THE PHILIPPINE JOURNAL OF SCIENCE

Vol. 72

MAY–JUNE, 1940

Nos. 1–2

THE LONGICORN BEETLES OF HAINAN ISLAND

COLEOPTERA: CERAMBYCIDÆ¹

By J. LINSLEY GRESSITT

Of the Lingnan Natural History Survey and Museum Lingnan University, Canton, China

EIGHT PLATES

The present report is in the nature of a classification of the longicorn, or long-horned, beetles hitherto collected on Hainan Island, as far as available to the writer. A large part of the material on which the work has been based is included in the collections of the Lingnan Natural History Museum of Lingnan University, Canton, made on various expeditions, principally by F. K. To in 1932 and 1935, by Prof. W. E. Hoffmann, Mr. O. K. Lau, and Dr. F. A. McClure in 1932, and by the Fifth Hainan Island Expedition of the University in 1929, as well as on collections made by myself on my trip(³⁴) to the island during the summer of 1935. The remainder of the material studied includes, among others, part of the collection made by Mr. J. Whitehead in 1899, and the specimens collected by Commander G. Ros in the spring of 1936.

A list of localities is given at the end, in addition to the map, in order to facilitate the identification of place names used.

I am deeply grateful to Professor W. E. Hoffmann, director of the Lingnan Natural History Survey and Museum of Lingnan University, for enabling me to make this study. To Dr. K. G. Blair, of the British Museum of Natural History, I am greatly

¹ Contribution from the Lingman Natural History Survey and Museum of Lingman University, Canton, China.

39937

indebted for sending me Hainan specimens for study, including some of Whitehead's material, as well as for kindly comparing specimens for me with types in the British Museum. I am likewise indebted to the Reverend Père Octave Piel, of the Musée Heude, Université l'Aurore, Shanghai, for generously submitting to me for study the specimens collected by Commander Ros. I wish also to express my deep appreciation to Mr. W. S. Fisher, of the United States National Museum, and Drs. E. C. van Dyke and E. Gorton Linsley, of the University of California, for coöperation extended during the course of this study. Dr. F. A. McClure has very kindly supplied information concerning localities in Hainan.

The type specimens of the new species are deposited in the United States National Museum in Washington, D. C.; the Lingnan Natural History Museum in Canton, China; the California Academy of Sciences in San Francisco; the British Museum in London; and the Musée Heude, Université l'Aurore, Shanghai. The holotypes in the California Academy of Sciences are placed on loan deposit as part of my own collection, pending the final deposition of the latter.

HISTORICAL

The first paper on the Cerambycidæ of Hainan Island, and the only previous paper to deal with them exclusively, was published by Gahan⁽¹⁹⁾ in 1900, and was based on the specimens collected by J. Whitehead on the island during the preceding year. In that paper the following 24 forms were listed, 22 of which were identified, and 6 (here preceded by asterisks) described as new species:

- * Ægosoma hainanensis Gahan. Ægosoma marginale (Fabr.). Philus antennatus Saund. Dialeges undulatus Gahan. Ceresium sinicum White. Eurybatus 10-punctatus Westw. Clytanthus douei Chevr. var. Chlorophorus annularis (Fabr.). Xylotrechus quadripes Chevr. var. Monohammus bimaculatus Gahan. * Pelargoderus apicalis Gahan.
- * Melanauster similis Gahan.

Melanauster chinensis Först.

- * Melanauster macrospilus Gahan. Coptops polyspila Pasc. Olenocamptus bilobus (Fabr.).
- * Niphona Hookeri Gahan. Pterolophia annulata Chevr. Zotale lineata (Gahan). Sybra posticata Gahan. Serixia sedata Pasc. Serixia sp.
- * Astathes cyanoptera Gahan. Oberea sp.

In addition was mentioned an undescribed species of a new genus allied to Merion ada, which has been sent me by Dr. Blair and is herein described as a new species of Kunbir. A

few changes in Gahan's identifications are also proposed in the present work. "Clytanthus douei Chevrolat var." may possibly be one of the two species of Chlorophorus herein named.

Since the publication of Gahan's paper no new species have been described from the island, and only two additional species have been recorded: *Paraphrus granulosus* Thomson by Lameere⁽⁴³⁾ in 1911, and *Æolesthes sinensis* Gahan by Liu^{(49,} p. 110) in 1934. As to the correctness of the latter identification, however, I am uncertain.

PHYSICAL FEATURES OF HAINAN

Hainan is a large, though little-known island, occupying an important place in the Gulf of Tonkin (Tongking) in the South China Sea, just south of the southern extremity of China, which, in the form of the Luichow Peninsula, approaches to within 25 kilometers of the island. Hainan lies a few hundred kilometers east of Tonkin. northern French Indo-China. The area of the island is in the neighborhood of 35,800 square kilometers (14,000 square miles), and its greatest length is about 290 kilometers (180 miles), in a southwest-northeast direction. Hainan extends from 18° 9' to 20° 8' north latitude and 108° 36' to 111°. 3' east longitude, being a little south of Formosa, Hawaii, and Lower California, with the middle of the island just south of Though similar to Formosa in area the northern end of Luzon. and in relation to the continent, the island is much less mountainous and less heavily forested than the latter, and in some respects seems poorer in its fauna, in spite of its more tropical location.

The northern portion of Hainan, and the northwestern coastal area, are largely level, being partially cultivated, and in part almost desertlike, with low grass and scattered palms. The central and southern parts of Hainan are mountainous, with several long ranges extending in different directions. The highest mountains are a little less than 2,000 meters (6,500 feet) in altitude, and are covered with dense jungle, at least on their upper slopes. There are no volcanoes on the island, though there are a few low eroded cones, "The Hummocks," near the northern end of the island. There are four principal rivers, emptying into the ocean on as many sides of the island, and all originating in the mountains of the central part.

The climate is tropical, with high humidity and heavy rains, particularly those brought by the summer monsoons and typhoons from the east and southeast, across the Philippines and the South China Sea. The climatic conditions differ considerably in the extreme southern part of the island, which is much warmer, with more distinct wet and dry seasons, than the central and northern sections, and this part apparently possesses a fauna distinctively different from that of the rest of the island. Unfortunately not much material is available from the southernmost portion.

ZOOGEOGRAPHY

Hainan is distinctly Indo-Chinese in the character of its ani-The last connection of the island with the mal inhabitants. mainland was very likely through the Luichow Peninsula, unless the northern part of the Gulf of Tonkin was submerged during the process of separation. Unfortunately the faunas of the Luichow Peninsula and of western Kwangtung Province are as yet little known, so it cannot be definitely stated whether the fauna of Hainan is more closely related to that of northern Indo-China or to that of the southern extremity of the Chinese mainland. Most likely the relationship of the three areas will show no very striking differences, and the fauna of Hainan will not prove to possess as high a percentage of endemicity as is indicated by the large proportion of forms described as new species or new subspecies in this work. In a recent study on the mainland Kwangtung fauna⁽³⁵⁾ in this family of beetles, only 25 of the 143 species considered were known to me to be found on Hainan, but in the present work 38 of the 167 species are recorded also from mainland Kwangtung. This apparently great difference between the two areas can be explained to some degree by the fact that the collections at hand probably represent only a small fraction of the actual fauna in both cases. and also by the fact that the Kwangtung material studied largely came from the northern and northeastern extremities of the province, and most of the Hainan material from the south central part of the island.

The relationship of the Hainan fauna with that of Burma and Siam seems to be very close, and doubtless many of the species here recorded from Hainan and one or both of the other two mentioned regions will later be found also in Indo-China or in the southwestern corner of China.

The geographical affinities of the Hainan longicorns, as far as the distribution of the various species is known, shows the following order of relationship with other regions, according to the number of species held in common with Hainan: South China mainland, 47 species; Formosa, 36; Indo-China, 34; Burma 28; Siam, 24; Hongkong, 21; India, 20; Malay Peninsula, 14; Assam, 14; Sunda Islands, 13; Ryu Kyu (Loochoo) Islands, 7; Japan proper, 7; Central China, 5; Andaman Islands, 5; Ceylon, 4; Wallacea, 4; North China, 3; Philippine Islands, 2; Korea, 2; and West China, Tibet, Africa, and the Bonin Islands with 1 species each in common with Hainan. One of the striking facts is the paucity of species (two) held in common with the Philippines, whereas the latitude is practically the same and the distance separating the two regions not very great. This circumstance can be contrasted with the 36 species possessed by Hainan in common with Formosa, which is just to the north of the Philippines and farther, in actual distance, from Hainan.

The affinity of the Hainan fauna with the Palæarctic region seems to be rather remote. No species are known to be found in common with Europe or Siberia, and only 3 Hainan species extend as far northward as North China.

According to the present picture, 72, or 43.1 per cent, of the 167 known Hainan species in this family, appear to be endemic, but it is predicted that further study will considerably lower this percentage.

EXPLANATION OF SPECIAL TERMS

- CICATRIX OPEN. A cicatrix, or raised and more or less roughened area on the dorsal side of the distal end of the antennal scape, which is not entirely surrounded by an elevated rim.
- CICATRIX CLOSED. A cicatrix entirely surrounded by a raised rim.
- COXAL CAVITIES CLOSED, or OPEN. Acetabulæ which, in the anterior pair, are, or are not, completely enclosed posteriorly by the sternum, and in the middle pair are, or are not, shut off externally from the mesepimera by contact of the mesepisterna with the metasternum.
- DIVARICATE. Tarsal claws in which the two members of each pair are directed in more or less opposite directions, in other words, form an angle of about 180° with each other.
- DIVERGENT. Tarsal claws with each member directed at an agle of 50° to 100° , or thereabouts, in relation to each other.
- EYES DIVIDED. Each of the two compound eyes consisting of two lobes which are completely separated, or connected by a fine line.
- EYES EMARGINATE. Each compound eye indented on one side, generally near the antennal insertion.
- GENAL ANGLE. The angle formed by the genal margin and the inferior margin of the front of the head, as seen in an anterior view.
- GENAL MARGINS. The lower parts of the sides of the head, as seen in an anterior view.

72, 1–2

- INTERCOXAL PROCESS. Prolongation of a sternum posteriorly or anteriorly between coxal cavities. This refers to the anterior and middle coxæ, as far as thoracic sterna are concerned, either the mesosternum or metasternum, or both, with a process between the middle coxæ.
- MIDDLE TIBLÆ GROOVED. Implies the presence of an oblique groove on the outer edge of each tibia a short distance before the apex, often more or less hidden by hairs.
- RETRACTILE HEAD. A head that in the normal contracted condition touches, or nearly touches, the anterior coxæ.

SCAPE. The first segment of an antenna.

ENUMERATION OF SPECIES

The aggregate of the species in the collections at hand, together with the additional forms recorded by Gahan, totals 167, distributed in 94 genera, representing 39 tribes of 5 subfamilies. Seventy of the forms are herein described as new species or geographical subspecies, and 23 genera and 106 species are new to China. Five new genera, 1 new subgenus, and 3 new tribal names are also proposed. The names are enumerated in the following list.

PRIONINÆ

PRIONINI

1. Baladeva walkeri Waterh.

2. Paraphrus granulosus Thoms.

3. Priotyrranus (Chollides) closteroides (Thoms.).

MACROTOMINI

4. Macrotoma (Zooblax) hainana sp. nov.

MEGOPIDINI

 5. Megopis (Ægosoma) sinicum
 6. Megopis (Ægolipton) marginahainanensis (Gahan).
 6. Megopis (Ægolipton) marginalis (Fabr.) comb. nov.

PHILINI

7. Philus antennatus (Gyllenh.)

8. Philus pallescens tristis subsp. nov.

DISTENIINÆ

DISTENIINI

9. Noemia submetallica sp. nov.

LEPTURIINÆ

LEPTURINI

- 10. Ephies gahani sp. nov.
- 11. Strangalia lateripicta loimailia subsp. nov.
- 12. Strangalia longicorne obscura subsp. nov.

72, 1-2

CERAMBYCINÆ

ACHRYSONINI

13. Nortia geniculata sp. nov.

CERAMBYCINI

- 14. Plocæderus obesus Gahan.
- 15. Nadezhdiella cantori (Hope).
- 16. Æolesthes holosericea (Fabr.).

18. Dialeges undulatus Gahan.

19. Trachylophus sinensis Gahan.

20. Rhytidodera bowringii White.

17. Trirachys orientalis Hope.

HESPEROPHANINI

21. Gnatholia eburifera Thoms. 22. Stromatium longicorne (New m.)

CALLIDIOPSINI

23. Ceresium geniculatum White. 24. Ceresium sinicum White.

MOLORCHINI

 Merionæda (Ocytasia) formo- 26. Kunbir pallidipennis sp. nov. sana burkwalli subsp. nov.

CALLICHROMINI

- 27. Embrik-Strandia unifasciata (Rits.) comb. nov.
- 28. Polyzonus prasinus (White).
- 29. Chloridolum loochooanum hainanicum subsp. nov.
- 30. Leontium nigroscutellatum sp. nov.
- 31. Chelidonium argentatum (Dalm.).
- 32. Chelidonium gibbicolle (White).

COMPSOCERINI

33. Rosalia (Eurybatus) decempunctata (Westw.).

CLYTINI

- 34. Xylotrechus basalis Schw.
- 35. Xylotrechus magnicollis Fairm.
- 36. Xylotrechus nigrosulphureus sp. nov.
- 37. Xylotrechus quadripes Chevr.
- 38. Perissus indistinctus sp. nov.
- 39. Perissus kankauensis chungkonensis supsp. nov.
- 40. Chlorophorus annularis (Fabr.)
- 41. Chlorophorus hainanicus sp. nov.

- 42. Chlorophorus macaumensis (Chevr.).
- 43. Chlorophorus reductus Pic.
- 44. Chlorophorus separatus sp. nov.
- 45. Rhaphuma pieli sp. nov.
- 46. Demonax bimaculicollis (Schw.) comb. nov.
- 47. Demonax brevespinosus sp. nov.
- 48. Demonax matsushitai reticulicollis subsp. nov.
- 49. Sclethrus stenocylindricus Fairm.

TILLOMORPHINI

50. Epipedocera hoffmanni sp. nov.

7

AINI Leontium nigroscutellatum s

CLEOMENINI

51. Dere macilenta sp. nov.

STENASPINI

52. Purpuricenus malaccensis (Lacord.).

LAMIINÆ

MONOCHAMINI

- 53. Psacothea inarmata sp. nov.
- 54. Epepeotes tonkinensis (Auriv.) comb. nov.
- 55. Pelargoderus apicalis Gahan.
- 56. Monochamus bimaculatus Gahan.
- 57. Monochamus versteegi Rits.
- 58. Dihamus sericeo micans (Fairm.)
- 59. Dihammus speciosus (Gahan).
- 60. Melanauster chinensis (Först.)

- 61. Melanauster macrospilus Gahan.
- 62. Melanauster pirouletii similis Gahan comb. nov.
- 63. Aristobia hispida (Saund.).
- 64. Aristobia testudo (Voet).
- 65. Blepephæus subcruciatus (White).
- 66. Blepephæus succinctor (Chevr.).
- 67. Blepephæus variegatus sp. nov.
- 68. Hainanhammus griseopubens gen. et sp. nov.

AGNIINI

69. Pharsalia ferruginea Gahan.

BATOCERINI

- 70. Batocera roylei orientalis Kr.
- 71. Batocera rubus (Linn.).
- 72. Batocera rufomaculata (De Geer).

MESOSINI

- 75. Mesosa maculifemorata sp. nov.
- 76. Mesocacia assamensis Heller.
- 77. Mesocacia punctifasciata sp. nov.
- 78. ?Mesocacia rugicollis sp. nov.
- 79. Cacia nigrofasciata sp. nov.

- 73. Apriona germari (Hope). 74. Apriona swainsoni (Hope.).
- 80. Coptops leucostictica rustica subsp. nov.
- 81. Coptops lichenea Pasc.
- 82. Chæromorpha formosana palminsulana subsp. nov.
- 83. Falsomesosella hakka Gressitt.

ANCYLONOTINI

84. Palimna annulata tessellata85. Palimna palimnoides similis (Pasc.). subsp. nov.

XYLORHIZINI

86. Xylorhiza adusta (Wied.).

DORCASCHEMATINI

87. Olenocamptus bilobus (Fabr.).

XENOLEINI

88. Xenolea tomentosa asiatica Pic).

1940

72, 1-2

NYCTIMENINI

89. Euseboides matsudai spinipennis subsp. nov.

HECYRINI

90. Machotupa suffusa (Pasc.).

NIPHONINI

APOMECYNINI

- 91. Niphona cantonensis Gressitt.
- 92. Niphona excisa Pasc.
- 93. Niphona hookeri Gahan.
- 94. Niphona minor (Lameere).
- 95. Niphona yanoi reducta subsp. nov.
- 96. Pterolophia albonigra sp. nov.
- 97. Pterolophia annulata (Chevr.).
- 98. Pterolophia arctofasciata sp. nov.

ceps Pic comb. nov.

111. Ropica sublineata sp. nov. 112. Ropica ngauchiliæ sp. nov.

99. Pterolophia camela Pic.

109. Apomecyna Thoms.

- 113. Ropica formosana dorsalis
- 114. Iproca acuminata gen. et sp. nov.

nov.

sp. nov.

- PTERICOPTINI
- 116. Sybra breuningi sp. nov.
- 117. Subra pascoei Lameere.
- 118. Sybra posticalis (Pasc.).
- 119. Sybra punctatostriata Bates. 120. Atimura apicalis Gahan.
- 121. Atimura cylindrica sp. nov.

124. Pseudanæsthetis whiteheadi sp.

APODASYINI

- 122. Terinæa rufonigra sp. nov.
- 123. Pseudanæsthetis seticornis sp. nov.

ESTOLINI

ACANTHOCININI

- 125. Zotale lineata (Gahan).
- 126. Donysia costata (Matsush.) gen. et comb. nov.
- 128. Neacanista tuberculipenne gen. et sp. nov.
- 129. Exocentus alboguttatus subconjunctus subsp. nov.
- 130. Exocentrus basirufus sp. nov.
- 131. Exocentrus constricticollis sp. nov.
- 132. Exocentrus trifasciellus sp. nov.

127. Microstola bidentata gen. et

- 133. Miænia laterimaculata sp. nov.
- 134. Rondibilis seatoni sp. nov.
- 135. Ostedes inermis dwabinus subsp. nov.

100. Pterolophia cervina Gressitt. 101. Pterolophia kaleea (Bates). 102. Lychrosis fasciatus sp. nov.

9

- 103. Luchrosis zebrinus (Pasc.).
- 104. Desisa subfasciata (Pasc.).
- 105. Enispia anfracta sp. nov.
- 106. Enispia quadristigma sp. nov.
- 108. Phesates marmoratus sp. nov.
- 107. Enispia tholana sp. nov.

- quadrifasciata Schw. 110. Apomecyna cantator excavati-
 - - 115. Eunidia lateralis Gahan.

HIPPOPSINI

136. Pothyne chocolata Gressitt. 139. Pothyne obliquetruncata Gres-137. Pothyne fusiscapa sp. nov. sit. 138. Pothyne lineolata sp. nov. 140. Pothyne rugifrons sp. nov. 141. Pothyne seriata sp. nov.

SPALACOPSINI

142. Tetraglenes insignis sublineatus Gressitt.

143. Serixia abbreviata sp. nov.

SAPERDINI

145. Serixia sedata Pasc.

144. Serixia longicornis pubescens 146. Glenida cyaneipennis Gahan.

GLENEINI

- 147. Glenea flavorubra sp. nov.
- 148. Glenea humerosa sp. nov.

152. Nupserha batesi Gressitt.

153. Nupserha corrugata sp. nov.

154. Nupserha fricator (Dalm.).

155. Nupserha kankauensis (Schw.)

149. Glenea relicta Pasc.

comb. nov.

subsp. nov.

- 156. Oberea formosana Pic.
- 157. Oberea fuscipennis Chevr.
- 158. Oberea nigriceps (White).
- 160. Oberea rosi sp. nov.

TETRAOPINI

- 161. Astathes cyanoptera Gahan.
- 162. Anastathes robusta sp. nov.
- 163. Chreonoma atricornis Pic ?
- 164. Chreonoma basalis Gahan.
- 165. Chreonoma cyaneoapicalis dimidiata subsp. nov.
- 166. Chreonoma pallidicolor Pic.
- 167. Lasiophrys tinhosensis sp. nov.

CERAMBYCIDÆ

- CERAMBYCIDÆ Leach, Zool. Misc. 3 (1815, 1817); Ganglbauer (Bestimm.-Tabell. Eur. Col. 7), Verh. zool-bot. Ges. Wien 31 (1881) 695: Aurivillius, Colt. Cat. 39 (1912), ibid. 73 (1922), ibid. 74 (1923); Craighead, Dept. Agric. Canada Tech. Bull. 27 (1923) 26; Comstock, Introd. Ent. rev. ed. (1924) 524; Matsushita, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 158.
- CERAMBYCIDES Thomson, Classif. Ceramb. (1860) ix; Syst. Ceramb. (1864) 13.
- LONGICORNIA Leconte, Proc. Acad. Sci. Philadelphia 14 (1862) 38; Pascoe, Trans. Ent. Soc. London (3) 3 (1865) 3; Gahan, Fauna Brit. India Col. 1 (1906) xi.
- LONGICORNES Lacordaire, Gen. Col. 8 (1869) 5; Planet, Encyclop. Ent. 2 (1924) 9.

PHYTOECIINI

(Fabr.).

150. Glenea tonkinea Auriv.

151. Glenea (Stiroglenea) cantor

- 159. Oberea nigriventris Bates.

Mentum transverse; maxillary palpi 4-segmented; labial palpi 3-segmented; antennæ generally longer than body, normally 11-, rarely 12-segmented; prothorax more or less cylindrical; elytra entire or abbreviated, generally wider than prothorax; metepisternum more or less parallel; metepimeron generally hidden by elytra; legs long; tarsi with third segment more or less deeply bilobed, fourth segment very minute, fifth segment bearing a pair of divergent or divaricate claws.

This family has been considered by many authors to represent a suborder, or superfamily (Longicornia), of the order Coleoptera (beetles), generally divided into families, which correspond, inpart, to the subfamilies as used in this work. These subfamily groupings, as herein used, are patterned largely after the classifications used by Ganglbauer, Aurivillius, and Craighead. The writer has, however, particularly followed Gahan's work (1906) for all but the Lamiinæ, except that the latter worker used the superfamily Longicornia, dividing it into the two families Cerambycidæ and Lamiidæ, the former including the five subfamilies other than the Lamiinæ of the present scheme. One of these subfamilies, the Spondylinæ, is not as yet known to occur on Hainan Island. It is differentiated from the others by the following combination of characters: antennæ moniliform, thick, not reaching beyond prothorax; anterior tibiæ toothed externally and strongly toothed and spined apically; fourth tarsal segment enlarged. Leconte and Pascoe divided their suborder Longicornia into the three families Prionidæ, Cerambycidæ, and Lamiidæ, the Cerambycidæ including the subfamilies Spondylinæ, Disteniinæ, Lepturinæ, and Cerambycinæ of this work. Others have reduced the above suborder to a family, and the three families to subfamilies. The tribe Parandrini (genus Parandra) of the subfamily Prioninæ (not known from Hainan) has frequently been considered a distinct subfamily or family.

Key to the Hainan subfamilies of Cerambycidæ.

1.	Anterior and middle tibiæ simple, lacking oblique grooves or concave
	subapical portions bearing short, erect hairs
	Anterior tibiæ generally obliquely grooved internally; middle tibiæ
	usually obliquely grooved before apex of outer side or with a slightly
	concave profile or some short, stiff, erect hairs hiding surface4.
2.	Prothorax not margined laterally; anterior coxæ rarely strongly trans-
	verse; inner lobes of maxillæ developed
	Prothorax margined laterally; anterior coxæ strongly transverse; in-
	ner lobes of maxillæ obsolete

72, 1-2

- - 4. Head inclined and abbreviated anteriorly; antennæ inserted close to mandibles; form very slender; antennæ generally with a fringe of long, fine hairs internally; last palpal segment blunt apically.... DISTENIINÆ.
 - Head vertical in front; antennæ inserted distantly from mandibles; form generally robust; antennæ lacking a fringe of very long, fine hairs for entire length, internally; last palpal segment acute.......... LAMINÆ.

PRIONINÆ

PRIONIDES Lacordaire, Gen. Col. 8 (1869) 16.

- PRIONIDÆ Bates, Biol. Center. American Col. 5 (1869) 1; Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 660.
- PRIONINI Ganglbauer, (Bestimm.-Tabell. Europ. Col. 7), Verh. zool.bot. Gesell. Wien 31 (1882) 684.
- PRIONINÆ Gahan, Fauna Brit. India Col. 1 (1906) 2; Lameere, Gen. Ins. 172 (1919) 4.

PRIONIENS Planet, Encyclop. Ent. 2 (1924) 17.

Prothorax margined laterally, frequently toothed or spined along margin; anterior coxæ strongly transverse, their cavities widely open posteriorly; inner lobe of maxillæ lacking or vestigial; ligula corneous; antennæ inserted more or less close to bases of mandibles; mesonotum lacking stridulatory area, except in *Philus;* sound generally produced by rubbing of hind femora on margins of elytra.

Worldwide in distribution. This subfamily includes some of the largest living insects. The larvæ generally live in dead or rotten wood or in the ground beneath roots or rotting logs.

Key to the Hainan tribes of Prioninæ.

- 2. Prothorax broad and shallowly arched above; lateral margins high, consisting of broad, flat teeth, middle tooth largest; antennæ serrate.

3. Prothorax transverse; third tarsal segment cleft nearly to base; third antennal segment as long as, or nearly as long as, following two segments combined, generally asperate; vein Cu₁ of hind wing simple.

MEGOPIDINI.

Prothorax longer than broad; third tarsal segment cleft for one-half its length; third antennal segment barely longer than fourth, not asperate; vein Cu₁ branched, joined by a crossvein to Cu₂......PHILINI.²

PRIONINI

PRIONIDES VRAIS Lacordaire, Gen. Col. 8 (1869) 35, part.
PRIONINI Gahan, Fauna Brit. India Col. 1 (1906) 4; Lameere, Mem. Soc. Ent. Belg. 21 (1912) 182; Gen. Ins. 172 (1919) 104.

Prothorax widely margined laterally, margins generally forming three broad flat teeth on each side; prosternal intercoxal process swollen, arched or subvertical posteriorly; labrum distinct; scape longer than broad; third and following antennal segments generally serrate.

Key to the Hainan genera of Prionini.

1.	Mandibles long, curving backward; eyes not very closely approximated above
	Mandibles not very long, extending forward; eyes closely approximated above in both sexes
2.	Mandibles of male extremely long; lobes of third tarsal segment acute apically
	Mandibles of male not extremely long; lobes of third tarsal segment rounded apically

Genus BALADEVA Waterhouse

Baladeva WATERHOUSE, Trans. Ent. Soc. London 2 (1840) 225; Ga-HAN, Fauna Brit. India Col. 1 (1906) 8; LAMEERE, Gen. Ins. 172 (1919) 130.

Cyrtognathus LACORDAIRE, Gen. Col. 8 (1869) 52, part.

Neck broad, moderately long; mandibles very long, curved backwards below in male; prosternal process greatly swollen, rounded behind, partially overlapping mesosternal process; prothorax with three spines at each side, second spine largest, third smallest; antennæ slightly longer than body in male, twothirds as long in female, subimbricate; shoulders somewhat obliquely produced; metasternum parallel, truncate apically.

² The tribe Philini has been placed in the subfamily Cerambycinæ, just preceding the tribe Lepturini, by Aurivillius (1, p. 156) and in the subfamily Lepturinæ by Boppe, (3, p. 52) who has been followed by Matsushita (50, p. 169)and by Liu. (48, p. 475) However, I prefer, for the present, to follow Lacordaire and Gahan in placing it with the subfamily Prioninæ because it possesses some of the principal characters of this group. Obviously, it forms a link between the Prioninæ and the Lepturinæ, and cannot be properly placed in either. The determination of its correct position should doubtless be aided by knowledge of the larval characters. This genus and the following one have been considered as subgenera of *Dorysthenes* (= Cyrtognathus, part).

Genotype.-Baladeva walkeri Waterhouse.

Range.-Burma; Siam; Hainan Island.

BALADEVA WALKERI Waterhouse. Plate 1, fig. 1.

Baladeva walkeri WATERHOUSE, Trans. Ent. Soc. London 2 (1840) 226, pl. 21, fig. 1; GAHAN, Fauna Brit. India Col. 1 (1906) 9.

Male.—Very large. Shiny black; clypeus, tarsal claws, and apical antennal segments somewhat reddish; eyes with bronzy reflections. Anterior and posterior borders of prothorax, sides of metathorax, and apex of last abdominal segment clothed with dull reddish-brown hairs.

Head long and broad, widest at middle of neck: mandibles as long as, or longer than, remainder of head, curved downward and posteriorly, serrate on basal half of outer side, with an external tooth just before middle; genæ acutely prominent; eves widest in middle: vertex grooved between antennal supports and eyes; occiput fairly smooth. Antennæ two-thirds as long as body, weakly asperate internally; first six segments shiny, following segments dull basally; fifth and following segments biangulate externally at apices; third segment barely longer than scape, as long as fourth and fifth segments combined. Prothorax transverse, narrower than elytra. 3-spined at each side, middle spine largest, third very weak. Elytra subacutely prominent at humeral angles, narrowed and rounded apically; surface subvermiculose and sparsely granulate basally, three or four raised. longitudinal lines discernible: first hind tarsal segment as long as following two united.

Female.—Head shorter; mandibles shorter than rest of head, toothed externally beyond middle; antennæ three-fifths as long as body, not asperate internally; elytra broader, shorter and less narrowed apically than in male.

Length, 42 to 67 millimeters; breadth, 18 to 25.

Specimens in Lingnan Natural History Museum from near Nodoa, 1929, Lingnan Univ. Fifth Hainan Exped.; "Hainan," Hoihow, northern Hainan, Lok-kei, June 18, Hau-ying-ts'uen, August 8, Nodoa to Nam-fung, June 23, 1932, and Tai-pin-ts'uen (Dwa-Bi), central Hainan, altitude 350 meters, July 24, 1935; one male, in Musée Heude, Shanghai, from Hoidow, 2 males from Kachek, eastern Hainan, altitude 25 meters, August 8, 1935, taken by the author; 2 males and 1 female, Nodoa, westcentral Hainan, altitude 250 meters, June 28 and July 13, 1935,

14

1 male, Dwa-Bi (Tai-pin-ts'uen), July 28, 1935, 1 female, Tahian, central Hainan, altitude 600 meters, June 15, 1935, taken by the author; 1 female, Hau-ying, Lin-fa Shan, northcentral Hainan, August 11, 1932, in the author's collection, F. K. To; 1 male, Nodoa, July 1935, in van Dyke collection, California Academy of Sciences, and 1 male, same data, in the United States National Museum, taken by the author.

New to Hainan.

Distribution.-Burma; Siam; Hainan Island.

Genus PARAPHRUS Thomson

Paraphrus THOMSON, Classif. Ceramb. (1861) 330; GAHAN, Fauna Brit. India Col. 1 (1906) 13; LAMEERE, Gen. Ins. 172 (1919) 128. Cyrtognathus LACORDAIRE, Gen. Col. 8 (1869) 51, part.

Head large; mandibles moderately long, slightly curved posteriorly; antennal supports broad, separated by a deep, narrow groove; frons with a subapical obtuse groove joined to interantennary groove at apex; antennæ 11-segmented, apical segment resembling two segments; third segment subequal in length to following two segments in male; prothorax 3-toothed at sides, first two teeth subequal; prosternal process swollen and produced posteriorly; lobes of third tarsal segment rounded apically.

Genotype.—Cyrthognathus granulosus Thomson.

Range.-North India to Hainan and Borneo.

PARAPHUS GRANULOSUS Thomson.

Cyrtognathus granulosus THOMSON, Classif. Ceramb. (1861) 329, India.

Paraphrus granulosus THOMSON, Syst. Ceramb. (1864, 281; GA-HAN, Fauna Brit. India Col. 1 (1906) 14; LAMEERE, Ann. Soc. Ent. Belg. 55 (1911) 335; LIU, Lingnan Sci. Journ. 12 (1933) 401.

Male.—Bright reddish brown, varying to testaceous brown or blackish brown; head and basal antennal segments blackish to reddish brown; palpi reddish. Body glabrous and slightly glossy above; hind thorax moderately clothed with soft, light brown hairs.

Head somewhat prominent, weakly convex between antennal insertions; vertex grooved, depressed, slightly raised at each side between eyes; surface finely punctured anteriorly; occiput punctured in middle, granulose at sides. Antennæ a little longer than body; first three segments smooth and shiny above, sparsely punctured, asperate below; fifth and following segments reticulately pitted longitudinally; third segment slightly longer than following two segments together. Prothorax transverse, subequally broad at first and second lateral spines; surface even, very finely and shallowly punctulate. Scutellum sparsely punctured, rounded behind. Elytra slightly narrowed posteriorly, rounded behind, each with two distinct longitudinal raised lines, joining at apical sixth; surface finely and irregularly wrinkled, finely punctured and minutely punctulate between punctures. Forelegs densely punctate, asperate internally; hind femora smooth, finely punctate; first hind tarsal segment longer than following two segments together.

Length, 28 to 50 millimeters; breadth, 10 to 17.5.

Specimens in Lingnan Natural History Museum: several from Hoihow, April, F. K. To; May 14, 1932, O. K. Lau; 1 from Ngai-chau, southern Hainan, May 27 to 30, 1932, W. E. Hoffmann and O. K. Lau; several from Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, April and May, 1935 (1 in author's collection), F. K. To; 1 from Kacheck, May 3 to 6, 1932, 1 from Nodoa, April, 1932. In author's collection: 1 from Nodoa, June 2, 1935, taken by the author; a large series from Fan-ziang, southcentral Hainan, March 5, 1936, taken for the author by a native collector; duplicates in the California Academy of Sciences.

Distribution.—North India; Burma; Siam; Tonkin; Hainan Island.

Genus PRIOTYRRANUS Thomson

Priotyrranus THOMSON, Archiv. Ent. 1 (1857) 120; GAHAN, Fauna Brit. India Col. 1 (1906) 21; LAMEERE, Gen. Ins. 172 (1919) 112.
 Prionotyrranus GEMMINGER et HAROLD, Cat. Col. 9 (1873) 2759.

Clypeus separated from frons by an arcuate depression; antennæ as long as, or a little longer than, body in male, shorter than body in female, postbasal segments acute apically; prothorax transverse, 3-spined at each side, spines slightly curved, middle spine longest, other two spines subequal, anterior and posterior margins convex in middle, concave on either side; elytra broad, rounded apically; prosternal intercoxal process strongly arched; first hind tarsal segment as long as following two segments united.

Genotype.—Prionus mordax White.

Range.—South India; South China; Hainan Island; Formosa; Borneo.

Subgenus CHOLLIDES Thomson

Chollides THOMSON, Rev. Mag. Zool. (1877) 264; LAMEERE, Gen. Ins. 172 (1919) 113.

Cnethocerus BATES, Ent. Monthly Mag. 14 (1878) 273.

Prionacus FAIRMAIRE, Notes Leyd. Mus. 18 (1897) 127.

Mandibles projecting forward, strongly curved preapically; eyes large, upper lobes wide and very closely approximate in both sexes; antennæ of male as long as body, third and following segment flattened, acute internally and externally at apices, longitudinally multi-carinate; antennæ of female slender, weakly flattened and apically spined, sparsely punctured on first six segments, longitudinally carinate on remaining segments; scutellum scutiform, as long as broad.

Type.—Chollides closteroides Thomson.

Range.-China; Tonkin; Hainan Island; Formosa.

PRIOTYRRANUS (CHOLLIDES) CLOSTEROIDES (Thomson).

Chollides closteroides THOMSON, Rev. Mag. Zool. (1877) 264.

- Cnethocerus messi BATES, Ent. Monthly Mag. 14 (1878) 273, Hongkong.
- Prionacus strigicornis FAIRMAIRE, Notes Leyd. Mus. 18 (1897) 127, South China.
- Priotyrranus (Chollides) closteroides LAMEERE, Gen. Ins. 172 (1919) 114; MATSUSHITA, Journ. Fac. Agr. Hokk. Imp. Univ. 34 (1933) 165; GRESSITT, Lingnan Sci. Journ. 18 (1939) 5.

Female.—Reddish brown, legs and abdomen reddish testaceous; head and prothorax dark reddish brown; eyes nearly black. Dorsal surface largely glabrous, except for labrum, mandibles, anterior and posterior borders of prothorax, and a few short, scattered hairs on elytra; ventral surface of thorax well clothed with golden-brown hairs; abdomen nearly glabrous.

Head short and broad; mandibles projecting forward; maxillary palpi long; eyes large; frons and occiput coarsely punctured. Antennæ four-fifths as long as body, fairly slender, shiny basally; third segment barely longer than fourth. Prothorax coarsely rugulose-punctate, somewhat shiny, middle of disc with a small smooth area. Scutellum finely vermiculate-punctate, dull. Elytra coarsely rugulose-punctate basally, more finely so beyond, moderately shiny. Hind breast finely vermiculatepunctate; abdomen with shallow impressions, minutely punctulate along middle. Tibiæ strongly margined behind; first hind tarsal segment fully as long as following two united.

Length, 37 millimeters; breadth, 13.75.

A single female, in the author's collection, taken at Cheungkon-ts'uen (Chung-kong), central Hainan, altitude 280 meters, April 4 to 7, 1935, by F. K. To.

Distribution.—South China; Tonkin; Hainan Island; Formosa.

39937----2

MACROTOMINI

MACROTOMIDES Lacordaire, Gen. Coleopt. 8 (1869) 96.
REMPHANIDES Lacordaire, tom. cit. 103.
MACROTOMINI Gahan, Fauna Brit. India Col. 1 (1906) 29; Lameere, Mem. Soc. Ent. Belg. 21 (1922) 180.

Eyes entire or nearly entire; third antennal segment generally large; prothorax rectangular or trapeziform, more or less angulate posteriorly at either side; generally finely toothed along lateral margins; prosternal intercoxal process broad and flat; legs spiny.

Genus MACROTOMA Serville

Macrotoma SERVILLE, Ann. Soc. ent. France (1832) 137; LACORDAIRE,
 Gen. Col. 8 (1869) 97; GAHAN, Fauna Brit. India Col. 1 (1906) 35; LAMEERE, Gen. Ins. 172 (1919) 146.

Head narrowly concave between antennal insertions; eyes large, entire; neck broad; antennæ about as long as body in male, shorter in female; scape short and broad; third segment thick, longer than following two united, asperate; prothorax short, narrowed apically, sharply declivitous laterally, with a row of short, fine teeth along lateral margins; elytra more than twice as long as broad; forelegs very rough and spinous in male, others toothed at least on lower edges of femora.

Genotype.—Prionus serripes Fabricius.

Range.—Oriental and Ethiopian Regions; Mediterranean Subregion.

Subgenus ZOOBLAX Thomson

Prinobius MULSANT, Ann. Soc. d'Agric. Lyon 5 (1842) 204; LANSB.,
 Notes Leyd. Mus. 6 (1884) 144; GAHAN, Fauna Brit. India. Col.
 1 (1906) 36.

Zooblax THOMSON, Rev. Mag. Zool. (1877) 274; GAHAN, Fauna Brit. India Col. 1 (1906) 38; LAMEERE, Gen. Ins. 172 (1919) 50.

Prothoracic disc of male with large, swollen, sparsely and finely punctured callosities, not entirely heavily punctured as in the typical subgenus.

Type.—Zooblax elateroides Thomson. Range.—Oriental region; Philippines.

MACROTOMA (ZOOBLAX) HAINANA Gressitt sp. nov. Plate 1, fig. 2.

Male.—A moderately small *Macrotoma*, broadest posteriorly. Dark reddish brown; head, basal antennal segments, and forelegs nearly black; antennæ and pronotal callosities shiny, submetallic; tarsi and posterior margins of abdominal segments lighter reddish brown.

Head a little longer than broad, moderately declivitous; antennal insertions moderately swollen, irregularly punctured. closely approximated for a very short space behind which is a sparsely punctured concavity; frons with a deep, but not very broad, obtuse depression at its base; occiput very sparsely punctured in middle, finely and densely granulose-punctate behind eves. Antennæ nine-tenths as long as body, slender: scape depressed, twice as long as broad, sparsely punctured, slightly longer than fourth to tenth segments, respectively; third segment slender, slightly flattened, twice as long as scape. Prothorax nearly one and one-half times as broad as long, broader at base than at apex, weakly rounded and finely tuberculatemargined at sides; disc swollen at each side, finely and closely punctured except for a large subtriangular area on each side before middle, a narrow, slightly curved, raised strip along upper part of each side and basal portion, between posterior extensions of former strips, together with a narrow, median. anterior extension to middle: these strips raised, shiny, finely and sparsely punctured. Scutellum dull, sparsely punctured, longitudinally grooved, rounded-truncate behind. Elvtra gradually broadened to last guarter, broadly rounded behind; surface of each elytron shiny, densely vermiculate, with four distinct, longitudinal, raised lines which branch and curve before apex. Metasternum with a large, triangular area smooth and shiny, remainder densely and finely punctured; abdomen glossy and sparsely punctured along middle, rougher at sides. Anterior femora and tibiæ densely asperate, middle and hind pairs less so, posterior femora largely smooth and glossy, anterior tibiæ spined below; first hind tarsal segment subequal to following two.

Length, 32 to 45 millimeters; breadth, 10.5 to 15.

Holotype, male, No. 53464 United States National Museum, Dwa-Bi (Tai-pin), near Loi Mother Mountain, central Hainan Island, altitude 370 meters, July 23, 1935, collected by the author; paratopotype, male, Lingnan Natural History Museum, and paratopotype, male, author's collection, vicinity of villages at foot of Lai-mo-ling (Loi Mother Mountain), May 25 to 28, F. K. To.

Differs from M. crenata (Fabricius) in being darker, more shiny, with the ventral surface of the thorax less hairy, the elytra more distinctly costate, the third antennal segment smoother and flatter, the prothorax more briefly spined along margins, and the disc with the raised areas wider. Differs (ex descr.) from M. bouvieri Lameere, described from a female from Tonkin, in being largely reddish brown instead of black with bronzy-green reflections, in having the middle and hind femora and tibiæ spinous only on lower margins instead of on both sides, the prosternum not shiny at sides, the pronotum minutely punctate, not granulose at sides.

Distribution.—Hainan Island.

Tribe MEZOPIDINI Gressitt nomen novum

ÆGOSOMIDES Lacordaire, Gen. Coleopt. 8 (1869) 153. ÆGOSOMATINÆ Pascœ, Trans. Ent. Soc. London (3) 3 (1869) 678. CALLIPOGONINI subtribe MEGOPIDINA Lameere, Ann. Soc. Ent. Belg. 43

(1904) 7.

ÆGOSOMINI Gahan, Fauna Brit. India Col. 1 (1906) 41.

Prothorax generally neither toothed nor spined, and only narrowly or obtusely margined laterally; third antennal segment as long as, or nearly as long as, following two united; metathoracic episterna gradually narrowed to acute apices; third to fifth antennal segments more or less asperate or briefly spined, thickened in males; eyes emarginate; third tarsal segment cleft nearly to base.

Lameere included the group Ægosomides of Lacordaire with the Eurypodini as subtribes under the tribe Callipogonini. I prefer, however, to consider them as different tribes, because the latter differ from the former in having the antennæ much smaller and simple, and the prothorax rectangular and distinctly margined horizontally at sides, the elytra shorter, flatter and smoother, and the metepisternum truncate, instead of subacute, apically.

Genus MEGOPIS Serville

- Megopis SERVILLE, Ann. Soc. ent. France 1 (1832) 161; Gen. Ins.
 172 (1919) 71; THOMSON, Classif. Ceramb. (1860) 289; Syst. Ceramb. (1864) 472; LACORDAIRE, Gen. Coleopt. 8 (1869) 155; LAMEERE, Ann. Soc. Ent. Belg. 53 (1909) 151.
- *Ægosoma* SERVILLE, Ann. Soc. ent. France 1 (1832) 162; LACORDAIRE, Gen. Col. 8 (1869) 154; GAHAN, Fauna Brit. Ind. Col. 1 (1906) 44.

Pachypleura WHITE, Cat. Col. Brit. Mus. 7 (1863) 27; THOMSON, Classif. Ceramb. (1860) 288; Syst. Ceramb. (1864) 472.

Head fairly long; eyes vertical, emarginate, clypeus distinctly separated from frons; third antennal segment large, generally asperate; prothorax unarmed laterally; lateral margins curved downward anteriorly from posteriolateral angles; elytra long, broader than prothorax.

Genotype.—Megopis mutica Serville.

Range.—Southern Europe; Africa; southern Asia.

Key to the Hainan subgenera of Megopis.

Subgenus ÆGOSOMA Serville

Ægosoma SERVILLE, Ann. Soc. ent. France 1 (1832) 162; LACORDAIRE, Gen. Coleopt. 8 (1869) 154; LAMEERE, Gen. Ins. 172 (1919) 73.

Third to fifth antennal segments enlarged, densely asperate and spinulose in male, fourth or fifth segment different from following; prothorax broadest at base, narrowed anteriorly; generally three moderately distinct longitudinal raised lines on elytra; last hind tarsal segment fully as long as first three united.

This name has been used more than *Megopis* for the genus as a whole because Lacordaire considered it before the latter, ignoring the fact that *Megopis* had priority, and also because the type of *Ægosoma* is a common European species.

Subgenotype.—Cerambyx scabricorne Scopoli.

Range.—Southern Europe; northern Africa; Oriental Region.

MEGOPIS (ÆGOSOMA) SINICUM HAINANENSIS (Gahan).

Ægosoma hainanensis GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 347, Hainan.

Megopis (Ægosoma) sinica hainanensis LAMEERE, Ann. Soc. ent. Belg. 53 (1909) 139, Sumatra, Borneo.

Male.—Elongate, flattened above, narrowed posterioly. Tawny-brown above, clothed with thin, pale-buff pubescence, irregularly on head and pronotum and densely on elytra, suture slightly reddish apically; ventral surface and legs reddish black, sparsely clothed with fine, pale hairs.

Head weakly grooved from clypeus onto occiput; inferior eye lobe twice as wide as superior; interocular region strongly and sparsely granulate. Antennæ one and and one-fifth as long as body, third to fifth segment thick, densely asperate, briefly spined internally, fifth segment as long as sixth and seventh segments combined. Prothorax one and one-half times as broad as long, irregularly granulose, somewhat swollen on each side of middle of disc and at sides. Scutellum rounded posteriorly, sparsely pubescent. Elytra gradually narrowed, rounded externally and angulated and briefly spined internally at apices. Ventral surface closely and finely punctulate. *Female.*—Antennæ five-sixths as long as body, third to fifth segments slenderer than in male, moderately asperate; prothorax shorter and less swollen above and at sides; ovipositor longer than head and prothorax combined when extended.

Length, 29 to 44 millimeters; breadth, 8 to 11.5.

Specimens in Lingnan Natural History Museum from Taipin-ts'uen (Dwa-Bi), central Hainan, altitude 250 meters, May 1935, Sam-ts'uen-kai-hui, July 1935, Sam-kwong-ts'uen, August 1935, and Nam-liu-tin, Lam-wan-tung, August 1935, F. K. To; 4 males and 4 females, Tai-pin-ts'uen (Dwa-Bi), July 21 and 29, 1935, taken by the author; 1 male, Sam-kwong-ts'uen, Lamwan-tung, northcentral Hainan, August 13, 1935, in the writer's collection, 1 male, from Dwa-Bi, in the United States National Museum, July 21, 1935, taken by the author; 1 female, same data, in van Dyke collection, California Academy of Sciences.

Distribution.—Hainan; "Sumatra; Borneo."

Subgenus ÆGOLIPTON Gressitt novum

Ægosoma WHITE, Cat. Col. Brit. Mus. 7 (1853) 31, part, not of Serville; LACORDAIRE, Gen. Coleopt. 8 (1869) 155, part; GAHAN, Fauna Brit. India Col. 1 (1906) 45, part.

Baralipton LAMEERE, Ann. Soc. ent. Belg. 53 (1909) 151; Gen. Ins. 172 (1919) 76, part, not of Thomson.

Antennæ of male with a fringe of short hairs internally for entire length; scape thickened apically; third segment as long as fourth and fifth segments together, third to fifth segments not much different from following; fifth segment barely longer than sixth; prothorax short, rounded laterally, narrowed apically, sinuate basally, finely and accurately margined on lower part of sides; elytra weakly costate, narrow; prosternal intercoxal process narrow, not greatly swollen; middle coxæ contiguous; last segment of hind tarsus shorter than first three united.

Type.—Cerambyx marginalis Fabricius.

Range.—Oriental Region; Celebes and Moluccas.

This subgenus includes the first group of the subgenus Baralipton as extended by Lameere.(42) Besides the type, it includes at least Megopis (Baralipton) sauteri Lameere³ of Formosa, and Ægosoma mandibularis Fairmaire, of southern China and Formosa. It differs from typical Baralipton Thomson (type: B.

³ Megopis (\mathcal{E} golipton) sauteri (Lameere) comb. nov. has the internal antennal fringe of the male somewhat indistinct; in marginalis and in the former the antennæ are fully as long as the body in the female and not greatly different from those of the male.

72, 1-2

maculosum Thoms., India) in having the neck slenderer, the antennal scape not spined internally at apex, the third segment much shorter than the remaining segments combined, the fourth to tenth segments similar, gradually decreasing in length, the prothorax smaller, rounded and untoothed laterally, as broad at middle as at base, and narrowed apically. It differs from $\mathcal{E}go$ soma and Megopis in having the antennæ distinctly fringed internally for their entire length, the third to fifth antennal segments not greatly differentiated, from Megopis in having the apical palpal segment compressed, and from $\mathcal{E}gosoma$ in having the fifth and sixth antennal segment similar, the sixth and following segments not greatly flattened, broadened apically or shortened, and the last hind tarsal segment shorter than the first three segments together.

MEGOPIS (ÆGOLIPTON) MARGINALIS (Fabricius) comb. nov.

- Cerambyx marginalis FABRICIUS, Syst. Ent. 2 (1775) 169, "Cape of Good Hope."
- *Ægosoma marginale* WHITE, Cat. Col. Brit. Mus 7 (1853) 31, China; GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 347, Hainan; Fauna Brit. India Col. 1 (1906) 45, Burma, Malay Peninsula and Archipelago.
- Ægosoma javanica REDTENBACHER, Reise Novara 2 (1868) 202, Java.
- Megopis (Baralipton) marginalis LAMEERE, Ann. Soc. ent. Belg. 53 (1909) 152.

Megopis marginalis GRESSITT, Lingnan Sci. Journ. 18 (1939) 6.

Male.—Reddish brown, clothed above with thin buff pile, except on margins of prothorax, scutellum, and elytra, which are black; antennæ and legs reddish; hind thorax clothed with moderately long, sparse, golden-brown pubescence; abdomen thinly clothed with short pale hairs.

Head finely granulose, with a few large granules between antennæ and eyes; neck slender and cylindrical; inferior eye lobe three times as wide as superior. Antennæ one and one-third as long as body, fringed internally; third segment moderately rough, as long as fourth and fifth segments combined. Prothorax swollen at either side, sinuate basally, one and one-third as broad as long, irregularly granulose. Scutellum longer than broad. Elytra nearly three times as long as broad, narrowed, rounded, and unarmed apically; surface of each with three or four weakly raised lines. Hind thorax and abdomen finely granulose. Legs moderately rough.

Length, 27 to 35 millimeters; breadth, 6.75 to 9.

23

Specimens in the Lingnan Natural History Museum from Tai-pin-ts'uen (Dwa-Bi), central Hainan, altitude 250 meters, May, 1935, F. K. To; Ngai-chau, southern Hainan, May, 1932, W. E. Hoffmann and O. K. Lau; Lam-ko, May 23 to 25, 1932, and Sam-kwong-ts'uen, August 1935, F. K. To; 1 male, Fan-ziang, central Hainan, March 5, 1935, taken by a native collector for the author; 1 male, in the author's collection, Nam-po-ts'uen, May 27, 1932, taken by F. K. To.

Distribution.—India; peninsula of southeastern Asia; China; Hainan; Formosa; Malay Archipelago as far as Celebes and Amboina.

PHILINI

MONODESMIDES Lacordaire, Gen. Col. 8 (1869) 157, part. PHILINI Gahan, Fauna Brit. India Col. 1 (1906) 54; Boppe, Gen. Ins. 178 (1921) 25; Liu, Lingnan Sci. Journ. 12 (1933) 475.

Head narrowed and elongated behind eyes; subvertical in front; labrum distinct from clypeus; eyes large and swollen, emarginate, fairly coarsely facetted; antennæ inserted close together, near mandibles, scape much shorter than third segment; prothorax feebly margined at side; anterior coxæ transverse; middle coxal cavities open to epimera externally.

This tribe contains only two genera, both confined to southern Asia, one of which has been found on Hainan.

Genus PHILUS Saunders

Philus SAUNDERS, Trans. Ent. Soc. London (2) 2 (1853) 110; GA-HAN, Fauna Brit. India Col. 1 (1906) 57; BOPPE, Gen. Ins. 178 (1921) 26.

Front of head reduced; mandibles moderately long, curved; antennæ thick, subserrate, longer than body in male, slender and shorter than body in female; lateral margin of prothorax generally present; mesonotum with a medially grooved, stridulatory area; elytra more than twice as long as broad, rounded apically and feebly costate.

Genotype.—Philus inconspicua Saund. (Stenocorus antennatus Gyllenh.)

Range.—China; Hainan; Formosa; Siam; Malacca; Borneo; northern India.

Key to the Hainan species of Philus.

1. Blackish brown; dorsal surface hairy; prothorax largely dull; ventral surface and legs hairy in female...... antennatus.

Testaceous to reddish brown; elytra nearly glabrous; prothorax largely smooth, shiny; ventral surface and legs fairly glabrous in female.

pallescens tristis.

PHILUS ANTENNATUS (Gyllenhal).

- Stenocorus antennatus GYLLENHAL in Schönherr, Syn. Ins. 3 (1817) append. 180.
- Philus inconspicua SAUNDERS, Trans. Ent. Soc. London (2) 2 (1853) 110, pl. 4, figs. 3, 4, North China.
- Philus antennatus LACORDAIRE, Gen. Col. 8 (1869) 160, pl. 83, fig. 2;
 HEYDEN, Deutsche Ent. Zeitschr. 30 (1886) 287; GAHAN, Ann.
 & Mag. Nat. Hist. (7) 5 (1900) 347, Hainan; BOPPE, Gen. Ins. 179 (1921) 27, pl. 1, fig. 11, pl. 2, figs. lab.

Female.—Large, elongate, slightly narrowed posteriorly. Dull blackish brown; ventral surface and apical halves of elytra somewhat reddish. Body almost entirely clothed with tawny hairs, shortest and sparsest on elytra, densest on ventral surface and legs.

Head about as broad as prothorax, gradually narrowed behind the swollen eyes, densely punctured above. Antennæ slender, slightly more than one-half as long as body; scape short, hairy; following segments thinly pubescent; third segment one and one-half as long as scape, one and one-third as long as fourth and following segments, which are subequal. Prothorax broader than long, cylindrical and constricted anteriorly, flattened basally, finely punctulate; disc with four small, partially impunctate, shiny areas forming a trapeze. Scutellum rounded-truncate behind. Elytra more than four times as long as head and prothorax united, vermiculate-punctate; each with four distinct longitudinal costæ. Ventral surface and legs densely and finely punctured; first hind tarsal segment shorter than following two segments united.

Length, 31 millimeters; breadth, 9.2.

A single specimen, in the Lingman Natural History Museum, was taken on Hainan Island, April 28 and 29, 1932, by Prof. W. E. Hoffmann.

Distribution.—Northcentral and southeastern China; Hainan Island.

PHILUS PALLESCENS * TRISTIS Gressitt subsp. nov. Plate 1, figs. 4 and 5.

Male.—Reddish brown; head and prothorax dark brown above; antennæ dusky brown; elytra testaceous beyond base; legs and ventral surface reddish brown, hairy in male, subglabrous and brighter in female.

⁴ Philus pallescens Bates, Proc. Zool. Soc. London (1866) 350, Formosa.

72, 1–2

Form subelongate. Head with mandibles long; frons, clypeus, and genæ greatly abbreviated; eyes large, emarginate, inferior lobe subglobular. Antennæ one and one-half as long as body; third and following segment subequal in length, slightly toothed apically, each about twice as long as scape, which is nearly as thick as long; prothorax very small, no broader than head, narrowed apically, fairly smooth above, finely punctured. Elytra long, slightly narrowed behind humeri, rounded apically, densely and finely punctured over entire surface, each with three or four weak, longitudinal, raised lines reaching nearly to apex. Femora weakly swollen, barely reaching beyond middle of abdomen; first hind tarsal segment hardly as long as following two segments combined.

Female.—Antennæ three-fifths as long as body, untoothed at apices of segments.

Length, 17 to 18 millimeters; breadth, 5.5.

Holotype, male, Musée Heude, Sam-a, southern Hainan Island, May 3, 1936; allotopotype, female, April 30, 1936; both collected by Commander G. Ros.

Differs from the typical form from Formosa and specimens from the Kwangtung mainland in being duller, less reddish, more hairy, and in having the elytra shorter, particularly in the female, the hind tibiæ shorter, the anterior femora more heavily punctured, the pedicel less globular in the female and more so in the male, and in other characters. The male differs from the male of P. costatus Gahan, of Siam, in being darker, particularly on the head, antennæ and prothorax, and in having the eyes more approximate above, the neck finer, prothorax narrower, and elytra shorter. Differs from P. antennatus (Gyllenhal) in having the elytra paler, less hairy and shorter, and in other characters.

Distribution.—Hainan Island.

DISTENIINÆ

DISTENITÆ Thomson, Classif. Ceramb. (1860) 181; Syst. Cer. (1864) 225.

DISTENIIDES Lacordaire, Gen. Col. 9 (1869) 225.

DISTENIINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 655; Gahan, Fauna Brit. India Col. 1 (1906) 58; Boppe, Gen. Ins. 178 (1921) 2; Craighead, Dept. Agric. Canada Tech. Bull 27 (1923) 99; Matsushita, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 167.

DISTENIINI Leconte and Horn, Classif. Col. N. Amer. (1883) 307; Aurivillius, Col. Cat. 39 (1912) 7; Liu, Lingnan Sci. Journ. 12 (1933) 473, 475. Head abbreviated anteriorly, elongated and narrowed behind eyes; eyes vertical, entire or weakly emarginate; maxillary palpi longer than labial palpi; mesonotum with stridulatory area divided by a median line; metepisternum narrow, acute apically; anterior coxal cavities generally rounded and open behind; anterior tibiæ generally with a feeble, oblique groove internally, middle tibiæ with an oblique, preapical, external depression.

This subfamily, which has frequently been considered a tribe of the subfamily Cerambycinæ, was first made to include the genera *Cyrtonops* and *Dynamostes* by Gahan in 1906. Though properly belonging in this subfamily they both differ considerably from the rest of the genera taken as a whole, and from each other. I therefore propose to divide the subfamily into three tribes, to represent more clearly the natural divisions existing among the genera.⁵ The typical tribe, which includes all the genera except *Cyrtonops* and *Dynamostes*, is the only one as yet known to occur in Hainan.

⁵ Tribus CYRTONOPINI novum

MONODESMIDES Lacordaire, Gen. Col. 8 (1869) 157, part. DISTENIINÆ Gahan, Fauna Brit. India Col. 1 (1906) 58; Boppe, Gen. Ins. 178 (1921) 2, part.

Head short behind; eyes prominent; maxillary palpi of male with second and fourth segments very long; antennæ shorter than body, lacking a long fringe of hairs internally; prothorax short, tuberculate; elytra less than three times as long as broad; anterior coxal cavities angulate externally, open behind; middle coxal cavities open exteriorly to epimera.

This tribe is erected for the Oriental genus Cyrtonops White [Type: C. punctipennis White, Cat. Col. Brit. Mus 7 (1853) 23, pl. 2, fig. 3.] which should be expected to occur in Hainan or South China. Lacordaire placed Cyrtonops in his Groupe Monodesmides of the subfamily Prioninæ with some uncertainty.

Tribus DYNAMOSTINI nomen novum

DYNAMOSTIDES Lacordaire, Gen. Col. 8 (1869) 196.

Head elongated and gradully narrowed behind eyes: mandibles large, toothed basally on inner edge; eyes narrow; antennæ shorter than body, lacking long internal fringes, scape longer than third segment; prothorax subcylindrical, longer than broad; elytra less than three times as long as broad; anterior coxal cavities rounded, open posteriorly; presternal process broad, dilated behind; middle coxal cavities closed externally to epimera, femora moderately thick; tibiæ spined externally, hind pair indented before apex of inner side.

This tribe is made for the genus Dynamostes Pascoe [type: D. audax Pascoe, Trans. Ent. Soc. London (2) 4 (1857) 90, pl. 22, fig. 1, Sikkim].

72, 1–2

Key to the tribes of the subfamily Disteniinæ.

DISTENIINI

DISTENITÆ Thomson, Classif. Ceramb. (1860) 181; Syst. Ceramb. (1864) 225.

- DISTENIIDES Lacordaire, Gen. Col. 9 (1869) 225.
- DISTENIINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 655; Gahan, Fauna Brit. India Col. 1 (1906) 58, part; Boppe, Gen. Ins. 178 (1921) 2, part.

DISTENIINI Leconte and Horn, Classif. Col. N. Amer. (1883) 307.

Form slender; elytra three or more times as long as broad; neck constricted; eyes generally entire, moderately large; antennæ slender, longer than body, bearing a fringe of long, fine hairs internally, frequently hidden in a groove; prothorax swollen or tuberculate at either side, constricted near apex and base; anterior coxal cavities subapproximate, rounded, open behind.

Genus NOEMIA Pascoe

Noemia PASCOE, Trans. Ent. Soc. London (2) 4 (1857) 111; ibid. (3) 3 (1869) 656; THOMSON, Classif. Ceramb. (1860) 182; Syst. Ceramb. (1864) 442; LACORDAIRE, Gen. Col. 9 (1869) 228; BOPPE, Gen. Ins. 178 (1921) 9.

Nethinius FAIRMAIRE, Bull. Soc. ent. Belg. 33 (1889) 94; Ann. Soc. ent. Belg. 41 (1897) 197; Ann. Soc. ent. France 48 (1899) 119.

Form slender, subparallel; eyes finely facetted, almost entire, lateral, behind antennal insertions, distant above; last maxillary palpal segment enlarged; antennæ twice as long as body, segments subequal in length, except second; prothorax longer than broad, swollen at middle, constricted before and behind; elytra rounded apically; prosternal intercoxal process very narrow, extending nearly to posterior borders of coxæ; mesosternal process broad, emarginate apically; middle coxal cavities closed externally to epimera; femora pedunculate-clavate; tibiæ subsinuate. *Genotype.*—Noemia flavicornis Pascoe.

Range.—Oriental Region (Java, Sumatra, Borneo, Malacca, Philippines, Formosa, Hainan); Madagascar.

NOEMIA SUBMETALLICA Gressitt sp. nov. Plate 2, fig. 1.

Male.—Narrow, subparallel, fragile; elytra deeply punctured. Tricolored: body black, shiny on head; labrum and palpi testaceous; antennæ ochraceous basally, apical portions of segments commencing with third gradually darker, seventh and eighth segments almost entirely brown, ninth, tenth, and basal twothirds of last segment pale testaceous; prothorax black, silverypubescent; elytra shiny, dark green on basal two-thirds above, remainder slightly iridescent purplish black, basal portions of tibiæ brownish black; tarsi and apices of tibiæ slightly brownish. Body furnished with fine, erect, pale hairs, third to tenth antennal segments with very long pale hairs below.

Head longer than broad, nearly as wide as prothorax, swollen below, very finely and sparsely punctured; eyes reniform; antennal supports slightly projecting anteriorly, placed in front of eves; frons vertical, minute; clypeus twice as broad as long; labrum wider and shorter; palpi with last segment of each pair Antennæ fine, one and two-thirds as long as broadly swollen. body; scape pedunculate, arched, strongly swollen in apical twothirds: subequal to third and following segments, last shortest. Prothorax longer than broad, constricted near apex and base and obtusely tuberculate laterally; cylindrical apical and basal portions finely striolated transversely: disc sparsely and shallowly punctate, finely midlongitudinally sulcate postmedially. Scutellum verv narrow. Elytra elongate, slightly narrowed in middle half, rounded externally at apices; surface deeply punctured in about nine longitudinal lines, except at apex. Ventral surface finely and sparsely punctured; metasternum exceedingly narrow. Legs with femora clavate, hind pair each with a deep, oblique, impression on inner side; tarsi with third segment lobed to base, large and dilated, last short.

