonchocarpus* spp. and *Acacia* spp. in humid and wet forests.

Decarthria stephensi Hope 1834: 16; Gahan 1895: 138; Villiers 1980e: 589; Chalumeau and Touroult 2005a: 219. **Distribution.** Guadeloupe, **Martinique**, St. Vincent (type locality); Lesser Antilles endemic. **Notes.** Develops in branches of *Ficus* spp., *Rhizophora* spp., *Coccoloba uvifera*.

TRIBE CALLIINI

Mesestola guadeloupensis Breuning 1980: 70; Villiers 1980e: 594; Chalumeau and Touroult 2005a: 225; Touroult 2007:12. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic. Genus endemic to West Indies.

TRIBE HEMILOPHINI

Adesmus chalumeau Touroult 2004: 70; Chalumeau and Touroult 2005a: 223. **Distribution.** **Martinique**; single island endemic. **Notes.** Taken in upper elevation forest on *Cecropia peltata* leaves.

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? Pan-tropical, nearly cosmopolitan. **Notes.** The Mexican bean bruchid. Pest of stored beans, probably native to Mexico or SW USA. Hosts: many leguminous genera.

159. FAMILY CHRYSOMELIDAE, The leaf beetles

SUBFAMILY CRIOCERINAE

TRIBE CRIOCERINI

Neolema dorsalis (Olivier) 1791: 201 (*Lema*); Jacoby 1897: 250 (*Lema*); Blackwelder 1944-1957: 629; Cooter 1983: 185 (*Lema*); Takizawa 2003: 6; Valentine and Ivie 2005: 280; Ivie et al. 2008b: 255. =*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

Echoma distincta (Boheman) 1854: 141 (*Omoplata*); Fleutiaux and Sallé 1890: 481; Blackwelder 1944-1957: 743; Takizawa 2003: 101. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

TRIBE CASSIDINI

Hilarocassis exclamationis (Linnaeus) 1767: 577 (*Cassida*); Fleutiaux and Sallé 1890: 480 (*Mesomphalia*); Champion 1897b: 278; Blackwelder 1944-1957: 742; Takizawa 2003: 104. **Distribution.** Grenada, Guadeloupe, **Martinique**, Puerto Rico, St. Vincent, Union. Mexico, Central, South America; Trinidad; widespread Antilles and Latin America. **Notes.** Feeds on *Jacquemontia* sp.

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.

SUBFAMILY EUMOLPINAE

TRIBE TYPOPHORINI

Eumolpus imperialis Baly 1877: 51; Blackwelder 1944-1957: 663; not listed in Takizawa 2003. **Distribution.** **Martinique**. French Guiana; Lesser Antilles and Latin America.

SUPERFAMILY CURCULIONOIDEA

161. FAMILY ANTHRIBIDAE, The fungus weevils

SUBFAMILY ANTHRIBINAE

TRIBE ZYGAENODINI

Ormiscus conis Jordan 1924: 240; Valentine 2004: 61. **Distribution.** Dominica, Guadeloupe (type locality), **Martinique**; Lesser Antilles endemic.

Ormiscus lineicollis (Chevrolat) 1880: 198 (*Brachytarsus*); Valentine 2004: 61. **Distribution.** **Martinique** (type locality), St. Lucia; Lesser Antilles endemic.

167. FAMILY CURCULIONIDAE, The snout beetles and true weevils

SUBFAMILY DRYOPHTHORINAE

TRIBE RHYNCHOPHORINI

SUBTRIBE RHYNCHOPHORINA

Rhynchophorus palmarum (Linnaeus) 1758: 377 (*Curculio*); Fleutiaux and Sallé 1890: 453; Hustache 1932: 376; Bennett and Alam 1985: 30; Pérez-Gelabert 2008: 134. **Distribution.** Barbados, Cuba, Dominica, Guadeloupe, Hispaniola, **Martinique**, St. Vincent. USA (CA, TX), Mexico to Panama, South America; widespread New World. **Notes.** These large weevils are primarily associated with a wide variety of palms. According to Wattanapongsiri (1966), *R. palmarum* has been associated with species of the palm genera *Acrocomia*, *Attalaea*, *Bactris*, *Chrysalidocarpus*, *Cocos* (including coconut palm), *Desmoncus*, *Elaeis* (including oil palm), *Euterpe*, *Guilielma*, *Manicaria*, *Maximiliana*, *Oreodoxa*, *Ricinus*, and *Sabal* as well as *Gynerium* and *Saccharum* (sugar cane) (Graminae), *Carica* and *Jaracatia* (Caricaceae), *Ananas* (pineapple) (Bromeliaceae) and *Musa* (banana) (Musaceae). Adult females lay eggs in the base of leaf sheaths, terminal shoots or in cuts made in the trunk. Larvae tunnel through the softest parts of the trunk, generally destroying the heart. Once they have finished feeding the top of the palm is weakened and may topple. Larvae prepare a cocoon around themselves inside the base of the trunk made from the fibers in the stem. The species develops throughout the year. The complete life cycle varies from 45 to 180 days depending on location. **Economic significance.** This species is a serious pest of coconut palms and other crops including banana, papaya, cacao, and sugarcane throughout Central and South America and the West Indies. Damage is due to the feeding habits of the larvae which generally weaken the trunk or stem to the point at which the plant is easily broken or toppled.

SUBTRIBE SPHENOPHORINA

Cosmopolites sordidus (Germar) 1824: 299 (*Calandra*); Fleutiaux and Sallé 1890: 455; Hustache 1932: 383; Bennett and Alam 1985: 30; Wibmer and O'Brien 1989: 24; Ivie et al. 2008b: 276. **Distribution.** Barbados, Cuba, Dominica, Guadeloupe, Hispaniola, Jamaica, **Martinique**, Montserrat, Puerto Rico, St. Croix. USA (FL), Mexico to Panama, South America, Old World; widespread New World. **Notes.** The common name is the banana corm weevil. This species is primarily, if not exclusively, associated with bananas (*Musa* spp.). According to Woodruff (1969), there are some citations of the species also being associated with manilla hemp, plantain, sugar cane and yam but these may be in error, or these plants may be attacked only if bananas are not present. Eggs are laid singly between the leaf sheaths as well as around the corm. Newly emerged larvae bore into the corm. The complete life cycle takes from 30 to 40 days with the egg stage lasting 5 to 7 days, the larval stage 15 to 20 days, and the pupal stage 6 to 8 days. Adults are primarily nocturnal. The immature stages were described by Anderson (1948). **Economic significance.** This species is also commonly called the "banana root borer" but its status as a primary pest of bananas needs to be confirmed since most dryophthorids only attack plants that are already sick, weakened or injured. Damage to the banana plants consists of extensive tunneling by the larvae in the corm, thus weakening the plant and making it susceptible to damage or blow-down from winds or other factors.

Metamasius atricolor (Chevrolat) 1880c: 198 (*Sphenophorus*). **Distribution.** **Martinique**; single island endemic.

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 re-infest subsequent crops.

Metamasius liratus (Gyllenhal) 1838: 914 (*Sphenophorus*); Coquerel 1849: 445; Fleutiaux and Sallé 1890: 455; Hustache 1932: 378 (*Sphenophorus*). **Distribution.** Dominica, Guadeloupe, **Martinique**; Lesser Antilles endemic. **Notes.** Vaurie (1966) notes that in Guadeloupe this species is common on 'balisiers' (canna or canna lily, *Canna indica* L.) and has been found in rain-soaked banana trunks lying on the ground.

Metamasius maurus (Gyllenhal) 1838: 912 (*Sphenophorus*); O'Brien and Wibmer 1982: 218. **Distribution.** Dominica, Grenada, Guadeloupe, **Martinique**, St. Croix, St. Vincent; Lesser Antilles endemic. **Notes.** Vaurie (1966) reports specimens (including larvae and pupal cells) taken from rotting trunks of banana in Martinique. No larvae have been found in healthy trunks and it has been suggested that this species could prove useful in hastening decomposition of old trunks.

Metamasius quadrisignatus (Gyllenhal) 1838: 907 (*Sphenophorus*); Fleutiaux and Sallé 1890: 454; Hustache 1932: 381; Ivie et al. 2008b: 276. =*M. bisignatus* Hustache 1932: 382 of Guadeloupe. =*M. tetraspilosus* (Chevrolat) 1880: XXXII (*Sphenophorus*) of Guadeloupe. **Distribution.** Dominica, Guadeloupe, **Martinique**, Montserrat. Panama; Lesser Antilles and Latin America. **Notes.** Vaurie (1966) reports specimens taken from the crowns of *Tillandsia* sp. in Montserrat.

Sphenophorus pygidialis Chevrolat 1880c: 198. **Distribution.** **Martinique**; single island endemic.

Sphenophorus tetraspilosus Chevrolat 1880c: XXXI. =*S. tetraspilotus*: Chevrolat 1880: 315 [error] of Guadeloupe. **Distribution.** Bahamas, Cuba, Hispaniola, Guadeloupe, **Martinique**, Puerto Rico. USA (KS, MO), Mexico; widespread Antilles and North and/or Central America.

Sphenophorus venatus (Say) 1831: 22; O'Brien and Wibmer 1982: 214; Ivie et al. 2008b: 276; Pérez-Gelabert 2008: 137. **Distribution.** Bahamas, Cuba, Hispaniola, **Martinique**, Montserrat, Puerto Rico. USA (widespread), Mexico, Honduras.

SUBFAMILY CURCULIONINAE

TRIBE ANTHONOMINI

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; synonymy in Clark 1992: 286. **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.

