March 2002

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

Stewart B. Peck
Carleton University, Ottawa, ON K1S 5B6, Canada

Joyce Cook
Carleton University, Ottawa, ON K1S 5B6, Canada

Jerry D. Hardy Jr.
National Museum of Natural History, Smithsonian Institution, Washington, DC

Follow this and additional works at: http://digitalcommons.unl.edu/insectamundi

Part of the Entomology Commons

Peck, Stewart B.; Cook, Joyce; and Hardy, Jerry D. Jr., "Beetle fauna of the island of Tobago, Trinidad and Tobago, West Indies" (2002). Insecta Mundi. 533.
http://digitalcommons.unl.edu/insectamundi/533

This Article is brought to you for free and open access by the Center for Systematic Entomology, Gainesville, Florida at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Insecta Mundi by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Beetle fauna of the island of Tobago, Trinidad and Tobago, West Indies

Stewart B. Peck and Joyce Cook
Department of Biology
Carleton University
Ottawa, ON K1S 5B6, Canada,

Jerry D. Hardy, Jr.
NMFS, National Systematics Laboratory
National Museum of Natural History,
Smithsonian Institution
Washington, DC, 20560, USA

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. Additionally, 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 Diocodia 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
Pachytele, 2 species
Paratachys, 2 species
Pentagonica flavipes picipes Darlington, 1935
Perigona nigriceps Dejean, 1831
Platynus aeneipennis Dejean, 1831
Polyderis species
Pseudapitinus (s. str.) species
Pseudapitinus (Thalpis) species
Selenophorus chalybeus Dejean, 1829
Selenophorus discoptatus Dejean, 1829
Selenophorus parvus Darlington, 1934
Selenophorus ruficollis species group
Selenophorus species
Stenocrepis insulana Jacquelin du Val, 1856: specimens in USNM.
Tachymenitis species
Cicindelinae (see Freitag, 1992)
Cicindela suturalis hebraea Klug, 1834; Wagenaar Hummelinck, 1983: 78 (as Cicindela (Plectographa) suturalis f. hebraea).
Cicindela trifasciata Fabricius, 1781; Wagenaar Hummelinck, 1983: 74; Freitag, 1992: 141, 157 (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
Halobota species
Hydrobius species
Paracyclus species
Pelosoma species
Phaeonotum species
Omicrus species
Oosternum costatum Sharp, 1882

21. Histeridae
Acritus species
Epeirus species
Hister species
Histerini, undetermined genus and species

Superfamily Staphylinoidae

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
Diosus species
Homoeotarsus 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
Oxytelus incisus Motschulsky, 1857;
Blackwelder, 1943: 98; Herman, 2001: 1434.
Paederomimus species
Palaminus species
Philonthus hepaticus Erichson, 1840;
Philonthus ventralis Gravenhorst, 1802;
Blackwelder; 1943: 402; Herman, 2001: 2997.
Philothalpus species
Piestus petzicillatus (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 iden-
tifications courtesy of D.S. Chandler).
Apharus hexagonus Park, et al., 1976: 67 [Type
locality]
Apharus species
Barrajuba 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 tobagensis Park, et al., 1976: 17
[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 tobagensis Park, et al., 1976: 16
[Type locality]
Jubus, 6 species
Neotyris tobagensis 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 Passsalus (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]
Passaluspunctiger 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 tobagensis Arrow, 1913: 428
[Type locality]; Imperial Bureau of
Entomology, 1917: 171
Anomala species
Aphodius cuniculus Chevolat, 1864; Chapin,
1940: 7; Woodruff, 1973: 87; Cartwright and
Chalumeau, 1978: 8 [as Aphodius (Nialis)
cuniculus]; Arnett, 1983a: 20.
Astaeana insulana Moser, 1913
Ataenius gracilis (Melsheimer), 1844
Ataenius picipes Fleutiaux and Sallé, 1897
Ataenius strigicauda Bates, 1887
Ataenius, 2 species
Ateuchus species
Barybas aenesens 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 melanoccephala (Fabricius), 1775
Deltotrichum orbignyi Blanchard, 1843
Dynastes hercules Linnaeus, 1758; Redd, 1982: 25
Gernzerostes rotundatus Paulian, 1982
Gymnetis pulchra Swederus, 1787
Ipselissus species
Isonychus species
Ligyrus fossor (Latreille), 1833
Neoathyreus lanei (Martinez), 1952
Onthophagus lojanus Balthazar, 1939
Pelidnota near aeruginosa (Linnaeus), 1758
Pelidnota laevissima Burmeister, 1855
Pelidonta velutipes Arrow, 1900
Phyllophaga species
Plepharithus parvulus (Chevrolat), 1864
Termitodes species
Uroxys species