Length, 11 to 25 millimeters; breadth, 2.25.

Holotype, male, No. 52178 United States National Museum, Ta-han, central Hainan Island, altitude 750 meters, June 23, 1935, taken by the author; paratype, male, Lingman Natural History Museum, Tai-pin-ts'uen (Dwa-Bi), central Hainan, April 25 and 26, 1935, taken by F. K. To, and paratype, male, in the author's collection, same data.

Close to N. mindanaoensis Gressitt in structure, but with the eyes more prominent, the thorax less smooth and more strongly swollen at sides, the elytra longer and the femora more strongly clavate. Differs from N. flavicornis Pascoe in having the antennæ largely darker, the rest of the body with the disc of pronotum and only part of elytra blue, instead of largely blue. This is the northernmost species of the genus except for N. incompta Gressitt, of Formosa, which is the only entirely nonmetallic species. The type was beaten from the branch of a living tree during the daytime.

Distribution.—Hainan Island.

LEPTURINÆ

LEPTURIDÆ Leach, Encyclop. Edinburgh 9 (1815); Stephen, Illustr. Brit. Ent. Man. 4 (1831) 253.

LEPTURIDES, DERECEPHALIDES, Mulsant, Col. France Long. ed. 1 (1839) 212; ibid. 2 (1862) 25, 437.

LEPTURIDES, DORCASONIDES, APATOPHYSIDES, VESPERIDES Lacordaire, Gen. Col. 8 (1869) 256, 424; ibid. 9 (1869) 236.

LEPTURINÆ Gahan, Fauna Brit. Ind. Col. 1 (1906) 68; Boppe, Gen. Ins. 39 (1922) 11.

LEPTURINI Aurivillius, Col. Cat. 39 (1912) 157.

Head narrowed posteriorly behind eyes, forming a distinct neck; genæ elongate; apical palpal segments ovoid or fusiform; antennæ inserted before, or between, eyes; eyes large, convex, generally entire and finely granulated; prothorax not margined; stridulatory area of mesonotum, if present, divided longitudinally; anterior coxæ contiguous, conical, angulate externally; metepisternum narrowed posteriorly; tarsi elongate.

LEPTURINI

LEPTURINI Aurivillius, Col. Cat. 39 (1912) 157, part; Boppe, Gen. Ins. 139 (1922) 14; Swaine and Hopping, Canad. Dept. Mines Bull. 52 (1928) 1-9.

Neck distinct; antennæ inserted between eyes behind level of their anterior border; eyes slightly emarginate, finely granulated; prothorax campanuliform, rarely tuberculate; posterior femora rarely reaching elytral apices; first hind tarsal segment generally longer than following two united; third tarsal segment not deeply cleft.

Key to the Hainan genera of Lepturini.

Genus EPHIES Pascoe

Ephies PASCOE, Proc. Zool. Soc. London (1866) 506; LACORDAIRE, Gen.
 Col. 8 (1869) 453; GAHAN, Fauna Brit. India Col. 1 (1906) 87;
 BOPPE, Gen. Ins. 179 (1921) 105.

Head fairly broad across genæ; frons squarish; neck suddenly constricted behind eyes; antennæ broadly serrate, nearly as long as body in male, one-half as long as body in female; prothorax campanulate, bases strongly sinuate, acutely produced at either side, nearly as broad as base of elytra; elytra subparallel, subobliquely truncate and externally subacute at apices; hind femora barely extending beyond third abdominal segment in male; tibial spines long.

Genotype.—Ephies cruentus Pascoe.

Range.—India; Laos; Yunnan; Hainan; Formosa; Malacca; Sumatra; Borneo; Philippines.

EPHIES GAHANI Gressitt sp. nov. Plate 2, fig. 3.

Male.—Moderately slender, gradually narrowed posteriorly. Elytra and prothorax entirely red; head red except for eyes, occiput, middle of frons, and tips of mandibles; anterior coxæ, anterior surfaces, and apices of anterior femora and tibiæ and spurs of middle and hind legs red; antennæ, scutellum, middle and hind thorax, abdomen, middle and hind legs, and remainder of forelegs black; mesosternal intercoxal process, inner sides of middle coxæ, and outer sides of middle femora tinged with reddish. Body clothed with recumbent red hairs on dorsal surface, with silvery pubescence on coxæ, meso- and metathoraces, and bases of first three abdominal segments, black hairs on other parts; posterior margins of first three abdominal segments glabrous and impunctate.

Head longer than broad, barely wider than antemedian swollen portion of prothorax, strongly constricted behind eyes; preocular portion, excluding trophii, broader than long, weakly narrowed anteriorly; frons as broad as long. shallowly grooved midlongitudinally; frons, vertex, and occiput microscopically punctulate; clypeus, genæ, and anterior portion of neck distinctly punctured. Antennæ five-sixths as long as body; fourth to tenth segments strongly serrate; third segment slightly expanded externally at apex; fourth segment practically as long as third or fifth. Prothorax hardly longer than broad, narrow apically, swollen before middle, acutely expanded at each side of base; basal margin convexly produced over base of scutellum; surface finely punctulate. Scutellum narrowly triangular. Elytra gradually narrowed posteriorly; apices obliquely truncate, subacuminate at external angles; suture dehiscent just before apices; surface finely and evenly punctured. Hind tarsi longer than hind tibiæ, laterally compressed; first segment as long as remaining segments together; posterior tibial spines nearly onehalf as long as first tarsal segment.

Female.—Head entirely red above; mesosternal intercoxal process entirely red; antennæ fully one-half as long as body, segments relatively thicker, but less distinctly serrate than in male; abdomen exceeding elytra, last segment subtruncate apically.

Length, 12 to 15 millimeters; breadth, 2.85 to 4.

Holotype, male, in the Lingman Natural History Museum, Nam-po, Hainan Island, May 27, 1932, taken by F. K. To; allotopotype, female, in the author's collection, same data.

Differs from E. coccineus Gahan of India in having the elytra relatively shorter and much more narrowed, the antennæ more strongly serrate in the male, the head and prothorax more largely red, the elytra more obliquely truncate, and the hind tarsi longer and slenderer.

Distribution.—Hainan Island.

Genus STRANGALIA Serville

Leptura LINNAEUS, Syst. Nat. ed. 10 (1758) 397, part.

- Strangalia SERVILLE, Ann. Soc. ent. France 4 (1875) 220; LACORDAIRE, Gen. Col. 8 (1869) 450, part; LINSLEY, Pan Pacific Ent. 14 (1938) 107.
- Stenura FAIRMAIRE, Ann. Soc. ent. France (6) 9 (1889) 59, not of Ganglbauer.
- Strangalina AURIVILLIUS, Col. Cat. 39 (1912) 240; BOPPE, Gen. Ins. 178 (1921) 102.

Head more or less attenuated anterior to eyes; last maxillary palpal segment three or four times as long as broad; antennæ generally about as long as body, slender; prothorax campanulate, longer than broad, frequently constricted preapically; elytra long, attenuated and generally constricted postmedially; hind legs long; hind tarsi usually longer than hind tibiæ, laterally compressed. Genotype.—Leptura luteicornis Fabricius. Range.—Palæarctic, Nearctic, and northern Oriental Regions.

Key to the Hainan species of Strangalia.

longicorne obscura.

STRANGALIA LATERIPICTA 6 LOIMAILIA Gressitt subsp. nov.

Female.—Elongate, laterally compressed, attenuated posterior-Ochraceous; head with apices of mandibles and sides of lv. occiput black; antennæ dark, first five segments largely ochraceous brown with inner sides and apices brownish black, sixth and seventh segments brownish basally, following segments black, last segment tipped with pale; prothorax with a longitudinal black stripe on either side of disc, from base to apex, broadest at base; elytra yellowish ochraceous, suture, external margins, and apices narrowly black, three black marks extending from external margin to midline of each, first two black marks squarish, last longitudinal, centered at first, second, and third fifths, respectively; hind thorax, abdomen, coxæ, and femora yellowish testaceous, last abdominal segment and apical thirds of hind femora and tibiæ black; tibiæ reddish ochraceous; tarsi brownish black. Body almost entirely clothed with oblique. golden-brown hairs: antennal hairs largely dark.

Head elongated, subparallel anterior to eyes, constricted at posterior borders of eyes, densely punctulate on occiput and sides of frons, sparsely punctured on neck, genæ, and clypeus; eyes longitudinally oval. Antennæ as long as body, slender, thickened apically; third segment longer than scape, fourth and sixth segments subequal to fifth; basal segments slightly thickened apically; subapical segments cylindrical. Prothorax one and onehalf times as long as broad at base, narrowed anteriorly, weakly rounded before middle of each side, moderately expanded at base; basal margin convex at center; surface densely punctulate. Scutellum acutely triangular. Elytra strongly narrowed from base to apical third, dehiscent apically; apices narrowly and obliquely truncate, acuminate externally; surfaces distinctly punctate. Meso- and metathoraces densely punctulate; abdomen more sparsely punctate, first four segments regularly decreasing

^eLeptura (Strangalia) lateripicta FAIRMAIRE, Ann. Soc. ent. Belg. 39 (1895) 178.

39937-----3

Testaceous, striped on pronotum and spotted on elytra with black; antennæ black preapically lateripicta loimailia. Head and thorax black; elytra dull brown; antennæ white preapically.

in length, last truncate below. Hind tarsus shorter than tibiæ, first segment one and one-fourth as long as remaining segments together.

Length, 13 to 14 millimeters; breadth, 2.8 to 3.2.

Holotype, female, in the Lingnan Natural History Museum, foot of Lai-mo-Ling (Loi Mother Mountain, Loi Mai Lia), central Hainan, altitude 400 meters, May 28 to 30, 1935, F. K. To; paratopotype, female, in the author's collection, near Tai-pin-ts'uen (Dwa-Bi), foot of Loi Mother Mountain, May 25 to 28, 1935, F. K. To.

Differs from typical Strangalia lateripicta (Fairmaire) from Tonkin in having the head narrower than the prothorax, the subapical antennal segments entirely black, the pronotum striped laterally, instead of unicolorous, in the female, the elytra partially banded, instead of irregularly striped laterally, the first four abdominal segments entirely testaceous, the hind tibiæ largely ochraceous, and in other characters. This form is apparently also very closely related to Strangalia vittaticollis⁷ Pic. It differs from S. gracilis Gressitt, of the northern Ryu Kyu (Loochoo) Islands, in being more heavily punctured, in having the hind legs, particularly the tarsi, shorter, the head less black, the prothoracic disc laterally and longitudinally striped for the entire length, the elytral bands not reaching the suture, the ventral surface less black, and in other characters.

Distribution.—Hainan Island.

STRANGALIA LONGICORNE 8 OBSCURA Gressitt subsp. nov.

Female.—Slender, laterally compressed, attenuated posteriorly. Head and thorax black, except for brownish palpi, apices of labrum and clypeus, coxæ, and middle of metasternum; antennæ dull brownish basally, seventh and eleventh segments nearly black, eighth to tenth segments buffy white; scutellum black; elytra duil chestnut brown, with apices, lateral spots at ends of first and second fifths of each, black; abdomen ochraceous, dull brown on last two segments and posterior margins of first three; legs dull castaneous, apices of hind femora and posterior sides of hind tibiæ and first tarsal segments blackish. Body clothed with tawny-golden pubescence, blackish on elytra and silvery buff on ventral surface.

* Strangalina longicorne Gressitt, Philip. Journ. Sci. 55 [1934 (1935)] 382.

⁷ Mel. Exot. Ent. 45 (1926) 22, Tonkin.

Head moderately elongate anteriorly, densely punctured, except for apical triangle of frons, and apices of clypeus and labrum; vertex finely grooved. Antennæ one and one-fifth as long as body; third segment barely longer than scape, distinctly longer than fourth and shorter than fifth Prothorax nearly one and one-half as long as broad at base, weakly constricted preapically; middle of disc swollen and finely punctured; sides densely punctured. Scutellum narrow, blunt. Elytra long, strongly narrowed, subparallel for apical third, dehiscent and subacuminate apically, finely punctured. Metepisternum densely punctulate; basal abdominal segments sparsely punctured apically. Posterior femora exceeding third abdominal segment; first hind tarsal segment distinctly longer than remaining segments united.

Length, 13 millimeters; breadth, 3.

Holotype, female, Lingnan Natural History Museum, Tai-pints'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, altitude 400 meters, May 5 to 7, 1935, F. K. To.

Differs from *Strangalia longicorne* (Gressitt) comb. nov. from Amami-Oshima Island, northern Ryu Kyu (Loochoo) Islands, in having the head narrower anteriorly, the antennæ slenderer, the pronotum much more swollen and finely punctate above and narrower apically, the elytra darker, with two lateral, instead of one sublateral, black spots anteriorly, the abdomen largely ochraceous instead of black, the femora much darker and the tarsi longer.

Distribution.—Hainan Island.

CERAMBYCINÆ

- CERAMBYCIDÆ Fabricius, Ent. Syst. 1, 2 (1792) 251-357, part; Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 49-660, part.
- CERAMBYCITÆ Thomson, Syst. Cer. (1864) 157-270, 332-336, 414-464, part.
- CERAMBYCIDES Lacordaire, Gen. Col. 8 (1869) 192-543; ibid. 9 (1869) 1-237.

CERAMBYCINI Ganglbauer, (Bestimm.-Tabell. Eur. Col. 7) Verh. zool.bot. Ges. Wien 31 (1881) 687.

CERAMBYCINÆ Gahan, Fauna Brit. India Col. 1 (1906) 90-322.

CERAMBYCIENS Planet, Encyclop. Ent. 2 (1924) 118.

Both lobes of maxillæ developed; palpi blunt apically; mentigerous process of gula absent or reduced; antennæ generally inserted close to eyes and more or less distant from bases of mandibles; neck rarely distinctly constricted behind eyes; pro-

72, 1–2

thorax not margined at sides; wing venation generally reduced by loss of Cu_2 or Cu_1 , or both; mesonotum with a stridulatory area which is rarely divided by a median line; anterior coxæ depressed, rarely strongly angulate externally; anterior tibiæ not obliquely grooved interiorly, and middle tibiæ not notched exteriorly.

This subfamily is second only to the Lamiinæ in size within the family Cerambycidæ. It has frequently been made to include the Disteniinæ and Lepturinæ, Aurivillius⁽¹⁾ having treated the subfamily in that sense.

Key to the Hainan tribes of Cerambycinæ.

1. Eyes coarsely facetted
Eyes finely facetted
2. Middle coxal cavities open externally to epimera
Middle coxal cavities closed externally to epimera CALLIDIOPSINI.
3. Anterior coxal cavities open behind; prosternal process not dilated and
truncated posteriorly; pronotum generally not vermiculated or cor-
rugated; fourth and fifth antennal segments hardly different from
third or sixth
Anterior coxal cavities generally closed posteriorly; prosternal process
dilated and truncated posteriorly; pronotum generally densely ver-
miculated or corrugated; fourth and fifth antennal segments generally
shorter than third and sixth, swollen apically CERAMBYCINI.
4. Vertex raised on either side above antennal insertions and grooved me-
dially; maxillary and labial palpi subequal in length; prothorax
transverse
Vertex nearly plane between antennal insertions; maxillary palpi dis-
tinctly longer than labial palpi; mandibles very small; prothorax
flattened and carinate above, as long as broad ACHRYSONINI.
5. Middle coxal cavities open exteriorly to epimera
Middle coxal cavities closed exteriorly to epimera
6. Front coxæ subtransverse, distinctly angulated externally
Front coxæ more or less rounded, not strongly angulated
7. Anterior coxæ subconical, strongly exerted, their cavities generally
closed posteriorly
Anterior coxæ not conical nor strongly exserted, their cavities open
posteriorly Compsocerini.
8. Prothorax generally tuberculate laterally; antennæ longer than body,
at least in male; scutellum moderately large, acute apically
9. Anterior coxal cavities widely open posteriorly, first hind tarsal seg-
ment generally shorter than following two segments combined.
STENASPINI.
Anterior coxal cavities closed or slightly open posteriorly; first hind
tarsal segment generally longer than following two segments com-

1940

36
72, 1-2

10. Head vertical in front; eyes entire; tarsal claws divergent.

TILLOMORPHINI. Head inclined in front; eyes emarginate; tarsal claws divaricate.

CLEOMENINI.

ACHRYSONINI

ACHRYSONIDES Lacordaire, Gen. Col. 8 (1869) 231; Bates, Trans. Ent. Soc. London (1870) 247.

ACHRYSONINI Aurivillius, Col. Cat. 39 (1912) 39; Matsushita Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 221, 241.

Eyes coarsely facetted; middle coxal cavities open externally to epimera; mentum sclerotized; anterior coxal cavities weakly angulate externally; basal margin of prothorax entire; antennæ longer than body, at least in male.

Genus NORTIA Thomson

Nortia THOMSON, Syst. Ceramb. (1864) 252; LACORDAIRE, Gen. Col. 8 (1869) 234.

Head short, nearly plane between antennal insertions; antennæ longer than body, third and following segments subuniform; prothorax flattened, rounded laterally, tricarinate above; elytra long, rounded apically; prosternal intercoxal process narrow; mesosternal process broad and plane; femora broad and strongly flattened; first four abdominal segments gradually decreasing in length.

Genotype.—Nortia cavicollis Thomson.

Range.-Moluccas; Philippines; Formosa; Hainan.

The following new form from Hainan is the third species of the genus to be made known. The genus has not been recorded from the mainland of Asia.

NORTIA GENICULATA Gressitt sp. nov.

Male.—Elongate, dorsoventrally compressed, weakly narrowed posteriorly. Dull reddish brown; head and prothorax nearly black; antennæ light reddish brown, nearly testaceous towards apices; legs yellowish testaceous, apical fifth of each femur black. Body clothed with fine, pale pubescence, densest on pronotum; antennæ with a fringe of short hairs on inner sides.

Head abbreviated anteriorly; clypeus and labrum very short; eyes nearly touching mandibles, deeply emarginate; frons short, transversely grooved before apex; vertex weakly concave between antennal insertions; surface granulose; last maxillary palpal segment obliquely truncate apically. Antennæ one and one-half as long as body, cylindrical, gradually tapering, fringed internally; scape one-half as long as third segment; third to tenth segments gradually diminishing in length; last segment as long as fifth. Prothorax depressed, as broad as long, evenly rounded apically. Elytra twice as long as head and prothorax combined, slightly narrowed posteriorly, separately rounded apically; surface deeply and regularly punctured, subseriately in part. Prosternal intercoxal process strongly narrowed posteriorly; mesosternal process broad; metasternum subasperate-punctate. Femora strongly compressed, hind pair not reaching elytral apices; first hind tarsal segment longer than following two segments combined.

Length, 22.6 millimeters; breadth, 4.

Female.—Antennæ barely longer than body.

Length, 29.5 millimeters; breadth, 4.4.

Holotype, male, Lingnan Natural History Museum, Nam-pots'uen, Loi territory, Ch'eng-mai district, Hainan Island, August 28 to 31, 1935, F. K. To; allotype, female, in the author's collection, Tai-tsing-lam-ts'uen, near Loi Mother Mountain, June 6, 1935, F. K. To.

Differs from N. carinicollis Schwarzer of Formosa in being smaller, with the scape shorter and more parallel, the femora more compressed, the pronotum less strongly carinate along the midline, the dorsal surface darker, the femora testaceous except for their black apices, and the antennæ paler.

Distribution.-Hainan Island.

CERAMBYCINI

CERAMBYCIDES VRAIS Lacordaire, Gen. Col. 8 (1869) 246. CERAMBYCINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 507; Gahan, Ann. & Mag. Nat. Hist. (6) 6 (1890) 247. CERAMBYCINI Gahan, Fauna Brit. India Col. 1 (1906) 119.

Head rough, generally grooved between antennal insertions and with one or two transverse grooves across frons, with a pit at either side; eyes deeply emarginate, coarsely facetted; antennæ frequently at least twice as long as body in male, fourth, or fourth and fifth segments generally shorter than third and sixth, swollen apically; pronotum often coarsely vermiculose or corrugated and pitted; anterior coxal cavities generally closed externally; prosternal intercoxal process dilated and truncate apically; middle coxal cavities open exteriorly to epimera; first abdominal segment relatively long; tarsal claws divaricate.

Key to the Hainan genera of Cerambycini.

1.	Anterior coxal cavities strongly angulate exteriorly; antennæ not spined internally; prothorax strongly spined laterally; elytra smooth and thinly clothed with fine, even pubescence
	Anterior coxal cavities rather weakly angulate exteriorly; prothorax weakly, or not at all, tuberculate laterally; elytra sometimes with pubescence lying in different directions, giving a variable pattern 3.
2.	Occiput carinate between eyes; antennal scape subarched, swollen api- cally; elytra toothed externally at apices
	drical, parallel; elytra rounded externally at apices Nadhezdiella.
8.	Third and following antennal segments lacking a distinct, flattened mar- gin externally
	Third and following antennal segments with a distinct, flattened mar-
	gin externally; antennæ but little longer than body in male; prothorax rounded laterally; elytra truncate apically
4.	Prothorax not longer than broad; antennæ not distinctly fringed inter- nally in male, or else spined internally on postbasal segments 5.
	Prothorax longer than broad; antennæ distinctly fringed interiorly, not spined internally on postbasal segments Dialeges.
5.	Third to sixth or eighth antennal segments not spined internally at apices; elytra truncate or weakly emarginate apically; prosternal intercoxal process somewhat produced posteriorly
	Third to sixth or eighth antennal segments distinctly spined endoapically; elytra each distinctly bispinous apically; prosternal intercoxal process not produced, weakly truncate
6.	Prothoracic disc irregularly vermiculose longitudinally; elytra entirely and evenly clothed with thin pubescence; prosternal intercoxal process
	acutely tuberculate
	constricted transversely before apex; prosternum intuberculate.
	Rhytidodera.

Genus PLOCÆDERUS Thomson

Plocæderus THOMSON, Classif. Ceramb. (1861) 197; LACORDAIRE, Gen. Col. 8 (1869) 254; GAHAN, Fauna Brit. India Col. 1 (1906) 120. Plocederus GEMMINGER and HAROLD, Cat. Col. 9 (1872) 2799.

Head weakly concave between the moderately raised antennal tubercles, not concave between upper eye lobes; antennal scape arched, swollen preapically; antennæ nearly twice as long as body in male, barely as long as body in female, fifth to tenth segments subequal in length; prothorax broader than long, sharply spined at each side, irregularly vermiculate on disc; elytra three times as long as broad, truncate apically with a small spine at each sutural angle; anterior coxal cavities angulate exteriorly; anterior intercoxal process finely tuberculate posteriorly.

Genotype.—Plocæderus cyanipennis Thomson.

Range.—Ethiopian Region; central and southwestern Asia; Oriental Region.

PLOCÆDERUS OBESUS Gahan. Plate 1, fig. 3.

Plocæderus obesus GAHAN, Ann. & Mag. Nat. Hist. (6) 5 (1890) 51;
ibid. (6) 6 (1890) 259; Fauna Brit. India Col. 1 (1906) 121, fig. 47.
Plocederus pedestris COTES (nec. White), Ind. Mus. Notes (1) 2 (1889) 91, pl. 5, fig. 4.

Male.—Reddish brown, eyes, outer sides and apices of basal antennal segments, apices of femora, and trochanters, black; dorsal surface of body clothed with thin, silky, buff pubescence, densest on scutellum, ventral surface clothed with longer, inclined, buff hairs, longest on metasternum; basal two maxillary palpal segments glabrous, apical two segments hairy.

Head granulose-punctate in front, swollen and granulose on occiput; eyes large, deeply constricted, inferior lobes several times larger than superior lobes; genæ very short. Antennæ one and three-fourths times as long as body; scape swollen, arched, densely but irregularly punctured; following segments granulose or finely asperate; a smooth, but dull, dorsolateral, concave, parallel strip on outer sides of segments from apex of fifth segment to apex of last; third and fifth to tenth segments subequal in length, each one and one-half as long as fourth and one and one-third as long as scape. Prothorax with anterior margin weakly convex, basal margin biconcave; each side with a sharp, slightly backward curving spine, a lateral swelling before each spine; disc coarsely vermiculate, a transverse ridge near apex and another near base. Elytra gradually narrowed in basal three-fourths; surface microscopically vermiculate-punctate; apices truncate, with a tooth at each angle. Ventral surface minutely punctulate; femora and tibiæ angulate in cross section; first hind tarsal segment as long as following two segments united.

Length, 44 to 46 millimeters; breadth, 15 to 16.

Female.—Antennæ about as long as body; last abdominal segment weakly emarginate-truncate.

Length, 25 to 38 millimeters; breadth, 9 to 12.

Specimens in Lingnan Natural History Museum, from a grove two miles southwest of Nodoa, June 28, 1929, Lingnan Univ. Fifth Hainan Exped.; 1 male, "Hainan Is., Oct. 1932"; Nodoa, west central Hainan (found with its calcareous pupal cocoon); and 1 female, "Trianguiar Mt.", Hainan, June, 15, 1932, F. K. To; 1 male, Dwa-Bi (Tai-pin-ts'uen), central Hainan, altitude 350 meters, July 23, 1935, taken by the author (shaken from dead tree at night); 1 female, Nam-fung, west central Hainan, and 1 female, Five Finger Mountains, southcentral Hainan, April 25, 1932, F. K. To, in the author's collection; 2 specimens, Sam-a, southern Hainan, May 5, 1936, G. Ros, in collector's collection; 1 specimen, same data, in Musée Heude.

Distribution.—India; Burma; Siam; Andaman Island; Hainan Island.

Genus NADEZHDIELLA Plavilstshikov

Nadezhdiella PLAVILSTSHIKOV, Bestimm.-Tabell. eur. Col. 100 (1931) 71; GRESSITT, Lingnan Sci. Journ. 16 (1937) 91.

Antennal supports overhanging internally; frons with two deep, oblique grooves; occiput deeply sulcate between superior eye lobes; antennæ over one and one-half times as long as body in male, slightly shorter than body in female, scape broad, weakly swollen apically, fourth segment two-thirds as long as third and fifth, third and fourth segments moderately swollen apically; prothorax transverse, coarsely and irregularly vermiculose above, with a slightly raised area on either side of middle of disc, strongly and sharply spined laterally; elytra long, subparallel, smooth, rounded apically; anterior coxal cavities acutely and weakly angulate externally, barely closed posteriorly; prosternal intercoxal process depressed, subtruncate posteriorly; mesosternal process concave and angulately emarginate apically; first hind tarsal segment shorter than following two united.

Genotype.—Cerambyx cantori Hope.

Range.—Western and southern China; Hainan; Formosa; Siam.

NADEZHDIELLA CANTORI (Hope).

Cerambyx cantori HOPE, Trans. Ent. Soc. London 4 (1845) 11, Chusan Island, East China; LACORDAIRE, Gen. Col. 8 (1869) 251, note 2; GAHAN, Ann. & Mag. Nat. Hist. (6) 6 (1890) 249; KATO, Three Color. Illus. Ins. Japan 9 (1933), pl. 18, fig. 6.

Cerambyx scabricollis CHEVROLAT, Rev. Zool. (2) 4 (1852) 416, Hong-kong.

Cerambyx lucasi BRONGNIART, Nouv. Arch. Mus. Paris (3) 3 (1891) 238, pl. 10, fig. 1.

Nadezhdiella cantori PLAVILSTSHIKOV, Bestimm.-Tabell. eur. Col. 100 (1931) 71; GRESSITT, Lingnan Sci. Journ. 18 (1939) 12.

Male.—Entirely black; body clothed with fine, silky, silvergray pubescence, very thin on elytra and denser on ventral surface and antennæ.

72, 1–2

Antennal supports subacutely raised at each side, interiorly overhanging the deeply grooved middle of vertex; frons with a very deep depression at either side of middle; occiput deeply grooved between superior eye lobes, slightly excavated at each side posteriorly. Antennæ two and two-thirds as long as body; scape pitted and slightly wrinkled; third segment longer than scape, fourth segment shorter than fifth to tenth segments, which are subequal; third and following segments weakly swollen at apices. Prothorax nearly as long as broad, swollen at each side anterior to the acute lateral spine; disc strongly and densely vermiculose in an irregular fashion. Elytra long, subparallel, rounded externally at apices, a small spine at each sutural angle; surface microscopically punctulate.

Female.—Antennæ not quite as long as body, scape smoother, fifth and following segments slightly expanded externally, toothed at apices.

Length, 44 to 50 millimeters; breadth, 12 to 13.5.

Description based on two specimens from Formosa.

Two specimens, in the Lingnan Natural History Museum, were taken, one at Tai-tsing-lam-ts'uen, behind Lai-mo-leng (Loi Mother Mountain), central Hainan, June, 1935, by F. K. To; the other at Lok-kei, near Nodoa, June 18 to 21, 1932, by O. K. Lau and F. K. To.

Distribution .--- South China; Hainan; Formosa; Siam.

Genus ÆOLESTHES Gahan

Æolesthes GAHAN, Ann. & Mag. Nat. Hist. (6) 6 (1890) 250; Fauna Brit. India Col. 1 (1906) 126.

Head deeply pitted on each side of frons, finely sulcate on vertex and deeply so on occiput behind eyes; antennæ over twice as long as body in male, slightly longer than body in female, scape wrinkled, sixth segment longer than third or fifth, third to fifth segments distinctly swollen apically; prothorax broader than long, rounded laterally, disc irregularly wrinkled, a smoother, raised area in middle; elytra slightly uneven, truncate apically, clothed with pubescence lying in different directions, giving a varying pattern; prosternal intercoxal process grooved ventrally, truncate and slightly projecting posteriorly; mesosternal process indented apically; first abdominal segment nearly as long as following two segments combined; first hind tarsal segment as long as succeeding two segments combined.

Genotype.—Hammaticherus aurifaber White. Range.—Oriental Region; Melanesia.

ÆOLESTHES HOLOSERICEA (Fabricius).

72, 1-4

Cerambyx holosericea FABRICIUS, Mant. Ins. 1 (1787) 135.

- Pachydissus velutinus THOMSON, Syst. Cer. (1865) 576, India.
- Pachydissus similis GAHAN, Ann. & Mag. Nat. Hist. (6) 5 (1890) 52.
- Neocerambyx holocericeus COTES, Ind. Mus. Notes (1) 2 (1889) 60, pl. 5, fig. 3.
- *Eolesthes holocericea* GAHAN, Ann. & Mag. Nat. Hist. (6) 7 (1891) 20; Fauna Brit. India Col. 1 (1906) 127; MAXWELL-LEFROY, Ind. Ins. Life (1909) 373, fig. 253.

Male.—Black to blackish brown; body clothed with dense pubescence which lies in different directions on elytra, giving patterns of brown and silvery-brown or golden-brown which change according to the angle of vision.

Vertex weakly concave between antennal insertions, finely grooved along middle, pitted at either side before ends of superior eye lobes; eyes deeply emarginate, inferior lobe subtriangular; surface granulose-punctate; submentum with a deep transverse groove. Antennæ two and one-half times as long as body; scape, third and fifth segments subequal in length, much shorter than sixth segment; last segment as long as elytra. Prothorax barely broader than long, coarsely wrinkled, a subrectangular, relatively smooth, raised area centered a little behind middle of disc, preceded by a smaller, subtriangular, concave, raised area. Elytra slightly uneven, weakly sinuatetruncate externally; hind femora nearly reaching elytral apices.

Length, 27 to 42 millimeters; breadth, 7 to 12.

Specimens in Lingnan Natural History Museum, from Namting-ts'suen, 16 kilometers northeast of Sam-ah-kong (Sam-a), southern Hainan, February 12 to 16, 1935, F. K. To; Lohfung-tung, Yai District, Hainan, February 22 to 25, F. K. To; one specimen each from both localities in the author's collection.

New to Hainan.

Distribution.—India; Ceylon; Andaman and Nicobar Islands; Tenasserim, Siam; Malacca; Hainan; Kwangtung.

Genus TRIRACHYS Hope

Trirachys HOPE, Proc. Ent. Soc. London (1841) 61; Trans. Ent. Soc. London 4 (1845) 11; THOMSON, Syst. Ceramb. (1864) 444; LACOR-DAIRE, Gen. Col. 8 (1869) 257; GAHAN, Ann. & Mag. Nat. Hist. (6) 6 (1890) 251; LIU, Lingnan Sci. Journ. 12 (1933) 480.
Trirrachis GEMMINGER and HAROLD, Cat. Col. 9 (1873) 2801.

Front of head with a transverse, diamond-shaped, raised area surrounded by grooves and, laterally, by pits; vertex weakly grooved; antennal scape transversely wrinkled, third segment subequal in length to scape, longer than fourth segment, hardly as long as fifth segment, much shorter than sixth and following segments, third to fifth, or seventh, segments spined internally at apices in male, third to tenth distinctly spined in female; prothorax briefly but sharply spined at each side, transversely wrinkled on middle of disc except for a narrow, smoother, raised area behind middle; elytra truncate and bispinous apically; anterior intercoxal process weakly truncate posteriorly.

Genotype.—Trirachys orientalis Hope.

Range.—Central and southern China; Hainan; Formosa.

TRIRACHYS ORIENTALIS Hope.

Trirachys orientalis HOPE, Proc. Ent. Soc. London (1841) 61, Chusan Islands, East China; Trans. Ent. Soc. London 4 (1845) 11.

Entirely black; body densely clothed with pubescence which lies in different directions on elytra, making pale-golden to greenish-black patterns according to angle of vision; ventral surface with hairs less closely adpressed; antennæ somewhat loosely clothed internally.

Head with vertex grooved on each side of middle; occiput with short, transverse, ridgelike granules behind; eyes nearly divided, inferior lobe subtriangular, not very closely approaching base of mandible. Antennæ more strongly spined interiorly, and on more segments, in female than in male. Prothorax weakly swollen at each side before the fine lateral tubercles, constricted before apex. Elytra somewhat uneven, obliquely truncate and spined apically.

Length 35 to 52 millimeters; breadth, 10 to 14.5.

Description based on specimens from Central China and Formosa.

Two examples, in the G. Ros collection and Musée Heude, were taken at Nodoa, altitude 250 meters, west central Hainan, March 25, 1936, by G. Ros.

Distribution.—Central and southern China; Hainan; Formosa. Genus DIALEGES Pascoe

Dialeges PASCOE, Trans. Ent. Soc. London (2) 4 (1856) 46; (3) 3 (1869) 521; LACORDAIRE, Gen. Col. 8 (1869) 263; GAHAN, Fauna Brit. India Col. 1 (1906) 141.

Head with a long neck; frons and vertex with a midlongitudinal groove; eyes deeply emarginate or divided; antennæ one and one-half to two times as long as body in male, slightly longer than body in female, fringed below with fine hairs in male, fourth segment much shorter than third and fifth segments; prothorax longer than broad, rounded at sides, constricted near apex and base, transversely corrugated; elytra narrow; prosternal intercoxal process vertically truncate posteriorly; hind femora exceeding elytral apices in male; first segment of hind tarsus longer than following two segments united.

Genotype.—Dialeges pauper Pascoe.

Range.—Ceylon; Peninsula of southeastern Asia; Hainan; Formosa; Malay Archipelago.

Gahan recorded "three or four examples" of the following species from Hainan, but I have seen no specimens. I quote Gahan's redescription from the Fauna of British India.

DIALEGES UNDULATUS Gahan.

Dialeges undulatus GAHAN, Ann. & Mag. Nat. Hist. (6) 7 (1891)
23, Ceylon, Burma, Siam; ibid. (7) 5 (1900) 308, Hainan; Fauna Brit. India Col. 1 (1906) 143, fig. 56; KANO, Trans. Nat. Hist. Soc. Formosa 17 (1927) 52, Formosa.

Pitchy brown, varying on the elytra to reddish brown in the colour of the derm; a covering of greyish pubescence, which is denser and more glossy on the elytra, there also with broad patches or bands of varying shades, like watered silk, according to the incidence of the light. Head slightly elongated behind the eyes; the latter deeply emarginate in front, not divided as they are in the type species. Antennæ of the male twice as long as the body, fringed with hairs under the third and succeeding joints; third joint shorter than the fifth; fifth to seventh subequal; eighth to tenth gradually diminishing in length, and united scarcely longer than the eleventh; antennæ of the female a little longer than the body, with the eleventh joint very little longer than the tenth. Prothorax longer than broad in both sexes, slightly rounded on each side, constricted at the base and apex; transversely and not very strongly wrinkled above, with a line or band bare of pubescence along the middle. Elytra conjointly rounded and unarmed at the apex.

This species, though it has a strong resemblance in shape and coloration to D. pauper, Pascoe, the type of the genus, is easily distinguished from it by the following well-marked structural characters:—the head less elongated behind the eyes; the eyes not divided; the third joint of the antennæ shorter than the fifth; the elytra rounded and unarmed at the apex.

Length 16-21; breadth 34-5 mm.-GAHAN, 1906.

Distribution.—Ceylon; Burma; Siam; Hainan; Formosa.

Genus TRACHYLOPHUS Gahan

Trachylophus GAHAN, Ann. & Mag. Nat. Hist. (6) 2 (1888) 59; Fauna Brit. India Col. 1 (1906) 145; LIU, Lingnan Sci. Journ. 12 (1933) 480.

72, 1-2

Frons deeply pitted on each side; vertex shallowly grooved between the low antennal supports, carinate between anterior borders of superior eye lobes; occiput deeply grooved between posterior borders of superior eye lobes; antennæ a little longer than body in male, about as long as body in female, third and fourth segments swollen apically, fifth and following segments flattened and angulate externally, fifth segment nearly twice as long as fourth; prothorax slightly broader than long, narrowed apically, rounded laterally, coarsely vermiculate above; elytra long, subparallel, truncate apically; mesosternal process narrow, concave, emarginate apically.

Genotype.—Trachylophus sinensis Gahan.

Range.-South China; Burma; Hainan; Formosa; Java.

TRACHYLOPHUS SINENSIS Gahan.

Trachylophus sinensis GAHAN, Ann. & Mag. Nat. Hist. (6) 2 (1888)
60, China; Fauna Brit. India Col. 1 (1906) 146, fig. 58; GRESSITT, Lingnan Sci. Journ. 18 (1939) 14.

Blackish brown, reddish on scape, elytra, thoracic sterna, and bases of abdominal segments; entirely clothed with thin, but close, pale-golden pubescence.

Neck slender, with ridgelike granules. Antennal scape slender, subcylindrical, nearly as long as third segment, which is one and one-third as long as fourth. Prothorax roughly vermiculate, transversely constricted before apex, with a hexagonal figure, containing a small diamond-shaped one, on middle of disc. Elytra long, truncate apically, microscopically punctulate. Prosternal process produced into a keeled tubercle; metepisternum gradually narrowed posteriorly; first abdominal segment nearly as long as next two together. Femora slender, hind pair reaching only to apex of third abdominal segment; hind tarsi nearly as long as tibiæ.

Length, 34 millimeters; breadth, 9.

Description based on a specimen from eastern Kwangtung.

I have seen a single specimen, taken at Sam-a, southern Hainan, April 29, 1936, by G. Ros, and now in his collection.

New to Hainan Island.

Distribution.-South China; Hainan; Formosa; Burma.

Genus RHYTIDODERA White

Rhytidodera WHITE, Cat. Col. Brit. Mus. 7 (1853) 132; THOMSON, Syst. Cer. (1864) 446; PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 524; LACORDAIRE, Gen. Col. 8 (1869) 268; GAHAN, Fauna Brit. India Col. 1 (1906) 146.

72, 1-2 Gressitt: Longicorn Beetles of Hainan

Head deeply grooved obliquely behind central diamond-shaped area of frons, narrowly sulcate between antennal insertions; antennæ about as long as body in male, shorter in female, third and fourth segments weakly swollen and somewhat flattened apically, following segments expanded laterally and angulate apically; prothorax as long as broad, constricted and cylindrical apically and basally, narrower at apex, rounded at sides, deeply grooved longitudinally above and at sides in about eighteen rows; elytra long, parallel, narrowed and obliquely truncated apically, with sutural angles produced into small spines; prosternal intercoxal process weakly arched, gradually declivitous posteriorly; mesosternal process plane, narrowed and bifurcated apically.

Genotype.—Rhytidodera bowringii White.

Range.—Oriental Region; Korea.

RHYTIDODERA BOWRINGII White.

Rhytidodera bowringii WHITE, Cat. Col. Brit. Mus. 7 (1853) 133, pl. 4, fig. 1, Hongkong; LACORDAIRE, Gen. Col. 8 (1869) 268; DOHRN, Stett. Ent. Zeit. 44 (1893) 156; HEYNE, Exot. Käfer (1903) pl. 33, fig. 5; GRESSITT, Lingnan Sci. Journ. 18 (1939) 15.

Male.—Blackish brown, antennæ, prothoracic grooves, elytra, abdomen, and legs dull reddish brown; body largely clothed with varying pubescence: head thickly clothed on middle of dorsal surface and around eyes, middle of occiput smooth and glabrous, antennæ loosely clothed with tawny hairs on first five segments, prothorax irregularly clothed with tawny hairs, denser and paler beneath, scutellum thickly clothed with yellow-orange pubescence, elytra sparsely clothed with pale, tawny pubescence and marked with five longitudinal rows of narrow, sublinear, fulvous spots, partly arranged in transverse bands, ventral surface and legs clothed with grayish-white pubescence.

Vertex narrowly grooved. Antennæ five-sixths as long as body, flattened apically; scape, and third and fifth segments subequal, longer than fourth and shorter than sixth and following segments. Prothorax longitudinally ridged on disc, transversely grooved and rugose apically and basally. Elytra parallel, narrowly truncate and suturally spined apically. Hind femora reaching to middle of third abdominal segment; first hind tarsal segment nearly as long as following two united.

Length, 32 millimeters; breadth, 7.5.

Two specimens, in the Lingnan Natural History Museum, were taken, 1 at Hoihow, northern Hainan, in 1932 by Prof. W. E. Hoffmann, 1 at Kachek, May 1932, by F. K. To. New to Hainan. Distribution.—South China; Hongkong; Hainan.

HESPEROPHANINI

CERASPHORITÆ Veræ Thomson, Syst. Cer. (1864) 248, part. HESPEROPHANIDES Lacordaire, Gen. Col. 8 (1869) 273. HESPEROPHANINÆ Pascæ, Trans. Ent. Soc. London (3) 3 (1869) 528. HESPEROPHANINI Gahan, Fauna Brit. India Col. 1 (1906) 109; Liu, Lingnan Sci. Journ. 12 (1933) 481.

Ligula membranous; eyes large, deeply emarginate, coarsely facetted; antennæ longer than body in male, fringed internally, scape moderately swollen, rounded apically; prothorax generally rounded laterally; elytra parallel; anterior coxal cavities open posteriorly, weakly angulate laterally; middle coxal cavities open exteriorly to epimera; first abdominal segment much shorter than following two segments united.

Key to the Hainan genera of Hesperophanini.

Genus GNATHOLIA Thomson

Gnatholia THOMSON, Classif. Ceramb. (1861) 375; Syst. Ceramb. (1864) 456; LACORDAIRE, Gen. Col. 8 (1869) 284; PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 530; GAHAN, Fauna Brit. India Col. 1 (1906) 110; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 294.

Mandibles of male large, deep, strongly toothed or carinate above, projecting anteriorly; genæ subacutely prominent; vertex weakly concave, finely grooved; antennæ one and one-half times as long as body in male, subequal to body in female, third segment nearly twice as long as scape; prothorax transverse, rounded laterally; elytra parallel, rounded or weakly truncate apically, sometimes marked with ivory-white spots; femora laterally compressed, subfusiform.

Genotype.—Gnatholia eburifera Thomson.

Range.—India; Peninsula of southeastern Asia; Hainan; Formosa; Philippine Islands; Borneo; Java.

GNATHOLIA EBURIFERA Thomson.

Gnatholia eburifera THOMSON, Classif. Ceramb. (1861) 375, Cambodia; GAHAN, Ann. & Mag. Nat. Hist. (6) 5 (1890) 53; Fauna Brit. India Col. 1 (1906) 111; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 296.

Male.—Dull reddish brown, elytra each with a pair of narrow, longitudinal, approximate, ivory-white, raised marks at middle, each lying on a weakly raised, light reddish-brown costa extending posteriorly from base. Body clothed with close, gray-brown pubescence and sparse, erect hairs; elytra dotted with glabrous, asperate punctures; antennæ clothed with long, erect hairs internally and ventrally.

Mandibles deep, strongly toothed above; vertex granulosepunctate, finely grooved, a small glabrous concavity between narrow superior eye lobes; occiput granulose, swollen posteriorly. Antennæ one and one-half times as long as body, slender; third segment nearly twice as long as scape, slightly longer than fourth to last segments, which are subequal, third to sixth segments weakly swollen apically. Prothorax broader than long, granulose, with a weak tubercle on either side of midline of disc, just before center. Elytra rounded apically, with a minute tooth at each sutural angle; surface with large, asperate punctures arranged subseriately. Prosternal intercoxal process narrow, weakly arched, not dilated apically; mesosternal process broad; metasternum and abdomen granulose-punctate.

Length 22 millimeters; breadth, 5.5.

A single male specimen, in the Lingman Natural History Museum, was taken at Loh-fung-tung, Yai District, South Hainan, February 25, 1935, by F. K. To.

New to Hainan.

Distribution.—Tenasserim; Tonkin; Siam; Malacca; Hainan; Formosa; Borneo.

Genus STROMATIUM Serville

Stromatium SERVILLE, Ann. Soc. Ent. France 3 (1834) 80; CASTEL-NAU, Hist. Nat. 2 (1840) 452; THOMSON, Classif. Ceramb. (1861) 231; Syst. Ceramb. (1864) 455; MULSANT, Col. France Long. ed. 2 (1862) 129; LACORDAIRE, Gen. Col. 8 (1869) 282; LECONTE and HORN, Classif. Col. N. Amer. (1883) 287; GAHAN, Fauna Brit. India Col. 1 (1906) 114.

Selonophorus MULSANT, Col. France Long. ed. 1 (1829) 65.

Apical palpal segment short and compressed; vertex subacutely raised at inner sides of antennal insertions; genæ very short;

39937----4

antennæ one and one-third as long as body to nearly twice as long in male, subequal to body in female, fringed internally, fourth segment not quite as long as third or fifth; prothorax transverse, rounded laterally, slightly constricted apically and basally, bearing a large, hairy depression on lower part of each side in male, irregular above; elytra subparallel, narrowed and rounded or subtruncate apically, irregular on surface; prosternal intercoxal process weakly arched, slightly broadened preapically; mesosternal process short; metepisternum parallel; femora compressed, hind pair nearly reaching apex of abdomen in male.

Genotype.—Callidium barbatum Fabricius.

Range.—Southwestern Palæarctic Region; Madagascar; Oriental Region to Batchian, Philippines, and Ryu Kyu Islands; eastern North America; Cuba; South America.

STROMATIUM LONGICORNE (Newman).

Arhopalus longicornis NEWMAN, Entomol. 1 (1842) 246, Manila.

Stromatium longicorne GAHAN, Fauna Brit. India Col. 1 (1906) 115; KATO, Three Color. Illus. Ins. Japan 9 (1933) pl. 18, fig. 2; GRES-SITT, Lingnan Sci. Journ. 18 (1939) 11.

Stromatium asperulum WHITE, Cat. Col. Brit. Mus. 8 (1855) 300, Hongkong; PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 532.

Male.—Dull reddish brown; mandibles, genæ, and margins of antennal insertions blackish; body clothed with thin gray pubescence, denser tawny hairs around eyes, on frons, anterior and posterior borders of prothorax, and posterior borders of abdominal segments.

Head coarsely granulose-punctate, deeply impressed and glabrous between superior eye lobes. Prothorax transverse; disc coarsely rugulose-punctate, with five swellings forming an M. Elytra narrowed and briefly truncated obliquely with sutural angles finely toothed; surfaces granulose-punctate with large, asperate punctures arranged subseriately in part. Anterior femora strongly flattened and broadened proximally; middle and hind pairs broadest at middle.

Female.—Antennæ as long as body, fourth segment distinctly shorter than third, hardly longer than scape; prothorax lacking cavities.

Length, 14 to 16 millimeters; breadth, 3.75 to 7.8.

Specimens in Lingnan Natural History Museum, from Faanmaan-ts'uen, May 4 to 21, 1932, F. A. McClure; Sam-ah-kong, May 22 to 25, and Taai-chau Island, June 2, 1932, W. E. Hoffmann and O. K. Lau; Kachek, May, Lam-ko, May 23, Lokkel, June 9 and 21, Nam-fung, June 27, O. K. Lau and F. K. To; Hauying-ts'uen, July 27, 1932, F. K. To; Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, April 16 to 24, May 13 to 22, Tai-tsing-lam-ts'uen, June 1, 1935, F. K. To; specimens in writer's collection from Nodoa, westcentral Hainan, July 10, 1935, collected by the author; Fan-ziang, central Hainan, March 5, 1936, author's native collector; Tai-pin-ts'uen, same data as above; 1 male from Chicheriang, Hainan, July 15, 1904, and 1 female from Mount Wuchi, Five Finger Mountains, May 23, 1903, in the British Museum.

New to Hainan Island.

72, 1-2

Distribution.—Assam; Burma; Peninsula of southeastern Asia; Malay Archipelago; Philippines; South China; Hainan; Formosa; Ryu Kyu Islands; Bonin Islands.

CALLIDIOPSINI

CALLIDIOPSIDES Lacordaire, Gen. Col. 8 (1869) 340.
CALLIDIOPSINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 340.
CALLIDIOPSINI Gahan, Fauna Brit. India Col. 1 (1906) 154; Liu, Lingnan Sci. Journ. 12 (1933) 482.
CALLIDIOPINI Aurivillius, Col. Cat. 39 (1912) 115; Matsushita, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 398.

Mandibles flattened, acute; clypeus not distinctly separated from frons; antennal insertions depressed; eyes coarsely facetted, inferior lobes extending anterior to antennal insertions; ligula membranous; apical palpal segments subtriangular; antennæ unarmed; prothorax subcylindrical or transverse; vein Cu_2 of hind wings lacking; anterior coxal cavities closed exteriorly to epimera; femora swollen.

Genus CERESIUM Newman

Ceresium NEWMAN, Entomol. 1 (1842) 322; THOMSON, Syst. Ceramb. (1864) 236; LACORDAIRE, Gen. Col. 8 (1869) 353; PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 536; GAHAN, Fauna Brit. India Col. 1 (1906) 156; MATSUSHITA, Ins. Matsumurana 7 (1932) 66; LIU, Lingnan Sci. Journ. 12 (1933) 482.

Diatomocephala BLANCHARD, Voy. Pole Sud 4 (1853) 266; LACOR-DAIRE, Gen. Col. 8 (1869) 354.

Pneumida THOMSON, Syst. Ceramb. (1864) 191.

Rhaphidera PERRIS, Ann. Soc. Linn. Lyon (2) 2 (1855) 336.

Rhaphidodera GEMMINGER and HAROLD, Cat. Col. 9 (1873) 2831.

Inferior eye lobes nearly touching mandibles, almost as closely approximate as superior lobes; vertex and occiput not grooved; antennæ somewhat longer than body in male, subequal to body in female; prothorax cylindrical or weakly swollen at sides; elytra more or less rounded apically; anterior coxæ globose; prosternal intercoxal process narrow; mesosternal process broad, emarginate-truncate apically; femora pedunculate-clavate, much shorter than abdomen; tibiæ noncarinate.

Genotype.—Ceresium raripilum Newman.

Range.—Oceania; southern and eastern Asia; Madagascar; Seychelles; Mauritius; Mexico.

Key to the Hainan species of Ceresium.

1. Body black; legs and antennæ reddish; apices of femora black. geniculatum.

Body reddish brown; prothorax largely clothed with white pubescence. sinicum.

CERESIUM GENICULATUM White. Plate 2, fig. 2.

Ceresium geniculatum WHITE, Cat. Col. Brit. Mus. 8 (1855) 245 (East Endies); GAHAN, Fauna Brit. India Col. 1 (1906) 158.

Ceresium rufipes PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 537, Timor.

Male.—Dark brownish black, antennæ, palpi, and legs reddish testaceous, except for black apices of femora; body clothed with pale hairs, scutellum densely pubescent, ventral surfaces somewhat densely clothed, some longer yellowish hairs on basal antennal segments and legs.

Neck reticulately vermiculate posteriorly. Antennæ one and one-fifth as long as body; scape subequal to fifth and following segments, slightly longer than third, which in turn is longer than fourth. Prothorax longer than broad, moderately rounded at sides, grossly vermiculate-punctate above. Elytra conjointly rounded apically, surfaces heavily punctured basally, punctures becoming very fine behind middle. Femora pedunculate basally and strongly swollen in apical three-fourths, clavate portions compressed; first hind tarsal segment as long as following two segments united.

Length, 9.5 to 12 millimeters; breadth, 2.3 to 3.

Two male specimens, in the Musée Heude and Ros collection, were taken at Sam-a, southern Hainan, April 26 and 30, 1936, by Commander G. Ros.

New to Hainan Island.

Distribution.—Burma; Andamans; Siam; Indo-China; Hainan; Flores; Timor.

CERESIUM SINICUM White.

72.1-2

Ceresium sinicum WHITE, Cat. Col. Brit. Mus. 8 (1855) 245, North China; GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 348, Hainan; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 300; GRESSITT, Lingnan Sci. Journ. 18 (1939) 15.

Dark reddish brown; antennæ reddish testaceous; elytra and legs castaneous; apical abdominal segments partly pale reddish brown. Head and prothorax with fairly dense clothing of tawny hairs on sides of upper parts, and sparsely so on remainder of surfaces; antennæ clothed with thin, tawny pile and suberect hairs on undersides of basal segments; scutellum densely pubescent; elytra with a single oblique hair from each puncture and a few longer erect hairs; metasternum with hairs around margins; abdomen sparsely hairy.

Head sparsely punctured, nearly horizontal between antennal insertions, constricted behind eyes. Antennæ about as long as body; scape subcylindrical, a little longer than third segment; third segment a little longer than fourth and shorter than fifth; fifth to tenth segments decreasing slightly in length. Prothorax one and one-fourth as long as broad, hardly swollen at sides, narrowed apically; surface coarsely punctured, with a median smooth stripe behind middle. Elytra deeply punctured, punctures smaller beyond middle and nearly disappearing before apices.

Length, 13.5 millimeters; breadth, 3.5.

A single specimen, in the British Museum, was collected by Whitehead in 1899, and sent to the author for study by Dr. K. G. Blair.

Distribution.—Central and southern China; Hainan; Formosa; southern Japan.

MOLORCHINI

PSEUDOLEPTURITÆ Thomson, Syst. Ceramb. (1864) 158, part. MOLORCHIDES Lacordaire, Gen. Col. 8 (1869) 482. NECYDALINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 565. STENOPTERI Leconte, Smithsonian Misc. Col. 9 (1873) 306. MOLORCHINI Gahan, Fauna Brit. India Col. 1 (1906) 169.

Head projecting anteriorly; eyes lateral, finely facetted; antennæ filiform or somewhat serrate apically; prothorax constricted at apex and base, rounded or bluntly tuberculate laterally; elytra generally short or apically narrowed, occasionally entire; anterior coxal cavities briefly angulate externally, genThe Philippine Journal of Science

erally closed behind; intercoxal process of mesothorax broad, middle coxal cavities open externally to epimera; first abdominal segment generally long, following segments reduced.

Key to the Hainan genera of Molorchini.

Genus MERIONŒDA Pascoe

- Merionæda PASCOE, Trans. Ent. Soc. London (2) 4 (1858) 238; ibid.
 (3) 3 (1869) 565, 570; THOMSON, Syst. Ceramb. (1864) 416; LACORDAIRE, Gen. Col. 8 (1869) 400; GAHAN, Fauna Brit. India Col. 1 (1906) 171.
- Ocytasia PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 565, 575; HELLER, Ent. Blätter 20 (1924) 31.

Head with a Y-shaped impression in front; eyes deeply emarginate, inferior lobes closely approaching bases of mandibles; antennæ inserted at about level of middle of eyes, shorter than body, scape weakly swollen apically, third and fourth segments slender, following segments flattened and expanded laterally; prothorax constricted anteriorly, swollen laterally; elytra shorter than abdomen, narrowed apically; anterior coxal cavities subtransverse, closed posteriorly; abdomen with first two segments longer in male, first as long as following in female; hind femora long, suddenly and strongly swollen apically; hind tibiæ toothed externally and spined apically.

Genotype.-Merionædo puella Pascoe.

Range.—Oriental, Ethiopian, and Neotropical (Oxycoleus, Stenoptrellus) Regions.

Subgenus OCYTASIA Pascoe

Ocytasia PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 565, 575; HELLER, Ent. Blätter 20 (1924) 31.

Middle tarsi of male strongly expanded laterally, broadly triangular; inner spine of hind tibiæ very long.

Subgenotype.—Ocytasia fulvipennis Pascoe.

Range.—Eastern, insular portion of Oriental Region.

MERIONŒDA (OCYTASIA) FORMOSANA º BURKWALLI Gressitt subsp. nov.

Female.—Yellowish testaceous; prothorax and anterior femora reddish testaceous; head (except palpi), basal antennal segments,

^eMerionæda (Ocytasia) formosana HELLER, Ent. Blätter 20 (1924) 32, Formosa. middle and posterior femoral clubs, and apices of posterior tibiæ black; apical antennal segments, middle tibiæ, and first hind tarsal segments brownish black; hind wing blackish brown. Body nearly glabrous above, sparsely pubescent beneath, with a dense fringe of hairs on posterior margin of second segment, some sparse, oblique hairs on antennæ and legs, and a few long, suberect hairs on first abdominal segment; fifth and following antennal segments with thin, close pubescence.

Head deeply impressed with three converging lines on middle of front; clypeus largely smooth; antennal insertions distant. hardly raised; vertex slightly concave; occiput closely punctured at sides and posteriorly, nearly impunctate in middle: eves almost divided. Antennæ reaching to apical guarter of elytra; scape weakly arched and slightly swollen apically, longer than any following segment, shiny, subglabrous; third and fourth segments subequal to each other and to ninth and tenth segments. hardly as long as fifth to seventh segments. Prothorax as long as broad, constricted preapically, separating a transverse, impunctate collar; three-fourths as broad at apex as at base; sides moderately swollen and impunctate, a larger, subobliquely oval, impunctate swelling on each side of disc, middle of disc longitudinally swollen, narrowly before middle, basal portion, and depressions between discal swellings finely punctured: basal margin sinuate. Scutellum rounded posteriorly. Elvtra gradually narrowed and acuminate apically, strongly dehiscent, nearly straight externally; surfaces deeply punctured subseriately, carinate medially before apices. Metepisterna broad, narrowed apically, deeply and closely punctured, as are sides of metasternum: first abdominal segment nearly impunctate. Anterior and middle femora very weakly swollen, hind pair very slender and subarcuate on basal three-fifths, suddenly and very strongly swollen apically; hind tibiæ weakly sinuate, bearing two rows of small teeth externally and two spines apically, upper spine over twice as long as lower; first hind tarsal segment longer than following two united.

Length, 7.7 to 8.6 millimeters; breadth, 2.

Holotype, female, No. 52177 United States National Museum, No-kyu-chun, central Hainan Island, March 22, 1936, author's native collector; paratype, female, author's collection, Taipin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, altitude 275 meters, April 25 and 26, 1935, F. K. To; two additional paratypes in the Lingnan Natural History Museum, Samts'uen-kai-hui, near Loi Mother Mountain, July 4 to 6, and Taipin-ts'uen, April 28 to 30, 1935, F. K. To.

This subspecies differs from M. formosana Heller in having the clypeus less punctate, the anterior collar of the prothorax more separated from the midlongitudinal discal swelling, the elytra more evenly narrowed and more sparsely punctured, the hind femora and tibiæ more sinuous, the eyes black instead of brownish, the anterior femora reddish testaceous instead of brownish black, and the posterior tibiæ black only on apical third. Named in honor of Dr. and Mrs. H. F. Burkwall of the American Presbyterian Mission in Hainan.

Distribution.—Hainan Island.

Genus KUNBIR Lameere

Kunbir LAMEERE, Ann. Soc. ent. Belg. compt. rend. (1890) ccxiii; GAHAN, Fauna Brit. India Col. 1 (1906) 174.

Head flattened above, with a T-shaped impression on front; eyes distant, closely approaching bases of mandibles, deeply emarginate; antennal insertions distant and improminent; antennæ shorter than body in both sexes; prothorax broader at base than at apex, sides feebly swollen; elytra entire, nondehiscent, separately rounded apically; hind tibiæ asperate-punctate.

Genotype.—Kunbir telephoroides Lameere.

Range.—Central India; Hainan Island.

KUNBIR PALLIDIPENNIS Gressitt sp. nov. Plate 2, fig. 4.

Female.—Pale testaceous, slightly more reddish on head, prothorax, and anterior femora; antennæ, clavate portion of middle and hind femora, and tibiæ and tarsi, black; somewhat glossy, particularly on center of metasternum and first abdominal segment; elytra and sides of thorax clothed with fine pale pubescence, legs and inner sides of second to fifth antennal segments with suberect hairs.

Head longer than broad, finely punctured; antennæ distantly inserted; frons broad, with a median groove meeting a much deeper, transverse groove at its apex; apical palpal segment long, narrow. Antennæ fairly slender, extending to apical third of elytra; scape arched and swollen apically; third and following segments subequal in length: fifth segment longest, tenth shortest. Prothorax as broad as long, considerably narrowed apically; disc with a median longitudinal and two lateral rounded swellings; sides with two weak swellings. Scutellum as broad as long, rounded behind. Elytra entire, parallel, separately rounded apically, finely and somewhat densely punctured in a moderately regular manner over entire surface. Femora moderately swollen, hind pair gradually so, reaching elytral apices; hind tibiæ short. feebly arched, asperate; hind tarsi with first segment longer than following two segments combined. Abdomen with first segment longer than remaining segments combined; second segment as long as third and fourth together; second and third segments concave and fringed apically.

Length 8.5 to 11 millimeters; breadth, 2 to 2.5.

Holotype, female, in the British Museum, 99, 315, Hainan Island, 1899, J. Whitehead; paratype, female, in the Lingman Natural History Museum, Hainan Island, 1932, Prof. W. E. Hoffmann (figure), paratype, female, author's collection, Tai-pints'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, altitude 325 meters, May 1 to 4, 1935, F. K. To.

This species differs from K. telephoroides Lameere, the only previously described species, in being less hairy, in having the hind femora less swollen, and in having the elytra lacking the apical black portion. It was recorded by Gahan as an undescribed species of a new genus allied to Merion ada.

Distribution.-Hainan Island.

72, 1-2

CALLICHROMINI

CALLICHROMITÆ VERÆ Thomson, Syst. Ceramb. (1864) 170, part. CALLICHROMIDES Lacordaire, Gen. Col. 9 (1869) 1. CALLICHROMINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 582. CALLICHROMINI Gahan, Fauna Brit. India Col. 1 (1906) 189; Liu, Lingnan Sci. Journ. 12 (1933) 484; Matsushita, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 249.

Head generally subacute anteriorly, transversely raised at vertex; clypeus large; eyes finely facetted, deeply emarginate; antennæ generally nearly as long as, to much longer than, body; prothorax generally swollen or tuberculate laterally; scutellum large, triangular; anterior coxal cavities subrounded, generally closed posteriorly; middle coxal cavities open exteriorly to epimera; tibiæ, and frequently also tarsi, laterally compressed; male with six visible abdominal segments.

Key to the Hainan genera of Callichromini.

Genus EMBRIK-STRANDIA Plavilstshikov

Embrik-Strandia PLAVILSTSHIKOV, Folia zool.-hydrobiol. 3 (1931) 278.

Head slightly produced below; mandibles forming a prominent angle; antennæ shorter than body in female, shorter than, or as long as, body in male, scape blunt apically, third segment nearly as long as fourth and fifth segments combined, apical segments angular in cross section and slightly produced ectoapically; prothorax rounded-tuberculate laterally, constricted at apex and base; scutellum triangular; elytra gradually narrowed, rounded apically; mesosternal intercoxal process broad, emarginate; hind femora not reaching apices of elytra in female, barely, or not, attaining them in male; first segment of hind tarsus a little longer than following two combined, somewhat compressed laterally.

