

Beetle fauna of the island of Tobago, Trinidad and Tobago, West Indies

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Abstract. Tobago is a biologically rich but poorly investigated island. In this paper we report the occurrence of 672 species of beetles representing 69 families. Of these, only 95 had been previously reported from the island.

Introduction

Tobago is an island on the northeastern shoulder of South America. It lies 30 km northeast of the island of Trinidad and forms part of the nation of Trinidad and Tobago. Tobago is generally considered to be a continental-shelf (or land-bridge) island and its biota to be similar to that of neighboring South America, and different in some degree from that of the islands of the Lesser Antilles.

Tobago is separated from Trinidad by an ocean depth of somewhat over 74 m (40 fathoms). Thus, at times of Pleistocene low sea levels, Tobago was certainly connected by land to Trinidad. This connection was last severed by rising sea levels about 14,000 yBP (Comeau 1991-1992). The shallower land connection between Trinidad and Venezuela (as little as 11 km distant on the adjacent coast of northern South America) was last broken by rising sea level about 10,000 yBP.

The biota of Tobago is generally similar to that of Trinidad and the nearby South American mainland. But there are some unusual distributions that show that the fauna is not entirely a simple subset of that of Trinidad. For the better known vertebrates, Hardy (1982) noted that there are 11 resident birds, four frogs, and two reptiles on Tobago which are strikingly similar or identical to species occurring in northern South America, but which are unknown in Trinidad. Furthermore, the herpetofauna of Tobago is unique in having more frogs of the genus *Eleutherodactylus* (3 in Tobago : 1 in Trinidad), lizards of the genus *Bachia* (2:1), and snakes of the genus *Atractus* (2:1) than occur on the adjacent and much larger island of Trinidad. Addi-

tionally, the Anuran family Centrolenellidae, represented on Tobago by a single species, is unknown on Trinidad. Lack (1976), in his study of the biodiversity of Caribbean birds, proposed a faunal boundary between Grenada and Tobago which he called "Bond's Line" (for the American ornithologist James Bond). Bird faunas north and south of Bond's Line are noticeably distinct; and the line also separates, to a greater or lesser degree, populations of amphibians and reptiles. It is not clear if this faunal difference is reflected in insect faunas; but at least one West Indian beetle, *Aphodius cuniculus* Chevrolat, crosses Bond's Line, reaching the southern limit of its known range in Tobago.

Jackson and Donovan (1994) state that "The island of Tobago is located in the southeastern corner of the Caribbean Plate and has been interpreted as part of the allochthonous terrane that forms the easternmost fragment of the Caribbean Mountain System." In a more detailed regional study, Robertson and Burke (1989) indicate that Tobago is part of a 250-km wide east-west-trending plate-boundary zone extending southward from Grenada to the mouth of the Orinoco River. Maps presented by Iturralde-Vinent and MacPhee (1999: 30, 34, 38) indicate that Tobago was exposed land on the Aves Ridge, far to the west of its present position, during the Eocene/Early Oligocene (the period of maximum Cenozoic exposure). It was submerged under "shallow water" during the late Oligocene and was then moving eastward with the Caribbean Plate. By the Middle Miocene it was still submerged and was located west of the present position of Trinidad and just north of what is now

the Paria Peninsula. At present it forms the eastern end of the "Aruba/Tobago Belt".

One of us (JDH) has been conducting a survey of the entire biota of Tobago, and asked the other authors of this paper to help with the insects, and especially the beetles. Few summaries exist for insects of this part of the Caribbean. Stirling's (1986) work on butterflies is one exception, and others are the lists of the terrestrial arthropods of Barbados by Bennett and Alam (1985) and the list for Grenada and the Grenadines (Woodruff et al. 1997). Works with a focus on insect groups of Tobago are Cock (1982) and Barcant (1970) on butterflies, Hynes (1948) and Nieser and Alkins-Koo (1991) on aquatic Hemiptera-Heteroptera, and Flint (1996) on Trichoptera. The earliest mention of beetles on Tobago was Blandford's observation of the scolytid "*Xyloborus perforans* Wollaston" attacking sugar cane on the island. However, this is an Old World species and Blandford's (1892) observations were therefore, presumably, based on a misidentification. Blackwelder (1944: 916) cites a questionable record of the Old World weevil *Diocalandra frumenti subfasciata* Boheman, 1839, from Tobago. Most of the early work on Tobago beetles concerned harmful species and their control.