   Series Elateriformia

   Superfamily Elateroidea

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

44. Buprestidae (identifications courtesy of B. Dzier)
   Agrilus, 2 species
   Oelopleura species
   Mastogenius species
   Pachyschelus species
   Paragrilus species
   Taphrocerus species

Superfamily Byrrhoidea

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

53. Ptilodactyliidae
   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)
   Aelos, 2 species
   Cardiorhinus species
   Chalcolepidius species
   Conoderus species
   Drapes species
   Heteroderus species
   Ischiodontus species
   Physorhinus 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 Bostrichicornia
   Superfamily Bostrichoidea

75. Dermestidae
   *Cryptorrhopalum* 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. Lymexyliidae
   *Melittomma* species

81. Trogossitidae
   *Corticotomus* species
   *Tenebroides* species

83. Cleridae
   undetermined genus, 2 species

85. Melyridae
   *Ablechrus* species
   undetermined genus and species

87. Melyridae
   Superfamily Cucujoidea

91. Nitidulidae
   *Amphicrossus* species
   *Brachypeplus* species
   *Colopterus* species
   *Conotetellus* 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 unicornis* (Reitter), 1876
   *Laemophloeus sutturalis* Reitter, 1876
   *Placonotus politissimus* (Wollaston), 1867

102. Phalacridae
   undetermined genera and 8 species

105. Cryptophagidae
   *Ephistemus* species

107. Languriidae
   *Cryptophilus* species
Hapalips species
Toranus species
undetermined genus, 3 species

108. Erotylidae (identifications courtesy of P. Skelley)
Iphiclus (Brachymerus) near nigropictus (Lacordaire), 1772
Ischyrus fulmineus Delkeskamp, 1957; Skelley, 1998: 127
Ischyrus insolens Crotch, 1867; Skelley, 1998: 37, 82.
Oligocorynus zebra (Fabricius), 1787

109. Oedemeridae
Paroxacis antillarum (Champion, 1896); Arnett 1983b: 5

110. Biphyllidae
Diplococetus, 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 orbiger orbiger 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 (Scymnobiis) species; Bennett and Yaseen, 1978a: 2; 1978b: 55 (as Nephus)
Pentilia species; Bennett and Simmonds, 1964: 90; Bennett, 1952: 6 lists Pentilia confiluens without author or year of publication. We are unable to verify this name.
Prodilis species; Bennett, 1952: 6
Pseudoaaza trinitatis (Marshall), 1912; Bennett, 1952: 6 (as Azya trinitatis); Bennett and Simmonds, 1964: 91 (as Azya trinitatis); 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. Latridiiidae
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
129. Zopheridae
Meratius species

134. Tenebrionidae (see Marcuzzi, 1984; identifications courtesy of C.A. Triplehorn)
Alphitobius laevigatus (Fabricius), 1781
Ammodonus ciliatus (Champion), 1896
Anaeus species
Calymmus cucullatus Pascoe, 1871
Corticeus species
Liodema serricorne Bates, 1873
Neomidia deltocera Triplehorn, 1965
Opatrinus gemellatus Olivier, 1895; 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
Platydema guatemalense Champion, 1886

137. Oedemeridae
Hypasclera species
Oxycops 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. Scraptiidae
undetermined genus, 2 species