Anthonomus rufirostris Gyllenhal 1836: 354; Fleutiaux and Sallé 1890: 444; Hustache 1929: 256. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

Anthonomus suturellus Gyllenhal 1836: 357. **Distribution.** Cuba, **Martinique**; widespread Antilles endemic.

SUBFAMILY COSSONINAE

TRIBE RHYNCOLINI

Rhyncolus filum (Chevrolat) 1880: 198 (*Phloeophagus*). **Distribution.** **Martinique**; single island endemic.

SUBFAMILY CRYPTORHYNCHINAE

TRIBE CRYPTORHYNCHINI

SUBTRIBE CRYPTORHYNCHINA

Sternochetus mangiferae (Fabricius) 1775: 139 (*Curculio*); Anonymous 1986: 215; Woodruff and Fasulo 2007: 1; Ivie et al. 2008b: 278. **Distribution.** Barbados, British Virgin Islands, Dominica, Grenada, Guadeloupe, **Martinique**, Montserrat, St. Lucia, St. Vincent. Australasia, Asia, Africa, North America (Hawaii), South America (French Guiana, Trinidad and Tobago), Oceania to Lesser Antilles; introduced to New World from Old World, not established in Florida as of 2007. **Notes.** The common name is the mango seed weevil. **Economic importance.** A pest of mangos, and intercepted at U. S. ports (mainland and Puerto Rico and Virgin Islands). Woodruff (1970) and Woodruff and Fasulo (2007) report that in Hawaii eggs are laid on mango fruits in various stages of development. Eggs hatch 5 to 7 days later and the newly hatched larva burrows through the fruit into the seed. There are 5 larval instars. Pupation takes place in the seed. Generally one adult matures in each seed. This species has only been found in association with *Mangifera indica*.

SUBTRIBE TYLODINA

Euscepes porcellus Boheman 1844: 430; Hustache 1930: 178; Miskimen and Bond 1970: 99; Turnbow and Thomas 2008: 31. =*Acalles longulus* (LeConte) 1876: 244. =*E. porcatus*: Chevrolat 1879: 109 [error]. **Distribution.** Bahamas, Cuba, Hispaniola, Guadeloupe, Jamaica, **Martinique**, Puerto Rico, St. Croix. USA (FL); Belize, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama; widespread New World.

Gerstaeckeria fairmairei (Coquerel) 1849: 450 (*Cleogonus*). **Distribution.** **Martinique**; single island endemic.

Lembodes arachnipes Chevrolat 1880: 198. **Distribution.** **Martinique**; single island endemic.

Oxypteropsis decemguttatus Chevrolat 1880: 294; Hustache 1930: 184. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

Oxytenopterus decemguttata (Chevrolat) 1880: 294 (*Cryptorhynchus*); Fleutiaux and Sallé 1890: 450. **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

SUBFAMILY ENTIMINAE

TRIBE EUSTYLINI

Diaprepes abbreviatus (Linnaeus) 1758: 386 (*Curculio*); Fleutiaux and Sallé 1890: 436; Uyttenboogaart 1902: 118; Hustache 1929: 183; Ramos 1946: 43; Miskimen and Bond 1970: 99; O'Brien and Wibmer 1982: 55; Cooter 1983: 186; Valentine and Ivie 2005: 282; Ivie et al. 2008b: 279. =*Curculio abbreviatus* variety *brevis* (Olivier) 1790: 549 of Guadeloupe, of Martinique. =*Curculio abbreviatus* variety *distinguendus* Gyllenhal 1834: 10 of Guadeloupe, of Martinique, of Puerto Rico. =*Curculio abbreviatus* variety *guadeloupensis* Gyllenhal 1834: 11 of Guadeloupe. =*Curculio abbreviatus guadeloupensis* Hustache 1929: 184 [not *guadeloupensis* Gyllenhal 1834]. **Distribution.** Barbados, Dominica, Guadeloupe, Guana, Hispaniola, **Martinique**, Mona, Montserrat, Puerto Rico, St. Croix, St. Lucia, St. Vincent; widespread Antilles endemic. USA (FL, introduced, first reported in 1964). **Notes.** The citrus root weevil or the diaprepes root weevil. **Economic importance.** This pest is commonly called 'the sugar cane root stalk borer weevil. It is a serious pest in Florida and the West Indies, attacking roots of citrus and a wide variety of other plants including many other cultivated trees and shrubs such as avocado Woodruff (1964, 1968, 1985). It is also a pest in the French Antilles (Mauleon and Mademba-Sy 1988). Ulmer et al. (2006) report on the parasitoids of the weevil's eggs on St. Lucia. Adults feed on leaves and larvae bore into the roots of plants.

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 species is a pest in citrus nurseries. The biology is likely similar to that of *D. abbreviatus* (L.).

Diaprepes reticulatus Chevrolat 1880: 165. **Distribution. Martinique;** single island endemic. **Notes.** A possible pest of citrus.

Diaprepes variegatus Chevrolat 1880: 165; O'Brien and Wibmer 1982: 56. **Distribution. Martinique;** single island endemic. **Notes.** A possible pest of citrus.

Exophthalmus hemigrammus (Chevrolat) 1880: 197 (*Diaprepes*). =*Exophthalmodes hemipterus* (Lona) 1938: 520 [error] **Distribution. Martinique;** single island endemic.

Exophthalmus martinicensis Chevrolat 1879: XCVIII. **Distribution. Martinique;** single island endemic.

Oxydereces cretaceus (Fabricius) 1792: 452 (*Curculio*); Fleutiaux and Sallé 1890: 435 (*Oxyderces*); Hustache 1929: 189 (*Plococompsus*). =*Compsus scutellaris* (Chevrolat) 1880: 197. **Distribution. Guadeloupe, Martinique;** Lesser Antilles endemic.

TRIBE NAUPACTINI

Ericydeus marginicollis (Chevrolat) 1880c: 197 (*Cyphus*). **Distribution. Martinique;** single island endemic.

Ericydeus viridis (Chevrolat) 1880c: 197 (*Cyphus*). **Distribution. Martinique;** single island endemic.

SUBFAMILY MOLYTINAE

TRIBE ANCHONINI

Anchonus delauneyi Chevrolat 1879: 84; Fleutiaux and Sallé 1890: 441; Hustache 1929: 227. =*Anchonus alveolatus* Chevrolat 1880: 213. =*Anchonus delaunayi*: Chevrolat 1879: 84 [incorrect original spelling; emended Chevrolat 1879: 109]. =*Anchonus hopei*: Chevrolat 1880: 197 [misidentification, not Fahraeus 1843]; Hustache 1929: 224. =*Anchonus rudis* Chevrolat 1879: 84. **Distribution. Guadeloupe, Martinique;** Lesser Antilles endemic.

Anchonus serietuberculatus Fahraeus 1843: 405; Fleutiaux and Sallé 1890: 442; Hustache 1929: 234. =*Anchonus impressus* Fahraeus 1843: 402 of St. Vincent; Fleutiaux and Sallé 1890: 441. =*Anchonus indus* Fahraeus 1843: 403 of St. Vincent; Fleutiaux and Sallé 1890: 442. =*Anchonus simplex* Chevrolat 1880: 213 of Guadeloupe. **Distribution. Guadeloupe, Martinique** (type locality), St. Vincent; Lesser Antilles 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.

Ixanchonus cribricollis (Coquerel) 1849: 448 (*Anchonus*); Voisin 1992: 400. **Distribution. Martinique;** single island endemic. Genus endemic to Lesser Antilles. **Notes.** Flightless.

Ixanchonus lafertei (Fahraeus) 1843: 394 (*Anchonus*); Voisin 1992: 400. **Distribution. Martinique;** single island endemic.

TRIBE CHOLINI

Cholus martiniquensis Marshall 1926: 540; O'Brien and Wibmer 1982: 123 (*Archarias*), 1984: 294. =*Cholus zonatus* (Swederus) of St. Lucia in Schotman 1989. **Distribution. Martinique, St. Lucia;** Lesser Antilles endemic.

TRIBE CLEOGONINI

Rhyssomatus strangulatus Gyllenhal 1837: 374. =*Rhyssomatus barioides* Fiedler 1937: 74 [in key].
Distribution. Barbados, **Martinique**, St. Vincent. Panama, Ecuador, Bolivia, Brazil; Lesser Antilles and Latin America.

TRIBE HYLOBIINI

Pseudanchonus guadelupensis (Hustache) 1929: 211 (*Anchonomorpha*). **Distribution.** Guadeloupe, **Martinique**; Lesser Antilles endemic.

TRIBE STERNECHINI

Chalcodermus insularis Chevrolat 1880: 198; Fleutiaux and Sallé 1890: 446; Hustache 1930: 124; Ivie et al. 2008b: 279. **Distribution.** Guadeloupe, **Martinique**, Montserrat; Lesser Antilles endemic.

SUBFAMILY SCOLYTINAE, The bark and ambrosia beetles

TRIBE HYLESININI

SUBTRIBE PHLOEOSININA

Chramesus opacicollis Eggers 1940: 124; Bright 1981: 153, 1985: 171; Wood and Bright 1992: 267. **Distribution.** Cuba, Dominica, Grenada, Guadeloupe, Jamaica, **Martinique** (as *C. o. nitidus* Eggers 1940: 125); widespread Antilles endemic.

Chramesus rotundatus (Chapuis) 1869: 47 (*Rhopalopleurus*); Bright 1981: 153, 1985: 171; Wood and Bright 1992: 268; Bright and Torres 2006: 395. **Distribution.** Guadeloupe, **Martinique**, Puerto Rico. Mexico (Veracruz); widespread Antilles and Latin America? **Notes.** Hosts: *Inga vera* (Willd.) Guaba.