As part of the project on Tobago's biota the following list of beetle species was partially assembled from published literature and as communications from specialists. The third author (JDH) searched the literature for records of Tobago beetles. This included Blackwelder (1944), other relevant historic literature such as agricultural reports, and Zoological Record from volume 1 to present. With the staggering amount of data already available to Blackwelder on Neotropical beetles in 1944, it is incredible to us how few Tobago records were in existence at that time. A total of 95 species were found to be reported from Tobago. We think it is amazing how small the list of published records still is, 60 years after Blackwelder (1944). It must be noted as a source of error, that on rare occasions the island has been confused (in the Zoological Record and elsewhere) with other places of the same or similar name: (1) a small island of the same name in the US Virgin Islands; (2) the Panamanian island of Taboga, near the southern entrance of the Panama Canal; (3) Tobago Cay in the Grenadines of the Lesser Antilles; and (4) Botel Tobago (Orchid Island) off the coast of Taiwan.

Additional data is here presented from (1) field work (of SBP) in June 1993; (2) a malaise trap operated on the edge of a neglected citrus orchard

bordering on primary forest, near Goldsborough, February to June, 1994, by M. Sommeijer of University of Utrecht; and (3) specimens collected by William Rowe (Smithsonian Institution, retired) and JDH in 1979. Voucher specimens collected by SBP are in the collections of the specialists who supplied identifications or are in the Canadian Museum of Nature, Aylmer, Quebec. Most of the Sommeijer material is with the Florida State Collection of Arthropods, and at least some of the specimens collected by Rowe and JDH are in the collection of the United States National Museum of Natural History. Identifications of the SBP specimens were made by the first two authors, or by the taxonomic specialist indicated for each family. Many of the taxa are not yet known by genus or species names, but we think it useful to indicate their presence in Tobago. As a result of this work, we now can document 672 species of beetles on the island of Tobago.

We assume that many of the beetle species presently known from Trinidad will ultimately be found to occur on Tobago. But a list for Trinidad is not available. C.K. Starr (unpublished) estimates that Trinidad may have as many as 80,000 to 400,000 terrestrial arthropod species, and that Tobago tends to have one fifth to one half and usually one third as many species as Trinidad. The ratios of shared insect species vary by taxonomic group. Flint (1996:108) lists 53 species of Trichoptera from Trinidad and 33 species from Tobago (62.3%). Seven (21%) of the Tobago species are endemic, and one occurs on Tobago and on the South American mainland, but not on Trinidad. Hynes (1948) and Nieser and Alkins-Koo (1991) document the occurrence of 81 species of water bugs (Heteroptera: Nepomorpha and Gerromorpha) from Trinidad, and 16 (19.8%) from Tobago. Oddly, the numerical relationship between the two infraorders varies greatly between the two islands. Tobago has 6.1% of the number of species of Nepomorpha that are found on Trinidad (2 : 33); while 71.8% of the Gerromorpha are recorded for Tobago (48 : 14). Barcant (1970) records 617 species of butterflies from Trinidad and 123 from Tobago (19.9%). In a more detailed study of the HesperIIDae (Lepidoptera) of the two islands, Cock (1982) records 272 species from Trinidad and 57 species from Tobago (21.0%). The only paper of which we are aware that deals specifically with a group beetles from the two islands is Hinton's review of the Elmidae of Trinidad and Tobago (Hinton, 1971). The same six species which occur on Trinidad also occur on Tobago (100%).

If the fauna of Trinidad conservatively contains 60,000 insect species, and if the insect fauna of Tobago is 1/3 that of Trinidad, and if beetles are about 20% of an insect fauna (Grove and Stork, 2000, and references), this conservatively predicts a total of about 4000 species of beetles in Tobago. By comparison, the nearby but smaller oceanic islands of Grenada and the Grenadines have 507 beetle species now reported or suspected (Woodruff et al., 1997). The following list is offered as a contribution to an understanding of the insects of the Caribbean. It shows how incompletely known the fauna still is. Tobago has the oldest forest reserve system in the New World (Beard, 1944) and there are well-developed trails through many areas of natural habitats (Comeau et al., 1992). A possible contact for visiting biologists to either Tobago or Trinidad is through the Chair of the Department of Life Sciences, University of the West Indies, St. Augustine, Trinidad, West Indies; tel (868) 645-3232, ext. 3096, fax (868) 645-3535 ext 2208 or 663-9684.

Starr and Nelson (1995) provide information about collecting regulations and procedures. Insect collecting and export permits for Trinidad and Tobago can be coordinated through: Head, Wildlife Section, Forestry Division, Farm Road, St. Joseph, Trinidad; Tel. (809) 662-5114; Fax (809) 645-4288. They use the information in their species conservation and habitat monitoring programs. Tobago itself also requires permission from the Secretary of Agriculture, Tobago House of Assembly, Scarborough, Tobago: Tel. (809) 639-2570; Fax (809) 639-1746. It is probably best to first contact the Department of Life Sciences at the University of the West Indies before contacting the Forestry Division.

