

**Article V.**—SUPPLEMENT TO PRELIMINARY LIST OF THE  
COLEOPTERA OF THE WEST INDIES.

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In the preface to the Preliminary List of the Coleoptera of the West Indies<sup>1</sup> we asked our readers to communicate any papers or manuscript notes bearing on the subject and expressed the hope of publishing later the records of the collections in this and possibly other museums. We have received a number of such communications in response to our request and have examined the material in the National Museum. To all who have thus aided us we are grateful, but particularly to Mr. E. A. Schwarz, to whose great knowledge of the subject and great patience and liberality in communicating his knowledge to us we owe much more than we can repay. In addition to the identified specimens, now added to the published records, there exists in this and other museums, a mass of unidentified material consisting largely of undescribed species of which at present no satisfactory records can be published. The additions (about 200), corrections, and notes that follow are derived either from the sources named or from the extensive West Indian material accumulated in American Museum and are in each instance credited to the proper source by an abbreviation. The explanation of such abbreviations and, concurrently, the authorities are given in the following list.

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- Cameron, M. *Entom. Monthly Magazine*, 2d ser., XLIX, (XXIV), 1913, p. 175.
- Casey, Thos. L. *Memoirs on the Coleoptera*, VII, 1916.
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- Cockerell, T. D. A. *Journal Jamaica Institute*, 1891–1893.
- Coquerel, Charles. *Ann. Soc. Entom. France*, 2d ser., VII, 1849, pp. 450–452.

<sup>1</sup> *Bulletin American Museum of Natural History*, XXXIII, Art. XXX, 1914, pp. 391–493.

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- Ehlers, W. Trans. Amer. Entom. Soc., XI, 1883, p. 36.
- Fleutiaux, Ed. In letters, and Liste des Coléoptères de la Guadeloupe par Fleutiaux et Sallé, Ann. Soc. Entom. France, 6th ser., IX, 1889, pp. 351-484; supplements by A. Raffray and A. Grouvelle: *ibid.*, LXXI, 1902, pp. 756-769; *ibid.*, LXXXVII, 1908, pp. 33-64; *ibid.*, LXXI, 1912, pp. 289-312. Revision des Trixagidæ, Melasidæ et Elateridæ des Antilles, *ibid.*, LXXX, 1911-1912, pp. 235-264.
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- Grouvelle, A. Bull. Soc. Entom. France, 1916, pp. 84-87.
- Gundlach, Juan. Annales de la Sociedad Espanola de Historia Natural, serie II, tomo segundo, 1894, pp. 601-658 (Fauna Puerto Riquena, pp. 287-344). This work was inaccessible to us at the time the Preliminary List was written; it contains a large number of Porto Rico records. Some of the species cited have, however, never been described and are not included by us.
- Hopkins, A. D. U. S. Department of Agriculture, Office of the Secretary, Report No. 99, 1915.
- Horn, Walther. Genera Insectorum, Coleoptera, Fascicule 82, *a, b, c*.
- Jones, Thomas H. Insects Affecting Vegetable Crops in Porto Rico. Bulletin of the U. S. Department of Agriculture, No. 192, 1915.
- Kerremans, Ch. Monographie des Buprestides, I-VII, pt. 8, 1906-1914.
- Kleine, R. Berl. Ent. Zeitsch., 1908; Ent. Blatter, VI, 1910.
- Lameere, A. Coleopterorum Catalogus, pt. 52, 1913.
- Leng, C. W. and Mutchler, A. J. Bull. Amer. Mus. Nat. History, XXXV, pp. 681-698.
- Mann, W. M. Psyche, XXII, 1915, pp. 163, 164.
- Marshall, Guy A. H. Ann. and Mag. Nat. Hist., XVIII, 8th ser., 1916, pp. 450-469.
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- Mutchler, A. J. Bull. Amer. Mus. Nat. History, XXXIII, 1914, pp. 345, 346.
- Putzeys, J. Stett. Ent. Zeitung, 1878, p. 25.
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- Robinson, Col. Wirt. In letters.
- Schwarz, E. A. In letters.
- Shoemaker, Ernest. A series collected in St. Thomas by Clarence Shoemaker, which has been at our disposal for inspection, has furnished some records.
- Spaeth, F. Coleopterorum Catalogus, part 62, 1914.
- U. S. N. M. Specimens in the United States National Museum, identified by E. A. Schwarz; records copied by permission of Dr. Leland O. Howard, Honorary Curator, Dept. of Insects.
- Urich, F. W. Trinidad Field Nat. Club, I, 1892.
- Wickham, H. F. In letters.

The statement in the Preliminary List "total absence of the Silphidæ", requires modification. While true of *Silpha* and *Necrophorus* and of Burying Beetles in the sense we intended, it is not true of all Silphidæ, as that family is composed in the Henshaw Check List. There is a species of *Aglyptonotus* in the British Museum from St. Vincent and Grenada (Ent. Mont. Mag., LI., p. 121). Mr. Schwarz has collected a species of *Aglyptonotus* at Cayamas, Cuba, and the National Museum contains specimens of a *Ptomophagus* or *Choleva* from Porto Rico. These are certainties; there

is furthermore a probability that species of *Scotocryptus* or *Parabystus* will be found, as they are inquilinous on Melipone bees, which occur in the West Indies (Schwarz).

The islands of Trinidad and Tobago, which are politically part of the West Indies, are situated close to the mainland of South America, of which faunistically they become part. In Cicindelinae the introduction of Trinidad records would require the addition of four species of the genus *Odon-tochila* (Trinidad Field Nat. Club, I, 1892, p. 109, and Walther Horn in Gen. Ins.) and, in other families, many similarly alien records. We shall, therefore, in future omit from the West Indian List species and genera occurring only in the islands above named.

In the following pages the additional records of distribution and the species to be added to our Preliminary List, the latter being indicated by asterisks, are arranged according to that List; errors which have been noticed are corrected, and various other items of interest are included. It will be noted that an atmosphere of doubt, necessarily surrounding records based on the various identifications of different authors in difficult groups, is indicated, but this cannot be dissipated until each of such groups is studied in detail.

## Family I. CARABIDÆ.

### Subfamily CICINDELINÆ.

The authors have published (Bull. American Mus. Nat. Hist., XXV, 1916, pp. 681-698) a Descriptive Catalogue of the West Indian Cicindelinae which involves the separation of the records for *Tetracha sobrina* and *Cicindela suturalis* to show the distribution of their varieties, the revival of Fleutiaux and Sallé's variety *pallipes* under *argentata*, the description of a new variety of *T. sobrina* from Antigua, and of two new species of *Cicindela* from Cuba. On account of these changes and of numerous additional records, we think it advisable to publish a complete revised list of this subfamily.

### **Tetracha** Hope.

*Tetracha acutipennis* (Dejean). Hispaniola, Cuba.

*Tetracha sobrina* (Dejean). St. Bartholomew?.

*Tetracha sobrina* var. *infuscata* (Mannerheim). Hispaniola, Porto Rico, St. Croix, St. Bartholomew.

*Tetracha sobrina* var. *antiguana* Leng and Mutchler. Antigua.

*Tetracha carolina* (Linné). Cuba.

*Tetracha carolina* var. *occidentalis* (Klug). Cuba, Grand Cayman.

**Cicindela** Linné.

- Cicindela marginata* Fabricius. Bahamas, Cuba.  
*Cicindela cardini* Leng and Mutchler. Cuba.  
*Cicindela böops* Dejean. Cuba, Hispaniola, Porto Rico.  
*Cicindela olivacea* Chaudoir. Cuba.  
*Cicindela trifasciata* Fabricius. Bahamas, Cuba, Grand Cayman, Hispaniola, Porto Rico, St. Thomas, Jamaica, Barbuda, Antigua, Guadeloupe.  
*Cicindela suturalis* Fabricius. Hispaniola, Porto Rico, St. Thomas, St. Bartholomew, Barbuda, Antigua, Guadeloupe, Martinique, Barbados, St. Vincent, Grenada.  
*Cicindela suturalis* var. *hebræa* Klug. St. Domingo, Porto Rico, Antigua.  
*Cicindela suturalis* var. *gadeloupensis* Fleutiaux and Sallé. Guadeloupe.  
*Cicindela viridicollis* Dejean. Cuba.  
*Cicindela argentata* var. *pallipes* Fleutiaux and Sallé. Guadeloupe.  
*Cicindela cubana* Leng and Mutchler. Cuba.