TRIBE SCOLYTINI

SUBTRIBE DRYOCOETINA

Coccotrypes cyperi (Beeson) 1929: 230 (*Thanmurgides*); Bright 1985: 172; Wood and Bright 1992: 598; Bright and Torres 2006: 411; Ivie et al. 2008b: 279; Pérez-Gelabert 2008: 138. =*Dryocoetes subdepressus* Eggers 1940: 127 of Guadeloupe. =*Dryocoetes insularis* Eggers 1940: 127 of Guadeloupe and of Martinique. =*Coccotrypes insularis* Eggers 1940: 129 of Guadeloupe. =*Dryocoetes subimpressus* Eggers 1940: 127 of Guadeloupe. =*Poecilips carabaicus* Schedl 1952: 345 of Guadeloupe and of Martinique. =*Poecilips eggersi* Schedl 1952: 347 of Guadeloupe. **Distribution.** Guadeloupe, Jamaica, Hispaniola, **Martinique**, Montserrat, Puerto Rico. USA (LA-FL), Central and South America and Pacific islands; widespread New World; widespread Asia, Australia. **Notes.** Hosts: known from 28 tree genera.

SUBTRIBE CRYPHALINA

Hypothenemus areccae (Hornung) 1842: 117 (*Bostrichus*); Wood and Bright 1992: 906; Turnbow and Thomas 2008: 31. =*Stephanoderes martiniquensis* Eggers 1941: 99 of Martinique. **Distribution.** Bahamas, **Martinique**, Puerto Rico, Virgin Islands. USA (FL), and Brazil; widespread Africa, Asia, Pacific islands; introduced to Lesser Antilles; introduced to New World; native to SE Asia (Wood 1977). **Notes.** Hosts: many species of trees, shrubs, and herbs.

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Literature Cited

- Anderson, W. H. 1948.** Larvae of some genera of Calendrinae (=Rhynchophorinae) and Stromboserinae. *Annals of the Entomological Society of America* 41: 413-437.
- Anonymous. 1986.** The mango seed weevil. *FAO Plant Protection Bulletin* 34: 215. [Not seen.]
- Ardoin, P. 1977.** Contribution à l'étude des espèces Américaines du genre *Doliema* Pascoe (Col. Tenebrionidae). *Annales de la Société Entomologique de France* (n. s.) 13: 1-20.
- Arnett, R. H., Jr. 1953.** The oedemerid beetles of the Bimini island group, Bahama Islands, British West Indies. *American Museum Novitates* 1646: 1-13.
- Arnett, R. H., Jr. 1957.** Contribution towards a monograph of the Oedemeridae 12. The oedemerid beetles of Jamaica. *Coleopterists Bulletin* 11: 1-8.
- Arnett, R. H., Jr. 1983.** Family 119. Oedemeridae (first series). *In*: R. H. Arnett, Jr. Checklist of the beetles of North and Central America and the West Indies, Vol. 6. The darkling beetles, Strepsiptera, and related groups. Flora and Fauna Publications; Gainesville, Florida. 6 p.
- Arnett, R. H., Jr. 1984.** The false blister beetles of Florida (Coleoptera: Oedemeridae). Florida Department Agriculture and Consumer Services, Entomology Circular 259: 1-4.
- Arnett, R. H., Jr., and M. C. Thomas (eds.). 2000.** American beetles. Archostemata, Myxophaga, Adephaga, Polyphaga: Staphyliniformia, Vol. 1. CRC Press; Boca Raton, FL. 443 p.
- Arnett, R. H., Jr., M. C. Thomas, P. E. Skelley, and J. H. Frank (eds.). 2002.** American beetles. Polyphaga: Scarabaeoidea through Curculionoidea, Vol. 2. CRC Press; Boca Raton, FL. 861 p.
- Audreau, A. 2001.** Présence de *Chalepides barbatus* (F. 1787) à Sainte-Lucie, petites Antilles (Col. Dynastidae). *Bulletin de la Société Entomologique de France* 106: 426.
- Balazuc, J., and F. Chalumeau. 1978.** Contribution à la faune des Antilles françaises. Cicindelides (Coleoptera: Caraboidea, Cicindelidae). *Nouvelle Revue d'Entomologie* 8: 17-26.
- Bameul, F., and M. A. Jach. 2001 (2000).** A new *Hydraena* Kugelann from Martinique Island, French West Indies (Coleoptera, Hydraenidae). *Nouvelle Revue d'Entomologie* (n. s.) 17: 273-285.
- Bass, D. 2003.** Freshwater macroinvertebrates of Barbados. *Journal of the Barbados Museum and Historical Society* 49: 269-280.
- Bass, D. 2006a.** A survey of freshwater macroinvertebrates on Antigua, West Indies. *Living World, Journal Trinidad and Tobago Naturalists Club* 2006: 11-14.
- Bass, D. 2006b.** A comparison of the freshwater macroinvertebrate assemblages of St. Kitts and Nevis, West Indies. *Living World, Journal Trinidad and Tobago Naturalists Club* 2006: 26-37.
- Bass, D. 2007.** Freshwater macroinvertebrates and their habitats in Dominica. *Living World, Journal Trinidad and Tobago Naturalists Club* 2007: 21-30.
- Beal, R. S. Jr. 1998.** Taxonomy and biology of Nearctic species of *Anthrenus* (Coleoptera: Dermestidae). *Transactions of the American Entomological Society* 124: 271-332.

- Beard, J. S. 1949.** The natural vegetation of the Windward and Leeward Islands. Oxford Forestry Memoirs 21: 1-192.
- Bell, R. T. 2001.** Rhysodine beetles in the West Indies. p.117-125. *In*: C. A. Woods and F. E. Sergile (eds.). Biogeography of the West Indies; patterns and perspectives. CRC Press; Boca Raton, Florida. 582 p.
- Bell, R. T., and J. R. Bell. 1985.** Rhysodini of the World. Part IV. Revisions of *Rhysodiastes* Fairmaire and *Clinidium* Kirby, with new species in other genera (Coleoptera: Carabidae or Rhysodidae). Quaestiones Entomologicae 21: 1-172.
- Bellamy, C. L. 2008-2009.** A world catalogue and bibliography of the Jewel Beetles (Coleoptera: Buprestoidea). Pensoft; Sofia-Moscow. Vol. 1(2008): 1-625.; Vol. 2(2008): 632-1260; Vol. 3(2008): 1265-1931; Vol. 4(2008):1935-2583; Vol. 5(2009): 2689-3264.
- Bennett, F. D., and M. M. Alam. 1985.** An annotated checklist of the insects and allied terrestrial arthropods of Barbados. Caribbean Agriculture Research and Development Institute (CARDI); Bridgetown, Barbados. 81 p.
- Bennett, F. D., and F. J. Simmonds. 1964.** Distribution and host records of Coccinellidae in the Caribbean area. Commonwealth Institute of Biological Control Technical Bulletin 4: 81-94.
- Blackwelder, R. E. 1943.** Monograph of the West Indian beetles of the family Staphylinidae. United States National Museum Bulletin 182: 1-658.
- Blackwelder, R. E. 1944-1957.** Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. United States National Museum Bulletin 185. Pt. 1 (1944): i-xii, 1-188; Pt. 2 (1944): 189-342; Pt. 3 (1945): 343-550; Pt. 4 (1946): 551-763; Pt. 5 (1947): 765-925; Pt. 6 (1957, Bibliography): i-vii, 927-1492. [Reprinted 1982.]
- Bonadona, P. 1981.** Contribution à l'étude des Anthicidae des Antilles françaises (Coleoptera). Annals Société Entomologique France (n. s.) 17: 273-286.
- Bordat, P. 1990.** Insectes Coléoptères Aphodiidae: Aphodiinae et Eupariinae. Museum Nationale d'Histoire Naturelle, Paris. Faune de Madagascar 74: 18-129.
- Bouysson, P., D. Westercamp, P. Andreieff, J. C. Baubron, and G. Scholari. 1985.** Le volcanisme sous-marin Néogène récent au large des côtes Caraïbes des Antilles française. Relations avec le volcanisme à terre de évolution du front volcanique. Géologie de la France. Orleans, France. Service Geologique National 1985: 101-114.
- Breuning, S. 1940.** Novae species Cerambycidarum. 71. Folia Zoologica et Hydrobiologica 10: 37-85.
- Breuning, S. 1971.** Revision des espèces américaines de la tribue des Apomecynini Lac. Entomologische Abhandlungen Staatliches Museum für Tierkunde Dresden 37: 209-335.
- Breuning, S. 1980.** Nouveaux Cerambycidae Lamiinae néotropicaux. Bulletin de la Société Entomologique de France 5: 67-71.
- Bright, D. E. 1981.** Studies on West Indian Scolytidae (Coleoptera) 1. New species, new distribution records and taxonomic notes. Studies on Neotropical Fauna and Environment 16: 151-164.
- Bright, D. E. 1985.** Studies on West Indian Scolytidae (Coleoptera) 3. Checklist of Scolytidae of the West Indies, with descriptions of new species and taxonomic notes. Entomologische Arbeiten aus dem Museum Gg. Frey 33/34: 169-187.
- Bright, D. E., and J. A. Torres. 2006.** Studies on West Indian Scolytidae (Coleoptera) 4. A review of the Scolytidae of Puerto Rico, United States of America, with descriptions of one new genus, fourteen new species and notes on new synonymy (Coleoptera: Scolytidae). Koleopterologische Rundschau 76: 389-328.
- Cartwright, O. L., and F. E. Chalumeau. 1978.** Bredin-Archbold-Smithsonian Biological Survey Dominica. The Superfamily Scarabaeoidea (Coleoptera). Smithsonian Contributions to Zoology 279: 1-32.
- Casale, A. 1998.** Phylogeny and biogeography of Calleidina (Coleoptera: Carabidae: Lebiini): a preliminary survey. p. 381-428. *In*: G. E. Ball, A. Casale, and A. Vigna Taglianti (eds.). Phylogeny and classification of Caraboidea (Coleoptera: Adephaga). Atti Museo Regionale di Scienze Naturali; Torino. 543 p.
- Casari, S. A. 2002.** Review of the genus *Chalcolepidius* Eschscholtz, 1829 (Coleoptera, Elateridae, Agrypninae). Revista Brasileira de Entomologia 46: 263-428.