Genotype.—Callichroma bimaculatum White.

Range.-China; Indo-China; Hainan; Formosa.

The following species was described as a Z cnopterus, but is congeneric with the type of *Embrik-Strandia*, which differs from *Zonopterus* in having the first and third antennal segments unspined ectoapically, the posterior femora longer, the first hind tarsal segment compressed and distinctly longer than the following two segments combined, and in other respects.

EMBRIK-STRANDIA UNIFASCIATA (Ritsema) comb. nov. Plate 1, fig. 11.

Zonopterus unifasciatus RITSEMA, Bull. Mus. Paris 2 (1897) 376, Hue, Annam.

Male.—Purplish black, elytra crossed by a broad, pale-yellow band from about end of first sixth to just behind middle; antennæ with apical seven segments and part of apex of fourth, ochraceous yellow; ventral surface and legs purplish. Body clothed with pubescence corresponding to ground color, except on abdomen, where it is somewhat silvery, that on pronotum fairly long and dense.

Frons densely punctured; clypeus more sparsely so; vertex fairly broad, feebly concave, grooved medially; antennæ barely longer than body, fifth and following segments tricarinate and slightly angulated ectoapically, third segment a little shorter than following two segments combined; prothorax broader than long, constricted apically and basally, bluntly tuberculate laterally, its surface rugulose, but largely hidden by pubescence; scutellum narrowly triangular, concave; elytra conjointly rounded apically, micropunctulate; metepisternum densely punctured; femora more grossly punctured; first hind tarsal segment one and one-half times as long as following two segments united.

Length, 18 millimeters; breadth, 5.3.

Female.—Antennæ not quite as long as body.

Length, 26 to 29 millimeters; breadth, 8.5.

Nine specimens, in the Lingnan Natural History Museum and in the author's collection, were taken at Ting-on, northeastern Hainan, April 21 and 22, 1932, and at Kachek, eastern Hainan, May 3 to 6, 1932, by Prof. W. E. Hoffmann; Nam-fung, westcentral Hainan, July 2, 1932, Tai-pin-ts'uen (Dwa-Bi), central Hainan, May 29 to 31, 1935, F. K. To; and Maan-fook-ts'uen, Hainan, July 4 to 19, 1929, Lingnan Univ. Fifth Hainan Exped. New to Hainan.

Distribution.-Indo-China (Annam); Hainan Island.

Genus POLYZONUS Castelnau

Polyzonus CASTELNAU, Hist. Nat. Col. 2 (1840) 438; LACORDAIRE, Gen. Col. 9 (1869) 21; GAHAN, Fauna Brit. India Col. 1 (1906) 213.

Slender; head produced anteriorly almost into a beak; antennæ about as long as body, thickened, but feebly toothed apically; third segment much longer than scape; prothorax briefly tuberculate on each side of middle; scutellum triangular, concave; elytra long, subparallel, rounded apically; posterior femora reaching to about elytral apices; first hind tarsal segment a little longer than following two segments combined.

Genotype.—Saperda fasciata Fabricius.

Range.—Oriental Region.

POLYZONUS PRASINUS (White).

Promeces prasinus WHITE, Cat. Col. Brit. Mus. 7 (1853) 170. Chelidonium polyzonoides THOMSON, Syst. Cer. (1865) 568. Polyzonus prasinus GAHAN, Fauna Brit. India Col. 1 (1906) 219.

72, 1-2

Female.—Body green with golden-green tinges, particularly on head, sides, and a precentral spot on disc, of prothorax, and on scutellum; elytra slightly tinged with bluish; antennæ and legs steel-blue with lavender tints, the former blackish violet distally. Elytra with purplish, and ventral surfaces with silvery, pubescence.

Head narrower than prothorax, much longer than broad, deeply vermiculate-punctate on clypeus and vertically ridged on frons; occiput grooved and rugose-punctate. Antennæ almost as long as body, thickened and somewhat silvery towards apices. Prothorax as long as broad, obtusely tuberculate, granulosepunctate on disc and vermiculate at sides. Elytra finely punctulate. Posterior femora not quite reaching to elytral apices; first hind tarsal segment a little longer than following two segments united.

Length, 25 millimeters; breadth, 4.2.

One specimen, British Museum 1911–288, was taken at Youboi, Hainan, June 4, 1904.

New to Hainan Island.

Distribution.-Southern India; Assam; Hainan.

Genus CHLORIDOLUM Thomson

Chloridolum THOMSON, Syst. Cer. (1864) 174; LACORDAIRE, Gen. Col. 9 (1869) 18; GAHAN, Fauna Brit. India Col. 1 (1906) 210.

Antennæ fully twice as long as body in male, slightly longer in female, slender, not strongly toothed externally; scape more or less acute ectoapically; prothorax sharply toothed laterally; scutellum triangular; elytra long, narrowed posteriorly; posterior femora reaching beyond elytral apices; posterior tibiæ compressed; first segment of posterior tarsi compressed, as long as remaining segments united.

Genotype.—Callichroma bivittatum White.

Range.—Oriental region, extended to North China, Japan and Australia.

CHLORIDOLUM LOOCHOOANUM HAINANICUM Gressitt subsp. nov. Plate 1, fig. 6.

Male.—Frosted green, shiny green on head, scutellum, ventral surfaces, parts of prothorax, extreme bases of elytra, and basal half of elytral suture; antennæ and legs purplish violet; scape bluish; anterior femora somewhat greenish; pronotal disc tinged with blue; antennal condyles, labrum, apical portion of clypeus, and apices of palpi reddish testaceous; eyes black. Ventral surface of body clothed with thin, silvery pubescence; undersides of basal antennal segments and inner sides of middle and hind tibiæ clothed with brief, black bristles.

Head no wider than base of prothorax, vermiculate-punctate on occiput, longitudinally carinate between upper eye lobes, longitudinally sculptured and punctured on frons, punctured on clypeus and genæ, longitudinally polycarinate below eyes and transversely so on gular region; vertex feebly concave; frons squarish, medially grooved; inferior eye lobes broader than deep. Antennæ one and three-fourths as long as body, first seven segments slightly thickened at apices; scape grossly punctured, three-fifths as long as third segment; fourth segment slightly shorter than, and fifth barely longer than, third; last segment longest. Prothorax as broad as long, broadly, but subacutely tuberculate laterally; surface in large part transversely vermiculose, middle of disc granulose, sides below lateral tubercles smooth. Scutellum rounded-concave and smooth. Elvtra gradually narrowed, finely subreticulate-punctate, vermiculate-punctate along suture. Ventral surface micropunctulate. Posterior tibiæ feebly sinuate. First segment of hind tarsus longer than following segments combined.

Length, 18 millimeters; breadth, 4.1.

Holotype, male, in the Lingman Natural History Museum, Naam-po, Hainan Island, May 28, 1932, F. K. To; two male paratypes in the British Museum and in the author's collection, You-boi, Hainan, June 4, 1904 (British Museum 1911–288).

Differs from C. loochooanum Gressitt (23, p. 163) in being more green and less blue, in having the frons more sculptured, the vertex more vermiculate, the antennæ relatively shorter, the prothorax less acutely tuberculate and more extensively vermiculate, the scutellum shorter and smoother, the elytra more sculptured along suture, and in other respects. Differs from C. loochooanum taiwanum Gressitt in having the prothorax greener and less completely vermiculated, the vertex less concave, the antennæ shorter, and in other characters.

Distribution.—Hainan Island.

Genus LEONTIUM Thomson

Leontium THOMSON, Syst. Cer. (1864) 175, 420; GAHAN, Fauna Brit. India Col. 1 (1906) 211.

Antennæ only slightly longer than body in both sexes; scape hardly grooved; fourth segment distinctly shorter than third; sixth to tenth segments briefly toothed ectoapically; prothorax longer than broad, finely tuberculate laterally; elytra subparallel; posterior femora straight and slender, exceeding abdomen.

Genotype.—Leontium viride Thomson.

Range.-Eastern Oriental Region; North China; Japan.

LEONTIUM NIGROSCUTELLATUM Gressitt sp. nov. Plate 1, fig. 10.

Female.—Elongate, slightly narrowed posteriorly, antennæ and legs fairly thick, clytra strongly rugulose basally. Shiny green, appendages bluish; head blue-green anteriorly and laterally, dull green on occiput; palpi blackish; antennæ purpleblue on scape, violet-blue on following segments, blackish apically; prothorax dull green above, bright blue-green at sides; scutellum greenish black; elytra bright green; ventral surfaces frosted green with fine silvery pubescence: legs with femora greenish basally and blue on remainder, tibiæ and tarsi violetblue, the latter blackish on last three segments.

Head but slightly prolonged anteriorly; with moderately fine punctures: occiput with a central impunctate area; superior interocular area with longitudinal grooves and ridges; vertex slightly concave; frons constricted at middle, grooved longitudinally at sides and transversely at apex. Antennæ somewhat thickened posteriorly, one and one-seventh as long as body; all segments but second and last slightly expanded externally at apices, sixth to tenth segments subacutely produced; scape heavily punctured, one-half as long as third; fourth segment shorter than fifth and sixth. Prothorax longer than broad at base, quite strongly tuberculate just behind middle of side, an obtuse swelling between anterior margin and tubercle; surface transversely striated near anterior and posterior margins, densely and irregularly vermiculated on disc. Scutellum longer than broad. rounded apically, broadly grooved longitudinally, smooth except Elytra grossly rugulose-punctate on basal third. at sides. densely and finely punctate on remainder; apices narrowed and obtusely angulate at suture, not reaching apex of abdomen. Legs with femora rather strongly thickened apically, second pair arched, third pair nearly straight; hind tibiæ fairly straight. broadened and compressed apically; hind tarsi with first segment longer than remaining segments combined.

Length, 17 to 18 millimeters; breadth, 3.2 to 3.6.

Holotype, female, in the Musée Heude, Shanghai, Shuiman, Hainan Island, April 17, 1936, G. Ros; paratopotype, female, Ros collection, same data. Differs from L. punctulatum Pic in being larger, in having the pronotum with transverse ridges and grooves anteriorly and basally, and the disc vermiculose instead of punctate, elytra very deeply impressed basally, prothorax and scutellum duller, and antennæ violaceous instead of cyaneous. Differs from L. viride Thoms. in its larger and heavier form, more abruptly swollen hind femora, vermiculose pronotal disc, and duller coloration. L. tenuipes Fairm. differs from the new form in having the occiput transversely sulcate, the pronotal disc striated longitudinally in middle and transversely at sides, the scutellum acute and rough, and the elytra finely rugulose.

Distribution.-Hainan Island.

Genus CHELIDONIUM Thomson

Chelidonium THOMSON, Syst. Cer. (1864) 175, 420; GAHAN, Fauna Brit. India Col. 1 (1906) 210.

Leontium LACORDAIRE, (nec Thomson), Gen. Col. 9 (1869) 19; PAS-COE, Trans. Ent. Soc. London (3) 3 (1869) 595.

Antennæ a little longer than body in male, subequal in body length to female, fifth to tenth segments angulate externally at apices; prothorax short, tuberculate laterally; elytra gradually narrowed and rounded apically; hind femera reaching or exceeding elytral apices; first hind tarsal segment longer than following two segments united. Generally frosted green or blue.

Genotype.—Cerambyx argentatum Dalman.

Range.—Oriental Region, north to eastern Siberia and Japan.

Key to the Hainan species of Chelidonium.

CHELIDONIUM ARGENTATUM (Dalman). Plate 1, fig. 9.

Cerambyx argentatum DALMAN in Schönherr, Syn. Ins. (1817) app. 151.

Chelidonium argentatum GAHAN, Fauna Brit. India Col. 1 (1906) 211; GRESSITT, Lingnan Sci. Journ. 18 (1939) 26.

Male—Frosted green; prothorax and top of head bluish; antennæ, tibiæ, and tarsi blackish purple or violet; ventral surfaces of body clothed with silvery pubescence. Moderately large, parallel, plane above; head attenuated anteriorly, mandibles long, frons impunctate in middle; remainder of head deeply punctured, except narrowly in middle of occiput; antennæ barely reaching beyond elytral apices, fifth to tenth segments sharply spined externally at apices, scape heavily punctured, one-half as long as third segment, fourth segment twothirds as long as third segment, slightly shorter than fifth and following segments. Prothorax as broad as long, subrectangular, bluntly tuberculate behind middle of each side, its surface reticulate-punctate and subtransversely vermiculate; scutellum acutely elongate-triangular, smooth; elytra long, nearly parallel, conjointly rounded apically, their surfaces finely vermiculatepunctate; femora weakly swollen; tibiæ strongly flattened; first hind tarsal segment shorter than remaining segments combined.

Length, 23.5 millimeters; breadth, 5.2.

Four specimens, in the Lingnan Natural History Museum and in the author's collection, were taken at Lung-hou and Lung-tong, 31 miles south of Ting-on, Hainan, April 21 and 22, 1932, by Prof. W. E. Hoffmann and O. K. Lau; 1 male was taken at "The Hummocks", northern Hainan, May 24, 1936, by G. Ros, and is in his collection.

New to Hainan.

Distribution.—South China; Hainan; Burma; Assam; southern India.

CHELIDONIUM GIBBICOLLE (White).

Callichroma gibbicolle WHITE, Cat. Col. Brit. Mus. 8 (1853) 160, "N. China".

Chelidonium gibbicolle GAHAN, Fauna Brit. India Col. 1 (1906) 213, fig. 80; GRESSITT, Lingnan Sci. Journ. 18 (1939) 26.

Male.—Dark green, head, prothorax, and scutellum somewhat shiny; elytra rather dull except near base and along suture; scape and anterior and middle femora greenish; following antennal segments and posterior femora greenish violet; apical portion of antennæ black; tibiæ and tarsi purplish violet; ventral surface of thorax golden-green, that of abdomen greenish brown, all clothed with thin, silvery-white pubescence.

Head finely punctured, partly rugulose; occiput smooth in middle. Antennæ one and one-fifth as long as body, subacutely spined; scape densely punctured, subangulate ectoapically, onehalf as long as third segment and three-fourths as long as fourth segment; fourth to tenth segments subequal in length. Prothorax broader than long, obtusely tuberculate laterally; dorsal surface almost entirely plicate in a transverse direction; disc

with a raised swelling on each side near base. Scutellum narrowly triangular, smooth and concave. Elytra finely vermiculate-punctulate. more coarsely so near suture and base. Fifth and sixth abdominal sternites moderately emarginate apically.

Length. 24 millimeters; breadth, 6.

A single male, in the Lingnan Natural History Museum, was collected on Hainan Island, April 28 and 29, 1932, by Prof. W. E. Hoffmann.

New to Hainan.

Distribution.—South China; Formosa; Hainan; Assam; Sylhet.

COMPSOCERINI

COMPSOCERITÆ Thomson, Syst. Cer. (1864) 260. COMPSOCERIDES Lacordaire, Gen. Col. 9 (1869) 30. ROSALINÆ J. Leconte, Smiths, Misc. Coll. (9) 265 (1873) 310. ROSALINI Gahan, Fauna Brit. India Col. 1 (1906) 175. COMPSOCERINI Aurivillius, Col. Cat. 39 (1912) 326.

Head projecting forward; antennal tubercles emarginate above; apical palpal segments slightly broadened, truncate, antennæ longer than body in male, often plumed or toothed; prothorax generally unarmed; scutellum short; elvtra long, parallel; anterior coxæ globular: middle coxal cavities open externally to epimera.

Genus ROSALIA Serville

Rosalia SERVILLE, Ann. Soc. ent. France 2 (1833) 561; LACORDAIRE, Gen. Col. 9 (1869) 33; LAMEERE, Ann. Soc. ent. Belg. 31 (1887) 171; GAHAN, Fauna Brit. India Col. 1 (1906) 176.

Frons swollen in middle; vertex raised, feebly concave; eyes finely facetted; antennæ long in male, third and fourth segments subequal, third to fifth segments thickened, and spined internally, at apices, frequently tufted; prothorax transverse, swollen laterally; elytra subparallel, obliquely rounded apically; femora swollen beyond middle, hind pair not reaching elytral apices; anterior coxal cavities broad and open behind; metepisterna strongly narrowed posteriorly.

Genotype.—Cerambyx alpinus Linnæus.

Range.—Palearctic, Oriental, and western Nearctic Regions.

Subgenus EURYBATUS Thomson

Eurybatus THOMSON, Classif, Cer. (1860) 250; LACORDAIRE, Gen. Col. 9 (1869) 32.

Pubescence clothing body largely vermilion, marked with spots or bands of black; antennæ generally with rather feeble tufts of hair; mandibles of male lacking dorsal tooth.

39937-----5

Subgenotype.—Lamia lateritia Hope. Range.—Oriental Region.

ROSALIA (EURYBATUS) DECEMPUNCTATA (Westwood).

Purpuricenus decempunctatus WESTWOOD, Cab. Orient. Ent. (1848) 59, pl. 29, fig. 2, Assam.

Eurybatus 10-punctatus GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 348, Hainan.

Rosalia decempunctata GAHAN, Fauna Brit. India Col. 1 (1906) 179.

Body beneath, except the prosternum, black; the prosternum red, with the intercoxal part and a triangular spot on each side black; head black, sometimes with two red spots above; pronotum and elvtra red, the first with four, or sometimes only three, and the latter with a variable number of black spots. Antennæ of male extend by their last three joints beyond the apex of the elytra; first joint sparsely punctate; third slightly longer than fourth; third to fifth each with a blunt spine almost at right angles from the apex, the spine on the third strongest; antennæ of female shorter than the body, joints third to fifth dilated, densely pubescent and subspinose at the apex. Prothorax globose at the sides in both sexes: the disc with a tubercle on each side in the female, without it in the male; marked with four black spots, two median and two lateral, the anterior median spot sometimes absent. Elytra each with from two to five black spots-two dorsally placed, one at the middle and the other midway between it and the base, one small lateral spot at about one-fifth from the base, one dorsal-lateral between the middle and apex; in addition to these there is sometimes a small black spot at the base close to the scutellum: the median dorsal spot is generally present, but any or all of the other spots are liable to disappear. Femora subclavately thickened below the middle, sparsely punctulate and more or less nitid. Intercoxal processes of pro- and meso-sterna narrow. Length, 20-35 millimeters.

GAHAN, 1906, description of Himalayan material.

Distribution.-Sikkim; Assam; Hainan; Borneo; Java.

CLYTINI

CLYTIDES Mulsant, Col. France Long. (1839) 70; Lacordaire, Gen. Col. 9 (1869) 57. CLYTITÆ Thomson, Classif. Cer. (1860) 214; Syst. Cer. (1864) 184. ANAGLYPTIDES Lacordaire, Gen. Col. 9 (1869) 84.

CLYTINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 597.

CLYTINI Gahan, Fauna Brit. India Col. 1 (1906) 239.

Head short, more or less vertical in front; antennæ generally shorter than body; prothorax globular or oval; elytra often slightly narrowed and truncate apically; hind legs generally long; anterior coxal cavities weakly angulate externally, open behind; middle coxal cavities open to epimera; tarsal claws divaricate.

Key to the Hainan genera of Clytini.

1.	Antennæ more or less distantly inserted on head, intervening space fairly even
	Antennæ rather closely inserted, space between insertions elevated near
	each side, concave in middle 3.
2.	Head carinate anteriorly Xylotrechus.
	Head not carinate anteriorly Perissus.
3.	First hind tarsal segment much longer than remaining segments com-
	bined
	First hind tarsal segment very little, or not, longer than remaining seg- ments combined
4.	Antennæ with third and fourth segments spined apically Demonax.
	Antennal segments not spined, some with small tufts of hairs apically.
	Sclethrus.
5.	Antennæ very slender, third segment longer than scape Rhaphuma. Antennæ not very slender, third segment no longer than scape.

Chlorophorus.

Genus XYLOTRECHUS Chevrolat

Xylotrechus CHEVROLAT, Ann. Soc. Ent. France (1860) 456; THOM-SON, Syst. Cer. (1864) 424; LACORDAIRE, Gen. Col. 9 (1869) 77; GAHAN, Fauna Brit. India Col. 1 (1906) 241.

Amauresthes CHEVROLAT, Mem. Soc. R. Sci. Liege 18 (1863) 327, part.

Moderately broad; slightly narrowed posteriorly. Frons vertical, bearing one or more longitudinal, or converging, carinæ along middle; antennæ distantly inserted, short; prothorax subglobose; scutellum short; elytra generally bisinuate-truncate apically; mesosternal intercoxal process broad, subemarginate; metepisternum broad; hind femora generally exceeding elytra in male; first hind tarsal segment at least twice as long as following two segments combined.

Genotype.—Xylotrechus sartorii Chevrolat.

Range.—Palæarctic, Oriental, Nearctic, Ethiopian, and northern Indo-Australian Regions.

Key to the Hainan species of Xylotrechus.

 Pubescence on dorsal surfaces greenish; elytra with a transverse band at extreme base and a prominent, free, oblique stripe on each side behind base _________ quadripes.
 Pubescence on dorsal surfaces grayish; elytra chestnut brown near scutellum, lacking distinct basal bands or longitudinally oblique stripes. basalis.

XYLOTRECHUS BASALIS Schwarzer.

Xylotrechus basalis SCHWARZER, Ent. Blätter 21 (1925) 25, Formosa; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 267, 268.

Male.-Elongate, subparallel. Body dark reddish brown, largely black on head, antennæ, and prothorax, and marked on elvtra with bands of biownish testaceous, forming background of most of pale pubescent markings of latter. Surfaces clothed with pale gray and grayish tawny pubescence, as follows: head, antennæ, and prothorax thinly clothed with gray except on intercarinal area of frons, on neck, and on three round pronotal spots forming an inverted triangle; scutellum clothed with pale buff; each elytron blackish, marked with gravish tawny as follows: (a) a transverse basal band, not reaching humerus; (b) a transverse, free, discal band at end of basal fifth; (c) a stripe commencing behind scutellum, extending along suture to middle. then broadened, and directed transversely and anteriorly to external margin; (d) a transverse band just before apical third. broadest at suture; and (e) an oblique apical area: ventral surfaces with gravish-white pubescence except on metasternum and bases of abdominal segments.

Head with a large Y-shaped carina on frons, and a smaller, inverted, Y-shaped carina on occiput. Antennæ reaching slightly beyond humeri, somewhat broadened and flattened apically. Prothorax granulose, broadest behind middle. Elytra transversely truncate apically, toothed externally.

Length, 13.6 millimeters; breadth, 3.7.

A single specimen, in the Lingnan Natural History Museum, was taken at Sam-kwong-ts'uen, Lam-wan-tung, Kiung-shan District, August 7 to 9, 1935, by F. K. To.

New to Hainan.

Distribution.—Formosa; Hainan.

XYLOTRECHUS MAGNICOLLIS Fairmaire.

Xylotrechus magnicollis FAIRMAIRE, Ann. Soc. Ent. Belg. 32 (1888) 34, China; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Nniv. 34 (1933) 371, Formosa. Female.—Body black; prothorax red above and at sides except narrowly along anterior border; elytra with three transverse, testaceous bands clothed with pale-yellow pubescence, first band along basal margins, quite narrow and not reaching humeri, connected with second band by a narrow band along each side of suture, second transverse behind and obtuse in front, third slightly obtuse before and behind at suture and broadened at external margins, continuing posteriorly almost to external angles; ventral surfaces largely clothed with creamy-yellow pubescence; posterior tibiæ slightly reddish brown.

Head with a pair of carinæ on frons which approach each other and become diffused below; antennæ about one-half as long as body, moderately slender, not thickened distally; prothorax large, nearly as long as broad, as wide as elytral bases, subtransversely corrugated on center, and punctured on periphery, of disc; elytra short, strongly narrowed and transversely truncate; posterior femora extending beyond elytral apices.

Length, 11 millimeters; breadth, 3.7.

A single female, in the Lingman Natural History Museum, was taken northwest of Nodoa, August 27, 1929, by the Lingman University Fifth Hainan Island Expedition.

New to Hainan.

Distribution.—Formosa; South China; Hainan.

XYLOTRECHUS NIGROSULPHUREUS Gressitt sp. nov. Plate 2, fig. 9.

Male.—Stout, subcylindrical, slightly narrowed posteriorly. Body black, somewhat reddish brown at apices of antennæ, on coxæ, basal portions of femora, and apical portions of abdominal segments. Surfaces in part clothed with sulphur-yellow pubescence of various intensities, and to a slight extent with white pubescence, as follows; head with sparse, oblique, deep sulphuryellow hairs, densest along each side of frons; antennæ with sparse, subrecumbent, yellowish to dirty-white hairs on first four segments, and with thin, silvery-gray pubescence on remainder; prothorax clothed with moderately dense. dark, sulphur-yellow pubescence, except along central portions of pronotum, and three small subglabrous spots on each side, two before middle and one near base, posteriolateral margin narrowly clothed with white; scutellum densely sulphur-yellow; each elytron clothed with dense sulphur-yellow as follows: (a) on base, near scutellum: (b) on sides of humerus and lateral declivity to end of first quarter; (c) entire suture and external margin, narrowly; (d) a stripe commencing immediately behind scutellum, extend-

72, 1–2

ing along suture to end of basal third, then curving outward and extending almost transversely to external margin; (e) a transverse band from suture to external margin, just before end of second third; and (f) apical fifth less densely clothed; a few scattered yellowish-white hairs on disc near base; ventral surfaces clothed with paler sulphur-yellow pubescence, whitish on thoracic pleura and coxæ; legs with scattered yellowish or whitish hairs.

Head obsoletely carinate and coarsely punctured on frons, rugulose on occiput. Antennæ slightly over one-half as long as body; scape punctulate, barely longer than third segment; fifth segment a little longer than fourth and subequal to third. Prothorax evenly rounded laterally, coarsely reticulate-punctate. Elytra slightly narrowed, truncate apically; surfaces subvermiculate-rugose on basal two-thirds, finely punctured and feebly vermiculose apically. Posterior femora exceeding elytral apices; first segment of posterior tarsus longer than remaining segments combined.

Holotype, length 14 millimeters; breadth, 4.

Paratype, length, 12 millimeters; breadth. 3.7.

Female.—Antennæ net quite one-half as long as body.

Length, 12.5 millimeters; breadth, 3.7.

Holotype, male, no. 52170 United States National Museum, Dwa-Bi (Tai-pin-ts'uen), near Loi Mother Mountain, central Hainan, altitude 350 meters, July 29, 1935, collected by the author; allotopotype, female, author's collection, July 26; two male paratypes, Lingnan Natural History Museum, Sam-kwongts'uen, Lam-wan-tung, Kiung-shan District, August 16 to 18, 1935, F. K. To.

Differs from *Clytus robusticollis* Pic, with which it is congeneric, in being more cylindrical, and in having the prothorax more extensively clothed with pubescence and less coarsely reticulate, the elytra less rounded apically and with broader and more sulphury bands, the ventral surfaces almost entirely yellow, and in other respects. Though the frons is not very distinctly carinate, this species is better placed here than in *Clytus*.

XYLOTRECHUS QUADRIPES Chevrolat.

Xylotrechus quadripes CHEVROLAT, Mem. Soc. R. Sci. Liege 18 (1863) 315 (63); GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 348, Hainan; Fauna Brit. India Col. 1 (1906) 245, fig. 90; MAXWELL-LEFROY, Indian Ins. Life (1909) 374, fig. 254.

Xylotrechus coffeophagus RICHTER, Proc. Agr.-Hort. Soc. Madras (1867).

Body black, tinged with reddish brown on antennæ, legs, and parts of elytral markings. Surfaces clothed with greenish and pale-yellow pubescence as follows: head and prothorax with thin greenish pubescence, paler on lower parts, pronotum with three black spots in a transverse row; scutellum with dense yellowishwhite pubescence, elytra with an orange spot at base of each, pubescence arranged on each elytron as follows: (a) a transverse band at base; followed by (b) a longitudinally oblique free stripe on disc; (c) a transverse band slightly before middle, which continues forward along suture to a point just behind scutellum; (d) a transversely oblique band behind middle, broadest at suture; and (e) the apex broadly pubescent.

Head hardly broader than anterior margin of prothorax, with a long, narrow, median carina and a shorter carina on each side of frons; occiput rugulose. Antennæ about one-half as long as body; third and fourth segments equal, barely as long as fifth segment. Prothorax broader than long, widest behind middle, finely rugose. Elytra gradually narrowed, sinuate-truncate apically.

Length, 16 millimeters; breadth, 4.6.

One specimen was taken near Fooi-iu, August 26, 1929, Lingnan Univ. Fifth Hainan Exp. A slightly atypical specimen of this species was recorded from Hainan by Gahan.

Distribution.—Burma; Siam; Tonkin; Hainan; Formosa; East Indies.

Genus PERISSUS Chevrolat

Perissus CHEVROLAT, Mem. Soc. R. Sci. Liege 18 (1863) 262 (10);
 LACORDAIRE, Gen. Col. 9 (1869) 79; PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 615; GAHAN, Fauna Brit. India Col. 1 (1906) 254.

Head broad, with antennal insertions widely separated, vertex plane, eyes narrowly emarginate; antennæ more than one-half as long as body in male, less than one-half as long as body in female, segments lacking spines and subequal in length; prothorax generally a little longer than broad, more or less swollen at sides; elytra subtruncate apically; legs long, particularly posterior pair; posterior tarsi about as long as respective tibiæ, first segment longer than remaining segments combined.

Genotype.—Perissus x-littera Chevrolat.

Range.—Oriental and southern Palæarctic Regions; Austro-Malayan Subregion.

Key to the Hainan species of Perissus.

kankauensis chungkonensis.

PERISSUS INDISTINCTUS Gressitt sp. nov.

Male.—Subcylindricai. Body brownish black, somewhat reddish brown on antennæ, tarsi, coxæ, and bases of femora. Surfaces in part clothed with grayish-white pubescence: thinly over most of head and prothorax, densely on upper sides of middle antennal segments, on scutellum, and on each elytron as follows: (a) a narrow basal band, rather indistinct on humerus; (b) a moderately narrow stripe commencing at suture just behind scutellum curving gradually outward to end of basal third on middle of disc, and slightly forward to external margin; (c) a subtransverse band a little behind middle, broadest at suture and curved slightly backward near external margin; and (d) an obliquely margined apical area; ventral surfaces rather densely clothed at sides of thorax and first two abdominal segments, thinly on remainder and on legs.

Head narrower than prothorax, plane and finely granulose in front. Antennæ three-fifths as long as body, broadened and flattened beyond fourth segment; scape longer than third segment; fourth segment equal to third and shorter than fifth. Prothorax barely longer than broad, evenly rounded at sides, coarsely granulose on disc. Elytra narrowed and obliquely truncate apically. Posterior femora slightly exceeding elytral apices.

Holotype, length 8.5 millimeters; breadth, 2.4.

Paratype, length, 6.7 millimeters; breadth, 1.75.

Holotype, male, in the Lingman Natural History Museum, Samkwong-ts'uen, Lam-wan-tung (Loi territory), Kiung-shan District, Hainan, August 7 to 9, 1935, F. K. To; paratype, in the author's collection, Nam-liu-tin, Lam-wan-tung, Kiung-shan District, August 3 and 4, 1935, F. K. To.

Differs from *P. kankauensis* Schwarzer in being slenderer, with the antennæ more flattened, the pronotum more sparsely granulose, the subbasal arcuate stripe of elytra broader and not
turned posteriorly near external margin, the elytral apices less transverse and less strongly toothed, and in other characters.

Distribution.-Hainan Island.

PERISSUS KANKAUENSIS CHUNGKONENSIS Gressitt subsp. nov. Plate 2, fig. 7.

Male.—Broad. abbreviated. slightly narrowed posteriorly. Body blackish brown, somewhat reddish brown on antennæ, ventral surfaces, tibiæ, tarsi, bases of femora, genæ, and sides of vertex and occiput. Surfaces in part clothed with gravish or white pubescence as follows: thinly grayish white on frons, antennæ, and scutellum, duller grayish on occiput and vertex, white on genæ and lower parts of prothorax; elytra marked each with whitish grav as follows: (a) a basal band joined to a humeral area; (b) a narrow stripe commencing behind basal band, extending along suture a short distance, curving outward to near middle of disc at end of basal two-fifths, there bending forward to just behind humeral mark; thence extending obliquely backward to margin; (c) a subtransverse band just behind middle, broad at suture, greatly narrowed and curved slightly backward in crossing disc to external margin; and (d) the apical sixth similarly pubescent; ventral surfaces moderately clothed with silvery-white pubescence, sparser along middle of sternites and lacking on mesepimeron and posterior end of metepisternum; legs with sparse, oblique, pale hairs.

Head broad, finely rugulose-punctate; frons convex. Antennæ nearly two-thirds as long as body; scape subequal in length to third, fourth, and fifth segments, respectively. Prothorax barely longer than broad, swollen behind middle at each side and on disc; surfaces finely granulose-punctate, coarsely granulose along median portion of disc. Elytra short, narrowly and obliquely truncate apically with external angles toothed. Posterior femora extending much beyond elytral apices; first hind tarsal segment nearly one and one-half times as long as remaining segments combined.

Holotype, length, 11.5 millimeters; breadth, 2.5.

Paratypes, length, 7.8 to 11 millimeters; breadth, 2.4 to 3.

Female.—Antennæ one-half as long as body, distinctly broadened and flattened apically.

Holotype, No. 52171 United States National Museum, between Fan-ta and Chung-kon-ts'uen, east of Nam-fung, westcentral Hainan Island, July 17, 1935, collected by the author; allotopotype, in the author's collection, same data; several paratopotypes, same data, collected on a felled tree. Ten paratypes, in the Lingnan Natural History Museum, Tai-pin-ts'uen (Dwa-Bi), July 23, Yin-ko-au, June 23 and 24, Nam-po-ts'uen, August 24 to 26, 1935, F. K. To.

Differs from *P. kankauensis* Schwarzer (69, p. 26) in being stouter, with the pronotum more finely granulose, the elytral fasciæ broader, the elytral apices more transversely truncate, and in other respects.

Distribution.—Hainan Island.

Genus CHLOROPHORUS Chevrolat

Chlorophorus CHEVROLAT, Mem. Soc. R. Sci. Liège 18 (1863) 290 (reprint, 38); AURIVILLIUS, Col. Cat. 39 (1912) 395.

Anthoboscus MULSANT, Col. France Long. ed. 2 (1863) 166.

Clytanthus THOMSON, Syst. Cer. (1864) 190; LACORDAIRE, Gen. Col. 9 (1869) 68.

Caloclytus GAHAN, Fauna Brit. India Col. 1 (1906) 260.

Head much narrower than prothorax; antennal supports close; frons narrow; antennæ about one-half as long as body, third segment no longer than scape, unspined; prothorax subglobular, generally longer than broad; elytra subparallel-sided; first hind tarsal segment rarely longer than following segments combined.

Genotype.—Clytus annularis Fabricius.

Range.—Palearctic, Oriental, Ethiopian, and Australian Regions.

Key to the Hainan species of Chlorophorus.

- 2. Pubescence largely yellowish, elytra with a basal lunular mark.

annularis.

Pubescence largely grayish, elytra with three basal white markings. macaumensis.

3. Basal black lunular mark of each elytron broadly open externally...... 4. Basal black lunular mark of each elytron nearly closed externally.

4. Pubescence dull sulphur yellow, postmedian dark fascia narrow. hainanicus.

CHLOROPHORUS ANNULARIS (Fabricius).

Callidium annulare FABRICIUS, Mant. Ins. 1 (1787) 156, East Indies. Clytus annularis FABRICIUS, Syst. Eleuth. 2 (1801) 352; CASTELNAU and GORY, Mon. Genre Clytus (1841) 102, pl. 19, fig. 121; WHITE, Cat. Col. Brit. Mus. 8 (1855) 283.

separatus.

Chlorophorus annularis CHEVROLAT, Mem. Soc. R. Sci. Liège 18 (1863) 290; GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 348, Hainan; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 280; GRESSITT, Lingnan Sci. Journ. 18 (1939) 43.
Caloclytus annularis GAHAN, Fauna Brit. India Col. 1 (1906) 261.
Clytus bidens WEBER, Obs. Entom. (1801) 90.

Body brown to blackish brown, largely covered with yellow pubescence, except for five sublongitudinal, anteriorly confluent, black spots on pronotum, and a basal lunule, a median transverse band, and a large roundish preapical spot on each elytron.

Head finely granulose-punctate, subcarinate on frons. Antennæ barely over one-half as long as body; scape as long as third segment; fourth and fifth segments equal, nearly as long as third. Prothorax globose, about as long as broad, finely vermiculose on disc. Elytra nearly parallel, emarginate-truncate apically, with external and internal angles finely toothed. Posterior femora reaching to elytral apices; first hind tarsal segment barely longer than remaining segments combined.

Length, 10 to 16 millimeters; breadth, 2.6 to 4.

One female, in the author's collection, taken at Ta-hian, near Five Finger Mountains, altitude 600 meters, June 10, 1 male, at Ta-han, near Red Mist Mountain, altitude 750 meters, June 21, 2 specimens at Vo-lau, west of Nodoa, altitude 150 meters, July 9, taken by the author in 1935. The Lingnan Natural History Museum has specimens taken at Nodoa, June 1929, Sam-ah-kong, May 22, and Taai-chau Island, June 2, 1932, W. E. Hoffmann and O. K. Lau; "Hainan Is." April 28 and 29, 1932, W. E. Hoffmann; Cheung-kon-ts'uen, April 4, and Tai-pin-ts'uen, May 5, 1935, F. K. To.

Distribution.—Northern India; Burma; Siam; Tonkin; China; Japan; Malay Archipelago.

CHLOROPHORUS HAINANICUS Gressitt sp. nov. Plate 2, fig. 13.

Moderately slender; parallel; cylindrical. Body black, almost entirely clothed with dense pubescence: golden green above, pale sulphur-yellow beneath, pale grayish on antennæ, grayish green on legs; prothorax with three vague, small, black markings: a median, transverse, bilobed spot just behind center of disc, and a round spot just before middle of each side; each elytron marked with black as follows: (a) an externally open arc commencing on humerus and extending around to outer portion of disc just before end of basal third; and crossing (b) a brief transverse band at end of basal quarter; (c) a transverse band just before middle, turning slightly forward at margin and suture, and (d) a narrower, less distinct band at beginning of apical quarter; ventral surfaces of body clothed with olive-green pubescence, sides of thoracic sterna and first two abdominal segments with lighter sulphury pubescence.

Head narrow, irregularly punctured; frons much wider below than above. Antennæ one-half as long as body, moderately slender. Prothorax oval-cylindrical, longer than broad, nearly as broad as elytral bases; disc microrugulose. Scutellum semicircular, convex. Elytra parallel, micropunctulate, obliquely truncate apically, strongly emarginate at sides.

Holotype, length, 9.5 millimeters; breadth, 2.6.

Paratypes, length, 10.5 to 13; breadth, 2.4 to 4.4.

Holotype, male, United States National Museum, Dwa-Bi (Tai-pin-ts'uen), central Hainan, July 25, 1935, collected by the author; three paratypes, in the Lingnan Natural History Museum and the author's collection, Hau-ying-ts'uen, July 31, 1932, and Yin-ko-au, near Loi Mother Mountain, June 23 and 24, 1935, collected by F. K. To.

Differs from C: annularis (F.) in having merely a small bilobed black spot on the pronotum, an externally open lunule on each humerus, a narrow transverse band replacing preapical spots, and in other respects.

CHLOROPHORUS MACAUMENSIS (Chevrolat). Plate 2, fig. 11.

Clytus macaumensis CHEVROLAT, Rev. Zool. (1845) 98, Macao.

- Anthoboscus macausnensis CHEVROLAT, Mem. Soc. R. Sci. Liège 18 (1863) 297.
- Anthoboscus macaonensis DUNNING, Trans. Ent. Soc. London (1868) 128.

Chlorophorus macaumensis AURIVILLIUS, Col. Cat. 39 (1912) 403; GRESSITT, Lingnan Sci. Journ. 18 (1939) 43.

Body black, slightly brownish on antennæ and parts of legs. Surfaces clothed with gray, white, or brown pubescence: prothorax with an inverted cordate spot on center of disc and a smaller round spot on each side before middle; scutellum white; elytra with three white marks on basal portion of each and a golden auburn band just beyond middle of apical half.

Head distinctly punctured on frons and genæ, finely carinate on occiput. Antennæ a little more than one-half as long as body; scape a little longer than third segment; fifth segment a little longer than fourth and shorter than third. Prothorax nearly as broad as elytral bases, longer than broad, finely subvermiculate. Elytra obliquely truncate apically. Posterior femora extending beyond elytral apices; first hind tarsal segment nearly as long as remaining segments combined.

Length, 7.5 to 13 millimeters; breadth, 2 to 3.25.

Specimens are in the Lingnan Natural History Museum from Nam-cha-chuen and Ngor-ma-chuen, July 8 to 10, 1929, Fifth Hainan Exp., Kachek, Hainan, May 3 to 6, and Hoihow, May 16, 1932, collected by F. K. To; Sam-ah-kong, southern Hainan, May 22 to 25, 1932, W. E. Hoffmann and O. K. Lau; Hau-yingts'uen, 6 miles southeast of Nodoa, July 31, 1932, F. K. To; and Tai-pin-ts'uen, May 10 and 11, Sam-ts'uen-kai-hui, July 1 to 3, 1935, F. K. To. Specimens were collected by the author at Nodoa, June 29, and Tai-pin-ts'uen (Dwa-Bi), July 25, 1935. A male was taken at "The Hummocks", northern Hainan, May 23, 1936, by G. Ros.

New to Hainan Island.

Distribution.—Macao; Hongkong; Hainan.

CHLOROPHORUS REDUCTUS Pic. Plate 2, fig. 12.

Chlorophorus reductus PIC, Mel. Exot. Ent. 37 (1922) 13, Tonkin; GRESSITT, Lingnan Sci. Journ. 18 (1939) 45.

Black; clothed with cinereous pubescence, whitish on sides of lower parts; elytra with a basal arcuate black mark on each, open exteriorly, a broad, median, transverse, black fascia, and apical third blackish brown, paler posteriorly.

Head small; frons constricted above. Antennæ two-thirds as long as body; third segment one and one-third as long as fourth. Prothorax slightly longer than broad, narrowed apically; disc granulose. Elytra subtransversely truncate apically, weakly dentate externally; surface densely and finely punctured. First hind tarsal segment as long as remaining segments united.

Length, 10.5 millimeters; breadth, 2.6.

A female was collected at Shuiman, Hainan, April 17, 1936, by G. Ros, and is in his collection; 2 males, in the Lingman Natural History Museum, were taken at Sam-kwong-ts'uen, Lamwan-tung, Kiung-shan District, August 6 to 11, and 1 female at Nam-liu-tin, July 27 and 28, 1935, by F. K. To.

New to Hainan.

These specimens differ from a North Kwangtung specimen in having the posterior dark band not distinctly margined behind. *Distribution.*—Tonkin; South China; Hainan.

77

CHLOROPHORUS SEPARATUS Gressitt sp. nov. Plate 2, fig. 10.

Moderately long and cylindrical; prothorax about as broad as elytra. Body black, clothed with greenish-gray pubescence on head and prothorax; except for a transverse black bar on center of pronotum and a small round black dot on each side of prothorax; elytra in part clothed with yellowish-gray pubescence, each marked with glabrous black areas as follows: (a) a nearly complete lunular mark on basal third, including humerus, slightly broken at posterior external angles; (b) a subtransverse band at about middle, broadest at lateral margin and projecting very slightly forward at suture; and (c) an incomplete band at beginning of apical quarter, broad at external margin and narrowed to a point close to suture; ventral surfaces clothed with pale yellowish pubescence.

Head about one-half as broad as prothorax; eyes feebly swollen. Antennæ one-half as long as body; third segment distinctly longer than fourth. Prothorax strongly swollen, nearly as broad as long, narrowed apically; surfaces closely granulosepunctate. Elytra with sinuate margins and obliquely truncate apices; surfaces micropunctulate. First hind tarsal segment longer than following two combined.

Length, 12 millimeters; breadth, 3.

Holotype, in the Lingman Natural History Museum, from Hainan Island, April 20, 1932, collected by Prof. W. E. Hoffmann.

Differs from *C. macaumensis* (Chevr.) in having the humeral black mark in the form of a lunule, isolated from the first transverse fascia, and with the pubescence uniform in color, the last elytral band incomplete, the prothorax distinctly narrowed apically, and in other respects.

Distribution.—Hainan Island.

Genus RHAPHUMA Pascoe

Rhaphuma PASCOE, Trans. Ent. Soc. London (2) 4 (1858) 240; LA-CORDAIRE, Gen. Col. 9 (1869) 72; GAHAN, Fauna Brit. India Col. 1 (1906) 271.

Raphuma THOMSON, Classif. Cer. (1860) 221.

Arcyphorus CHEVROLAT, Mem. Soc. R. Sci. Liège 18 (1863) 287.

Form slender; head with antennal insertions moderately separated; antennæ slender, unspined, about as long as body, with third segment distinctly longer than scape; prothorax longer than broad; elytra truncate; posterior femora extending beyond elytral apices; first hind tarsal segment longer than remaining segments combined. Genotype.—Rhaphuma placida Pascoe. Range.—Oriental and eastern Palæarctic Regions.

RHAPHUMA PIELI Gressitt sp. nov. Plate 2, fig. 8.

Dark to light brown, largely clothed above with golden, below with pale sulphur-yellow, pubescence; head nearly black, almost entirely clothed, clypeus red-brown, labrum and palpi testaceous: antennæ pale ochraceous, duller apically; prothorax dull reddish brown, densely clothed above except for a pair of subparallel, longitudinal, ()-shaped stripes on the disc extending from basal fifth to apical eighth, and two subtriangular spots on each side. one spot centered just before middle, the other spot between it and base: scutellum densely pubescent; elvtra chocolate-brown except for reddish-brown base, golden-pubescent except for external margin, a longitudinal discal stripe extending from near base to just beyond first third where it commences to turn towards external margin, a transverse band at middle extending anteriorly onto external margin, and a postmedian longitudinal stripe similar to basal stripe, but broader and uniting apically with marginal stripe before apical eighth; ventral surface dark red-brown, pubescence very sparse on anterior portion of prosternum, middle of metasternum and pleuroventral parts of bases of abdominal segments; legs dull ochraceous brown, femora dark brown on swollen portions and pale basally.

Head narrower than prothorax, parallel beyond eyes; frons rectangular, longer than broad; genæ long; gula heavily punc-Antennæ fine, five-sixths as long as body; third segment tured. longer than scape; scape longer than fourth segment and shorter Prothorax one and one-third as long as broad, subthan fifth. cylindrical, slightly swollen above and at sides; brown area granulated; punctures noticeable through pubescence on base and sides. Scutellum bluntly triangular. Elvtra with external margins moderately concave; apices subobliquely truncate, with both angles minutely toothed; nude areas minutely punctate. Hind femora extending one-fifth their length beyond elytral apices; first segment of hind tarsi twice as long as following two segments united.

Length, 9 millimeters; breadth, 2.

Holotype, female, in the Musée Heude, from Nodoa, westcentral Hainan Island, March 26, 1936, Commander G. Ros.

Differs from R. maculata Schwarzer of India in having the head and prothorax narrower, the elytra shorter, the first segment of hind tarsus longer, and the pronotal and elytral mark-

72, 1-2

ings much narrower and elongate. Named in honour of R. P. O. Piel, Director of the Musée Heude.

Distribution.—Hainan Island.

Genus DEMONAX Thomson

Demonax THOMSON, Classif. Cer. (1860) 226; CHEVROLAT, Mem. Soc. R. Sci. Liège 18 (1863) 268; GAHAN, Fauna Brit. India Col. 1 (1906) 280.

Grammographus CHEVROLAT, Mem. Soc. R. Sci. Liège 18 (1863) 285; LACORDAIRE, Gen. Col. 9 (1869) 71.

Elezira PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 637.

Head with antennæ not very distantly inserted and frons generally wider below than above; antennæ nearly as long as body in male, with third segment usually no longer than scape, and third and fourth segments, at least, spined endoapically; prothorax swollen; elytra truncate; legs long, with first hind tarsal segment distinctly longer than remaining segments combined.

Genotype.—Demonax nigrofasciatus Thomson. Range.—Oriental Region; Indo-Australian Subregion.

Key to the Hainan species of Demonax.

- - Third and fourth antennal segments with long apical spines; prothorax broadly and shallowly reticulate-punctate; elytra with a distinct preapical transverse black band...... matsushitai reticulicollis.

DEMONAX BIMACULICOLLIS (Schwarzer) comb. nov.

Chlorophorus bimaculicollis SCHWARZER, Ent. Blätter 21 (1925) 28 Formosa; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 278, 281.

Male.—Body blackish, somewhat brownish on posterior portions of antennæ, elytra and abdomen, and on coxæ and claw segments of tarsi. Surfaces clothed with pubescence as follows: pale gray on head and antennæ; tawny gray on prothorax with an indistinct black spot on each side of disc, gray on elytra, each with (a) a longitudinally oblique black stripe commencing at suture just behind scutellum and extending to midline of disc just beyond end of basal quarter; (b) a broad band, transversely suboblique behind and concave anteriorly, extending forward along suture, leaving a narrow, curved, gray stripe between (a) and (b); and (c) nearly apical third sparsely clothed with dull tawny-brown; silvery white on mesosternum, metepisternum, posterior border of metasternum, and first, and apical portion of second, abdominal segment, remainder of ventral surfaces with pale-gray pubescence.

Head much narrower than prothorax. Antennæ nearly as long as body; scape as long as third segment; third and fourth segments briefly spined internally. Prothorax longer than broad, evenly swollen, granulose-punctate. Elytra hardly narrowed, sinuate-truncate apically, feebly dentate at external angles.

Length, 7.5 millimeters; breadth, 1.8. Distribution.—Formosa; Hainan Island.

DEMONAX BREVESPINOSUS Gressitt sp. nov.

Male.-Large, somewhat narrowed posteriorly. Body black, slightly brownish on abdomen, legs, and fifth and following antennal segments. Surfaces largely clothed with gray or whitish pubescence, as follows: head and prothorax clothed with tawnygrav, latter with a transversely oval black spot on each side of disc and white pubescence along posteriolateral margins; antennæ and scutellum with whitish-gray pubescence: elytra with grayish pubescence, each marked with black bands, clothed with dull auburn as follows: (a) an irregular, somewhat U-shaped mark on basal third, more narrowed, and extending a little farther forward internally, reaching suture just behind scutellum; (b) a broad band just before middle, widest at external margin and attenuated anteriorly along suture a short distance, leaving between (a) and (b) a narrow, boomerang-shaped, gray fascia, narrowly interrupted at top of lateral declivity; and (c) a broad subtransverse band in posterior two-thirds of third quarter, somewhat constricted at suture; ventral surfaces with silvery-white pubescence, thinned and more grayish on middle of metasternum, last abdominal segment and bases of first four segments.

Head nearly as broad as prothorax, finely punctulate with a few coarser punctures on sides of occiput and behind eyes. Antennæ not quite as long as body; scape as long as third and fifth segments; third to fifth segments distinctly spined endo-

39937----6

apically; sixth and seventh segments very briefly so. Prothorax longer than broad, feebly swollen, subgranulose, with a slight depression on each side of disc. Elytra slightly narrowed posteriorly; apices obliquely truncate, toothed externally.

Length, 15.5 millimeters; breadth, 3.5.

Holotype, male, in the Lingnan Natural History Museum, from Tai-pin-ts'uen (Dwa-Bi), Lam-ka-heung, Loi-mai Lia, Kiungshan District, Hainan, May 5 to 7, 1935, F. K. To.

Differs from *D. bimaculicollis* (Schwarzer) in being larger, and in having a much more cylindrical and more rugose prothorax and longer and more regularly banded elytra.

Distribution.—Hainan Island.

DEMONAX MATSUSHITAI RETICULICOLLIS Gressitt subsp. nov. Plate 2, fig. 6.

Female.—Small; slender; subcylindrical. Body black; abdomen and legs brownish black: claws reddish brown. Surfaces largely clothed with whitish-gray or silvery-white pubescence as follows: head evenly clothed with whitish gray; antennæ thinly clothed with whitish gray basally and with denser, paler pubescence apically; prothorax clothed with whitish gray, paler at sides, and with a suboblique brownish-black spot on each side of disc just before middle; each elytron clothed with whitish-gray pubescence except for the following black marks which are clothed with thin, dark-brown pubescence: (a) a spot covering front and side of humerus; (b) a short, oblique, cuneiform line on disc from near suture almost to end of basal quarter; (c)a broad band in second quarter, subtransverse on anterior margin and oblique posteriorly, broadest at external margin; and (d) a broad, transverse band occupying fourth fifth of elytron: ventral surfaces clothed with silvery white, except on last three abdominal segments, densest on mes- and metepisterna, posterior border of metasternum, and sides of posterior parts of first two abdominal segments.

Head with a few shallow punctures on occiput and postgenæ. Antennæ about three-fourths as long as body; scape not quite as long as third segment; third segment a little longer than fourth, third and fourth segments each with a long endoapical spine, spine of third segment nearly, that of fourth segment more than, one-half as long as respective segments; fifth segment as long as third but thicker, slightly longer than sixth. Prothorax barely longer than broad, shallowly reticulate on entire notum and sides. Elytra narrow, subparallel; apices truncate, slightly toothed externally. Posterior femora reaching 72, 1-2 Gressitt: Longicorn Beetles of Hainan

elytral apices; first hind tarsal segment one and one-half as long as remaining segments combined.

Length, 8.5 millimeters; breadth, 1.8.

Holotype, female, loan deposit of the California Academy of Sciences, from Ta-han. near Red Mist Mountain, altitude 750 meters, June 24, 1935, collected by the author.

Differs from D. matsushitai Gressitt¹⁰ in having the prothorax much more broadly reticulate, the elytral apices more strongly toothed, the first hind tarsal segment relatively shorter, and in other characters.

Genus SCLETHRUS Newman

Sclethrus NEWMAN, Entomol. 1 (1842) 247; THOMSON, Syst. Cer. (1864) 426; LACORDAIRE, Gen. Col. 9 (1869) 80; PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 618.

Form elongate, often broadened posteriorly; head concave behind vertex, with a raised area on frons, eyes strongly swollen, subrounded and only slightly emarginate; antennæ slender, shorter than body, not very distantly inserted, with scape shorter than third segment; prothorax long, swollen above; elytra long, narrow basally; legs long and slender, posterior femora extending beyond elytral apices; first hind tarsal segment fully as long as remaining segments combined.

Genotype.—Ibidion amoenus Gory.

Range.—Philippines; Indo-China; Hainan.

SCLETHRUS STENOCYLINDRICUS Fairmaire. Plate 1, fig. 7.

Sclethrus stenocylindricus FAIRMAIRE, Ann. Soc. Ent. Belg. 39 (1895) 184, Tonkin.

Male.—Elongate, very slender, subcylindrical. Body black; antennæ and legs reddish castaneous, duller on tibiæ; scape and abdomen dark reddish brown; surfaces marked with areas of blue or silver-green scales as follows: head with a blue band on each side of occiput and a few scales bordering inferior lobes of eyes; pronotum with four small, round, greenish-blue spots, one at each side near middle, other two near base and slightly closer; scutellum with dense, greenish-silvery scales; each elytron with a small blue-green spot on disc at end of basal fifth segment, a fine line curving from external margin just behind middle and joining suture a little before middle, greenish blue on disc and greenish gold along suture, a subtransverse band of blue scales just behind beginning of apical quarter; ventral

¹⁰ Philip. Journ. Sci. 61 (1936) 97, pl. 1, fig. 10, Formosa.

83

surfaces with prosternum, median part of mesosternum, posterior part of mesepisternum, most of metepisternum and posterior borders of sides of first two abdominal segments silvery green; apical portion of last abdominal tergite bluish; antennæ with a few bluish scales at ends of third to fifth segments, small tufts of short, brown bristles endoapically on third and following segments.

Head sparsely punctured on sides of frons, densely rugosepunctate behind eyes and on occiput. Antennæ barely threefifths as long as body; third segment considerably longer than scape and fifth segment, fourth segment shorter than fifth. Prothorax nearly twice as long as broad, slightly swollen at middle, densely punctured posteriorly with an impunctate area on each side, more finely punctured and pubescent anteriorly; scutellum triangular. Elytra heavily punctured anteriorly, finely so posteriorly.

Length, 16.5 millimeters; breadth, 2.8.

Female.—Antennæ barely one-half as long as body.

Length, 16 millimeters; breadth, 3.

One male specimen, in the author's collection, was taken by the author at Dwa-Bi (Tai-pin-ts'uen), near Loi Mother Mountain, July 24, 1935, flying in the sunlight in an opening in the jungle; 1 female, in the Lingnan Natural History Museum, was taken at Tai-pin-ts'uen, May 21, 1935, by F. K. To; 1 male at Nam-liu-tin, July 27.

New to Hainan.

Distribution.--Tonkin; Hainan.

TILLOMORPHINI

TILLORMORPHIDES Lacordaire, Gen. Col. 9 (1869) 88. TILLOMORPHINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 640. EPIPEDOCERNI Gahan, Fauna Brit. India Col. 1 (1906) 305.

Eyes finely facetted, generally entire; antennæ rarely longer than body; prothorax constricted basally; anterior coxal cavities round, barely open behind; metepisternum narrow; legs short, particularly tarsi; tarsal claws weakly divergent; body dorsoventrally compressed.

Genus EPIPEDOCERA Chevrolat

Epipedocera CHEVROLAT, Mem. Soc. R. Sci. Liège 18 (1863) 339; LA-CORDAIRE, Gen. Col. 9 (1869) 93; PASCOE, Trans. Ent. Soc. London (3) 3 (1869) 640; GAHAN, Fauna Brit. India Col. 1 (1906) 305.

Head vertical in front; eyes small, entire. Antennæ about as long as body in male, a little over one-half as long in female; segments flattened and serrate apically; prothorax strongly swollen laterally, narrow basally; basal margin emarginate; elytra short, slightly constricted medially, broad apically, bearing an ivory band near middle, frequently bispinose at apices; mesosternal intercoxal process very broad; femora slightly swollen; tibiæ carinate; first segment of hind tarsus nearly as long as following two segments united.

Genotype.—Epipedocera zona Chevrolat. Range.—Oriental Region.

72, 1-2

EPIPEDOCERA HOFFMANNI Gressitt sp. nov. Plate 2, fig. 5.

Female.—Small; elytra short and subparallel; antennæ broad. Dull black, antennæ and legs slightly shiny, elytra with a narrow, transverse, slightly sinuous, ivory-white, raised line just before middle, this line not quite reaching margins or suture; posterior lateral margins of prothorax, scutellum, mesepisterna, and posterior portion of metasternum and metepisterna densely clothed with silvery-white pubescence; coxæ and pro- and mesosternal processes finely clothed therewith; abdomen dark reddish brown, very finely pubescent; remainder of body glabrous except for labrum and last three antennal segments, latter very thinly pubescent.

Head short, vertical in front; occiput declivitous; eyes entire, nearly round; frons wider than high, slightly broader above than at apex; vertex fairly wide, weakly concave; surface finely and densely punctured, a median smooth line on vertex and frons. Antennæ about three-fourths as long as body, flattened apically: segments from third to base of ninth broadly canaliculate above and below: sixth to last expanded, bluntly toothed externally at apices; last four segments nearly as broad as long; first eight segments shiny, last three dull; third segment barely longer than scape. Prothorax nearly as broad as long, wider at apex than at base, strongly protuberant and rounded at sides; broadly and shallowly reticulate-punctate, punctures small near apex and base, numbering about twenty-three in a median line from anterior to posterior margins, and about twenty-five from side to side at middle. Scutellum triangular. Elytra slightly narrowed before middle; apices broadly and conjointly rounded. bearing four short, sharp spines, one spine at sutural angle and another at middle of apex of each; surface coarse, unpolished.

85

clothed with small, deep punctures, more densely behind median ivory band, bearing numerous minute tubercles; abdomen densely and minutely punctulate; femora densely punctured; tibiæ polycarinate.

Length, 6 millimeters; breadth, 1.85.

Holotype, female, loan deposit, California Academy of Sciences, from Ta-hian, near Five Finger Mountains, southcentral Hainan, altitude 600 meters, June 11, 1935, collected by the author.

Differs from E. affinis Chevrolat, to which it runs in Gardner's key to Indian species,¹¹ in being much more opaque and less shiny, and in having the antennæ shorter and broader, the prothorax with much wider punctures and with dense silvery pubescence along posteriolateral margins, the elytra shorter and more finely and deeply punctured, the metasternum more, and the abdomen less, pubescent.

Distribution.—Hainan Island.

CLEOMENINI

CLEOMENIDES Lacordaire, Gen. Col. 9 (1869) 97. CLEOMENINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 645. CLEOMENINI Gahan, Fauna Brit. India Col. 1 (1906) 313; Liu, Lingnan Sci. Journ. 12 (1933) 474.

Head depressed, oblique; frons plane, rectangular; eyes lateral, finely facetted, emarginate; antennæ shorter or longer than body, with third segment distinctly longer than fourth; prothorax often constricted before and behind, rounded at middle of sides; elytra subparallel; anterior coxal cavities rounded, closed posteriorly; mesosternum with broad intercoxal process and externally closed acetabulæ; first abdominal segment long; femora pedunculate; tarsal claws widely divergent.

Genus DERE White

Dere WHITE, Cat. Col. Brit. Mus. 8 (1885) 248; THOMSON, Classif.
 Cer. (1860) 217; Syst. Cer. (1884) 422; LACORDAIRE, Gen. Col. 9 (1869) 100; GAHAN, Fauna Brit. India Col. 1 (1906) 315.

Head with antennal insertions somewhat raised; frons plane, squarish; upper eye lobes very small and narrow; antennæ shorter than body, third segment about as long as following two united, fourth segment shorter than fifth; apical segments expanded apically; prothorax a little longer than broad, rounded at sides; elytra flattened above, slightly broadened posteriorly,

¹¹ Indian Forest Records (12) 7 (1926) 204.

toothed apically; metepisternum with curved inner border; posterior femora not reaching elytral apices; first hind tarsal segment a little shorter than following two segments united.

Genotype.—Dere thoracica White.

Range.—Japan; China; Indo-China; Malacca; Borneo; India; Ceylon; Africa.

DERE MACILENTA Gressitt sp. nov.

Head, antennæ, scutellum, meso- and metasterna, abdomen, and legs black; prothorax reddish orange, anterior border blackish; elytra metallic blue-green; anterior coxæ reddish testaceous; middle coxæ partly brownish. Ventral surfaces of body largely clothed with silvery-white pubescence.

Head deeply punctured, more coarsely so on occiput; vertex moderately concave. Antennæ finely punctured, prothorax rugulose-punctate. Scutellum broadest at middle, acuminate apically. Elytra with dense puncturelike depressions opening externally, apex of each emarginate, with two acuminate spines, outer spine about twice as long as inner. Ventral surface densely, but shallowly, punctured; first abdominal segment as long as following two united. Anterior and middle femoral clubs smooth, posterior femoral clubs heavily punctured.

Length, 6.7 to 8.5 millimeters; breadth, 1.8 to 2.3.

Holotype, in the California Academy of Sciences, Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, altitude 325 meters, July 23, 1935, taken by the author; several paratypes, in the Lingnan Natural History Museum. United States National Museum, and the author's collection, same data, some taken by F. K. To.

Differs from *D. affinis* Gahan, of northern India, in being slenderer, in having the prothorax distinctly longer than broad, the pronotum black apically and pitchy basally and less densely rugulose, and the elytra green instead of blue. The apex of each elytron has the outer spine stouter and longer and the inner spine shorter than in *affinis*.

Distribution.—Hainan; Tonkin.

STENASPINI

STENASPIDES Lacordaire, Gen. Col. 9 (1869) 166. STENASPIDINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 553, 653. PURPURICENINI Gahan, Fauna Brit. India Col. 1 (1906) 183. STENASPINI Aurivillius, Col. Cat. 39 (1912) 457.

Eyes finely facetted, deeply emarginate; antennæ longer than body in male, shorter and apically thickened in female; prothorax tuberculate laterally; scutellum long, triangular; anterior coxæ globular, their cavities rounded externally and open posteriorly; middle coxal cavities open externally to epimera.