## Subfamily CARABINÆ.

- Bembidium fastidiosum* (Laferte). Antigua (Putzeys).  
 \* *Tachys picturatus* Putzeys. Antigua (Putzeys).  
*Tachyta autumnalis* Bates. Cuba, Montserrat (U. S. N. M.).  
 \* *Pterocharis eggersi* Ehlers. St. Thomas (Tr. Am. Ent. Soc., 1883, p. 36).  
*Lachnophorus leucopterus* Chevrolat. Porto Rico (A. M. N. H.).  
*Selenophorus alternans* Dejean. Porto Rico (Gundlach).  
*Selenophorus chalybæus* Dejean. Jamaica, Bahamas (U. S. N. M.); Antigua (Putzeys); Guadeloupe (Fleutiaux).  
 \* *Selenophorus integer* (Fabricius). Guadeloupe (Fleutiaux).  
*Selenophorus discopunctatus* Dejean. Haiti, Porto Rico (U. S. N. M.); Antigua (Putzeys).  
*Selenophorus flavilabris* Dejean. Porto Rico (A. M. N. H.).  
*Selenophorus parumpunctatus* Dejean. Porto Rico (Gundlach).  
*Selenophorus propinquus* Putzeys. Antigua (Putzeys).  
*Selenophorus pyritosus* Dejean. Porto Rico (Gundlach).  
*Selenophorus sinuatus* (Gyllenhal). Antigua (Putzeys).  
 Putzeys (Stett. Ent. Zeit., 1878) treats *S. cuprinus* Dejean as a synonym of *S. discopunctatus* Dejean and *S. æneocupreus* Dejean as a form of *S. beauvoisi* Dejean, established on darker specimens with the sides of thorax less rounded and other details.  
*Gynandropus gadeloupensis* Fleutiaux. Porto Rico (U. S. N. M.).

*Amblygnathus vitraci* Fleutiaux. Dominica (U. S. N. M.).

\* *Euphorticus pubescens* var. *æneolus* Bates. Cuba (U. S. N. M.).

*Colpodes ellipticus* Chaudoir. Guadeloupe (U. S. N. M.).

*Stenous tibialis* (Chevrolat). Porto Rico (Gundlach).

\* *Panagæus fasciatus* Say. Porto Rico (Gundlach).

\* *Panagæus thomæ* Schaum. Cuba (U. S. N. M.). This has been treated as a synonym of the Mexican *quadrisignatus* but is possibly distinct.

*Panagæus quadrisignatus* Chevrolat. Cuba, Porto Rico (A. M. N. H.).

*Aspidoglossa vulnerata* Putzeys. Cuba, Porto Rico (Gundlach).

\* *Clivina bipustulata* (Fabricius). Cuba (A. M. N. H.); it is possible that this and the preceding records refer to the same insect.

*Oxydrepanus rufus* (Putzeys). Guadeloupe (Fleutiaux).

*Stratiotes iracundus* Putzeys. Dominica (A. M. N. H.).

*Morio monilicornis* (Latreille). Porto Rico, Culebra, Jamaica, Haiti; possibly introduced in pine lumber from the United States (Schwarz).

*Coptodera festiva* Dejean. Jamaica (U. S. N. M.).

*Rhombodera flavipes* (*pallipes* err. typ.) Leconte. Occurs also in Jamaica (U. S. N. M.).

*Rhombodera bicolor* Leconte which may be a variety of *flavipes* (Leconte), (compare G. H. Horn, Tran. Am. Ent. Soc., X, p. 159) and possibly not different from *atorrufa* Reiche. Porto Rico (Gundlach and Van Zwaluwenburg).

*Lebia viridis* Say. Dominica, Porto Rico (A. M. N. H.).

*Lebia biteniata* Chevrolat. Dominica, Porto Rico (U. S. N. M.).

\* *Lebia elevata* (Fabricius)? Guadeloupe. The identity of the Guadeloupe insect is doubtful. See Fleutiaux, Ann. Ent. Soc. Fr., 1889, p. 361.

\* *Apenes opaca* Leconte. Bahamas (Wickham).

*Apenes parallela* Dejean and *A. morio* (Dejean) may be synonymous.

*Apenes parallela* (Dejean). Bahamas (A. M. N. H.).

\* *Apenes variegata* (Dejean). Antigua (Putzeys). Under this name both Van Zwaluwenburg and Gundlach record a species from Porto Rico in the genus *Cymindis*; it seems probable, however, that all the West Indies species recorded in that genus really belong to *Apenes*.

\* *Zuphium americanum* Dejean. Porto Rico (Gundlach, A. M. N. H.).

*Brachinus gilvipes* Mannerheim. Porto Rico (Gundlach).

*Galerita beauvoisi* Chaudoir. Barbados (Cockerell).

\* *Casnomia insignis* (Chaudoir). Porto Rico (Gundlach).

*Calosoma alternans* Fabricius. St. Croix (U. S. N. M.); St. Vincent, Barbuda (W. I. Bull.).

The American species, \* *C. calidum* (Fabricius) is also credited to Porto Rico by Van Zwaluwenburg, but the identification may be subject to revision.

## Family III. DYTISCIDÆ.

*Megadytes fraternus* Sharp. Porto Rico (Gundlach, U. S. N. M.).

*Megadytes giganteus* (Castelnau). Porto Rico (Gundlach and Van Zwaluwenburg). The Cuban species may not be identical; it is labelled *l'herminieri* in U. S. N. M. Coll.

*Eunectes occidentalis* White is a synonym of *E. sticticus* (Linné); also the citation on p. 398 of *Eretes sticticus* (Linné) for the Guadeloupe species is an error, there being but one species involved. The author of *E. occidentalis* appears to be Erichson.

*Thermonectes margineguttatus* (Aubé). Porto Rico (Gundlach).

*Thermonectes circumscriptus* (Latreille). Porto Rico (Gundlach); St. Thomas (U. S. N. M.).

*Rhantus calidus* (Fabricius). Haiti (A. M. N. H.).

*Copelatus posticatus* (Fabricius). Porto Rico (Gundlach); Haiti, St. Vincent (U. S. N. M.).

*Copelatus angustatus* Chevrolat. Porto Rico (Gundlach).

\* *Celina grossula* Leconte. Cuba (U. S. N. M.).

*Laccophilus americanus* Aubé (= *proximus*) Porto Rico (Gundlach).

*Pachydrus obniger* (Chevrolat). Porto Rico (Gundlach).

## Family IV. GYRINIDÆ.

*Dineutes longimanus* (Olivier). Porto Rico (Gundlach); Jamaica (U. S. N. M.).

*Dineutes metallicus* Aubé. Porto Rico (Gundlach); Guadeloupe (Fleutiaux); Jamaica (U. S. N. M.).

*Gyrinus rugifer* Regimbart. (?) Dominica (A. M. N. H.).

## Family V. HYDROPHILIDÆ.

*Hydrochus pallipes* Chevrolat. Porto Rico (Gundlach).

\* *Hydrochus rugosus* Mulsant. Cuba (A. M. N. H.).

*Derallus rudis* Sharp. Cuba (A. M. N. H.).

*Stethoxus intermedius* (Jacquelin Duval). Culebra (U. S. N. M.).

According to Mr. F. Wintersteiner, who has studied our collections of Hydrophilidæ, the West Indian species *intermedius* (Duval) is not identical with the Central American species *ater* (Olivier).

*Stethoxus insularis* (Castelnau). Porto Rico, St. Kitts (U. S. N. M.).

*Hydrophilus tenebrioides* (Jacquelin Duval). Martinique (U. S. N. M.); Porto Rico (Gundlach).

*Tropisternus chalybeus* Castelnau. Cuba, Montserrat, Porto Rico (various).

*Tropisternus lateralis* (Fabricius). St. Thomas, Jamaica, Porto Rico, St. Kitts, Culebra (various).

*Tropisternus collaris* (Fabricius). Culebra (U. S. N. M.); Porto Rico (Gundlach).

\* *Tropisternus ovalis* Castelnau. Cuba (A. M. N. H.).

\* *Philhydrus nebulosus* (Say). Porto Rico (A. M. N. H.).

\* *Philhydrus ochracea* Melsheimer (?) Porto Rico (A. M. N. H.).

*Philhydrus melanocephalus* (Olivier). Porto Rico (Gundlach).

Separate the genera *Dactylosternum* to *Pelosoma* as Family Sphæridiidæ.

#### Family Va. SPHÆRIDIIDÆ.

*Dactylosternum abdominale* (Fabricius). Cuba, Montserrat, Barbados (U. S. N. M.).

*Dactylosternum flavicorne* (Mulsant). Porto Rico (Gundlach); Haiti (U. S. N. M.).

\* *Dactylosternum advectum* Horn. Porto Rico (A. M. N. H.).

The authority for *D. subdepressum* should be corrected to Castelnau.

*Phænnotum estriatum* Say. Dominica, Jamaica, Cuba (A. M. N. H.).

\* *Phænotypus palmarum* (Schwarz). Dominica (A. M. N. H.).

\* *Oosternum costatum* Sharp. Cuba, Porto Rico (U. S. N. M. and A. M. N. H.).

*Cercyon nigriceps* (Marsham). Jamaica (A. M. N. H.).

\* *Cercyon variegatum* Sharp. Dominica (A. M. N. H.).

\* *Cercyon quisquilius* (Linné). Jamaica (A. M. N. H.).

The identifications of the American Museum material of Hydrophilidæ and Sphæridiidæ were made by Mr. F. Wintersteiner.

#### Family VII. PSELAPHIDÆ.

The genus *Ephymia* Reitter appears in Deutsche Ent. Zeit., XXVII, p. 34, as *Phymia*.

\* *Fustiger haytiana* Mann. Haiti (Mann). Psyche, Vol. XXII, 1915, pp. 163, 164.