- Chalumeau, F. 1977.** Les scarabées (Insectes, Coléoptères) des îles de l'arc Antillais s'étendant de Guadeloupe à Martinique (taxonomie, ethologie, biogéographie). Imprimerie du C. D. D. P.; Pointe à Pitre, Guadeloupe. 230 p.
- Chalumeau, F. 1978.** Contribution à l'étude des Scarabaeoidea des Antilles. (II. Remarques et observations, description de nouveaux taxa). Bulletin de la Société Entomologique de Mulhouse 1978 (October-December): 41-56.
- Chalumeau, F. 1980.** Désignation de types de Scarabaeoidea (Coleoptera) Néotropicaux et observations diverses. Nouvelle Revue Entomologie 10: 79-96.
- Chalumeau, F. 1982a.** Contribution à l'étude des Scarabaeoidea des Antilles (III). Nouvelle Revue d'Entomologie 12: 321-345.
- Chalumeau, F. 1982b.** Tenebrionidae des Antilles françaises: description d'une nouvelle espèce, désignation de lectotypes et observations diverses (Col). Bulletin de la Société Entomologique de France 87: 187-195.
- Chalumeau, F. 1983a.** Les Coléoptères scarabaeides des petites Antilles (Guadeloupe à Martinique). Encyclopédie Entomologique (series A) 44. Editions Lechevalier; Paris. 295 p.
- Chalumeau, F. 1983b.** Acanthocinini des petites Antilles. Nouveau taxa et observations diverses (Coleoptera: Cerambycidae: Lamiinae). Nouvelle Revue d'Entomologie 13: 219-237.
- Chalumeau, F. 1984.** *Cylindera suturalis* (Fabricius, 1798): les formes des petites Antilles et notes concernant ce taxon (Coleoptera, Cicindelidae). Nouvelle Revue d'Entomologie (n. s.) 1: 171-177.
- Chalumeau, F. 1985a.** The Rutelinae (Coleoptera: Scarabaeidae) of the Antilles. Mitteilung Schweizer Entomologische Gesellschaft 58 (3): 231-260.
- Chalumeau, F. 1985b.** Quelques Cerambycidae (Coleoptera) mimétique des petites Antilles et description d'une espèce nouvelle. L'Entomologiste 41: 147-152.
- Chalumeau, F. 1985c.** Quelques Cerambycidae (Coleoptera) mimétique des petites Antilles et description d'une espèce nouvelle. L'Entomologiste 41: 147-152.
- Chalumeau, F., and L. Gruner. 1974.** Scarabaeoidea des Antilles françaises, 1re partie. Annales de la Société Entomologique de France (n. s.) 10: 781-819.
- Chalumeau, F., and L. Gruner. 1976.** Scarabaeoidea des Antilles françaises, 2me partie: Melolonthinae et Rutelinae. Annales de la Société Entomologique de France (n. s.) 12: 83-112.
- Chalumeau, F., and L. Gruner. 1977.** Scarabaeoidea des Antilles françaises, 3me partie: Dynastinae et Cetoniinae. Annales de la Société Entomologique de France (n. s.) 13: 579-612.
- Chalumeau, F., and W. Reid. 2002.** Aperçus sur le complexe *hercules* de statut du *Dynastes alcidus* (Coleoptera, Dynastidae). Nouvelle Revue d'Entomologie (n. s.) 19: 83-91.
- Chalumeau, F., and D. Roguet 1984.** Lycidae (Coleoptera) des Antilles françaises. Bulletin de la Société Entomologique de Mulhouse (France) 1984: (Avril-Juin): 30-32.
- Chalumeau, F., and J. Touroult. 2004a.** Nouvelles espèces, synonymies et notes concernant quelques longicornes des petites Antilles (Coleoptera, Cerambycidae). Lambillionea 104: 189-198.
- Chalumeau, F., and J. Touroult. 2004b.** Nouveaux Elaphidiini des petites Antilles et notes diverses (Coleoptera, Cerambycidae, Cerambycinae). Lambillionea 104: 751-755.
- Chalumeau, F., and J. Touroult. 2005a.** Les longicornes des petites Antilles (Coleoptera, Cerambycidae): taxonomie, éthologie, biogéographie. Series Faunistica 51, Pensoft Publishers; Sofia-Moscow. 241 p.
- Chalumeau, F., and J. Touroult. 2005b.** Nouveau longicorne de la Dominique et de la Martinique (petites Antilles) et notes diverses (Coleoptera, Cerambycidae). Lambillionea 105: 155-159.
- Chapin, E. A. 1940.** A revision of the West Indian beetles of the scarabaeid subfamily Aphodiinae. Proceedings United States National Museum 89 (3092): 1-41.
- Chapin, E. A. 1957.** Records of coccinellid beetles from the Cayman Islands, with descriptions of new species from the West Indies. Entomologists Monthly Magazine 93: 89-91.
- Chassain, J. 2005.** Contribution à la connaissance de la faune Entomologique de s Antilles françaises (Coleoptera, Elateridae et Eucnemidae). L'Entomologiste 61: 181-191.
- Chassain, J. and C. Sautière. 2007.** Nouvelle contribution à la connaissance de la faune Entomologique des Antilles françaises (Coleoptera Elateridae et Eucnemidae). L'Entomologiste 63: 141-144.
- Chemsak, J. A. 1966.** Descriptions and records of West Indian Cerambycidae (Coleoptera). Proceedings United States National Museum 118 (3526): 209-220.

- Chemsak, J. A., E. G. Linsley, and F. A. Noguera. 1992.** Listados Faunísticos de Mexico. II. Los Cerambycidae y Disteniidae de Norteamérica, Centroamérica y las Indias Occidentales (Coleoptera). Instituto de Biología, Universidad Nacional Autónoma de México; México. 204 p.
- Clark, P. U., A. S. Dyke, J. D. Shakun, A. E. Carlson, J. Clark, B. Wohlfarth, J. X. Mitrovica, S. W. Hoestetler, and A. M. McCabe. 2009.** The last glacial maximum. *Science* 325: 710-714.
- Clark, W. E. 1992.** New synonymy, a new combination and a lectotype designation in Neotropical Anthonomini (Coleoptera: Curculionidae). *Coleopterists Bulletin* 46: 286-289.
- Clark, W. E. and H. R. Burke. 1985.** Revision of the *venustus* species group of the weevil genus *Anthonomus* Germar (Coleoptera: Curculionidae). *Transactions American Entomological Society* 111: 103-170.
- Cobos, A. 1981.** Ensayo sobre los géneros de la subfamilia Policestinae (Coleoptera, Buprestidae). *Eos* 55-56 (1979-1980): 23-94.
- Conservation International. 2010.** Biodiversity hotspots; available at: <http://www.biodiversityhotspots.org>. [last accessed 9 November, 2010.]
- Cooter, J. 1983.** A few insects from Montserrat, West Indies. *Entomologists Record and Journal of Variation* 95: 185-186.
- Costa, C. 1972.** Género *Pyrophorus*. 6. Redescricao de *P.tuberculifer* Eshscholtz, *P.phosphorescens* Castelnau e descricao de quatorze especies novas (Col. Elateridae). *Papéis Avulsos de Zoologia (São Paulo)* 25: 199-227.
- Costa, C. 1975.** Systematics and evolution of the tribes Pyrophorini and Heligmini, with description of Campyloxeninae, new subfamily (Coleoptera, Elateridae). *Arquivos de Zoologia* 26: 49-190.
- Dalens, P.-H., and J. Touroult. 2007.** Nouveau taxon et liste commentée des Longicornes de la Barbade. *Lambillionea* 107: 289-294
- Darlington, P. J. 1957.** Zoogeography: the geographical distribution of animals. John Wiley and Sons; New York. 675 p.
- Dillon, L. 1957.** Revision of the neotropical Acanthocinini (Coleoptera, Cerambycidae). The genus *Lagocheirus*. *Bulletin British Museum (Natural History), Entomology* 6: 137-166.
- Donnelly, T. W. 1988.** Geologic constraints on Caribbean biogeography. p.15-37. *In: J. K. Liebherr (ed.). Zoogeography of Caribbean Insects.* Comstock Publishing Associates, Cornell University Press; Ithaca. 205 p.
- Duverger, C. 2001.** Coccinellidae (Caraibes) des petites Antilles. *In: H.-P. Aberlenc. Entomologie: insectes, biodiversité and Gaia. 7. Coccinellidae.* <http://www.aberlentomo.fr/Index7.html>. [Last accessed 7 October 2010.]
- Eggers, H. 1940.** Borckenkäfer aus Südamerika (Coleoptera: Ipidae). IX. Insel Guadeloupe. *Arbeiten morphologische taxonomie Entomologie (Berlin-Dahlem)* 7: 123-141.
- Eggers, H. 1941.** Borckenkäfer aus Südamerika (Coleoptera: Ipidae). IX. Insel Guadeloupe. *Arbeiten morphologische taxonomie Entomologie (Berlin-Dahlem)* 8: 99-109.
- Endrödi, S. 1985.** The Dynastinae of the world. Series Entomologica 28. Dr. W. Junk Publishers; Dordrecht. 800 p.
- Erwin, T. L., and L. L. Sims. 1984.** Carabid beetles of the West Indies (Insects: Coleoptera): a synopsis of the genera and checklist of tribes of Caraboidea, and of the West Indian species. *Quaestiones Entomologicae* 20: 351-466.
- Fisher, W. S. 1950.** A revision of the North American species of beetles belonging to the family Bostrichidae. United States Department Agriculture, Miscellaneous Publication 698: 1-157.
- Fleutiaux, E. 1947.** Sternoxia; Famille des Elateridae, Eucnemidae, Trixagidae. p.104-138. *In: E. Fleutiaux, C. Legros, P. Lepesme, and R. Paulian. Faune de l'Empire Français, 7: Coléoptères des Antilles.* Muséum National d'Histoire Naturelle (Paris) 1: 1-239.
- Fleutiaux, E., C. Legros, P. Lepesme, and R. Paulian. 1947.** Faune de l'Empire Français, 7. Coléoptères des Antilles. Muséum National d'Histoire Naturelle (Paris) 1: 1-239.
- Fleutiaux, E., and A. Sallé. 1890 [1889].** Liste des Coléoptères de la Guadeloupe et descriptions d'espèces nouvelles. *Annales de la Société Entomologique de France (series 6)* 9: 351-484.
- Frank, J. H. 1988.** *Paederus, sensu lato* (Coleoptera: Staphylinidae): an index and review of the taxa. *Insecta Mundi* 2: 97-159.

