CORYNDON MEMORIAL MUSEUM EXPEDITION TO THE CHYULU HILLS.

VI.

COLEOPTERA. PART I.

By A. F. J. GEDYE, F.Z.S., F.R.E.S.

The present list enumerates the greater portion of the Coleoptera collected by the expedition. A paper on the Curculionidae by Sir Guy Marshall also appears in this Journal. Certain groups still remain to be dealt with notably the Staphylinidae, Coccinellidae, and certain Clavicorn families. Thanks are due to Sir Guy Marshall, the staffs of the Imperial Institute of Entomology, and the British Museum (Natural History) for great help in the

determination of the specimens.

Climatic conditions were rather unfavourable during the period of collecting which was during and just after the long rains. There is little doubt that better results would be obtained after the short rains which normally take place in October to November. The present collection was made during May, June and July, 1938. In view of the paucity of material few remarks of value can be made regarding geographical distribution. It is gratifying to find in such a small collection a high percentage of species new to science. This is particularly so in the Curculionidae in which family more material was collected than in others. A very considerable number of species have proved new to the Coryndon Museum collection.

LAMELLICORNIA.(1)

The collection made by the expedition consists of some three hundred and fifty specimens which are separable into about forty-five different species. Most of the species are common and widely distributed in Eastern Africa and it is improbable that any of the beetles discovered in any family are endemic to the Chyulu Hills. Two new species of Aphodiinae have been described by M. Paulian in the Revue Zoologique et Botanique Africaine. A few species have proved indeterminable by comparison with material in the British Museum and it is possible that some of these may prove to be new to science when opportunity occurs to compare them with material in other European collections. Owing to present world conditions it is, of course, impossible to send specimens to certain specialists.

⁽¹⁾ No attempt has been made to arrange the families in a natural sequence.

The collection of coprophagous beetles was confined to searching in buffalo dung which occurred chiefly in dense forest. Thanks are due to Mr. G. J. Arrow, of the British Museum, for great assistance in the determination of the species.

Family LUCANIDAE.

1. Xiphodontus bicolor, Boileau.

Kilimand-Meru Exped. 7, 1909, p. 17.

Six males and seven females were taken in rotten wood at 5,200 to 5,600 ft. This very interesting species was described in 1909 from Mt. Kilimanjaro and the unique female type is in Stockholm. There is one female in the British Museum and the Coryndon Museum possesses two males from Nairobi and Embakasi. So that in spite of its apparent rarity the species may eventually prove to be widely distributed.

Family SCARABAEIDAE. Sub-family CETONIINAE.

2. Fornasinius fornasinii, Bert.

Mem. Acad. Bologna IV, 1853, p. 345.

One male of this handsome beetle was captured at 6,500 ft. at the exuding sap of *Erythrina tomentosa*, R.Br. Repeated search unfortunately failed to produce further examples. Many names have been given to forms varying in colour and markings. There is only one rather damaged male in the British Museum exactly agreeing with the present specimen and this has no precise locality but was probably collected at Taveta.

3. Eudicella bertherandi, Fair.

Ann. Soc. ent. Fr., 1891, p. 241.

Two males were taken on Cissus sp. at 6,000 ft. This is a widely spread species in East Africa and is closely allied to Eudicella smithi var immaculata, Heath (of which it is probably a geographical race), but can be distinguished by the two black humeral spots on the elytra.

4. Coelorrhina cornuta, Heath.

Entomologist XXXVII, 1904, p. 101, fig. 2.

Three males and eighteen females taken on Erythrina tomentosa, R.Br., and on the wing at 5,000-6,000 ft. Widely distributed and common in East Africa east of the Rift Valley.

5. Genyodonta flavomaculata, F.

Ent. Syst. Suppl., 1798, p. 129.

One male at 3,800 ft. on Erythrina tomentosa. A not uncommon species in the Kibwezi and Taveta areas. I have no records of its occurrence at higher altitudes than 4,500 ft., and

it appears to have been mixed in some collections with G. fissicornis, Bourg., which takes its place at higher elevations to the north-west. G. flavomaculata, F., has a larger horn on the head of the male and is undivided. The black spots and marking on the thorax are separated.

The yellow markings on the elytra extend from the apex to the middle and are distinctly dentate on the basal half. The apical brown area enclosed by the yellow markings is about one-third of the length of the elytra. The body is more attenuate and tapers more to the apex than in fissicornis.