## Family VIII. STAPHYLINIDÆ.

- \* *Lispinus claviger* Cameron. St. Vincent (Cameron).
- \* *Lispinus impar* Cameron. St. Vincent (Cameron).
- Lispinus insularis* Fauvel. Guadeloupe (Fleutiaux).
- \* *Thoracophorus guadalupensis* Cameron. Grenada, Haiti (Cameron).
- Trogophloeus aridus* Jacquelin Duval. Porto Rico (Gundlach).
- Trogophloeus smithi*. The author of this species should be Cameron.
- Oxytelus insignitus* Gravenhorst. Jamaica (A. M. N. H.).
- \* *Thinobius miricornis* Cameron. St. Vincent, Grenada (Cameron).
- \* *Holotrochus smithi* Cameron. St. Vincent (Cameron).
- \* *Osorius fauveli* Cameron. Haiti (Cameron).
- \* *Pinophilus vermiformis* Cameron. Mustique (Cameron).
- \* *Pinophilus latipes* Gravenhorst. Porto Rico (Gundlach).
- \* *Palaminus insularis* Cameron. Jamaica (Cameron).
- \* *Palaminus coriaceus* Cameron. Jamaica, Haiti (Cameron).
- \* *Pæderus thoracicus* Erichson. Martinique (Marshall).
- \* *Stilicopsis circumflexus* Cameron. Mustique (Cameron).
- \* *Stilicopsis auripilis* Cameron. Grenada (Cameron).
- \* *Stamnoderus bernhaueri* Cameron. Jamaica (Cameron).
- \* *Stamnoderus dissimilis* Cameron. Jamaica (Cameron).
- \* *Stamnoderus apicalis* Cameron. Jamaica (Cameron).
- \* *Stamnoderus varians* Cameron. Grenada, St. Vincent (Cameron).
- \* *Musicoderus nigrocoeruleus* Cameron. Jamaica (Cameron).
- \* *Megalops læviventris* Cameron. Grenada (Cameron).
- \* *Megalops humeralis* Cameron. Grenada (Cameron).
- \* *Megalops smithii* Cameron. St. Vincent (Cameron).
- \* *Stenus (Mesostenus) lucens* Cameron. Grenada (Cameron).
- \* *Monista personata* Cameron. Grenada (Cameron).
- \* *Echiaster waterhousii* Cameron. Grenada (Cameron).
- \* *Echiaster bupthalmus* Cameron. Mustique, Grenadines, St. Vincent (Cameron).
- \* *Echiaster sharpi* Cameron. Jamaica (Cameron).
- \* *Echiaster distinctus* Cameron. Jamaica (Cameron).
- \* *Echiaster impressicollis* Cameron. Grenada (Cameron).
- \* *Stilicus jucundus* Cameron. St. Vincent (Cameron).
- \* *Stilicus agnatus* Cameron. Grenada (Cameron).
- \* *Stilicus insularis* Cameron. Jamaica (Cameron).
- \* *Stilicus cupreus* Cameron. Jamaica (Cameron).
- \* *Ophiomedon anthracinus* Cameron. St. Vincent (Cameron).



\* *Medon cingulatus* Cameron. St. Vincent, Grenada (Cameron).

\* *Aderocharis conifer* Cameron. St. Vincent (Cameron).

\* *Aderocharis obscurior* Cameron. Grenada (Cameron).

Strike out *Sciocharis bakeri* and *Sciocharella pertenuis* duplicated on same page in *Thinocharis*. Also add near *Scopæus* and *Lathrobium*, the new genus \**Micranops* Cameron, and new species *brunneus* Cameron. Jamaica (Cameron).

\* *Thinocharis fuscina* Cameron. Grenada (Cameron).

\* *Thinocharis smithi* Cameron. Grenada (Cameron).

*Lithocharis ochracea* (Gravenhorst). Porto Rico (Gundlach).

\* *Scopæus marginatus* Cameron. Jamaica (Cameron).

\* *Scopæus simplicicollis* Cameron. St. Vincent, Grenada (Cameron).

\* *Scopæus antennalis* Cameron. Haiti (Cameron).

\* *Scopæus umbra* Sharp. Grenada, Haiti, Jamaica (Cameron).

\* *Scopæus angusticollis* Cameron. Grenada (Cameron).

\* *Scopæus auripilis* Cameron. St. Vincent, Grenada (Cameron).

*Belonuchus gagates* Erichson. Jamaica (A. M. N. H.).

*Cilea pulchellus* (Erichson). Jamaica (Cockerell).

The genus *Coproporus* is possibly not distinct from *Erchomus* (Schwarz).

#### Family IX. PTILIIDÆ.

Under *Throscidium* change the author of *invisible* to read (Nietner).

#### Family XI. PHALACRIDÆ.

\* *Litolibrus princeps* (Schwarz). Cuba (U. S. N. M.).

\* *Acylomus quadrispinosus* Casey. Cuba (Casey).

\* *Acylomus detractus* Casey. Cuba (Casey).

\* *Acylomus cubiensis* Casey. Cuba (Casey).

#### Family XII. CORYLOPHIDÆ.

*Sacium instabile* Matthews. Cuba (U. S. N. M.).

## Family XIII. COCCINELLIDÆ.

*Megilla maculata* (DeGeer). Cuba (A. M. N. H.); Martinique (U. S. N. M.); Guadeloupe (Fleutiaux).

The record of *Hippodamia 13-punctata* (Linné) from the Antilles is questioned by Mr. Schwarz; the species being distinctly northern and its occurrence almost impossible unless introduced. In the same category may be placed the recent records of \**H. convergens* Guérin, Porto Rico (Van Zwaluwenburg); and \**Coccinella 9-notata* Herbst, Cuba (A. M. N. H.).

*Psyllobora nana* Mulsant. Haiti (A. M. N. H.); Porto Rico (Gundlach).

*Psyllobora lineola* (Fabricius). Porto Rico (Gundlach); Jamaica (Cockerell).

*Cycloneda sanguinea* (Linné). Barbados (Cockerell); Antigua (Marshall).

*Chilocorus cacti* (Linné). Cuba (A. M. N. H.).

*Cladis nitidula* (Fabricius). St. Lucie (U. S. N. M.).

*Exochomus uva* Mulsant. Dominica (A. M. N. H.); Martinique (Marshall); Guadeloupe (Fleutiaux).

The name of the genus at the foot of page 410 should read *Thalassa*.

*Hyperaspis connectens* (Schönherr). St. Kitts (U. S. N. M.).

*Hyperaspis apicalis* Weise. Haiti (A. M. N. H.).

*Scymnus ochroderus* var. \**cyanipennis* Mulsant. Antigua (Cockerell).

*Scymnus thoracicus* (Fabricius). Porto Rico (Gundlach); Guadeloupe (Fleutiaux).

*Scymnus loewii* Mulsant. Antigua, Montserrat (U. S. N. M.).

The spelling of the specific name under *Cryptolæmus* should be *montrouzieri*.

## Family XV. EROTYLIDÆ.

*Ægithus clavicornis* (Linné). Dominica (U. S. N. M.).

*Brachysphænus marginatus* (Olivier). Dominica (A. M. N. H.).

The position of the genus *Diplocælus* is doubtful and it may have to be removed from Erotylidæ.

## Family XVI. COLYDIIDÆ.

*Euxestus piciceps* Gorham is the same as *E. minor* (Sharp), see Champion Trans. Ent. Soc. Lond. 1913, p. 79, and *E. erithacus* (Chevrolat) is probably not more than a variety of *E. parki* Wollaston.

*Philothermus puberulus* Schwarz. Montserrat (U. S. N. M.).

\* *Nematidium mustela* Pascoe. Cuba (U. S. N. M.).

*Aulonium bidentatum* (Fabricius). Guadeloupe (Fleutiaux, A. M. N. H.).

The genus *Botrodes* Casey belongs probably to Murmidiinæ; the same applies to the genus *Lapethus* Casey (Grouvelle, Ann. Soc. Ent. France, 1912, pp. 297, 298). The genera *Stylulus* and *Cryptzoon* are misplaced, but there is some doubt as to their family position.

*Synchita laticollis* (Leconte). Montserrat, Cuba (U. S. N. M.).

*Synchita granulata* Say. Haiti, Cuba (U. S. N. M.). This and the preceding species probably belong to *Acolobicus*.

\* *Acolobicus lineaticollis* (Horn). Cuba (U. S. N. M.).

\* *Ditoma carinata* (Leconte). Haiti, Cuba (U. S. N. M.).

\* *Lobogestoria gibbicollis* Reitter. Cuba (U. S. N. M.).

#### Family XVII. MONÆDIDÆ.

There is a question as to whether the genus *Monædus* was described by Horn or Leconte. The description of the type species appears in a paper by Horn but Leconte's authorship of the species is clearly indicated by Horn's statement that Dr. Leconte communicated the description. The author of the genus, nevertheless, appears to be Horn and our citation should be corrected.

\* *Monædus guttatus* Leconte. Cuba (Champion).

*Adimerus dubius* Sharp is a synonym of *Monædus guttatus* Leconte. (Champion, Trans. Ent. Soc. Lond., 1913, p. 73.).

*Monædus lecontei* Fleutiaux. Montserrat (U. S. N. M.).

#### Family XIX. CUCUJIDÆ.

\* *Hemipeplus marginipennis* Leconte. Cuba (U. S. N. M.).

*Inopeplus præusta* Chevrolat. Cuba (U. S. N. M.).

\* *Telephanus strictus* Grouvelle. Jamaica (Grouvelle).

\* *Telephanus cribratus* Grouvelle. Jamaica (Grouvelle).