- Franz, H. 1984.** Scydmaeniden von den karibischen Inseln (Dominianische Republik, Puertorico, San Tomas und Gouadeloupe) (Scydmaenidae, Col.). Koleopterologische Rundschau 57: 15-34.
- Franz, H. 1991.** Weiterer Beitrag zur Kenntnis der Scydmaeniden der Karibischen Inseln (Coleoptera: Scydmaenidae). Koleopterologische Rundschau 61: 25-48.
- Freitag, R. 1992.** Biogeography of West Indian tiger beetles (Coleoptera: Cicindelidae). p.123-157. *In*: G. R. Noonan, G. E. Ball, and N. E. Stork (eds.). The biogeography of ground beetles of mountains and islands. Intercept Ltd.; Andover, Hampshire, UK. vii+256 p.
- Galileo, M. H., and U. R. Martins. 1993.** Revisão da tribo Solenopterini (Coleoptera, Cerambycidae, Prioninae). Parte III. Gênero *Solenoptera* A. -Serville, 1983. Revista Brasileira de Entomologia 37: 425-458.
- Gidaspow, T. 1963.** The genus *Calosoma* in Central America, the Antilles, and South America (Coleoptera, Carabidae). Bulletin American Museum of Natural History 124: 279-313.
- Gillogly, L. R. 1955.** A review of the genus *Mystrops* Erichson (Coleoptera, Nitidulidae). Revists Brasileira de Entomologia 3: 191-204.
- Gilmour, E. F. 1963.** On the Neotropical Acanthoninini (Col., Cerambycidae, Lamiinae). Some Caribbean genera and species. Studies on the Fauna of Curaçao and other Caribbean Islands 17 (no. 76): 57-96
- Gordon, R. D. 1985.** The Coccinellidae (Coleoptera) of America north of Mexico. Journal New York Entomological Society 93: 1-912.
- Gordon, R. D. 1999.** South American Coccinellidae (Coleoptera) Part VI: A systematic revision of the South American Diomini, new tribe (Scymninae). Annales Zoologici (Warsaw) 49 (supplement 1): 1-219.
- Gordon, R. D. and D. J. Hilburn. 1990.** The Coccinellidae (Coleoptera) of Bermuda. Journal of the New York Entomological Society 98: 265-309.
- Gordon, R. D., and P. E. Skelley. 2007.** A monograph of the Aphodiini inhabiting the United States and Canada (Coleoptera: Scarabaeidae: Aphodiinae). Memoirs American Entomological Institute 79: 1-580.
- Grouvelle, A. H. 1898.** Clavicornes de Grenada et de St. Vincent (Antilles) recoltés par M. H. H. Smith, et appartenant au Musée de Cambridge. Notulae Leyden Museum 20: 35-48.
- Grouvelle, A. H. 1902.** Supplément a la liste des Coléoptères de la Guadeloupe de MM. Fleutiaux et Sallé. Annales de la Société Entomologique France 71: 756-769.
- Grouvelle, A., and A. Raffray. 1908.** Supplément a la liste des Coléoptères de la Guadeloupe. 2e supplément. Annales de la Société Entomologique France 77: 33-64.
- Grouvelle, A., and A. Raffray. 1912.** Supplément a la liste des Coléoptères de la Guadeloupe. 3e supplément. Annales de la Société Entomologique France 81: 289-312.
- Gruner, L. and F. Chalumeau. 1977.** Biologie et élevage des *Dynastes h. hercules* en Guadeloupe (Coleoptera, Dynastinae). Annales de la Société Entomologique de France (N. S) 13: 613-624.
- Halstead, D. G. H. 1973.** A revision of the genus *Silvanus* Latreille (s. l.) (Coleoptera: Silvanidae). Bulletin British Museum (Natural History), Entomology 29: 39-112.
- Halstead, D. G. H. 1993.** Keys for the identification of beetles associated with stored products – II. Laemophloeidae, Passandridae and Silvanidae. Journal Stored Products Research 29: 99-197.
- Hansen, M. 1999.** World catalogue of insects. 2. Hydrophiloidea (s. str.) (Coleoptera). Apollo Books; Stenstrup, Denmark. 416 p.
- Harrison, A. D., and J. J. Rankin. 1976.** Hydrobiological studies of eastern Lesser Antillean islands. II. St. Vincent: Freshwater fauna-its distribution, tropical river zonation, and biogeography. Archive für Hydrobiologie Monographie (Suppl. 50): 275-311.
- Hatch, M. H. 1928.** Silphidae II.p. 63-244. *In*: S. Schenkling, (ed.). Coleopterorum Catalogus, Pars 95. W. Junk; Berlin, Germany. 182 p.
- Hedges, S. B. 2001.** Biogeography of the West Indies: an overview. p.15-33. *In*: C. A. Woods and F. E. Sergile (eds.). Biogeography of the West Indies; patterns and perspectives. CRC Press; Boca Raton, FL. 582 p.
- Herman, L. H. 2001.** Catalog of the Staphylinidae (Insecta: Coleoptera). 1785 to the end of the second millenium. Bulletin American Museum of Natural History 265: 1-4218.

- Hoebeke, E. R., and K. Beucke. 1997.** Adventive *Onthophagus* (Coleoptera: Scarabaeidae) in North America: geographic ranges, diagnoses, and new distributional records. *Entomological News* 108: 345-362.
- Howden, H. F., and O. L. Cartwright. 1963.** Scarab beetles of the genus *Onthophagus*. *Proceedings of the United States National Museum* 114: 1-135.
- Huchet, J. B. 1992.** Un scarabée nouveau pour les petites Antilles: *Digitonthophagus gazella* (Fabricius) (Col. Scarabaeidae, Coprinae, Onthophagini). *L'Entomologiste* 48: 297-303.
- Irmeler, U. 1985.** Neue arten der Gattungen *Aneucamptus* und *Thoracophorus* (Col., Staphylinidae) aus der Neotropis. *Entomologische Blätter* 81: 41-58.
- Iturralde-Vinent, M. A. 2006.** Meso-Cenozoic Caribbean paleogeography: implications for the historical biogeography of the region. *International Geology Review* 48: 791-827.
- Iturralde-Vinent, M. A., and R. D. E. MacPhee. 1999.** Paleogeography of the Caribbean Region: implications for Cenozoic biogeography. *American Museum of Natural History Bulletin* 238: 1-95.
- Ivie, M. A. 1983.** The Cicindelidae (Coleoptera) of the Virgin Islands. *Florida Entomologist* 66: 191-199.
- Ivie, M. A. 1985.** Nomenclatorial notes on West Indian Elaphidiini (Coleoptera: Cerambycidae). *Pan-Pacific Entomologist* 61: 303-314.
- Ivie, M. A. and J. A. Chemsak. 1983.** Synonymy in West Indian *Ecyrus* LeConte (Cerambycidae: Lamiinae: Pogonocherini). *Coleopterists Bulletin* 37: 199-202.
- Ivie, M. A., and A. R. Gillogly. 1998.** Passalidae of the West Indies. Online at <http://virgin.msu.montana.edu/WestIndiesPolyphagaScarabaeoideaWEPasslist.html>. [last accessed June 2007].
- Ivie, M. A., K. A. Marske, I. A. Foley, K. A. Guerrero, and L. L. Ivie. 2008a.** Invertebrates of the Centre Hills and Montserrat, with an emphasis on beetles. p.56-89. *In*: R. P. Young (ed.). *A biodiversity assessment of the Centre Hills, Montserrat*. Durrell Conservation Monograph No. 1. Durrell Wildlife Conservation Trust, Jersey, Channel Islands. 319 p. Online at http://www.durrell.org/library/Document/Durrell_Cons_Monograph_1_full-report.pdf. [last accessed 1 November 2010].
- Ivie, M. A., K. A. Marske, I. A. Foley, and L. L. Ivie. 2008b.** Appendix 2. Species lists of the beetles, non-beetle hexapods and non-hexapod invertebrates of Montserrat. p.237-311. *In*: R. P. Young (ed.). *A biodiversity assessment of the Centre Hills, Montserrat*. Durrell Conservation Monograph No. 1. Durrell Wildlife Conservation Trust, Jersey, Channel Islands. 319 p. Online at http://www.durrell.org/library/Document/Durrell_Cons_Monograph_1_full-report.pdf. [last accessed 1 November 2010].
- Ivie, M. A., and T. K. Philips. 2008.** Three new species of *Canthonella* Chapin from Hispaniola, with new records and nomenclatural changes for West Indian dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae). *Zootaxa* 1701: 1-14.
- Ivie, M. A., and S. A. Slipinski. 1989.** The Pycomerini (Coleoptera: Colydiidae) of the West Indies. *Florida Entomologist* 72: 64-80.
- Iwan, D. 1995.** Revision of the genus *Opatrinus* Dejean, 1821 (Coleoptera: Tenebrionidae: Platynotini). *Genus* 6: 1-90.
- Jameson, J. L. 1997.** Phylogenetic analysis of the subtribe Rutelina and revision of the *Rutela* generic groups. *Bulletin of the University of Nebraska State Museum* 14: 1-184.
- Kingsolver, J. M. 1970.** A synopsis of the subfamily Amblycerinae Bridwell in the West Indies, with descriptions of new species (Coleoptera: Bruchidae). *Transactions of the American Entomological Society* 96: 469-497.
- Kingsolver, J. M. 2004.** Handbook of the Bruchidae of the United States and Canada (Insecta, Coleoptera). United States Department of Agriculture, Agriculture Research Service, Technical Bulletin 1912. Vol. 1, 324 p; Vol. 2, 198 p.
- Lachaume, G. 1985.** Les Coléoptères du Monde. Volume V. Dynastini. 1: *Dynastes - Megasoma - Golofa*. *Science Nat; Venette*. 85 p.
- Lawrence, J. F., and A. F. Newton, Jr. 1995.** Families and subfamilies of Coleoptera (with selected genera, notes, references and data on family-group names). p.779-1006. *In*: J. Pakaluk and S. A. Slipinski (eds.). *Biology, phylogeny, and classification of Coleoptera: papers celebrating the 80th birthday of Roy A. Crowson*. Muzeum I Instytut Zoologii PAN; Warsaw. 1006 p.