Genus PURPURICENUS Latreille

Purpuricenus LATREILLE, Regne Anim. ed. 2 5 (1829) 114; SERVILLE, Ann. Soc. Ent. France 2 (1833) 568; LACORDAIRE, Gen. Col. 9 (1869) 177; GAHAN, Fauna Brit. India Col. 1 (1906) 184.
Cyclodera WHITE, Stoke's Voy. App. 1 (1846) 510.
Philagathes LACORDAIRE, Gen. Col. 9 (1869) 176, part.

Head with prominent antennal supports; frons vertical; antennæ of female with apical segments angulate ectoapically; femora swollen; first hind tarsal segment shorter than following two segments combined; intercoxal process of mesosternum emarginate apically, tuberculate preapically.

Genotype.—Cerambyx desfontainei Fabr. Range.—All Regions except Neotropical.

PURPURICENUS MALACCENSIS (Lacordaire). Plate 1, fig. 8.

Philagathes malaccensis LACORDAIRE, Gen. Col. 9 (1869) 176, note 2, Malacca.

Purpuricenus fasciatus BROGNIART, Nouv. Archiv. Mus. Paris (3) 3 (1891) 241, pl. 10, fig. 5.

Purpuricenus malaccensis GAHAN, Fauna Brit. India Col. 1 (1906) 185.

Male.—Black, elytra with basal eighth and a slightly wider band just behind middle pale yellow, both bands sinuous-edged, humeri black anteriorly. Clypeus and labrum with some yellowbrown hairs; elytra black-pubescent behind second fascia; ventral surface dull silvery pubescent, including postgenæ; antennæ glabrous.

Head abbreviated anteriorly, vertical in front, narrower than prothorax; occiput grossly, though shallowly, punctured; vertex deeply grooved. Antennæ slightly more than two and one-half times as long as body; scape concave basally, heavily punctured, three-fifths as long as third segment; third to tenth segments subequal; last segment longer than elytra. Prothorax broader than long, bluntly tuberculate just behind middle of sides; very finely vermiculate-punctate anteriorly and laterally, grossly punctured basally, a very slight tubercle on each side of middle of disc. Scutellum triangular. Elytra parallel, rounded posteriorly, finely and densely punctured. Metathorax and abdomen micropunctulate. Hind femora exceeding elytral apices; first segment of hind tarsus as long as following two combined. Length, 21 millimeters; breadth, 6.8.

Female.—Head and mandibles smaller; antennæ just as long as body, fifth to tenth segments enlarged, angulately produced ectoapically; pronotum evenly granulose over entire surface.

Length, 18 millimeters; breadth, 6.

One male, in the Lingman Natural History Museum, was taken at Tai-pin-ts'uen, May 21, 1935, and 1 female, in the author's collection, at Nam-liu-tin, Lam-wan-tung, Kiung-shan District, July 27, 1935, by F. K. To.

New to Hainan.

Distribution.—Assam; Burma; Siam; Malacca; Sumatra; Java; Hainan.

LAMIINÆ

LAMIARÆ Latreille, Hist. Nat. Crust. et Ins. 11 (1804) 282. LAMIIDÆ White, Cat. Col. Brit. Mus 8 (1855) 335. LAMIITÆ Thomson, Classif. Cer. (1860) 1. LAMIIDES Lacordaire, Gen. Col. 9 (1869) 238. LAMIINÆ Leconte and Horn, Smiths. Misc. coll. (21) 507 (1883) 313; Aurivillius, Col. Cat. 73 (1922) 1.

Head vertical anteriorly; antennal insertions generally distant from mandibles and partly surrounded by eyes; apical palpal segments acute; neck generally broad; prothorax cylindrical and often tuberculate laterally; scutellum usually rounded behind; anterior coxæ more or less prominent, their acetabulæ generally angulate externally; anterior tibiæ obliquely grooved on inner surfaces.

This division has very frequently been considered as a family and probably warrants separation more than any other major group of the longicorns except the Disteniinæ.

Key to the Hainan tribes of Lamiinæ.

1. Tarsal claws simple, lacking teeth
Tarsal claws toothed or appendiculate basally
2. Antennal scape with a cicatrix at apex
Antennal scape lacking a true cicatrix at apex
3. Cicatrix of scape generally completely closed, occasionally feebly mar-
gined internally 4.
Cicatrix of scape incomplete, open internally 5.
4. Frons more or less rectangular MONOCHAMINI.
Frons strongly narrowed above AGNIINI.
5. Head touching coxæ in repose
Head not touching coxæ in repose BATOCERINI.
6. Middle tibiæ generally lacking a preapical groove MESOSINI.
Middle tibiæ generally possessing a preapical groove ANCYLONOTINI.

90

7.	Middle coxal cavities open externally to epimera
	Middle coxal cavities closed externally to epimera 18.
8.	Tarsal claws divergent, forming an angle of less than 90°
	Tarsal claws divaricate, forming an angle of about 180° 13.
9.	Middle tibiæ with a preapical oblique groove externally 10.
	Middle tibiæ generally lacking a preapical oblique groove NIPHONINI.
10.	Front of head more or less rectangular 11.
	Front of head trapeziform, broader below than above; antennæ with long hairs 12.
1 1 .	Anterior coxæ very prominent, produced posteriorly, conical or cylindri- cal
	Anterior coxæ not very prominent, projecting but slightly above level of intercoxal process
12.	Antennæ very slender, much longer than body; head moderately an- gulate
	Antennæ hardly longer than body; head strongly produced at vertex,
	frons forming an acute angle with top of head SPALACOPSINI.
13.	Middle tibiæ with a preapical oblique groove externally 14.
	Middle tibiæ lacking a preapical oblique groove 16.
14.	Eyes emarginate
	Eyes divided
15.	Scape club-shaped, granulose; elytra never carinate DORCASCHEMATINI.
	Scape slender, gradually thickened; elytra generally carinate laterally. GLENEINI.
10	Antennal scape slender or subcylindrical; head not touching coxæ in
10.	repose 17.
	Antennal scape club-shaped; head resting on coxæ in repose HECYRINI.
17.	Metepisternum narrow, subparallel-sided APODASYINI. Metepisternum triangular, very broad anteriorly; elytra sometimes ca-
	rinate laterally
10	Tarsal claws divaricate
10.	Tarsal claws divergent, forming angles of less than 90° PTERICOPTINI.
19.	Antennal scape slender, subcylindrical, simple; antennal insertions widely separated
	Antennal scape club-shaped, bearing a false granular cicatrix before apex: antennal insertions fairly close
20.	Anterior coxal cavities rounded ACANTHOCININI.
	Anterior coxal cavities angulate externally ESTOLINI.
21.	Eyes simply emarginate, not divided 22.
	Eyes completely divided TETRAOPINI.
22.	Elytra generally carinate laterally; middle three abdominal segments
	shorter than first and last
	Elytra rarely carinate along edge of lateral declivity; first four ab- dominal segments subequal in length

MONOCHAMINI

MONOHAMMIDES Lacordaire, Gen. Col. 9 (1869) 299. MONOCHAMINI Aurivillius, Col. Cat. 73 (1922) 73.

Gressitt: Longicorn Beetles of Hainan

Cicatrix of antennal scape distinctly enclosed by a raised line, at least externally; vertex generally concave and somewhat angulate between antennal supports; frons more or less rectangular; middle coxal cavities open externally to epimera; elytra longer than head and body combined; antennæ distinctly longer than body in male, often more than twice as long; prothorax usually tuberculate laterally.

The tribe contains over one hundred genera, most of which are Oriental. Nine genera are known to me from Hainan.

Key to the Hainan genera of Monochamini.

1. Mesosternal process neither tuberculate nor swollen	
Mesosternum tuberculate, or at least feebly swollen along middle 3.	
2. Cicatrix of first antennal segment completely enclosed Monochamus.	
Cicatrix of first antennal segment open internally Dihammus	
3. Inferior lobes of eyes vertical (deeper than wide)	
Inferior lobes of eyes horizontal (wider than deep)7	
4. Mesosternal process with a strong perpendicular process 5	
Mesosternal process with a horizontal keel below	
5. Third antennal segment with a prominent tuft of hair Aristobia	
Third antennal segment lacking a prominent tuft of hair Melanauster	
6. Antennal cicatrix hairy; elytra subtruncate apically Blepehæus	
Antennal cicatrix nearly glabrous, very small; elytra rounded apically	•
Hainanhammus	
110000000000000000000000000000000000000	•
	-
7. Third antennal segment fully twice as long as first; elytra subtruncate	,
7. Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	, ,
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	, 1
 7. Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	, 1
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	, 1
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	, 1
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	,
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	,
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	,
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	,
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	,
 Third antennal segment fully twice as long as first; elytra subtruncate spotted with chalky-white pubescence	,

Genus PSACOTHEA Gahan

Psacothea GAHAN, Ann. & Mag. Nat. Hist. (6) 2 (1888) 400.

Anterior coxal cavities slightly open behind; inferior lobes of eyes wider than deep; antennæ more than twice as long as body in male, nearly or fully twice as long in female; scape less than one-half as long as third segment, broad apically; prothorax as long as, or longer than, broad, very weakly, to moderately,

¹² This does not apply to *Psacothea* from North China.

72, 1-2

tuberculate laterally, vermiculate on disc; elytra briefly emarginate-truncate apically; form very slender; elytra spotted with chalky pubescence.

Genotype.—Monohammus hilaris Pascoe.

Range.—China; Japan; Ryu Kyu islands; Formosa; Hainan.

PSACOTHEA INARMATA Gressitt sp. nov. Plate 3, fig. 2.

Male.—Elongate, head and prothorax over one-half as long as elytra. Black, almost entirely clothed with fine gray pubescence, marked with areas of thick, chalky, pale-yellow pubescence as follows: each side of frons with a vertical stripe; genæ each with a horizontal stripe; top of head with three longitudinal stripes, one commencing between antennal tubercles, each of the other two from behind emargination of eyes, and continuing as a wider stripe for entire length of side of pronotum: each elvtron with five moderately large spots arranged in a weakly convex arc from middle of base to before apex, besides some that are nearly as large, along external margin and a number of small ones scattered over surface, mostly behind middle; genal stripe continued along lower side of thorax as far as base of metasternum; prosternum with a median ventral stripe on latter two-thirds; metathorax with small spots at base and apex; abdomen with two rows of rounded spots on each side; base of fourth and following antennal segments briefly pale pubescent.

Head moderately long, feebly punctured; frons carinate, narrowed at base of antennal insertions; vertex narrowly concave between antennal insertions. Antennæ more than two and onehalf times as long as body; third segment over twice as long as scape; fourth three-fifths as long as third; last segment a little longer than third. Prothorax longer than broad, narrower at apex than at base, slightly swollen at sides and practically intuberculate. Elytra narrowed, weakly bicostate, finely punctured, subseriately in part; narrowly emarginate at apices, Anterior femora as long as head and prothorax united; tarsi slender.

Length, 19 to 26 millimeters; breadth, 6 to 8.2.

Female.—Antennæ slightly more than twice as long as body; prothorax barely longer than broad, weakly tuberculate laterally; legs shorter than in male.

Length, 22 millimeters; breadth, 7.

Holotype, male, No. 53465 United States National Museum, Dwa-Bi (Tai-pin-ts'uen), central Hainan Island, altitude 350 meters, July 26, 1935, taken by the author; allotype, female, in the author's collection, Ta-han, central Hainan, altitude 750 meters, June 22, 1935, taken by the author; paratype, male, in the Lingnan Natural History Museum, Chung-mai, Hainan, August 18, 1932, F. K. To.

Distribution.—Hainan Island.

Genus EPEPEOTES Pascoe

Epepeotes PASCOE, Proc. Zool. Soc. London (1866) 249; Trans. Ent. Soc. London (3) 3 (1866) 300; LACORDAIRE, Gen. Col. 9 (1869) 301, 312.

Anterior coxal cavities closed posteriorly; first segment of anterior tarsus of male with an ectoapical spine; scape nearly one-half as long as third antennal segment; prothorax broader than long, strongly tuberculate laterally; anterior legs long, their tibiæ longitudinally grooved externally in male; elytra subtruncate apically.

Genotype.—Lamia lusca Fabricius.

Range.—India; Siam; Hainan; Malay Peninsula and Archipelago, including Philippine Islands and New Guinea.

EPEPEOTES TONKINENSIS (Aurivillius) comb. nov. Plate 3, fig. 1.

Macrochenus tonkinensis AURIVILLIUS, Archiv f. Zoologi (13) 9 (1920) 12.

Male.—Large, moderately stout; prothorax strongly tuberculate. Body black, largely clothed with thin, silvery-gray pubescence and marked with the following stripes and spots of dense pubescence, white below and creamy yellow above: head with lower and inner borders of eyes, a stripe along vertex, and a longitudinal stripe extending back from both upper and lower eye lobes on each side, white or creamy; pronotum with a creamy stripe on each side, continued from upper lateral stripes of head; each elytron with a short stripe at middle of base, constricted or broken in middle, and a number of irregularly placed spots of different sizes on posterior two-thirds; ventral surfaces with a broad white stripe on each side of thorax, continued from lower lateral stripes of head, and a white spot near lateral margin of each abdominal sternite; antennæ black, almost glabrous; legs clothed with gray.

Head nearly impunctate, rounded-concave between antennal supports. Antennæ slightly more than twice as long as body, tapering; scape strongly thickened apically, hærdly more than one-half as long as third segment; fourth segment two-thirds as long as third segment and slightly longer than fifth, last segment subequal to third. Prothorax broader than long, with a broad-based, subacute tubercle at each side; disc with only a few scattered, shallow punctures and some feeble corrugations across middle before center. Elytra strongly narrowed posteriorly, subobliquely truncate apically; surfaces rather closely punctured on basal two-thirds.

Length, 18 to 27 millimeters; breadth, 6 to 9.

Female.—Body more nearly parallel-sided; antennæ one and one-half as long as body, third and following segments with white pubescence on basal portions.

Length, 24 millimeters; breadth, 7.5.

One male, in the author's collection, Chung-kon-ts'uen, central Hainan Island, altitude 275 meters, July 19, 1935, taken by the author; 1 female, in the Lingnan Natural History Museum, a grove 1.5 miles south of Nodoa, Hainan, June 27, 1929, Lingnan Univ. Fifth Hainan Island Exped.; additional specimens were taken at Chung-kon-ts'uen, April 11 and 12, and at Tai-pints'uen, May 1 to 4, 1935, by F. K. To.

New to Hainan.

Distribution.—Tonkin; Hainan.

Genus PELARGODERUS Serville

Pelargoderus SERVILLE, Ann. Soc. Ent. France 6 (1835) 72; LACOR-DAIRE, Gen. Col. 9 (1869) 301, 312.
Paragnoma BLANCHARD, Voy. Pole Sud 4 (1857) 298.
Rhamses THOMSON, Archiv Ent. 1 (1857) 177.

Frons higher than wide, narrowed above middle; antennal insertions broad, narrowly separated; inferior lobes of eyes wider than deep; antennæ two or more times as long as body in male, one and one-half to two times as long in female; cicatrix entire; prothorax generally as long as broad, with small lateral tubercles; elytra granulose basally; mesosternal process tuberculate.

Internally multituberculate anterior femora are normally characteristic of the species of this genus, but in the species found on Hainan these are lacking.

Genotype.—Pelargoderus vittatus Serville.

Range.-Oriental Region; Indo-Australian Subregion.

PELARGODERUS APICALIS Gahan. Plate 3, fig. 7.

Pelargoderus apicalis GAHAN, Ann. & Mag. Nat. Hist. (5) 7 (1900) 348, Hainan Island. 72, 1-2

Male.—Fairly large, slender, feebly narrowed posteriorly. Body largely black; antennæ and legs dark reddish brown, apices of segments of former blackish; surfaces irregularly clothed with tawny-brown to black pubescence of various thicknesses, giving a complex pattern: head rather evenly clothed with pale, rusty pubescence, except along middle of occiput and frons and behind eyes; antennæ clothed with pale rusty on first three segments, except at apex of third, and very sparsely clothed beyond; prothorax with an incomplete, longitudinal, reddish-tawny stripe on each side of midline and another on each side above tubercle, intervening area irregularly pubescent; scutellum densely clothed with reddish tawny, except along middle; elytra with irregular, longitudinal, reddish-tawny stripes on basal quarter, and more distinct, paler stripes at beginning of apical third, apices with irregular subconfluent blotches, central portion irregularly marked with small, tawny spots and larger black spots; ventral surfaces and legs moderately clothed with tawny brown, rather thinly so along midventral line and middle of sides. Antennæ sparsely ciliate beneath.

Head not distinctly punctured; antennæ twice as long as body; prothorax subrugose above, with small lateral tubercles; elytra heavily punctured and subnodose basally; anterior tarsi broad, with flying lateral hairs.

Length, 20 to 27 millimeters; breadth, 6.7 to 8.5.

Three males, in the Lingnan Natural History Museum and in the author's collection: 1 at Nam-po-ts'uen, Ch'eng-mai District, Hainan, August 22, 1935, F. K. To; 1 at Ta-hau, near Vo-lau, western Hainan, July 7, and 1 at Dome Mountain (Sa-bo-leng, Sa-ko-lia), west of Nam-fung, July 13, 1935, collected by the author.

Distribution.—Hainan Island.

Genus MONOCHAMUS Guerin-Meneville

Monochamus GUERIN-MENEVILLE, Dict. Class. d'Hist. Nat. 9 (1826) 186; THOMSON, Classif. Cer. (1860) 97; PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 292.

Monohammus MULSANT, Col. France Long. (1839) 173; LACORDAIRE, Gen. Col. 9 (1869) 314.

Monohamus GUERIN-MENEVILLE, Icon. Regne Anim. Ins. (1844) 242. Monochammus SEIDL., Fauna Balt. (1875) 139.

Frons about as high as wide, emarginate laterally; antennal tubercles strongly raised, divergent; inferior lobes of eyes about as deep as, or slightly deeper than, wide; antennæ two to three times as long as body in male, one and one-half to two times as long or longer in female, lacking tufts or fringes; scape gradually thickened to apex, which bears a prominent and completely closed cicatrix; prothorax with sharp lateral tubercles, disc feebly swollen behind middle; elytra narrowed posteriorly, at least in male, generally punctured basally; mesosternal process nontuberculate.

Genotype.—Lamia sutor Fabricius. Range.—Palearctic, Nearctic, Oriental, and Ethiopian Regions.

Key to the Hainan species of Monochamus.

Body largely clothed with pale bluish-white pubescence, marked with oblique bands of glabrous black spots; body more than 25 millimeters long. *versteegi.*

MONOCHAMUS BIMACULATUS Gahan.

Monohammus bimaculatus GAHAN, Ann. & Mag. Nat. Hist. (6) 2 (1888) 260; ibid. (7) 5 (1900) 348, Hainan.

No description is given since the species is not represented in the Hainan material at hand, and Gahan's specimen might possibly have represented M. *filicornis* Gressitt, which is almost identical in appearance with b^{i} maculatus and replaces it to the east. Both are rather small species, bimaculatus being stout and dorsoventrally somewhat compressed, with thick antennæ, while *filicornis* is narrower and more cylindrical, with the antennæ much slenderer and longer. Both have a round velvety black spot behind the middle of each elytron, but bimaculatus is rust-brown and *filicornis* gray-brown, and the former is more coarsely punctured above.

Distribution.—Northern India; Burma; Siam; Hainan(?).

MONOCHAMUS VERSTEEGI Ritsema.

Monohammus versteegi RITSEMA, Notes Leyden Mus. 3 (1881) 155; Midden-Sumatra (4) 6 (1887) 133, pl. 3, fig. 4; GAHAN, Ann. Mus. Civ. Hist. Nat. Genova 34 (1894) 34; MAXWELL-LEFROY, Ind. Ins. Life (1909) 376, fig. 256.

Monochamus versteegi AURIVILLIUS, Col. Cat. 73 (1922) 96.

Male.—Large, elongate, narrowed and rounded posteriorly. Body black, clothed with smooth, pale, bluish-white pubescence, except for following glabrous black markings: head black only along four narrow sublongitudinal stripes on dorsal surface behind eyes; antennæ black for progressively greater proportions

96

of distal ends of third and following segments; prothorax with a shiny, elongate, median, diamond-shaped area and a smaller, elongate-oval area on each side of disc, and upper portions of lateral spines, black; elytra with about seven suboblique bands formed of isolated, squarish or oblong black spots, becoming smaller posteriorly. Pronotum with a few fine, erect, black hairs; elytra with short, oblique, black bristles.

Head nearly impunctate; vertex broadly concave; frons wider than high; antennæ two and two-thirds times as long as body; prothorax subacutely spined laterally, impunctate on median shiny area, a few foveate punctures forming an oblique row on each side behind middle; elytra punctured throughout, somewhat more deeply so on basal third.

Length, 27 to 31 millimeters; breadth, 9.5 to 11.

Female.—Subparallel; antennæ one and two-thirds as long as body.

Length, 32 to 34 millimeters; breadth, 11.

Three specimens, in the Lingman Natural History Museum and in the author's collection, were collected at Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, altitude 400 meters, 2 by F. K. To, May 10 and 11, 1935, and 1 by the author, July 20, 1935; 1 was taken by the author at Nodoa, June 11, 1935.

New to China.

Distribution.—Sumatra; Burma; Assam; Northern India; Hainan.

Genus DIHAMMUS Thomson

Dihammus THOMSON, Syst. Cer. (1864) 80, 381; PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 290.

Haplohammus BATES, Journ. Linn. Soc. London Zool. 18 (1884) 239.

Frons fully as wide as high, broader above than below; vertex strongly concave; inferior lobes of eyes about as wide as deep; antennæ two or three times as long as body in male, one and one-half to two times as long in female; scape short, conicocylindrical, with a large, internally open cicatrix at apex; prothorax transverse, strongly tuberculate laterally, only slightly irregular on disc, transversely grooved near apex and base; scutellum short and rounded; elytra narrowed and rounded apically; mesosternal process even, or feebly swollen. Body clothed with close pubescence.

Genotype.—Monochamus longicornis Thomson.

Range.—Oriental, Australian, and eastern Palæarctic Regions.

39937-----7

Key to the Hainan species of Dihammus.

Pubescence tawny golden-orange, silvery white along sides of thorax; frons nearly impunctate; over 26 millimeters long...... sericeomicans.

Pubescence dark golden brown, highly variable, silvery along sides of ely-

tra; frons irregularly punctured; less than 24 millimeters long.

speciosus.

EIHAMMUS SERICEOMICANS (Fairmaire).

Monochamus sericeomicans FAIRMAIRE, Ann. Soc. Ent. France (6) 9 (1889) 67.

Dihammus sericeomicans SCHWARZER, Entom. Blätter 21 (1925) 59.

Male.—Fairly large, elongate, subcylindrical, only slightly narrowed posteriorly. Body blackish brown, entirely clothed with close, velvety pubescence, golden orange-brown above, with varied markings, and tawny-golden and silvery-cream beneath: head and antennal scape clothed with light gray-brown basally and blackish brown apically, the former predominating on basal segments and the latter on apical segments; pronotum and elytra golden orange-brown, with lighter and darker areas determined by pubescence lying in different directions; scutellum, and pronotum on middle of base and behind each lateral tubercle, tawnywhite; ventral surfaces tawny-golden along middle of thoracic sternites and on most of abdomen, silvery cream along sides, on bases of femora, and on tibiæ and tarsi, remainders of femora golden-orange.

Head lacking distinct punctures except around upper portions of eyes and inner faces of antennal tubercles; antennæ twice as long as body; prothorax bluntly tuberculate laterally, finely asperate-punctate on somewhat irregularly swollen disc; scutellum broadly rounded; elytra finely but deeply punctured on basal third.

Length, 28 millimeters; breadth, 9.

Female.—Subparallel, rounded posteriorly; antennæ one and three-fifths as long as kody.

Length, 28 to 32 millimeters; breadth, 9 to 10.

A male was taken on Hainan Island in 1932 by Prof. W. E. Hoffmann; a female was collected at Naam-fung, July 25, and another female at Nai-suen, September 6, 1932, by F. K. To.

New to Hainan.

Distribution.-South China; Hainan Island.

DIHAMMUS SPECIOSUS (Gahan).

Haplohammus speciosus GAHAN, Ann. & Mag. Nat. Hist. (6) 1 (1888) 274, China and Hongkong.

Dihammus speciosus AURIVILLIUS, Col. Cat. 73 (1922) 99; GRESSITT, Lingnan Sci. Journ. 18 (1939) 54. *Male.*—Body dark reddish brown to blackish, entirely clothed with velvety pubescence of shades varying from dark reddish brown through golden-amber to silvery gray-green: head tawnybrown in front, golden above and at sides; antennæ gray-brown except for apices of third and following segments which are reddish brown; prothorax dark brown with pinkish-golden markings, according to angle of light; scutellum tawny; elytra dark brown, varying to pinkish golden on sutural halves of discs, grayish brown externally and silvery gray-green along intervening strip from humerus to apex of each; ventral surfaces and legs pale tawny-golden.

Head irregularly punctured; vertex broadly concave; antennæ two and three-fourths times as long as body, last segment as long as elytra; prothorax transverse, bluntly tuberculate laterally, disc slightly irregular with a few foveæ; scutellum short and rounded; elytra strongly punctured on basal half.

Length, 17.5 to 21 millimeters; breadth, 4.5 to 6.

One male, in the Lingnan Natural History Museum, was collected at Nam-po-hui, Lin-kao, Hainan, May 27 and 28, 1932, by F. K. To.

New to Hainan.

72, 1-2

Distribution.-South China; Hainan; Formosa.

Genus MELANAUSTER Thomson

 Melanauster THOMSON, Physis 2 (1868) 181; LACORDAIRE, Gen. Col.
 9 (1869) 301, 326; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 320, 331.

Frons subrectangular, fully as high as wide; vertex deeply concave between antennal insertions; inferior lobes of eyes deeper than wide; antennæ about one and one-half to one and threefourths times as long as body in male, and about one and onethird as long in female, lacking distinct tufts of hairs or internal fringes; antennal scape large, conicocylindrical, cicatrix large, not always distinctly margined; prothorax broad, strongly tuberculate laterally, somewhat swollen behind middle of disc; elytra broad, rounded posteriorly, often granulose basally; mesosternal process strongly tuberculate.

Genotype.—Cerambyx chinensis Förster. Range.—Eastern Asia.

Key to the Hainan species of Melanauster.

- - Antennæ with extreme apices and bases of segments clothed with bluishwhite pubescene; elytral bases with but few nodes; pubescent spots on elytra irregularly arranged, not in transverse bands.

pirouletii similis.

MELANAUSTER CHINENSIS (Förster).

Cerambyx farinosus HOUTTUYN, Natuurl. Hist. (1) 9 (1766) 536, pl. 75, fig. 2 (not of Linnæus); DONOVAN, Ins. China (1798) pl. 6.

Cerambyx chinensis FÖRSTER, Nov. Spec. Ins. (1771) 39, China.

Lamia punctator FABRICIUS, Gen. Ins. (1776) 230; WESTWOOD, in Donovan's Ins. China ed. 2 (1842) 12, pl. 6, fig. 3.

Cerambyx pulchricornis VOET, Cat. Col. 2 (1778) 22, pl. 20, fig. 95.

Cerambyx sinensis GMELIN in Linnæus, Syst. Nat. ed. 13 (1) 4 (1790) 1863.

Cerambyx punctator OLIVIER, Ent. (4) 67 (1795) 69, pl. 8, fig. 50.

Calloplophora macularia THOMSON, Syst. Cer. (1865) 553, North China.

Melanauster chinensis THOMSON, Physis 2 (1868) 182, note 1; HEYNE-TASCHENBERG, Exot. Käfer (1906) 241, pl. 37, fig. 9; AURIVILLIUS, Col. Cat. 73 (1922) 108; GRESSITT, Lingnan Sci. Journ. 18 (1939) 55.

Male.—Shiny black; clothed with areas of white or pale-bluish pubescence: head sparsely clothed with pale blue on genæ, middle of occiput, and edges of frons; antennæ thinly clothed with bluish white on undersides of scape, second segment, and bases of third and following segments, for successively greater portions towards apices; pronotum with a small spot on each side before middle; elytra with about five transverse bands of squarish or oblong spots of dense, white pubescence; ventral surfaces and legs clothed with thin, pale-bluish pubescence.

Head deeply concave between antennal insertions; frons and occiput with punctures of various sizes; antennæ one and threefourths times as long as body, third to tenth segments gradually shorter; prothorax transverse, acutely tuberculate laterally, smooth in middle, swollen behind center, asperate-punctate on each side of middle; elytra densely nodose at bases, sparsely punctured, punctures bearing fine hairs.

Length, 27 to 28 millimeters; breadth, 10 to 10.5.

Female.—Larger; elytra not narrowed posteriorly; antennæ one and one-fourth as long as body.

Length, 23 millimeters; breadth, 12.

Specimens were collected by the author at Ta-han, June 7, and Chung-kon, July 18, 1935; 1 was taken for the author at Hoihow in July, 1935. by Miss Betty Steiner. The Lingman Natural History Museum has specimens from Nodoa, June 26, 1929, Lin-fa-ling, July 21, 1929, Hoihow, April, 1932, W. E. Hoffmann; Kachek, May 3 to 6, Nodoa, June 4 to 20, 1932, Cheung-kon-ts'uen, April 1 to 3, Faan-na, July 12, Tai-pin-ts'uen, July 25, Hau-ying-ts'uen, August 1, Sam-kwong-ts'uen, August 12, and Nai-suen, September 10, 1935, F. K. To.

Distribution.—China; Hainan; Formosa; Ryu Kyu Islands; Japan; Korea.

MELANAUSTER MACROSPILUS Gahan.

Melanauster macrospilus GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 349, Hainan.

Male.—Rather long, narrowed posteriorly. Shiny blue-black, with a slight purplish tinge; body marked with areas of bluishwhite pubescence: on sides of frons, mandibles, and genæ, undersides of scape, and extreme bases and apices of following segments, with last three segments largely white, an incomplete longitudinal stripe on each side of pronotum, a spot on apical portion of scutellum, about nine fairly large, and two or three smaller, areas of dense bluish-white pubescence on each elytron, the largest areas being an oval area at apex, a transverse oblong area at end of basal third, and a rounded area at base; sides of thorax and abdomen with transverse areas of paler bluish, apices of femora and upper portions of tarsi densely clothed with bluish.

Head impressed along median line, deeply concave between antennal insertions; frons and occiput with two sizes of punctures; antennæ nearly one and three-fourths as long as body, third segment feebly arcuate; prothorax with lateral tubercles strong, not very acute, directed slightly backwards at apices, disc swollen behind center and foveate-punctate on each side; elytra entirely smooth, lacking granules or distinct punctures, glabrous on nonpubescent portions.

Length, 32 millimeters; breadth, 12.

One male, in the Lingnan Natural History Museum, collected at Tai-pin-ts'uen, May, 1935 by F. K. To; 1 male, taken by the author at Ta-hian, near foot of northern side of Five Finger Mountains, southcentral Hainan, altitude 600 meters, June 14, 1935.

Distribution.—Hainan Island.

MELANAUSTER PIROULETI SIMILIS Gahan comb. nov.

Melanauster similis GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 350, Hainan Island.

Female.—Moderately large, broad, slightly narrowed posteriorly. Shiny black, marked with white pubescence, which is thin and slightly tinged with grayish-blue on head, scape, ventral surfaces, and legs; sides of genæ more densely clothed, a lateral, triangular area on each side of metasternum glabrous; antennæ, beyond second segment, clothed with grayish white at extreme bases and apices of each segment, apical portions a little more extensively so than basal portions; prothorax with an incomplete, suboblique stripe on each side of disc from apex to base; scutellum with only a few pale adpressed hairs; elytra marked with irregularly arranged, rounded-oval spots of dense white pubescence, about thirteen large, and several small, spots on each elytron. Prothorax and elytra sparsely clothed with suberect, black bristles.

Head with punctures of various sizes on frons, but only scattered larger punctures on middle of occiput, antennæ nearly one and one-third as long as body; prothorax with lateral tubercles acute, directed slightly backwards, lateral portions of pronotal disc swollen and impunctate before middle, strongly asperatepunctate; scutellum broad, rounded behind; elytra sparsely nodose at base, with five scattered punctures on rest of surface.

Length, 34 millimeters; breadth, 12.5.

A single female was taken by the author at Ta-hian, near foot of Five Finger Mountains, Hainan, altitude 600 meters, June 19, 1935.

Distribution.—Hainan Island.

Though the arrangement of the pubescent spots of the elytra is rather different from that of typical M. *pirouletii* Fairmaire,¹³ of southern and western China, I am reducing *similis* to a subspecies of *pirouletii*, since in structure, general color, punctuation, elytral tuberculation, and bristle arrangement, there is almost perfect identity. There is some possibility that *similis* might be the female of *macrospilus*, but the markings of the latter are of a different nature, the elytral surfaces are smoother and more metallic, lacking basal nodes and black bristles; these differences are almost too great to be of a sexual character in this genus.

¹³ Ann. Soc. Ent. France (6) 9 (1889) 66, Koui-Tcheou.

102

Genus ARISTOBIA Thomson

Aristobia THOMSON, Physis 2 (1868) 178; LACORDAIRE, Gen. Col. 9 (1889) 301, 327.
Eunithera PASCOE, Ann. & Mag. Nat. Hist. (4) 15 (1875) 65.

Daniellera 1 ASCOE, Ann. & Mag. Nat. 11151. (4) 15 (1875) 65.

Frons higher than wide, broadened above; antennal insertions strongly divergent; inferior lobes of eyes deeper than wide; antennæ only slightly longer than body in both sexes, generally with third segment, and often some of following segments, with tufts of hairs or bristles at apices; cicatrix of antennal scape fairly well enclosed; prothorax large, transverse, with strong tubercles, disc convex, slightly irregular; elytra broad, subparallel, rounded-emarginate apically. Body largely pubescent.

Genotype.—Cerosterna hispida Saunders. Range.—Oriental Region.

Key to the Hainan species of Aristobia.

Dorsal surfaces bright orange, marked with black reticulations; third antennal segment with a prominent black tuft of hairs at apex.

ARISTOBIA HISPIDA (Saunders).

Cerosterna hispida SAUNDERS, Trans. Ent. Soc. London (2) 2 (1853) 112, pl. 4, fig. 6, North China.

Aristobia hispida THOMSON, Physis 2 (1868) 178; LIU, Lingnan Sci. Journ. 13 (1934) 641.

Female.—Body dark reddish brown; head, scape, prothorax, and legs clothed with reddish brown and dotted with black; elytra and ventral surfaces clothed with red-brown pubescence, interrupted by small spots consisting of areas of dense, black pubescence, and smaller spots of grayish-white hairs; antennæ rust-brown to buffy distally, with apices of segments blackish; dorsal surfaces with long, suberect, black hairs; ventral surfaces with shorter, more oblique, black hairs.

Head nearly impunctate; antennæ slightly longer than body, scape thick, slightly longer than third segment, fourth to tenth segments gradually diminishing in length; prothorax broader than long, acutely spined at each side, strongly swollen and nodose on disc; elytra broad, rounded apically and briefly truncate next to suture, their surfaces sparsely punctured; ventral surfaces hardly punctured.

Length, 29 millimeters; breadth, 11.3.

testudo.

A single female, in the Lingman Natural History Museum, was taken at Loh-ma-chuen, southwest of Nodoa, altitude 180 meters, August 10, 1929, by the Lingman University Fifth Hainan Island Expedition.

Distribution.—Eastern China; Formosa; Hainan; Tonkin.

ARISTOBIA TESTUDO (Voet).

Cerambyx testudo VOFT, Cat. Col. 2 (1778) 12, pl. 10, fig. 39, China. Lamia reticulator FABRICIUS, Spec. Ins. 1 (1781) 219.
Cerambyx reticulator DONOVAN, Ins. China (1798) pl. 6.
Aristobia reticulator LACORDAIRE, Gen. Col. 9 (1869) 327.
Aristobia testudo AURIVILLIUS, Col. Cat. 73 (1922) 110; GRESSITT, Lingnan Sci. Journ. 18 (1939) 57.

Female.—Large, rather broad, subcylindrical. Body black, largely clothed with thick, orange-yellow pubescence with black reticulations on dorsal surfaces: head with velvety-black pubescence except for some orange on occiput; antennæ bright orange except for scape, second segment, and bases and apices of third and fourth segments and hair tufts: a large tuft on apical twofifths of third segment, and a small tuft at apex of fourth segment; prothorax orange-yellow above, except for apices of tubercles and a pair of incomplete longitudinal stripes on disc; scutellum orange-yellow, elytra clothed with same, but with large, partially broken, reticulate markings of black pubescence; ventral surfaces black, clothed with grayish-yellow pubescence; legs black. Dorsal and ventral surfaces clothed with fine, erect hairs.

Head deep, with long mandibles and a convex, sparsely punctured frons; antennæ one and one-sixth as long as body; prothorax with subacute lateral tubercles, disc convex, asperatepunctate on an oblique ridge on each side behind middle; elytra narrowed in posterior third, briefly emarginate-punctate at apices.

Length, 33 to 34 millimeters; breadth, 13.

Five specimens, in the Lingman Natural History Museum, were taken in groves 1 to 2 miles south of Nodoa, Hainan, June 27 to July 13, 1929; by the Lingman Univ. Fifth Hainan Exped.; Naam-fung, June 27 and 28, 1932, O. K. Lau and F. K. To; and Faan-a, July 10 and 11, 1932, F. K. To; 1 female was taken by the author at Nodoa, May 31, 1935.

New to Hainan.

Distribution.-South China; Hainan Island.

These specimens differ slightly from the typical continental form, being larger and having less distinct reticulations, and may prove to be a subspecies.

Genus BLEPEPHÆUS Pascoe

Blepephæus PASCOE, Proc. Zool. Soc. London (1866) 249; Trans. Ent. Soc. London (3) 3 (1866) 291; LACORDAIRE, Gen. Col. 9 (1869) 339.

Head strongly concave between antennal insertions; frons broader above; inferior eye lobes deeper than wide; antennæ one and one-half to two times as long as body in male, a little longer than body in female; scape subcylindrical, completely cicatricized; prothorax transverse, strongly toothed laterally, uneven above; elytra moderately broad, subparallel, rounded or truncate apically, slightly swollen near base; anterior coxal cavities closed behind; mesosternal intercoxal process subtuber culate, obtusely carinate horizontally; middle tibiæ grooved externally.

Genotype.—Monohammus succinctor Chevrolat.

Range.-Southeasterr. continental Asia; Hainan; Formosa.

Key to the Hainan species of Blepephæus.

1.	Elytra truncate or emarginate apically	2.
	Elytra rounded apically	variegatus.
2.	Elytra subemarginate-truncate apically, with external	
	prothoracic tubercles slightly recurved	
	Elytral apices narrowly emarginate near suture, roun	ded externally;
	prothoracic tubercles short, not curved	succinctor.

BLEPEPHÆUS SUBCRUCIATUS (White). Plate 3, fig. 8.

Monohammus subcruciatus WHITE, Proc. Zool. Soc. London 26 (1858) 410, Hongkong.

Blephephæus subcruciatus AURIVILLIUS, Col. Cat. 73 (1922) 114; GRES-SITT, Lingnan Sci. Journ. 18 (1939) 59.

Male.—Dark brown, elytra reddish brown; entire surface densely clothed with pubescence: largely reddish fawn above, with a grayish-white Y-shaped figure on elytra; scutellum whitish; head, antennæ, ventral surfaces, and legs grayish fawn; antennæ slightly reddish beyond bases.

Moderately elongate, narrowed posteriorly. Head laterally compressed, eyes weakly convex, frons broader above, antennal supports fairly prominent, divergent; antennæ one and threefourths as long as body, scape subcylindrical, three-fourths as long as third segment, third to tenth segments gradually shorter; prothorax broader than long, strongly spined laterally, its disc with six weak swellings in two transverse rows, and some irregular, deep punctures; scutellum triangular; elytra long, narrowed, their apices subemarginate-truncate, outer angles slightly more produced, surfaces irregularly punctured; abdomen sparsely punctured. Length, 17 millimeters; breadth, 5.7.

Female.—Antennæ one and one-fourth as long as body; scutellum less triangular; elytra subparallel to apical third; last abdominal segment broadly truncated.

Length, 19.5 millimeters; breadth, 6.5.

One male specimen was collected at Sam-a, Southern Hainan, April 30, 1936, by G. Ros, and is in his collection; 1 female, in the author's collection, was taken by the author at Dwa-Bi (Taipin-ts'uen), central Hainan, July 23, 1935, at night on a cut branch of a tree.

Distribution.—Hongkong; Hainan.

BLEPEPHÆUS SUCCINCTOR (Chevrolat).

Monohammus succinctor CHEVROLAT, Rev. Zool. (2) 4 (1852) 417, Shanghai.

- Monohammus sublineatus WHITE, Proc. Zool. Soc. London 26 (1858) 410, Sylhet.
- Monohammus obfuscatus WHITE, tom. cit. 411, Hongkong.

Blepephæus succinctor PASCOE, Trans. Ent. Soc. London (3) 3 (1866)
 250; Trans. Ent. Soc. London (3) 3 (1866) 292; GRESSITT, Lingnan Sci. Journ. 18 (1939) 59.

Brownish black, densely clothed with grayish-brown pubescence on head, scape, and prothorax; third and following antennal segments gray basally and dull brown apically; pronotal disc nearly black along each side and grayish white along postmedian portion; elytra largely whitish gray, finely spotted or streaked with brown, each with a large blackish-brown spot near scutellum, and a variable, sublateral area of similar color just behind middle, a small dark spot on each humerus, and some fine dots at beginning of apical fifth.

Inferior eye lobes one and one-half times as deep as wide; antennæ one and one-half times as long as body in male, one and one-third as long in female, third segment hardly longer than scape; prothorax strongly tuberculate laterally; disc with a swelling at each side before middle and one on middle behind center; elytral apices rounded externally, slightly emarginate near suture.

Length, 19 to 25 millimeters; breadth, 7 to 9.

Several specimens, in the Lingman Natural History Museum and the author's collection, were taken at Nodoa, Tan District, Hainan, June 27, 1929; April, and June 4 to 10, 1932, by F. K. To.

New to Hainan Island.

Distribution.—South China; Hongkong; Formosa; Hainan; Tonkin; Assam; Tenasserim; India; Siam; Malacca.

106

BLEPEPHÆUS VARIEGATUS Gressitt sp. nov.

Male.—Dark reddish brown to blackish brown; almost entirely clothed with pubescence as follows: head, antennæ, ventral surfaces, and legs evenly clothed with grayish-tawny pubescence; prothorax similarly clothed, with three lighter, narrow, longitudinal stripes, one median, the other two placed above lateral tubercles; scutellum tawny; elytra brown, varied with grayish white, brown areas consisting of an irregular basal triangle, a broad V at middle and some irregular, subconfluent spots on apical third, the remainder consisting of a broad, subbasal V, an irregular spot at each side behind middle, and some irregular spots on apical third, confluent along suture.

Head short, narrowly concave between antennal tubercles, longitudinally grooved, nearly impunctate: from parallel-sided to bases of antennal tubercles, higher than wide, feebly convex; eyes deeply emarginate, inferior lobes one and one-half times as deep as wide, extending two-thirds distance from antennal insertions to bases of mandibles. Antennæ two and two-thirds times as long as body, gradually attenuated beyond scape; scape subcylindrical, widely cicatricized, three-fifths as long as third segment: fourth to seventh segments subequal, each three-fourths as long as third: seventh segment nearly as long as following two united. Prothorax a little broader than long, subacutely tuberculate laterally; disc with two swellings on each side and one on middle behind center, several large, but low, glabrous granules behind middle. Scutellum rounded behind. Elytra a little more than twice as long as broad, narrowed and obtusely rounded apically; surface subseriately punctured, punctures subasperate basally, fine and sparse apically. Ventral surfaces micropunctulate; first hind tarsal segment nearly as long as following two segments united.

Length, 17.5 millimeters; breadth, 5.7.

Holotype, male, in the Lingnan Natural History Museum, Taipin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, altitude 400 meters, July 24, 1935, by F. K. To.

Similar to *B. subcruciatus* (White), but with the frons narrower, the vertex more acutely concave between antennal tubercles, the scape relatively shorter, the seventh antennal segment nearly twice as long as the eighth, the prothorax with the disc less swollen and the lateral tubercles not curved, the elytra apically rounded instead of truncate, and the pattern consisting of a brown V, edged with gray at middle, instead of a gray-brown X. *Distribution.*—Hainan Island.

Genus HAINANHAMMUS Gressitt novum

Head about as wide as base of prothorax; frons convex, higher than wide, broader above than below; antennal supports large, prominent, divergent; vertex obtusely but rather deeply concave; eyes subfinely facetted, emarginate, with inferior lobes nearly twice as deep as wide; antennæ about twice as long as body (male); scape subcylindrical, nearly as long as third segment, narrowly and indistinctly cicatricized distally; prothorax subtransverse, tuberculate laterally; elytra narrowed, rounded posteriorly; mesosternal intercoxal process tuberculate-carinate; anterior tarsi not very broad, shorter than tibiæ.

Genotype.—Hainanhammus griseopubens Gressitt sp. nov. Range.—Hainan Island.

This genus differs from *Blepephxus* in being shorter, with the antennal scape long and with a very small, glabrous cicatrix; it can be distinguished from *Melanauster* by the horizontal keel on the mesosternal process, the long, slender scape, and the small cicatrix.

HAINANHAMMUS GRISEOPUBENS Gressitt sp. nov. Plate 4, fig. 1.

Male.—Body dull reddish brown, blackish on scape, apical antennal segments, swollen portions of pronotum, elytral discs, and legs; surfaces clothed with thin, gray pubescence, very sparsely on antennæ, beyond scape, and irregularly on elytra; scutellum apically with pale tawny hairs; antennæ almost lacking erect hairs beneath.

Head almost impunctate, only a few small punctures above center of frons; mandibles short, strongly curved; frons convex, shallowly grooved along median line; vertex angularly concave; inferior eye lobes occupying three-fourths distance between antennal insertions and genal margins. Antennæ twice as long as body: scape hardly swollen, truncate and feebly cicatricized apically; subequal to third, fourth, and fifth segments, respectively; following segments decreasing slightly in length. Prothorax a little broader than long, a stout, posteriorly somewhat curved tubercle just behind middle of each side; disc swollen along midline at center, and on each side before middle sparsely and irregularly punctured. Scutellum short, rounded behind. Elvtra barely twice as long as head and prothorax combined, distinctly narrowed, separately rounded posteriorly; surfaces distinctly and irregularly punctured, punctures becoming very fine towards apices. Ventral surfaces not distinctly punctured. Posterior femora reaching to end of third abdominal segment. Tarsi nar-
row, first segment of hind pair as long as following two segments combined.

Length, 10.6 to 12 millimeters; breadth, 3.5 to 4.2.

Holotype, male, in the Lingnan Natural History Museum, Namcha-chuen, 5 kilometers west of Nodoa, westcentral Hainan Island, altitude 180 meters, July 6, 1929, Lingnan Univ. Fifth Hainan Exped.; paratype, male, in the author's collection, Dwa-Bi (Tai-pin-ts'uen), near Loi Mother Mountain, altitude 400 meters, July 28, 1935, taken by the author; paratype, male, in the United States National Museum, near Fooi-iu, northwest of Nodoa, August 20, 1929, Lingnan Univ. Fifth Hainan Exped.

Somewhat similar in appearance to a small species of *Melanauster*, but differing in lacking pubescent spots and in having the mesosternal process with a horizontal keel and the antennal scape slenderer and with a smaller cicatrix.

Distribution.—Hainan Island.

AGNIINI

AGNIITES Thomson, Syst. Cer. (1864) 83, 382. HYPSELOMINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1866) 227, part. AGNIIDES Lacordaire, Gen. Col. 9 (1869) 340. AGNIINI Aurivillius, Col. Cat. 73 (1922) 118.

Frons much higher than wide, narrowed above; eyes finely facetted; antennal supports subadjacent; antennæ long; scape slender, with a closed apical cicatrix; elytra several times as long as head and prothorax combined; middle coxal cavities open externally to epimera; middle tibiæ grooved externally; tarsal claws divaricate.

Genus PHARSALIA Thomson

Pharsalia THOMSON, Syst. Cer. (1864) 85, 384; PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 228, 248; LACORDAIRE, Gen. Col. 9 (1869) 342, 347.

Antennal supports vertical, nearly touching, acutely prominent internally; inferior eye lobes about as wide as deep; antennæ three to three and one-half times as long as body in male, about twice as long as body in female; prothorax broader than long, strongly tuberculate laterally; elytra long, rounded apically, tuberculate at base near scutellum; middle intercoxal process tuberculate anteriorly; posterior femora little more than one-half as long as abdomen.

Genotype.—Pharsalia malasiaca Thomson. Range.—Oriental Region. 109

72, 1–2

PHARSALIA FERRUGINEA Gahan.

Pharsalia ferruginea GAHAN, Journ. Fed. Malay States Mus. 1 (1906) 116, pl. 6, fig. 11, Selangor, Malacca; Siamese Malay States.

Female.—Elongate, subelliptical in dorsal outline. Body black, reddish brown along margins of abdominal segments and on tibiæ and tarsi, largely clothed with rusty brown, black, and yellowish-white pubescence: head rusty with three narrow black streaks on occiput; antennæ rusty to base of third segment, fourth and following segments thinly clothed with grayish at bases; prothorax with five dorsal stripes, and one stripe on lower part of each side, of rusty pubescence; scutellum rusty; elytra with a suturally interrupted, transverse, yellowish-white band just before middle, edged before and behind with black, bases and apices mottled and streaked with rusty; ventral surfaces clothed with paler ferrugineous, subglabrous along middle and sides of abdominal sternites; legs clothed with rusty brown.

Head narrowed in front; frons impunctate, finely carinate medially; vertex narrowly and acutely concave. Antennæ twice as long as body; scape slender, subcylindrical. Prothorax nearly twice as broad as long, acutely tuberculate laterally; disc uneven, with a small, low tubercle behind center. Elytra narrowed and rounded-truncate apically; bases rounded-tuberculate; surfaces subseriate-punctate.

Length, 18 millimeters; breadth, 6.8.

A single female, in the Lingman Natural History Museum, was taken at Sam-kwong-ts'uen, Lam-wan-tung, Kiung-shan District, August 13 and 14, 1935, by F. K. To.

New to Hainan Island.

Distribution.—Malacca; lower Siam; Hainan.

BATOCERINI

BATOCERIDES Lacordaire, Gen. Col. 9 (1869) 353. BATOCERA group Gahan, Ann. & Mag. Nat. Hist. (6) 1 (1888) 279. BATOCERINI Aurivillius, Col. Cat. 73 (1922) 123.

Cicatrix of antennal scape open; head not touching anterior coxæ in repose; eyes finely facetted; antennal tubercles low, widely divergent; prothorax strongly tuberculate laterally; mesosternal process variable, generally nontuberculate.

Key to the Hainan genera of Batocerini.

1940

110

Genus BATOCERA Castelnau

Batocera CASTELNAU, Hist. Nat. Col. 2 (1840) 470; THOMPSON, Syst. Cer. (1864) 74, 378; KRIESCHE, Archiv. f. Naturg. A 11 80 (1915) 111.

Key to the Hainan species of Batocera.

- - External angles of elytral apices rounded; each elytron with a number of irregularly placed tawny-orange spots, ground color reddish brown, with fulvous pilosity; occiput subrugulose... rufomaculata.
- 2. Antennal segments with strong, acuminate internal and apical teeth; each elytron with four large, rounded, white spots in a longitudinal row; prothorax narrower than elytra at humeral spines.

roylei orientalis.

Antennal segments with only a few, small, blunt or strongly oblique teeth on inner faces, except at apices of distal segments; major elytral spots irregular in size, second spot largest, with at least one accessory spot; prothorax as broad as elytra at humeral spines. *rubus*.

BATOCERA ROYLEI ORIENTALIS Kriesche.

Batocera roylei orientalis KRIESCHE, Archiv. Naturg. 11 A 80 (1915) 119, Tonkin.

Male.—Large, elongate, slightly narrowed posteriorly. Body black, clothed thinly above and densely beneath, with velvety gray-brown pubescence, except for following white markings: a wide subreniform spot on each side of middle of pronotal disc, almost entire surface of scutellum; four large, rounded spots in a row along middle cf each elytron; and a broad stripe along each side of body from behind eye to base of last antennal segment.

Antennæ one and one-half times as long as body, armed internally with many acute spines, these spines larger at apices of segments; prothorax with slender-tipped lateral spines; elytra densely nodose basally, punctures beyond base hardly visible to naked eyes.

Length, 51 millimeters; breadth, 17.5.

A single male, in the Lingnan Natural History Museum, was taken at Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, May 17 and 18, 1935, by F. K. To.

New to Hainan Island.

Distribution.—Tonkin; Hainan.

72, 1–2

BATOCERA RUBUS (Linnæus).

- Cerambyx rubus LINNÆUS, Syst. Nat. ed. 10 (1758) 390; ed. 12 (1767) 625.
- Lamia rubus FABRICIUS, Syst. Ent. (1775) 177; Syst. Eleuth. 2 (1801) 283.
- Cerambyx albofasciatus DE GEER, Mem. Ins. 5 (1775) 106, pl. 13, fig. 16.
- Lamia octomaculata FABRICIUS, Ent. Syst. (1) 2 (1792) 290.
- Batocera octomaculata PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 262.

Batocera rubus AURIVILLIUS, Col. Cat. 73 (1922) 126.

Male.—Moderately large, broad at humeri, distinctly narrowed posteriorly. Body brownish black; elytra and apical threefourths of antennæ dark reddish brown; body thinly clothed with a dull grayish-brown pilosity, and marked with areas of dense pale pubescence as follows: a pair of () shaped orange-yellow marks around center of pronotal disc, scutellum clothed with white, each elytron with three major white spots, second spot with some adjacent blotches, side of body with a broad stripe from behind eye to end of last abdominal segment.

Antennæ one and one-half times as long as body, briefly and sparsely tuberculate internally; prothorax short, sharply tuberculate; elytra coarsely nodose basally, distinctly punctured in middle portion, apices truncate, briefly dentate at angles.

Length, 38 millimeters; breadth, 13.7.

A male was taken by the writer at Kachek, eastern Hainan, altitude 25 meters, August 8, 1935. Specimens are in the Lingnan Natural History Museum from Cheung-kon ts'uen, April 1 to 3, 1935; Sam-kwong-ts'uen, August 12, 1935; Tai-pin-ts'uen, May and July, 1935; Nam-liu-tin, Kiung-shan District, August, and Nam-po-ts'uen, Chieng-mai District, September 1 to 3, 1935, F. K. To; and Nodoa, August 15, 1929, Lingnan Univ. Fifth Hainan Exped.

New to Hainan.

Distribution.—India; Assam; Peninsula of southeastern Asia; Sunda Islands; Philippines; South China; Hainan; Formosa; Korea.

BATOCERA RUFOMACULATA (De Geer).

Cerambyx rufomaculata DE GEER, Mem. Ins. 5 (1775) 107.

Cerambyx cruentata GMELIN, in Linnæus, Syst. Nat. ed. 13 (1) 4 (1790) 1863.

Cerambyx rubiginosa VOET, Cat. Col. 2 (1778) 14, pl. 13, fig. 53.

Cerambyx rubus SCHRÖTER, Abhandl. 1 (1776) 333, pl. 2, fig. 2; Do-NOVAN, Ins. China (1798) pl. 6, fig. 1. Batocera rubus THOMSON, Arcana Nat. (1859) 80. Batocera rufomaculata AURIVILLIUS, Col. Cat. 73 (1922) 127.

Male.—Large, broad-shouldered, narrowed posteriorly. Body brownish black, elytra, apical two-thirds of antennæ, and legs reddish brown; surfaces largely clothed with thin pile: graybrown on head, prothorax, and antennæ, very sparse on latter, buffy on elytra, pale tawny on ventral surfaces and legs; marked with areas of thick pubescence as follows: a crescent orange spot on each side of center of pronotum, scutellum entirely covered with creamy pubescence, each elytron marked with about five fairly distinct, rounded, pale-orange spots of decreasing size in a zig-zag arrangement on disc, besides a few irregular smaller spots, and a broad creamy stripe along each side of lower portions from side of neck to last abdominal segment, with a rounded projection on each side of metasternum.

Antennæ nearly one and one-half as long as body, coarsely rugulose on basal segments, and armed with many sharp spines internally; prothorax transverse, acutely spined laterally, not quite as broad as elytral bases, rugose at sides of pronotal disc; elytra coarsely nodose basally, indistinctly punctured in middle.

Length, 52 millimeters; breadth, 17.

Description based on a specimen from northern India.

One specimen, in the Musée Heude, considered referable to this species, was collected on Hainan in the spring of 1936 by Commander G. Ros; and 1 specimen, in the Lingman Natural History Museum, Tai-pin-ts'uen, July 1935, F. K. To.

New to Hainan.

Distribution.—India; Andamans; Ceylon; Cochin-China; Hainan; Tibet; Madagascar; Mauritius; Bourbon; East Africa.

Genus APRIONA Chevrolat

Apriona CHEVROLAT, Revue Zool. (2) 4 (1852) 414; PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 259, 272; LACORDAIRE, Gen. Col. 9 (1869) 354, 356.

Subcylindrical; eyes large; frons higher than wide; antennæ a little longer than body in male and a little shorter in female, neither wrinkled nor bearing spines; prothorax short, strongly spined, rugose; elytra nodose or asperate-punctate basally, narrowly emarginate-truncate apically; mesosternal process even.

39937-----8

Genotype.—Lamia germari Hope. Range.—Oriental Region; Philippines; Celebes.

Key to the Hainan species of Apriona.

APRIONA GERMARI (Hope).

Lamia Germari HOPE in Gray, Zool. Miscell. 1 (1831) 28, Silhet. Apriona rugicollis CHEVROLAT, Revue Zool. (2) 4 (1852) 418, Shanghai.

Apriona Germari STEBBING, Ins. affect. Forestry 1 (1903) 25, pl. 4, fig. 3c; GRESSITT, Lingnan Sci. Journ. 18 (1939) 61.

Black, largely clothed with greenish-brown pubescence; antennæ with bases of third and following segments clothed with dense grayish-white pubescence; pronotum with ridges, asperate punctures, and upper parts of lateral tubercles subglabrous; elytra with basal nodes shiny black, suture and external margins clothed with bluish-gray pubescence; legs with sparse, grayish-tawny pubescence.

Head broad, impressed with punctures of two sizes; frons constricted; vertex broadly concave; antennæ slightly longer than body, segments unarmed, cylindrical, finely punctulate; prothorax transversely corrugated, sharply spined; elytra even except for low glabrous nodes at bases, their apices narrowly and obliquely truncate and bidentate.

Length, 30 millimeters; breadth, 12.5.

Specimens are in the Lingnan Natural History Museum from Sam-kwong-ts'uen (Lam-wan-tung, Loi territory), August 7 to 9, 1932, F. K. To; Kachek, May 1932, Nodoa, June 27, 1929, Lingnan Univ. Fifth Hainan Exped.; and Nai-suen, September 1 to 10, 1932.

New to Hainan.

Distribution.—India; Burma; Indo-China; central and southern China; Hainan; Formosa; Ryu Kiu Islands; Japan.

APRIONA SWAINSONI (Hope).

Lamia swainsoni HOPE, Proc. Linn. Soc. London 1 (1840) 79, Assam. Apriona basicornis FAIRMAIRE, Ann. Soc. ent. Belg. 39 (1895) 185, Tonkin.

Apriona swainsoni AURIVILLIUS, Col. Cat. 73 (1922) 132.

Male.—Moderately large, elongate, hardly narrowed posteriorly. Body dark brown, head and prothorax nearly black, elytra and legs dark reddish brown, labrum red; surfaces clothed with pubescence of various colors and thicknesses: head and prothorax with sparse, grayish-tawny pubescence; antennæ with close, tawny pubescence to just beyond middle of fourth segment, and with dull golden-brown on remainder; scutellum and extreme bases of elytra with dense, tawny-orange pubescence; remainder of elytra with thin, close, grayish-brown to buffy, mixed with thicker, white, pubescence, the latter mainly concentrated in small irregular spots scattered over entire surface; ventral surfaces clothed with tawny-brown, marked on sides of thoracic and abdominal segments with white pubescence.

Head large, an arcuate groove across lower portion of frons, two sizes of punctures, some asperate punctures around upper lobes of eyes, and frons greatly constricted by eyes; antennæ one and one-sixth as long as body, segments subcylindrical, third and fourth segments distinctly swollen apically, following segments subangulate ectoapically; prothorax grossly vermiculaterugose, with two transverse ridges at both apex and base; elytra asperate-punctate basally, shallowly punctured on remainder, subtransversely truncate and bidentate apically.

Length, 32 to 33 millimeters; breadth, 10.5.

Female.—Antennæ not quite reaching to elytral apices; body very stout.

Length, 38 to 39 millimeters; breadth, 12.6 to 13.

Several specimens, in Lingnan Natural History Museum and in the author's collection, Lam-ko, Lin-kao District, May 23 to 25, Nam-fung, July 5 and 6, and Faan-na, 9 miles south of Nodoa, July 10 and 11, 1932, F. K. To; 1 female was taken for the author at Hoihow, July 1935, by Miss Betty Steiner; 1 male is in the British Museum, labelled "Hainan Island, Fry coll., 1905. 100".

New to Hainan Island.

Distribution.—Assam: Tonkin; Hainan.

MESOSINI

MESOSITÆ Thomson, Calssif. Cer. (1860) 35, part; Syst. Cer. (1864) 58, part.

MESOSINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1866), 7, 94, part. MESOSIDES Lacordaire, Gen. Col. 9 (1869) 367.

MESOSINI Aurivillius, Col. Cat. 73 (1922) 135.

Antennal scape with an open cicatrix; head capable of touching anterior coxæ in repose; antennæ ciliate beneath, rarely as The Philippine Journal of Science

much as twice as long as body; anterior coxal cavities angulate externally; middle coxal cavities open externally to epimera; middle tibiæ lacking a distinct external groove.

Key to the Hainan genera of Mesosini.

1. Eyes deeply emarginate 2.
Eyes divided into two lobes connected by a narrow strand 4.
2. Third and fourth antennal segments not very long, not bearing tufts
of hairs apically
Third and fourth antennal segments long, both bearing tufts of hairs
apically Cacia.
3. Antennæ slender, considerably longer than body in male; fourth seg-
ment very slightly longer than fifth segment; middle intercoxal process
tuberculate or at least vertical anteriorly Mesocacia.
Antennæ stout, very little longer than body in male; fourth segment
about as long as fifth and sixth segments combined; middle intercoxal
process rounded and gradually declivitous anteriorly Falsomesosella.
4. Sides of prothorax more or less rounded, bluntly swollen or nearly
straight
Sides of prothorax with a small but distinct tubercle before middle.
Contons

- 5. Vertex distinctly concave between antennal insertions; pronotum somewhat uneven; middle intercoxal process subtuberculate anteriorly. Mesosa.
 - Vertex horizontal between antennal insertions; pronotum smooth, evenly convex; middle intercoxal process broad and convex at anterior margin of vertical declivity, plane on ventral surface.... Chæromorpha.

Genus MESOSA Latreille

Mesosa LATREILLE in Cuvier, Regne Anim. Ins. ed. (2) 2 (1829) 124;
 SERVILLE, Ann. Soc. ent. France 4 (1835) 43; THOMSON, Syst. Cer. (1864) 370; LACORDAIRE, Gen. Col. 9 (1869) 369, 372.
 Aplocnemia STEPHENS, Brit. Ent. Mand. 4 (1873) 236.
 Haplocnemia GEMMINGER and HAROLD, Cat. Col. 10 (1873) 3038; REIT-

TER, Fauna Germ. 4 (1912) 62.

Vertex moderately concave between antennal insertions; frons squarish; eyes divided into two lobes connected by a fine thread, inferior lobe wider than deep; antennæ a little longer than body in male, about as long as body in female; prothorax a little broader than long, with low convexities on notal disc and sides; elytra subparallel; middle intercoxal process uneven, subtuberculate anteriorly.

Genotype.—Lamia curculionoides Fabricius. Range.—Palæarctic and Oriental Regions.

116

MESOSA MACULIFEMORATA Gressitt sp. nov. Plate 3, fig. 5.