In G. fissicornis the horn on the head of the male is much smaller and distinctly divided and notched. The black markings on the thorax are confluent. The yellow markings on the elytra extend from the apical sides to two-thirds of the length of the body. The inner portion of the yellow markings is larger and more elongate and is rounded at the base and not dentate as in flavomaculata. The body is less attenuate and more rounded at the apex. The Coryndon Museum possesses ten specimens all from the Nairobi area.

6. Diplognatha silicea, McLeay.

Illus. Annul. S. Africa, 1938, p. 22.

Five specimens were taken at 5,600 ft. on *Umbelliferae*. This is the commonest *Cetoniine* beetle in Africa and extends from the Cape to Abyssinia. It becomes less common west of the Rift Valley and is gradually replaced in Uganda and further west by *D. gagates*, F. Both species are shining black in colour and superficially similar but can be easily separated by the presence in *D. gagates* of two spines on the middle of the intermediate tibiae whereas in *D. silicea* there is only one.

7. Amaurina lunicollis, Klb.

Sitz. Gesell. nat. Freunde Berlin, 1892, p. 66. One specimen at 6,000 ft.

8. Leucocciis elegans, Kolbe.

Stett. Ent. Zeit., LVI., 1895, p. 291.

Very common and taken in large numbers at 5,200-5,600 ft., often found in copula on oat grass and species of *Umbelliferae*. Generally distributed in East Africa east of the Rift Valley.

9. Gnathocera legrosi, Janson.

Ann. Soc. Ent. Belg., XLIV, 1900, p. 465.

Very common at 5,200 ft. and often taken in cop. on grasses. The species of this genus are very variable but all the specimens taken on the Chyulu Hills show little variation.

Sub-family TRICHIINAE.

10. Polyplastus ovatus, Waterh.

Ann. Mag. Nat. Hist. (7), i, 1898, p. 261.

Twelve specimens were taken at 3,800 to 5,600 ft. were bred from rotten wood but the condition of the larvae unfortunately renders their description impossible. This species shows great variation in colour and markings. Common and widely distributed east of the Rift Valley. It can be taken on the flowers of Hibiscus vitifolius, L.

Sub-family VALGINAE.

11. Comythovalgus fasciculatus, Gyll.
in Schon. Syn. Ins. 1, 3, 1817, Append. p. 43.

Two specimens were taken by general sweeping at 5,200-5,400 ft. A widely distributed and common species in East Africa.

12. **Comythovalgus** sp.

One specimen of a distinct species which it has not been possible to determine by comparison with material in the British Museum and in the Congo Museum, at Tervueren.

Sub-family DYNASTINAE.

13. Oryctes boas, F.

Syst. Ent. 1775, p. 8.

One male specimen of the common "Rhinoceros beetle" was taken at 5,600 ft.

Sub-family RUTELINAE.

14. Nannopopillia minuscula, Harold.

Stett. Ent. Zeit. XL, 1879, p. 333.

Twelve specimens were collected at 5,600 ft. on Vernonia sp. A common species; there are specimens in the Museum collection from numerous localities east of the Rift Valley.

Popillia sp.

One specimen of an attractive species which is not represented in the British Museum collection. Owing to the war it is not possible to send the insect to the specialist on this group.

Sub-family Melolonthinae.

16. Trochalus fraterculus, Klb.

Sitzb. Ges. Naturf. Besl. 1913, p. 202. A very common species of "chafer" taken at light, 5,200-5,600 ft.

- 17. Trochalus sp.
- 18. Pseudotrochalus sp.
- 19. Camenta sp.

Sub-family Troginae.

20. Trox luridus, F.

Spec. Ins. II, App. 1781, p. 496.

Common at 5,200 ft. in old skins, among bones and in serval dung.

Sub-family APHODIINAE.

21. Aphodius jeanneli, Paulian.

Bull Soc. Ent. Fr., 43, 1938, p. 77. One specimen in buffalo dung at 5,600 ft.

22. Aphodius zborniki, Balthasar.

Acta Soc. Ent. Csl., 32, 1935, p. 68. One specimen at 3,800 ft.

23. Aphodius angustatus, Klug.

Symb. Phys. V., 1845, nr. 8, t. 42, f. 8. Two specimens at 3,800 ft.

24. Aphodius rugulicollis, Fr. var. coryndoni, Paul. Rev. Zool. Bot. Afr., 32, 1939, p. 89.

Six specimens in buffalo dung at 5,600 ft. which Paulian has described as a new variety.

25. **Trichaphodius** sp.

One specimen at 5,600 ft. which Paulian considers a new species but is unable to describe without further material.