The third author solicits additional information from specialists on published or unpublished records of Tobago beetles and all other insects, and will fully acknowledge such help.

Order: Coleoptera

Families and higher classification and numbering used here follow Lawrence and Newton (1995), as modified by Arnett and Thomas (2001). To conserve space, subfamilies are usually indicated only for traditional families that are now used at a subfamily rank. Genera are listed alphabetically under family or subfamily. We do not use full subfamily and tribal classifications because they would greatly lengthen this contribution. Listing of only a family or genus name means that the taxon is present in the voucher collections but that

species identification was not possible. Records from the literature are indicated by one or more reference citations. We have not attempted to confirm the identity of specimens cited in the literature for which we did not have recent material. We give only the author and year of publication for species known to occur in Tobago but which were described from other countries. We do not cite these in the references and they can be found in Blackwelder (1944). Even though many species names are not now known, we believe that listing this material to the species level by whatever higher taxon name is possible is still of interest in helping to make known the diversity of the fauna.

Suborder Adephaga

Section Geadephaga

10. Carabidae

Carabinae (G.E. Ball and D. Shpeley identifications)

- Amblygnathus darlingtoni* Ball & Maddison, 1987
- Apenes steinheili* Ball and Shpeley, 1992
- Aspidoglossa schach* (Fabricius, 1792) Nichols, 1988: 99
- Athrostictus paganus* Dejean, 1831
- Calleida* species
- Clivina (Paraclivina)* species
- Colliuris rugofrons* Dejean, 1825
- Colliuris (Colliurella)* species
- Cylindronotum* species
- Hyboptera dilutior* Oberthür, 1884
- Lebia bitaeniata* Chevrolat, 1834
- Lebia* species; cf. *rugatifrons* Chaudoir, 1871
- Micratopus* species
- Notiobia* species
- Pachyteles*, 2 species
- Paratachys*, 2 species
- Pentagonica flavipes picipes* Darlington, 1935
- Perigona nigriceps* Dejean, 1831
- Platynus aeneipennis* Dejean, 1831
- Polyderis* species
- Pseudaptinus* (s. str.) species
- Pseudaptinus (Thalpius)* species
- Selenophorus chalybeus* Dejean, 1829
- Selenophorus discopunctatus* Dejean, 1829
- Selenophorus parvus* Darlington, 1934
- Selenophorus ruficollis* species group
- Selenophorus* species

- Stenocrepis insulana* Jacquelin du Val, 1856: specimens in USNM.
Tachymenis species
 Cicindelinae (see Freitag, 1992)
Cicindela suturalis hebraea Klug, 1834; Wagenaar Hummelinck, 1983: 78 (as *Cicindela suturalis hebraea*); Freitag, 1992: 141, 157 (as *Cicindela (Plectrographa) suturalis* f. *hebraea*).
Cicindela trifasciata Fabricius, 1781; Wagenaar Hummelinck, 1983: 74; Freitag, 1992: 156 (as *Cicindela (Cicindelidia) trifasciatus*)
Odontocheila marginegutta Dejean, 1825
- Section Hydradephaga
14. Noteridae
Notomicrus species
17. Dytiscidae (identifications courtesy of R. Roughley and P. Spangler)
Copelatus posticatus (Fabricius), 1801
Copelatus unidecimstriatus Aubé, 1838
Copelatus species (group 6, Roughley, unpub.)
Desmopachria species
- Suborder Polyphaga
- Series Staphyliniformia
- Superfamily Hydrophiloidea
18. Hydrophilidae (identifications courtesy of R. Roughley)
Cercyon species
Enochrus, 2 species
Epimetopus species
Halobata species
Hydrobius species
Paracymus species
Pelosoma species
Phaenonotum species
Omicrus species
Oosternum costatum Sharp, 1882
21. Histeridae
Acritus species
Epeirus species
Hister species
 Histerini, undetermined genus and species
- Superfamily Staphylinioidea
22. Hydraenidae
Hydraenus species
23. Ptiliidae
Nossidium (?) species
 undetermined genus and species
25. Leiodidae
Adelopsis species
Aglyptinus species
Dissochaetus species
Eucatops species
Zeadolopus species
26. Scydmaenidae (identifications courtesy of A. Davies)
Euconnus (Napochus) sommerijeri Makham, 1997: 136 (Makham did not use the subgenus)
Protoconnus (?) species
Scydmaenus (s. str.) spp.
Microscydmus species
 undetermined genus and species
28. Staphylinidae (see Blackwelder, 1943, additional identifications courtesy of A.F. Newton)
Acylophorus species
Achenomorphus species
Aleochara (Aleochara) lustrica Say, 1836; Klimaszewski and Génier, 1987: 247
Anotylus insignitus (Gravenhorst), 1806; Herman, 2001: 1360; Blackwelder, 1943: 98 (as *Oxytelus*).
Atanygnathus species
Baeocera species
Belonuchus rufipennis (Fabricius), 1801; Blackwelder, 1943: 433; Herman, 2001: 2570.
Biocrypta species
Bledius caribbeanus Blackwelder, 1943: 113 [Type locality]; Herman, 1972: 145 (as *Psamathobledius*); Herman 1986: 300; 2001: 1523; Blackwelder, 1983: 15.
Cafius bistriatus bistriatus (Erichson), 1840; Blackwelder, 1943: 439; Herman, 2001: 2570.
Carpelimus species
Clavilispinus species
Coproporus, 3 species
Diochus species
Holisus species
Homoetarsus obsolescens Blackwelder, 1943: 329 [Type locality]
Lithocharis species