Male.---Moderately large, subparallel, broadly rounded posteriorly. Body dark reddish brown to blackish brown, almost entirely clothed with varied patterns of grayish-white, lightbrown, and dark-brown pubescence, and subglabrous areas: head largely clothed with tawny-brown in front, spotted with dark brown, and spotted with whitish on genæ, behind eyes, and on occiput, a pair of longitudinal subglabrous dark-brown stripes on latter: antennæ irregularly clothed with tawny-gray on scape. basally tawny to whitish and apically brownish black, on following segments; prothorax clothed with grayish white and buff, finely clothed with dark brown and with a longitudinal, subglabrous stripe of same color on each side of notum, from apex to base: scutellum whitish along middle, glabrous at sides; elytra clothed with light brown with irregular areas of grayish white, the latter largely forming zig-zag transverse bands and narrower longitudinal stripes, besides three incomplete, strongly zig-zag, subglabrous bands, two subbasal spots, and numerous small dots, of dark chocolate-brown; ventral surfaces clothed with grayish white except for irregular areas and small spots on sides, and median portion of abdominal sternites dark brown; legs tawnywhite, irregularly spotted on femora, ringed subbasally and apically on tibiæ, with blackish brown. Body almost entirely clothed with sparse, erect hairs, blackish brown on dorsal surfaces of body and undersides of antennæ, tawny on ventral surfaces of body.

Head sparsely punctured, broadly concave between antennal insertions, inferior eye lobes reaching one-half distance from antennal bases to genal margins. Antennæ nearly one and onefourth as long as body; scape gradually thickened apically, nearly as long as third segment; third to sixth segments proportionately reduced in length. Prothorax moderately convex laterally; disc with a large swelling on each side of middle and a small swelling on midline near base; surface irregularly punctured. Scutellum short, truncate behind. Elytra conjointly rounded posteriorly; somewhat coarsely punctured basally, less so posteriorly; ventral surfaces shallowly punctured.

Holotype, length, 20 millimeters; breadth, 7.6.

Paratypes, length, 14.5 to 16.5 millimeters; breadth, 5.6 to 6.4. *Female.*—Antennæ barely as long as body, last abdominal sternite longer than two preceding, medially sulcate. Length, 16.5 to 20.5 millimeters; breadth, 7 to 8.

Holotype, male, in the Lingnan Natural History Museum, Taipin-ts'uen (Dwa-Bi), near Lai-mo-ling, Loi Mother Mountain, Kiung-shan District, central Hainan, May 1 to 4, 1935, F. K. To; allotype, female, Nos. 53456 and 53459 United States National Museum, Sam-ts'uen-kai-hui, southeast of Lai-mo-ling, Ting-an District, June 27 to 30, 1935, F. K. To; paratopotype male, in the author's collection, taken July 24, 1935, by the author; additional paratypes, in the Lingnan Natural History Museum, San-ts'uen-kai-hui, June 27 to 30, villages at foot of Lai-mo-ling, May 25, Sam-kwong-ts'uen, August 13, and Nam-liu-tin, July 13, 1935, F. K. To.

Differs from *M. pœcila* Bates in being darker, with more brown and black pubescence, and with erect body hairs much shorter. Possibly related to *M. nigrosparsa* Pic, of Indo-China. *Distribution.*—Hainan Islands.

Genus MESOCACIA Heller

Mesocacia Heller, Tijd. Ent. 69 (1926) 33.

Frons higher than wide, subrectangular, plane; vertex feebly concave; inferior eye lobes generally wider than deep; antennæ considerably longer than body in female; scape long, gradually thickened towards apex; third and following antennal segments decreasing gradually in length; prothorax about as long as broad, nontuberculate above; mesosternal process tuberculate.

Genotype.—Mesocacia assamensis Heller. Range.—Assam; Hainan Island.

Key to the Hainan species of Mesocacia.

rugicollis.

MESOCACIA ASSAMENSIS Heller. Plate 3, fig. 6; Plate 7, fig. 1.

Mesocacia assamensis Heller, Tijd. Ent. 69 (1926) 33, Assam.

Male.—Brownish black, partly dark reddish brown beneath; almost entirely clothed with close pubescence, largely tawny-

4

yellow mottled with darker shades: head with tawny-sulphuryellow along middle of anterior and dorsal surfaces, along each side below eyes, on sides of neck, and narrowly along each side of frons; antennæ thinly clothed with greenish yellow on inner side of scape and with grayish white on basal third or quarter of each of third and following antennal segments; prothorax tawny-yellow, with an irregular black stripe on each side of disc from apex to base, another, less distinct, gray-brown stripe on each side, internal to, and partly in contact with, the former; scutellum and elytra clothed with tawny-sulphur-yellow, the latter irregularly marked with dusky brown and velvety black spots, some of these forming a zig-zag band before, and another behind, middle; ventral surfaces tawny-sulphur, a small brown spot on middle of each metepisternum; legs greenish sulphur-yellow, banded with brownish black.

Head finely punctulate; inferior eye lobes wider than deep, occupying less than one-half space between antennal insertions and genal angles. Antennæ nearly two and one-half times as long as body, slender; scape nearly as long as third segment. Prothorax nearly as long as broad, narrowed anteriorly; disc slightly uneven, sparsely punctured. Elytra parallel, rounded apically; surfaces sparsely punctured. Mesosternal process feebly tuberculate.

Length, 14 to 15 millimeters; breadth, 5 to 5.3.

Female.—Pubescence more golden-tawny above and sulphuryellow beneath. Antennæ not quite twice as long as body.

Length, 14 millimeters; breadth, 5.2.

The Hainan material differs slightly from specimens from Assam, appearing to be somewhat differently marked, but it is mainly a difference in intensity of the coloration, the Hainan specimens being more distinctly marked. In structure they are identical.

One male, in the Lingman Natural History Museum, was taken at Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, July 23, 1935, by F. K. To; 1 female, in the author's collection, was taken at the same place by the author July 21; several were taken at Tai-tsing-lam-ts'uen, back of Loi Mother Mountain, June 7 to 10, and 1 at Sam-kwong-ts'uen, August 7 to 9, 1935, by F. K. To.

New to Hainan Island. Distribution.—Assam; Hainan.

72, 1–2

MESOCACIA PUNCTIFASCIATA Gressitt sp. nov. Plate 7, fig. 2.

Female.-Body dark brown, reddish brown on sides of abdominal sternites, blackish on antennæ, irregularly clothed with tawny and dirty-white pubescence: head with small patches of tawny pubescence on edges and middle of frons, borders of eyes, sides of neck, and middle of occiput; antennæ with thin, irregular, tawny pubescence on scape, and gravish pubescence on bases of third and following segments; prothorax thinly clothed with tawny pubescence, except for a number of subglabrous areas and dots, mainly surrounding center of notal disc; scutellum thinly clothed apically; elytra with a wide, irregularly margined, gravish-white band centered slightly before middle, marked with two brown dots on each side, bases dark brown with a few small tawny spots, apices dark brown mixed with golden-brown and marked with irregular tawny-white areas: ventral surfaces clothed with tawny-yellow pubescence with a few small dark-brown spots along side; legs blackish brown, banded with tawny or white on bases and middles of femora and tibiæ and on first two tarsal segments; a few erect bristles on inner sides of basal five antennal segments and on base of pronotum.

Head as broad as prothorax, slightly broader at middle of genæ than at eyes; frons higher than wide, lateral margins slightly zig-zag; vertex broadly concave; punctures sparse and fine on frons, large near genal angles. Antennæ nearly twice as long as body; scape gradually thickened to apex, about as long as third segment; following segments decreasing in length. Prothorax broader than long, slightly rounded at sides, swollen on each side of middle of disc, irregularly punctured behind center and on sides. Elytra slightly narrowed and rounded posteriorly, feebly swollen on each side of suture near base, closely subasperate-punctate basally, more sparsely and finely punctured posteriorly.

Length, 13.5 millimeters; breadth, 5.

Holotype, female, in the Lingnan Natural History Museum, Tai-pin-ts'uen, near Loi Mother Mountain, central Hainan, May 1935, F. K. To.

Differs from M. assamensis Heller in being broader, with the prothorax transverse, the elytra asperate basally, the dorsal surface largely darker, with a broad, pale, median band.

Distribution.—Hainan Island.

MESOCACIA RUGICOLLIS Gressitt sp. nov. Plate, 7, fig. 3.

Female.-Moderately large; elytra broad; antennæ stout. Body blackish brown to reddish brown, partly clothed with tawny-brown or pinkish pubescence; head with tawny pubescence on genæ, apical portion of frons, and sides of vertex and occiput: antennæ clothed with pinkish tawny on basal halves of third and following segments, apices clothed with black; prothorax brownish black, partly subglabrous, marked with spots of tawny-yellow on center and midbasal portion of notal disc. behind anterior margin and on sides; scutellum reddish, subglabrous; elytra black, reddish brown in part on scutellar half, largely covered with subrounded spots of tawny pubescence, intervening areas sparsely clothed with blackish; ventral surfaces brownish black. reddish brown on parts of metasternum, sides of abdominal sternites, and most of apical segments, clothed with pinkish pubescence on reddish areas, sparsely with grayish brown on darker parts; legs reddish to dark brown, clothed with tawny and pinkish marked with bands of dark brown. Body with only a few erect hairs; antennæ densely clothed with black bristles on inner sides of basal segments.

Head a little broader than prothorax, finely punctulate; frons fully as broad as deep, trapeziform, widest at bottom; genal angles very prominent; eyes deeply emarginate, inferior lobes distinctly transverse. Antennæ one and one-sixth as long as body; scape gradually thickened to apex, fully as long as third segment; third to sixth segments distinctly and regularly decreasing in length and thickness. Prothorax slightly broader than long, narrowed anteriorly, hardly swollen at sides; disc convex on each side of, and behind, center, bearing numerous transverse ridges. Scutellum short, rounded-triangular. Elvtra less than twice as long as head and prothorax combined, bluntly rounded posteriorly; disc deeply subasperate-punctate basally, less deeply so towards apices. Prosternal process with a tubercle on each side; mesosternal process strongly tuberculate anteriorly. Last abdominal sternite fully as long as three preceding sternites combined.

Length, 20.5 millimeters; breadth, 7.7.

Holotype, female, in the Lingnan Natural History Museum, Sam-kwong-ts'uen, near Lai-mo-ling, Loi Mother Mountain, central Hainan Island, August 16 to 18, 1935, F. K. To; paratopotype, female, in the author's collection, August 10 and 11. Differs from M. assamensis Heller in having the frons broad and trapeziform, the prothorax stout and transversely rugose, the antennæ barely longer than the body in the female, and in other respects. This species does not fit very well in this genus, and its placement here is only provisional.

Distribution.—Hainan Island.

Genus CACIA Newman

Cacia NEWMAN, Entomologist 1 (1842) 290; THOMSON, Syst. Cer. (1864) 370; PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 96, 106; LACORDAIRE, Gen. Col. 9 (1869) 369, 374.
Corethrophora BLANCHARD, Voy. Pole Sud Zool. 4 (1853) 301.

Ipocregyes PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 113, syn. nov.

Vertex distinctly concave between antennal insertions; frons higher than wide; eyes deeply emarginate, sometimes nearly divided, lobes hardly separated, inferior lobes about as deep as wide; antennæ considerably longer than body in male, slightly longer in female, third and fourth segments generally long and hairy; prothorax feebly rounded laterally, slightly irregular on disc; elytra parallel, rounded apically; middle intercoxal process subtuberculate, vertical anteriorly.

Genotype.—Cacia spinigera Newman.

Range.—Oriental Region; Indo-Australian Subregion.

I am synonymizing *Ipocregyes* with *Cacia*, because the differences attributed to the former break down and gradually blend into *Cacia* in certain species described since *Ipocregyes* was proposed. The elytral callosities appear to be no more than a specific character, as do the swollen, instead of tuberculate, mesosternal process and shorter antennæ, with every degree of intergradation exhibited in various species now known or still undescribed. I doubt that Kano's two Formosan species described as *Ipocregyes* belong here.

CACIA NIGROFASCIATA Gressitt sp. nov. Plate 7, fig. 5.

Female.—Small, parallel-sided, rounded posteriorly. Body reddish brown, dark brown, or blackish, clothed with golden, tawny, or brown pile and erect hairs; head blackish brown, clothed with dull tawny pile, reddish and subglabrous at genal angles; antennæ reddish brown, darker on scape and apical half of fourth segment, clothed with thin brown pile, whitish on bases of third and fourth segments and on most of fifth segment, and long, erect, dark-brown hairs, dense and blackish on inner side of apical portion of fourth segment. Prothorax dark brown, reddish at base, thinly clothed with tawny pile, except for a blackish stripe on each side of notum, extending from basal margin to about middle. Scutellum entirely clothed with tawny. Elytra largely clothed with buff or tawny pile of varying thickness, and two subbasal reddish-brown, subglabrous spots, a large, transverse, blackish-brown, subglabrous spot on each elytron **a** little behind middle, some small dark-brown dots on apical portions. Ventral surfaces dark brown, orange brown on bases and sides of abdominal segments, clothed with thin, tawny-golden pile. Legs reddish brown with buff pile, paler and denser on middle of tibiæ and first two abdominal segments. Body almost entirely clothed with erect hairs.

Head nearly as broad as prothorax, narrower at genal angles than at eyes; frons squarish, finely punctured; inferior eye lobes wider than deep, occupying two-fifths distance from antennal insertions to genal angles. Antennæ one and one-fourth as long as body; scape gradually thickened, four-fifths as long as third segment and hardly longer than fourth, which is swollen in apical half and nearly as long as following three segments combined. Prothorax broader than long, slightly swollen laterally, constricted near apex and base; disc fairly even, sparsely punctured. Elytra short, parallel, rounded behind, deeply and irregularly punctured on basal half, more finely so posteriorly. Mesosternal process obtusely tuberculate.

Length, 8 millimeters; breadth, 3.3.

Holotype, female in the Lingnan Natural History Museum, Tai-tsing-lam-ts'uen, back of Lai-mo-ling (Loi Mother Mountain), Ting-an District, Hainan, July 17 and 18, 1935, F. K. To.

Differs from *C. newmani* Pascoe (type of *Ipocregyes*), of Malacca and Borneo, in being larger, in having the elytral bases less swollen, the fourth antennal segment less brushlike, the pronotum not completely striped, and the elytra less distinctly marked, with the postmedian fascia not oblique.

Distribution.—Hainan Island.

Genus COPTOPS Serville

Coptops SERVILLE, Ann. Soc. ent. France 4 (1835) 64; THOMSON, Syst. Cer. (1864) 371; PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 96, 116; LACORDAIRE, Gen. Col. 9 (1869) 369, 384.

Vertex feebly concave between antennal supports; frons rectangular, broader than deep; eyes divided into two lobes connected by a fine line, inferior lobe subrectangular, wider than deep, antennæ one and one-fourth to one and two-thirds as long as body in male, generally shorter than body in female, last segment hooked distally in male, prothorax transverse, tuberculate anteriorly at each side, bearing three swellings on center of notal disc; elytra slightly raised at middle of base of each, rounded posteriorly; middle intercoxal process distinctly tuberculate and vertical anteriorly.

Genotype.—Coptops parallela Serville (ædificator Fabr.) Range.—Ethiopian and Oriental Regions.

Key to the Hainan species of Coptops.

Dorsal surface closely mottled with tawny, gray-brown, and black; antennæ over one and one-half times as long as body in male; body more than 18 millimeters long.....leucostictica rustica. Dorsal surface irregularly banded with brown, grayish white and pinkish; antennæ one and one-fourth as long as body in male; body less than 16 millimeters long.....lichenea.

COPTOPS LEUCOSTICTICA RUSTICA Gressitt subsp. nov. Plate 3, fig. 3.

Coptops polyspila GAHAN (nec Pascoe), Ann. & Mag. Nat. Hist. (7) 5 (1900) 351, Hainan.

Male.—Large; slightly narrowed posteriorly. Body black, largely clothed with mottled gray, tawny, and brown pubescence: head irregularly speckled with tawny and whitish pubescence; antennæ with scape similarly speckled or banded, third and following segments tawny-gray basally; prothorax largely clothed with gray-brown, mottled with tawny and whitish, and dotted with black; scutellum tawny; elytra mottled rusty brown, tawny, and grayish-white, with an indistinct, transverse, darker band before, and another behind, middle; ventral surfaces entirely clothed with mottled tawny and gray-brown pubescence; legs tawny, spotted with light brown; apices of tibiæ black; tarsi black with a little grayish white on inner side of first, base of second, apices of lobes of third, and middle of fifth, segment. Antennæ fringed internally with black hairs to apices.

Head rounded-concave between antennal supports, sparsely punctured, entire surface minutely punctulate; frons a little broader than deep; inferior eye lobes slightly wider than deep. Antennæ nearly one and two-thirds times as long as body; scape irregularly punctured, slightly longer than third segment; last segment distinctly hooked apically. Prothorax transverse, swollen laterally, two blunt swellings on upper portion of each side, before and behind middle, five swellings on notal disc, a median sulcus dividing anterior two swellings and bisecting middle posterior swelling; surfaces with scattered subasperate punctures. Elvtra subrounded apically, slightly swollen at extreme bases; surfaces deeply subasperate-punctate basally, distinctly punctured as far as apices. Mesosternal process bluntly tuberculate anteriorly.

Holotype, length, 21.5 millimeters; breadth, 9.7.

Paratypes, length, 16.5 to 24 millimeters; breadth, 7 to 10.2.

Female.—Antennæ seven-eighths as long as body, last segment not hooked; elytra subparallel.

Allotopotype, length, 21.5 millimeters; breadth, 9.6.

Paratypes, length, 17 to 23 millimeters; breadth, 7 to 10.

Holotype, male, No. 53458 United States National Museum, Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, altitude 380 meters, July 21, 1935, taken by the author; allotopotype, female, in the author's collection, July 24, numerous paratopotypes, in the Lingman Natural History Museum, the author's collection, the California Academy of Sciences, the British Museum, and Musée Heude, July 21 to 26, 1935, taken by the author; one paratopotype, July 23, 1935, one F. K. To; three paratypes, between Fan-ta and Chung-kon-ts'uen, altitude 300 meters, July 17, 1935, taken by the author; numerous paratypes. Nam-liu-tin, August 1 and 2, Sam-kwong-ts'uen, Lam-wan-tung, Kiung-shan District, August 10 to 20, Nam-po, August 22 and 23, 1935, F. K. To; one paratype, Ta-hau, 30 kilometers westsouthwest of Nodoa, July 24, 1935, taken by the author.

Differs from C. leucostictica White in being spotted with tawny instead of white, in having the bases of the antennal segments grayish white instead of fawn-colored and the elvtral bases more coarsely asperate-punctate. Differs from Coptops leucostictica polyspila (Pascoe) comb. nov. in having the dorsal spots smaller and tawny instead of brick-red, the elytral bases more coarsely punctured, and in other respects.

Distribution.—Hainan Island.

COPTOPS LICHENEA Pascoe. Plate 3, fig. 4.

Coptops lichenea PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 118, Malacca.

Male.—Short, subparallel and rounded posteriorly; dorsoventrally somewhat compressed. Body mainly dark reddish brown above, brownish beneath, largely clothed with brown, gray, or reddish pubescence: head with mottled dark-brown and tawnybrick-red pubescence; antennæ pale brick-red on first two segments and bases of third and following segments, changing to pale gray on bases of apical segments; prothorax largely pale

72, 1-2

gray, dotted with brown at sides; dark brown on discal swellings and brick-red between latter; elytra grayish brown, with an irregular basal band, a wider median band, a narrow, zig-zag, gray band behind middle, a humeral spot and several narrow red spots or stripes on apical half; ventral surfaces tawny, mixed with brick-red and finely spotted or blotched with dark brown at sides; legs brick-red banded with dark brown; tarsi grayish, dark brown on most of third segment, and on base and apex of last segment.

Head sparsely punctured. Antennæ one and one-fifth as long as body; scape a little longer than third segment. Prothoracic disc with three rounded swellings forming a triangle, posterior swelling grooved medially. Elytra with bases swollen on each side of suture; surfaces rather closely and deeply punctured on basal half, subasperately so near base.

Length, 14 millimeters; breadth, 5.6.

Female.—Antennæ seven-eighths as long as body.

Length, 11 to 15.3 millimeters; breadth, 4.6 to 6.8.

Four specimens were collected by the author at Dwa-Bi (Taipin-ts'uen), July 22 to 25, Loi Mother Mountain, July 26, and Fan-ta (east of Nam-fung), July 17, 1935; 2 were taken by F. K. To at Nam-po-ts'uen (Loi territory), Ch'eng-mai District, August 28 to 31, 1935.

New to Hainan.

Distribution.—Malacca; Hainan Island.

Genus CHŒROMORPHA Chevrolat

Chæromorpha CHEVROLAT, Dict. Hist. Nat. d'Orbigny 3 (1849) 613; GAHAN, Journ. Fed. Malay States Mus. 1 (1906) 117, note.

Agelasta THOMSON, Syst. Cer. (1864) 371; PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 96, 123, part; LACORDAIRE, Gen. Col. 9 (1869) 369, 376.

Vertex level between antennal insertions; frons subtrapeziform, broader than deep, wider above than below; eyes divided into two not very distant lobes joined by a fine line, inferior lobe about as deep as wide; antennæ slightly longer than body in male and slightly shorter than body in female; prothorax transverse, feebly swollen laterally, evenly convex above; middle intercoxal process broad, evenly convex anteriorly, horizontal beneath, vertical anteriorly from side view; pronotum, scutellum, and elytral bases on same level.

Genotype.—Chæromorpha pigra Aurivillius.

Range.—Oriental Region; Indo-Australian Subregion.

72, 1-2 Gressitt: Longicorn Beetles of Hainan

The name of this genus and its type pigra were proposed, without descriptions, by Dejean in his Catalogue. Chevrolat, in d'Orbigny's Dictionnaire, first characterized the genus, but did not describe any species. Gahan was the first to describe a species as a *Chæromorpha*.¹⁴ Notwithstanding the fact that the species *pigra* was not described until 1920, by Aurivillius (2, p. 16), I am considering it the type of the genus since it was the only species mentioned in both the original publication and the first characterization of the genus, though both times as a *nomen nudum*.

CHEROMORPHA FORMOSANA 15 PALMINSULANA Gressitt subsp. nov. Plate 4, fig. 2.

Female.—Broad, abbreviated, suboval, evenly convex dorsally. Body brownish black, slightly reddish along posterior portions of suture; surfaces in part clothed with whitish-gray pubescence, leaving blackish markings of subglabrous areas; head largely pubescent, with middle of frons thinly clothed and occiput with a pair of longitudinal blackish stripes; antennæ clothed with gray pubescence: scape spotted with black, apical halves of third and following segments entirely black; prothorax clothed with dull-gray pubescence, irregularly marked with small spots and dots of thin, black pubescence; scutellum partly clothed with gray; elytra clothed with whitish gray, marked with subglabrous black areas clothed with thin blackish pubescence as follows: a small area on base of each bordering scutellum, a broad, transverse band near base and reaching to just behind end of basal third, a number of irregular angular spots on remainder. a few small spots arranged in a transverse band just before middle, another band, of slightly larger spots, just behind middle; ventral surfaces of body clothed with gravish-white pubescence, marked with a few small, brownish spots along sides of thorax and abdomen, middle portions of abdominal sternites subglabrous, legs grayish with tarsi, apical portions of tibiæ, and a few spots on femora, black. Antennæ fringed with black internally.

Head feebly convex, sparsely punctured in front; inferior eyelobes a little deeper than wide, subtriangular. Antennæ as long as body; scape about as long as third segment; fourth segment three-fourths as long as third. Prothorax nearly twice as broad as long, moderately convex laterally, disc evenly convex, sparsely

¹⁴ C. robinsoni, Journ. Fed. Malay States Mus. 1 (1906) 117.

¹⁵ Agelasta formosana SCHWARZER, Ent. Blätter 21 (1925) 61, Formosa.

and shallowly punctured. Elytra short, narrowed and subrounded apically, rather closely punctured, punctures deep on basal half.

Length, 11.2 millimeters; breadth, 4.8.

Holotype, female, loan deposit, California Academy of Sciences, Chung-kon-ts'uen, east of Nodoa, Hainan, July 18, 1935, taken by the author; allotype, male, in the Lingman Natural History Museum, Tai-tsing-lam-ts'uen, near Loi Mother Mountain, June 7, 1935, F. K. To; paratype, male, in the United States National Museum, Tai-tsing-lam-ts'uen, June 7 to 10, 1935, F. K. To.

Differs from the typical form in being broader, in having the elytra much more densely punctured, the elytral spots less numerous with the subbasal band broader and more complete, and the tarsi entirely black. The name *palminsulana* refers to Hainan: "The Isle of Palms", as designated by American missionaries.

Distribution.—Hainan Island.

Genus FALSOMESOSELLA Pic

Falsomesosella Pic, Mel. Exot. Ent. 44 (1925) 27.

Head rounded-concave between antennal insertions, strongly swollen on frons; eyes rather coarsely facetted, deeply emarginate, inferior lobe small, higher than wide; antennæ but slightly exceeding body in length, fringed beneath; scape reaching to middle of prothorax, widened externally at apex, bearing an internally open cicatrix; fifth and following segments each much shorter than third or fourth; prothorax broader than long, rounded at sides, evenly convex above; elytra about twice as long as broad, more or less rounded and obsoletely truncated at apices; disc of each weakly swollen near scutellum; anterior coxæ large; intercoxal process of mesosternum small, depressed; first abdominal segment more or less fringed apically, following segment with a partially hidden concavity, at least in male.

Genotype.—Falsomesosella albofasciata Pic.

Range.-South China; Hainan; Formosa; Japan.

FALSOMESOSELLA HAKKA Gressitt.

Falsomesosella hakka GRESSITT, Lingnan Sci. Journ. 16 (1937) 597, Kwangtung; ibid. 18 (1939) 64, pl. 2, fig. 5.

Female.—Dark brown to reddish brown or black, largely clothed with pubescence; head tawny, mottled with dark brown;

antennæ rusty, third and fourth segments with pale-tawny hairs except for dark apices and some small, scattered, brown spots; prothorax dark brown, mottled with tawny; scutellum subglabrous, dark brown; elytra with two black-spotted, transverse, whitish bands of similar width, the first close to base, the second just behind middle, remaining surfaces rusty brown dotted with black, the latter predominating behind both transverse bands, suture slightly whitish before apices; ventral surfaces and legs grayish tawny, blotched with blackish brown.

Head feebly concave between antennal insertions, finely punctured; frons a little broader than deep. Antennæ barely longer than body; scape nearly as long as third segment, subequal to fourth segment. Prothorax a little broader than long, rounded laterally, closely and finely punctured on disc. Elytra broadest behind middle; apices rounded-truncate; surfaces deeply subseriate-punctate.

Length, 6.5 millimeters; breadth, 2.5.

A single female, in the Lingman Natural History Museum, was taken at Tai-tsing-lam-ts'uen, near Lai-mo-ling, June 11, 1935, by F. K. To.

New to Hainan.

Distribution.-Kwangtung Province; Hainan Island.

ANCYLONOTINI

ANCYLONOTIDES Lacordaire, Gen. Col. 9 (1869) 299, 391. ANCYLONOTINI Aurivillius, Col. Cat. 73 (1922) 152.

Frons subrectangular; vertex concave between antennal insertions; eyes finely facetted; antennal scape with an open, granular cicatrix; elytra more or less tuberculate basally; anterior coxal cavities angulate externally, open posteriorly; middle coxal cavities open to epimera externally, separated by a broad, gradually declivitous lamelliform process; middle tibiæ notched externally; tarsal claws divaricate.

Genus PALIMNA Pascoe

Palimma PASCOE, Journ. Ent. 1 (1862) 346; Trans. Ent. Soc. London (3) 3 (1865) 96, 134; THOMSON, Syst. Cer. (1864) 369; LACORDAIRE, Gen. Col. 9 (1869) 392.
Cylanca THOMSON, Syst. Cer. (1864) 58, 132, 484.

Frons more or less granulose; inferior eye lobes a little deeper than wide; antennæ at least twice as long as body in male, seventh segment hooked, or at least swollen, endoapically; pro-

39937----9

72, 1–2

The Philippine Journal of Science

thorax briefly tuberculate laterally, with low swellings and granules on disc; elytra with humeral granules, subbasal tubercles, an oblique median ridge, and subrounded apices.

Genotype.—Golsinda tessellata Pascoe.

Range.—Oriental Region.

According to some of the characters used by Bates in erecting his genus Apalimna for one Japanese and one North Indian species, one of the following forms should fall in Apalimna, and is described as a subspecies of a form placed in the genus by Schwarzer. However, I feel that the type of Apalimna hardly merits more than subgeneric separation, and that the two Formosan species, palimnoides Schwarzer and formosana Kano, are closer to Palimna than to Apalimna, differing only from the species placed in the former by lacking a distinct internal projection at the apex of the seventh antennal segment of the male, and agreeing with them in the degree of tuberculation of the sides of the prothorax, the humeri, and the basal portions of the elytral discs.

Key to the Hainan species of Palimna.

- Seventh antennal segment of male with a prominent internal projection at apex; scutellum nontuberculate; elytra with two pairs of contiguous, laterally compressed tubercles near base; last abdominal sternite of female one-half as long as preceding sternites together. annulata tessellata.
- Seventh antennal segment of male lacking a prominent internal projection at apex; scutellum nontuberculate; elytra with two pairs of contiguous, laterally compressed tubercles near base; last abdominal sternite of female nearly as long as preceding sternites combined.

palimnoides similis.

PALIMNA ANNULATA TESSELLATA (Pascoe). Plate 3, fig. 11.

- Golsinda tessellata PASCOE, Trans. Ent. Soc. London (2) 4 (1857) 49, Borneo.
- Palimna tessellata PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 135, pl. 6, fig. 2.

Palimna annulata var. tessellata AURIVILLIUS, Col. Cat. 73 (1922) 152.

Male—Black to brownish black, largely clothed with white or grayish pubescence: head clothed with white except across upper part of frons and front of vertex, which are black; antennæ with middle of scape and bases of following segments grayish white; prothorax white with black granules and a pair of interrupted, suboblique, gray-brown stripes from anterior border to near base; scutellum white with black sides; elytra in large part covered with oval, white areas, light gray-brown or whitish gray on intervening spaces; ventral surfaces silvery white on meta-

130

131

÷

sternum, grayish white on abdomen; legs whitish, banded with black.

Head sparsely granulose on lower and upper ends of frons, shallowly concave between antennal insertions; antennæ twice as long as body; scape two-thirds as long as third segment; seventh segment armed endoapically; prothorax feebly tuberculate laterally; disc swollen on each side, with numerous granules; scutellum bituberculate; elytra coarsely nodose at humeri; disc of each with two erect tubercles near base, one before other, and coarse punctures, particularly on basal portions of sides.

Length, 24 to 27 millimeters; breadth, 9 to 10.8.

Female.—Antennæ one and two-fifths as long as body, lacking a projection on seventh segment.

Length, 22 millimeters; breadth, 8.

Five specimens were taken at Sam-kwong-ts'uen, Lam-wantung, Kiung-shan District, Hainan, August 5 to 14, Nam-po, August 22 and 23, 1935, and Nodoa, April 1932, by F. K. To.

Distribution.—Borneo; Java; Malacca; Siam; Hainan.

PALIMNA PALIMNOIDES ¹⁶ SIMILIS Gressitt subsp. nov.

Female.—Body black, extensively marked with areas of white pubescence; head clothed with white except on upper portion of frons, front of vertex, most of occiput, and sides behind eyes; antennæ black with middle of scape and bases of following segments white; prothorax clothed with white on sides, along base, and along a median stripe, the latter crossed by a transverse white bar at center, remainder black with brownish-black pubescence: scutellum white along middle and on apical portion; elytra white on dorsal surface of basal two-fifths, except around subbasal tubercles and scutellum, remainder with a number of oval white spots of various sizes, in part confluent; ventral surfaces densely clothed with silvery white on thoracic sterna, more sparsely so on abdomen; legs largely white; femora banded with black near middle and apex, tibiæ black at base, middle and apex, and tarsi black on third to fifth segments, and on borders of first two segments.

Head directed posteriorly beneath; frons wider below than above, with numerous granules over entire surface; vertex subobtusely concave between antennal supports; the latter and occiput almost lacking granules. Antennæ one and one-half times as long as body; scape three-fourths as long as third segment; second to sixth segments distinctly swollen apically. Prothorax

¹⁶ Apalimna palimnoides Schwarzer, Ent. Blätter 21 (1925) 62, Formosa.

72, 1–2

briefly tuberculate laterally, swollen across central portion, disc with scattered, shiny granules and a slight median groove before center. Scutellum triangular, slightly depressed along median line. Elytra narrowed and rounded posteriorly; humeri swollen and subnodose; disc of each with two laterally compressed, subadjacent tubercles near base, and several small tubercles near scutellum, coarsely rugose-punctate at sides of basal half and on middle of disc, more finely so on remainder. Last abdominal sternite nearly as long as preceding four abdominal sternites combined.

Length, 18 millimeters; breadth, 7.

Holotype, male, loan deposit, California Academy of Sciences, Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, July 23, 1935, taken by the author.

Differs from Palimna palimnoides (Schwarzer) comb. nov. in having the lateral tubercles of the prothorax shorter and blunter, the pronotal disc more suddenly constricted before and behind, its center less depressed, the humeral swellings less nodose, the elytral bases near the scutellum more tuberculate, and in other respects. Very similar in markings to the preceding species, but having the frons more granulose, the pronotum less granulose, the vertex more concave, and the elytral bases less sharply tuberculate.

Distribution.—Hainan Island.

XYLORHIZINI

XYLORHIZIDES Lacordaire, Gen. Col. 9 (1872) 413, 443. XYLORHIZINI Aurivillius, Col. Cat. 73 (1922) 208.

Frons subrectangular; vertex concave; antennæ rarely longer than body; scape lacking a cicatrix; prothorax with or without lateral tubercles; elytra considerably broader than prothorax; anterior coxal cavities angulate externally; anterior coxæ prominent; middle coxal cavities open externally to epimera; intercoxal processes unarmed; middle tibiæ obliquely grooved externally; tarsal claws divergent.

Genus XYLORHIZA Castelnau

Xylorhiza CASTELNAU, Hist. Nat. Col. 2 (1840) 476; THOMSON, Classif. Cer. (1860) 38; Syst. Cer. (1864) 366; PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 162; LACORDAIRE, Gen. Col. 9 (1872) 444, 445.

Vertex deeply concave between antennal supports; frons grooved medially; eyes small, deeply emarginate; antennæ shorter

than body, densely fringed on undersides of basal segments; prothorax nontuberculate, subcylindrical; elytra long, separately emarginate, lobed apically; posterior femora only reaching slightly beyond second abdominal segment.

Genotype.—Xylorhiza venosa Castelnau (adusta Wied.)

Range.—Southeastern continental Asia; Hainan; Hongkong; Formosa; Sumbawa.

XYLORHIZA ADUSTA (Wiedemann).

Lamia adusta WIEDEMANN, Zool. Mag. (1) 3 (1819) 182, Bengalia, Xylorhiza venosa CASTELNAU, Hist. Nat. Col. 2 (1840) 476; PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 162; LACORDAIRE, Gen. Col. 9 (1872) 446; LATREILLE in Cuvier, Regne Anim. 4 (1817) pl. 14, fig. 7; ibid. ed. 2 3 (1830) pl. 18, fig. 7; COTES, Ind. Mus. Notes 3 (1894) 47. biol.

Xylorhiza adusta GAHAN, Ann. Mus. Civ. Genova 34 (1894) 58; GRESSITT, Lingnan Sci. Journ. 18 (1939) 66.

Female.—Black to brownish black on dorsal surfaces and dark brown beneath, clothed with thick pubescence, finely striped with darker and lighter brown: head pale buff along middle, darker on genæ and sides of frons; antennæ with buff and brown on first three segments, following segments thinly clothed with grayish brown; prothorax dark brown, rusty at base, with two narrow, median, pale-buff stripes converging at basal margin, and two narrower, oblique, pale-buff stripes above middle of sides; scutellum reddish golden, with a fine, median, buff stripe; elytra narrowly striped longitudinally with various shades of buff, and with dark-brown on base, along median lines, near suture and external margin, and apices; ventral surfaces and legs dark brown streaked with buff.

Head with median glabrous line; vertex broadly concave; inferior eye lobes small and deeper than wide. Antennæ five-sixths as long as body. Prothorax nearly as long as broad, feebly swollen at sides; disc irregular, with some coarse punctures. Elytra long, obliquely truncate apically, with sutural angles bluntly produced; bases sparsely punctured.

Length, 40 millimeters; breadth, 11.8.

Description based on a specimen from Hongkong.

A single specimen, in the Musée Heude, was collected in Hainan by Commander G. Ros in the spring of 1936.

New to Hainan.

Distribution.—Bengal; Burma; Peninsula of southeastern Asia; Hainan; Hongkong; Formosa.

DORCASCHEMATINI

DORCASCHEMITÆ Thomson, Classif. Cer. (1860) 104, 107; Syst. Cer. (1864) 90, 340. DORCASCHEMIDES Lacordaire, Gen. Col. 9 (1872) 415, 456.

DORCASCHEMATINI Aurivillius, Col. Cat. 73 (1922) 213.

Frons rectangular; vertex concave, narrow; antennal tubercles deeply emarginate anteriorly; antennæ slender, much longer than body; scape short, swollen and granulose above; prothorax subcylindrical, nontuberculate; elytra narrow, rounded or subangulate apically; anterior coxæ subglobular, their cavities angulate externally; middle coxal cavities open externally; middle tibiæ obliquely grooved preapically; tarsal claws divaricate.

Genus OLENOCAMPTUS Chevrolat

Olenocamptus CHEVROLAT, Mag. Zool. 5 (1835) 134; THOMSON, Syst. Cer. (1864) 386; LACORDAIRE, Gen. Col. 9 (1872) 457, 458.

Authades THOMSON, Archives Ent. 1 (1857) 191; Syst. Cer. (1864) 386.

Ibidimorphum Motschulsky, Schrenck's Reisen Amurland Col. (1860) 153.

Head broader than prothorax; frons wider than high; eyes large, deeply emarginate, inferior lobes wider than deep; antennæ more than twice as long as body in both sexes; scape filelike above; prothorax longer than broad, transversely folded on central portion; elytra subangulate apically; legs slender, anterior pair longer than others; posterior femora reaching to fourth abdominal segment; tarsi short.

Genotype.—Olenocamptus serratus Chevrolat. (bilobus Fabr.). Range.—Oriental Region; Indo-Australian Subregion.

OLENOCAMPTUS BILOBUS (Fabricius).

Saperda biloba FABRICIUS, Syst. Eleuth. 2 (1801) 324.

Olenocamptus bilobus PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 316; GAHAN, Ann. & Mag. Nat. Hist. (5) 7 (1900) 351, Hainan; MAXWELL-LEFROY, Ind. Ins. Life (1909) 376.

Male.—Slender, subparallel. Body brownish black, light reddish brown on antennæ, palpi, elytra, and legs; clothed with thin, fawn-colored, and dense, silvery white, pubescence: head pale tawny on vertex, occiput, and upper parts of sides, remainder white; antennæ nearly glabrous; prothorax grayish buff above, brown along middle of each side, and white beneath; scutellum white; elytra fawn-colored with a subbasal oval spot adjacent to suture, a smaller oval spot before middle and nearer margin than suture, and a larger, subrounded spot, nearer suture than margin, behind middle, of thick, white pubescence; ventral surfaces clothed with silvery white on sides, grayish white on median portions of sternites; legs thinly clothed with white on femora, golden on tibiæ.

Head fully as wide as deep, finely carinate on frons and vertex, nearly impunctate; eyes prominent; antennæ two and two-thirds times as long as body; minutely thorny beneath; scape about one-fourth as long as third segment; prothorax one and onethird as long as broad, a little narrower at base than at apex, constricted near each end: elytra rather closely punctured.

Length, 13 millimeters; breadth, 3.

Female.—Antennæ two and one-fourth times as long as body, unarmed beneath; last abdominal sternite as long as two preceding abdominal sternites.

Length, 15 millimeters; breadth, 3.6.

One male and 1 female, in the author's collection, were taken by the author at Ta-hian, near Five Finger Mountains, June 12, and Liamui (Leng-moon), August 1, 1935, respectively; the Lingnan Natural History Museum possesses specimens from Tai-pin-ts'uen, May, 1935, F. K. To, and Sam-ah-kong, southern Hainan, May, 1932, W. E. Hoffmann and O. K. Lau. I have seen one of the specimens collected by Whitehead in 1899.

Distribution.—Seychelles; Ceylon; India; Burma; Siam; Indo-China; Malacca; Malay Archipelago; Hainan; Hongkong; Formosa; Ryu Kiu Islands; South China.

XENOLEINI

XENOLEIDES Lacordaire, Gen. Col. 9 (1872) 460. XENOLEINI Aurivillius, Col. Cat. 73 (1922) 216.

Head not retractile; frons subtrapeziform; eyes coarsely facetted; antennæ slender; scape short, swollen, granulose apically; prothorax tuberculate laterally; elytra even, rounded apically; middle coxal cavities nearly closed to epimera externally; intercoxal process simple, gradually declivitous; middle tibiæ grooved externally; tarsal claws divaricate.

Genus XENOLEA Thomson

Xenolea THOMSON, Syst. Cer. (1864) 91; LACORDAIRE, Gen. Col. 9 (1872) 460.

Æoschopalæa PASCOE, Trans. Ent. Soc. London (3) 3 (1864) 24.

Head narrower than prothorax, deeper than broad; frons higher than wide above; inferior eye lobes deeper than wide; vertex narrowly concave between antennal insertions; antennæ more than twice as long as body in male, nearly twice as long in female; prothorax subcylindrical, tuberculate; elytra separately rounded apically.

Genotype.—Xenolea collaris Thomson.

Range.—Malay Archipelago; Hainan; South China; Japan; Formosa.

XENOLEA TOMENTOSA ASIATICA (Pic). Plate 4, fig. 14.

Æschopalea asiatica PIC, Echange (40) 41 (1925) 16, Tonkin.

Xenolea asiatica GRESSITT, Lingnan Sci. Journ. 17 (1938) 158, Szechwan.

Xenolea tomentosa asiatica GRESSITT, Lingnan Sci. Journ. 18 (1939) 69, Kwangtung.

Male.—Brownish black, mixed in part with reddish brown on elytra and pronotum; antennæ reddish, scape and apices of following segments blackish; body irregularly mottled with tawny pubescence on dorsal surfaces, denser on sides and apices of elytra, evenly and entirely clothed with paler, more green-gold, pubescence on ventral surfaces; antennæ with very thin, goldentawny pubescence, and a few short, erect hairs on undersides of basal segments; legs thinly clothed with green-gold.

Head finely punctured; inferior eye lobes a little deeper than wide. Antennæ two and one-third times as long as body. Scape three-fifths as long as third segment; third and following segments subequal. Prothorax about as broad as long, with a large stout tubercle at each side; disc rather closely punctured, except along median line, slightly swollen a short distance behind center. Elytra slightly narrowed posteriorly, separately subrounded apically; surfaces feebly swollen near base, closely punctured throughout; legs with femora swollen and tarsi small; first segment of latter as long as following two segments combined.

Length, 8.5 to 9.2 millimeters; breadth, 2.7 to 3.

Two males were collected on Hainan: 1 by the Lingman Univ. Fifth Hainan Exped., Nodoa, at lights, August 15, 1929, 1 by the author at Ta-hau, near Vo-lau, 30 kilometers westsouthwest of Nodoa, July 8, 1935.

New to Hainan.

Distribution.—Indo-China; southern and western China; Hainan; Formosa.

NYCTIMENINI

NYCTIMENITES Thomson, Syst. Cer. (1864) 94, 341. NYCTIMENIDES Lacordaire, Gen. Col. 9 (182) 415, 467. NYCTIMENINI Aurivillius, Col. Cat. 73 (1922) 218.

136

Head distant from anterior coxæ; frons subrectangular; antennæ slender; scape subcylindrical, lacking a cicatrix; prothorax cylindrical, nontuberculate; middle coxal cavities open to epimera externally; intercoxal process low, feebly declivitous, unarmed; middle tibiæ grooved preapically on outer sides; tarsal claws divaricate.

Genus EUSEBOIDES Gahan

Euseboides GAHAN, Ann. & Mag. Nat. Hist. (6) 11 (1893) 385.

Slender, narrowed posteriorly; head fully as broad as apex of prothorax, concave between antennal insertions; inferior eye lobes vertical; antennæ a little longer than body; prothorax cylindrical, longer than broad; elytra long and narrow, acuminate ectoapically; metepisternum very narrow, parallel-sided; first four abdominal segments gradually decreasing in length.

Genotype.—Euseboides plagiatus Gahan.

Range.—India; Hainan; Formosa; Ryu Kyu Islands.

EUSEBOIDES MATSUDAI SPINIPENNIS Gressitt subsp. nov. Plate 4, fig. 8.

Male.—Very slender, slightly narrowed posteriorly. Bodv blackish brown, somewhat reddish along sides and suture of elytra and on antennæ (except for scape and apices of following segments) and legs; thinly clothed with tawny pubescence: head entirely clothed in front, sparsely so on occiput, with four longitudinal stripes posteriorly; antennæ sparsely clothed with tawny-gray on basal portions of segments, and with dark brown at apices; prothorax with longitudinal stripes of tawny along sides and lateral margins of notal disc, a faint streak along median line; scutellum tawny; elytra sparsely and irregularly clothed with tawny and grayish, a short stripe of denser pubescence extending back a short distance from inner side of humerus. a small spot near suture about two-fifths elytral length before apex, and apical fifth obliquely banded with dense tawny; ventral surfaces irregularly clothed with tawny, last three abdominal segments densely clothed and with glabrous dots of varying size.

Head closely punctured; frons square, convex; vertex moderately concave; inferior eye lobes twice as deep as wide. Antennæ one and one-third as long as body, slender; scape subcylindrical in apical half; third segment a little shorter than fourth; fourth segment nearly as long as scape. Prothorax nearly cylindrical, a little broader at apex than at base, rather densely punctured. Scutellum broadly shield-shaped. Elytra slender, slightly narrowed; apices obliquely emarginate-truncate, acutely produced exteriorly. Ventral surfaces distinctly punctured except on last three abdominal segments.

Holotype, loan deposit, California Academy of Sciences, Taipin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, July 23, 1935, taken by the author.

Differs from E. matsudai ¹⁷ Gressitt in having the prothorax more cylindrical, the elytral apices more acute, the dorsal punctuation coarser, the last three abdominal segments nearly impunctate, and the abdomen not distinctly striped with pubescence.

Distribution.—Hainan Island.

HECYRINI

HEOYRIDIDES Lacordaire, Gen. Col. 9 (1872) 416, 517. HECYRINI Aurivillius, Col. Cat. 73 (1922) 243.

Head retractile; frons rectangular; vertex concave; eyes subcoarsely facetted; antennal scape swollen, lacking a cicatrix; prothorax bituberculate laterally; elytra long, parallel; pro- and mesosternal intercoxal processes vertical anteriorly; middle coxal cavities open externally; middle tibiæ ungrooved; tarsal claws divaricate.

Genus MŒCHOTYPA Thomson

Mæchotypa THOMSON, Syst. Cer. (1864) 55, 368; PASCOE, Trans. Ent. Soc. London (3) 3 (1864) 85.

Scotinauges PASCOE, Ann. & Mag. Nat. Hist. (4) 8 (1871) 277.

Tylophorus BLESSIG, Horae Soc. Ent. Ross. 9 (1873) 213.

Stout-bodied, suboblong, rounded posteriorly; vertex broadly concave, sulcate medially; eyes divided, with superior and inferior lobes connected by a fine line; antennæ a little longer than body in male, about as long as body in female; scape short, thickened apically; prothorax transverse, swollen on disc; elytra rounded apically.

Genotype.—Mæchotypa arida Thomson (suffusa Pascoe).

Range.—Northern India; southeastern Asia; North China; Korea; Hainan; Borneo; Formosa.

MŒCHOTYPA SUFFUSA (Pascoe).

Niphona suffusa PASCOE, Journ. Ent. 1 (1862) 336, Cambodia.

Mæchotypa arida THOMSON, Syst. Cer. (1864) 55, Laos; LACORDAIRE, Gen. Col. 9 (1869) 519, pl. 102, fig. 2.

Mæchotypa suffusa Aurivillius, Col. Cat. 73 (1922) 245.

¹⁷ Philip. Journ. Sci. 65 (1938) 163, pl. 1, fig. 2, Formosa.

138

Male.—Brownish black, almost entirely clothed with thick pinkish red, dark brown, and gray pubescence: head pinkish red, grayish on vertex, a transverse brown band across middle of frons, an obtuse band on occiput; antennæ dark brown, bases of third to sixth segments pinkish, bases of following segments gray; prothorax pinkish, mixed with white hairs, swellings on pronotal disc and some median spots and lateral dots, dark brown; scutellum dark brown, edged laterally with pink and then whitish; elytra pinkish at base and apex and along margins and suture, and four or five slender, obliquely longitudinal stripes, a darkbrown band just behind base, and two narrow, incomplete, zigzag bands, the first at about middle, the second at beginning of apical quarter; ventral surfaces pinkish, a dark-brown spot at middle and each side of base of each abdominal segment.

Head deeply punctured; inferior eye lobes subrectangular, wider than deep. Antennæ nearly one and one-half times as long as body; scape one-half as long as third segment. Prothorax broad, strongly swollen and sparsely punctured on each side of disc; a blunt tubercle before, another tubercle behind middle of each side; disc grooved behind center. Elytra shallowly punctured; middle of base of each with an erect tubercle followed by a small swelling.

Length, 22.5 millimeters; breadth, 9.

Female.—Antennæ barely longer than body; last abdominal sternite as long as two preceding, medially grooved at base and apex.

Length, 23 millimeters; breadth, 8.5.

One male, in the Lingnan Natural History Museum, Chungmei, Hainan, August 28, 1932, 1 female, Nam-ting-ts'uen, February 8, 1935, F. K. To; 1 female, in the author's collection, collected in a groove near Beggar Village, southwest of Nodoa, July 9, 1929, by the Lingnan Univ. Fifth Hainan Exped.

New to Hainan.

72, 1-2

Distribution.—Indo-China (Cambodia and Laos); Hainan.

NIPHONINI

NIPHONINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1864) 7, 56. NIPHONIDES Lacordaire, Gen. Col. 9 (1872) 414, 519. NIPHONINI Aurivillius, Col. Cat. 73 (1922) 245.

Head more or less retractile; frons rectangular, or broader above than below; vertex feebly concave; eyes emarginate or divided; antennæ rarely longer than body; scape lacking a cicatrix; middle coxal cavities open to epimera externally; middle tibiæ ungrooved exteriorly; tarsal claws divergent.

Key to the Hainan genera of Niphonini.

1.	\mathbf{Eyes}	completely	divided,	lobes	connected	by	a	fine	threa	ıd	 	2.
	Eyes deeply emarginate, not divided									 	4.	

3. Eyes coarsely or subcoarsely facetted; elytra separately rounded or obtuse apically; third antennal segment no longer than scape.

Genus NIPHONA Mulsant

Niphona MULSANT, Col. France Long. ed. 1 (1839) 169; THOMSON, Syst. Cer. (1864) 368; LACORDAIRE, Gen. Col. 9 (1872) 522, 530; GANGLBAUER, Bestimm.-Tab. eur. Col. 7 (1882) 694. Ocheutes THOMSON, Syst. Cer. (1864) 54. Ælara THOMSON, ibid. 55, 368.

Frons broader above than below; vertex feebly concave; eyes divided and coarsely facetted, inferior lobes generally transverse; antennæ about as long as, or a little longer than, body; scape thick and short; prothorax short, swollen, generally grooved or rugose; elytra often tuberculate basally, with apices truncate or emarginate; mesosternal process tuberculate.

Genotype.—Niphona picticornis Mulsant. Range.—Southern Paleartic, Ethiopian, and Oriental Regions.

Key to the Hainan species of Niphona.

faces unevenly clothed with gray, or rusty brown, pubescence........... 3.

2. Scape as long as third antennal segment; prothorax swollen on each side, feebly punctate; elytra barely swollen basally; apices obliquely emarginate-truncate, with external angles produced....... cantonensis. Scape shorter than third antennal segment; prothorax coarsely rugose-punctate, medially carinate on disc; each elytron with a strong basal

crest, besides a lesser, external crest, apices subobliquely truncate. *hookeri*.

NIPHONA CANTONENSIS Gressitt.

Niphona cantonensis GRESSITT, Lingnan Sci. Journ. 18 (1939) 71, pl. 2, fig. 8, Canton, Kwangtung.

Male.—Small, slender, narrowed posteriorly. Body blackish to light reddish brown, clothed with tawny or whitish pubescence: head reddish brown, entirely clothed with tawny; antennæ reddish brown, scape and apices of following segments blackish brown, irregularly clothed with tawny on scape, briefly setose internally; prothorax reddish, darker on anterior border, densely clothed with tawny pubescence; elytra blackish brown basally, pale castaneous on remainder; largely clothed with tawny, a transverse band of white pubescence behind base and continued along sides nearly to apices; ventral surfaces blackish brown, in part reddish, clothed laterally with tawny pubescence.

Head closely punctured, feebly convex in front, barely concave between antennal tubercles. Antennæ nearly one and one-half times as long as body; scape subequal in length to third segment, both shorter than fourth. Prothorax short, swollen laterally, moderately punctured. Elytra long, obliquely emarginate-truncate apically, subseriately punctate.

Length, 11 millimeters; breadth, 3.1.

A single male was taken at Hoihow, northern Hainan, April 18, 1932.

New to Hainan Island. This specimen is considerably less rubbed than the type. This species is probably congeneric with

72, 1–2

Falsoniphona lutea¹⁸ Pic, but I doubt the validity of the latter genus, described at the same time.

Distribution.—Kwangtung; Hainan.

NIPHONA EXCISA Pascoe. Plate 3, fig. 9.

Niphona excisa PASCOE, Journ. Ent. 1 (1862) 337, Cambodia.

Male.—Subcylindrical, slightly narrowed posteriorly. Body dark reddish brown, blackish brown on elytral bases and tarsi, unevenly clothed with dark brown or light tawny pubescence: head densely clothed with tawny on frons and vertex, genæ dark brown, occiput streaked; antennæ dark brown, first and fourth segments mottled brown and white; prothorax dark brown, striped with tawny along sides of disc; elytra dark brown, tawny at base near scutellum and on an irregular, oblique, suboval area behind middle of each, fringed apically; ventral surfaces clothed with tawny mixed with brown, subglabrous on abdomen.

Head deep and short, deeply punctured; vertex nearly plane; frons much broader above than beneath. Antennæ nearly as long as body; scape not quite as long as third segment; prothorax a little broader than long, moderately convex, trisulcate medially, subrugose laterally. Elytra sparsely punctured, each feebly bicostate basally and strongly emarginate and bispinose apically.

Length, 19.5 millimeters; breadth, 5.6.

A single specimen, in the Lingnan Natural History Museum, was taken at Chung-mei, Hainan, August 19, 1932, by F. K. To.

New to Hainan.

Distribution.—Cambodia; Hainan.

NIPHONA HOOKERI Gahan.

Niphona hookeri GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 351, Hainan, northern India, China; GRESSITT, Lingnan Sci. Journ. 18 (1939) 72, Kwangtung.

Male.—Dark reddish brown, blackish on head; almost entirely clothed with dense, whitish-buff pubescence, tawny on bases, and along middle portion of elytra; antennæ thinly clothed and dull distally.

Head deep, finely punctured; eyes large, inferior lobes transverse; antennæ a little longer than body; scape two-thirds as long as third segment; prothorax transverse, tricarinate me-

¹⁸ Mel. Exot. Ent. 44 (1925) 26, Tonkin.

142

dially, coarsely rugose-punctate on remainder of disc and on sides; elytra subparallel in basal two-thirds, distinctly narrowed and subobliquely truncated apically; disc of each irregularly punctured, a strong, subtuberculate ridge on base near scutellum and a lesser one near humerus.

Length, 10.7 millimeters; breadth, 3.4.

One single male, in the Lingnan Natural History Museum, taken at Nam-cha-chuen, near Nodoa, August 9, 1929, by the Lingnan Univ. Fifth Hainan Exped.

Distribution.—Hainan; Hongkong; Kwangtung; Sikkim; Andaman Islands.

NIPHONA MINOR (Lameere). Plate 4, fig. 3.

Ælara minor LAMEERE, Ann. Soc. ent. France 62 (1893) 284, Pnom-Penh, Cambodia.

Niphona minor AURIVILLIUS, Col. Cat. 73 (1922) 250.

Male.—Subparallel; dorsoventrally compressed. Body dark reddish brown to blackish brown, irregularly clothed with various shades of brownish and grayish-white pubescence: head clothed with rusty brown, mixed with tawny and grayish, pubescence; antennæ dark brown spotted with light brown and whitish; prothorax thinly clothed with light rusty brown, mixed with pale-gray hairs; elytra clothed with whitish gray on depressed areas and with light rusty brown on ridges and most of interpunctural spaces, a faint, pale zig-zag band behind middle; ventral surfaces grayish white along sternites, and mottled brown, rusty, and whitish along sides; legs whitish internally and mottled brown externally.

Head deeply and irregularly punctured; frons subparallel; vertex hardly concave; inferior eye lobes squarish, a little deeper than wide; antennæ slightly longer than body; scape not quite as long as third segment; prothorax short, with coarse rugæ arranged more or less as longitudinal ridges, an anteriorly converging pair at middle, elytra deeply punctured, irregularly rugose and subtricarinate basally; apices emarginate-truncate, briefly bidentate.

Length, 12.7 to 13.4 millimeters; breadth, 4 to 4.5.

Two males, in the Lingman Natural History Museum and in the author's collection, were taken at Sam-ah-kong (Sam-a), Yai District, southern Hainan, February 1 to 3, 1935, by F. K. To.

New to Hainan.

Distribution.—Cambodia; Hainan.

NIPHONA YANOI REDUCTA Gressitt subsp. nov. Plate 7, fig. 4.

144

Male.—Moderately large: subparallel; narrowed preapically. Body blackish brown, slightly reddish in part, clothed with irregular patterns of whitish, gray, and tawny, pubescence: head clothed with grayish white, tawny and a little dark brown; antennæ largely of a rusty or tawny-brown, spotted or mixed with grayish white, particularly on third and following segments, apices ringed with tawny and then whitish; prothorax largely clothed with golden-tawny, mixed with gravish white; scutellum clothed with dark brown at sides, gravish medially, and golden-tawny posteriorly; elytra largely clothed with thin, gravish-white pubescence, many of interpunctural areas or ridges clothed with rusty orange-brown, whitish predominating along sides of central portion and obliquely across just behind middle; ventral surfaces whitish on sternites, with center of each subglabrous, sides rusty brown with whitish hairs mixed in; legs tawny-brown, mixed with gravish.

Head sparsely and irregularly punctured; frons slightly wider than high; inferior eye lobes small, wider than deep. Antennæ nearly as long as body; scape thick, almost longer than third segment; third segment a little shorter than fifth; fifth and following segments gradually decreasing. Prothorax one and one-third times as broad as long; disc coarsely subvermiculose, a pair of subnodose ridges along middle, converging not far from anterior margin, remainder irregularly swollen. Elytra subcoarsely and subseriately punctured; disc of each with a laterally compressed swelling near base and a small ridge between this and humerus; apices narrow, subemarginate-truncate, angles briefly dentate. Last abdominal sternite deeply emarginatetruncate, strongly produced ectoapically. Anterior tibiæ strongly dentate posteriorly before apices.

Length, 17.3 millimeters; breadth, 6.2.

Holotype, in the Lingman Natural History Museum, Sam-ahkong (Sam-a), Yai District, southern Hainan, January 30, 1935, F. K. To.

Differs from N. yanoi¹⁹ Matsushita in having the pronotal disc less grossly swollen on each side, the lateral margins less convex posteriorly; the elytral apices much abbreviated, with external angles not produced more than suture; the last abdominal sternite flatter, and with the ectoapical processes less produced.

Distribution.—Hainan Island.

¹⁹ Trans. Nat. Hist. Soc. Formosa 24 (1934) 240, Formosa.
Genus PTEROLOPHIA Newman

Pterolophia NEWMAN, Entomologist 1 (1842) 370; THOMSON, Syst. Cer. (1864) 365; GAHAN, Ann. Mus. Civ. Genova 34 (1895) 66.
Prioneta BLANCHARD, Voy. Pole Sud Zool. 5 (1853) 292.
Preonetha PASCOE, Journ. Ent. 1 (1862) 348.

Frons subrectangular; vertex concave; eyes divided, subcoarsely facetted, inferior lobes more often wider than deep; antennæ generally shorter than body; scape, and third and fourth segments more or less equal in length; fourth segment often nearly as long as fifth and sixth segments combined; prothorax broader than long, evenly swollen at sides, nontuberculate, elytra narrowed and separately rounded or subangulate apically; mesosternal process nontuberculate.

Genotype.—Pterolophia vitticollis Newman. Range.—Oriental, Oceanic, and eastern Palæarctic Regions.

Key to the Hainan species of Pterolophia.

- 3. Posterior antennal segments of male acutely produced anteriorly at apices; elytra pinkish brown with a faint, oblique band on each at beginning of posterior declivity...... arctofasciata.
- 5. Largely black, marked on prothorax, suture and sides of elytra with white; antennæ stout, white basally and beyond middle, remainder black; scutellum semicircular; body length more than 8 millimeters. albonigra.

cervina.

PTEROLOPHIA ALBONIGRA Gressitt sp. nov. Plate 4, fig. 5.

Female.—Somewhat abbreviated, parallel, strongly declivitous posteriorly, a raised ridge at top of declivity. Body black, partially clothed with white, and a little brown, pubescence: head moderately clothed with white and tan, denser at sides; clypeus and labrum brown; antennæ largely white and partly tan to middle of third segment, pure black on apical half of third segment, all of fourth and eighth to eleventh segments, white on fifth to seventh segments; prothorax white along middle of disc and upper parts of sides, remainder largely dirty tan; scutellum brown, margined laterally with white and apically with yellowish tan; elytra largely black, an oblique white band on each side from middle of external margin to posterior callus; extreme base, basal callus, suture, and sutural half of apical portion, white mixed with tan; ventral surface and legs largely whitish mixed with tan.

Head weakly concave between antennal insertions, sparsely punctured; frons broader than high; inferior lobe of eye much shorter than its distance from mandibles. Antennæ reaching slightly beyond middle of elytra; scape distinctly carinate on three sides, equal in length to third segment; fourth segment two-thirds as long as third, both weakly carinate externally. Prothorax broader than long, weakly swollen at sides, densely and finely punctured. Scutellum rounded behind. Elytra subparallel, narrowed and obliquely subtruncate apically, grossly and deeply punctured, bearing two more or less distinctly raised ridges, inner ridge more strongly raised and bearing suberect hairs near base and at top of declivity.

Length, 9 millimeters; breadth, 3.4.

Holotype, female, loan deposit, California Academy of Sciences, Ta-hian, near Five Finger Mountains, southcentral Hainan Island, altitude 600 meters, June 19, 1935, taken by the author.

Differs from P. annulata Chevr. in being much shorter, black instead of brown, the pinkish brown pubescence largely replaced by white, the sides of the elytra only partly white, and the middle and apical portions of antennæ black with the rest white.

Distribution.—Hainan Island.

PTEROLOPHIA ANNULATA (Chevrolat).

- Coptops annulata CHEVROLAT, Rev. Zool. 8 (1845) 99, Macao, near Hongkong.
- Praonetha Bowringii PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 170, Hongkong.
- Pterolophia annulata GAHAN, Ann. Mus. Civ. Genova 34 (1895) 69; Ann. & Mag. Nat. Hist. (7) 5 (1900) 352, Hainan; GRESSITT, Lingnan Sci. Journ. 18 (1939) 73.

Pterolophia bowringii AURIVILLIUS, Col. Cat. 73 (1922) 253; MATSU-SHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 260.

Male.—Body reddish brown, clothed with dark brown, rusty, pinkish, or grayish-white pubescence: head rusty, with scattered pale hairs, dark brown at sides; antennæ rusty on scape, dark brown on third segment, following segments grayish or tawny proximally and darker brown distally; prothorax dark brown at sides, median portion of disc with a pair of pinkish-tawny stripes commencing at both apex and base, intervening area faintly mottled; elytra rusty brown basally and apically, sides grayish white, sutural portion of bases tawny or pinkish brown; ventral surfaces tawny, mixed with grayish buff and spotted with dark brown.