26. Saprosites chyuluensis, Paulian.

op. cit., p. 85.

Two specimens in buffalo dung at 5,600 ft. which M. Paulian has described as a new species.

Sub-family Coprinae.

27. Scarabaeus purpurascens, Gerst.

Arch. Naturg. XXXVII, 1871, 1, p. 28. One specimen of this species was collected by the "safari" at 3,800 ft. on the way to the first camp in the hills. It is unlikely to occur at higher altitudes.

28. Scarabaeus pustulosus, Gerst.

op. cit., p. 48.

Two specimens in buffalo dung at 5,600 ft.

29. Heliocopris pirmal, F.

Ent. Syst. Suppl., 1798, p. 29.

One female collected at light 4,000 ft.

30. Sisyphus goryi, Harold.

Berl. Ent. Zeit. II, 1859, p. 224.

Six specimens in buffalo dung at 5,200-5,600 ft.

31. Sisyphus tibialis, Raffray.

Rev. Mag. Zool., 1877, p. 312.

One specimen of this species, which was originally recorded from Abyssinia, was taken at 5,600 ft. in buffalo dung.

32. Catharsius vitulus. Boh.

Ins. Caffr. II, 1857, p. 223.

One male in buffalo dung at 6,000 ft.

33. Copris mesacanthus, Harold.

Mitth. Munch. Ent. Ver. II, 1878, p. 45. One male at 5,200 ft.

34. Copris integer, Reiche.

in Ferret and Galinier, Voy. Abss. III, 1847, p. 312.

Three males and nine females were taken at 3,800-4,000 ft. either in buffalo dung or on the wing.

35. Onitis spinierus, Fairm.

Ann. Soc. Ent. Fr. LXII, 1893, p. 137. Five specimens at 5,600 ft. in buffalo dung.

36. Onitis confusus, Boh.

Ofvers, Vet. Akad. Forh. Stockholm, XVII, 1860, p. 111.

This species occurred commonly and twenty-eight specimens were taken at 5,600-6,000 ft, in buffalo dung.

37. Onitis sp. near violaceus, Lansb.

Ann. Soc. Ent. Belge., XVIII, 1875, p. 51.

One specimen at 5,600 ft.

38. Oniticellus planatus, Cast.

Hist. Nat. Col. II, 1840, p. 91.

Eight specimens at 5,600 ft. in buffalo dung. This very common species occurs throughout Africa.

39. Onthophagus miricornis, D'Orb.

Ann. Soc. Ent. Fr. LXXI, 1902, p. 139.

Five males were taken in buffalo dung at 5,600 ft. This is an interesting species in which two forms of male occur both horned and hornless.

40. Onthophagus triarmatus, D'Orb.

Ann. Mus. Civ. Genova XLI, 1904, p. 320.

Six males and thirteen females in buffalo dung at 5,200 ft. The Museum collection previously contained only three specimens from Nairobi but as the species was originally described from Abyssinia it will no doubt prove to be widely distributed.

41. Onthophagus raffrayi, Har.

Berl. Ent. Zeit. XXX, 1886, p. 144.

Three males and one female in buffalo dung at 5,200-5,600 ft.

42. Onthophagus parcepictus. D'Orb.

Ann. Soc. Ent. Fr. LXXVII, 1908, p. 132.

Twenty-eight specimens in buffalo dung at 5,200-5,600 ft. This species was not previously represented in the Coryndon Museum.

43.

Onthophagus quadricuspis, D'Orb. Ann. Soc. Ent. Fr. LXXVII, 1908, p. 125.

Two males and on female at 5,200-5,600 ft. in buffalo dung. A common and widely distributed species in East Africa.

44, 45, 46. Onthophagus ssp.

The determination of these specimens awaits further material.

LONGICORNIA.

The Longicorn beetles collected by the expedition number some ninety-six specimens and are divisible into fourteen species. The more difficult species have been submitted to Dr. Breuning and he has described three as new. Such a high proportion of new species in such a small collection only shows what might be expected from the Chyulu Hills as a result of further collecting at a more favourable time. Little collecting for Coleoptera was done in the large forest at the highest elevation of the range and there undoubtedly many interesting insects await discovery. No Prioninae were represented in the collection but there is little doubt that the commoner species of Macrotoma and Acanthophorus would be found to occur at the lower altitudes.

Family CERAMBYCIDAE. Sub-family CERAMBYCINAE.

47. **Oemida gahani,** Dist.

Four specimens at 5,600 ft. A common and widely spread species throughout East Africa.