*Læmophlæus pusillus* (Schönherr). Porto Rico (U. S. N. M.).

\* *Læmophlæus iteratus* Sharp. St. Vincent, Grenada (U. S. N. M.).

\* *Læmophlæus adustus* Leconte. Porto Rico (Gundlach).

*Silvanus surinamensis* (Linné). Porto Rico (Van Zwaluwenburg).

\* *Silvanus rectus* (?) Leconte. Cuba (U. S. N. M.).

*Ahasverus advena* (Waltl). Porto Rico (Gundlach).

*Nausibius dentatus* (Marsham). Porto Rico (Gundlach); Haiti (A. M. N. H.). This species is treated as a synonym of *N. clavicornis* Kugelann by Casey (Trans. Am. Ent. Soc., XI, p. 74), Sharp (Biologia Cent. Am., Coleop. II., pt. 1, p. 556) and Blatchley (Beetles of Indiana, p. 564.).

*Lathropus costatus* Grouvelle. Cuba (U. S. N. M.) is probably identical with the American species.

#### Family XX. CRYPTOPHAGIDÆ.

##### Subfamily CRYPTOPHAGINÆ.

*Loberus testaceus* Reitter. (?) Porto Rico, Haiti (U. S. N. M.).

\* *Tomarus acutus* Reitter. Cuba (U. S. N. M.). Possibly identical with a species described from Florida.

#### Family XXI. TRITOMIDÆ.

*Typhæa semirufa* Chevrolat. Porto Rico (Gundlach).

*Berginus bahamicus* Casey. Cuba (U. S. N. M.).

The genus *Berginus* should be removed to *Lyctidæ*, according to some authors.

*Litargus balteatus* Leconte. Montserrat, Cuba (U. S. N. M.).

#### Family XXII. DERMESTIDÆ.

\* *Dermestes caninus* Germar. Jamaica (Cockerell).

*Dermestes carnivorus* Fabricius. Porto Rico (Gundlach).

*Dermestes vulpinus* Fabricius. Porto Rico (Gundlach).

*Globicornis fulvipes* Guerin. Porto Rico (Gundlach).

*Trogoderma insulare* Chevrolat. Porto Rico (Gundlach).

\* *Cryptorhopalum scutellare* Arrow. Mustique (Arrow).

#### Family XXIII. HISTERIDÆ.

\* *Acritus atomulus* Marseul. Cuba (U. S. N. M.).

*Acritus analis* Leconte. Porto Rico (Gundlach).

*Carcinops troglodytes* (Paykull). Porto Rico (Gundlach).

*Epiurus waterhousei* Marseul. Porto Rico.

\* *Epiurus cubensis* Casey. Cuba (Casey).

The species cited as *Paromalus parallelus* Leconte may be *P. laterirectus* Marseul.

\* *Isolomalus nanulus* Casey. Cuba (Casey).

\* *Abræus dufawi* Desbordes. Guadeloupe (Bull. Soc. Ent. Fr. 1914, p. 234).

*Atholus confinis* (Erichson). Porto Rico (U. S. N. M.).

*Omalodes ruficlavis* Marseul. Haiti (U. S. N. M.).

*Omalodes klugi* Marseul. Porto Rico (Gundlach).

*Lioderma interruptum* (Marseul). Porto Rico (Gundlach).

*Lioderma quadridentatum* (Fabricius). Cuba (U. S. N. M.).

#### Family XXIV. NITIDULIDÆ.

\* *Smicrips hypocoroides* (Reitter). Cuba, Bahamas (U. S. N. M.).

*Paralindria partita* Olliff. Montserrat (U. S. N. M.). The citation of the species as *bipartita* by Fleutiaux and Salle, was followed by us in the Preliminary List.

*Lobiopa insularis* (Castelnau). Porto Rico (Gundlach).

*Stelidota geminata* (Say). Porto Rico (Gundlach).

*Stelidota ruderata* Erichson. Porto Rico (Gundlach).

*Haptoncus luteolus* (Erichson). Porto Rico (Gundlach). Cosmopolitan, in stores.

*Conotelus conicus* (Fabricius). Jamaica, Montserrat (U. S. N. M.); Porto Rico (Gundlach).

*Brachypephus mutilatus* Erichson. Guadeloupe (Fleutiaux).

*Macrostola lutea* Murray. Montserrat (Hubbard, Insect Life, VII, pp. 340-345).

\* *Platychora lebasi* Erichson. Cuba (U. S. N. M.).

*Carpophilus hemipterus* (Linné). Haiti (A. M. N. H.); Porto Rico (Van Zwaluwenburg).

*Carpophilus dimidiatus* (Fabricius). Porto Rico (Van Zwaluwenburg).

*Carpophilus dimidiatus* var. *mutilatus* Erichson. Vieques, Montserrat (U. S. N. M.).

*Carpophilus (Colopterus) amputatus* (Erichson). Bahamas (U. S. N. M.).

*Carpophilus (Colopterus) truncatus* (Randall). Cuba.

*Rhizophagus keydeni* should be *heydeni*.

## Family XXV. LATHRIDIIDÆ.

\* *Coluocera maderæ* (Wollaston). Haiti (Mann).

*Lobogestoria* Reitter should be transferred to Colydiidæ. (Schaeffer, Proc. Ent. Soc. Washington, VIII, 1906, p. 141.)

\* *Melanophthalma distinguenda* (Comolli). Cuba (U. S. N. M.). Cosmopolitan.

\* *Corticaria ferruginea* Motschulsky. Cuba (U. S. N. M.). Cosmopolitan.

## Family XXVII. TEMNOCHILIDÆ.

The authority for *Nemosoma* should be Latreille not Reitter.

\* *Temnochila hubbardi* Leveillé. Cuba (U. S. N. M.).

*Tenebroides transversicollis* (Jacquelin Duval). Porto Rico (Gundlach).

## Family XXIX. BYRRHIDÆ.

*Chelonarium punctatum* Fabricius. Porto Rico (Gundlach). The position of the genus *Chelonarium* is uncertain; its species live on bushes, not on the ground like the Byrrhidæ. It is treated as a separate family by Brues and Melander, and is placed in the subfamily Chelonarinæ under Byrrhidæ by Sharp (Biol. Cent. Amer., II, pt. 1, 1902, pp. 684-696); Plate XX referred to in the text was, apparently, never published.

## Family XXXII. HELODIDÆ.

Mr. Schwarz has verbally called attention to the differences shown by Peyerimhoff, between the larvæ of Helodidæ, Cyphonidæ and Dascillidæ.

## Family XXXVI. ELATERIDÆ.

*Adelocera subcostata* Candèze. Antigua (Marshall).

*Hemirhipus fascicularis* (Fabricius). Haiti (A. M. N. H.).

*Chalcolepidius obscurus* Castelnau. Montserrat, Dominica (U. S. N. M.).

\* *Chalcolepidius validus* Candèze. Dominica (U. S. N. M.).

The authority for *Ischiodontus oblitus* should be Candèze.

*Dicrepidius ilegans* should be *elegans*.

*Dicrepidius notus* should be *ignotus*.

*Monocrepidius bifoveatus* (Beauvois). Bahamas, Haiti (U. S. N. M.).

All the species listed as *Conoderus* should be listed as *Monocrepidius*.

*Æolus elegans* (Fabricius). Porto Rico (Gundlach).

\* *Megapenthes sturmii* (Germar). Cuba (U. S. N. M.).

The authority for *Anchastus rufescens* should be Candèze.

For *Pyrophorus ongipennis* read *P. longipennis*.

\* *Æaphes decoloratus* (Say). Antigua (Marshall).

*Glyphonyx quadraticollis* Champion. Cuba (A. M. N. H.).

#### Family XXXVII. TRIXAGIDÆ.

*Drapetes tunicatus* Bonvouloir. Haiti (U. S. N. M.).

#### Family XXXVIII. BUPRESTIDÆ.

According to Kerremans' Monograph, the following changes should be made:

*Polycesta thomæ* Chevrolat is a synonym of *P. porcata* (Fabricius); *P. angulosa* Jacquelin Duval is a synonym of *P. excavata* Blanchard; *Acmæodera contigua* Kerremans is a synonym of *A. flavomarginata* (Gray); *Halecia aureomicans* (Nonfried) and *Hilarotes chalconota* (Jacquelin Duval) are both synonyms of *Halecia nitidicollis* (Castelnau); *Gyascutus carolinensis* Horn belongs in *Hippomelas*.

The identity of *Psiloptera aurifera* (spelled in error *aurifer*) and *aurata* is questionable.

\* *Pelecopselaphus strictus* (Linné). Antilles (Kerremans).

*Polycesta porcata* (Fabricius). St. Thomas (Kerremans).

*Acmæodera cruenta* (Olivier). Haiti (Kerremans).

*Buprestis decora* Fabricius. Porto Rico (Gundlach).

*Buprestis lineata* Fabricius. Porto Rico (Gundlach).

These and other species of *Buprestis* are probably not native but commercially introduced in timber. See also Fleutiaux (Ann. Soc. Ent. Fr., 1889, p. 405) for similar Guadeloupe records.

*Melanophila notata* (Laporte and Gory). Bahamas (A. M. N. H.).

*Chrysobothris lepida* Castelnau and Gory. Porto Rico (Gundlach).

*Chrysobothris tranquebarica* (Gmelin). Porto Rico (Gundlach).