- Legros, C. 1947.** Dryopoidea, Dascilloidea. p. 85-98. *In*: E. Fleutiaux, C. Legros, P. Lepesme and R. Paulian. Faune de l'Empire Français, Vol 7. Coléoptères des Antilles. Muséum National d'Histoire Naturelle (Paris) 1: 1-239.
- Leng, C. W., and A. J. Mutchler. 1914.** A preliminary list of the Coleoptera of the West Indies as recorded to Jan. 1, 1914. Bulletin American Museum of Natural History 33: 391-493.
- Leng, C. W., and A. J. Mutchler. 1916.** Descriptive catalogue of West Indian Cicindelinae. Bulletin of the American Museum of Natural History 35: 681-698; pl xii.
- Leng, C. W., and A. J. Mutchler. 1917.** Supplement to preliminary list of the Coleoptera of the West Indies. Bulletin of the American Museum of Natural History 37: 191-220.
- Lepesme, P. 1947.** Cleroidea; Bostrychoidea. p.165-233. *In*: E. Fleutiaux, C. Legros, P. Lepesme and R. Paulian. Faune de l'Empire Français, 7: Coléoptères des Antilles. Muséum National d'Histoire Naturelle (Paris) 1: 1-239.
- Liebherr, J. K. 1987.** A taxonomic revision of the West Indian *Platynus* beetles (Coleoptera: Carabidae). Transactions American Entomological Society 112: 289-368.
- Liebherr, J. K. 1988.** Redefinition of the supertribe Odacanthitae, and revision of the West Indian Lachnophorini (Coleoptera: Carabidae). Quaestiones Entomologicae 24: 1-42.
- Majka, C. G. 2010.** Is the American burying beetle the fox terrier of Nova Scotia. Coleopterists Bulletin 64: 163-165.
- Maldonado Capriles, J. 1996.** The status of insect alpha taxonomy in Puerto Rico after the scientific survey. *In*: J. C. Figuero Colon (ed.). The Scientific Survey of Puerto Rico and the Virgin Islands; An eighty-year reassessment of the islands natural history. Annals of the New York Academy of Sciences 776: 201-216
- Marcuzzi, G. 1962.** Tenebrionid beetles of the West Indies. Studies on the Fauna of Curaçao and other Caribbean Islands 13 (no. 57): 21-48. **Marcuzzi, G. 1977.** Further studies on Caribbean tenebrionid beetles. Studies on the fauna of Curaçao and other Caribbean Islands 52 (no. 170): 1-71.
- Marcuzzi, G. 1984.** A catalogue of tenebrionid beetles (Coleoptera: Heteromera) of the West Indies. Folia Entomologica Hungarica 45: 69-108.
- Marcuzzi, G. 1999.** Five new species and a new subgenus of *Cyrtosoma* Perty from the West Indies (Coleoptera, Tenebrionidae). Annales Historico-Naturalis Musei Nationalis Hungarici 91: 81-86.
- Marcuzzi, G., and J. d'Aguilar. 1971.** Descriptive catalog of insects from the French Antilles. 3. Coleoptera: Tenebrionidae. Annales Zoologie et Ecologie des Animaux 3: 79-96.
- Marquet, J., and D. Roguet. 2003.** Contribution à la connaissance des Coléoptères scarabaéides de la Martinique. Le Coléoptériste 6: 9-23.
- Matthews, E. G. 1966.** A taxonomic and zoogeographic survey of the Scarabaeinae of the Antilles (Coleoptera: Scarabaeidae). Memoirs American Entomological Society 21: 1-134.
- Mauleon, H., and F. Mademba-Sy. 1988.** Un ravageur des argumes aux Antilles Françaises: *Diaprepes abbreviatus* L. Fruits (Paris) 43 (4): 229-234.
- Maury, R. C., G. K. Westbrook, P. E. Baker, P. Bouysse, and D. Westercamp. 1990.** Geology of the Lesser Antilles. p. 141-166. *In*: G. Dengo and J. E. Case (eds.). The Caribbean Region. Geology of North America Vol. H. Geological Society of America; Boulder Colorado. 528 p.
- McDermott, F. A. 1955.** A note on the genus *Diphotus* Barber 1941 (Coleoptera: Lampyridae). Coleopterists Bulletin 9: 49-52.
- McDermott, F. A. 1966.** Lampyridae. Coleopterorum Catalogus, supplementa, pars 9, 2nd edition. Junk; The Hague. 149 p.
- Miskimen, G. W., and R. M. Bond. 1970.** The insect fauna of St. Croix, United States Virgin Islands. Scientific Survey of Porto Rico and the Virgin Islands (New York Academy of Sciences) 1 (part 1): 1-150.
- Mittermeier, R. A., P. Robles Gil, M. Hoffmann, J. Pilgrim, T. Brooks, C. G. Mittermeier, J. Lamoreaux, and G. A. B. Da Fonseca. 2004.** Hotspots revisited. CEMEX; S.A. de C. V. Mexico City, Mexico. 391 p.
- Monné, M. A., and F. T. Hovore. 2005.** Checklist of the Cerambycidae (Coleoptera) of the Western Hemisphere. Electronic version 2005 (Updated through 01 January, 2006). Online at: www.cerambycids.com/checklist/monne&hovore-2005. Online at <http://plant.cdfa.ca.gov/byciddb/documents.html>. [Last accessed 16 November, 2010].