48. Carinoclytus thomsoni, Har.

One specimen at 5,600 ft. Very common at Kibwezi.

49. Calociytus carinatus, Aur.

Fifteen specimens collected in rotten wood at 5,600 ft. Not uncommon in the Nairobi area.

Sub-family Lamiinae.

50. Phymatogyrus pulcher, Breuning.

Three specimens at 5,400-5,600 ft. This has been described as a new species by Dr. Breuning.

51. Monoxenus balteatus, Aur.

Twelve specimens at 5.500-5.600 ft.

52. Mecynome puncticollis, Breuning.

This was the most abundant species collected and forty-eight specimens were taken at 5,600-6,000 ft.

53. Batrochorhina approximata. Breuning.

One specimen described as new by Breuning taken at 5.600 ft.

54. Sternotomis bohemanni, Chev.

Two specimens at 5,600 ft. This handsome beetle occurs commonly in East Africa east of the Rift Valley and breeds in fig trees.

55.

Entebbia bipunctata, Gah. Two specimens at 5,600 ft. Not uncommon and widely distributed in East Africa.

56. Cymatura spumans, Guer.

One specimen at 5,500 ft. New to the Museum collection.

57. Pterolophia mediopicta, Breuning.

One specimen at 5,600 ft. This has been described as new by Breuning.

58. Sophronica grisea, Aur.

One specimen at 5,600 ft. Widely distributed.

59. Sophronica rufescens, Breuning.

Five specimens at 5.600 ft.

60. Corus lignarius, Guer.

One specimen at 5,600 ft.

Family CARABIDAE.

One hundred and thirty-eight specimens of Carabidae were collected which are separable into some twenty-five species. Most of these have been identified by Mr. E. B. Britton, of the British Museum. A considerable proportion of the species are represented by unique specimens and in several cases owing to the lack of material it has not been possible to determine them other than generically. Here again there is no doubt that further collecting will produce many more interesting species. The time of year must have been particularly unfavourable for Carabidae as only two species, Polyaulacus kilimanus, All., and Demetrias natalensis, Chd., were found in any abundance. No Cicendelidae were collected by the expedition.

Psecadius eustalactus, Gerst.

Eight specimens at 5,200-5,600 ft. The Museum possesses a large series of this striking beetle from various localities east of the Rift Valley.

- 62. **Agonum alacer,** Boh. One specimen at 5,200 ft.
- 63. Agonum sp.
- 64. **Euleptus elegans,** Per. One specimen at 5,600 feet.
- 65. Chlaenius pulchellus, Boh.

One specimen at 3,800 ft. The Museum previously possessed only one specimen from Mombasa.

- 66. Anisodactylus sp.
- 67. Aulacoryssus aciculatus, Dej.
 One specimen at 3,800 ft.
- 68. Hypharpalus interstitialis, Boh.
 One specimen at 5,600 feet.
- 69. **Hypharpalus escheri, Dej.**One specimen at 3,800 ft. Common and widely distributed.
- 70. Acupalpus sp.
 One specimen at 5,600 ft.
- 71. Amorphomerus opacus, Raff.
 One specimen at 2,800 ft.
- 72. Aephnidius madagascariensis, Chd.
 One specimen at 5,600 feet.
- 73. **Lebia evecta,** Per. One specimen at 5,600 ft. Common and widely distributed.
- 74. **Lebia** sp.
- 75. Phlaeozetus sp.

Three undetermined species of this genus were found in the collection.

- 76. Thyreopterus flavosignatus, Dej. Two specimens at 3,800 ft.
- 77. Demetrias natalensis, Chd.

Twenty-three specimens were taken at 5,200-5,600 ft. under bark.

- 78. **Dromius fusculus,** Per. Two specimens at 5,600 ft.
- 79. Polyaulacus kilimanus, All.

This was the commonest *Carabid* collected and eighty specimens were taken at 5,600 ft. This species was originally described by Alluaud from Kilimanjaro.

- 80. Hystrichopus similis, Per.
 Four specimens at 5,600 ft.
- 81. Drypta sp.
- 82. Triaenogenius sculpturalis, Gerst. One specimen at 2.800 ft.

Family BOSTRYCHIDAE.

- 83. Bostrychoplites cornutus, Ol. One specimen of this common "borer" at 3,800 ft.
- 84. Enneadesmus forficula, Frm. Two specimens respectively at 3,800 and 5,600 ft.
- 85. **Xylion adustus.** Fhs. Three specimens at 5,600 ft. Common and widely distributed in East Africa.

Family ANOBIIDAE.