\* *Chrysobothris denticulata* Castelnau and Gory. San Domingo, introduced.

Families XXXIX–XLI. LYCIDÆ, LAMPYRIDÆ AND  
TELEPHORIDÆ.

A descriptive catalogue, in which the numerous changes will be included, is in preparation.

Family XLII. MALACHIIDÆ.

The spelling of the family name requires correction, as above.

Family XLIII. CLERIDÆ.

*Thanoclerus* should read *Thameroclerus* and the locality Guadeloupe should be inserted for *T. girodi* Chevrolat; Fleutiaux (Ann. Soc. Ent. Fr., 1889, p. 417) records *T. buqueti* (Lefebvre) with *T. girodi* as a synonym, but *buqueti* being East Indian (Schenckling in Gen. Ins.) *girodi* is probably the the Guadeloupe species.

Family XLIV. PTINIDÆ.

*Gibbium psylloides* Czempinski. Montserrat (U. S. N. M.). This is a cosmopolitan insect — as are many of the family.

*Ptinus niveicollis* Boieldieu. Cuba (U. S. N. M.).

*Lasioderma serricornis* (Fabricius). Cuba (U. S. N. M.); Porto Rico (Van Zwaluwenburg).

Champion's paper, in Trans. Entom. Soc. Lond., 1913, makes some changes in this family: *Ozognathus* is not Antillean and the species referred thereto may be a *Cryptorama*; *Petalium pulicarium* (Gorham) is a synonym of *P. antillarum* (Pic); *Mirosternus laevis* Gorham belongs to *Eupactus* Leconte; *Priotoma brevis*? Gorham is *P. insularis* Champion.

*Xylographus* belongs in Cioidæ.

*Calymmaderus bibliothecarum* (Poey). Porto Rico (Gundlach).

*Atractocerus* Palisot (not Latreille) belongs in Lymexylonidæ.

*Atractocerus brasiliensis* (Laporte and Serville) of which *A. antillarum* Vitrac (Insecta, III, 1913, p. 168) is treated as a synonym by Schenckling (Coleopterorum Catalogus, pt. 64, 1915). Jamaica (Cockerell).



## Family XLV. BOSTRYCHIDÆ.

*Lyctus* should be separated as family Lyctidæ which includes also \**Minthea rugicollis* Walker (*Lyctophilis foveicollis* Reitter), St. Domingo (U. S. Tech. Ser. 20, part 3, 1911, p. 138).

The genus *Xylopertha* should be expunged; the species *sextuberculata* is *Zylomeira torquata* (Fabricius); the species *minutus* is cosmopolitan and belongs in *Dinoderus*.

*Heterarthron gonagra* (Fabricius). Jamaica, Dominica (U. S. N. M.).

\* *Heterarthron plicatus* (Leconte). Cuba, Jamaica (U. S. N. M.).

*Rhizopertha pusilla* (Fabricius). Porto Rico (A. M. N. H.). Cosmopolitan species or introduced from the United States in timber.

\* *Sinoxylon floridanum* Horn. Antigua, Jamaica (U. S. N. M.). Cosmopolitan species or introduced from the United States in timber.

*Apate francisca* Fabricius. Porto Rico (Van Zwaluwenburg).

\* *Apate terebrans* (Pallas). Jamaica (reared from *Anacardium occidentale*).

## Family XLVI. CIOIDÆ.

*Ennearthron delicatulum* Jacquelin Duval. Porto Rico (Gundlach):  
Strike out *Ceratocis*, transferring the species to *Ceracis*.

## Family XLVIII. PASSALIDÆ.

*Passalus tlascala* Percheron is a *Neleus*.

It is doubtful that *Passalus unicornis* (Serville) occurs in Cuba or Guadeloupe.

*Passalus interruptus* (Linné). Martinique (Marshall).

## Family XLIX. SCARABÆIDÆ.

*Chæridium insulare* Chevrolat. Montserrat (U. S. N. M.).

\* *Canthidium melanocephalum* (Olivier). According to Olivier (Ent., I, 3, pp. 173, 174,) the type of this species was described from Guadeloupe but von Harold, in *Coleopterologische Hefte*, I, pp. 29-30, gives Brazil as the locality for the species and more recent authors have followed the latter record, excepting Fleutiaux and Sallé, who very likely followed Olivier, as they had no specimens of this species to verify the records.

- Aphodius granarius* (Linné). Jamaica (A. M. N. H.).  
*Aphodius granarius* var. undescribed. Porto Rico, Cuba, Martinique (U. S. N. M.).
- \* *Atænius figurator* Harold. Cuba (U. S. N. M.).  
*Atænius gracilis* (Melsheimer). Jamaica (A. M. N. H.).  
*Atænius imbricatus* (Melsheimer). Haiti, Porto Rico (A. M. N. H.).  
*Atænius rhyticephalus* (Chevrolat). Porto Rico (Gundlach).  
*Atænius stercorator* (Fabricius). Porto Rico (U. S. N. M.).  
*Atænius terminalis* (Chevrolat). Haiti, St. Thomas (U. S. N. M.).  
*Athyreus tridentatus* MacLeay var. *castaneus* (Guerin). Bahamas (A. M. N. H.).
- Trox suberosus* Fabricius. Porto Rico (Gundlach).  
*Clæotus rufopiceus* Arrow. Dominica (A. M. N. H.).  
*Phyllophaga* (*Lachnosterna*) *patruelis* (Chevrolat). St. Kitts (W. I. Bull.).
- \* *Anomala undulata* Melsheimer. Jamaica (Cockerell).  
*Macraspis tristis* Castelnau. Dominica (A. M. N. H.).  
*Cyclocephala notata* (Illiger). Jamaica (A. M. N. H.).  
*Cyclocephala tridentata* (Fabricius). Dominica (U. S. N. M.).  
*Rutela formosa* Burmeister. Bahamas (A. M. N. H.).  
*Leucothyreus vicentiæ* Arrow. St. Lucie (U. S. N. M.).  
*Dyscinetus barbatus* (Fabricius). Porto Rico (Gundlach, Van Zwaluwenburg).  
*Dyscinetus trachypygus* (Burmeister). Porto Rico (Van Zwaluwenburg).  
*Dyscinetus picipes* (Burmeister). Porto Rico (various).  
*Ligyryus cordatus* (Fabricius). Guadeloupe (Fleutiaux).  
*Ligyryus juvenicus* (Fabricius). Cuba (A. M. N. H.).  
\* *Ligyryus fossulatus* Latreille. (= *fossor* Latr.?) Porto Rico (Gundlach).
- Strategus antæus* (Fabricius) is an error for *syphax* (Fabricius); *S. julianus* Burmeister is possibly also an error in determination of the species from Grenada (Schwarz).
- Strategus tricornis* (Verrill) is a synonym of *vulcanus* (Fabricius). (Arrow).
- Dynastes argentata*, *D. lagaii* and *D. vulcan* Verrill are synonyms of *D. hercules* (Linné). (Arrow).
- It may be well to repeat that species described from Trinidad, of which there are several in Scarabæidæ, are not included because that island is really South American in respect of fauna.

## Family L. CERAMBYCIDÆ.

*Parandra lævis* Latreille. Jamaica (Waterhouse, Trans. Ent. Soc. Lond. 1878, p. 303).

*Malodon spinibarbis* (Linné). Dominica (A. M. N. H.).

*Nothopleurus maxillosus* (Drury). Porto Rico (Gundlach). The "Barbados" record for this species should be Barbuda.

*Stenodotes exsertus* (Olivier). Mona (Lameere).

*Prosternodes cinnamipennis* (Chevrolat). Bahamas (A. M. N. H.).

M. Lameere's work in Coleopterorum Catalogus makes *Dendrobaptus* and *Callomegas* subgenera of *Callipogon*, *Prosternodes dominicensis* Gahan a *Derancistrus*, *Solenoptera* a subgenus of *Derancistrus*, *Orthosoma brunneum* a *Derobrachus*.

*Methia punctata* Leconte. Porto Rico (Gundlach).

\* *Criocephalus cubensis* Mutchler. Cuba (A. M. N. H.).

The spelling of *Achryson surinam* should be *surinamum*. Marshall calls the specimens found in Antigua var. *pallens* (Fabricius).

*Chlorida festiva* (Linné). Montserrat, Haiti (U. S. N. M.).

*Eburia decemmaculata* (Fabricius). Dominica (U. S. N. M.).

*Elaphidion glabratum* (Fabricius). St. Lucie, Dominica, Antigua (W. I. Bull.); Bahamas (A. M. N. H.).

*Elaphidion irroratum* (Linné). Porto Rico (Gundlach); St. Kitts (Ballou).

*Elaphidion nanum* (Fabricius). Porto Rico (Gundlach); Bahamas (A. M. N. H.).

*Elaphidion signaticolle* Chevrolat. Bahamas (A. M. N. H.).

*Elaphidion tomentosum* Chevrolat. Montserrat, Porto Rico (U. S. N. M.).

\* *Heterachthes ebenus* Newman. Cuba (U. S. N. M.).

*Cylindera flava* (Fabricius). Porto Rico, Bahamas (A. M. N. H.).

*Cylindera puberula* (Fleutiaux & Salle). Haiti, Bahamas, Jamaica (A. M. N. H.).