- Megalopinus* species
Monista species
Nacaeus species
Neohypnus attenuatus (Erichson), 1839; Blackwelder, 1943: 479 (as *Xantholinus*); Herman, 2001: 3709.
Ochthephilum species
Oligota minuta Cameron, 1931; Commonwealth Institute of Biological Control, 1977: 3; Frank et al., 1992: 377.
Oxytelus incisus Motschulsky, 1857; Blackwelder, 1943: 98; Herman, 2001: 1434.
Paederomimus species
Palaminus species
Perinthus bolivari Seevers, 1946; 1957: 170.
Perinthus xenocostalis Seevers, 1937; 1957: 170.
Philonthus hepaticus Erichson, 1840; Blackwelder, 1943: 402; Herman, 2001: 2837.
Philonthus ventralis Gravenhorst, 1802; Blackwelder, 1943: 402; Herman, 2001: 2997.
Philothalpus species
Piestus penicillatus (Dalman), 1821; Blackwelder, 1943: 47; Herman, 2001: 1793.
Platystethus species
Rugilus species
Scaphisoma species
Sepedophilus species
Stenus species
Suniotrichus species
Thinodromus species
Thyreoxenus parviceps Mann, 1923; Seevers 1957: 175
Xantholinus illucens Erichson, 1839; Blackwelder, 1943: 489; Herman, 2001: 3800.
Pselaphinae (see Park et al. 1976; additional identifications courtesy of D.S. Chandler).
Apharus hexagonus Park, et al., 1976: 67 [Type locality]
Apharus species
Barrojuba species
Biblomimus species
Briaraxis depressus Brendel, 1894 (previously known only from Dry Tortugas Keys, Florida)
Batrybraxis species
Bythinoplectus laminatus Park, et al., 1976: 5 [Type locality]; Comellini, 1985: 727
Bythinoplectini (3 species, genus not determined)
Dalmonexus tobagoensis Park, et al., 1976: 17 [Type locality]
Euphalepsus species
Euplectus episcopalis Park, et al., 1976, [Type locality]
Euplectus species
Euplectini, 6 species, genera not determined
Eurhexius incertus Park, et al., 1976: 20 [Type locality]
Hamotus soror Raffray, 1904; Park, et al., 1976: 72, 78.
Insulomodes excavatus Park, et al., 1976: 16 [Type locality]
Insulomodes tobagoensis Park, et al, 1976: 16 [Type locality]
Jubus, 6 species
Neotyrus tobagoensis Park, et al, 1976: 78 [Type locality]
Ocabaraja species
Oxarthrius species
Rhexinia species
Sebaga, 5 species
Thesium pearcei Park, et al, 1976: 23 [Type locality]
- Series Scarabaeiformia
- Superfamily: Scarabaeoidea
30. Passalidae (data courtesy of J. Schuster)
Passalus cf. *interruptus* Linnaeus, 1758; Bennett, 1952: 5 [as *Passalus (interruptus)?*]; Longstaff, 1912: 333
Passalus interstitialis Eschscholtz, 1829; Longstaff, 1912: 333 [as *Scalmus (Ninus) interstitialis*]
Passalus latifrons Percheron, 1844; Schuster, 1992: 363 [as *Passalus (Pertinax) latifrons*]
Passalus punctiger Lepeletier and Serville, 1825
Passalus unicornis Serville, 1825
Spasalus robustus Percheron, 1835; Schuster, 1992: 363
Verres furcalabris Eschscholtz, 1829; Schuster, 1992: 360
37. Scarabaeidae (identifications courtesy of H.F. Howden and B. Gill)
Aegopsis species (near *A. trinidadensis* or *A. curvicornis*), Longstaff, 1912: 333.
Ancistrosoma tobagoensis Arrow, 1913: 428 [Type locality]; Imperial Bureau of Entomology, 1917: 171
Anomala species
Aphodius cuniculus Chevrolat, 1864; Chapin, 1940: 7; Woodruff, 1973: 87; Cartwright and Chalumeau, 1978: 8 [as *Aphodius (Nialus) cuniculus*]; Arnett, 1983a: 20.
Astaena insulana Moser, 1913