- Mouchamps, R. 1959.** Remarques concernant les genres *Hydrobiomorpha* Blackburn et *Neohydrophilus* Orchymont (Coléoptères Hydrophilides). Bulletin et Annales de la Société Royale d'Entomologie Belgique 95: 295-335.
- Mroczkowski, M. 1968.** Distribution of the Dermestidae (Coleoptera) of the world with a catalogue of all known species. Annales Zoological (Polska Akademia Nauk) 26 (3): 15-191.
- Myers, N. 2003.** Biodiversity hotspots revisited. BioScience 53: 916-917
- Myers, N., R. A. Mittermeier, C. G. Mittermeier, G. A. B. da Fonseca, and J. Kent. 2000.** Biodiversity hotspots for conservation priorities. Nature 403: 853-858.
- Nearns, E. H., and M. A. Branham. 2008.** Revision and phylogeny of the tribes Curini LeConte and Plectromerini Nearns and Branham, new tribe (Coleoptera: Cerambycidae: Cerambycinae). Memoirs American Entomological Society 47: 1-117.
- Nichols, S. 1988a.** Kaleidoscopic biogeography of West Indian Scaritinae (Coleoptera: Carabidae). p.71-120. In: J. K. Lieberr (ed.). Zoogeography of Caribbean Insects. Comstock Publishing Associates; Cornell University Press, Ithaca, NY. 285 p.
- Nichols, S. 1988b.** Systematics and biogeography of West Indian Scaritinae (Coleoptera: Carabidae). PhD thesis, Cornell University; Ithaca, NY. 392 p. [University Microfilms No. 8804612.]
- O'Brien, C. W., and G. J. Wibmer. 1982.** Annotated checklist of the weevils (Curculionidae sensu lato) of North America, Central America, and the West Indies (Coleoptera: Curculionidae). Memoirs American Entomological Institute 34: 1-382.
- Park, O., J. A. Wagner, and M. W. Sanderson. 1976.** Review of the pselaphid beetles of the West Indies (Coleopt., Pselaphidae). Fieldiana Zoology 68: 1-90, 41 Figures.
- Paulian, R. 1947a.** Scarabaeoidea. p.17-84. In: E. Fleutiaux, C. Legros, P. Lepesme, and R. Paulian (eds.). Faune de l'Empire Français, Vol. 7. Coléoptères des Antilles, Muséum National d'Histoire Naturelle (Paris), Paris vol. 1: 1-239.
- Paulian, R. 1947b.** Rhipiceridae, Buprestidae, Malacodermata. p.138-164. In: E. Fleutiaux, C. Legros, P. Lepesme and R. Paulian (eds.). Faune de l'Empire Français, Vol. 7. Coléoptères des Antilles. Muséum National d'Histoire Naturelle (Paris) vol. 1: 1-239.
- Peck, S. B. 2005.** A checklist of the beetles of Cuba: with data on distributions and bionomics (Insecta: Coleoptera). Arthropods of Florida and Neighboring Land Areas 18: 1-241.
- Peck, S. B. 2006.** The beetle fauna Dominica, Lesser Antilles (Insecta: Coleoptera): diversity and distribution. Insecta Mundi 20: 165-209.
- Peck, S. B. 2009a.** The beetles of Barbados, West Indies (Insecta: Coleoptera): diversity, distribution and faunal structure. Insecta Mundi 0074: 1-51.
- Peck, S. B. 2009b.** Beetle species diversity in the Lesser Antilles islands: How many species are really there? Insecta Mundi 0078: 1-5.
- Peck, S. B. 2009c.** The beetles of St. Lucia, Lesser Antilles (Insecta: Coleoptera): diversity and distribution. Insecta Mundi 0106: 1-34 p.
- Peck, S. B. 2010.** The beetles of the island of St. Vincent, Lesser Antilles (Insecta: Coleoptera): diversity and distributions. Insecta Mundi 0144: 1-77.
- Peck, S. B. 2011.** 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). Insecta Mundi 0159: 1-54.
- Peck, S. B., and M. C. Thomas. 1998.** A distributional checklist of the beetles (Coleoptera) of Florida. Arthropods of Florida and Neighboring Land Areas 16: 1-180.
- Pérez-Gelabert, D. E. 2008.** Arthropods of Hispaniola (Dominican Republic and Haiti): A checklist and bibliography. Zootaxa 1831: 1-530.
- Philips, T. K., and M. A. Ivie. 1998.** The Methiini of the West Indies (Coleoptera: Cerambycidae) with notes on circum-Caribbean species. Entomologica Scandinavica 29: 57-87.
- Pollock, D. A., and M. A. Ivie. 1996.** Anthicidae (Coleoptera) of the Virgin Islands. Florida Entomologist 79: 230-240.
- Portevin, M. G. 1903.** Rémarques sur les Nérophages du Muséum et description d'espèces nouvelles. Bulletin de Muséum d'Histoire Naturelle 9: 329-336.
- Ramos, J. A. 1946.** The insects of Mona Island (West Indies). Journal of Agriculture of the University of Puerto Rico 30: 1-74.

- Ratcliffe, B. C. 1988.** New species and distributions of Neotropical Phileurini and a new phileurine from Burma (Coleoptera: Scarabaeidae: Dynastinae). *Coleopterists Bulletin* 42: 43-55.
- Ricklefs, R. E., and I. J. Lovette. 1999.** The roles of island area *per se* and habitat diversity in the species-area relationships of four Lesser Antillean faunal groups. *Journal of Animal Ecology* 68: 1142-1160.
- Ryckewaert, P. 1998.** Illustrated guide of insects and mites on vegetable crops in the Lesser Antilles. Éditions Quae, Versailles, France. 111 p. Available at <http://www.quae.com/fr/livre/?GCOI=27380100469420>
- Schedl, K. E. 1952.** Neotropische Scolytoidea, III. *Dusenja* 3: 343-366.
- Scheerpeltz, O. 1969.** Studien über die Arten der Gattungen *Espeson* Schauffuss und *Parespeson* Bernhauer (Col. Staphylinidae, subfam. Piestinae, tribus Thoracophorini). *Mitteilungen der Müncher Entomologischen Gesellschaft* 59: 115-155.
- Selander, R. B., and J. K. Bouseman. 1960.** Meloid beetles (Coleoptera) of the West Indies. *Proceedings of the United States National Museum* 111: 197-226.
- Selander, R. B., and J. K. Bouseman. 1961.** Meloidae (Coleoptera) of the West Indies. Supplemental Records. *Entomological News* 72: 190-191.
- Silvestre, G. 1996.** Le Dynaste hercule et ses variations géographiques (Coleoptera, Dynastidae). *L'Entomologiste* 52: 171-181.
- Sikes, D. S., and S. B. Peck. 2000.** Description of *Nicrophorus hispaniola*, new species, from Hispaniola (Coleoptera: Silphidae) and a key to the species of *Nicrophorus* of the New World. *Annals of the Entomological Society of America* 93: 391-300.
- Skelley, P., M. Dellacasa, G. Dellacasa, and R. D. Gordon. 2007.** Checklist of the Aphodiini of Mexico, Central, and South America (Coleoptera: Scarabaeidae: Aphodiinae). *Insecta Mundi* 0014: 1-14.
- Slipinski, S. A., R. D. Pope, and R. J. W. Aldridge. 1989.** A review of the world Bothriderini (Coleoptera, Bothrideridae). *Polskie Pismo Entomologiczne* 59: 131-202.
- Smetana, A. 1995.** Rove beetles of the subtribe Philonthina of America north of Mexico (Coleoptera: Staphylinidae). Classification, phylogeny and taxonomic revision. Associated Publishers; Gainesville, Florida. *Memoirs on Entomology International* 3: 1-946.
- Spangler, P. J., and S. Santiago-Fragoso. 1992.** The aquatic beetle subfamily Larainae (Coleoptera: Elmidae) in Mexico, Central America, and the West Indies. *Smithsonian Contributions to Zoology* 528: 1-74.
- Spilman, T. J. 1971.** Bredin-Archbold-Smithsonian Biological Survey of Dominica; Bostrichidae, Inoepilidae, Lagriidae, Lyctidae, Lymexylonidae, Melandryidae, Monommidae, Rhipiceridae and Rhipiphoridae (Coleoptera). *Smithsonian Contributions to Zoology* 70: 1-10.
- Stebnicka, Z. 2002.** The New World species of *Ataenius* Harold, 1867. II. Revision of the West Indian *A. terminalis*-group (Coleoptera: Scarabaeidae: Aphodiinae: Eupariini). *Acta Zoologica Cracoviensia* 45: 259-281.
- Stebnicka, Z. 2003.** The New World species of *Ataenius* Harold, 1867. III. Revision of the *A. imbricatus*-group sensu lato (Coleoptera: Scarabaeidae: Aphodiinae: Eupariini). *Acta Zoologica Cracoviensia* 46: 219-249.
- Stebnicka, Z. 2004.** The New World species of *Ataenius* Harold 1867. IV. Revision of the *A. strigicauda*-group (Coleoptera: Scarabaeidae: Aphodiinae: Eupariini). *Acta Zoologica Cracoviensia* 47: 211-228.
- Stebnicka, Z. 2005.** The New World species of *Ataenius* Harold 1867. VI. Revision of the *A. aequalis-platensis*-group (Coleoptera: Scarabaeidae: Aphodiinae: Eupariini). *Acta Zoologica Cracoviensia* 48B: 99-138.
- Stebnicka, Z. 2007a.** The New World species of *Ataenius* Harold 1867. IX. Revision of the *A. scutellaris*-group and diagnosis of the *A. texanus-carinator* group with descriptions of new species (Coleoptera: Scarabaeidae: Aphodiinae; Eupariini). *Acta Zoologica Cracoviensia* 50B: 45-81.
- Stebnicka, Z. 2007b.** The genus *Ataenius* Harold, 1867 (Coleoptera: Scarabaeidae) of the New World. Iconography I. Institute of Systematics and Evolution of Animals, Polish Academy of Sciences; Krakow. 155 p.