86. Ptilinus sp. One specimen not represented in the British Museum.

Family CLERIDAE.

- 87. **Gyponyx** sp. near **weisi**, Hintz. Six specimens at 5,200-5,600 ft. This species was not previously represented in the Museum collection.
- 88. Cephaloclerus sp. Two specimens at 5,600 ft.
- 89. Necrobia rufipes, De Geer. Four specimens. Common in old drying carcases throughout East Africa.

Family MALACHIIDAE.

- 90. Hedybius bicornutus, Champ. Eleven specimens at 5,200-5,600 ft. Fairly common east o the Rift Valley.
- 91. Hapalochrus sumtuosus, Boh.
- Six specimens at 3,800 ft.

 92. Hapalochrus amplipennis, Har. Very common in all parts of the hills. Widely distribute in East Africa.
- 93. Hapalochrus semilaevis, Champ. Very common at all elevations.

Family DRILIDAE.

94. Selasia rhipiceroides, Cast. Three specimens at 3,800 ft.

Family PRIONOCERIDAE.

95. Idgia bipartita, Gerst.

One specimen at 3,800 ft. Common and widely distributed.

96. Idgia dimidiata var. tripartita, Pic. Common at all elevations.

Family CANTHARIDAE.

97. Cantharis puberulus, Chp.

One specimen at 5,600 ft. Common over a great part of East Africa.

Family LYCIDAE.

98. Lycus trabeatus, Guer.
One specimen at 3,500 ft.

99. Lycus ampliatus, Fhs.

Nine specimens. Widely spread over the hills and most of East Africa.

100. Lycus flammeatus, Bourg.

Sixteen specimens. Common at all elevations.

101. Cautires lamellatus, Kln. Nine specimens at 5,600 ft.

102. Cautires pentagonus, Kln. Four specimens at 5,600 ft.

Family BUPRESTIDAE.

103. Steraspis fastuosa, Gerst.

Three specimens at 2,500 ft. This handsome insect is not uncommon on the plains.

104. Sphenoptera maculipennis, C. & G.

One specimen at 5,200 ft.

105. Sphenoptera neglecta, Kl.

One specimen at 5,200 ft.

106. Anthaxia pilifrons, Kerr. One specimen at 2,500 ft.

107. Anthaxia sp. n.

One specimen of a new species which will be shortly described by Thèry. (1).

108. Damarsila albomarginata, Hbst.

Three specimens at 5,600 ft. Common and widely distributed in East Africa.

⁽¹⁾ Since the above was written I have received Mon. Thery's MS in which this insect is described as Anthaxia chyuluensis, n. sp. This paper will appear in a future issue of this Journal.

109. Damarsila amaurotica stuhimanni, Klb.

One specimen at 5,200 ft. Previously the Museum possessed only one specimen from Moshi.

110. Acmaeodera subprasina, Mars.

One specimen at 5,200 ft.

111. **Meliboeus albopilosus,** Kerr.

One specimen at 5,200 ft.

Meliboeus albopilosus var. montanus, Kerr. One specimen at 5,200 ft.

Family ELATERIDAE.

The Museum expedition collected a large number of individuals of this family although they are not separable into many different species. They have been determined by Monsieur E. Fleutiaux, the recognised authority on the group, who has already contributed a valuable paper to this journal (Vol. XII (53-54), 1935, p. 90). In this paper were described no less than fifty-five new species and two new genera from the Museum collection. There is no doubt that careful collecting will produce many more new forms from East Africa.

Adelocera kenyensis, Fleut.

Twenty specimens were collected at 5,600 ft. Prior to this the Museum possessed only one specimen from the Kikuyu Escarpment so that the species will probably prove to be widely distributed.

114. Propsephus maculatus, Schw.

One hundred and twenty specimens were collected at 5,600 ft., the Museum previously possessing only two specimens from the Aberdare Mountains.

115. Anchastus sp. near parvicollis, Fleut.

One specimen at 5,600 feet.

116. Cardiophorus subdentatus, Schw.

Thirty-three specimens at 5,200-5,600 ft. Common and widely distributed in East Africa.

- 117. Cardiophorus sp. near chappuisi, Fleut.
 - One specimen at 5,600 ft.
- 118. Cardiophorus usambaricus. Fleut.

One specimen at 5,600 ft.

- 119. Cardiophorus sp. near frontalis. Fleut. Two specimens at 5,600 ft.
- 120. Elasmosomus sp. near mocquerysi, Fleut. One specimen at 5,600 ft.

Family TENEBRIONIDAE.