Ataenius gracilis (Melsheimer), 1844
Ataenius picipes Fleutiaux and Sallé, 1897
Ataenius strigicauda Bates, 1887
Ataenius, 2 species
Ateuchus species
Barybas aenescens Moser, 1926
Canthon cyanocephalus Harold, 1868
Canthon triangularis Drury, 1770
Canthon velutinus Harold, 1868
Coelosis biloba (Linnaeus), 1767
Coilodes ovalis Robinson, 1948
Coprophanaeus dardanus (Macleay), 1819
Cyclocephala amazon Linnaeus, 1767
Cyclocephala melanocephala (Fabricius), 1775
Deltochilum orbigny Blanchard, 1843
Dynastes hercules Linnaeus, 1758; Redd, 1982:
 25
Germarostes rotundatus Paulian, 1982
Gymnetis pulchra Swederus, 1787
Ipselissus species
Isonychus species
Ligyris fossor (Latreille), 1833
Neothyreus lanei (Martinez), 1952
Onthophagus lojanus Balthazar, 1939
Pelidnota near *aeruginosa* (Linnaeus), 1758
Pelidnota laevissima Burmeister, 1855
Pelidnota velutipes Arrow, 1900
Phyllophaga species
Pleurophorus parvulus (Chevrolat), 1864
Termitodes species
Uroxys species

Series Elateriformia

Superfamily Scirtoidea

39. Eucinetidae
 undetermined genus and species
40. Clambidae
Clambus panamensis insularis Endrödy-Younga, 1998: 387 (occurrence on Tobago is explicitly indicated only on the distribution map).
41. Scirtidae (identifications courtesy of R. Roughley)
Scirtes, 3 species
Prionocyphon species

Superfamily Buprestoidea

44. Buprestidae (identifications courtesy of B. Dozier)
Agrilus, 2 species
Leiopleura species
Mastogenius species
Pachyschelus species
Paragrillus species
Taphrocerus species

Superfamily Byrrhoidea

46. Elmidae
Elsianus clypeatus Hinton, 1936: 254
Heterelmis simplex codrus Hinton, 1971: 264 [paratype]
Hexacylloepus smithi (Grouvelle), 1898; Hinton, 1971: 263
Microcylloepus carinatus Hinton, 1940; Hinton, 1971: 261
Neelmus pusio Hinton, 1971: 258 [Type locality]; 1972: 134
Phanocerus congener Grouvelle, 1898; Hinton, 1971: 254

53. Ptilodactylidae
 undetermined genus, 4 species

54. Chelonariidae
Chelonarium, 2 species

Superfamily Elateroidea

60. Eucnemidae
Deltometopus species
Fornax species
 undetermined genus and species
61. Throscidae
 undetermined genus, 3 species
62. Elateridae (identifications courtesy of E. C. Becker)
Aeolus, 2 species
Cardiorhinus species
Chalcolepidius species
Conoderus species
Drapetes species
Heterodera species
Ischiodontus species
Physorrhinus species
Pyrophorus s. lat. species