Antennæ fourth-fifths as long as body; scape, and third and fourth segments subequal in length. Prothorax nearly as long as broad, feebly convex laterally. Elytra with surfaces coarsely foveate-punctate, around the feebly swollen basal callosities; apices subrounded.

Length, 10 to 12 millimeters; breadth, 3.3 to 4.

Female.—Antennæ two-thirds as long as body, posterior segments hardly dentate endoapically.

Length, 14 millimeters; breadth, 4.8.

One male, in the British Museum, was collected on Hainan by J. Whitehead in 1899; 2 males, in the Lingman Natural History Museum, were taken at Ch'ung-mei, 25 kilometers southeast of Naam-fung, Lin-kao District, August 27 and 28, 1932, by F. K. To; 1 female, in the author's collection, was taken at Taipin-ts'uen (Dwa-Bi) by the author, July 25, 1935; 1 female, Samkwong-ts'uen, Lam-wan-tung, August 16, 1935, F. K. To.

Distribution.—Hongkong; Kwangtung; Kiangsu; Hainan; Formosa; Ryu Kiu Islands; Burma.

PTEROLOPHIA ARCTOFASCIATA Gressitt sp. nov. Plate 4, fig. 6.

Female.—Moderate-sized; laterally compressed; strongly declivitous posteriorly. Reddish brown, entirely clothed with dense

pubescence varying from light tan to blackish: head blackish brown, mottled with reddish brown and isolated white hairs: antennæ blackish brown from base to end of basal third of fourth segment, middle of fourth segment reddish, remaining segments brown with scattered whitish hairs and base of each segment pale: prothorax dark brown, pinkish on each side of midline of disc from base to apex as well as on lower parts of sides; scutellum and basal guarter of elvtra pinkish red, basal crest black-tipped, an oblique brown portion beyond basal part. then a light reddish-brown triangular area on each side: margined posteriorly with light tan, forming a narrow, slightly sinuous line from posterior callus to margin, leaving the triangular apical area brown mixed with pinkish, some black spots along suture in middle and posterior region; ventral surface and legs largely pinkish brown, last abdominal segment and tarsi dark brown, middle of metasternum grav-brown.

Head moderately concave between antennal insertions, heavily punctured on occiput, less so on frons. Antennæ reaching almost to apical third of elytra; scape thick, equal in length to third segment; fourth segment slightly arched, nearly as long as third, twice as long as fifth segment. Prothorax slightly broader than long, narrower apically, densely punctured, each puncture giving rise to a white hair. Scutellum rounded-triangular. Elytra slightly narrowed posteriorly, strongly declivitous, separately rounded-subangulate apically; surface bearing a weak callus near base and another at beginning of last third, near suture, the latter bearing a longer tuft of hairs.

Length, 10.7 to 11.6 millimeters; breadth, 4.

Male.—Antennæ five-sixths as long as body, posterior segments acuminately dentate endoapically.

Length, 10 millimeters; breadth, 3.2.

Holotype, female, No. 52173 United States National Museum, Ta-hian, near Five Finger Mountains, southcentral Hainan Island, altitude 600 meters, June 12, 1935, taken by the author; allotype, male, in the Musée Heude, Nodoa, Hainan, March 23, 1936, G. Ros; two paratypes, 1 female, in the Lingnan Natural History Museum, Dwa-Bi (Tai-pin), July 20, 1935, and 1 male, in the author's collection, Ta-han, June 21, 1935, taken by the author; one paratype, taken at Sam-a (Sam-ah-kong), April 30, 1936, by G. Ros; one at Ying-ko-au, June 25, 1935, F. K. To; and one en route from Paai-poon-ts'uen, Yai District, to Faanmaan-ts'uen, Ling-shui District, May 11, 1932, by R. A. McClure. This species differs from P. annulata (Chevr.) in being a little smaller, narrower at humeri, with the posterior antennal segments of the male acutely produced endoapically and the elytra with a narrow, curved, pale fascia at top of posterior declivity, instead of with the sides largely clothed with whitish-gray pubescence.

Distribution.—Hainan Island.

PTEROLOPHIA CAMELA Pic.

Pterolophia camela PIC, Mel. Exot. Ent. 45 (1926) 30, Tonkin.

Male.—Small; narrow; tuberculate on pronotum and bases of elvtra. Body reddish brown, darker brown on elytra, clothed with various shades of brown, with some grayish white, and black, pubescence: head tawny-brown, a little whitish on genæ, sides of lower part of frons and sides of vertex; antennæ rusty brown mixed with dark brown and grayish on first four segments, following segments each rusty brown basally, dark brown in middle, grayish at extreme apex; prothorax tawny-brown, with indefinite longitudinal stripes and areas on disc; elytra tawny-brown, mixed with grayish white, marked with brownish black on humeri, basal crests, and along sutural third to beyond middle, some incomplete, suboblique, grayish bands at suture before and after beginning of posterior declivity, edged with tawny and separated by some black spots; ventral surfaces thinly clothed with whitish mixed with pale buff, some dull-brown spots on legs and apex of abdomen.

Head finely punctured; inferior eye lobes large; antennal supports prominent. Antennæ three-fourths as long as body; scape slender, tricarinate, a little longer than third segment. Prothorax short, finely punctured, constricted basally, bituberculate on center of notal disc. Elytra prominenty crested basally, carinate from crest to beginning of posterior declivity, seriate-punctate, obliquely truncate apically, concave along center of disc of each.

Length, 6.5 millimeters; breadth, 2.6.

A single male, in the Lingman Natural History Museum, taken at Ngaai-uen city, Yai District, southern Hainan, January 31, 1935, by F. K. To.

New to Hainan.

Distribution.—Tonkin; Hainan.

PTEROLOPHIA CERVINA Gressitt.

Pterolophia cervina GRESSITT, Lingnan Sci. Journ. 18 (1939) 74, pl. 2, fig. 6, Kwangtung and Kwangsi.

72, 1–2

Male.—Body dark brown, lighter reddish brown on elytra and parts of ventral surfaces, clothed with tawny-brown, and a little dark brown, pubescence: head pale tawny, streaked with dark on each side of occiput; antennæ buff with spots on scape and central portions of fifth and following segments brownish; prothorax whitish buff with a large dark-brown spot on each side of base of notum; elytra tawny-buff, with several faint, posteriorly arcuate, darker bands on base and middle, the last considerably broadened towards lateral margins; thoracic sterna and legs tawny-buff spotted with dull brown; abdomen thinly clothed with whitish buff with reddish-brown spots, posterior margins of segments densely fringed.

Head sparsely and finely punctured; antennal supports subtuberculate internally; antennæ nearly as long as following two segments united; prothorax one and one-fifth as broad as long, evenly swollen and sparsely punctured; elytra roughly crested subbasally, seriate-punctate on inner half of basal portion of each; apices subobtuse.

Length, 10 millimeters; breadth, 3.8.

A single male, in the Lingman Natural History Museum, taken at lights at Nodoa, August 15, 1929, by the Lingman Univ. Fifth Hainan Island Exped.

New to Hainan.

Distribution.—Kwangtung; Hainan.

PTEROLPHIA KALEEA (Bates). Plate 5, fig. 5.

Praonetha kaleea BATES, Proc. Zool. Soc. London (1866) 351, Formosa. Pterolophia kaleea AURIVILLIUS, Col. Cat 73 (1922) 254.

Pterolophia kaleca MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 359, 361 (error).

Female.—Dark brown, somewhat reddish beneath, irregularly clothed with grayish white, tawny, rusty, and blackish pubescence: head tawny-brown with several incomplete transverse or oblique whitish bands; antennæ dark brown, banded with grayish white at middle and apex of scape, base of third, bases and apices of fourth to eighth, and bases of following, segments; prothorax dull brown, in part tawny, largely suffused with grayish white on sides and onto disc as far as each side of center, and, more distantly, each side of base; elytra dull brown mixed with darker brown and dotted with blackish brown, marked with grayish white as follows: a small spot on each side of suture behind parascutellar tawny spots, a broad, irregular, premedian,

and a narrow postmedian, band, fusing at sides into a large whitish area, and some irregular, subcoalesced spots, particularly on dorsal portion of apical quarter, suture broken up into subregular, rusty, dark-brown, and whitish, bars, a pale rusty spot on each side of suture at top of apical declivity; ventral surfaces thinly clothed with grayish white, some tawny hairs on abdomen; legs with irregular whitish pubescence.

Head deeply punctured; inferior eye lobes oval, oblique; antennæ three-fourths as long as body; scape slender, a little longer than third segment. Prothorax nearly one and one-third as broad as long, feebly swollen laterally, with surfaces closely and deeply punctured and slightly convex on each side of center of disc. Elytra parallel for basal two-thirds, narrowed and subrounded apically; surfaces closely, and in large part seriately, punctured; basal crest short, a feeble ridge extending from it to top of apical declivity.

Length, 5.6 millimeters; breadth, 2.

A single female, in the author's collection, taken by the author at Tai-pin-ts'uen (Dwa-Bi), near Loi Mother Mountain, Hainan, July 25, 1935.

New to Hainan.

Distribution.—Formosa; Hainan.

Genus LYCHROSIS Pascoe

Lychrosis PASCOE, Journ. Linn. Soc. London Zool. 9 (1866) 89; LA-CORDAIRE, Gen. Col. 9 (1872) 522, 541.

Frons slightly broader above than beneath; vertex shallowly concave; eyes finely facetted, inferior lobes wider than deep; antennæ about as long as body in male, shorter in female, third segment longer than scape; prothorax subcylindrical, broader than long; elytra lacking distinct basal crests, declivitous posteriorly, separately acuminate apically; middle intercoxal process nontuberculate; tarsi about as long as tibiæ.

Genotype.—Mycerinus luctuosus Pascoe.

Range.—Indo-Chinese Subregion; Queensland.

Key to the Hainan species of Lychrosis.

Frons wider than high; third antennal segment no longer than fourth; grayish white with a large humeral spot and a postmedian band, on elytra, of blackish; body less than 12 millimeters long...... fasciatus.

Frons higher than wide; third antennal segment longer than fourth; white, striped and spotted with black; body over 13 millimeters long.

zebrinus.

LYCHROSIS FASCIATUS Gressitt sp. nov. Plate 4, fig. 4.

Male.-Brownish black, largely clothed with gray, white, tawny. or dark-brown pubescence: head with grayish white, mixed on vertex and upper part of frons with a little tawny. pubescence; antennæ thinly clothed with gravish white on first five segments, and with gravish brown on remainder: prothorax clothed with gravish white, somewhat tawny anteriorly and on middle of disc, more whitish basally and at sides, finely and sparsely dotted with blackish; scutellum thinly clothed with whitish; each elytron with a large, subrectangular, dark-brown spot on outer two-thirds of basal quarter, somewhat rusty on humeri; remainder of base, and sutural portion slightly beyond base, pale tawny; premedian areas forming a broad, transverse, white band, postmedian area, for nearly equal width, brownish black; somewhat tawny at sides, apical quarter pale tawny to whitish, dotted with dark brown; ventral surfaces clothed with white on thorax and pale buff on abdomen, segments of latter fringed on posterior margins: legs thinly clothed with white.

Head closely and finely punctulate; vertex slightly concave. Antennæ not quite as long as body; scape thick, nearly as long as third segment; fourth segment subequal to third and nearly as long as fifth and sixth segments combined. Prothorax subcylindrical, a little broader than long, hardly convex at sides, evenly swollen on disc; surfaces finely and closely punctured. Scutellum short, convex behind. Elytra slightly broadened to just behind middle, narrowed posteriorly; apices separately produced and subacute; surfaces deeply subseriate-punctate, two feeble costæ extending from base to beginning of posterior declivity, on each. Metasternum with a few deep punctures at sides.

Holotype, length, 9.4 millimeters; breadth, 3.6.

Paratype, length, 8 millimeters; breadth 3.2.

Female.—Antennæ four-fifths as long as body; elytra more swollen posteriorly, with three more or less distinct costæ.

Length, 11 millimeters; breadth, 4.2.

Holotype, male, in the Lingnan Natural History Museum, Taaichau Island (Tinhosa), Wan-ning District, off southeastern Hainan, June 2, 1932, collected by Prof. W. E. Hoffmann and O. K. Lau; allotopotype, 1 female, Nos. 53457 and 53475, United States National Museum, and paratopotype, male, in the author's collection, taken the same day.

Differs from L. zebrinus (Pascoe) in being shorter and more broadened posteriorly, in having the frons much broader, the antennal scape stouter, the third antennal segment relatively shorter, the pronotum more swollen, the elytra more regularly punctured, subcostate, and a little less produced apically, besides being clothed with duller white and banded, instead of spotted and striped, with black. Possibly near *L. rufipennis* Pic, but the elytra are not red and have a definite pattern of pubescence, and the prothorax is broader than long.

Distribution.—Hainan Island.

LYCHROSIS ZEBRINUS (Pascoe). Plate 3, fig. 10.

Hathlia zebrina PASCOE, Trans. Ent. Soc. London (2) 4 (1857) 252, India.

Lychrosis zebrinus LACORDAIRE, Gen. Col. 9 (1872) 541.

Male.—Black, partially clothed with thick, white pubescence: head white with four longitudinal black stripes on top, middle two stripes very close, a few blackish dots on genæ, and some grayish areas on frons; antennæ with last seven segments black except at bases and apices, fourth segment dark just before apex; prothorax white with five black stripes; elytra white with irregular, subreticulate, black markings, particularly along dorsal portion, and crossing suture as broken or transverse bands; ventral surfaces and legs white with grayish-black dots.

Head deep, feebly concave at vertex. Antennæ barely as long as body; scape long, subcylindrical, carinate anteriorly, not quite as long as third segment. Prothorax nearly cylindrical, hardly swollen above or at sides, rather closely and deeply punctured. Elytra grossly punctured.

Length, 12.5 millimeters; breadth, 4.8.

Female.—Antennæ five-sixths as long as body.

Length, 14.7 millimeters; breadth, 5.6.

One male was taken at Ta-han, central Hainan, altitude 750 meters, June 21, and 1 female at Tai-pin'ts'uen (Dwa-Bi), near Loi Mother Mountain, altitude 400 meters, July 24, 1935, by the author. The Lingnan Natural History Museum has specimens from between Nam-fung and Poh-shang, July 24, and Fan-ta-ts'uen, July 31, 1929, Lingnan Univ. Fifth Hainan Exped.; Chengmai, August 24, 1932, and Tai-pin-ts'uen, July 25, 1935, F. K. To.

New to Hainan.

Distribution.-Northern India; Tonkin; Hainan; Formosa.

Genus DESISA Pascoe

Desisa PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 163; LACORDAIRE, Gen. Col. 9 (1872) 551, 566.

72, 1–2

Body depressed; frons squarish; vertex feebly concave; eyes emarginate, coarsely facetted, inferior lobes about as wide as deep; antennæ a little longer than body in male, about as long as body in female, scape broadened apically, as long as third segment; prothorax short, narrowest at base; elytra broad, rounded apically; intercoxal process nontuberculate.

Genotype.—Praonetha subfasciata Pascoe.

Range.—India; Indo-China; Hainan; South China; Formosa.

DESISA SUBFASCIATA (Pascoe).

Praonetha subfasciata PASCOE, Journ. Ent. 1 (1862) 348, Cambodia. Desisa subfasciata PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 163; LACORDAIRE, Gen. Col. 9 (1872) 566; GRESSITT, Lingnan Sci. Journ. 18 (1939) 76.

Female.—Dull reddish brown, somewhat blackish on pronotal disc, scape, and parts of femora and tibiæ, clothed with irregular, dull-brown or grayish pubescence: head grayish brown, with a few scattered tawny spots; antennæ thinly clothed with dull brown, some tawny on scape, bases of fourth and following segments pale gray; prothorax dull brown, with some irregular tawny blotches; elytra grayish brown, spotted with tawny, a broad, but faint, grayish-white band centered slightly before middle; ventral surfaces buffy white along middle and with tawny spots along sides.

Antennæ about as long as body; scape broad apically, hardly longer than third segment; prothorax transverse, broadened anteriorly, irregularly punctured; elytra broad, subparallel, rounded apically, distinctly punctured, subasperately punctured at base.

Length, 10.8 millimeters; breadth, 4.4.

A single female, in the Lingnan Natural History Museum, taken at Tai-tsing-lam-ts'uen, back of Lai-mo-ling (Loi Mother Mountain), Ting-an District, June 5, 1935, by F. K. To.

New to Hainan.

Distribution.—Cambodia; South China; Hainan.

Genus ENISPIA Pascoe

Enispia PASCOE, Trans. Ent. Soc. London (3) 3 (1864) 28, 50; LA-CORDAIRE, Gen. Col. 9 (1872) 552, 575.

Dyemus PASCOE, Trans. Ent. Soc. London (3) 3 (1864) 28, 54.

Subcylindrical, hairy. Antennæ distantly inserted, tapering, not much longer than body, with long internal hairs, segments

thickened apically, scape hardly reaching middle of prothorax; head sometimes broader than prothorax, squarish in front, plane or feebly concave between antennal insertions; eyes emarginate, their inferior lobes deeper than wide; prothorax subcylindrical, nontuberculate, transversely constricted near apex and base; scutellum short; elytra parallel, conjointly rounded apically; legs short, first tarsal segment hardly longer than following.

Genotype.—Enispia venosa Pascoe.

Range.—Oriental Region; Wallacea; New Guinea.

Key to the Hainan species of Enispia.

ENISPIA ANFRACTA Gressitt sp. nov. Plate 5, fig. 13.

Male.—Slender, dorsoventrally somewhat compressed. Brownish black below, dark chocolate-brown above, basal half of elytra somewhat reddish brown; antennæ brownish black, scape partly reddish, bases of third to sixth segments feebly ringed with pale hairs; femora pale ochraceous, tibiæ duller, tarsi blackish brown; elytra crossed by four zig-zag, partly broken fasciæ, and an apical spot of pale-gray pubescence; remainder of body clothed with a thin layer of close, gray pubescence, and suberect hairs, which are dark on dorsal surface and whitish on legs and undersides; antennæ with a long internal fringe.

Head moderately concave between antennal insertions; surface finely and quite closely punctured; frons rectangular, broader than deep, convex; eyes deeply emarginate, inferior lobes only a little deeper than wide, broader above than below. Antannæ one and two-thirds as long as body; scape moderately slender, fusiform, a little longer than third segment, third and fourth segments subequal, following segment short. Prothorax a little longer than broad, widest at apex, constricted near apex and base; surface finely punctured. Elytra parallel, rounded apically, densely, and in part irregularly, punctured. Posterior femora barely reaching fourth abdominal segment. Female.—Antennæ one and one-third as long as body. Length, 4 to 4.8 millimeters; breadth, 1.6.

Holotype, male, in the Lingnan Natural History Museum, Tai-tsing-lam-ts'uen, back of Lai-mo-leng (Loi Mother Mountain), central Hainan, June 13 to 16, 1935, F. K. To; allotype, female, in the author's collection, Tai-pin (Dwa-Bi), near Loi Mother Mountain, July 20, 1935, taken by the author.

Differs from E. venosa Pascoe in having the antennæ less distinctly annulated, the elytra dark with pale zig-zag fasciæ instead of being distinctively marked with yellow, gray, white, and brown. Differs from E. setosa Gressitt in having the body hairs shorter and sparser, the elytral punctures denser and less regular, and the markings much less striking.

Distribution.—Hainan Island.

ENISPIA QUADRISTIGMA Gressitt sp. nov. Plate 4, fig. 12.

Male.—Dark brownish black; third and following antennal segments ringed basally with white for successively increasing lengths; pronotum with a pair of incomplete longitudinal stripes of tawny-brown on each side of middle; scutellum tawny on each side; elytra with a very small white spot near midline of each at end of basal third, and an incomplete, narrow, irregular, oblique fascia at beginning of apical third, largely tawny except for the middle portion on each elytron, which forms an oblique white spot and a narrow, incomplete, tawny fascia just before apex; dorsal surface dotted with short, white, recumbent hairs; ventral surface clothed with thin gray pubescence; body largely clothed with suberect hairs, dark above and whitish beneath.

Head nearly plane between antennal insertions, feebly convex in front, deeply punctured except on occiput; eyes with inferior lobes barely deeper than wide. Antennæ one and one-fourth as long as body, tapering; scape thick, subcylindrical, about as long as third segment; fourth segment slightly longer than third; following segments slightly shorter. Prothorax fully as broad as long, uneven above. Elytra deeply punctured in about eight rows. Ventral surfaces impunctate; posterior femora not reaching fourth abdominal segment.

Length, 6.3 to 7.2 millimeters; breadth, 2.1 to 2.5.

Holotype, male, in the Lingman Natural History Museum, Sam-ts'uen-kai-hui, southeast of Lai-mo-leng, central Hainan, July 4 to 6, 1935, F. K. To; paratype, male, in the author's collection, Fan-ta, southeast of Nam-fung, altitude 300 meters, July 17, 1935, taken by the author.

Differs from E. anfracta Gressitt in being larger, black, with small tawny or white spots, the antennæ more annulated, and in other respects.

Distribution.—Hainan Island.

ENISPIA THOLANA Gressitt sp. nov. Plate 4, fig. 11.

Female.-Dark reddish brown, nearly black on femora and ventral surface; largely clothed with yellowish buff, brown, or gravish pubescence as follows: head mottled with golden-buff and brown in front and above, and with gray at sides; antennæ thinly clothed with gray-brown, some golden-buff on scape; prothorax clothed with golden-buff, partly in longitudinal stripes, and spotted with small dark-brown dots; elytra largely golden-buff of brighter and duller shades, bases grayish, an area along middle. and two oblique areas before apex of each, thinly pubescent and reddish brown, the brighter golden areas in the form of three or four zig-zag fasciæ, the most distinct and acute fascia near beginning of apical third; ventral surface thinly and evenly clothed with gray-brown, posterior margins of abdominal segments narrowly edged with golden-buff. Entire body clothed with moderately long, erect hairs, brown above, pale on underparts.

Head barely as wide as prothorax, plane in front, distinctly punctured; vertex oblique, very slightly depressed; frons much wider than deep; eyes small, deeply emarginate, inferior lobes deeper than wide. Antennæ barely longer than body, strongly tapering; scape subcylindrical, punctate, shorter than fourth and longer than third, segment; fourth segment nearly as long as fifth and sixth segments combined. Prothorax broader than long, constricted near base and apex, slightly swollen at middle; surface with shallow, but distinct, punctures. Scutellum short, rounded behind. Elytra moderately broad, convex, conjointly rounded apically; deeply punctured, in ten or eleven rows at middle of each. Posterior femora barely reaching fourth abdominal segment.

Length, 7 millimeters; breadth, 2.8.

Holotype, female, loan deposit, California Academy of Sciences, Dome Mountain (Sa-ko-lia, Sa-bo-leng), southwest of Nodoa, westcentral Hainan, altitude 450 meters, July 12, 1935, taken by the author.

Differs from E. setosa Gressitt in having a more swollen and shorter prothorax, broader and more convex elytra which are more sparsely and more regularly punctured, shorter setæ, particularly on antennæ, less contrasting markings, a less distinct pattern, and in other characters.

Distribution.—Hainan Island.

Genus PHESATES Pascoe

Phesates PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 155; LACOR-DAIRE, Gen. Col. 9 (1872) 552, 571.

Head broad, evenly convex in lateral outline; frons broad, emarginate laterally; vertex nearly horizontal between antennal insertions; eyes coarsely facetted, emarginate, occupying most of space between antennal insertions and genal margins; antennæ hardly as long as body, slender; scape subcylindrical, a little shorter than third segment; third and fourth segments subequal; prothorax broader than long, convex and briefly toothed postmedially at sides; elytra but slightly broader than prothorax, rounded apically; mesosternal process very broad anteriorly, subtriangular; femora pedunculate-clavate.

Genotype.—Phesates ferrugatus Pascoe.

Range.-Borneo; Hainan; Hongkong; South China; India.

PRESATES MARMORATUS Gressitt sp. nov. Plate 4, fig. 13.

Depressed-cylindrical, narrowed posteriorly. Reddish brown, blackish on disc of prothorax and base and postmedian parts of elytra, partially clothed with tawny and grayish-white hairs: head quite densely clothed with tawny on upper portion of frons and on vertex, grayish on genæ; antennæ reddish, with bases of third to last segments thinly clothed with pale hairs, basal segments finely ciliated below; prothorax irregularly tawny on anterior portion of disc and upper parts of sides before tubercles, lower sides gray, remainder sparsely clothed; scutellum reddish; elytra irregularly mottled with tawny and gray, the former predominating on basal two-thirds, the latter at apex and along suture; ventral surfaces largely clothed with grayish, some tawny at sides; femora dull red-brown, sparsely gray-haired.

Head nearly level between antennal insertions, sparsely punctured; inferior lobes of eyes nearly reaching bases of mandibles. Antennæ five-sixths as long as body, finely tapered towards apices; scape subcylindrical, three-fourths as long as fifth. Prothorax broader than long, flattish above, briefly tuberculate behind middle of each side, deeply punctured. Scutellum small, semicircular. Elytra gradually narrowed, separately rounded apically, punctured in six regular longitudinal rows, with irregular rows of punctures in the interspaces. Ventral surfaces very sparsely punctured. Femora very strongly swollen, first segment of hind tarsus shorter than following two segments combined.

Length, 6.5 to 9 millimeters; breadth, 2.2 to 2.8.

Holotype, male, No. 53624 United States National Museum, Tai-pin-ts'uen (Dwa-Bi), altitude 380 meters, near Loi Mother Mountain, central Hainan, July 25, 1935, taken by the author; allotype, female, in the author's collection, Ta-hau, western Hainan, altitude 220 meters, July 7, 1935, taken by the author; paratypes, in the Lingnan Natural History Museum, a grove east of Nodoa, August 12, 1929, Lingnan Univ. Fifth Hainan Expedition, Kachek, eastern Hainan, altitude 25 meters, May 1 to 5, 1932, F. K. To; paratype, female, in the Musée Heude, Sam-a, southern Hainan, May 7, 1936, G. Ros; paratype, female, in the California Academy of Sciences, Hongkong, Koebele; paratype, female, in the Lingnan Natural History Museum, Yam-na Shan (Yim-na San), Mei District, Kwangtung Province, South China, September 20, 1933, F. K. To; paratype, female, Canton, Kwangtung, March 6, 1933, W. E. Hoffmann.

Differs from *P. ferrugatus* Pascoe in having the prothorax less cylindrical and the elytra mottled instead of uniform in pattern. *Distribution.*—Hainan; Hongkong; South China.

Tribe APOMECYNINI

APOMECYNIDES Lacordaire, Gen. Col. 9 (1872) 413, 579. APOMECYNINI Aurivillius, Col. Cat. 73 (1922) 278.

Frons rectangular; vertex concave; eyes emarginate or divided; antennæ rarely longer than body; prothorax cylindrical, nontuberculate; elytra narrow, parallel; mesosternal intercoxal process simple; middle coxal cavities open externally; middle tibiæ grooved externally; tarsal claws divergent.

Key to the Hainan genera of Apomecynini.

1.	Eyes coarsely facetted; third antennal segment not shorter than fourth or scape
	Eyes finely facetted; third antennal segment much shorter than either scape or fourth segment
2.	 Eyes completely divided; scape subcylindrical, about as long as third antennal segment; third and fourth segments together much shorter than remaining segments combined

72, 1–2

Genus APOMECYNA Latreille

Apomecyna LATREILLE in Cuvier, Regne Anim. ed. 2 5 (1829) 126;
LACORDAIRE, Gen. Col. 9 (1872) 580.
Mecynapus THOMSON, Archives Ent. 2 (1858) 187, note 1.

Antennæ short and thick; scape swollen; third and fourth segments relatively long; vertex moderately concave between antennal insertions; a deep pit below the small, deeply emarginate eyes; prothorax swollen, rough, nontuberculate; elytra subparallel, rough: legs short and thick: last segment of tarsus large.

Genotype.—Lamia alboguttata Megerle. Range.—Africa; Asia; Oceania.

Key to the Hainan species of Apomecyna.

APOMECYNA QUADRIFASCIATA Thomson. Plate 5, fig. 1. Apomecyna quadrifasciata THOMSON, Physis 2 (1868) 159.

Female.—Brownish black, marked above with spots of white pubescence: four on pronotum; one on each side of disc; two sublinear spots, at apex and base, respectively, of midline; about twelve on each elytron, arranged in three oblique lines with some irregularly placed spots near apex; surface of body largely clothed with thin, dull-brown pubescence; some light areas on sides of abdominal segments.

Vertex subrounded-concave between antennal insertions; antennæ thickened apically, slightly more than one-half as long as body; scape one-half as long as third segment; prothorax one and one-fourth as long as broad, cylindrical, heavily punctured; elytra narrow, obliquely emarginate-truncate at apices; surfaces deeply punctured in eleven longitudinal rows; hind femora weakly swollen, not quite reaching to end of third abdominal segment.

Length, 6.6 millimeters; breadth, 1.6.

72, 1-2

Three specimens, in the Musée Heude, were taken at Sam-a, southern Hainan, April 8 to 14, 1936, and at Yuan-men-tung, Hainan, April 8, 1936, by G. Ros.

New to Hainan.

Distribution.—Philippines; Laos; Hainan; Formosa.

APOMECYNA CANTATOR EXCAVATICEPS Pic comb. nov. Plate 4, figs. 9 and 10.

Apomecyna excavaticeps PIC, Mel. Exot. Ent. 28 (1918) 6, China.

Male (Plate 4, fig. 9).—Dark reddish brown, blackish brown beneath, clothed with moderately dense, chocolate-brown pubescence, varied with buff; elytra with two fairly broad, and one narrow, irregular fasciæ, first two fasciæ centered near ends of first and second thirds, respectively, last fascia just before apex, composed of separate, round spots of dense, white pubescence; first fascia of each elytron composed of about nine subequal spots in a W-shaped arrangement when viewed from side, touching neither suture nor margin, the second composed of a few large and several small spots, some closely approaching suture and margin, the third composed of three to five spots arranged subtransversely.

Head broadly subrounded-concave between antennal insertions; antennæ three-fourths as long as body; scape two-thirds as long as third segment; prothorax broader than long, weakly rounded at sides, deeply punctured; elytra narrowed and subobliquely truncate apically, punctured heavily near base, and more finely, in ten rows, posteriorly; hind femora reaching nearly to apex of fourth abdominal segment.

Length, 10.6 millimeters; breadth, 3.3.

Female (Plate 4, fig. 10).—Vertex more narrowly concave between antennal insertions; antennæ slightly exceeding middle of body; prothorax and elytra much more heavily punctured and rougher; brown pubescence irregularly varied with grayish white; white spots of elytral markings largely fused, last fasciæ more transverse than in male.

Length, 11 millimeters; breadth, 3.3.

One male, in the Musée Heude, was taken at Yuan-men-tung, Hainan, April 9, 1936, and 1 female, at Sam-a, May 3, 1936, both by G. Ros; 1 female, in the Lingnan Natural History Museum, collected at Hoihow, May 16 to 19, 1932, by O. K. Lau.

New to Hainan.

Distribution.—South China; Hainan; Formosa.

39937-----11

Genus ROPICA Pascoe

Ropica PASCOE, Trans. Ent. Soc. London (2) 4 (1857) 247; ibid. (3) 3 (1866) 187; LACORDAIRE, Gen. Col. 9 (1872) 590.

Head deeper than wide; frons rectangular, higher than wide; convex; vertex shallowly concave; eyes subcoarsely facetted, divided, lobes not greatly separated; antennæ tapering, a little longer than body, with scape and third and fourth segments subequal in length; prothorax broader than long, convex laterally; elytra broadest behind middle, separately rounded or subobtuse apically; mesosternal intercoxal process narrow and simple.

Genotype.—Ropica piperata Pascoe.

Range.—Oriental Region; Indo-Australian Subregion; Melanesia.

Key to the Hainan species of Ropica.

- - Inferior eye lobes occupying less than one-half space between antennal supports and genal margins; antennæ very slender, with numerous distinct, erect hairs distally; elytra with some glabrous areas.

ngauchiliæ.

- 2. Prothorax one and one-third as broad as long; elytra lacking distinctly raised longitudinal lines, irregularly punctured along suture; inferior eye lobes as wide as deep; pubescence not distinctly striped longitudinally, an arcuate whitish mark behind middle of each elytron.

ROPICA SUBLINEATA Gressitt sp. nov. Plate 5, fig. 9.

Male.—Narrow, subcylindrical. Body largely dull reddish brown; blackish on neck, across middle portion of prothorax, along median area of each elytral disc from humerus to beyond middle, and blackish brown on femora, apices of tibiæ, and central portions of posterior abdominal segments; surfaces clothed with pale gray, tawny, or various shades of brown, pubescence: head tawny, finely speckled with dark brown; antennæ reddish brown, thinly clothed with pale gray, irregularly on apical segments; prothorax with three longitudinal tawny stripes along middle and joined at apex and base, remainder dark, very thinly clothed with gray; scutellum with pale gray at sides; elytra thinly clothed with gray-brown, each with a tawny stripe on basal quarter near suture, the two raised costæ each partly grayish white and partly dark brown, with some minute gray spots along suture and sides as well as near apices; ventral surfaces pale gray, somewhat tawny along sides; first abdominal segment with a tawny-buff apical fringe.

Head finely punctured; vertex feebly concave; inferior eye lobes a little deeper than wide. Antennæ one and one-fifth as long as body; scape slightly depressed, rugose-punctate, no longer than third segment; fourth segment as long as third; third to sixth segments feebly thickened apically. Prothorax nearly as long as broad, feebly convex laterally, slightly constricted at apex and base; surfaces finely punctured. Elytra narrow, hardly broadened posteriorly, separately rounded apically; disc of each subregularly punctured in about 17 longitudinal rows, with two raised costæ along dorsal portion from base to near apex where they meet. Thoracic sterna distinctly punctured at sides. Abdomen with last three segments subequal in length, longer than second.

Length, 7.6 millimeters; breadth, 2.4.

Female.—Antennæ barely longer than body; elytral costæ less distinct; last abdominal segment large, medially grooved.

Length, 7.8 millimeters; breadth, 2.5.

Holotype, male, loan deposit, California Academy of Sciences, Ta-hau, near Vo-lau, western Hainan, altitude 180 meters, June 17, 1935, taken by the author; allotype, female, in the Lingman Natural History Museum, near Fooi-iu, northwest of Nodoa, August 20, 1929, Lingman Univ. Fifth Hainan Exped.

Differs from *Ropica formosana* Bates in having the prothorax longer and less swollen, the elytral bases more raised and rugose, and in other respects.

Distribution.—Hainan Island.

ROPICA NGAUCHILÆ Gressitt sp. nov. Plate 7, fig. 8.

Male.—Small, subcylindrical, hardly broadened posteriorly. Body dull reddish brown; head, sides, and middle of pronotal disc, median portions of elytral discs, and thoracic sterna blackish; antennæ, abdomen, and legs lighter reddish brown; surfaces irregularly clothed with whitish to dull-gray pubescence: head unevenly pale tawny-gray; antennæ faintly ringed with grayish white, and with many erect hairs on distal half; prothorax thinly tawny-gray, more densely tawny on each side of median dark stripe; scutellum tawny at each side; elytra grayish tawny on outer half of each, irregular on inner half, more densely tawny

72, 1–2

basally, subglabrous beyond middle, and with longitudinal spots of pale gray posteriorly; ventral surfaces pale tawny-gray on thoracic sterna and buffy white on abdomen and legs.

Head finely punctured; inferior eye lobes small, about as broad as deep. Antennæ slender, one and one-third as long as body; scape shorter than third segment, feebly punctured; fourth segment about as long as third, slightly longer than fifth segment, prothorax broader than long, evenly convex laterally; disc finely and closely punctured, moderately convex in center. Elytra narrowly rounded posteriorly, each closely subseriate-punctate on inner half, with two feebly raised, incomplete costæ.

Female.—Antennæ slightly longer than body; fourth abdominal segment distinctly shorter than second.

Length, 5.6 to 6.4 millimeters; breadth, 2.

Holotype, male, No. 53625 United States National Museum, Tahian, foot of Five Finger Mountains, southcentral Hainan, altitude 600 meters, June 13, 1935; allotopotype, female, in the author's collection, June 17, 1935; paratopotype, male, in the Lingnan Natural History Museum, June 14, 1935, all collected by the author.

Differs from R. formosana dorsalis Schwarzer in being more elongate, with the antennæ slenderer and less distinctly annulated, the elytra carinate and with various short stripes and no transverse preapical white bars and other differences. The name refers to the Hainanese term for the Five Finger Mountains, Ngau-chi-lia.

Distribution.—Hainan.

ROPICA FORMOSANA DORSALIS Schwarzer.

Ropica formosana var. dorsalis SCHWARZER, Ent. Blätter 21 (1925) 145, Formosa; GRESSITT, Lingman Sci. Journ. 18 (1939) 78.

Female.—Light reddish brown; blackish brown on front of head, on neck, sides of prothorax, humeri, and central portions of elytral discs; dark reddish brown on sides of thoracic sterna and on femora; surfaces irregularly clothed with whitish to tawny-gray pubescence: head thinly whitish gray, pale tawny on antennal supports; antennæ spotted and narrowly ringed at apices of segments with grayish white; prothorax pale gray at sides, largely pale tawny on disc; elytra thinly tawny-gray, not hiding derm, an arcuate whitish mark on each behind middle, a few scattered whitish dots, and a minute white hair in each puncture. Head finely and closely punctured. Antennæ not very slender, slightly longer than body; scape barely as long as third segment. Prothorax distinctly transverse, feebly convex laterally, its surface finely punctured, an incomplete stripe on middle of disc. Elytra broadest behind middle, subrounded apically, surfaces closely punctured.

Length, 6 millimeters; breadth, 2.6.

A single female, in the author's collection, taken by the author at Ta-hau, near Vo-lau, western Hainan, altitude 180 meters, July 4, 1935.

New to Hainan. Distribution.—Hainan; Formosa; Kwangtung.

Genus IPROCA Gressitt novum

Depressed-cylindrical; narrow. Frons subrectangular, emarginate laterally and above; vertex obtusely concave; antennal supports moderately prominent; eyes coarsely facetted, completely divided into distant lobes, inferior lobe convex and lying in a depression; antennæ about as long as body, scape subcylindrical and barely longer than third segment, fourth segment fully as long as third; prothorax subcylindrical, feebly swollen before middle, about as broad as long; elytra elongate, subparallel, narrowed and separately acuminate apically, concave along middle of disc of each; anterior coxal cavities entire, angulate externally; middle coxal cavities open exteriorly; mesosternal intercoxal process plain, gradually declivitous anteriorly; middle tibiæ emarginate preapically; tarsi as long as tibiæ, with third segment of last pair distinctly shorter than first and less than one-half as long as last.

Genotype.—Iproca acuminata Gressitt sp. nov.

Range.—Hainan Island.

This genus differs from *Ropica* in having the frons smaller and less convex, the eyes more coarsely facetted, with the lobes more distant, the vertex more concave, the antennæ less tapered distally, the prothorax longer and more cylindrical, the elytra acuminate posteriorly, and the femora with a hairy depression beneath.

IPROCA ACUMINATA Gressitt sp. nov. Plate 5, fig. 8; Plate 7, fig. 6.

Male.—Dull reddish brown; head and thorax (except anterior margin) blackish; surfaces largely clothed with varied pubescence: head with gray-brown, duller on genæ and occiput, grayish white along lower margins of frons and genæ, and behind

165

72, 1–2

antennal insertions; antennæ with gray-brown at base, as far as apex of third segment, with grayish buff on basal two-thirds of fourth segment, and just beyond bases of following three or four, remainder dark reddish brown; prothorax subglabrous and thinly clothed with tawny on notal disc, except for a fine, median, grayish-white line, sides dark sooty brown along middle, striped above and below with grayish white; elytra pale tawny-gray or grayish buff, each striped along median depression of disc, along basal third near suture with gray-brown, and along the two ridges bordering median depression with grayish white; ventral surfaces tawny-gray along middle, and grayish white on sides, of thoracic sternites, grayish white on abdomen mixed with tawny-gray on basal segments. Apical antennal segments with minute, scattered, suberect hairs.

Head subsquarish in front; frons grooved medially, deeply punctured; occiput deeply punctured, concave and medially grooved between superior eye lobes; inferior eye lobes overhung slightly by antennal supports, a little broader than deep, occupying slightly more than one-half space between antennal supports and genal margins. Antennæ barely longer than body; segments cylindrical and of equal thickness beyond scape; scape barely longer than third segment; fourth segment slightly longer than scape. Prothorax with anterior margin of notum convex and disc feebly swollen, closely and deeply punctured. Scutellum short, subrounded behind. Elytra deeply subseriate-punctate and strongly produced and acuminate apically, leaving a deep, rounded emargination between. Metasternum punctured at sides. First abdominal segment as long as following two combined. Posterior femora swollen, longer than tibiæ, reaching to end of fourth abdominal segment, a fringed depression on underside of each.

Length, 8.6 millimeters; breadth, 2.2.

Holotype, male, loan deposit, California Academy of Sciences, Ta-hian, near Five Finger Mountains, southcentral Hainan, altitude 600 meters, June 19, 1935, taken by the author.

Similar in appearance to *Ropica sublineata* Gressitt, but more attenuate, with the elytral apices acuminate, and other differences.

Distribution.—Hainan Island.

Genus EUNIDIA Erichson

Eunidia ERICHSON, Archiv. f. Naturg. 9 1 (1843) 261; THOMPSON, Syst. Cer. (1864) 396; LACORDAIRE, Gen. Col. 9 (1872) 580, 585. Anomæsia PASCOE, Trans. Ent. Soc. London (2) 4 (1858) 255. Frixus THOMSON, Archives Ent. 1 (1857) 313. Syessita PASCOE, Journ. Ent. 2 (1864) 284. Trittomicrus FAIRMAIRE, Revue d'Ent. 11 (1892) 125.

Body slender; head wider than prothorax; eyes finely facetted, emarginate, large, reaching nearly to genal angles; antennæ long, slender; scape slender; third segment barely one-third as long as either scape or fourth segment; prothorax small, subcylindrical, narrowest at base; elytra narrow, rounded apically; middle intercoxal process very narrow; legs slender; femora reaching to about middle of abdomen; tarsi barely three-fifths as long as tibiæ, last segment small.

Genotype.—Eunidia nebulosa Erichson.

Range.—Ethiopian and Oriental Regions.

EUNIDIA LATERALIS Gahan. Plate 5, fig. 2.

Eunidia lateralis GAHAN, Ann. & Mag. Nat. Hist. (6) 11 (1893) 387, southern India.

Male.—Black; elytra reddish brown; abdomen dark reddish brown with apical margins lighter; dorsal surfaces of head, prothorax, and elytra clothed with orange-yellow pubescence; sides, including lateral declivitous portions of elytra, thinly clothed with darker pubescence; ventral surfaces, legs, and antennæ sparsely clothed with palish hairs.

Head feebly concave between antennal insertions, minutely punctured; inferior eye lobes large, subreniform, nearly twice as deep as wide. Antennæ nearly twice as long as body; scape long, gradually thickened apically; third segment very short, angulate ectoapically; following segments long, subequal. Prothorax cylindrical, finely punctulate, plane on disc. Elytra finely and irregularly punctulate.

Length, 6 millimeters; breadth, 1.65.

Female.—Antennæ one and one-half as long as body.

Length, 7 millimeters; breadth, 2.

One female, in the Lingman Natural History Museum, was taken on Hainan in 1932 by Prof. W. E. Hoffmann; 1 male, in the author's collection, was collected at Ngai-chau, Yai District, southern Hainan, May 27 to 30, 1932, by W. E. Hoffmann and O. K. Lau.

New to Hainan.

Distribution.—India; Hainan.

PTERICOPTINI

PTERICOPTIDE Lacordaire, Gen. Col. 9 (1872) 601. PTERICOPTINI Aurivillius, Col. Cat. 73 (1922) 294.

Frons subrectangular; vertex more or less concave; eyes deeply emarginate; antennæ about as long as body; scape swollen, shorter than third segment; prothorax subcylindrical, elytra parallel, generally but little wider than prothorax; anterior and middle intercoxal process feebly raised; anterior coxal cavities closed; middle coxal cavities nearly closed to epimera externally; middle tibiæ emarginate preapically; tarsal claws divergent.

Key to the Hainan genera of Ptericoptini.

Genus SYBRA Pascoe

Sybra PASCOE, Trans. Ent. Soc. London (3) 3 (1865) 141, 198; LA-CORDAIRE, Gen. Col. 9 (1872) 603, 615.

Dorsoventrally compressed; frons rectangular; vertex feebly concave; antennal supports distant, hardly raised; eyes subcoarsely facetted, deeply emarginate; antennæ about as long as, or a little longer than, body; scape short, subfusiform; prothorax generally broader than long, feebly swollen laterally or constricted apically; elytra long, subdentate or obliquely truncate apically; legs short, with posterior femora reaching but slightly beyond middle of abdomen.

Genotype.—Ropica stigmatica Pascoe.

Range.—Oriental Region; Indo-Australian and Melanesian Subregions.

Key to the Hainan species of Sybra.

- Frons wider than high; scape two-thirds as long as third antennal segment; elytra regularly striate-punctate, separately acute apically; over 7.5 millimeters long punctatostriata.
 - Frons higher than wide, emarginate laterally; scape about as long as third segment; elytra irregularly punctured on basal portion near suture, separately obtuse apically; less than 5 millimeters long.

breuningi.

3. Prothorax slightly broader than long, with punctures moderately dense; elytra brown, lighter apically clothed with tawny-buff...... posticalis. Prothorax slightly longer than broad, with punctures closely reticulate above; elytra black at sides and at base near scutellum, dull reddish with gray pubescence on remainder....... pascoei.

SYBRA BREUNINGI Gressitt sp. nov.

Dark brown, reddish on labrum, clypeus, bases of antennal segments, anterior and posterior margins of pronotum, postbasal, sutural, and apical portions of elytra, tarsi, tibiæ in large part, extremities of femora, and apex of abdomen; front of head and ventral sternites nearly black; surfaces largely clothed with tawny-gray above and whitish gray beneath: head with pale gray, slightly tawny behind eyes; antennæ thinly clothed, distinctly grayish white at bases of last six segments; prothorax pale gray at sides, tawny-gray above; elytra pale tawny-gray, with irregular blotches of grayish-white pubescence and subglabrous areas on discs; ventral surfaces pale gray on middle of thoracic sternites and on abdomen, tawny-gray on sides of thorax.

Head finely and sparsely punctured; frons emarginate laterally, broadest at top; inferior eye lobes large, obliquely oval, closely approaching genal margins. Antennæ one and one-sixth as long as body, slender; scape feebly swollen, about as long as third segment; fourth segment longer than third. Prothorax distinctly broader than long, swollen at middle, finely, though deeply and somewhat closely, punctured. Elytra narrowed in apical two-fifths; apices obtusely angulate; surfaces closely seriate-punctate, irregularly punctured along suture at base. Metasternum deeply punctured at sides.

Length, 3.55 millimeters; breadth, 0.95.

Holotype, male(?), loan deposit, California Academy of Sciences, Ta-hau, near Vo-lau, western Hainan, altitude 175 meters, July 6, 1935, taken by the author.

Differs from most species of *Sybra* in having the frons narrowed, the inferior eye lobes large, the third antennal segment no longer than the scape, the elytra with more rows of punctures and simply obtuse apically, and in other respects.

Distribution.-Hainan Island.

SYBRA PASCOEI Lameere. Plate 5, fig. 11.

Sybra Pascoei LAMEERE, Mem. Soc. ent. France 62 (1893) 285, Annam.

Black, reddish brown on first three antennal segments and bases of remaining antennal segments, sides of prothorax, parts of ventral surfaces and legs, and on each elytron as follows: a broad, oblique stripe from humerus to suture, extending along latter to apex, with outer border somewhat irregular; surfaces clothed with thin brownish-gray pubescence, sides of prothorax and lighter portions of elytra with tawny-buff pubescence.

Head deeply and irregularly punctured. Antennæ slender, about as long as body; scape short and thick, barely two-thirds as long as third segment. Prothorax densely and deeply reticulate-punctate on disc, closely and more finely punctured laterally. Elytra entirely seriate-punctate; apices separately produced, subacute.

Length, 5.4 millimeters; breadth, 1.35.

A single male, in the author's collection, was taken by the writer at Ta-han, near Red Mist Mountain, central Hainan, altitude 750 meters, June 7, 1935.

New to Hainan.

Distribution.—Indo-China; Annam; Hainan.

SYBRA POSTICALIS (Pascoe).

Ropica posticalis PASCOE, Trans. Soc. Lond. (2) 4 (1858) 248, Hong-kong.

Sybra posticata, GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 352, Hainan. (nec. Gahan, 1894).

Sybra posticalis AURIVILLIUS, Col. Cat. 73 (1923) 301; GRESSITT, Ling. Sci. Journ. 18 (1939) 80, Lan-tau Island, near Hongkong.

Female.—Dark brown, somewhat reddish on bases of antennal segments, humeri and parts of sides of elytra, parts of legs, and bases of abdominal segments; surfaces thinly clothed with light brown or grayish, in part with denser tawny or whitish pubescence: head with tawny-brown, mixed with some grayish; antennæ thinly clothed with pale, more densely so on bases of last six segments; prothorax gray-brown at sides; notum with a median stripe and some irregular lateral markings, of tawny; elytra thinly clothed with pale rusty brown, spotted or mixed with grayish, bases striped with tawny, apical halves tawny along inner portions, a blackish spot on middle of each at beginning of apical fifth; ventral surfaces with dense tawny on sides of metasternum and along abdominal segments as incomplete stripes.

Head deeply and sparsely punctured. Antennæ five-sixths as long as body; scape swollen, three-fourths as long as third segment. Prothorax somewhat heavily punctured above, more sparsely so at sides. Elytra seriately punctured except for dense**72,** 1–2

ly and irregularly punctured areas along suture near base; apices obliquely truncate and obtusely produced.

Length, 5.6 to 7.4 millimeters; breadth, 1.7 to 2.3.

Three female specimens, in the Lingman Natural History Museum and the author's collection, collected by the author; 1 at Ta-han, central Hainan, altitude 750 meters, June 7, 1 at Nodoa, altitude 250 meters, June 28, 1 at Ta-hau, altitude 175 meters, July 4, 1935.

Distribution.—Hongkong; Hainan Island.

SYBRA PUNCTATOSTRIATA Bates.

Sybra punctatostriata BATES, Proc. Zool. Soc. London (1866) 351, Formosa; GRESSITT, Lingnan Sci. Journ. 16 (1937) 610, southern Kiangsi.

Female.—Dull reddish brown, blackish brown on apices of antennal segments, on base and along middle of disc of each elytron, and on thoracic sterna and bases of abdominal segments; surfaces irregularly clothed with grayish brown, tawny, or whitish pubescence: head grayish brown, with two tawny stripes on occiput and one tawny stripe on each gena; antennæ thinly clothed with grayish brown; prothorax grayish brown, with five tawny stripes on notum and one tawny stripe on each side below middle; elytra in the main alternately striped along punctural interstices with tawny and grayish brown, in part with dark brown interrupted by whitish marks; ventral surfaces pale buffy gray, tawny on sides of metasternum; legs grayish brown, mixed with tawny.

Head finely and irregularly punctured. Antennæ barely longer than body; scape swollen, two-thirds as long as third segment. Prothorax not very closely or deeply punctured; elytra regularly striate-punctate, an extrasutural row at base; apices separately produced, subacute.

Length, 6.75 to 9.5 millimeters; breadth, 1.8 to 2.7.

Four females, in the Lingnan Natural History Museum and the author's collection, 1 at Lam-ko, Lin-kao District, May 23 to 25, 1932, 1 at Sam-ah-kong, Yai District, January 24 to 26, 1935, F. K. To; 1 at Ta-hian, near foot of Five Finger Mountains, June 11, 1935, taken by the author; 1 at Fan-heang, southcentral Hainan, March 26, 1936, taken for the author by a native collector.

New to Hainan.

Distribution.—Formosa; Hainan; Kiangsi.

Genus ATIMURA Pascoe

Atimura PASCOE, Trans. Ent. Soc. London (3) 1 (1863) 548; LACOR-DAIRE, Gen. Col. 9 (1872) 613.

Narrow and cylindrical; frons subrectangular; antennal supports distant, prominent; eyes deeply emarginate, subcoarsely facetted; antennæ slender, about as long as body, scape thick and much shorter than third segment; prothorax cylindrical, longer than broad; elytra parallel-sided, abruptly narrowed posteriorly, subrounded or angulate at apices, surfaces more or less costate; tarsi slender, fully as long as tibiæ.

Genotype.—Atimura terminata Pascoe. Range.—Australia: Oriental Region.

Key to the Hainan species of Atimura.

ATIMURA APICALIS Gahan.

Atimura apicalis GAHAN, Ann. Mus. Civ. genova 34 (1895) 76, Burma.

Female.—Dark reddish brown, blackish on antennæ, pronotum, elytral costæ, sides of metasternum, abdomen except at base and apex, femora, and tibiæ; surfaces with tawny-buff, grayish, and brownish pubescence: head quite densely clothed with tawnybuff, some subglabrous areas on frons; antennæ thinly clothed with gray-brown, paler at extreme base of each segment; prothorax thinly clothed with pale gray, streaked with tawny on lower parts of sides and briefly at middle and each side of pronotum at apex and base; elytra thinly clothed with brownish gray, except on posterior declivity, which is covered with dense, pale buff; ventral surfaces tawny along middle of thoracic sterna, whitish gray on sides of metasternum, grayish on basal four abdominal segments and tawny on last segment.

Head deeply and somewhat closely punctured. Antennæ not quite as long as body. Prothorax a little longer than broad, somewhat closely punctured. Elytra each with four distinctly raised, though in part interrupted, costæ, apical declivity abrupt, bearing about five tubercles, and apical margin subacutely produced; surfaces in part seriate-punctate.

Length, 7 to 8 millimeters; breadth, 1.6 to 1.8.

72, 1–2

Three females were collected: 1, in the Lingnan Natural History Museum, at Sam-ts'uen-kai-hui, near Lai-mo-ling, June 27 to 30, 1935, F. K. To; 1 in the author's collection, at Ta-hau, near Vo-lau, western Hainan, July 5, 1935, taken by the author; 1 in the Musée Heude, at Sam-a (Sam-ah-kong), southern Hainan, May 9, 1936, G. Ros.

New to Hainan.

Distribution.—Burma; Hainan.

ATIMURA CYLINDRICA Gressitt sp. nov. Plate 5, fig. 6.

Female.—Cylindrical; evenly declivitous posteriorly. Body dark brown, somewhat reddish on antennæ, pronotal disc anterior to center, elytra along sides behind humeri and on part of apical portions, bases of abdominal segments, bases and apices of femora and tibiæ, and tarsi in large part; surfaces irregularly clothed with tawny to pale-gray pubescence: head clothed with dense, tawny pubescence, thinner behind eyes; antennæ thinly clothed with gray-brown, denser and whitish gray at bases of last six segments; prothorax thinly clothed with tawny and grayish, three barely distinct, longitudinal, tawny stripes on disc; elytra sparsely clothed with grayish and with a few seriately arranged, narrow, tawny spots on basal three-fifths, remainder clothed with tawny and marked with irregular dark-brown subglabrous spots; ventral surfaces thinly clothed with grayish buff, tawny along middle of sternites and on pleura of thoracic segments, and tawny-buff on sides of last abdominal sternite.

Head deeply and rather closely punctured; inferior eye lobes deeper than wide; occiput grooved medially. Antennæ about as long as body; scape thick, three-fifths as long as third segment; fourth segment a little shorter than third, one and one-third as long as fifth. Prothorax longer than broad, feebly swollen at middle of each side, closely and deeply punctured. Elytra parallel-sided, obtusely rounded posteriorly; surface of each closely subseriate-punctate, with some indistinctly raised longitudinal costæ on disc, outermost costa raised near apex; apices evenly declivitous, lacking tubercles. Thoracic sterna deeply and closely punctured laterally.

Length, 7.6 to 8.2 millimeters; breadth, 1.9 to 2.

Holotype, female, No. 53626 United States National Museum, Tahau, near Vo-lau, western Hainan, altitude 175 meters, July 4, 1935, taken by the author; one female paratopotype, in the author's collection, same data. Differs from A. combreti Gardner in having the shoulders and suture dark, the prothorax a little longer than broad, and the elytral costæ feeble and unbroken.

Distribution.—Hainan Island.

APODASYINI

APODASYIDES Lacordaire, Gen. Col. 9 (1872) 416, 623. APODASYINI Aurivillius, Col. Cat. 73 (1922) 305; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 316, 374.

Scape simple; tarsal claws divaricate; middle tibiæ lacking an external groove; anterior coxal cavities closed behind, briefly angulate externally; middle coxal cavities open externally to epimera; anterior coxæ globular; frons rectangular; metepisterna narrow; antennæ relatively short, hairy; eyes finely to somewhat coarsely facetted; elytra conjointly rounded apically; legs short, first hind tarsal segment shorter than following two segments combined.

Key to the Hainan genera of Apodasyini.

Scape subequal to third and following segments; first abdominal segment longer than following two segments combined; elytra fully one-half as broad as long; prothorax closely and finely punctured...... Terinæa.
Third antennal segment longer than scape, subequal to fourth segment, distinctly longer than fifth; first abdominal segment shorter than following two segments combined; elytra less than one-half as broad as long; prothorax irregular punctured....... Pseudanæsthetis.

Genus TERINÆA Bates

Terinæa BATES, Journ. Linn. Soc. Zool. 18 (1884) 249; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 374.

Head as broad as prothorax, transversely subrectangular and convex in front; eyes emarginate and subfinely facetted, deeper than wide below; antennæ slightly longer than body, filiform, scape subcylindrical and subequal in length to third and following segments; prothorax short, slightly expanded laterally, armed behind middle of each side with a short, sharp spine; scutellum rounded; elytra broad, conjointly rounded apically; first abdominal segment as long as following two segments combined; femora swollen, hind pair reaching fourth abdominal segment; tarsi short, first segment shorter than following two segments combined.

Genotype.—Terinæa atrofusca Bates. Range.—Japan proper; Hainan Island.

TERINÆA RUFONIGRA Gressitt sp. nov. Plate 5, fig. 15.

Male.—Black; prothorax, mesothorax, including scutellum, trochanters, and anterior coxæ partially, reddish chestnut. Body largely clothed with thin, gray pubescence on dark portions, and with short, oblique bristles, particularly on elytra; antennæ with a fringe of sparse oblique bristles internally.

Head moderately convex in front, finely punctulate; frons broader than high, wider above than below; vertex finely grooved, nearly horizontal between antennal insertions; eyes with inferior lobes one and one-third as high as wide, reaching three-fourths distance from antennal insertions to bases of mandibles. Antennæ slightly longer than body; scape subequal in length to third and following segments, respectively. Prothorax broader than long, a little broader at apex than at base, slightly constricted above near each extremity, finely and acutely spined a little behind middle of each side, finely and closely punctured. Elytra about one-half as broad as long, conjointly rounded apically, densely and irregularly punctured throughout. Ventral surface distinctly punctured on sides of metasternum and first abdominal segment. Femora subfusiform; tarsi slender.

Female.—Antennæ a little longer than body; hind femora hardly reaching fourth abdominal segment; last abdominal segment as long as three preceding segments combined, medially grooved.

Length, 4.1 to 4.5 millimeters; breadth, 1.4.

Holotype, male, No. 53448 United States National Museum, Ta-han, near Red Mist Mountain, central Hainan, altitude 750 meters, June 24, 1935, and allotopotype, female, in the author's collection, June 21, both taken by the author.

Differs from T. atrofusca Bates of Japan in being smaller, black with a red thorax, instead of dark brown, the prothorax more convex above, the elytra more distinctly punctured, and the antennæ with longer and sparser internal hairs.

Distribution.—Hainan Island.

Genus PSEUDANÆSTHETIS Pic

Pseudanæsthetis PIC, Mel. Exot. Ent. 37 (1922) 15.

Head not broader than prothorax at middle, nearly horizontal between antennal insertions, hardly convex in front; eyes not very finely facetted, inferior lobes nearly as broad as deep; antennæ generally shorter than body; scape subcylindrical, shorter than third segment; fourth segment a little shorter than third, distinctly longer than fifth; prothorax about as long as broad, slightly broader at base than at apex, constricted near base, swollen and foveate-punctate in middle with a small tubercle behind middle of each side; elytra parallel, conjointly rounded apically, subseriately punctured; femora short, swollen; tarsi nearly as long as tibiæ.

Genotype.—Pseudanæsthetis langana Pic. Range.—South China; Indo-China; Hainan; Formosa.

Key to the Hainan species of Pseudanæsthetis.

- Third antennal segment one and two-thirds as long as scape; prothorax finely punctate, tuberculate at sides; body reddish brown, legs and antennæ black whiteheadi.

PSEUDANÆ STHETIS SETICORNIS Gressitt sp. nov. Plate 5, fig. 14.

Female.—Brownish red, tinged with black at elytral apices and posterior borders of abdominal segments; antennæ, eyes, and legs black. Body clothed with very sparse pale pubescence and moderately long, fine, erect bristles.

Head as broad as prothorax at middle, feebly convex, sparsely and distinctly punctured; frons a little wider than deep; vertex nearly plane between antennal insertions; eyes deeply emarginate, subfinely facetted, inferior lobes slightly deeper than wide.

Antennæ slender, not quite as long as body; scape subcylindrical, four-fifths as long as third segment, practically as long as fourth segment; fifth segment three-fifths as long as fourth. Prothorax barely longer than breadth at middle, narrower at apex than at base, slightly broader behind middle, a minute spine at each side on subconstricted basal and apical portions. Elytra subparallel, conjointly rounded apically; surfaces of each deeply and quite closely punctured in about thirteen subregular rows. Ventral surfaces not distinctly punctured. Legs short; femora swollen; tarsi four-fifths as long as tibiæ.

Length, 4.6 millimeters; breadth, 1.5.

Holotype, female, in the California Academy of Sciences, Tahian, Five Finger Mountains, Hainan, altitude 650 meters, June 15, 1935, taken by the author.

Differs from *P. langana* Pic in having the antennæ much slenderer, the prothorax with longer punctures and slenderer lateral tubercles, the elytra more deeply punctured, and the bristles longer and sparser.

Distribution.—Hainan Island.

PSEUDANÆSTHETIS WHITEHEADI Gressitt sp. nov.

72, 1-2

Male.—Dark chocolate-brown; head, prothorax, and scutellum orange-testaceous. Body sparsely clothed with pale pubescence and short, fine, oblique hairs; antennæ internally with a row of moderately long bristles.

Head broader than base of prothorax, moderately convex, distinctly punctured; frons wider than deep, emarginate on all sides: vertex shallowly concave between antennal insertions; eyes deeply emarginate, inferior lobes a little deeper than wide, reaching three-fifths distance from antennal insertions to bases of man-Antennæ nearly one and one-half as long as body, moddibles. erately slender; scape three-fifths as long as third segment; fourth segment subequal to third, nearly twice as long as fifth; fifth and sixth segments subequal. Prothorax a little broader than long, as broad at apex as at base, constricted near base and slightly so between middle and apex, armed with a short, blunt tubercle just behind middle of each side; surface deeply and rather regularly punctured. Scutellum short and rounded. Elytra broadened from base to beyond middle, rounded apically; surfaces punctured in about fifteen somewhat irregular rows. Legs slender; first hind tarsal segment nearly as long as following two united.

Length, 6.6 millimeters; breadth, 2.2.

Holotype, male, British Museum, 99.315, Hainan Island, 1899, J. Whitehead.

This species is only provisionally referred to this genus, differing from P. langana Pic and the preceding species in having the antennæ longer than the body, the third segment nearly twice as long as the scape; the prothorax no longer than broad, as broad at apex as at middle; not transversely sulcate or carinate near extremities; the femora less swollen; and in other characters.

Distribution.—Hainan Island.

ESTOLINI

ESTOLIDES Lacordaire, Gen. Col. 9 (1872) 416, 636. ESTOLINI Aurivillius, Col. Cat. 73 (1922) 317.

Frons subrectangular, generally transverse; antennal insertions distant; vertex more or less concave; eyes coarsely facetted, emarginate; antennæ slender, generally not longer than body; scape somewhat thickened, usually shorter than third segment; anterior coxal cavities angulate externally; middle coxal

cavities nearly closed to epimera externally, process between them nearly at level of coxæ; middle tibiæ grooved externally; tarsal claws divaricate.

Key to the Hainan genera of Estolini.