- Stebnicka, Z. 2009.** The tribe Eupariini of New World (Coleoptera: Scarabaeidae: Aphodiinae). Iconography II. Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Krakow. 135 p.
- Stehlé, H. 1941a.** Esquisse des associations végétales de la Martinique. Bulletin agricole de Martinique 6: 196-264.
- Stehlé, H. 1941b.** The flora of Martinique. Journal of the New York Botanical Garden 42: 235-244
- Stehlé, H. 1945-1946.** Forest types of the Caribbean Islands. Caribbean Forester, supplements to vols. 6 and 7: 337-709 (Issued in French, English, and Spanish.)
- Steiner, W. E., Jr. 2004.** The genus *Trachyscelis* (Coleoptera: Tenebrionidae) in North America: synonymy, origin, distribution, and decline. Coleopterists Bulletin 58: 335-343.
- Takizawa, H. 2003.** Check list of Chrysomelidae in West Indies (Coleoptera). Publicación Científica Ocasional, Museo Nacional de Historia Natural, Santo Domingo, República Dominicana. Hispaniola (n. s.) No. 2: 1-125.
- Thomas, M. C. 1988.** A revision of the New World species of *Cryptolestes* Ganglbauer (Coleoptera: Cucujidae: Laemophloeinae). Insecta Mundi 2: 43-65.
- Thomas, M. C. 1993.** The flat bark beetles of Florida (Coleoptera: Silvanidae, Passandridae, Laemophloeidae). Arthropods of Florida and Neighboring Land Areas 15: 1-93.
- Thomas, M. C. 2002.** Descriptions of four new species of *Cryptolestes* Ganglbauer, with a revised key to the New World species and notes on other species (Coleoptera: Laemophloeidae). Insecta Mundi 16: 147-155.
- Touroult, J. 2004.** Deux nouveaux longicornes des Antilles (Coleoptera, Cerambycidae, Lamiinae). Lambillionea 104: 66-70.
- Touroult, J. 2005.** Notes sur l'éthologie et la faunistique de quelques coléoptères des petites Antilles. Le Coléoptériste 8: 83-91.
- Touroult, J. 2007.** Contribution à la connaissance des longicornes de Ste. Lucie et de Martinique (Coleoptera, Cerambycidae). Cahiers Magellanes 70: 1-14.
- Triplehorn, C. A. 1991.** A review of the genus *Phaleria* Latreille from the Western Hemisphere (Coleoptera: Tenebrionidae: Phalerinae). Coleopterists Bulletin 45: 258-270.
- Triplehorn, C. A., and L. E. Watrous. 1979.** A synopsis of the genus *Phaleria* in the United States and Baja California (Coleoptera: Tenebrionidae). Coleopterists Bulletin 33: 275-295.
- Tschinkel, W. 1984.** *Zophobas atratus* (Fab.) and *Z. rugipes* Kirsch (Coleoptera: Tenebrionidae) are the same species. Coleopterists Bulletin 38: 325-333.
- Tucker, R. W. E. 1952.** The insects of Barbados. Journal of Agriculture of the University of Puerto Rico. Agricultural Experiment Station, Rio Piedras 36: 330-365.
- Turnbow, R. H., Jr., and M. C. Thomas. 2008.** An annotated checklist of the Coleoptera (Insecta) of the Bahamas. Insecta Mundi 0034: 1-64.
- Ulmer, B. J., J. E. Peña, S. L. Lapointe and G. Mathurin. 2006.** The occurrence of parasitoids attacking citrus weevil eggs on St. Lucia. Florida Entomologist 89: 407-409
- Uyttenboudaart, D. L. 1902.** List of beetles collected in the months of August and September 1900 in Surinam (Dutch Guyana) and on the island of Barbadoes. Tijdschrift voor Entomologie 45: 112-121.
- Valentine, B. D. 2004 (2003).** A catalogue of West Indian Anthribidae (Coleoptera). Insecta Mundi 17: 49-67.
- Valentine, B. D., and M. A. Ivie. 2005.** Beetles: Coleoptera. p. 274-282. *In*: J. Lazell (ed.). Islands: Fact and theory in nature. University of California Press; Berkeley. 382 p.
- Vandenberg, N. J. 2002.** The New World genus *Cycloneda* Crotch (Coleoptera: Coccinellidae: Coccinellini): historical review, new diagnosis, new generic and specific synonyms, and an improved key to North American species. Proceedings Entomological Society Washington 104: 221-236.
- Vaurie, P. 1955** A revision of the genus *Trox* (Coleoptera: Scarabaeidae) in North America. Bulletin of the American Museum of Natural History 106: 1-89.
- Vaurie, P. 1966.** A revision of the Neotropical genus *Metamasius* (Coleoptera, Curculionidae, Rhynchophorinae). Species groups I and II. Bulletin American Museum of Natural History 131: 211-337.
- Villiers, A. 1979a.** Coléoptères Cerambycidae des petite Antilles nouvelles espèces. Designation de types. (Premiere note). Revue Française d'Entomologie (n. s.) 1: 23-26.

- Villiers, A. 1979b.** Coléoptères Cerambycidae des petite Antilles. Nouveaux genres, désignation de types. (Deuxième note). Revue Française d'Entomologie (n. s.) 1: 96-98.
- Villiers, A. 1979c.** Diagnose préliminaire d'un nouveau *Parandra* antillais. Revue Française d'Entomologie (n. s.) 1: 182.
- Villiers, A. 1980a.** Une collection de Coléoptères Cerambycidae de la Dominique appartenant à l'United States National Museum (Washington). Annales de la Société Entomologique de France (n. s.) 16: 129-131.
- Villiers, A. 1980b.** Coléoptères Cerambycidae des Antilles françaises. I. Parandrinae, Prioninae, Lepturinae. Annales de la Société Entomologique de France (n. s.) 16: 133-157.
- Villiers, A. 1980c.** Coléoptères Cerambycidae des Antilles françaises. II. Cerambycinae. Annales de la Société Entomologique de France (n. s.) 16: 265-306.
- Villiers, A. 1980e.** Coléoptères Cerambycidae des Antilles françaises III. Lamiinae. Annales de la Société Entomologique de France (n. s.) 16: 541-598.
- Villiers, A. 1980f.** Coléoptères Cerambycidae des petites Antilles. Nouveaux genres, nouvelles espèces, désignation de types (troisième note). Revue Française d'Entomologie (n. s.) 2: 86-98.
- Vitali, F. 2001.** Description de la larve de deux longicornes de Guadeloupe: *Chaetanes fleutiauxi* Villiers, 1980 et *Leptostyloides assimilis* (Gahan, 1895) (Coleoptera, Cerambycidae, Lamiinae, Acanthocinini). L'Entomologiste 57: 151-156.
- Vitali, F., and J. Touroult 2005.** Contribution à la connaissance des larves des longicornes des Antilles françaises (Coleoptera Cerambycidae). L'Entomologiste 61: 64-81.
- Vitali, F., and J. Touroult 2006.** Contribution à la connaissance des états préimaginaux des longicornes des Guadeloupe (Coleoptera Cerambycidae). L'Entomologiste 62: 3-6.
- Voisin, J.-F. 1992.** Sur le genre *Ixanthonus* nov. et sur la véritable identité de *Anthonus pudens* auct. (Col. Curculionidae Molytinae). Bulletin de la Société Entomologique de France 96: 399-402.
- Watrous, L. E., and C. A. Triplehorn. 1982.** *Phaleria* of the West Indies and circum-Caribbean region (Coleoptera: Tenebrionidae). Coleopterists Bulletin 36: 12-21.
- Wattanapongsiri, A. 1966.** A revision of the genera *Rhynchophorus* and *Dynamis* (Coleoptera: Curculionidae). Department of Agriculture Science Bulletin, Bangkok. 1 (1): 1-328.
- Werner, F. G. 1983.** Anthicidae of the Greater Antilles and a new species from Venezuela (Coleoptera). Psyche 90: 211-235.
- White, R. E. 1980.** A taxonomic study of the New World genus *Stichtoptychus* Fall (Coleoptera: Anobiidae). United States Department Agriculture Technical Bulletin 1602: 1-35.
- Whitwell, A. C. 1991.** *Diaprepes* sp. problems in Dominica and some possible solutions. Colloques de l'INRA (Institut National de la Recherche Agronomique) 58: 529-541.
- Wibmer, G. J., and C. W. O'Brien. 1989.** Additions and corrections to annotated checklists of the weevils of North America, Central America, and the West Indies, and South America. Southwestern Entomologist Supplement 13: 1-49.
- Wilson, E. O. 1992.** The diversity of life. W. W. Norton & Co.; NY. 424 p.
- Wolcott, G. N. 1950 [1948].** The insects of Puerto Rico. Coleoptera. Journal of Agriculture of the University of Puerto Rico 32: 225-416.
- Wood, S. 1977.** Introduced and exported American Scolytidae (Coleoptera). Great Basin Naturalist 37: 67-74.
- Wood, S. L., and D. E. Bright. 1992.** A catalog of Scolytidae and Platypodidae (Coleoptera) part 2; Taxonomic index, Volume A and B. Great Basin Naturalist Memoirs 13: 1-1553.
- Woodruff, R. E. 1964.** A Puerto Rican weevil new to the United States (Coleoptera: Curculionidae). Florida Department of Agriculture, Division of Plant Industry, Entomology Circular No. 30: 1-3.
- Woodruff, R. E. 1968.** The present status of a West Indian weevil (*Diaprepes abbreviata* (L.)) in Florida (Coleoptera: Curculionidae). Florida Department of Agriculture. Division of Plant Industry. Entomology Circular No. 77: 1-4.
- Woodruff, R. E. 1969.** The banana root borer (*Cosmopolites sordidus* (Germar)) in Florida (Coleoptera: Curculionidae). Florida Department of Agriculture, Division of Plant Industry, Entomology Circular No. 88: 1-2.
- Woodruff, R. E. 1970.** The mango seed weevil, *Sternochetus mangiferae* (Fab.) (Coleoptera: Curculionidae). Florida Department of Agriculture, Division of Plant Industry, Entomology Circular No. 93: 1-2.

- Woodruff, R. E. 1985.** Citrus spp. weevils in Florida and the West Indies: Preliminary report on systematics, biology and distribution (Coleoptera: Curculionidae). Florida Entomologist 68: 370-379.
- Woodruff, R. E., B. M. Beck, P.E. Skelley, C. Y. L. Schotman, and M. C. Thomas. 1998.** Checklist and bibliography of the insects of Grenada and the Grenadines. Center for Systematic Entomology Memoirs 2: 1-286.
- Woodruff, R. E., and R. M. Baranowski. 1985.** *Metamasius hemipterus* (Linnaeus) recently established in Florida (Coleoptera: Curculionidae). Florida Department of Agriculture, Division of Plant Industry, Entomology Circular 272: 1-4.
- Woodruff, R. E., and T. R. Fasulo. 2007.** Mango Seed weevil, *Sternochetus mangiferae* (Fabricius) (Insecta: Coleoptera: Curculionidae). University of Florida IFAS Extension Publication EENY-371 (IN666): 1-5. also published as DPI Entomology Circular 93 <<http://edis.ifas.ufl.edu/pdffiles/IN/IN66600.pdf>>

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