67. Lycidae
Plateros (?) species
 Lycinae, undetermined, 2 genera, 2 species
69. Phengodidae
 Mastocerini, undetermined genus and species
Pseudophengodes pulchella Guérin, 1843;
 Longstaff, 1912: 333 (as *Phengodes pulchella*)
 undetermined genus and species
70. Lampyridae
Aspisoma ignitum (Linnaeus), 1767: 645;
 Hackett et al., 1992: 181
Photinus, 2 species, genus first recorded by
 Longstaff, 1912: 333.
Photuris, 2 species
 undetermined genus, 6 species
72. Cantharidae
Cauliognathus species
Discodon ? species
Podabrus ? species
Silis? species
 Omethini, undetermined genus and species
 undetermined genus, 6 species
- Series Bostrichiformia
- Superfamily Bostrichoidea
75. Dermestidae
Cryptorhopalum species
Orphinus species
 undetermined genus, 4 species
76. Bostrichidae
Dinoderus species
 undetermined genus, 2 species
Lyctus species
77. Anobiidae
Byrrhodes species
Caenocara species
Calymmaderus species
Tricorynus species
 undetermined genus, 2 species
- Series Cucujiformia
- Superfamily Lymexyloidea
79. Lymexylidae
Melittomma species
- Superfamily Cleroidea
81. Trogossitidae
Corticotomus species
Tenebroides species
83. Cleridae
 undetermined genus, 2 species
87. Melyridae
Ablechrus species
 undetermined genus and species
- Superfamily Cucujoidea
91. Nitidulidae
Amphicrossus species
Brachypeplus species
Colopterus species
Conotelus species
Cybocephalus species
Haptoncus species
Lobiopa species
Pallodes species
Pityophagus species
Stelidota species
 unidentified genera, 12 species
93. Monotomidae
Monotoma species
 Monotominae, undetermined genus and species
97. Silvanidae (identifications courtesy of M.C. Thomas)
Monanus concinnulus (Walker), 1858
Telephanus species
 undetermined genus, 2 species
100. Laemophloeidae (identifications courtesy of M.C. Thomas)
Charaphloeus convexus (Grouvelle), 1876
Cryptolestes unicoloris (Reitter), 1876
Laemophloeus suturalis Reitter, 1876
Placonotus politissimus (Wollaston), 1867
102. Phalacridae
 undetermined genera and 8 species
105. Cryptophagidae
Ephistemus species
107. Languriidae
Cryptophilus species

- Hapalips* species
Toramus species
 undetermined genus, 3 species
108. Erotylidae (identifications courtesy of P. Skelley)
Iphiclus (*Brachymerus*) near *nigropictus* (Lacordaire), 1772
Ischyryus fulmineus Delkeskamp, 1957; Skelley, 1998: 127
Ischyryus insolens Crotch, 1867; Skelley, 1998: 37, 82.
Oligocorynus zebra (Fabricius), 1787
109. Oedemeridae
Paroxacis antillarum (Champion, 1896); Arnett 1983b: 5
110. Biphylidae
Diplocoelus, 3 species
111. Bothrideridae
 undetermined genus and species
112. Cerylonidae
 Cerylonini, undetermined genus and species
 Murmidiinae, undetermined genus and species
115. Endomychidae
Stenotarsus species
 undetermined genus and species
116. Coccinellidae (identifications courtesy of R. Gordon)
Azya orbigera orbigera Mulsant, 1850; Bennett, 1952: 6
Azya species
Coleomegilla maculata Degeer, 1775; Bennett and Simmonds, 1964: 93
Cryptognatha nodiceps Marshall, 1912; Bennett, 1952: 6
Cryptognatha species Bennett and Simmonds, 1964: 89
Cycloneda sanguinea Linnaeus, 1758; Bennett, 1952: 6; Bennett and Simmonds, 1964: 93
Exoplectra species; Bennett and Simmonds, 1964: 91
Hyperaspis species
Lioscymnus diversipes Champion, 1913; Bennett, 1952: 6
Microscymnus calvus Champion, 1913; Bennett and Simmonds, 1964: 85
Nephus aeneipennis (Sicard), 1929
- Nephus* (*Scymnobius*) species; Bennett and Yaseen, 1978a: 2; 1978b: 55 (as *Nephus*)
Pentilia species; Bennett and Simmonds, 1964: 90; Bennett, 1952: 6 lists *Pentilia confluens* without author or year of publication. We are unable to verify this name.
Prodilis species; Bennett, 1952: 6
Pseudoazyza trinitatis (Marshall), 1912; Bennett, 1952: 6 (as *Azya trinitatus*); Bennett and Simmonds, 1964: 91 (as *Azya trinitatus*); Gordon, 1980: 196
Scymnus floralis Fabricius, 1792; Bennett and Simmonds, 1964: 83
Scymnus, 3 species
Stethorus species; Bennett and Simmonds, 1964: 82
117. Corylophidae
Bathona species
 Saciini, undetermined genus and species
Sericoderus species
 undetermined genera, 7 species
118. Latridiidae
Cartodere ? species
Corticaria ? species
- Superfamily Tenebrionoidea
119. Mycetophagidae
 undetermined genus and species
122. Ciidae
Cis species
Orthocis species
Strigocis species
124. Melandryidae
 undetermined genus and species
125. Mordellidae
Mordella species; Bennett, 1952: 5
Mordellistena species
Tomoxia serricornis Ray, 1939: 277 [type locality]
 undetermined genera, 18 species
126. Rhipiphoridae
Trigonodera species
 undetermined genus and species
127. Colydiidae
Acolobicus species