Superfamily Chrysomeloidea

149. Cerambycidae
Aereena species
Adetius species
Bactriola viitulata Bates, 1885
Callopopogon armillatum (Linnaeus), 1767
Estola species
Hippopsis meinerti Aurivillius, 1900; Galileo and Martins, 1988:181, 185 (subspecies tobagensis synonymized); Breuning, 1962:9,10 (as Hippopsis lemniscata ssp. tobagensis [type locality])
Lagocheirus araneiformis fulvescens Dillon, 1957: 151 [paratype]: Duffy, 1960:236 (as Lagocheirus araneiformis)
Leptures 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. Mallodon) dasytomus]
Stizocera species
Taenioletes 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 (Motschulsky), 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 tristriala (Fabricius), 1792
Agrostema species
Alagoasa species
Allocolaspis species
Antitypona species
Asphaera species
Aulacochalamys species
Brachypnoea species
Capralata 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
Gynandrobotraca species
Heikertingerella, 3 species
Hypolampsis? species
Lexiphanes species
Longitarus, 2 species
Luperalata group, species
lysathia species
Microtenochira fraterna (Boheman), 1850
Microtenochia reticulata (DeGeer), 1775; Borowiec, 1996: 201
Monomacra group, 3 species
Myochrous species
Neobrotica praecella Weise, 1929; Blake, 1966: 306
Neolesma, 2 species
Neseerepidia, probably rufomarginata Blake, 1964
"Oulema" species
Pachybrachis species
Phaedon species
Phenicra species
Schematiza cordiae Barber, 1947; Simmonds, 1949: 276
Strabala species
Syphrea species
Systena 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
Toxanotus 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
Cleagonus armatus Champion, 1904
Conotrachelus cristatus Fahraeus, 1837
Conotrachelus tuberosus Fielder, 1840
Conotrachelus, 3 species
Cosmopolites sordidus Germar, 1824; Freeman1925: 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
Cossus species
Crionyx, 2 species
Cryptorrhynchus formosus Chevrolat, 1906
Cryptorrhynchus, 3 species
Cryptorrhynchini, 9 genera, 9 species
Dryophthorus species
Dynamis borrassi Fabricius, 1801: Wattanapongsira, 1966: 203 (Tabago misspelled as “Tabago”; but Panama (Tabogo) 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
Rhysornatus, 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
Coccolycytes carpophagus (Hornung), 1842
Corthylus species (near minimus 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 plumerir (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
Trischidia species
Xyleborus affinis Eichhoff, 1868
Xyleborus asper Eggers, 1933
Xyleborus ferrugineus (Fabricius), 1801
Xyleborus volvulus (Fabricius), 1775
Xyleborus species
Xylosandrus morigerus (Blandford), 1894

Acknowledgements

The field work of SBP was partly supported by research grants from the Natural Sciences and Engineering Council of Canada. Field work in Trinidad and Tobago was greatly aided by Dr. C. K. Starr. Field work of JDH (1979) was supported by The Organization of American States and Earthwatch and recent library research by the Tobago House of Assembly, Scarborough, Tobago. The Florida State Collection of Arthropods provided many unsorted beetle specimens. The many taxonomic specialists are thanked for contributing identifications. Without their help such contributions to summaries of species diversity are not possible.

Literature Cited


Blanford, W. F. H. 1894. Sugar-cane borers in the West Indies. The Agricultural Record (Official Journal of the Central Agricultural Board of Trinidad), October, 1892, pp. 103-137.


Cock, M. J. W. 1982. The skipper butterflies (Hessteridae) of Trinidad. Part II. A systematic list of the Trinidad and Tobago Hesperidae. Occasional Paper No. 5, Department of Zoology, University of the West Indies, Trinidad, ii+47pp.


Commonwealth Institute of Biological Control. 1977. West Indian Station, Commonwealth Institute of Biological Control, Quarterly Report for October - December 1977, 3pp.


Hynes, H. B. N. 1948. Notes on the aquatic Hemi- ptera-Heteroptera of Trinidad and Tobago, B.


**Lawrence, J. F., and A. F. Newton.** 1995. Families and subfamilies of Coleoptera (with selected genera, notes, references and data on family group names. In J. Pakaluk and S.A. Slipinski (editors), Biology, Phylogeny, and Classification of Coleoptera.. Museum i Instytut Zoologii PAN, Warsaw, Poland, pp. 779-1006.


**Maharaj, S.** 1964. The development of the palm weevil in felled coconut trees. Journal of the Agricultural Society of Trinidad and Tobago 64(1): 67-74


**Nieser, N., and M. Alkins-Koo.** 1991. The water bugs of Trinidad and Tobago. Occasional Paper 9, University of the West Indies, St. Augustine, Trinidad, iii+127 pp.


Urich, F. W., and P. L. Guppy. 1911. Preliminary notes on some insects affecting the coconut palm. Board of Agriculture, Trinidad and Tobago, Circular 5: 1-30, 3 plates.