Only some twenty odd species of this family were collected by the expedition and these have been kindly determined by Dr. K. G. Blair, of the British Museum. It is unfortunate that although several species were found in considerable abundance it has only been possible to identify them generically.

121. **Zophosis** sp.

122. Rhytinota ventricosa, Gerst.

One specimen at 6,000 ft. A common species of the surrounding plains.

123. Rhytinota gracilis, Gerst.

Two specimens at 5,600 ft. A common and widely distributed species.

124. Adesmia (Macropoda) baccata, Gerst.

Two specimens at 2,500 ft. Widely distributed.

125. Phrynocolus crispatus, Fairm.

Twenty-six specimens at 5,600 ft.

126. Phrynocolus auriculatus, Geb.

Two specimens at 5,600 ft. These are much smaller in size than a fair series possessed by the Museum from North Kavirondo.

127. Phrynocolus frondosus. Gerst.

One specimen at 3,800 ft. A common insect of the plains.

128. **Psammodes** sp.

129. **Sepidium muscosum,** Gerst. Sixteen specimens at 3,800 ft. to 5,200 ft. Common and widely distributed in East Africa.

130. Gonocephalum simplex, F.

Abundant throughout East Africa.

131. Mesomorphus murinus, Bdi.

Two specimens from 3,800 ft. Previously the Museum had only one specimen from Lake Jipe.

132. Hypophioeus ? abyssinicus, Pic.

Four specimens at 5.600 ft.

133. Gnathocerus cornutus, F.

One specimen at 5,200 ft. A cosmopolitan insect.

134. Derosphaerus granipennis, Geb.

Three specimens at 5,600 ft. New to the Museum.

135. Lyprops badius, Geb.

One specimen at 3,800 ft.

136. Dichastops sunaeneus, Geb.

One specimen at 3,800 ft. This species is new to the Museum collection and bears a curious resemblance to a *Lagriid*.

137. Micrantereus femoratus, Gerst.

Two specimens at 5,200 ft. New to the Museum collection.

- 138. **Hoplonyx** sp. near **brevicollis**, Geb. Three specimens at 5,600 ft.
- 139. Paramarygmus metallicus, Fairm.

 Two specimens at 5,600 ft. New to the Museum collection.
- 140. **Praogena** sp.
 Three specimens at 5,600 ft.
- 141. **Pyona** sp.

 Twenty-eight specimens at 5,600 ft.
- 142. **Hypamarygmus** sp. Forty-two specimens at 5,600 ft.

Family CISTELIDAE.

A large number of specimens of this family were collected and have been determined by Herr Borchmann. They are of great interest and no less than six named species are new to the collection. They were captured by sweeping grasses on the edge of forest. A large Allecula and several small species of other genera still remain to be identified.

- 143. **Ectenostoma oberudorferi,** Borch. One specimen at 5,600 ft.
- 144. **Ectenostoma dilatipes,** Borch. Sixteen specimens at 5,600 ft.
- 145. **Ectenostoma atrum,** Borch. Twenty-four specimens at 5,600 ft.
- 146. Isomira 8-lineata, Borch.

Twenty-five specimens at 5,000-5,600 ft. Some were attacked by mites while living.

- 147. **Isomira vagilineata,** Borch. Twenty-three specimens at 5,400-5,600 ft.
- 148. **Mycetocharina suturalis,** Borch. One specimen at 5,600 ft.

Family SCRAPTIIDAE.

149. **Biophida** sp.
Two specimens at 5,600 ft.

Family RHIPIPHORIDAE.

150. Macrosiagon bipunctatum, F.

One specimen at 5,200 ft. Widely distributed.

151. Rhipiphorus ? caffer, Gerst.

One specimen at 5,500 ft. This insect has very short, almost vestigial elytra, and with its vivid yellow abdomen bears a remarkable resemblance to a *Hymenopteron*.

Family LAGRIIDAE.

The specimens have been determined by Borchmann.

152. Lagria villosa, F.

Eight specimens at 5,600 ft. Common and widely distributed throughout East Africa and Uganda.

153. Derolagria convexa, Klb.

Twenty-one specimens at 5,600 ft. Common and widely distributed.

154. Chrysolagria plebeja, Gerst.

Two specimens at 5,400 ft. A common coastal form.

155. Chrysolagria flavipennis, Fhs.

Five specimens at 5,600 ft. New to the Museum collection.

156. Chrysolagria antennalis, Borch.

Fifteen specimens at 5,400-5,600 ft. New to the Museum.