- Bitoma* species
Eucicones species
Nematidium species
undetermined genus, 5 species
129. Zopheridae
Meralius species
134. Tenebrionidae (see Marcuzzi, 1984; identifications courtesy of C.A. Triplehorn)
Alphitobius laevigatus (Fabricius), 1781
Ammodonus ciliatus (Champion), 1896
Anaedus species
Blapstinus buqueti Champion, 1885; Marcuzzi, 1962: 23, 36, 43; 1977: 26, 47; 1984: 80.
Calymmus cucullatus Pascoe, 1871
Corticeus species
Liodema serricorne Bates, 1873
Neomidia deltocera Triplehorn, 1965
Opatrinus gemellatus Olivier, 1795; Marcuzzi, 1962: 31; 1977: 22, 47; 1984: 78
Palorus subdepressus Wollaston, 1864
Paratenetus species
Phaleria angustata Chevrolat, 1878; Marcuzzi, 1977: 34, 39
Phaleria picipes Say, 1824
Platydemia guatemalense Champion, 1886
137. Oedemeridae
Hypasclera species
Oxycopis species
Paroxacis species
139. Meloidae
Tetraonyx species (from *Epicharis* bee nest)
140. Mycteridae (data courtesy of D. Pollock)
Physcius species
145. Salpingidae (data courtesy of D. Pollock)
Lanthanus species
Prostominiinae, undetermined genus and species
146. Anthicidae
undetermined genus, 2 species
147. Aderidae
undetermined genus, 4 species
148. Scraphiidae
undetermined genus, 2 species
- Superfamily Chrysomeloidea
149. Cerambycidae
Aerenea species
Adetus species
Bactriola vittulata Bates, 1885
Callopogon armillatum (Linnaeus), 1767
Estola species
Hippopsis meinerti Aurivillius, 1900; Galileo and Martins, 1988:181, 185 (subspecies *tobagoensis* synonymized); Breuning, 1962:9,10 (as *Hippopsis lemniscata* ssp. *tobagoensis* [type locality])
Lagocheirus araneiformis fulvescens Dillon, 1957: 151 [paratype]; Duffy, 1960:236 (as *Lagocheirus araneiformis*)
Lepturges species
Lochmaeocles zonatus Dillon and Dillon, 1946: 214 [Type locality]
Megaderus stigma (Linnaeus), 1758; Duffy, 1960: 411
Neoclytus rufus Olivier, 1895
Stenodontes dasytomus (Say), 1823; Duffy, 1960: 62 [as *Stenodontes* (s. g. *Malodon*) *dasytomus*]
Stizocera species
Taeniotes species, Guppy, 1911: 14
Tethystola species
150. Bruchidae (identifications courtesy of J.M. Kingsolver)
Acanthoscelides apicalis (Sharp), 1885
Acanthoscelides dominicana Johnson, 1986
Acanthoscelides johnique Johnson, 1986: 267
Acanthoscelides zeteki Kingsolver, 1969.
Amblycerus, 2 undescribed species
Caryedes clitoriae (Gyllenhal), 1839
Ctenocolum crotonae Fahraeus, 1839; Johnson and Kingsolver, 1981: 418
Ctenocolum podagricus (Fabricius), 1801; Alvarez-Marin and Kingsolver, 1997: 219
Megacerus cubicus Motschulsky, 1874; Johnson and Kingsolver, 1981: 411
Meibomeus panamensis Kingsolver and Whitehead, 1976
Merobruchus columbinus (Sharp), 1885
Sennius rufomaculatus (Motschoulsky), 1874; Alvarez-Marin and Kingsolver, 1997: 220
Sennius, 2 species
151. Chrysomelidae (identification courtesy of E.G. Riley)
Acalymma species, *gouldi* species group
Acalymma species, *peregrinum* species group