 Antennal scape swollen, only about one-half as long as third segment; vertex distinctly concave; prothorax cylindrical, longer than broad.2.
 Antennal scape subcylindrical, as long as third segment; vertex horizontal; prothorax cylindrical; elytra briefly acuminate apically.

Microestola.

 Antennal supports distant; vertex shallowly concave; antennæ hardly longer than body; prothorax slightly longer than broad...... Donysia. Antennal supports subapproximate; vertex deeply concave; antennæ about twice as long as body; prothorax nearly twice as long as broad.

Zotale.

Genus ZOTALE Pascoe

Zotale PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 329; LACORDAIRE, Gen. Col. 9 (1872) 647.

Head narrower than prothorax; antennal supports prominent; eyes small, subcoarsely facetted, nearly divided; antennæ longer than body, slender; scape subfusiform, two-thirds as long as third segment; prothorax nearly cylindrical, barely longer than broad, somewhat raised anteriorly; scutellum short, roundedtruncate posteriorly; elytra slightly and evenly narrowed posteriorly, subtruncate apically; femora slender; middle tibiæ emarginate externally before apices.

Genotype.—Zotale unicolor Pascoe.

Range.—Sumatra; Burma; Tenasserim; Tonkin; Hainan; southern China.

ZOTALE LINEATA (Gahan).

Mycerinopsis lineatus GAHAN, Ann. Mus. Civ. Genova 34 (1894) 75. Zotale lineata GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 352, Hainan.

Female.—Dark reddish brown, lighter on antennæ, elytra, parts of lateral portions of thoracic and abdominal sternites, and parts of legs, nearly black along middle of thoracic and abdominal sternites. Head, prothorax, elytra, and sides of thoracic sterna clothed with tawny pubescence, with longitudinal stripes of denser pubescence: two on vertex, three on pronotum, and three or four narrower stripes on each elytron; ventral surfaces and legs thinly clothed with silky grayish-buff pubescence; antennæ thinly clothed with buffy gray and with a ventral fringe of fine, erect hairs from second segment to apex.

Head coarsely punctured; inferior eye lobes rounded-triangular; antennæ one and one-third as long as body, slender; scape short, subfusiform, deeply punctured, two-thirds as long as third segment; prothorax subcylindrical, raised anteriorly, barely longer than broad, deeply, but not very closely, punctured; elytra obliquely truncate apically; surface of each deeply punctured, subseriately along middle of disc on basal half, distinctly so posteriorly, particularly along sutural half.

Length, 15.4 millimeters; breadth, 3.6.

72, 1-2

One specimen, in the Lingnan Natural History Museum, taken at Chung-mei, 15 miles southeast of Nam-fung, Lin-kao District, August 18 and 19, 1932, by F. K. To.

Distribution.—Burma; Tenasserim; Hainan; South China.

Genus DONYSIA Gressitt novum

Head deeper than wide; occiput strongly oblique to frons; antennal supports distinctly raised; frons wider than high, emarginate laterally; inferior eye lobes about as wide as deep, occupying about one-half space between antennal supports and genal margins; antennæ slender, longer or shorter than body; scape swollen, much shorter than third segment; prothorax cylindrical, rough on disc; elytra long and narrow, subangulate apically.

Genotype.—Sydonia costata Matsushita.

Range.-Japan; Ryu Kyu Islands; South China; Hainan.

This genus differs from Sydonia Thomson in having the scape short and swollen instead of moderately long and cylindrical, the vertex broad and shallowly concave, and in other respects. Differs from Zotale Pascoe in having the antennal supports much more distantly separated, the vertex less concave, and the antennæ shorter. This new genus contains Sydonia subglabrata and S. ropicoides Gressitt, as well as the type.

DONYSIA COSTATA (Matsushita) comb. nov.

Sydonia costata MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 379, pl. 5, fig. 1, Okinawa, Ryu Kyu Islands.

Male.—Narrow; subcylindrical; declivitous anteriorly and posteriorly. Body blackish brown, tinged with reddish brown on most of sutural half of each elytron and on abdomen; surfaces clothed with tawny pubescence of varying density: head sparsely clothed; antennæ with very thin and sparse pubescence, underside of third segment with a fringe of sparse, oblique, pale hairs; prothorax subglabrous above, more densely clothed at sides; elytra very thinly clothed with tawny-gray on bases and sides, nearly to suture at middle, remainder with denser tawny-buff pubescence; ventral surfaces densely clothed on thoracic sterna, and sparsely on abdomen and legs.

Head heavily punctured; inferior eye lobes occupying about two-thirds space between antennal insertions and genal angles. Antennæ barely as long as body; scape thick, one-half as long as third segment; fourth segment nearly as long as third, distinctly longer than fifth. Prothorax longer than broad, parallelsided; disc with five distinct longitudinal ridges with coarse punctures between; some lesser ridges and punctures at sides. Elytra narrowed and obliquely truncated apically; surfaces deeply seriate-punctate on basal two-thirds, with some more or less completely raised costæ, innermost costa giving rise to a few low tubercles near base.

Length, 9 to 10 millimeters; breadth, 3 to 3.2.

Two specimens, in the Lingman Natural History Museum and the author's collection, were taken at Nodoa, Tan District, Hainan, April 26 to 30, 1932, by F. K. To.

New to Hainan.

Distribution.-Ryu Kyu Islands; Hainan Island.

Genus MICROESTOLA Gressitt novum

Frons rectangular, transverse; antennal insertions distant and low; eyes deeply emarginate; antennæ about as long as body; scape slender; prothorax cylindrical, longer than broad; elytra narrow, separately angulate apically; anterior coxal cavities closed behind, briefly angulate externally; metepisternum narrow; abdominal segments subequal in length; posterior femora hardly reaching to apex of second sternite.

Genotype.-Microestola bidentata Gressitt sp. nov.

Range.—Hainan; Formosa.

This new genus differs from Zotale Pascoe in having the frons more transverse, the vertex less concave, the eyes larger, the antennæ shorter, the scape more cylindrical, the legs shorter, and in other respects; and from *Donysia* Gressitt in having the vertex less concave, the antennæ less slender, the scape longer, the third segment shorter, the prothorax more cylindrical, and in other characters.

MICROESTOLA BIDENTATA Gressitt sp. nov.

Male.—Body dark reddish castaneous, slightly blackish brown on parts of pronotum and elytra; ventral surfaces brownish black, reddish brown along median line of sternites; legs and antennæ reddish brown, slightly duller on scape. Surface in
part clothed with grayish-white or grayish-buff pubescence as follows: head and antennæ thinly clothed with slight tawnybuff; prothorax with sides and an indistinct median stripe on disc, with grayish buff; elytra with several irregularly spaced and partly broken, narrow-longitudinal stripes of grayish buff, remainder with thinner, dark-brown hairs; ventral surfaces with thin, whitish-buff pubescence, in part with a silvery sheen; legs sparsely clothed with pale.

Head coarsely punctured; vertex broad, shallowly concave; inferior eye lobes large, about as wide as deep. Antennæ about as long as body; scape moderately slender, as long as third segment. Prothorax cylindrical, about one and one-third as long as broad, closely punctured. Elytra parallel-sided, coarsely and irregularly punctured; apices separately acute. Ventral surfaces closely punctured, quite deeply so on sides of thoracic sternites.

Female.—Broader, with elytral apices more gradually narrowed, but less acuminate; antennæ four-fifths as long as body; sutural portion and extreme apices of elytra blackish; pubescence of elytra less distinctly striped, and with larger nonpubescent areas.

Length, 6.6 millimeters; breadth, 1.5.

Holotype, male, in the Lingnan Natural History Museum, Taipin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, altitude 375 meters, April 20 to 24, 1935, F. K. To; allotype, female, in the author's collection, Ta-hau, near Vo-lau, western Hainan, altitude 175 meters, July 4, 1935, taken by the author. *Distribution.*—Hainan Island.

ACANTHOCININI

ACANTHOCINITÆ Thomson, Classif. Cer. (1860) 6; Syst. Cer. (1864) 23, 338.

ACANTHOCININÆ and EXOCENTRINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1865) 9, 26.

ACANTHOCINIDES Lacordaire, Gen. Col. 9 (1872) 757.

ACANTHOCININI Aurivillius, Col. Cat. 74 (1923) 390.

Frons rectangular; vertex weakly concave between the moderately distant antennal supports; antennæ generally very long in male, scape slender, cylindrical or cone-shaped, frequently as long as third segment; anterior coxal cavities rounded; middle coxal cavities closed externally to epimera; middle tibiæ emarginate externally before apices; femora clavate; tarsal claws divaricate.

The Philippine Journal of Science

Key to the Hainan genera of Acanthocinini.

1.	Hind tarsi long, first segment longer than following two united 2.
	Hind tarsi short, first segment shorter than following two united 4.
2.	Body slender; prothorax fully as long as broad, scape not reaching as
	far as middle of prothorax, discs of pronotum and elytra not strongly tuberculate
	Body broad, prothorax transverse, strongly toothed above and at sides;
	elytra each strongly bidentate basally, antennal scape reaching be- yond middle of prothorax
3.	Prothorax broadly toothed laterally, antennæ densely clothed with long
	hairs internally; first hind tarsal segment shorter than remaining segments united
	Prothorax rounded laterally, antennæ sparsely clothed with short brist-
	les internally; first hind tarsal segment as long as remaining seg- ments united
4.	Prothorax strongly transverse, produced at sides with a posteriorly-
	directed spine; body clothed with long bristles Exocentrus.
	Prothorax subcylindrical, with a very fine, short spine at each side; body
	lacking long, erect bristles; antennæ briefly ciliate Miænia.

Genus NEACANISTA Gressitt novum

Head somewhat deeply concave between antennal insertions, squarish in front; antennæ nearly twice as long as body; scape slender, gradually thickened, extending to beyond middle of prothorax; prothorax transverse, strongly tuberculate at each side, bituberculate on disc; elytra broad basally, narrowed, transversely truncated and externally toothed at apices, bituberculate basally; anterior coxal cavities closed posteriorly, briefly angulate externally; middle coxal cavities closed externally to epimera, process separating them broad and truncate; metepisterna narrow, parallel-sided; femora pedunculate and suddenly clavate; tarsi slender, first segment of hind pair nearly as long as following united; claws divaricate.

Genotype.—Neacanista tuberculipenne Gressitt sp. nov.

Range.—Hainan Island.

This new genus differs from *Acanista*²⁰ Pascoe in having the antennæ short, the scape barely reaching base of elytra, gradually thickened apically, instead of being clavate, the prothorax bituberculate above, the elytra each bituberculate basally and less strongly spined apically.

NEACANISTA TUBERCULIPENNE Gressitt sp. nov. Plate 7, fig. 7.

Blackish brown varied with reddish brown; irregularly clothed with brown, buff, tawny, and whitish pubescence: head blackish

³⁰ Trans. Ent. Soc. London (3) 3 (1865) 10 (type: A. alphoides Pasc.).

brown with brown, mixed with tawny-gray, pubescence; antennæ dark brown, basal portions of segments clothed with tawny-white pubescence; prothorax blackish, clothed with tawny, mixed with whitish pubescence; elytra dark reddish brown, clothed with pubescence that is largely tawny-brown basally and whitish preapically, spotted and mixed with dark brown, tawny, and buff, tubercles nearly black; ventral surfaces evenly clothed with tawny-gray; legs reddish brown clothed with tawnygray.

Head with frons about as wide as high, broadest below; eyes emarginate, inferior lobes nearly twice as deep as wide, extending three-fifths distance from antennal insertions to bases of mandibles. Antennæ nearly twice as long as body: scape slender. subcylindrical, thickest before apex, nearly reaching base of prothorax, about as long as third segment; fourth segment slightly longer than third; fifth segment subequal to third. Prothorax transverse, constricted near apex and base, broader at latter than at former, central portion swollen, strongly tuberculate at each side and quite prominently tuberculate on each side of middle of disc, with a feeble swelling behind center, apex and base with a few deep punctures. Scutellum trapeziform, concave api-Elytra broad, narrowed posteriorly, transversely emarcally. ginate-truncate apically with external angles dentate; surface longitudinally ribbed, deeply and irregularly punctured, each with two strong tubercles near base and suture, one before the other. Femora pedunculate and strongly clavate; first hind tarsal segment nearly as long as remaining segments combined.

Length, 14 millimeters; breadth, 5.3.

Holotype, female (?), in the Lingnan Natural History Museum, Tai-tsing-lam-ts'uen, near Loi Mother Mountain, central Hainan, June 13 to 16, 1935, F. K. To.

Differs from Acanista alphoides Pascoe in having the scape shorter and more cylindrical, the prothorax tuberculate above, the scutellum truncate, the elytra tuberculate, and in other characters.

Distribution.—Hainan Island.

Genus EXOCENTRUS Mulsant

Exocentrus MULSANT, Col. France Longic. (1839) 152; THOMSON, Syst. Cer. (1864) 395; PASCOE, Trans. Ent. Soc. London (3) 3 (1864) 27, 28; LACORDAIRE, Gen. Col. 9 (1872) 800, 805; FISHER, Ind. For. Rec. 16 (1932) 295.

Oligospis THOMSON, Syst. Cer. (1864) 111, 596; LACORDAIRE, Gen. Col. 9 (1872) 806.

72, 1–2

Head broad, with antennal insertions distant and vertex hardly concave; antennæ a little longer than body, with suberect bristles; scape long; prothorax short, flattened, expanded, and with a posteriorly projecting tooth behind middle of each side; elytra broad, rounded posteriorly; femora pedunculate-clavate, hind pair reaching to apex of second abdominal segment; body clothed with long, erect hairs or bristles.

Genotype.—Exocentrus cinereus Mulsant.

Range.—Palearctic, Ethiopian, Oriental, Oceanic, and Neotropical Regions.

Key to the Hainan species of Exocentrus.

1.	Elytra with three narrow, transverse, pale bands	2.
	Elytra lacking three narrow, transverse, pale bands	3.
2.	Bases of elytra bright reddish brown basirufa	us.

Bases of elytra not reddish nor different in color from remainder. trifasciellus.

 Elytra dark reddish brown, with six longitudinal stripes of isolated or partly joined spots alboguttatus subconjunctus. Elytra testaceous brown, with two broken, darker, transverse bands, and a number of irregular isolated spots of various sizes.... constricticollis.

EXOCENTRUS ALBOGUTTATUS SUBCONJUNCTUS Gressitt subsp. nov.

Male.—Dull reddish brown, darker on upper part of head, center of prothoracic disc, antennæ, swollen portions of femora, sides of metasternum, and posterior portions of abdominal segments. Surfaces clothed with white pubescence as follows: head thinly, but almost entirely, clothed; antennæ clothed on scape, basal three-fourths of third segment, basal two-thirds of fourth segment, and bases of fifth to seventh segments for successively diminishing lengths; prothorax clothed on middle of disc and sides, former area connected premedially with sides and posteriorly with basal margin; elytra with six or more longitudinal stripes formed of isolated or partly joined spots of white pubescence, and a band at middle which extends obliquely backward to suture; ventral surface thinly clothed with pale pubescence. Bristles moderately short, thick, and dense on elytra, longer and slenderer on antennæ.

Head nearly as broad as prothorax; frons broad, swollen; vertex feebly concave between antennal insertions; eyes with inferior lobes slightly deeper than wide, extending two-thirds distance to bases of mandibles. Antennæ one and two-fifths as long as body; scape subequal in length to third segment; fourth segment two-thirds as long as third. Prothorax about twice as broad as long, narrower at base than at apex, subparallel at sides, with a short, posteriorly-directed, acute spine before emargination. Elytra quite regularly punctured in about ten longitudinal rows on dorsal surface of each and irregularly on deflexed portions.

Female.—Antennæ one and one-fourth as long as body; prothorax more than twice as broad as long.

Length, 5.7 to 7.4 millimeters; breadth, 2.8 to 3.8.

Holotype, male, in the Lingnan Natural History Museum, Taitsing-lam-ts'uen, near Lai-mo-ling (Loi Mother Mountain), central Hainan, June 5, 1935, F. K. To; allotype, female, in the author's collection, Tai-pin-ts'uen (Dwa-Bi), altitude 380 meters, near Loi Mother Mountain, May 17, 1935, F. K. To; three paratopotypes in the United States National Museum, and four paratypes from Tai-pin-ts'uen.

Differs from typical *E. alboguttatus* Fisher of India in having the bristles shorter and thicker, the punctures extending farther posteriorly, and the rows of white spots less regular and partly joined.

Distribution.—Hainan Island.

EXOCENTRUS BASIRUFUS Gressitt sp. nov. Plate 5, fig. 16.

Male.—Reddish brown; head, prothorax, and posterior half of elytra nearly black; antennæ blackish brown on apical halves. Head and prothorax very thinly clothed with pale pubescence; scutellum and basal margin of prothorax narrowly clothed with white hairs; elytra crossed by three narrow, incomplete fasciæ of white hairs, first at end of basal quarter, second and third at beginning of apical fifth; posterior borders of abdominal segments edged with white pubescence; bristles long, suberect and thick on dorsal surface of elytra, short and sparse on prothorax, short and dense on head, moderately long on inner sides of antennæ.

Head practically as broad as prothorax, finely punctulate; front less than one and one-half times as wide as high, moderately convex; vertex nearly level between antennal insertions; eyes deeply emarginate, inferior lobes nearly as wide as deep. Antennæ one and one-fourth as long as body, fairly thick; scape subfusiform, following segments cylindrical; third segment twothirds as long as scape, subequal to fourth and fifth segments; following segments gradually decreasing. Prothorax one and three-fifths as broad as long, as broad at base as at apex, feebly expanded laterally, with a fine, acute tubercle pointing obliquely outward. Scutellum rounded. Elytra deeply punctured in about

72, 1-2

thirteen subregular longitudinal rows to apical fifth. Posterior femora reaching to base of fifth abdominal segment; first hind tarsal segment as long as following two segments united.

Length, 3.1 to 4 millimeters; breadth, 1.1 to 1.5.

Holotype, male, in the United States National Museum, Chungkong-ts'uen, central Hainan, altitude 325 meters, July 18, 1935, taken by the author; paratype, male, in the author's collection, Tsin-leong Shan, near Mei-hsien City, Mei District, eastern Kwangtung Province, southeastern China, altitude 850 meters, June 5, 1936, taken by the author.

Differs from *E. cudraniæ* Fisher of India in having the bristles longer, denser, and finer, the head and prothorax black, the punctures larger and more regular, and the elytra more distinctly banded.

Distribution.-Hainan Island; Kwangtung Province.

EXOCENTRUS CONSTRICTICOLLIS Gressitt sp. nov. Plate 5, fig. 12.

Female.—Dull brown, marked with tawny, reddish brown, and blackish: head black, thinly clothed with gray pubescence; clypeus, labrum, bases of mandibles, and apices of genæ reddish; antennæ reddish brown, apices of segments darker; prothorax dull reddish brown, anterior and posterior constricted portions reddish testaceous, disc irregularly clothed with pale pubescence; scutellum densely clothed with pale buff; elytra testaceous-brown, crossed by two broad, irregular, dark-brown bands, one band at about middle, the other apical, as well as some small, lateral, dark spots and fine reticulations, bases reddish brown, pale areas clothed with light-buff pubescence; ventral surface reddish brown, clothed with pale pubescence, pro- and mesosterna and coxæ subtestaceous; tarsi and apical portions of femora and tibiæ darker. Bristles fairly long, thick, and sparse, those on antennæ arising from all sides.

Head broad, moderately convex in front, feebly convex at vertex; occiput smooth, swollen; frons transverse, finely grooved medially, minutely punctulate; eyes with inferior lobes nearly as broad as deep, extending four-fifths distance to bases of mandibles. Antennæ with scape subfusiform, twice as thick as, and one and one-third as long as, third segment; fourth segment subequal to third. Prothorax transverse, strongly constricted basally; lateral spines acute, extending obliquely backwards; surface micropunctulate. Scutellum rounded-triangular. Elytra finely punctured in about six longitudinal rows above, densely punctured on lower parts of sides. First hind tarsal segment barely as long as following two segments united.

186

Length, 4 millimeters; breadth, 1.4.

Holotype, female, loan deposit, California Academy of Sciences, Ta-hau, westcentral Hainan, altitude 200 meters, July 3, 1935, taken by the author.

Differs from E. pubescens Fisher, of India, in having the bristles shorter, thicker, and sparser, the puncture rows fewer, the prothorax more constricted and more strongly spined, and the ground color lighter with the pubescence sparser.

Distribution.—Hainan Island.

EXOCENTRUS TRIFASCIELLUS Gressitt sp. nov. Plate 5, fig. 17.

Male.—Dark reddish brown, brighter on basal half of elytra, nearly black on head, apical portions of elytra, swollen parts of femora, and apices of tibiæ; antennæ, coxæ, bases of tibiæ, and apices of tarsi reddish; body irregularly clothed with thin, white pubescence, arranged in three incomplete, transverse fasciæ, with intervening spots, on elytra: first spot near base, second just before middle, third closer to middle than apices. Bristles on body sparse, thick and fairly long, those on antennæ shorter and slenderer, largely internal.

Head broad, finely punctulate; frons transverse, feebly swollen; vertex plane between antennal insertions; eyes with inferior lobes slightly deeper than wide, extending three-fourths distance to bases of mandibles. Antennæ one and one-half as long as body; scape slender, one and one-third as long as third segment; third to seventh segments hardly decreasing in length. Prothorax twice as broad as long, fully as broad at base as at apex, acutely and obliquely spined laterally. Scutellum short. Elytra conjointly rounded, distinctly punctured in six longitudinal rows on dorsal surface for basal three-fourths. First hind tarsal segment as long as following two segments united.

Length, 3.3 millimeters; breadth, 1.2.

Holotype, male, loan deposit, California Academy of Sciences, Ta-han, central Hainan, altitude 750 meters, June 21, 1935, taken by the author.

Differs from E. variepennis (Schwarzer) of Formosa in having the prothorax more expanded laterally, the spines much longer, the punctures sparser, and the bands more anteriorly placed.

Distribution.—Hainan Island.

Genus MIÆNIA Pascoe

Miænia PASCOE, Trans. Ent. Soc. London (3) 3 (1864) 27, 38; LA-CORDAIRE, Gen. Col. 9 (1872) 801, 813.

72, 1–2

Head as broad as prothorax; vertex moderately broad, feebly concave; antennæ slender, longer than body; scape much shorter than third segment; third and fourth segments long, subequal; prothorax broader than long, subcylindrical, finely toothed near middle of each side; body lacking erect bristles.

Genotype.—Miænia marmorea Pascoe. Range.—Eastern part of Oriental Region.

MLÆNIA LATERIMACULATA Gressitt sp. nov. Plate 5, fig. 10.

Male.—Dull reddish brown, darker on apical two-thirds of antennæ and on two transverse bands crossing elytra, one centered just before middle, the other at beginning of apical quarter; body largely clothed with thin, pale-gray pubescence, except on elytral fasciæ; legs dark, swollen portions of femora and apices of tibiæ nearly black; a row of short, oblique hairs on inner side of antennæ, a few fine hairs around mouth parts, sides of prothorax, and pro- and mesothoracic sterna.

Head about as broad as prothorax at middle, constricted behind eyes, finely and irregularly punctured; frons slightly wider than high, narrowed above, moderately swollen; vertex feebly concave between antennal insertions; eyes large, approximate above, deeply constricted, inferior lobes rounded, slightly deeper than wide, extending two-thirds distance to bases of mandibles.

Antennæ slender, one and one-half as long as body; scape slender, three-fourths as long as third segment, fourth segment longer than scape, fifth segment three-fifths as long as fourth. Prothorax nearly as long as broad, slightly swollen at sides, finely punctured. Scutellum rounded. Elytra closely punctured in about fifteen more or less regular rows. Sides of metasternum closely punctured. First hind tarsal segment nearly as long as following two segments combined.

Length, 5 millimeters; breadth, 2.2.

Holotype, male, loan deposit, California Academy of Sciences, Ta-han, near Red Mist Mountain (Hung-mo-lia), central Hainan, altitude 750 meters, June 23, 1935, taken by the author.

Differs from M. subfasciata Schwarzer of Formosa in having the scape relatively longer; the prothorax shorter and less densely punctured; and the elytra less regularly and less closely punctured, with the bands less distinct and the spots more numerous.

Distribution.—Hainan Island.

Genus RONDIBILIS Thomson

Rondibilis THOMSON, Archives Ent. 1 (1857) 306; Classif. Cer. (1860) 104, 108; Syst. Cer. (1864) 396; LACORDAIRE, Gen. Col. 9 (1872) 796, 797.

Polimeta PASCOE, Trans. Ent. Soc. London (3) 3 (1864) 10, 13.

Head hardly concave between antennal tubercles; frons higher than wide; antennæ a little longer than body, with bristles internally; prothorax distinctly longer than broad, feebly rounded laterally, transversely constricted near base; elytra long and parallel, each with a median postbasal crest bearing a spine anteriorly; posterior tibiæ long.

Genotype.-Rondibilis bispinosa Thomson.

Range.—Indo-Malayan, Indo-Chinese, and Indo-Australian Subregions.

RONDIBILIS SEATONI Gressitt sp. nov. Plate 4, fig. 7.

Female.—Dark reddish brown, largely clothed with close pubescence; basal portions of antennæ, bases of tibiæ and tarsi, and bases and apices of femora paler reddish and more thinly pubescent, apical portions of antennæ black; pubescence largely pale cinereous-buff, marked with dark brown as follows: prothorax with a pair of longitudinal stripes from anterior to posterior constrictions, and three spots in a line on each side, at anterior and posterior borders and middle, respectively; elytra with a basal sutural stripe, bordering scutellum and breaking up into isolated small spots after basal third, a more complete stripe along each lateral declivity, and two sublateral, transverse marks, the first just behind middle, suboblique, the second near beginning of apical quarter, both extending about two-thirds distance from margin toward suture. Bristles short, oblique, subseriately arranged on elytra, lacking on prothorax and legs.

Head minutely punctulate, shallowly concave between antennal insertions, which are raised; frons squarish; eyes deeply emarginate, inferior lobes as wide as deep. Antennæ one and onehalf as long as body, scape subfusiform, three-fifths as long as third segment; fourth segment equal to third, barely longer than fifth segment. Prothorax a little longer than broad, constricted near base and apex, middle portions swollen at sides. Elytra narrow, emarginate-truncate apically, irregular and finely punctured on inner portions, bristles arising from punctures; first hind tarsal segment slightly longer than remaining segments combined.

Length, 11 millimeters; breadth, 2.8.

Holotype, female, in the Lingnan Natural History Museum, Kachek, eastern Hainan, altitude 20 meters, May 13 to 16, 1932, F. K. To; allotype, male, in the author's collection, Chung-konts'uen, central Hainan, altitude 325 meters, July 18, 1935, taken by the author; three paratypes, in the Lingnan Natural History Museum, Nam-liu-tin, Kiung-shan District, July 26 to August 3, 1935, F. K. To; two paratypes, females, Dwa-Bi (Tai-pin-ts'uen) July 20 to 23, 1935, F. K. To and the author, No. 53450 United States National Museum; three paratypes, Tai-tsing-lam-ts'uen, near Loi Mother Mountain, June 5 to 18, 1935, F. K. To; one paratype, No. 53450 United States National History Museum.

Differs from *R. horiensis* Kano in being less densely punctured and spined on elytra, with the prothorax more constricted, the elytra with partial bands instead of numerous spots, and in other characters.

Named in honor of Dr. S. P. Seaton, of the American Presbyterian Mission in Hainan, as a slight token of extensive assistance and kindness tendered by him and Mrs. Seaton to the author during part of his sojourn on the island.

Distribution.—Hainan Island.

Genus OSTEDES Pascoe

Ostedes PASCOE, Trans. Ent. Soc. London (2) 4 (1859) 43; ibid. (3) 3 (1864) 10, 14; THOMSON, Syst. Cer. (1864) 396; LACORDAIRE, Gen. Col. 9 (1872) 795, 796.

Head broad, moderately convex between antennal insertions; frons much wider than high; antennæ a little longer than body, internally with erect hairs; scape subfusiform, third and fourth segments subequal in length; prothorax longer than broad, swollen and tuberculate at each side and constricted near apex and base; elytra long, narrowed posteriorly, a small tubercle near base of each.

Genotype.—Ostedes pauperata Pascoe.

Range.—Indo-Chinese, Indo-Malayan, and Indo-Australian Subregions.

OSTEDES INERMIS DWABINUS Gressitt subsp. nov.

Male.—Dark rusty brown, varied with lighter and darker and partially clothed with silvery-buff pubescence. Head dark brown, thinly clothed with pubescence, except for some small round dots; antennæ reddish brown near base, darker apically, basal quarter or third of third and following segments clothed with pale-buff pubescence; prothorax reddish brown, darker on sides of disc, partially clothed with silvery buff, leaving small, dark dots that converge on each side of disc before middle. forming larger blotches; scutellum light reddish, thinly pubescent; elytra dark brown subbasally, laterally, and medially, with extreme bases, a large anterior circular area, suture at middle, and a large, irregular, postmedian area extending nearly to apices, of light reddish brown clothed with pale-buff pubescence and dotted with dark punctures; ventral surface dull reddish brown, duller on metasternum, evenly clothed with thin, pale pubescence; legs reddish brown, swollen portions of femora and apical portions of tibiæ nearly black, middle portions of tibiæ and basal two-thirds of first tarsal segment densely clothed with pale-buff pubescence. Body above, legs and antennæ internaliv. clothed irregularly with suberect, black bristles.

Head broader than base of prothorax, feebly convex anteriorly, rounded-concave between antennal insertions, sparsely punctured; frons broad, medially grooved; eyes deeply emarginate, inferior lobes broader than deep, indenting frons. Antennæ one and one-half times as long as body; scape feebly swollen, a little shorter than third segment; fourth segment slightly longer than third and fifth segments, which are subequal. Prothorax longer than broad, constricted near base and apex, expanded laterally, bearing a thick, short, blunt, posteriorly curved tubercle at middle of each side; surface finely and sparsely punctured. Elytra narrowed and subobliquely truncate apically, deeply and irregularly punctured. Tibiæ and tarsi slender; first hind tarsal segment nearly as long as remaining segments combined.

Length, 10.5 millimeters; breadth, 2.8.

Female.—Antennæ one and one-sixth as long as body.

Length, 12.4 millimeters; breadth, 3.6.

Holotype, male, in the Lingnan Natural History Museum, Taipin-ts'uen (Dwa-Bi), near Loi Mother Mountain, central Hainan, May 17, 1935, F. K. To; allotopotype, female, in the author's collection, July 23.

Differs from *O. inermis* Schwarzer of Formosa in being more reddish, more densely punctured, with longer and sparser bristles, the prothorax longer, less prominently tuberculate and more even on disc.

Distribution.—Hainan Island.

191

HIPPOPSINI

HIPPOPSITÆ Thomson, Classif. Cer. (1860) 124, part; Syst. Cer. (1864) 97, 389.
HIPPOPSINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1869) 323.
HIPPOPSIDES Lacordaire, Gen. Col. 9 (1872) 414, 690.
HIPPOPSINI Aurivillius, Col. Cat. 74 (1923) 353; Liu, Lingnan Sci. Journ. 13 (1933) 240, 247, 650.

Form elongate; head more or less oblique, vertex acute, mouth parts directed posteriorly; frons long, broader below than above; antennæ slender, generally more than twice as long as body, ciliated below; scape generally long; prothorax cylindrical, unarmed; elytra long; anterior coxal cavities closed posteriorly, somewhat angulate exteriorly; middle coxal cavities open externally to epimera; posterior femora much shorter than abdomen; tarsal claws divergent.

Genus POTHYNE Thomson

Pothyne THOMSON, Syst. Cer. (1864) 97; PASCOE, Trans. Ent. Soc. London (3) (1869) 691, 694; LIU, Lingnan Sci. Journ. 13 (1933) 248.

Head moderately acute, slightly concave between antennal insertions, not distant from anterior coxæ; frons deep, slightly narrowed above; inferior eye lobes deep and narrow; antennæ one and one-half to three times as long as body; scape cylindrical, nearly reaching base of elytra, subequal in length to third and fourth segments; prothorax cylindrical, a little longer than broad; elytra long, broader than prothorax, subparallel, rounded or truncate apically; posterior femora reaching to apex of first or to middle of second, abdominal segment; first hind tarsal segment distinctly shorter than following two segments united.

Genotype.—Pothyne variegata Thomson. Range.—Oriental Region; southern Japan.

Key to the Hainan species of Pothyne.

1.	Prothorax no longer, or hardly longer, than broad; scape thick, subcy-
	lindrical; pronotum sparsely or coarsely punctured 2.
	Prothorax distinctly longer than broad; scape slender, long; pronotum
	finely, somewhat closely, punctured 4.
2.	Occiput punctured; frons not asperate-punctate in male; scape clothed
	with short, obliquely erect hairs
	Occiput impunctate; frons asperate-punctate in male; scape lacking
	short, obliquely erect hairs rugifons.
3.	Elytra with narrow, longitudinal stripes of buffy-yellow pubescence; ely-
	tral apices rounded: scape rugulose chocolata.

	Elytra with a number of alternating grayish tawny and yellow pubes- cent stripes, with short, irregular crossbars; elytral apices subemar- ginate-truncate; scape micropunctulate lineolata.
4.	Vertex narrowly concave between antennal supports; antennal scape cy-
	lindrical or subfusiform; elytra irregularly punctured
	Vertex shallowly and broadly concave between antennal supports; an-
	tennal scape gradually thickened to just before apex; elytra in large part regularly seriate-punctate
5.	Scape subfusiform, shorter than third antennal segment; elytral apices
	subtransversely emarginate-truncate; dorsal surfaces subglabrous with tawny-yellow stripes fusiscapa.
	Scape cylindrical, as long as third antennal segment; elytral apices
	obliquely truncate; dorsal surfaces with whitish-buff pubescence with
	buffy-yellow stripesobliquetruncata.
PO)THYNE CHOCOLATA Gressitt. Plate 4, fig. 17.

Pothyne chocolata GRESSITT, Lingnan Sci. Journ. 18 (1939) 88, Kwangtung, Kiangsi, and Hunan Provinces.

Male.—Reddish brown to chocolate-brown; elytra largely reddish; frons and parts of femora blackish. Surfaces in part clothed with grayish-white or pale-tawny pubescence: head irregularly clothed with pale tawny in front and densely so behind eyes; antennæ with sparse, pale-buff pubescence and with long, black hairs on undersides of first five segments; prothorax with scattered buffy hairs and seven longitudinal, pale-tawny stripes of denser pubescence, those on notal disc somewhat incomplete; scutellum tawny at sides; each elytron with about six narrow longitudinal stripes of tawny-buff pubescence, and some scattered hairs of the same color; ventral surfaces sparsely clothed with tawny-buff, thoracic pleura with dense, creamy-buff pubescence.

Head deeply punctured in front and between upper eye lobes. Antennæ 12-segmented, a little more than twice as long as body; scape subcylindrical, slightly narrowed apically, barely longer than broad, deeply punctured to near apices.

Length, 12.7 millimeters; breadth, 3.3.

Female.—More chocolate-brown and less reddish; antennal fringe shorter and less dense; antennæ hardly twice as long as body.

Length, 14 millimeters; breadth, 3.6.

One male, in the Lingman Natural History Museum, taken at Ngai-chau, Yai District, southern Hainan, May 20 to 27, 1932, by W. E. Hoffmann and O. K. Lau; 1 female, in the author's collection, taken at Ta-hau, near Vo-lau, western Hainan, July 5, 1935, by the author.

39937-----13

New to Hainan.

Distribution.—Kwangtung; Kwangsi; Hunan; Hainan Island. POTHYNE FUSISCAPA Gressitt SD. DOY.

Male.—Body dark chocolate-brown, reddish brown on antennæ (beyond scape); mouth parts; apical and basal margins of prothorax; a median and a sublateral longitudinal stripe, and external margin, of each elytron; and along middle of thoracic and abdominal sternites; legs dark reddish brown. Surfaces clothed with gravish to tawny-vellow pubescence: head and ventral surfaces thinly and entirely clothed with tawny-yellow, more dense and more yellowish on thoracic pleura and lateral edges of abdominal sterna; antennæ thinly pubescent, with relatively short, oblique, black, flying hairs on undersides of first four segments; prothorax with seven longitudinal stripes of tawnyyellow, lower two on each side narrowly separated, interspaces with minute, pale hairs; scutellum tawny-yellow; elytra with very thin and sparse, pale hairs, each with suture, external margin, a moderately broad median, and a similar sublateral stripe and two narrower stripes, one between the two afore-mentioned. the other between median stripe and suture.

Head as broad as prothorax; frons trapezoidal, deeply and evenly punctured; inferior eye lobes one and one-fourth as deep as wide, occupying a little more than one-half distance between antennal supports and genal margins. Antennæ 12-segmented, two and one-half times as long as body, very slender; scape slender, fusiform-cylindrical, micropunctulate, a little shorter than third segment; fourth segment slightly longer than third; fifth to tenth segments shorter, subequal. Prothorax a little longer than broad, cylindrical, slightly constricted near base; surfaces finely punctured, somewhat sparsely so on notum. Elytra parallel, narrowly and subobliquely emarginate-truncate apically, with external angles slightly produced; surfaces irregularly and rather heavily punctured nearly to apices.

Length, 10.6 millimeters; breadth, 2.75.

Holotype, female, loan deposit, California Academy of Sciences, Dome Mountain (Sa-bo-leng, Sa-ko-lia), 8 kilometers west of Nam-fung, Hainan, July 13, 1935, taken by the author.

Differs from most species of *Pothyne* in having the scape slender, subfusiform, and shorter than the third antennal segment. Differs from *P. chocolata* Gressitt in having the elytra truncate instead of rounded apically, the scape longer, smoother, and slenderer, and in other characters.

Distribution.—Hainan Island.

POTHYNE LINEOLATA Gressitt sp. nov.

Male.—Subparallel, dorsoventrally somewhat compressed. Reddish brown, dark brown at apices of antennal segments, on middle of metasternum, and sides of abdominal sternites, blackish on frons, vertex, parts of occiput, pronotal disc, metasternalepisternal suture, thickest portions of femora, and basal segments of tarsi. Body surfaces almost entirely clothed with tawny-buff, whitish buff, or grayish, pubescence of varying thicknesses, largely in stripes dorsally: head whitish, tinged with buff in front, tawny-buff at sides; antennæ with fairly dense, oblique, whitish pile on scape and bases of third to fifth segments, remainder with short, sparse, gray-brown hairs, undersides of first seven segments with long, flying, blackish hairs; prothorax sparsely clothed with tawny-gray pubescence and with seven narrow, longitudinal stripes of thick, ochraceous pubescence; scutellum edged with whitish and tawny hairs; each elytron with eight or nine alternating stripes of tawny-buff and whitish gray, suture tawny, external margin gray, stripes in part with branchlike connections with adjacent stripes; ventral surfaces clothed with grayish white, somewhat tawny at sides; legs clothed with whitish buff, grayish white on tarsi.

Head fully as broad as prothorax, deeply punctured on frons and middle of occiput; inferior eye lobes large, one and onehalf as deep as wide, occupying nearly three-fourths distance between antennal supports and genal margins. Antennæ 11segmented, one and three-fourths as long as body, tapering; scape nearly cylindrical, finely punctulate, a little longer than third segment; third to seventh segments subequal in length; last segment nearly as long as scape. Prothorax cylindrical, hardly longer than broad, slightly constricted near base, shallowly and irregularly punctured. Scutellum broadly rounded. Elytra narrowed and subemarginate-truncate apically; surfaces closely, irregularly, and somewhat finely punctured. Posterior femora barely reaching beyond first abdominal segment.

Length, 14.8 millimeters; breadth, 3.7.

Holotype, male, in the Lingman Natural History Museum, Cheung-kon-ts'uen, Ka-luk-kong, 30 kilometers east of Nam-fung, Kiung-shan District, April 11 and 12, 1935, F. K. To.

Differs from P. variegata Thomson in being slenderer, in having the antennæ composed of eleven instead of twelve segments and slenderer, the elytral stripes frequently interrupted, and in other characters.

Distribution.—Hainan Island.

POTHYNE OBLIQUETRUNCATA Gressitt. Plate 4, fig. 16.

Pothyne obliquetruncata GRESSITT, Lingnan Sci. Journ. 18 (1939) 89, northern and eastern Kwangtung.

Male.—Slender, cylindrical. Reddish brown, blackish brown at extreme apices of third to sixth and last antennal segments and on sides of occiput, pronotal disc, humeri, and parts of lateral portions of metasternum and abdominal segments. Surfaces clothed with thin grayish white, and stripes of tawnyyellow, pubescence: head sparsely tawny with denser, yellow pubescence on anterior borders of genæ and behind eyes; prothorax thinly grayish white, with seven yellow stripes; elytra similarly clothed, but with five stripes on each; ventral surfaces thinly grayish white, with denser yellow pubescence on thoracic pleura. First five antennal segments fringed, with black hairs internally.

Head asperate-punctate on frons, distinctly punctured on occiput. Antennæ two and one-half times as long as body; scape cylindrical, about as long as third segment. Prothorax a little longer than broad, cylindrical, finely and irregularly punctured. Elytra deeply punctured to near apices, the latter obliquely truncate. Length, 11 to 14.5 millimeters; breadth, 2.6 to 3.1.

Female.—Antennæ more than twice as long as body, ventral fringe much shorter; frons deeply, but not asperately, punctured. Length, 12.6 to 15.7 millimeters; breadth, 2.8 to 3.3.

Eight males and 3 females, in the Lingnan Natural History Museum, the author's collection, and the California Academy of Sciences, taken as follows: 1 each at Yin-ko-au, west of Lai-moling, central Hainan, June 23 and 24, 1935, F. K. To; top of Lin-fa-ling, near Kuen-yan-ngan, east of Nodoa, August 6 to 9, 1929, Lingnan Univ. Fifth Hainan Exped.; Nodoa, May 31, Dome Mountain (Sa-bo-ling), July 13, Chung-kon-ts'uen, July 19, Dwa-Bi (Tai-pin-ts'uen) July 24, and Liamui (Leng-moon), August 3, 1935, taken by the author.

Distribution.—Kwangtung; Kwangsi; Hunan; Hainan Island. POTHYNE RUGIFRONS Gressitt sp. nov.

Male.—Moderately large, subcylindrical. Dark reddish brown, nearly black on head, scape, pronotal disc, humeri, femora, and metasternum. Body surfaces very thinly clothed with grayishtawny pubescence, and marked with the following stripes of tawny yellow: narrowly on sides of frons, on postgenæ behind eyes; five narrow longitudinal stripes, and lower parts of sides, on prothorax, and on sutural and external margins; four discal

196

stripes on each elytron; a stripe of very dense pubescence on meso- and metathoracic pleura, forming continuations of area on lower part of each side of prothorax; antennæ sparsely pubescent, a few paler hairs at bases of fourth and following segments, first five segments internally fringed with very long, blackish hairs.

Head strongly asperate-punctate, in part medially carinate, on frons; inferior eye lobes one and one-half as high as wide, occupying a little more than one-half distance from antennal insertions to genal margins. Antennæ about twice as long as body; scape cylindrical, finely punctulate, practically as long as third segment; third and following segments gradually decreasing in length. Prothorax cylindrical, slightly broader at anterior margin, hardly longer than broad; surfaces sparsely and shallowly punctured. Elytra irregularly and rather heavily punctured, narrowly and subobliquely truncate apically, external angles briefly acute.

Length, 14 millimeters; breadth, 3.6.

Holotype, male, in the Lingnan Natural History Museum, Cheung-kon-ts'uen, Ka-luk-kong, 30 kilometers east of Namfung, Kiung-shan District, April 13 and 14, 1935, F. K. To.

Differs from P. chocolata Gressitt in having the frons coarsely asperate-punctate, the scape without short, oblique hairs, the elytral stripes uninterrupted, and in other respects.

Distribution.—Hainan Island.

POTHYNE SERIATA Gressitt sp. nov. Plate 4, fig. 15.

Female.-Small, cylindrical. Body dark chocolate-brown, reddish brown on labrum, third to fifth antennal segments, lateral, posteriosubsutural, and raised submedian, portions of each elytron, and median portions of metasternum and abdominal sternites. Surfaces clothed with tawny-yellow on frons and more densely with golden pubescence on middle of occiput and sides behind eyes; antennæ thinly clothed with minute, oblique hairs, lacking long flying hairs beneath; prothorax with very thin tawny-yellow, and fine stripes of dense golden, pubescence; scutellum golden; each elytron clothed with dense, golden pubescence on lateral portion, raised submedian stripe, basal two-fifths of suture, and parasutural area in apical half, a fine, tawnyyellow stripe between submedian stripe and lateral stripe, remainder of surface with sparse, grayish-tawny pubescence; ventral surfaces thinly clothed with golden-yellow, thoracic pleura densely so.

72, 1–2

Head barely broader than prothorax, shallowly concave and not very narrow between antennal insertions; frons deeply and sparsely punctured; inferior eye lobes nearly as wide as deep. Antennæ 12-segmented, very slender, three times as long as body; scape slender, gradually thickened to just before apex, subequal in length to third segment; third and following segments gradually increasing in length and decreasing in diameter. Prothorax longer than broad, cylindrical, sligthly broadened at apex, three-fourths as broad as elytra; surfaces deeply and irregularly punctured. Elytra narrowly truncate apically with external angles feebly dentate; surface of each seriate-punctate except just external to median line, a slightly raised stripe bearing a single row of punctures on basal three-fifths and lacking punctures posteriorly, just internal to median line.

Length 9.2 millimeters; breadth, 2.

Holotype, female, loan deposit, California Academy of Sciences, Ta-han, near Red Mist Mountain, central Hainan, altitude 750 meters, June 22, 1935, taken by the author.

Differs from most species of *Pothyne* in having the antennal supports somewhat widely separated, the antennal scape gradually thickened, and the elytra seriate-punctate. Differs from *P. fusiscapa* in having the vertex more shallowly concave, the scape as long as the third antennal segment and gradually thickened, and in other respects.

Distribution.—Hainan Island.

SPALACOPSINI

APROSOPITÆ Thomson, Syst. Cer. (1864) 95, 398, part. SPALACOPSIDES Lacordaire, Gen. Col. 9 (1872) 414, 702. SPALACOPSINI Aurivillius, Col. Cat. 74 (1923) 360.

Slender; head strongly produced anteriorly; mouth parts directed backward; eyes divided; antennæ hardly longer than body; scape large; prothorax cylindrical, as broad as head and elytral bases; anterior coxal cavities angulate externally; middle coxal cavities open externally to epimera; middle tibiæ grooved preapically on outer sides; tarsal claws divergent.

Genus TETRAGLENES Newman

Tetraglenes NEWMAN, Entomologist 1 (1842) 300; THOMSON, Syst. Cer. (1864) 388; PASCOE, Trans. Ent. Soc. London (3) 3 (1866) 323, 325; LACORDAIRE, Gen. Col. 9 (1872) 702, 703.

Head nearly as long as prothorax; antennæ about as long as body; scape stout, nearly as long as third and fourth segments **72,** 1–2

combined; third and following segments with a fringe of long hairs; elytra fusiform, separately acuminate apically; legs short; posterior femora reaching only to apex of first abdominal segment.

Genotype.—Tetraglenes insignis Newman. Range.—Ethiopian and Oriental Regions.

TETRAGLENES INSIGNIS SUBLINEATUS Gressitt. Plate 4, fig. 18.

Tetraglenes sublineatus GRESSITT, Lingnan Sci. Journ. 14 (1935) 572, Foochow, Fukien Province.

Tetraglenes insignis sublineatus GRESSITT, Lingnan Sci. Journ. 16 (1937) 613; ibid. 18 (1939) 90, Kwangtung.

Brownish black, elytra reddish brown mixed with black; surfaces irregularly clothed with tawny, gray, buff, or whitish pubescence: head dull tawny-brown, buffy on frons and postocciput, blackish behind eyes; antennæ tawny on scape, sparsely pubescent and fringed on remainder; prothorax tawny, with three longitudinal, blackish-brown stripes on notum and one along each side; elytra largely tawny or buffy, whitish along median ridge on basal half, subglabrous on black portions; ventral surfaces largely clothed with buffy, pinkish brown along middle of sternites, blackish brown at sides.

Head finely punctured; superior eye lobe slightly smaller than inferior eye lobe. Antennæ as long as body; scape as long as prothorax, deeply punctured. Prothorax subcylindrical, with three shallow, longitudinal grooves. Elytra ridged medially on basal portion and externally on apical portion, their surfaces closely punctured.

Length, 9 to 11 millimeters; breadth, 1.6 to 1.75.

Three specimens from Ta-hian, near foot of Five Finger Mountains, June 12 to 17, 1 from Ta-han, near Red Mist Mountain, June 7, 1 from Ta-hau, west of Nodoa, July 7, and 1 from Chung-kon, east of Nam-fung, July 19, 1935, collected by the author; 1 taken at Nam-fung, June 24, 1932, by F. K. To.

New to Hainan.

Distribution.—Fukien; Kwangtung; Hainan.

SAPERDINI

SAPERDAIRES Mulsant, Col. France Long. (1839) 181. SAPERDINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1866) 327. SAPERDIDES Lacordaire, Gen. Col. 9 (1869) 831. SAPERDINI Leconte, Smiths. Misc. Coll. (9) 265 (1873) 331, 345.

Eyes finely facetted, emarginate; antennal scape gradually thickened; prothorax rarely armed laterally; middle tibiæ not

The Philippine Journal of Science

grooved or toothed externally; anterior coxal cavities angulate externally; pro- and mesosternal intercoxal processes depressed, unarmed; middle coxal cavities open externally to epimera; last tarsal segment relatively short; tarsal claws divaricate.

Key to the Hainan genera of Saperdini.

Genus SERIXIA Pascoe

Serexia PASCOE, Trans. Ent. Soc. London (2) 4 (1856) 45; ibid. (3) 3 (1866) 329; Journ. Ent. 1 (1862) 353; THOMSON, Syst. Cer. (1864) 399; LACORDAIRE, Gen. Col. 9 (1872) 832, 839.

Iole PASCOE, Trans. Ent. Soc. London (2) 4 (1858) 254.

Iolea PASCOE, Journ. Ent. 1 (1862) 353; THOMSON, Syst. Cer. (1864) 398.

Head wider than prothorax; eyes deeply emarginate, swollen; antennæ generally much longer than body in both sexes, slender, segments, except second, subequal in length; prothorax subcylindrical, disc swollen posteriorly; scutellum minute, squarish; elytra parallel, rounded apically, generally smooth and seriatepunctate above; anterior and middle coxæ subapproximate, fairly prominent, acetabula of former closed posteriorly; metepisternum fairly broad, narrowed posteriorly; last abdominal segment of female long, swollen and finely grooved medially; legs slender; tarsi short.

Genotype.—Serixia apicalis Pascoe.

Range.—Malay Archipelago, including Philippines; peninsula of southeastern Asia; South China; Hainan; Formosa.

Key to the Hainan species of Serixia.

1.	Scape b	olack; b	ody slende	r					2.
	Scape t	estaceo	ous; body v	very short.				abb	reviata.
2.	Elvtra	black	anically:	posterior	f emora	not	nearly	reaching	elvtral

SERIXIA ABBREVIATA Gressitt sp. nov. Plate 5, fig. 7.

Male.—Abbreviated, parallel, depressed-cylindrical. Testaceous; head and prothorax subochraceous; eyes and apices of mandibles black; antennæ testaceous on basal three and one-half

200

segments, remainder black; legs pale testaceous. Body clothed with short, suberect, pale hairs, longest on front of head and base of elytra, as well as fine, golden pubescence, giving a silky sheen on head, prothorax, and ventral surfaces; antennæ with short, pale pubescence, and a few fine, erect, golden hairs on scape and inner side of each to middle of fourth segment, remainder with very short, black pubescence.

Head as wide as deep, distinctly wider than prothorax, finely and sparsely punctured, except on occiput and genæ: labrum heavily punctured; frons wider than high, weakly swollen, emarginate laterally; vertex nearly plane between antennal insertions. finely grooved along middle; each eye with inferior lobe nearly round, occupying nearly two-thirds distance from antennal insertions to base of mandibles. Antennæ less than twice as long as body; scape slightly thickened towards apex, fully as long as third segment: third segment slightly longer than fourth, fourth segment barely longer than fifth. Prothorax one and one-third as broad as long, subcylindrical, constricted prebasally; disc weakly swollen behind center, finely punctured on each side and nearly impunctate along middle. Elytra less than twice as long as broad, parallel, each broadly rounded apically and impressed with a subsutural groove, seven longitudinal rows of fine punctures on dorsal surface; deflexed sides irregularly punctate; apical portion indistinctly punctured. Metasternum swollen, nearly impunctate. First abdominal segment nearly as long as following three segments combined; last segment rounded-truncate apically. Posterior femora reaching elytral apices.

Length, 5 millimeters; breadth, 1.75.

Holotype, male, loan deposit, California Academy of Sciences, Ta-hau, 40 kilometers westsouthwest of Nodoa, Hainan, altitude 180 meters, July 7, 1935, taken by the author.

Differs from S. sedata Pascoe in being much more abbreviated; in having the occiput more swollen; the prothorax less closely, and the elytra less distinctly, punctured; the antennæ testaceous basally and black apically, instead of being partly annulated; and the elytra entirely pale.

Distribution.—Hainan Island.

SERIXIA LONGICORNIS PUBESCENS Gressitt subsp. nov. Plate 5, fig. 4.

Male.—Moderately slender, parallel, subcylindrical. Testaceous, somewhat reddish on head, prothorax, and ventral surfaces; antennæ brownish testaceous, first and second segments black, apices of following segments blackish brown. Body

72, 1-2

clothed with sparse, erect, pale hairs and fine, golden pubescence, densest on elytra.

Head transverse, nearly one and one-half as broad as prothorax, finely and sparsely punctured; frons wider than high, very weakly swollen, labrum narrow; vertex plane; eyes deeply emarginate, inferior lobes swollen, hemispherical. Antennæ two and two-thirds times as long as body, very slender; scape threefourths as long as third segment; third and following segments subequal in length. Prothorax as long as broad, subcylindrical. slightly constricted before base and broadened beyond middle; surface very finely and irregularly punctured, moderately swollen on middle of disc. Scutellum emarginate behind. Elvtra three times as long as broad, parallel, rounded apically; surfaces seriate-punctate for entire length, in seven rows on each at middle, punctures mostly no more than a puncture width apart longitudinally. Ventral surfaces nearly impunctate. Hind legs slender; posterior femora nearly reaching apices of elytra.

Female.—Antennæ two and one-third times as long as body; last abdominal segment grooved medially, longer than two preceding segments combined.

Length, 5.5 to 6.5 millimeters; breadth, 1.5 to 1.75.

Holotype, male, in the Lingnan Natural History Museum, Taichau Island (Tinhosa), Wan-ning District, 18° 40' north latitude, 110° 30' east longitude, off Hainan Island, June 2, 1932, W. E. Hoffmann and O. K. Lau; allotype, in the author's collection, Nodoa, Hainan Island, July 11, 1935, taken by the author; paratype, male, No. 53451 United States National Museum, Chue-mo-ling, northeast of Nodoa, Hainan, August 24, 1929, Lingnan Univ. Fifth Hainan Exped.

Differs from S. longicornis Pascoe in being slenderer, more reddish, and more pubescent; and from S. sedata Pascoe in being slenderer, with the head broader, the antennæ longer and largely testaceous, and the elytra entirely testaceous. Differs from S. subsericea Gressitt of Formosa in being slenderer and paler, with the legs entirely testaceous, and the antennæ more extensively so.

Distribution.—Hainan and Tinhosa Islands.

SERIXIA SEDATA Pascoe. Plate 5, fig. 3.

Serixia sedata PASCOE, Journ. Ent. 1 (1862) 354, Siam; GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 392, Hainan, Burma.

Yellowish testaceous; eyes, tips of mandibles, and apical sixth of elytra black; antennæ black except for basal halves of fourth to ninth segments in male and basal halves of fourth and sixth segments and extreme bases of fifth, seventh, and eighth segments in female. Body largely clothed with fine, golden pubescence, and short, erect, pale hairs; antennæ with a sparse fringe of black hairs on undersides of second, third, and basal half of fourth, segments.

Head but slightly broader than prothorax, finely and sparsely punctured, feebly convex in front. Antennæ one and one-half to one and three-fourths times as long as body; scape four-fifths as long as third segment, subequal to fourth. Prothorax a little broader than long, finely and irregularly punctured. Scutellum truncate. Elytra two and one-half times as long as broad, slightly broadened posteriorly in female, quite regularly punctured in about nine rows nearly to apices. Posterior femora slightly thickened.

Length, 5 to 8 millimeters; breadth, 1.7 to 3.

One specimen, taken at Ta-hian, southcentral Hainan, altitude 600 meters, June 15, 1 at Ta-hau, western Hainan, altitude 180 meters, July 7, 1935, by the author; a large series was collected at No-kyu-chun, central Hainan, March 22, 1936, by the author's native collector; duplicates deposited in various collections; numerous examples, taken at Tai-pin-ts'uen, May, and Cheung-konts'uen, April 1935, F. K. To; 4 specimens, in the British Museum, recorded by Gahan, taken by Whitehead in 1899.

Distribution .-- Siam; Burma; Annam; Hainan.

Genus GLENIDA Gahan

Glenida GAHAN, Ann. & Mag. Nat. Hist. (6) 2 (1888) 65.

Head broad at genæ; frons plane, subtrapeziform; occiput raised, forming an obtuse angle with frons; antennæ about as long as body, scape as long as fourth segment; prothorax transverse, briefly and bluntly tuberculate at each side just before middle, disc on midline behind center and one at each side before middle; scutellum rounded-triangular and bilobed apically; elytra broad, rounded apically, bicarinate laterally to apical third, deeply punctured basally; posterior femora not reaching last abdominal segment.

Genotype.—Glenida suffusa Gahan. Range.—South China; Hainan; Formosa.

GLENIDA CYANEIPENNIS Gahan. Plate 6, fig. 1.

Glenida cyaneipennis GAHAN, Ann. & Mag. Nat. Hist. (6) 2 (1888) 66, China; WATERHOUSE, Aid Ident. Ins. 2 (1890) pl. 181, fig. 3; GRESSITT, Lingnan Sci. Journ. 18 (1939) 93. *Male.*—Orange testaceous; elytra metallic purplish violet; apical seven and one-half antennal segments, a small spot on each side of prothorax, tibiæ largely, and tarsi entirely, black. Orange portions clothed with golden pubescence, dark portions with short, black pubescence and erect, black hairs.

Head weakly concave between antennal insertions; antennæ as long as body; scape apically cylindrical; elytra broad, conjointly rounded apically, irregularly punctured on basal threefifths.

Length, 14 millimeters; breadth, 5.8.

A single male was taken at Sam-a, southern Hainan, April 30, 1936, by Commander G. Ros, and is in the Musée Heude.

New to Hainan Island.

This example differs from specimens from mainland Kwangtung in having the antennæ more extensively black, the elytra more purplish than cyaneous, the ventral surface more ochraceous than yellow, and the head and prothorax more densely pubescent.

Distribution.—South China; Hainan.

GLENEINI

GLENEITÆ Thomson, Syst. Cer. (1864) 123, 401. GLENEIDES Lacordaire, Gen. Col. 9 (1872) 841. GLENEINI Aurivillius, Col. Cat. 74 (1923) 494.

Antennal insertions distant, feebly raised; eyes finely facetted, emarginate; antennæ but slightly longer than body; anterior coxal cavities angulate externally; middle coxal cavities open to epimera; middle tibiæ obliquely grooved; tarsal claws divaricate, generally toothed beneath in male.

Genus GLENEA Newman

Glenea NEWMAN, Entomologist 1 (1842) 301; PASCOE, Trans. Ent. Soc. London (3) 3 (1867) 363, 364; LACORDAIRE, Gen. Col. 9 (1872) 842, 843; AURIVILLIUS, Arkiv. f. Zoologi (13) 9 (1920) 30.

Frons higher than wide, emarginate laterally; vertex shallowly concave; antennæ not much longer than body; prothorax subcylindrical; elytra broader than prothorax, gradually narrowed, carinate laterally, truncate apically, with external angles angulate or acuminate; first abdominal sternite much longer than second, third, or fourth.

Genotype.—Glenea lepida Newman.

Range.—Ethiopian and Oriental Regions; Manchurian and Indo-Australian Subregions.

Key to the Hainan species of Glenea.

1. Scape not strongly carinate along anteriodorsal surface (Subgenus Gle-
nea sensu strictu)
Scape strongly carinate along anteriodorsal surface; elytra creamy-buff, with black and white markings apically (Subgenus <i>Stiroglenea</i>).
cantor

	ly black or blackish brown
	Elytra castaneous with white spots; legs and antennæ reddish relicta.
4.	First two elytral spots obliquely placed; prothorax entirely white on
	lower half; humeri very prominent humerosa.
	First two elytral spots transversely placed; prothorax with two white
	stripes on sides, humeri hardly projecting tonkinea.

Subgenus GLENEA sensu strictu

GLENEA FLAVORUBRA Gressitt sp. nov. Plate 6, fig. 2.

Male.—Moderately narrow, attenuated posteriorly; third antennal segment much thicker than fourth, rather hairy apically. Bright brick-red, duller beneath; antennal segments beyond third pale reddish brown, with duller apices; body clothed with thin, pale pubescence, erect tawny or reddish hairs, and marked with areas of dense ochraceous yellow or silvery-white pubescence as follows: head with white, mixed with vellow, pubescence on lower parts of genæ and along sides of frons, eyes narrowly bordered with yellow; antennæ with a fringe of reddish hairs on undersides of first five segments, densest and longest on third segment; prothorax with three silvery-white spots across base. and a narrow stripe along lower part of each side: scutellum silvery white apically; each elytron with an elongate spot on inner portion near base, a similar but smaller mark external to this, a fine, incomplete, longitudinal line behind former, another along suture before middle, an oblique, oblong-oval spot just behind middle, and a rounded-squarish preapical spot, of bright ochraceous yellow; meseptisterna and posterior portions of metepisterna and metepimera clothed with paler golden-yellow pubescence, and posterior margins of abdominal segments with two, posteriorly with one, silvery-white spot at each side.

Head deeply and subuniformly punctured except on genæ; frons narrow. Antennæ one and one-half as long as body, slender beyond third segment; scape nearly as long as third segment and longer than fourth. Prothorax a little longer than broad, subcylindrical, swollen above; disc closely punctured anteriorly, nearly impunctate on basal third. Elytra cuneiform, truncate apically, with external angles strongly, and internal angles briefly, acuminate; surface of each with an oblique, raised line along disc and two carinæ along side, densely punctured on central portions, more deeply and sparsely so on base.

Length, 10 to 15 millimeters; breadth, 3 to 5.

Holotype, male, No. 52174 United States National Museum, Liamui, (Leng-moon), east central Hainan Island, August 1, 1935, taken by the author; allotype, female, in the Lingnan Natural History Museum, Faan-na, 9 miles south of Nodoa, Tan District, Hainan, July 10 and 11, 1932, F. K. To; paratypes, in the author's collection, Lingnan Natural History Museum, Museé Heude, British Museum, and the California Academy of Sciences, Chung-mei, August 1932, Fang-no, July 11, 1932, Yingko-au, near Loi Mother Mountain, June 23 and 24, 1935, Nodoa, March 18 to 22, 1935, F. K. To; Ta-hian, June 12 to 15, 1935, taken by the author, and from other localities.

Differs from G. relicta Bates in being larger, in having the third antennal segment much thicker and hairy apically, and the body entirely bright brick-red with yellow-orange markings.

Distribution.—Hainan.

GLENEA HUMEROSA Gressitt sp. nov. Plate 6, fig. 4.

Male.—Broad at humeri, attenuated posteriorly. Body entirely black, in part clothed with thick, silvery-white pubescence: head with genæ, anterior borders of eyes, and two parallel stripes between upper eye lobes white, remainder of frons thinly pubescent; prothorax with a middorsal stripe and sides to just above middle densely clothed: scutellum entirely pubescent: elvtra with suture narrowly white near base and apex, disc of each with a large, oval spot near suture at end of first quarter; another, slightly larger, adjacent to suture at middle; and a large, subapical spot besides two smaller sublateral spots, alternating with the three larger spots; ventral surfaces largely pubescent, thinly so along middle of sternites and subglabrous along mesepimeralmetepisternal suture, part of metepisternal-metasternal suture, and bases of abdominal segments; antennæ with thin, whitish pubescence on inner sides of first three segments and base of fourth segment, and with short, scattered, black bristles on undersides of first seven segments; pronotum and elytral bases with sparse, erect, black bristles and thin, silvery-black pubescence.