*Merostenus attenuatus* (Chevrolat). Porto Rico (Gundlach).

\* *Plectromerus dentipes* (Olivier). Cuba (U. S. N. M.).

*Pentomacrus fasciatus* Gahan. Cuba (A. M. N. H.).

The generic position of the species assigned to *Stizocera* requires investigation, they may belong to *Peribæum*; also those assigned to *Heterachthes* may belong to *Compsa*.

*Callichroma elegans* (Olivier). Dominica (U. S. N. M.).

*Euryscelis suturalis* (Olivier). Bahamas (A. M. N. H.).

*Trachyderes succinctus* (Linné). St. Thomas (A. M. N. H.); Martinique (Marshall).

*Tæniotes scalaris* (Fabricius). Martinique (Marshall).

*Adetus lherminieri* Fleutiaux. Montserrat (U. S. N. M.).

*Oncideres amputator* (Fabricius). Jamaica (U. S. N. M.).

\* *Batocera rubus* (Linné). Barbados (Quaintance); St. Croix (U. S. N. M.); introduced from China.

*Steirastoma depressum* (Linné). Jamaica (Cockerell); Martinique (U. S. N. M.); a serious pest on *Cacao* (Quaintance).

*Lagochirus araneiformis* (Linné). Porto Rico (Gundlach).

*Leptostylus argentatus* (Jacquelin Duval). Haiti (A. M. N. H.).

*Leptostylus præmorsus* (Fabricius). Dominica, St. Lucie (W. I. Bull.), Antigua (Marshall).

*Leptostylus*, the species credited to Dejean or Dejean Cat., make Gahan the authority (see Trans. Ent. Soc. London, 1895, pp. 135, 136).

*Lepturges guadeloupensis* Fleutiaux and Salle. Cuba (U. S. N. M.).

\* *Onychocerus scorpio* (Fabricius). Grenada (U. S. N. M.) received from H. A. Ballou.

\* *Monohammus titillator* (Fabricius). Cuba, Porto Rico (Gundlach); perhaps introduced from the United States.

#### Family LI. CHRYSOMELIDÆ.

*Lema confusa* Chevrolat. Jamaica (U. S. N. M.).

*Lema dorsalis* Olivier. Haiti (U. S. N. M.).

\* *Lema intermedia* Suffrian. Cuba, Haiti (U. S. N. M.).

\* *Cryptocephalus squalens* Suffrian. Cuba, Bahamas (U. S. N. M.).

*Cryptocephalus viridipennis* Suffrian. Jamaica, Porto Rico (A. M. N. H.).

\* *Eumolpus imperialis* Baly. Martinique (Clavareau, Coleopterorum Catalogus).

\* *Glyptoscelis æneipennis* Baly. Grenada (U. S. N. M.).

\* *Glyptoscelis hobsoni* (Curtis). Cuba (Clavareau, Coleopterorum Catalogus).

\* *Metachroma terminalis* Horn. Cuba (A. M. N. H.).

Numerous changes are made by Clavareau in the Coleopterorum Catalogus, pt. 59: *Noda fusca* is placed in *Glyptoscelis*; *N. luteicornis* is placed in *Colaspis*; *Colaspis suffriani* Weise is proposed for *C. nigricornis*; *Chalcophana furvida* is placed in *Colaspis*, all other species of *Chalcophana* in *Phanata*; *Heteraspis nana* is placed in *Glyptoscelis*; *Metachroma cubæcola* Clavareau is proposed for *M. puncticollis*; *M. suffriani* Clavareau is pro-

posed for *M. suturalis*; *Myochrous brevicornis* is placed in *Glyptoscelis*; *M. denticollis* is not cited as West Indian.

*Colaspis ebasi* should read *Colaspis lebasi*.

The following species recorded from the West Indies, in many instances on excellent authority, are cited by Clavareau, in *Coleopterorum Catalogus*, pt. 59, only from the following localities but probably without the intention of discrediting the published records of West Indian occurrence: *Rhabdoptera picipes* (Olivier), Massachusetts to Dakota to Carolina; *Colaspis fastidiosa* (Lefevre), Colombia, Venezuela, Panama; *C. obscura* Fabricius, South America; *C. lebasi* Lefevre, Columbia, Central America; *C. femoralis* Lefevre, Columbia, Panama; *Typophorus viridicyaneus* (Crotch), Virginia to Nicaragua.

*Cerotoma ruficornis* (Olivier). Haiti (A. M. N. H.).

\* *Cerotoma trifurcata* (Forster). Porto Rico (Van Zwaluwenburg).

*Luperus placidus* Suffrian. Grenada, Haiti (U. S. N. M.).

*Malacosoma detritum* (Fabricius). Montserrat (A. M. N. H.); Dominica (U. S. N. M.).

*Diabrotica bivittata* (Fabricius). Haiti (A. M. N. H.); Cuba (U. S. N. M.); Porto Rico (Gundlach, Jones).

*Diabrotica graminea* Baly. Cuba (A. M. N. H.); Vieques, Haiti (U. S. N. M.).

*Diabrotica innuba* (Fabricius). Culebra (U. S. N. M.).

*Diabrotica melanocephala* (Fabricius). Montserrat (U. S. N. M.).

*Diabrotica ochreatea* (Fabricius). Montserrat (U. S. N. M.).

*Diabrotica pulchella* (Jacquelin Duval) is a *Phyllobrotica* (Schwarz).

Strike out *Hypolampsis nigrina* Clark, St. Paul's Island being not West Indian; also *Omototus fulvopubescens* Clark, the Cuban citation being erroneous.

*Ædionychis cyanipennis* (Fabricius). Haiti (A. M. N. H.).

*Homophæta æquinoctialis* (Fabricius). St. Croix (A. M. N. H.); Jamaica, Porto Rico, Antigua, treating *albicollis* as a synonym (U. S. N. M.).

\* *Haltica subaurea* Suffrian. Cuba (U. S. N. M.).

\* *Haltica ignita* Illiger? Bahamas (U. S. N. M.).

*Epitrix fuscata* (Jacquelin Duval). Porto Rico (Gundlach).

*Epitrix parvula* (Fabricius). Bahamas (U. S. N. M.).

\* *Epitrix cucumeris* (Harris). Porto Rico (Jones, Van Zwaluwenburg).

The identity of the Porto Rican insect with *E. cucumeris* of the United States is insisted upon by Mr. Schwarz, who made the identification.

*Systema basalis* Jacquelin Duval. Haiti (A. M. N. H.).

*Lactica scutellaris* (Olivier). Jamaica (A. M. N. H.).

*Aphthona compressa* (Suffrian). Haiti, Bahamas, Culebra (U. S. N. M.).

*Aphthona maculipennis* Jacoby. Porto Rico (U. S. N. M.).

*Chatoenema apricaria* (Suffrian). Jamaica, Vieques, Haiti (U. S. N. M.).

*Homophyla krugi* Weise. Guadeloupe (Fleutiaux).

*Megistops granulatus* Jacoby. Guadeloupe (U. S. N. M.).

*Chalepus sanguinicollis* (Linné). Vieques (U. S. N. M.); St. Thomas (A. M. N. H.).

*Elytrogona bulla* Boheman. Haiti (Spaeth).

*Elytrogona quadrimaculata* (Latreille), change to *E. quattodecimmaculata* (Latreille).

*Chelymorpha polysticha* Boheman. Dominica (U. S. N. M.); St. Bartholomew (Spaeth).

*Chelymorpha swarzi* Thunberg change to *C. swartzii* Thunberg. See Schönherr, Syn. Ins., II, p. 229.

*Omoplatia distincta* Boheman. Martinique (Spaeth).

\* *Batonota rugosa* Wagener. Haiti (Mitt. Munch. Ent. Ver. V. 1881, p. 44).

\* *Calaspidea grossa* (Linné). Jamaica (Spaeth).

\* *Oxymodera variegata* (Linné). Antilles (Spaeth).

\* *Physonota gigantea* Boheman. Antilles (Spaeth).

Strike out *Aspidomorpha bajula* Boheman, which according to Spaeth is a synonym of the East Indian *A. sanctæ crucis* (Fabricius).

A number of changes in position, etc., are proposed in Coleopterorum Catalogus, pt. 62, as follows: *Mesomphalia ænea* (Olivier) is placed in *Pseudomesomphalia* Spaeth; *M. exclamationis* (Linné) is placed in *Hilarocassis* Spaeth; *Chelymorpha angusticollis* Suffrian, *C. flavicollis* Boheman and *C. swartzii* Thunberg are placed in *Stoiba* Spaeth; *C. argus* (Lichtenstein) is treated as a variety of *C. cassidea* (Fabricius) and *C. polysticha* Boheman as a variety of *C. multipunctata* (Olivier). The other generic names under which Spaeth catalogues the species formerly placed in *Coptocycla* are not yet adopted by the authors.

*Coptocycla bistripunctata* Olivier. Antigua (U. S. N. M.). This name was probably cited in error by Fleutiaux and Sallé for *sexpunctata* Olivier.

\* *Coptocycla propinqua* (Boheman). Haiti (A. M. N. H.).

*Coptocycla subsignata* (Boheman). Haiti, Porto Rico, Cuba (A. M. N. H.).

*Coptocycla guttata* (Olivier). Porto Rico (Van Zwaluwenburg, Jones); Cuba, Jamaica, Haiti (U. S. N. M.). (Champion, in Biologia).