157. Chrysolagria cuprina, Ths.

Forty-seven specimens at 5,200-5,600 ft. This was very abundant on the hills but is new to the Museum collection.

Family MELOIDAE.

The members of this family are of particular interest on account of the hyper-metamorphosis which they undergo. A different type of larva developing at each instar of the same species. The adults deposit their eggs in the ground. In some cases the young larvae climb on to flowers where they attach themselves to bees or other insects and are borne to the nest where they pass the rest of their larval life. In the case of the genus Horia it is known that the larvae actually pupate in the burrows of Xylocopa bees. All the adult members of the family are phytophagous. Apart from Horia I know of no life history which has been worked out in other African genera. I have found Mylabris praestans in the act of laying and have been successful in rearing young larvae but have been unable to keep them alive owing to ignorance of their food. Some larvae are believed to parasitic in the egg masses of certain grass hoppers (Acridiidae).

158. Mylabris merefiensis, Pic.

One specimen at 5,600 ft. New to the Museum collection.

159. Mylabris praestans, Gerst.

One specimen at 5,200 ft. Common on the plains from Nairobi to the Coast.

160. Mylabris bipartita, Mars.

Four specimens at 3,800 ft. Very common and widely distributed.

- 161. Eletica rugiceps, Ancey. One specimen at 5,200 ft.
- 162. **Epicauta albovittata,** Gestro.

 One specimen at 5,500 ft. Common at the coast.
- 163. Nemognatha angolensis, Har.
 One specimen at 5,200 ft. Widely distributed.
- 164. **Coryna apicicornis, G**uer.
 Sixteen specimens at 3,800-5,600 ft. Very common and widely spread.
- 165. **Coryna 12-punctata,** Chev. One specimen at 5,600 ft.

Family ANTHICIDAE.

- 166. Anthicus bottergei, Pic.
 Two specimens at 5,600 ft.
- 167. Notoxus jeanneli, Pic.
 One specimen at 5,600 ft. Widely distributed.

Family BRUCHIDAE.

- 168. **Spermophagus bimaculatus,** Pic. Four specimens at 5,600-6,600 ft. Widely distributed.
- 169. **Spermophagus cicatricosus,** Gyll. One specimen 5,600 ft.
- 170. **Spermophagus? maurus,** Fhs. Five specimens 5,600 ft. New to the Museum collection.
- 171. Spermophagus natalensis, Fhs. Two specimens 5,200 ft.
- 172. Bruchus obscurus, Fhs. Eight specimens 5,400-5,600 ft.
- 173. Bruchus ornatus, Boh. One specimen 5,400 ft.
- 174. Bruchus atrosuturalis, Pic.
 One specimen 5,200 ft. New to the Museum collection.

175. Bruohus subcallosus, Pic.

One specimen at 5,600 ft. New to the Museum collection.

176. Bruchus chinensis, L.

Two specimens at 5,300 ft. New to the Museum collection.

177. **Bruchus ? uberatus,** Fhs.

Two specimens at 5,200-5,600 ft. New to the Museum collection.

178. Bruchus rhodesianus, Pic.

Three specimens at 5,200-5,600 ft.

179. Bruchus flabellicornis, Boh.

Two specimens 5.400-5.600 ft. New to the Museum collection.

180. Bruchus obtectus, Say.

Six specimens at 5.600 ft. New to the Museum collection.

Pachymerus atricolor, Pic.

One specimen at 5.600 ft. New to the Museum collection.

Family CHRYSOMELIDAE.

Several hundred specimens of this family were collected which are separable into at least fifty species. Mr. G. E. Bryant has been kind enough to determine a number of the species but it is unfortunate that it has only been possible to affix a generic name to a considerable number. Many of the species are not represented in the British Museum and undoubtedly a number of them will prove to be new to science.

Sub-family Orsodacninae.

Two species of Zeugophora were collected but they have not yet been determined specifically.

Sub-family CRIOCERINAE.

182. Bradylema robusta, Lac.

Three specimens at 5,400 ft. This species is widely distributed, the Museum already possessing specimens from Kaimosi.

183. Lema regimbarti. Gest.

Two specimens at 5,200 ft. Widely distributed throughout East Africa.

Sub-family CLYTRINAE.

Several species of Melitonoma and Gynandrophthalma were collected in large numbers, but it has not yet been possible to determine them.

Sub-family CRYPTOCEPHALINAE.

184. Cryptocephalus decemnotatus, Suff., var.

Nineteen specimens at 5,200-5,600 ft. Common and widely distributed.