- Agroiconota tristrialis* (Fabricius), 1792
Agrostema species
Alagoasa species
Allocolaspis species
Antitypona species
Asphaera species
Aulacochalamys species
Brachypnoea species
Capraita species
Cerotoma salvinii Baly, 1866
Chaetocnema, 2 species
Chalepus species
Charidotella zona (Fabricius), 1801; Borowiec, 1996: 149
Charidotella species
Chlamisus species
Colaspis melanchalica group
Colaspis, 2 species
Cryptocephalus species
Diabrotica, 2 species
Diachus species
Diaphaulaca, 3 species
Epitrix species
Glyptina, 3 species
Griburius species
Gynandrobrotica species
Heikertingerella, 3 species
Hypolampsis ? species
Lexiphanes species
Longitarsus, 2 species
Luperaltica group, species
Lysathia species
Microctenochira fraterna (Boheman), 1850
Microctenochia reticulata (DeGeer), 1775; Borowiec, 1996: 201
Monomacra group, 3 species
Myochrous species
Neobrotica praeclara Weise, 1929; Blake, 1966: 306
Neolema, 2 species
Nesaecrepidia, probably *rufomarginata* Blake, 1964
“*Oulema*” species
Pachybrachis species
Phaedon species
Phenrica species
Schematiza cordiae Barber, 1947; Simmonds, 1949: 276
Strabala species
Syphrea species
Systema s-littera (Linnaeus), 1758
Trichobrotica species
Yingaresca species
- Zepherina trinidadensis* Weise, 1929; Wilcox, 1983: 78
- Superfamily Curculionoidea
153. Anthribidae
- Euxenus* species
Euparinus species
Ormiscus species
Toxonotus species
159. Curculionidae (determinations courtesy of R.A. Anderson)
- Acamptus* species
Anchonus, 2 species
Anthonomus species
Apion species
Baradini, 9 genera, 9 species
Baris, 2 species
Caulophilus species
Catolethrus species
Cleogonus armatus Champion, 1904
Conotrachelus cristatus Fahraeus, 1837
Conotrachelus tuberosus Fielder, 1840
Conotrachelus, 3 species
Cosmopolites sordidus Germar, 1824; Freeman 1925: 24 (as “plantain weevil”; later identified as *C. sordidus*, Imperial Bureau of Entomology, 1925:493; Stell, 1935: 50; Urich, 1925: 40; Ali et al., 1973
Cossonus species
Crionyx, 2 species
Cryptorhynchus formosus Chevrolat, 1906
Cryptorhynchus, 3 species
Cryptorhynchini, 9 genera, 9 species
Dryophthorous species
Dynamis borrhassi Fabricius, 1801; Wattanapongsira, 1966: 203 (Tobago misspelled as “Tabago”; but Panama (Tabago) clearly not intended).
Eubulus, 4 species
Eugnamptus species
Geraeus, 5 species
Hilipinus species
Hiotus species
Hypocoeloides, 5 species
Huaca species
Laemosaccus species
Lechriops canescens Champion, 1906
Lechriops, 3 species
Lepilius species
Metamasius hemipterus (Linnaeus), 1764
Microhyus species

Oxyptenopterus, 2 species
Paranchonus species
Penestes species
Phyllerythrurus sanguinolentus Olivier, 1790:
 Blackwelder, 1944: 912
Piazorhinus species
Plocamus species
Prionarthrus species
Promecops, 3 species
Prosaldius, 5 species
Pseudanchonus species
Pseudanthonomus species
Pseudapotrepus species
Pseudopinara species
Psomus species
Rhinanisus ? species
Rhynchophorus palmarum (Linnaeus), 1764;
 Urich, 1911: 7; Urich and Guppy, 1911: 7;
 Devinish, 1913: 325; Griffith, 1979: 365;
 Maharaj, 1964: 3; Wattanapongsira, 1966:
 56; Gerber and Gilbin-Davis, 1990: 143, 144
Rhysomatus, 2 species
Sibariops species
Zygopini, genus, species
Zygops species
 Platypodinae (identification courtesy of D. Bright)
Platypus parallelus Fabricius, 1801
Platypus hians Chapuis, 1865
 Scolytinae (identifications courtesy of D. Bright)
Araptus hymenaceae (Eggers), 1933
Chaetophloeus mandibularis Bright, 1981: 160
 [Type locality]
Cnesinus species
Coccotrypes carpophagus (Hornung), 1842
Corthylus species (near *minus* Wood, 1975)
Cryptocarenus heveae (Hagedorn), 1912
Dryocoetoides cristatus (Fabricius), 1801
Gymnochilus reitteri Eichhoff, 1878
Hypothenemus birmanus (Eichhoff), 1878
Hypothenemus cylindricus Hopkins, 1915
Hypothenemus eruditus (Westwood), 1836
Hypothenemus plumerira (Nordliner), 1856
Hypothenemus rotundicollis (Eichhoff), 1878
Hypothenemus squamosus (Hopkins), 1915
Microborus boops Blandford, 1897
Phloeotribus squamatus Wood, 1982
Pycnarthrum species
Pycnarthrum hispidum (Ferrari), 1867
Scolytodes prob. *guayanaensis* (Schedl), 1937
Trischidias species
Xyleborus affinis Eichhoff, 1868
Xyleborus asper Eggers, 1933
Xyleborus ferrugineus (Fabricius), 1801

Xyleborus volvulus (Fabricius), 1775
Xyleborus species
Xylosandrus morigerus (Blandford), 1894

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