\* *Coptocycla guttata* var. *fuliginosa* (Olivier). Guadeloupe (Champion, in Biologia Cen. Am., Col., VI, pt. 2, pp. 194-195).

According to Champion, l. c., *guttata* Boheman nec Olivier, 1808, and *hamulata* Boheman are synonyms of *signifera* (Herbst), but he appears to

have overlooked the discrepancy between Olivier's original publication in 1790 and his later work (Cf. H. S. Barber, Proc. Ent. Soc. Washington, XVIII, 1916, pp. 117-118) by which *guttata* (Olivier) is validated.

### Family LII. BRUCHIDÆ.

*Bruchus chinensis* (Linné). Porto Rico (Van Zwaluwenburg).

\* *Bruchus amicus* Horn. Porto Rico (Van Zwaluwenburg).

\* *Bruchus sallei* Sharp. Porto Rico (Van Zwaluwenburg).

*Bruchus obtectus* Say should be substituted for *B. obsoletus* Say, when that name is used for the bean weevil; add the locality Porto Rico (Van Zwaluwenburg).

*Bruchus rufimanus*, change author to Boheman.

*Bruchus sinuatus* Fähræus (*fide* Horn) is a variety of *B. quadrimaculatus* Fabricius.

*Bruchus tetricus* Gyllenhal. Cuba (U. S. N. M.).

\* *Caryoborus nucleorum* (Fabricius). Cuba (U. S. N. M.).

*Spermophagus hoffmanseggi* Gyllenhal was proposed to replace *robinix* Olivier *nec* Fabricius. It is not equivalent to *robinix* Fabricius as we have it in the Preliminary List but to *robinix* erroneously cited in Olivier, Ent., IV, 1795, no. 79, p. 7, pl. 1, fig. 4 a, b.

### Family LIII. TENEBRIONIDÆ.

By a regrettable error, the records for the genus *Cælotaxis* derived from Guadelupe Island in the Pacific Ocean, were included in our Preliminary List. They should all be stricken out, as well as the record for *Conibius* on page 461.

*Dacoderus dominicensis* Horn. Cuba (U. S. N. M.).

\* *Phaleria variabilis* Quedenfeldt. Porto Rico (Gundlach).

Strike out *Rhipidandrus micrographus*, as a misidentification of *Eutomus cornutus*.

Strike out *Cherostus* as synonymous with *Eutomus* and *C. jamaicensis* as synonymous with *E. cornutus*.

Change *Eutomus sulcatus* Gorham to *Rhipidandrus sulcatus* (Gorham). Numerous references to these genera are given in two papers: Proc. Ent. Soc. Washington, XV, 1913, pp. 188-193 and XVI, 1914, pp. 175-177. A letter from H. S. Barber states that he has recently examined larvæ of *Eutomus fulvomaculatus* (Dury) and *E. cornutus* (Arrow) and finds that they agree closely with the larvæ of *Eledona* and *Bolitotherus*.

*Platydema antennatum* Castelnau & Brullé. Haiti (U. S. N. M.).

*Platydema apicale* Castelnau & Brullé. Porto Rico (Gundlach).

\* *Platydema picicorne* (Fabricius). Cuba, Haiti (U. S. N. M.).

\* *Tribolium confusum* Jacquelin Duval. Porto Rico (Van Zwaluwenburg).

*Tribolium ferrugineum* (Fabricius). Porto Rico, Cuba (Gundlach).

*Uloma retusa* (Fabricius). Dominica (A. M. N. H.); Montserrat (U. S. N. M.).

\* *Diaperis maculata* Olivier (*hydni* Fabricius). Porto Rico (Van Zwaluwenburg); Cuba (U. S. N. M.); Jamaica (Cockerell).

Change the authority for *Antimachus* to Gistel and the authority for *roudeni* to Fleutiaux and Sallé.

*Alphitobius piceus* (Olivier). Porto Rico (Gundlach).

\* *Alphitobius diaperinus* (Panzer). Jamaica (Cockerell). Cosmopolitan.

\* *Ulosonia biimpressa* (Latreille). Cuba (A. M. N. H.).

*Zophobas morio* (Fabricius). St. Thomas (Shoemaker); Porto Rico (Gundlach, Van Zwaluwenburg); Culebra (U. S. N. M.). Evidently widely distributed in West Indies. Compare also Ann. and Mag. Nat. Hist. 8th Ser., XIII, 1914, p. 487.

*Cyrtosoma lherminieri* (Chevrolat). Montserrat (U. S. N. M.); Dominica (A. M. N. H.).

*Pyanisia undata* (Fabricius). Cuba, Haiti (U. S. N. M.).

*Pyanisia tristis* Castelnau. Porto Rico (Gundlach).

Change *Rhacius sulcatus* Dejean to *Rhacius sulcatulus* Champion.

#### Family LIV. ALLECULIDÆ.

*Allecula flavipes* Jacquelin Duval. Bahamas (U. S. N. M.). The reference of West Indian species to *Allecula*, which is possibly an exclusively Old World genus, is questionable in the opinion of Mr. Schwarz; as is also the identification of *Isomera sericea* Say, which should perhaps read *I. valida* Schwarz, described from Florida.

#### Family LVI. MONOMMIDÆ.

*Hyporhagus æneus* Thomson. Cuba (U. S. N. M.). This species probably belongs to *Aspathines* Champion.

*Hyporhagus marginatus* (Fabricius). Bahamas (U. S. N. M.); Porto Rico (Gundlach).



## Family LVII. MELANDRYIDÆ.

Definite records in this family are few. The single species mentioned in our Preliminary List may be more properly placed in Alleculidæ and, though we have information of species of *Orchesia*, *Canifa* and *Conomorphus* occurring in Cuba from Mr. Schwarz, not one of them has been described.

\* *Phlæotrya mexicana* Champion is said to occur in Dominica (Ent. Mont. Mag., 1916, p. 37).

## Family LIX. ŒDEMERIDÆ.

For *Nacerdes* Schmidt read *Nacerda* Stephens.

*Copidita tenella* Waterhouse. Haiti, Jamaica (U. S. N. M.).

*Alloxaxis dorsalis* (Melsheimer). Cuba (A. M. N. H.).

*Ananca vittata* (Fabricius). Jamaica, Vieques, Cuba (U. S. N. M.).

S. Schenckling, in Coleopterorum Catalogus, part 65, makes some changes in this family by which the species *simplex* is transferred to *Copidita* and *dorsalis* to *Alloxaxis*, etc.

## Family LX. MORDELLIDÆ.

*Mordella scutellaris* Fabricius. Cuba (Gundlach).

## Family LXI. PEDILIDÆ.

Change the spelling of *Macrataria* to *Macratria*.

## Family LXII. ANTHICIDÆ.

\* *Xylophilus* (*Hylophilus*) *halticioides* Champion. Grenada (Champion).

\* *Xylophilus* (*Hylophilus*) *atomarioides* Champion. St. Vincent (Champion).

## Family LXIV. MELOIDÆ.

Change the author of *Horia maculata* from Swederer to Swederus; the author of *H. auriculata* from Dugès to Champion; the name *Cantharis* to *Epicauta*; and *Nematognatha* to *Nemognatha*. (Schwarz.)

*Horia maculata* Swederus. Dominica (U. S. N. M.).

*Tetraonyx 4-maculatus* Fabricius. Montserrat (U. S. N. M.).

*Epicauta annulicornis* Chevrolat. Dominica (U. S. N. M.).

## Family LXV. RHIPIPHORIDÆ.

Change *Rhipidophorus* to *Rhipiphorus* and transfer *sordidum* to *Macrosiagon*. (Schwarz.)

*Macrosiagon basalıs* (Gerstaecker). Cuba (Gundlach).

*Macrosiagon discicolle* (Gerstaecker). Lesser Antilles (Gundlach).

*Macrosiagon sordidum* v. *major* (Quedenfeldt). Cuba (Gundlach).

\* *Macrosiagon cruentum* (Germar). Cuba (A. M. N. H.).

## Family LXVI. CURCULIONIDÆ.

The genus *Acampopsis* is misplaced; it should follow *Cryptorhynchus*. (Schwarz.)

Change *Propodes* to *Prepodes*.

\* *Pachnæus citri* Marshall. Jamaica.

\* *Pachnæus marmoratus* Marshall. Jamaica.

*Neocyphus pudens* (Boheman). Montserrat (U. S. N. M.).

*Diaprepes abbreviatus* (Linné). St. Lucia (W. I. Bull.).

*Diaprepes comma* Boheman. Guadeloupe (Gundlach).

\* *Diaprepes balloui* Marshall. Dominica.

\* *Diaprepes famelicus barbadensis* Marshall. Barbados.

*Lachnopus curripes* (Fabricius). Tortola (W. I. Bull.).

*Lachnopus valgus* (Fabricius). Anguilla (W. I. Bull.); Porto Rico (Gundlach).

Change *Tetrabothymus* to *Tetrabothynus*. (Schwarz.)

*Anchonus suillus* (Fabricius). Porto Rico (Gundlach).

\* *Hypoptus insularis* Champion. Grenada, St. Vincent (Biologia C. Am. Col. IV, pt. 3, p. 302).

Change *Sternuchus* to *Sternechus*.