185. Cryptocephalus sp.

Sub-family EUMOLPINAE.

186. Europe sauberlichi. Wse.

Three specimens at 3,800 ft. New to the Museum collection.

187. **Macrocoma fulvohirta,** Gest. Two specimens at 5,400 ft.

188. Macrocoma auriviliosa, Marsh.

One specimen at 5,600 ft. Common and widely distributed.

- 189. Colasposoma sp.
- 190. **Pseudocolaspis** sp.
- 191. Pagria sp.

192. Lefevrea spp.

Several unknown species of this genus were taken in large numbers.

Sub-family GALERUCINAE.

193. Gastrida abdominalis, Chap.

Nine specimens at 5,600 ft. Common and widely distributed.

194. Hyperacantha inaequalis, Chap.

One specimen at 5,600 ft.

195. Hyperacantha semipalliata, F.

One specimen at 5,600 ft.

196. Hyperacantha complexa, Lab.

Twenty-four specimens at 5,200-5,600 ft. It is probable that this species and *H. semipalliata* and *H. inaequalis* are all forms of one species. *H. complexa* is certainly the dominant form on the Chyulu Hills as only one specimen of each of the other forms was taken. *H. complexa* is a distinctive looking insect and is also the dominant form on the Teita Hills and on Mt. Mbololo, and we have not seen specimens from elsewhere. *H. inaequalis* seems to be generally distributed while *H. semipalliata* is the common form in the Nairobi area and adjacent country.

197. Monolepta lusingaensis, Lab.

Seventy specimens at 5,200-5,600 ft. Widely distributed, also occurring in the Nairobi area.

198. Monolepta leuce, Wse.

Fifty-six specimens at 5,200-5,600 ft. Common and widely distributed.

199. Monolepta rubricosa, Gerst.

Five specimens at 5,600 ft.

200. Monolepta spp.

Some five different species still undetermined specifically.

- 201. Platyxantha sp.
- 202. Rhaphidopalpa africana, Wse.

One specimen at 5,600 ft. A common coastal form.

203. Copa kunowi, Wse.

One specimen at 5,600 ft. Common and widely distributed.

- 204. Mahutia sp.
- 205. Hemixantha usambarica, Wse. Four specimens at 5,200-6,000 ft.
- 206. Hemiphracta sp.

Sub-family HALTICINAE.

207. Hespera cinotella, Wse.

One specimen at 5,600 ft.

208. Decaria abdominalis, Jac.

One specimen at 6,600 ft.

209. Philopona tibialis, Wse.

Five specimens at 5,200-5,600 ft. Common and widely distributed.

- 210. Philopona sp.
- 211. Podagrica puncticollis, Wse.

Four specimens at 5,400 ft. Common and widely distributed.

- 212. Crepidodera sp.
- 213. Haltiea pyritosa, Er.

Eighteen specimens at 5,600 ft. Very common and widely distributed in East Africa near rivers and streams.

- 214. Longitarsus sp.
- 215. Aphthona sp.

Sub-family HISPINAE.

216. Dichirispa mashuna, Per.

Seven specimens at 5,600 ft. A widely spread species originally described from Rhodesia.

- 217. **Dichirispa auromicans, G**est. Fifteen specimens at 5,200-5,600 ft. Widely distributed.
- 218. **Daetylispa contribulis,** Wse. Fifty-eight specimens at 5,200-5,600 ft. Widely distributed.
- 219. Dactylispa sp.
- 220. Dactylispa gracilis, Per.
 Seven specimens at 5,600 ft. New to the Museum collection.
- 221. Hispa fraterna, Per.
 Twenty-two specimens at 5,600 ft. New to the collection.
- 222. Hispa gracilicornis, Wse.
 Two specimens at 5,600 ft. New to the collection.
- 223. Oneocephala sp. Five specimens at 5,600 ft.

Sub-family CASSIDINAE.

- 224. Aspidomorpha infuscata, Spth. Four specimens at 5,600 ft. Widely distributed.
- 225. Aspidomorpha lateralis, Wse.
 Two specimens at 5,600 ft. Widely distributed.
- 226. Aspidomorpha quadrimaculata, Ol.
 One specimen at 5,000 ft. Common and widely distributed
- 227. Laccoptera montivaga, Spth.

 Five specimens at 5,600 ft. Common and widely distributed
- 228. Cassida magilensis, Spth.
 One specimen at 5,400 ft. New to the Museum collection.
- 229. Acrocassis soror, Wse.
 Two specimens at 5,600 ft. Common and widely distributed