\* *Sternechus pectoralis* Suffrian. Cuba (U. S. N. M.).

*Sternechus vicinus* Fleutiaux. Dominica (U. S. N. M.).

Change *Hilipilus* to *Heilipus*.

\* *Heilipus elegans* Guerin. Jamaica (U. S. N. M.). (Introduced.)

*Attelabus bipustulosus* Jekel. Porto Rico (U. S. N. M.).

Strike out *Attelabus mutabilis* Jekel, the St. Paul locality being not West Indian; *A. foveipennis* Suffrian is also probably not West Indian.

Strike out *Ludovix* Castelnau and transfer the species *morio* Suffrian to *Erodiscus*.

Change *Botanobius* to *Botanebius*.

\* *Anthonomus elegans* Leconte. Cuba (U. S. N. M.).

\* *Anthonomus julichi* Dietz. Cuba (U. S. N. M.).

\* *Anthonomus varipes* Jacquelin Duval. Cuba, Bahamas (U. S. N. M.).

(Injurious to egg plant, Quaintance).

\* *Derelomus albidus* Suffrian. Cuba (U. S. N. M.).

\* *Analcis fulvicornis* Suffrian. Cuba (U. S. N. M.).

*Polyderces zonatus* change author to (Swederus) and add: Dominica (U. S. N. M.).

\* *Conotrachelus coronatus* Leconte. Cuba (U. S. N. M.).

\* *Conotrachelus lineola* Suffrian. Cuba (U. S. N. M.).

\* *Conotrachelus presbyta* Suffrian. Cuba (U. S. N. M.).

\* *Chalcodermus pupillatus* ? Suffrian. Cuba (U. S. N. M.).

\* *Ulosomus furo* Suffrian. Cuba (U. S. N. M.).

\* *Ulosomus laticaudis* Suffrian. Cuba (U. S. N. M.).

*Euscepes porcellus* Boheman has been redescribed by Leconte under the name *Acalles longulus* (Champion, Biol. Cent. Am., Col., IV, pt. 4, p. 496).

*Cryptorhynchus batatae* Waterhouse. Porto Rico (Jones); Jamaica (U. S. N. M.); Grenada, St. Vincent, Antigua, St. Kitts, Nevis, Virgin Is. (W. I. Bull.). The larvæ of this species tunnel the sweet potato (Quaintance). It belongs to *Euscepes* and according to Faust, no true *Cryptorhynchus* occur in America except the introduced species *lapathi*.

\* *Cryptorhynchus longus* (Leconte). Cuba (U. S. N. M.).

*Pseudomus semicibratus* Boheman. Haiti (U. S. N. M.). This genus seems to be peculiar to the West Indies, except that two or three species reach the U. S.

*Styracopus phaseoli* Marshall. Dominica, St. Vincent.

*Macromerus lanipes* (Olivier). Dominica (U. S. N. M.).

*Trypetes guildini* Fähræus. Dominica (U. S. N. M.).

*Peridinetus maculatus* Rosenschoeld. Porto Rico (Gundlach).

*Peridinetus poeyi* Jacquelin Duval. Porto Rico (U. S. N. M.). In this genus there may be some species synonymous with species described from South America.

\* *Eurhinus festivus* (Fabricius). Haiti, Cuba (U. S. N. M.).

*Baris tabaci* (Sallé). Haiti (U. S. N. M.).

*Cylas formicarius* (Fabricius). Porto Rico (Van Zwaluwenburg, Jones).

On sweet potato.

*Apion portoricanum* Gerstaecker is a synonym of *subaneum* Gerstaecker (Wagner, Mem. Soc. Belg., 1912, XIX, p. 36).

#### Family LXVII. BRENTHIDÆ.

*Trachelizus linearis* Suffrian. Porto Rico (Gundlach).

*Belophorus maculatus* (Olivier). Cuba (U. S. N. M.).

*Belophorus militaris* (Olivier). Porto Rico (Gundlach).

*Rhaphidorrhynchus nitidicollis* Gyllenhal. Dominica (U. S. N. M.).

*Brenthus anchorago* (Linné). Dominica, Montserrat (U. S. N. M.).

*Brenthus turbatus* Boheman. Haiti (U. S. N. M.); Porto Rico (Gundlach).

#### Family LXVIII. COSSONIDÆ.

*Rhynchophorus palmarum* (Linné), Martinique; the larvæ, locally called "grou-grou," are common in dead stems of *Areca* (Marshall).

\* *Dynamis politus* (Gyllenhal). St. Vincent (Biologia).

*Metamasius sericeus* (Olivier). St. Kitts, St. Lucie (U. S. N. M.).

*Sphenophorus liratus* Gyllenhal. Dominica (A. M. N. H.); Martinique (Ann. Soc. Ent. Fr., VII, p. 447).

*Sphenophorus quadrisignatus* Gyllenhal. Dominica (A. M. N. H.).

*Sphenophorus sordidus* (Germar). Dominica (A. M. N. H.).

\* *Sphenophorus sacchari* Gyllenhal. St. Kitts (Barber).

*Sphenophorus longicollis* (Olivier) to be dropped is a native of China, Ceylon, etc. (Ann. Soc. Ent. France, 1885, p. 288).

*Calandra linearis* (Herbst). Dominica (A. M. N. H.).

*Calandra oryzae* (Linné). Haiti, Mona (A. M. N. H.); Jamaica (Cockerell).

*Cossonus impressus* Boheman. Mona (A. M. N. H.).

The authority for *Cossonus hamiltoni* should be Slosson, not Champion. For *Macrorhyncholus* read *Macrorhyncholus*.

## Family LXX. SCOLYTIDÆ.

The studies of Dr. A. D. Hopkins have made many changes necessary. The family name Scolytidæ is restored and many species names are added, though it may be that some of them are intended to represent taxonomic units, which may later be shown to constitute a smaller number of biological units. Assuming for the present that each represents a species, the following list of *Cryphalinæ* is to be substituted (*vide* Hopkins, Rept. 99) for that given in our Preliminary List.

**Hypothenemus** Westwood.

- H. obscurus* (Ferrari). Cuba.
- H. lineatifrons* Hopkins. Cuba.
- H. sacchari* Hopkins. Nevis.
- H. parvus* Hopkins. Cuba.
- H. flavipes* Hopkins. Cuba.
- H. abdominalis* Hopkins. Cuba.
- H. brunneipennis* Hopkins. Cuba.
- H. amplipennis* Hopkins. Cuba.
- H. moschata* (Schaufuss). Guadeloupe.
- H. ceiba* Hopkins. Cuba.
- H. pilosus* Hopkins. Cuba.

**Stephanoderes** Eichhoff.

- S. flavicollis* Hopkins. Cuba.
- S. elongatus* Hopkins. Cuba.
- S. unicolor* Hopkins. Cuba.
- S. subconcentralis* Hopkins. Cuba.
- S. gossypii* Hopkins. Cuba.
- S. depressus* Eichhoff. Antilles.
- S. opacifrons* Hopkins. Porto Rico.
- S. squamosus* Hopkins. Cuba.
- S. minutus* Hopkins. Cuba.
- S. nitidipennis* Hopkins. Cuba.
- S. nitidulus* Hopkins. Cuba.
- S. obliquus* Hopkins. Cuba.
- S. subopacicollis* Hopkins. Cuba.
- S. obesus* Hopkins. Cuba.
- S. setosus* (Eichhoff). Guadeloupe.
- S. cubensis* Hopkins. Cuba.

**Xylocleptes** *Ferrari.*

- X. carbonarius* Ferrari. Cuba.  
*X. ? limbatus* (Blandford). Cuba.

**Coccotrypes** *Eichhoff.*

- C. ? robustus* (Eichhoff). Cuba.  
*C. thrinacis* Hopkins. Isles of Pines.  
*C. bakeri* Hopkins. Cuba.  
*C. anonæ* Hopkins. Cuba.  
*C. hubbardi* Hopkins. Montserrat.

**Theoborus** *Hopkins.*

- T. theobromæ* Hopkins. Dominica.

**Xyleborus** *Eichhoff.*

- X. inermis* Eichhoff. Cuba.  
*X. sacchari* Hopkins. St. Vincent.  
*X. affinis* Eichhoff. Cuba.  
*X. grenadensis* Hopkins. Grenada.

In addition, the following notes are derived from various sources: Kleine treats *Hypothenemus eruditus* Westwood and *plumeriæ* as identical; he also cites *Cryphalus mucronifer* Wollaston from St. Vincent.

*Xyleborus ferrugineus* (Fabricius). Porto Rico (Gundlach).

*Xyleborus inermis* Eichhoff. Cuba (Kleine); Porto Rico (Van Zwaluwenburg).

*Xyleborus grenadensis* Hopkins. Porto Rico (U. S. N. M.).

*Xyleborus sacchari* Hopkins. Porto Rico (U. S. N. M.).

*Xyleborus perforans* (Wollaston). St. Kitts, Barbados, St. Vincent (Barber); Jamaica (Cockerell).

It is to be noted that where these names are not repeated in Dr. Hopkins's list it is possible that the same insect is there recorded as a new species. Until his paper on Scolytid synonymy is published such matters can not be definitely treated.

## Family LXXI. ANTHRIBIDÆ.

- \* *Aræcerus fasciculatus* (De Geer). Jamaica (Cockerell).