Head hardly broader than prothorax, deeply, and in part closely, punctured, feebly concave at vertex; inferior eye lobes

a little deeper than wide, occupying three-fourths distance between antennal insertions and genal margins. Antennæ one and one-sixth as long as body; scape shorter than third segment and longer than fourth. Prothorax barely longer than broad, slightly swollen before middle, convex, and somewhat deeply and closely punctured on disc. Elytra prominently angulate at humeri; apices truncate, with external and internal angles dentate; surfaces with coarse punctures of different sizes, irregular except at sides.

Length, 13 millimeters; breadth, 4.

Holotype, male, loan deposit, California Academy of Sciences, Ta-hian, foot of Five Finger Mountains, southcentral Hainan, June 18, 1935, taken by the author.

Differs from G. coomani Pic in having the prothorax longer, the humeri more prominent, some of the dorsal spots white instead of yellow, the third, and base of fourth, antennal segments clothed with pale pubescence, and in other characters.

Distribution.—Hainan Island.

GLENEA RELICTA Pascoe.

72, 1-2

Glenea relicta PASCOE, Trans. Ent. Soc. London (2) 4 (1858) 258;
BATES, Ann. & Mag. Nat. Hist. (4) 12 (1873) 387; op. cit. (6) 19 (1897) 485;
MATSUMURA, Thous. Ins. Japan (609) 3 (1908) pl. 52, fig. 14; Illus. Common. Ins. Japan 3 (1931) 132, pl. 21, fig. 1;
MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 413.

Male.—Head and prothorax black; antennæ castaneous basally and blackish apically; elytra reddish castaneous with apical third blackish; ventral surfaces blackish brown; legs pale castaneous, blackish brown on tarsi; surfaces clothed with silvery-white pubescence as follows: head clothed on genæ, sides and anterior border of frons, and along two stripes on occiput; prothorax with a median discal stripe, two stripes on each side, and part of base, white; elytra with suture, an apical spot, and four small discal spots in a zig-zag arrangement on each; ventral surfaces largely white; antennæ thinly pubescent.

Head broader than prothorax, finely punctured; antennæ nearly one and one-half as long as body. Prothorax fully as long as broad, slightly swollen in middle, closely punctured. Elytra deeply and subseriately punctured on basal two-thirds.

Length, 9.4 to 10 millimeters; breadth, 2.5 to 3.

Female.—Antennæ one and one-fifth as long as body; prothorax hardly as long as broad.

Length, 9.5 to 12 millimeters; breadth, 2.8 to 4.

The Lingnan Natural History Museum has specimens from Cheung-kon-ts'uen, Kiung-shan District, April 4 to 14, Tai-pints'uen, foot of Loi Mother Mountain, April 28 to 30, May 5 to 11, 15 to 18, 21 and 22, and July 20 and 21, Tai-tsing-lam-ts'uen, near Loi Mother Mountain, June 1 to 11, and Nam-liu-tin, Lamwan-tung, July 29 and 30, 1935, F. K. To. The author collected specimens at Ta-han, near Red Mist Mountain, June 22 to 24, and Tai-pin-ts'uen (Dwa-Bi), July 26, 1935.

New to Hainan.

Distribution.—Japan; Ryu Kyu Islands; Formosa; North China; Kiangsi; Hainan.

GLENEA TONKINEA Aurivillius. Plate 6, fig. 3.

Glenea tonkinea AURIVILLIUS, Arkiv. f. Zoologi 18 A 9 (1926) 19, fig., Tonkin.

Female.—Entirely black, except for reddish trochanters; surfaces marked with silvery, greenish, or bluish-white pubescence: head with two occipital stripes, margins of frons and anterior parts of genæ bluish white, postgenæ silvery, remainder of frons thinly bluish white; antennæ with bluish white on inner sides of first three segments and short dark bristles on undersides of first five: prothorax with a bluish-white stripe along middorsal line, a silvery-white stripe just above middle of each side and sternum and lower parts of sides thinly pubescent: scutellum pale bluish white; elytra faintly silvery gray along apical half, and disc of each with four equally spaced, more or less transverse bands of silvery white, tinged with blue-green: first composed of two spots, second of a transversely oblong bar, third a squarish spot, and last an ill-defined, more bluish apical spot, not separated from suture as are others; ventral surfaces partly clothed with silvery-white pubescence.

Head deeply, somewhat densely punctured. Antennæ one and one-fourth as long as body. Prothorax a little broader than long; disc densely and finely punctured. Elytral surfaces deeply and not very regularly punctured.

Length, 10.5 to 11 millimeters; breadth, 3.4.

Male.—Slenderer; antennæ one and one-third as long as body; femora reddish brown basally.

One female, in the Lingman Natural History Museum, taken in the vicinity of villages at the foot of Loi Mother Mountain, May 25 to 28, 1935, by F. K. To; 1 male, in the author's collection, Ta-hian, foot of Five Finger Mountains, June 17, 1935, 72, 1-2

taken by the author; 2 females, collected at Tai-pin-ts'uen, near Loi Mother Mountain, May 8 to 11, 1935, by F. K. To.

New to Hainan.

Distribution.—Tonkin; Hainan.

Subgenus STIROGLENEA Aurivillius

Stiroglenea AURIVILLIUS, Arkiv f. Zoologi (13) 9 (1920) 31.

GLENEA (STIROGLENEA) CANTOR (Fabricius). Plate 6, fig. 5.

Lamia cantor FABRICIUS, Mant. Ins. 1 (1787) 142, China.

Saperda cantator FABRICIUS, Syst. Eleuth. 2 (1801) 304, emendation. Glenea cantor GAHAN, Trans. Ent. Soc. London (1894) 488.

Glenea (Stiroglenea) cantor AURIVILLIUS, Arkiv f. Zoologi (13) 9 (1920) 31; GRESSITT, Lingnan Sci. Journ. 18 (1939) 96.

Male.—Black; elytra yellowish testaceous except at humeri and apices; anterior and middle femora and tibiæ reddish amber; surfaces in part clothed with pubescence: head, prothorax, and ventral surfaces with dense, creamy pubescence, marked by subglabrous, black areas: a median line on occiput, vertex, and upper part of frons, a stripe behind each upper eye lobe, a median line and four spots on pronotum, and four spots on each side of prothorax, middle of mesepisternum, each end of metepisternum, middle of sides of metasternum, and base of side of each abdominal segment; elytra with thin, golden pubescence, apical fifth with grayish-white except for two transverse black bars on each.

Head nearly impunctate, hardly concave between antennal supports. Antennæ one and one-third as long as body; scape barely longer than third segment. Prothorax a little broader than long, constricted near base, sparsely punctulate. Elytra with punctures of various sizes, subseriate basally.

Length, 11 to 13 millimeters; breadth 4 to 4.5.

Female.—Body broader; antennæ barely longer than body.

Length, 13.5 to 15 millimeters; breadth, 5 to 6.

The Lingnan Natural History Museum has specimens from Lam-ko, Lin-kao District, May 23 to 25, Nodoa, May 14 to 16, Faan-na, 15 kilometers south of Nodoa, July 14 and 15, Hauying-ts'uen, 10 kilometers southeast of Nodoa, July 31, Taai-po, Lin-kao District, about 40 kilometers from Nam-fung, September 19 to 24, 1932, Tai-pin-ts'uen, July 25, Nam-liu-tin, August 1 to 4, and Sam-kwong-ts'uen, August 7 to 11, 1935, taken by F. K. To; Man-fook-chuen, July 12, and Wong-lung-chuen, August 22, 1929, Lingnan Univ. Fifth Hainan Exped. The writer collected specimens at Ta-hian, foot of Five Finger Mountains,

39937-----14

June 11 to 19, and Liamui (Leng-moon), eastern Hainan, August 1, 1935.

New to Hainan.

Distribution.-South China; Hainan; Tonkin.

PHYTŒCIINI

OBEREITÆ Thomson, Syst. Cer. (1864) 119, 399. PHYTŒCIIDES VRAIS Lacordaire, Gen. Col. 9 (1872) 849. PHYTŒCIINI Aurivillius, Col. Cat. 74 (1923) 513.

Eyes large, finely facetted; prothorax unarmed laterally; anterior coxal cavities angulate externally, generally closed behind; middle coxal cavities open externally to epimera; mesosternal process platelike; metepisternum narrowed posteriorly; tarsal claws appendiculate and divaricate.

Key to the Hainan genera of Phytæciini.

- rinæ, or vertically deflexed sides...... Oberea.

Genus NUPSERHA Thomson

Nupserha THOMSON, Classif. Cer. (1860) 41; Syst. Cer. (1864) 400; PASCOE, Trans. Ent. Soc. London (3) 3 (1867) 413; LACORDAIRE, Gen. Col. 9 (1872) 854.

Frons subrectangular; vertex nearly plane; eyes finely facetted, emarginate, inferior lobes broader than deep; antennæ stout, about as long as body, scape slightly longer than third segment, fourth and following segments gradually diminishing in length; prothorax no longer than broad, swollen on middle of disc and at middle of each side; scutellum short, truncate; elytra slightly narrowed, each emarginate or truncate apically and costate longitudinally.

Genotype.—Stibara cosmopolita Thomson. Range.—Oriental Region; Japan; North China; Africa.

Key to the Hainan species of Nupserha.

1.	Elytra distinctly carinate along top of lateral declivity, emarginate and
	bidentate apically
	Elytra not distinctly carinate along top of lateral declivity, obliquely
	truncate apically, without distinct teeth
2.	Dorsal surfaces of body entirely ochraceous; ventral surfaces largely
	black; prothorax distinctly swollen at each side corrugata.
	Head and elytral apices black; ventral surfaces largely testaceous; pro-
	thorax feebly swollen laterally fricator.

NUPSERHA BATESI Gressitt.

Nupserha batesi GRESSITT, Lingnan Sci. Journ. 16 (1937) 618, southern Kiangsi and eastern Kwangtung; ibid. 18 (1939) 98.

Female.—Small, subparallel-sided. Body pale testaceous, more ochraceous on pronotal and elytral discs; head black; antennæ blackish brown basally and apically, middle segments ochraceous brown with duller apices; elytra pitchy brown along sides, behind humeri, on apices, and slightly so on apical portions of discs; tarsi, posterior tibiæ, and apex of last abdominal segments pitchy brown.

Head finely punctured, most closely so on occiput. Antennæ one and one fifth as long as body; escape about as long as third segment; fourth segment equal to third, slightly longer than fifth. Prothorax one and one-third as broad as long, constricted at base, finely and unevenly punctured. Scutellum nearly square. Elytra very slightly narrowed posteriorly; apices subobliquely truncate; surfaces with fairly uniform punctures arranged in six longitudinal rows along central portion of each. Ventral surfaces with a few shallow punctures on sides of metasternum.

Length, 8.5 millimeters; breadth, 2.

A single specimen, in the Lingman Natural History Museum, taken at Tai-pin-ts'uen, near Loi Mother Mountain, May 1 to 4, 1935, by F. K. To.

New to Hainan. This specimen is not entirely typical, being paler than mainland specimens, and having the prothorax not narrowed apically.

Distribution.—Southern Kiangsi; eastern Kwangtung; Hainan.

NUPSERHA CORRUGATA Gressitt sp. nov. Plate 6, fig. 6.

Male.—Body black, dorsal surfaces, most of head, prosternum, mesosternal intercoxal process, and posterior border of mesepisternum bright reddish orange, more yellowish on elytra and labrum; head and prothorax clothed with golden-orange pubescence, ventral surfaces and legs with pale greenish-golden pubescence; antennæ with sparse, pale, recumbent hairs, and an erect, black fringe on undersides of first six or seven segments; elytra with sparse, short, suberect, orange hairs; a few dark bristles on head.

Head convex in front, feebly grooved medially, finely and irregularly punctured; inferior eye lobes a little wider than deep. Antennæ barely as long as body, moderately stout, cylindrical; scape slightly broadened apically, a little longer than third segment; third and fourth segment subequal, following segments slightly diminishing in length. Prothorax nearly twice as broad as long, constricted near base and apex, swollen at middle of each side and on disc to near base at midline; surfaces indis-Scutellum subvertical. tinctly punctured. Elytra about two and one-third times as long as head and prothorax combined, nearly straight-sided, with apex emarginate, bearing a small tooth at suture and an acutely produced tooth externally, disc distinctly tricarinate, with one to three subregular rows of punctures along each interspace. Ventral surfaces finely and sparsely punctured. Posterior tarsi with first segment as long as following two segments combined, fully as long as last segment.

Length, 12 millimeters; breadth, 4.2.

Holotype, male, loan deposit, California Academy of Sciences, Ta-hian, near foot of northwest side of Five Finger Mountains, southcentral Hainan, altitude 600 meters, June 11, 1935, taken by the author.

Differs from N. fricator (Dalm.) in being less narrowed posteriorly, with the prothorax shorter, more swollen at sides, the elytra more strongly carinate, the dorsal surfaces entirely yellowish, and the ventral surfaces largely black.

Distribution.—Hainan Island.

NUPSERHA FRICATOR (Dalman). Plate 6, fig. 8.

Saperda fricator DALMAN in Schönherr, Syn. Ins. (1) 3 app. (1817) 183; CASTELNAU, Hist. Nat. Col. 2 (1840) 489.

Nupserha fricator PASCOE, Trans. Ent. Soc. London (3) 3 (1867) 414.

Male.—Body ochraceous; head, antennæ, sides and apices of elytra, and most of last abdominal segment black, elytral suture and punctures pitchy behind middle; body clothed with thin, buf-fy-golden pubescence.

Head practically as broad as elytral bases, finely punctured, densely so on occiput. Antennæ nearly one and one-half as long as body, tapering; scape barely longer than third segment; fourth and fifth segments subequal, each longer than third. Prothorax practically as long as broad, constricted near base, slightly narrowed towards apex, feebly obtuse at sides, broadest behind middle; surface convex along middle of disc, with only a few shallow punctures on sides and behind center of disc. Scutellum trapeziform. Elytra strongly narrowed posteriorly; apices emarginate, with both angles produced into acute teeth, outer angles more prominent; surfaces regularly punctured in six rows at middle of each.

Length, 9 to 11 millimeters; breadth, 2 to 2.5.

Female.—Antennæ barely one and one-third as long as body; elytra less strongly narrowed.

Length, 10.5 to 12 millimeters; breadth, 2.5 to 3.3.

About 15 specimens, in the Lingnan Natural History Museum and the author's collection, taken on the island as follows: 1 from Nodoa, April 28, 1932, F. K. To; 1 from Lung-hou-tong, April 22, 1932, W. E. Hoffmann; 2 from Tun-heung-ts'uen, 6 miles southeast of Nodoa, June 13 and 14, 1 from Nam-fung, June 29 to 30, O. K. Lau and F. K. To; 2 from Tai-pin-ts'uen, April 25 and 26 and May 19 and 20, 1935, F. K. To; 1 from Tahian, Five Finger Mountains, June 13, 1 from Ta-hau, west of Nodoa, July 4, a few each from Faan-ta, east of Nam-fung, July 17, and Liamui (Leng-moon), August 1 and 2, 1935, taken by the author.

New to Hainan.

Distribution.—Burma; Hainan; Formosa; Malacca; Java; Borneo; Celebes.

NUPSERHA KANKAUENSIS (Schwarzer) comb. nov. Plate 6, fig. 7.

Oberea marginella var. kankauensis SCHWARZER, Ent. Blätter 21 (1925) 153, southern Formosa.

Oberea kankauensis MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 420.

Female.—Body ochraceous, slightly paler beneath; head, proximal and distal antennal segments, lateral margins of elytra, and apical two-thirds of last abdominal segment black; apices of middle antennal segments, tarsi, and posterior tibiæ pitchy black; posterior portions of elytral discs dull brown. Body surfaces clothed with pale-buff pubescence.

Head broader than prothorax, narrower than elytral bases, shallowly punctured on frons, more closely and deeply so on occiput. Antennæ one and one-sixth as long as body; third segment fully as long as scape and fourth segment, longer than fifth. Prothorax distinctly broader than long, slightly constricted at apex and base and broadened behind middle, its surface finely, and in large part closely, punctured. Elytra moderately nar-

72, 1-2

rowed, obliquely subemarginate-truncate apically; surfaces of each in large part punctured in six regular rows.

Length, 10 to 12.5 millimeters; breadth, 3 to 3.5.

Male.—Prothorax about as long as broad; elytra more strongly narrowed; antennæ one and one-third as long as body.

Length, 9.5 to 12 millimeters; breadth, 2.5 to 3.

Several specimens, in the Lingnan Natural History Museum and the author's collection, were taken at Man-fook-chuen, near Nodoa, July 4, 1929, Lingnan Univ. Fifth Hainan Exped. Cheung-kon-ts'uen, April 13 and 14, Tai-pin-ts'uen, May 17 to 22, 1935, F. K. To; Ta-hian, Five Finger Mountains, June 11 and 12, 1935, taken by the author; 1 specimen was taken by Whitehead in 1899.

New to Hainan.

Distribution .--- Formosa and Hainan.

Genus OBEREA Mulsant

Oberea MULSANT, Col. France Longic. (1839) 192, 194; THOMSON, Classif. Cer. (1860) 41; Syst. Cer. (1864) 400; PASCOE, Trans. Ent. Soc. London (3) 3 (1867) 363, 420; LACORDAIRE, Gen. Col. 9 (1872) 851, 864.

Isoscles NEWMAN, Entomologist 1 (1842) 318; THOMSON, Syst. Cer. (1864) 400; PASCOE, Trans. Ent. Soc. London (3) 3 (1867) 420.

Form slender and elongate, subparallel-sided; head generally broader than prothorax; eyes finely facetted; antennæ slender, about as long as, or slightly longer than, body; prothorax usually subcylindrical; scutellum truncate or emarginate; elytra narrow, several times as long as head and prothorax combined, emarginate or truncate apically; abdomen cylindrical; legs short.

Genotype.—Cerambyx oculatus Linnæus.

Range.—Cosmopolitan, except South Seas and South America.

Key to the Hainan species of Oberea.

1.	Head testaceous
	Head, last abdominal segment, and antennæ black nigriceps.
2.	Elytra, metathorax, and abdomen largely testaceous
	Elytra, metathorax, and abdomen black, form extremely narrow.
	nigriventris.
3.	Prothorax longer than broad, or subequilateral 4.
	Prothorax broader than long, vertex sparsely punctured, elytra largely pale
4.	Elytra impunctate before apices; abdomen finely and sparsely punc-
	tured laterally; antennæ at least one and one-third as long as body in
	male formosana.
	Elytra deeply punctured to apices; abdomen densely punctured laterally;
	antennæ barely longer than body in male fuscipennis.

OBEREA FORMOSANA Pic.

Oberea formosana Pic, Longic. (8) 1 (1911) 220, Formosa; GRES-SITT, Lingnan Sci. Journ. 18 (1939) 102.

Oberea holoxantha var. formosana PLAVILSTSHIKOV, Revue Russe d'Ent. 15 (1916) 80; AURIVILLIUS, Col. Cat. 74 (1923) 532.

Male.—Elongate, somewhat narrowed behind shoulders. Body pale ochraceous, slightly duller, with golden-buff pubescence on elytral discs; sides and apices of elytra slightly pitchy; antennæ black on first two segments, pitchy black to dull brown on remainder; eyes black; last abdominal segment tipped with black.

Head as broad as elytral bases; surface with fine, fairly close punctures. Antennæ one and one-half as long as body; scape not quite as long as third segment; fourth segment longer than third, subequal to fifth, sixth, and seventh segments. Prothorax a little longer than broad, slightly convex at sides and on discs; surfaces irregularly punctured near apex, behind middle of disc and on sides. Scutellum emarginate. Elytra long, narrowed behind shoulders, obliquely emarginate apically, with both angles acute; surfaces of each regularly punctured in six rows to near apex. Sides of abdomen sparsely punctured; last abdominal sternite shallowly concave apically.

Length, 12 to 17 millimeters; breadth, 1.7 to 2.8.

Female.—Antennæ barely longer than body; elytra less narrowed behind humeri.

Length, 13 to 16 millimeters; breadth, 2 to 2.8.

Numerous specimens, in the Lingnan Natural History Museum, California Academy of Sciences, and the author's collection, collected at Kachek, May 13 to 19, Nam-fung, July 2, 1932, F. K. To; "Hainan Id.", April 30, 1932, W. E. Hoffmann; Cheung-kon-ts'uen, April 11 to 14, Tai-pin-ts'uen, April 28 to May 20, Tai-tsing-lam-ts'uen, June 3 to 22, Ying-ko-au, June 23 to 24, Sam-ts'uen-kai-hui, June 27 to July 3, Nam-liu-ting, August 1 and 2, Sam-kwong-ts'uen, August 10 and 11, Nampo-ts'uen, August 24 to 26, 1935, F. K. To; Chung-kon-ts'uen, July 19, 1935, and other localities, taken by the author.

New to Hainan.

Distribution.—Formosa; Kiangsi; Kwangtung; Hainan.

OBEREA FUSCIPENNIS Chevrolat. Plate 6, fig. 19.

Oberea fuscipennis CHEVROLAT, Revue Zool. (2) 4 (1852) 419, Shanghai, SCHWARZER, Ent. Blätter 21 (1925) 153; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 417, 419.

Oberea fulveola BATES, Ann. & Mag. Nat. Hist. (4) 12 (1873) 390, Japan. *Male.*—Elongate and narrow, subparallel. Body reddish testaceous; elytra ochraceous, tipped with pitchy; antennæ black proximally and pitchy distally, middle segments reddish brown tipped with blackish.

Head as broad as elytral bases, convex anteriorly, grooved on vertex, closely and finely punctured. Antennæ barely longer than body; third segment considerably longer than scape, slightly longer than fourth and following segments. Prothorax nearly one and one-half as long as broad, slightly constricted at or near apex and base; surface slightly raised along median line and transversely wrinkled on each side of it, irregularly punctured over most of surface. Scutellum truncate apically. Elytra elongate, slightly narrowed behind humeri, obliquely emarginatetruncate and bidentate apically; surfaces heavily punctured to apices. Abdomen closely punctured at sides, sparsely so beneath; last sternite deeply excavated and emarginate apically.

Length, 14 to 18 millimeters; breadth, 1.7 to 2.5.

Female.—Antennæ about as long as body. Last abdominal sternite grooved medially, slightly concave preapically.

Length, 11.5 to 17 millimeters; breadth, 1.5 to 2.3.

A large number of specimens, in the Lingnan Natural History Museum, the British Museum, the California Academy of Sciences, the Musée Heude, and the author's collection, taken at You-boi, June 6, at Man-grin, June 11, 1904, and at Nodoa, April 26, 1932, F. K. To; "Hainan Is.," April 30, 1932, W. E. Hoffmann; Kachek, May 1 to 16, Lam-ko, Lin-kao District, May 23 to 25, 1932, F. K. To; Naam-fung, July 3 to 6, Tun-heungts'uen, near Nodoa, June 13 and 14, Lok-kei, near Nodoa, June 20 and 21, 1932, O. K. Lau and F. K. To; Naam-fung, July 7, Yau-ma-woh, near Nodoa, July 8 and 9, Nai-suen, southeast of Naam-fung, August 31, 1932, Cheung-kon-ts'uen, April 13 and 14. Tai-pin-ts'uen, April 25 to May 22 and July 24, vicinity of villages at foot of Lai-mo-ling (Loi Mother Mountain), May 25 to 28. Tai-tsing-lam-ts'uen, June 1 to 12. San-ts'uen-kai-hui, July 1 to 6, Ying-ko-au, near Lai-mo-ling, June 25 and 26, and Sam-kwong-ts'uen, August 7 to 9, 1935, F. K. To; Ta-hian, near Five Finger Mountains, June 17, 1935, taken by the author.

Distribution.—East China; Japan; Formosa; Hainan.

OBEREA NIGRICEPS (White). Plate 6, fig. 12.

Saperda (Isoscelis) nigriceps WHITE, Ann. & Mag. Nat. Hist. 14 (1844) 425, Hongkong.

Oberea nigriceps FAIRMAIRE, Ann. Soc. Ent. Belg. 39 (1895) 189, 190; KANO, Kontyu 6 (1933) 288; GRESSITT, Lingnan Sci. Journ. 18 (1939) 105.
Female.—Largely reddish testaceous; head black, except neck and base of clypeus; antennæ entirely black; elytra burnt ochraceous, lighter basally, brownish black towards apices and on posterior half of external margin; last abdominal segment black except at extreme base; tarsi and apical portion of hind tibiæ brown to black. Body clothed with fine, pale-golden pubescence, dark on head and last abdominal segment; some erect, golden hairs on pronotum and basal half of elytra; antennæ sparsely ciliated beneath.

Head fully as broad as prothorax, moderately swollen anteriorly, feebly depressed between antennal insertions; surface moderately punctured; frons rectangular. Antennæ five-sixths as long as body; scape slightly shorter than third segment following segments gradually decreasing. Prothorax broader than long, slightly narrower at apex, swollen behind middle at each side and constricted before base; disc moderately raised; surface with fairly dense, heavy punctures. Scutellum squarish, subemarginate-truncate. Elytra three times as long as head and prothorax combined, narrowed behind shoulders; apices obliquely emarginate-truncate, with each angle briefly toothed; surface very heavily punctured in six longitudinal rows, the punctures mostly larger than spaces between them. Sides of metathorax and abdominal segments densely punctured.

Length, 15 to 17.5 millimeters; breadth, 3 to 3.5.

Male.—Narrower; antennæ as long as body; prothorax as long as broad.

Length, 15.5 millimeters; breadth, 2.8.

Specimens in the Lingnan Natural History Museum, the United States National Museum, and the author's collection, from Tai-pin-ts'uen, near Loi Mother Mountain, April 20 to May 22, Cheung-kon-ts'uen, April 1 to 9, 1935, F. K. To; Nodoa, May 30, 1935, taken by the author.

Some specimens have the prothorax and elytra rather pale, and the one from Nodoa has the antennæ ochraceous beyond the middle of the fourth segment.

New to Hainan Island.

Distribution.;-Hongkong; Formosa; Hainan.

OBEREA NIGRIVENTRIS Bates. Plate 6, fig. 9.

Oberea nigriventris BATES, Ann. & Mag. Nat. Hist. (4) 12 (1873) 390, Japan; MATSUSHITA, Journ. Fac. Agr. Hokkaido Imp. Univ. 34 (1933) 418, 419, 422; GRESSITT, Lingnan Sci. Journ. 18 (1939) 105. *Male.*—Extremely elongate and narrow, laterally compressed; head, pro- and mesothorax, forelegs, and middle and hind femora reddish testaceous; antennæ, metathorax, abdomen, and hind tibiæ black; tarsi dull brown; elytra reddish at extreme base, disc dull reddish brown, remainder black. Body clothed with very fine, golden pubescence; only a few short, erect hairs.

Head broader than prothorax, strongly swollen laterally and anteriorly, concave on vertex, finely sulcate on occiput; surface with moderately dense and fine punctures, subvermiculose on occiput; frons higher than wide. Antennæ one and one-fifth as long as body; third segment slightly longer than scape, subequal to following segment. Prothorax cylindrical, one and one-half as long as broad; disc feebly swollen; surface finely punctured. Scutellum longer than broad, narrowed and truncate apically. Elytra narrow, closely punctured in six rows; apices obliquely truncate and toothed at each angle. Sides of metathorax and abdomen densely punctured; last abdominal sternite shallowly concave to base.

Length, 12 to 15 millimeters; breadth, 1.2 to 1.5.

Female.—Antennæ slightly exceeding elytral apices. Last abdominal sternite hardly concave, finely grooved.

Length, 12.5 to 17 millimeters; breadth, 1.5 to 2.2.

Several specimens, in the Lingnan Natural History Museum and the author's collections taken at Hoihow, Hainan, April 18, 1932, by F. K. To; south of Nodoa, July 13, 1929, Lingnan Univ. Fifth Hainan Exped., Cheung-kon-ts'uen, April 13 and 14, Taipin-ts'uen, May 15 and 16, 1935, F. K. To; Ta-hian, June 12, 1935, taken by the author.

New to Hainan.

Distribution.—Japan; Formosa; East and South China; Hainan.

OBEREA ROSI Gressitt sp. nov. Plate 6, fig. 11.

Female.—Elongate; prothorax short; elytra narrow, slightly constricted behind base. Body testaceous; antennæ black on first three and one-half segments, last and intervening segments reddish brown; elytra subochraceous, dusky at extreme apices and impressed with dark resin-colored punctures; head, prothorax, and legs paler than elytra and abdomen, extreme apex of last segment of latter black. Surfaces clothed with fine golden pubescence; a few erect, golden hairs on sides of head and basal portions of pronotum and elytra.

Head transverse, broader than prothorax, as broad as elytra, slightly concave between antennal insertions, feebly swollen anteriorly; surface finely punctured; eyes mediocre, separated in front by nearly twice width of a ventral lobe; frons broader than high; genæ large, prominent. Antennæ not quite reaching elytral apices; scape shorter than fourth segment; fourth seg-Prothorax slightly broader than long, ment shorter than third. cylindrical, slightly constricted before basal margin, very slightly swollen above and at sides, with moderately sparse and fine punctures. Scutellum short. narrowed. subsinuate-truncate apically. Elytra attenuate, three and one-half times as long as head and prothorax combined, narrowed beyond base and slightly expanded before apex; apices narrowed, obliquely truncate, sutural angles produced; surfaces with large, deep punctures, those of outermost row less than one, and those of inner rows one to two, puncture widths apart. Sides of metasternum vertical, heavily punctured, as are metepisterna and sides of abdominal segments. Posterior femora not quite reaching apex of second abdominal segment; posterior tarsi more than half as long as tibiæ.

Length, 14.2 to 18 millimeters; breadth, 2.5 to 3.2.

Male.—Antennæ about as long as body; elytra more narrowed posteriorly.

Length, 15 millimeters; breadth, 2.7.

Holotype, female, in the Musée Heude, Shuiman, Hainan Island, April 17, 1936, collected by Commander G. Ros, for whom the species is respectfully named; allotype, male, in the Lingnan Natural History Museum, Lok-kei, northwest of Nodoa, Hainan, June 20 and 21, 1932, O. K. Lau and F. K. To; four female paratypes, in the Lingnan Natural History Museum, the United States National Museum, and the author's collection, Naam-fung, south of Nodoa, Hainan, June 27 and 28, 1932, O. K. Lau and F. K. To; Tai-pin-ts'uen, near Loi Mother Mountain, Hainan, April 25 to May 11, 1935, F. K. To.

Differs from O. holoxantha Fairmaire in having the head more sparsely punctured, the prothorax shorter and more cylindrical, the elytra more densely punctured, and the femora shorter. Differs from O. formosana Pic in having the head broader, the antennæ paler, the prothorax much shorter, the sides of the metathorax more heavily punctured, the elytra broader, and in other characters.

Distribution.—Hainan Island.

TETRAOPINI

TETRAOPHTHALMITÆ Blanchard, Hist. Nat. Ins. (1845) 160. TETRAOPESITÆ Thomson, Classif. Cer. (1860) 66. ASTHATITÆ Thomson, Syst. Cer. (1864) 117, 399. ASTATHEINÆ Pascoe, Trans. Ent. Soc. London (3) 3 (1867) 347. TETRAOPIDES Lacordaire, Gen. Col. 9 (1872) 849, 871. TETRAOPINI Casey, Mem. Col. 4 (1913) 373; Aurivillius, Col. Cat.

74 (1923) 570.

Body relatively broad, depressed, more or less oblong; head broad; antennal insertions distant; vertex subhorizontal; eyes finely facetted, separated into two distant lobes; antennæ stout, rarely much longer than body; prothorax swollen, but not toothed, laterally; elytra noncarinate; mesosternal process unarmed; middle coxal cavities open externally to epimera; tarsal claws appendiculate, divaricate.

Key to the Hainan genera of Tetraopini.

1. Metasternum with an anteriorly projecting process between middle coxæ. 2.

- - fringes of hair in male..... Lasiophrys.

Genus ASTATHES Newman

Astathes NEWMAN, Entomologist 1 (1842) 299; THOMSON, Classif. Cer. (1860) 42; Syst. Cer. (1864) 399; PASCOE, Trans. Ent. Soc. London (3) 3 (1867) 348; LACORDAIRE, Gen. Col. 9 (1872) 872, 873; GAHAN, Trans. Ent. Soc. London (1901) 38.

Tetraophthalme BLANCHARD, Hist. Nat. Ins. 2 (1845) 161.

Tetraophthalmus GUERIN, Icon. Regne Anim. Ins. (1844) 244; THOM-SON, Archives Ent. 1 (1857) 48.

Body broad and oblong; head fully as wide as prothorax; frons convex; prothorax transverse, swollen on center of disc and at middle of each side; elytra broadly rounded apically; intercoxal process of mesosternum nearly vertical, overhung posteriorly by an anterior process of metasternum; middle tibiæ each with a feeble, oblique groove near apex.

Genotype.—Astathes perplexa Newman. Range.—Oriental Region; Wallacea. 1940

ASTATHES CYANOPTERA Gahan. Plate 6, fig. 14.

Astathes cyanoptera GAHAN, Ann. & Mag. Nat. Hist. (7) 5 (1900) 353, Hainan Island; Trans. Ent. Soc. London (1901) 44.

Male.—Body ochraceous, slightly reddish on head and pronotum; eyes, proximal two and one-half and distal five and onehalf antennal segments, tarsi, and distal two-thirds of tibiæ black; elytra dark metallic green or steel-blue tinged with purplish. Body covered with sparse, suberect hairs, pale on most surfaces, dark on elytra except apices.

Head irregularly punctured, most densely so on frons. Antennæ barely longer than body; scape hardly as long as third segment, longer than fourth. Prothorax about twice as broad as long, constricted near base, strongly swollen on each side and on center of disc; latter sparsely punctate. Elytra less than twice as long as broad; surfaces with punctures of various sizes, partly arranged in longitudinal rows. Ventral surfaces finely punctured.

Length, 11.5 to 13 millimeters; breadth, 4.5 to 5.2.

Female.—Antennæ four-fifths as long as body; last abdominal segment concave apically and densely punctured.

Length, 13.5 to 16 millimeters; breadth, 5 to 5.8.

Several specimens, in the Lingnan Natural History Museum and the author's collection, taken at Man-fook-chuen and a groove near Nodoa, July 4, 1929, Lingnan Fifth Hainan Exped.; "Hainan Is.," April 28 and 29, 1932, W. E. Hoffmann; Taai-chau Island (Tin-hosa), off east coast of Hainan, June 2, 1932, W. E. Hoffmann and O. K. Lau; Nam-po-hui, May 27 and 28, Naamfung, June 24 and 25, O. K. Lau and F. K. To; Tai-pin-ts'uen, May 29 to 31, and Sam-kwong-ts'uen, August 16 to 18, 1935, F. K. To; Ta-hian, June 16 to 18, Ta-han, June 22, and Nodoa, June 29, 1935, taken by the author. Type in the British Museum.

Distribution.—Hainan Island.

Genus ANASTATHES Gahan

Anastathes GAHAN, Trans. Ent. Soc. London (1901) 60.

Form stout, subrectangular; head broader than prothorax; antennæ thick and short, third segment no longer than scape; prothorax strongly swollen above and at sides; elytra broad, parallel-sided; metasternum produced anteriorly to about middle of space between middle coxæ, entering angulate posterior emargination of mesosternal intercoxal process, which is almost vertical. Genotype.—Astathes nigricornis Thomson. Range.—Eastern part of Oriental Region.

ANASTATHES ROBUSTA Gressitt sp. nov.

Male.—Broad, oblong, compressed dorsally. Body reddish ochraceous, paler yellowish testaceous on elytra and legs; antennæ brownish black, somewhat reddish on first three segments; eyes, ends of mandibles, and hind wings black; tarsal claws reddish. Body surfaces clothed with suberect, golden-orange hairs, and thin silvery or pale-golden pubescence on head, prothorax, ventral surfaces, and legs, densest on ventral surfaces and front of head; antennæ with oblique, black hairs on first three segments, and thin, adpressed, palish hairs on remainder, undersides fringed with long, suberect, reddish-black hairs beneath for entire length.

Head a little broader than prothorax, hardly concave at middle of vertex; frons convex, slightly depressed along midline, rather closely punctured; occiput, vertex, and genæ sparsely punctured. Antennæ stout, not quite as long as body; scape deeply punctured, fully as long as third segment; fourth segment nearly as long as third, longer than fifth; following segments gradually decreasing in length; last segment with a slender, resin-colored, apical projection. Prothorax nearly twice as broad as long, swollen at middle of each side, constricted behind swelling and laterally before swelling and at apex; disc swollen, deeply punctured except on each side of swelling. Scutellum small, subvertical, rounded-truncate posteriorly. Elytra parallel-sided, broadly rounded apically; surfaces with two feebly raised lines and a few regular longitudinal rows of punctures along inner half of each, irregularly punctured on outer portions, punctures feeble apically. Ventral surfaces finely punctured on sides of thorax and abdomen.

Length, 9.5 millimeters; breadth, 3.55.

Female.—Antennæ three-fourths as long as body; last abdominal sternite large, grooved medially and concave preapically.

Length, 11.5 millimeters; breadth, 4.6.

Holotype, male, in the Lingnan Natural History Museum, Chung-kon-ts'uen, Ka-luk-kong, 18 miles east of Naam-fung, Kiung-shan District, central Hainan Island, March 27 and 28, 1935, F. K. To; allotopotype, female, in the author's collection, and paratopotype, male, in the United States National History Museum, same data. Differs from A. biplagiata Gahan of Siam in having the elytra entirely testaceous, and in other respects. Differs from A. parva Gressitt of Formosa in being much stouter, with the antennæ thicker, the prothorax more swollen and more heavily punctured, and in other characters.

Distribution.—Hainan Island.

Genus CHREONOMA Pascoe

Chreonoma PASCOE, Trans. Ent. Soc. London (3) 3 (1867) 348; LA-CORDAIRE, Gen. Col. 9 (1872) 872, 876; GAHAN, Trans. Ent. Soc. London (1901) 63.

Moderately broad, subparallel; head broader than prothorax; frons transverse, strongly convex; inferior eye lobes a little wider than deep; prothorax transverse, swollen at middle of each side and on disc; elytra conjointly rounded; intercoxal process of mesosternum narrow, gradually declivitous anteriorly; middle tibiæ obliquely emarginate externally, tarsal claws toothed beneath at base.

Genotype.—Chreonoma venusta Pascoe. Range.—Oriental Region; Japan and North China.

Key to the Hainan species of Chreonoma.

 Elytra entirely testaceous	sh 2.
 Elytra blue or greenish except for extreme basal mar taceous except near apices; vertex slightly concave densely punctured Elytra metallic on apical half, testaceous basally; v elytra densely punctured basally	
 densely punctured Elytra metallic on apical half, testaceous basally; elytra densely punctured basally	
 Elytra metallic on apical half, testaceous basally; y elytra densely punctured basally	ly concave; elytra not very
elytra densely punctured basally cyaneou 3. Antennæ almost entirely black; pronotum densely p subregularly punctured Antennæ pale, dusky at distal ends; pronotum spa	basalis.
 Antennæ almost entirely black; pronotum densely p subregularly punctured Antennæ pale, dusky at distal ends; pronotum spa 	basally; vertex horizontal;
subregularly punctured Antennæ pale, dusky at distal ends; pronotum spa	cyaneoapicalis dimidiata.
Antennæ pale, dusky at distal ends; pronotum spa	
	notum sparsely punctured;

CHREONOMA ATRICORNIS Pic.

Chreonoma atricornis PIC, Mel. Exot. Ent. 37 (1922) 15, Tonkin.

Female.—Relatively long, dorsoventrally compressed. Body orange-testaceous, slightly duller on ventral surfaces, dusky on tibiæ; eyes, tips of mandibles, and antennæ black, the latter slightly pitchy brown beyond middle. Surfaces with short, suberect, or oblique hairs, goldish above and whitish buff on ventral surfaces.

Head distinctly broader than prothorax, slightly grooved on vertex; punctures dense on frons and sparse on occiput. Antennæ not quite as long as body; scape subequal in length to third

72, 1–2

segment; fourth to eighth segments successively decreasing in length. Prothorax one and one-half as broad as long, feebly swollen above and at sides; punctures large, moderately close. Scutellum short, rounded-truncate behind. Elytra a little more than twice as long as head and prothorax combined, with moderately close, subregular punctures on basal four-fifths. Ventral surfaces feebly punctured.

Length, 11.5 millimeters; breadth, 3.7.

A single female, in the Lingman Natural History Museum, taken at Tai-pin-ts'uen, near Loi Mother Mountain, central Hainan, May 1 to 4, 1935.

New to Hainan.

Distribution.-Tonkin; Hainan.

CHREONOMA BASALIS Gahan.

Chreonoma basalis GAHAN, Trans. Ent. Soc. London (1894) 487, Hongkong; GRESSITT, Lingnan Sci. Journ. 18 (1939) 111, 112.

Female.—Relatively long, subparallel-sided. Body pale ochraceous, slightly reddish on pronotum; elytra steel-blue with purplish tinges, except for a narrow basal band and the suture a short distance behind scutellum; antennæ pitchy black on about the last four segments.

Head distinctly broader than prothorax, smooth and sparsely punctured. Antennæ five-sixths as long as body; scape not quite as long as third segment, longer than fourth. Prothorax one and one-half as broad as long, gradually convex and irregularly punctured. Elytra with fairly dense, suberect, dark hairs, irregularly punctured, somewhat densely so at sides and impunctate near apices.

Length, 12.5 millimeters; breadth, 4.

A single female specimen, in the Lingman Natural History Museum, taken at Tai-pin-ts'uen, near Loi Mother Mountain, Hainan, May 10 and 11, 1935, by F. K. To.

New to Hainan Island.

Distribution.-Hongkong; Kwangtung; Hainan.

CHREONOMA CYANEOAPICALIS²¹ DIMIDIATA Gressitt subsp. nov.

Male.—Relatively narrow, parallel-sided; head very broad. Body ochraceous, apical half of elytra metallic steel-blue, tinged with purplish and green; antennæ reddish ochraceous on basal four or five segments, pitchy black on remainder; legs testaceous.

²¹ Chreonoma cyaneoapicalis Gressitt, Lingnan Sci. Journ. 18 (1939) 112, pl. 2, fig. 11, northern Kwangtung. Body and undersides of antennæ clothed with erect, golden-brown hairs, dark purplish brown on metallic portions of elytra and dull brown on distal halves of antennæ; head, prothorax, and ventral surfaces with thin golden pubescence; dark parts of antennæ with blackish pubescence.

Head distinctly broader than prothorax, as broad as elytra; eyes prominent, inferior lobes barely wider than deep, occupying three-fifths space between antennal supports and genal margins; frons transverse, broader above, finely punctured; vertex horizontal; occiput sparsely but deeply punctured. Antennæ barely longer than body, not very stout; scape subcylindrical, irregularly punctured, as long as third segment: fourth segment a little shorter than third and longer than fifth. Prothorax one and one-fourth as broad as long, swollen at middle of each side, constricted behind swelling; disc strongly swollen, particularly behind center, grossly punctured, except along median line and on each side of swelling. Scutellum broad, very short. Elvtra parallel, broadly rounded posteriorly; surfaces even, in large part seriate-punctate; punctures deep basally and minute apically. Ventral surfaces finely and sparsely punctured at sides. Posterior tarsi one-half as long as respective tibiæ.

Length, 6.6 millimeters; breadth, 2.25.

Holotype, male, in the Lingnan Natural History Museum, Taitsing-Lam-ts'uen, back of Lai-mo-ling (Loi Mother Mountain), central Hainan, June 3 and 4, 1935, F. K. To.

Differs from *C. cyaneoapicalis* Gressitt, of Kwangtung, in being narrower and more reddish, with the head broader, the occiput more sparsely punctured, the antennæ darker, the elytra metallic on apical halves and a little less regularly punctured, and in other characters.

Distribution.—Hainan Island.

CHREONOMA PALLIDICOLOR Pic.

Chreonoma pallidicolor PIC, Mel. Exot. Ent. 17 (1916) 6, Saigon.

Female.—Broad, abbreviated, subrectangular. Almost entirely pale testaceous, slightly orange on head, pronotum, and basal antennal segments; eyes and tips of mandibles black; last few antennal segments pitchy. Body with sparse, erect pale hairs, longer on dorsal surfaces.

Head nearly as broad as elytral bases; frons feebly swollen, sparsely punctured; occiput nearly impunctate. Antennæ not quite as long as body, relatively slender; scape subequal to third segment in length; fourth segment two-thirds as long as fifth

225

segment, one-half as long as third. Prothorax nearly twice as broad as long, moderately swollen above and at sides, deeply but sparsely punctured, constricted anterior to base. Scutellum short, emarginate-truncate. Elytra broad, closely and subregularly punctured on basal half, remainder with close reticulations in derm resembling punctures.

Length, 8.3 millimeters; breadth, 3.5.

A single female, in the Lingnan Natural History Museum, taken at Tai-tsing-lam-ts'uen, back of Lai-mo-ling (Loi Mother Mountain), central Hainan, June 17 and 18, 1935, by F. K. To.

New to Hainan.

Distribution.—Cochin-China; Hainan.

Genus LASIOPHRYS Gahan

Lasiophrys GAHAN, Trans. Ent. Soc. London (1901) 71.

Moderately narrow, subparallel-sided. Head of male with a distinct lateral fringe of pale hairs on each side between inferior eye lobe and antennal support; antennæ longer than body in both sexes; prothorax broader than long, not greatly swollen; elytra parallel, conjointly rounded apically; mesosternal intercoxal process narrow, subhorizontal, and extending posteriorly to near hind margins of coxal cavities.

Genotype.—Lasiophrys latifrons Gahan. Range.—Indo-Chinese subregion.

LASIOPHRYS TINHOSENSIS Gressitt sp. nov. Plate 6, fig. 13.

Male.—Orange testaceous, slightly dusky beneath; eyes, tips of mandibles, antennæ, and apical quarter of elytra black. Pale surfaces clothed with suberect, golden and buff hairs; antennæ with dense, short, oblique, black hairs and long flying hairs internally; sides of head with projecting fringes.

Head a little broader than prothorax, nearly plane in front; occiput densely, and frons sparsely, punctured; inferior eye lobes ovate, suboblique. Antennæ one and one-half as long as body, gradually tapering; scape a little longer than third segment, not quite reaching to base of prothorax; third segment barely longer than fourth; sixth and following segments much shorter than fifth. Prothorax nearly two and two-thirds as broad as long, slightly swollen at sides, hardly swollen above, constricted anterior to base; disc rather closely punctured, sides sparsely punctured. Scutellum subtriangular. Elytra parallel, deeply subseriate-punctate on basal two-thirds, nearly impunctate apically, Ventral surfaces nearly impunctate. Length, 10.2 millimeters; breadth, 3.4.

Female.—Head lacking prominent lateral fringes; antennæ slightly longer than body.

Length, 10.8 millimeters; breadth, 3.6 to 4.

Holotype, male, in the Lingnan Natural History Museum, Taaichau Island (Tinhosa), Wan-ning District, off coast of Hainan, June 2, 1932, W. E. Hoffmann and O. K. Lau; allotopotype, female, in the author's collection, and paratopotype, female, in the United States National Museum, same data.

Differs from *L. longicornis* Pic, of Cochin-China, in having the antennæ much less than twice as long as body, the pronotal disc more closely punctured, and in other characters. Differently colored, and slenderer than *L. latifrons* Gahan.

Distribution.-Tinhosa, Taai-chau Island, off Hainan.

HAINAN LOCALITIES AT WHICH LONGICORNS WERE COLLECTED 22

The present list has the purpose of making possible the more or less exact location of all localities mentioned in the text, as far as they are known to the author. Few maps of Hainan have been published, and only a small proportion of the place names used in this work are to be found on any of them. Furthermore, on the various existing maps, and in works dealing with the natural history of the island, frequently romanizations of place names are used only from a single dialect, such as Hainanese, Cantonese, or Mandarin, which are often unrecognizable to people unfamiliar with the various dialects and with the Chinese characters or the meanings of the place names, so that the identification of localities is confusing or impossible. Even in the present work, several place names have remained unidentified, and for others only one or two romanizations are available.

In this list all the place names used in this work are arranged alphabetically. The spellings used are those that occur on the actual labels of the specimens studied. The explanations location in respect to a key locality, approximate (often roughly estimated) altitude, and the Chinese characters—are given after the Hainanese ("native" Chinese, not aboriginal) or English

²² Plate 8 shows a map of the key localities of Hainan, mountain ranges, and rivers. The boundaries of the thirteen districts are not shown because of their periodic change and indefiniteness in the central part where most of the collecting stations occur. However, the district cities, or capitals of the various districts (all of them but one—Deng-ag or Ting-on being on or near the coast) are designated, even though most of them do not represent places of origin of longicorn specimens.

72, 1–2

spellings, in most cases, with other romanizations following. The names taken from Lingman Natural History Museum labels, or from McClure's papers, are mostly romanized according to accepted custom, but some of the author's own romanizations are purely according to sound, as are some on Miss Moninger's map in "The Isle of Palms." The principal difference is that, according to customs, p is used for b, and p ("aspirated") for p, as well as t for d, and \sharp for t.

The following symbols, placed after the romanizations, are used to designate the dialect or origin of the name, as far as it is known to the author:

[†] HAINANESE. Largely from Miss Moninger's map in "The Isle of Palms." A few from the British Admiralty map.

‡ ROMANIZATIONS on the author's specimen labels, largely published in "Notes on collecting in Hainan ", a few original in this work. Mostly Hainanese, but a few Hakka or Cantonese.

* CANTONESE (Dialect of Canton, provincial Chinese capitol during the period when most of the material was collected) as mostly taken from the Lingman Natural History Museum labels and McClure's papers.

* MANDARIN (Official Chinese dialect; Pekinese). Partly from Ros's labels.

♦ Loi (Principal interior group of aborigines).

¶ FROM specimen labels in the British Museum, probably Hainanese or Loi.

LIST OF PLACES

CH'ENG-MAI. See Dio-vai.

CHEUNG-KON-TS'UEN * [長幹村]. Chung Kon. Village southeast of Nodoa, on Deng-an River. Altitude 270 meters.

CHICHERIANG.¶ Location unknown.

CH'ING-MAAI. See Dio-vai.

CHUE-MO-LING* [猪毛嶺]. Hill northeast of Nodoa. Altitude 300 meters (?)

CHUNG-KON. See Cheung-kon-ts'uen.

CHUNG-MAI. See Dio-vai.

CHUNG-MEI÷ [中尾]. Locality 24 kilometers southeast of Nam-fung. Altitude 250 meters.

DENG-AN† [安定]. Ting-on,* Ting-an,* Deng-ag.† District city in northeastern Hainan, south of K'iung-chow. Altitude about 80 meters.

- DIO-VAI † [澄邁]. Ch'eng-mai,* Ching-maai,* Chung-mai. District city on north coast, west of Hoihow. Near sea level.
- DOME MOUNTAIN ‡ [沙帽嶺]. Sha-po-ling,* Sa-mo-leng,* Sha-po-shan,+ Sa-ko-lia,‡ Twa-po-lia.‡ Mountain southwest of Nodoa and near Namfung. Altitude 795 meters.

- DWA-BI‡ [大邊村]. Tai-pin-ts'uen,* Tai-pin. Village just north of Loi Mother Mountain, central Hainan. Altitude 400 meters.
- FAAN-MAAN-TS'UEN * [番萬村]. Faan-maan. Village in southern Hainan, northwest of Po-ting, and considerably north of Sam-a. Altitude about 150 meters.
- FAAN-NA* [番雅]. Place about 15 kilometers south of Nodoa, near Namfung, northcentral Hainan. Altitude about 160 meters.
- FAAN-TA. See Fan-ta.
- F'AN-HEANG. See Fan-hiang.
- FAN-HIANG ‡ [番雜]. Fan-heang,‡ Fang-shlagt†? Village in central Hainan, northeast of Five Finger Mountains. Altitude about 500 meters. FAN-JANG. See Fan-ziang.
- FAN-TA‡ [番打]. Faan-ta,* Fang-ta.† Village in northcentral Hainan, a days' walk south of Nam-fung. Altitude about 250 meters.
- FAN-ZIANG.[‡] Fan-jang.[†] Village several kilometers westsouthwest of Fan-hiang, central Hainan. Altitude about 450 meters.
- FANG-NO* [番那]. Village eastsoutheast of Nam-fung, northcentral part. Altitude about 225 meters.
- FANG-TA. See Fan-ta.
- FIVE FINGER MOUNTAINS [五指嶺]. Ngau-chi-lia,‡ Ng-tze-leng,* Wu-chihshan,* Mount Wuchi.¶ Highest range on Hainan, a little south of the center of the island. Summit 1,890 meters.
- FOOI-IU.* Place a few kilometers northwest of Nodoa. Altitude 250 meters.
- HAU-YING-TS'UEN * [後影村]. Hau-ying. Village near Lin-fa-shan, east of Nodoa. Altitude 205 meters.
- HOI-HOW [海口]. Hai-ho,† Hai-kau.* Port at northern end of Hainan, sea level.
- HUMMOCKS [火山]. Hoi-toa,‡ Foh San.* Extinct volcanoes westsouthwest of Hoi-how. Altitude about 250 meters.
- KA-CHEK† [嘉積]. Ka-tsek. City near coast in eastcentral Hainan. Altitude about 30 meters.
- K'iUNG-CHOW † [證 州] K'iung-chow-fu. Capital of Hainan, a few kilometers south of Hoihow. Altitude about 45 meters.
- KUEN-YAN-NGAN * [觀音巖]. Koon-yam-ngaam.* Near Lin-fa-shan, east of Nodoa. Altitude 200 meters.
- LAI-MO-LENG. See Loi Mother Mountain.
- LAI-MO-LING. See Loi Mother Mountain.
- LAM-KO. See Lim-ko.
- LIA-MUI†[嶺門]. Leng-moon.÷ Town in eastcentral Hainan, east of Loi Mother Mountain. Altitude about 375 meters.
- LIM-KO†[臨高]. Lam-ko,* Lin-kao.+ District city in northern Hainan, near coast.
- LIN-FA-SHAN * [蓮花山]. Lin-fa-ling,* Lin-fa-leng.* Mountain east of Nodoa, northcentral Hainan. Altitude 600 meters.
- LIN-KAO. See Lim-ko.
- LOH-FUNG-TUNG.* Place in Yai District, southern Hainan.

LOH-MA-CHUEN * [羅馬村]. Southwest of Nodoa. Altitude 180 meters. LOI-MAI-LIA. See Loi Mother Mountain.

LOI MOTHER MOUNTAIN [黎田嶺]. Loi-mai-lia,‡ Lai-mo-leng,* Lai-moling,* Lai-voe-lea.() Third highest range in Hainan, north of Five Finger Mountains and northeast of Red Mist Mountain. Summit 1,500 meters.

LOK-KEI* [洛基]. Northwest of Nodoa. Altitude about 175 meters.

LUNG-HOU-TONG * [龍口洞]. Lung-hou, Lung-tong. Villages about 50 kilometers south of Ting-on, northeastern Hainan. Altitude 200 meters (?).

MAN-FOOK-CHUEN * [萬應村]. Maan-fook-ts'uen.* A short distance from Nodoa.

MAN-GRIN.¶ Location unknown.

NAAM-PO. See Nam-po-ts'uen.

NAI-SUEN * []. Ngai-shuen.* A few kilometers southeast of Namfung. Altitude about 200 meters.

NAM-CHA-CHUEN * [南茶村]. Five kilometers west of Nodoa. Altitude 175 meters.

NAM-FUNG†[南豐]. Nam-fong,* Naam-fung. Town 13 kilometers south of Nodoa, northcentral Hainan. Altitude 175 meters.

NAM-LIU-TIN * [南了田]. Several kilometers eastnortheast of Sam-

kwong-ts'uen, northeast of Loi Mother Mountain. Altitude 325 meters. NAM-PO-HUI* [南保墟]. Place near Nam-po-ts'uen, northeastcentral

Hainan.

NAM-PO-TS'UEN * [前保村]. Naam-po, Nam-po. Village east of Chungkon-ts'uen, northcentral Hainan. Altitude about 300 meters.

NAM-TING-TS'UEN * [南定材]. Village 16 kilometers northeast of Sam-a, southern Hainan.

NGAI-UEN CITY. See Ngai-chau.

NGAI-CHAU* [崖州]. Ngaai-uen, Ngai-chow,* Ngai-chiu,† Ngai-tsiu,† Ai-hsien,* Yai-sien.+ District city near southern coast, west of Sam-a. NGAI-CHOW. See Ngai-chau.

NGOR-MA-CHUEN. Village south of Nodoa. Altitude 180 meters.

NODOA† [那大]. No-tai,* Noh-taai.* Town in northcentral Hainan. Altitude about 180 meters.

NO-KYU-CHUN‡ [基叫村]. Village in central Hainan. Altitude about 500 meters (?). Exact location uncertain.

PAAI-POON-TS'UEN * [拜本村]. Village in southern Hainan, about 35 kilometers north of Sam-a. Altitude about 125 meters.

PO-TING * [那亭]. Bo-deng,† Po-teng-shi.* Loi Village about 8 kilometers southwest of the Seven Finger Mountains, and about 35 kilometers northnortheast of Sam-a, southern Hainan. Altitude 125 meters. SA-BO-LENG. See Dome Mountain.

SAM-A ÷ [三亞]. Sama, Ta-ngae.[†] Town just north of Sam-ah-kong, port near southern tip of Hainan.

SAM-AH-KONG* [三廣溪]. Port in Yai District, at southern end of Hainan.

SAM-KWONG-TS'UEN * [三述村]. Village eastsoutheast of Chung-konts'uen, and northwest of Tai-pin-ts'uen, central Hainan. Altitude about 325 meters.

SAM-TS'UEN-KAI-HUI* [三村亞港]. Place south of Yin-ko-au and west of Loi Mother Mountain, central Hainan. Altitude about 425 meters.

SHA-BO-LENG. See Dome Mountain.

SHA-PO-SHAN. See Dome Mountain.

SHUIMAN * [水門]. Shui-moon.* South of Five Finger Mountains, southcentral Hainan. Altitude about 400 meters.

TA-HAN ‡ [他寒]. Ta-an,† Ta-hon.* Group of villages east of Red Mist Mountain and northwest of Fan-hiang. Altitude 750 meters.

TA-HAU‡ [他厚]. Village southwest of Vo-lau, northwestern Hainan; 35 kilometers westsouthwest of Nodoa. Altitude about 150 meters.

TA-HIAN.[‡] Ta-sian-kwan.[‡] Group of Loi villages on upper reaches of north side of Five Finger Mountains, southcentral Hainan. Altitude 600 meters.

TAAI-CHAU ISLAND. See Tin-hosa.

TAAI-PO* [大埔]. Southeast of Chung-kon-ts'uen, and north of Loi Mother Mountain, central Hainan; 40 kilometers eastsoutheast of Namfung. Altitude 350 meters.

- TAI-CHAU ISLAND. See Tin-hosa.
- TAI-PIN-TSUEN. See Dwa-Bi.
- TAI-TSING-LAM-TS'UEN * [大村林村]. Village south of Loi Mother Mountain, central Hainan. Altitude 400 meters.

THE HUMMOCKS. See Hummocks.

TING-AN. See Deng-an.

TING-ON. See Deng-an.

TIN-HOSA † ISLAND [大洲島]. Taai-chau * Island. A double island off the southeastern coast of Hainan, in Wan-ning District.

TRIANGULAR MOUNTAIN [三角山]. Ta-kok-toa,[‡] Sam-kok-san.^{*} Mountain south of Loi Mother Mountain, central Hainan.

TUN-HEUNG-TS'UEN * [始向时]. Village 10 kilometers southeast of Nodoa. Altitude 190 meters.

VO-LAU ‡ [溯流]. Woh-lau. Town about 30 kilometers westsouthwest of Nodoa, northwestern Hainan. Altitude about 160 meters.

WONG-LUNG-CHUEN * [王龍村]. Wong-lung-ts'uen. Village northeast of Nodoa. Altitude 190 meters.

WUCHIH-SHAN * (See Five Finger Mountains).

YAU-MA-WOH* [油萊窩]. Yiu-ma-wa.* Place at east end of Dome Mountain, northwest of Nam-fung, northcentral Hainan. Altitude 190 meters.

YIN-KO-AU* [鸚哥凹]. Mountain northwest of Loi Mother Mountain, central Hainan. Altitude about 1,225 meters.

YOU-BOI.¶ Location unknown.

YUAN-MEN-TUNG * [源門書]. Place in southern Hainan, near Sam-a.

72, 1-2

31

LITERATURE CITED 23

- 1. AURIVILLIUS, CHR. Coleopterorum Catalogus. Cerambycinae. Schenkling and Junk 39 (1912) 1-574.
- AURIVILLIUS, CHR. Neue oder wenig bekannte Longicornia. Arkiv. f. Zoologi (13) 9 (1920) 12-16, 361-405.
- 3. AURIVILLIUS, CHR. Coleopterorum Catalogus. Lamiinae. Schenkling and Junk 73 (1922) 1-322.
- 4. AURIVILLIUS, CHR. Coleopterorum Catalogus. Lamiinae. Schenkling and Junk 74 (1923) 323-704.
- BATES, H. W. On a collection of Coleoptera from Formosa, sent home by R. Swinhoe, Esq., H. B. M. Consul, Formosa. Proc. Zool. Soc. London (1866) 339-355.
- BATES, H. W. On the longicorn Coleoptera of Japan. Ann. & Mag. Nat. Hist. (4) 12 (1873) 148-156, 193-201, 308-318, 380-390.
- BATES, H. W. Longicorn beetles of Japan. Additions, chiefly from the later collections of Mr. George Lewis; and notes on the synonymy, distribution, and habits of the previously known species. Journ. Linn. Soc. Zoology 18 (1884) 205-262, pls. 1, 2.
- 8. BOPPE, P. Genera Insectorum. Wytsman. Disteniinae and Lepturinae 178 (1921).
- 9. CASTELNAU (De Laporte), F. L., and H. GORY. Monographe du genre Clytus. Hist. Nat. Icon. Ins. Col. (1841) 1-124, pls. 1-20.
- CHEVROLAT, A. Dix coléoptères nouveaux. Revue Zoologique (2) 4 (1852) 415-419.
- CHEVROLAT, A. Clytides d'Asie et d'Oceanie. Mem. Soc. R. Sci. Liége 18 (1863) 253-350.
- 12. FABRICIUS, J. C. Systema Eleutheratorum 1 (1801) i-xxiv, 1-506.
- 13. FABRICIUS, J. C. Systema Eleutheratorum 2 (1801) 1-687.
- FAIRMAIRE, LÉON. Coleopteres de l'intérieur de la Chine, 5. Ann. Soc. Ent. France (6) 9 (1889) 5-84.
- FAIRMAIRE, LÉON. Deuxieme note sur quelques coléoptères des environs de Lang-Song. Ann. Soc. ent. Belg. 39 (1895) 173-190.
- GAHAN, C. J. On longicorn Coleoptera of the family Lamiidae. Ann. & Mag. Nat. Hist. (6) 1 (1888) 270-281, pl. 16, figs. 1-5.
- 17. GAHAN, C. J. On new longicorn Coleoptera from China. Ann. & Mag. Nat. Hist. (6) 2 (1888) 59-67.
- GAHAN, C. J. A list of the longicorn Coleoptera collected by Signor Fea in Burma and the adjoining regions, with descriptions of the new genera and species. Ann. Mus. Civ. Stor. Nat. Genova 34 (1895) 5-104, pl. 1.
- *19. GAHAN, C. J. On some longicorn Coleoptera from the Island of Hainan. Ann. & Mag. Nat. Hist. (7) 5 (1900) 347-354.
- 20. GAHAN, C. J. A revision of Astathes Newm. and allied genera of longicorn Coleoptera. Trans. Ent. Soc. London (1901) 37-74, pl. 4.
- GAHAN, C. J. The fauna of British India, including Ceylon and Burma, Coleoptera, I. Cerambycidae. (1906) i-xviii, 1-329, 107 figs.

²⁸ Only articles marked with asterisks deal with Hainan in any way; the others pertain to species or genera recorded from Hainan for the first time in this work, or with species of which subspecies are herein described.

- GANGLBAUER, L. Bestimmungs-Tabellen europaischer Coleopteren. 7. Verh. zool.-bot. Ges. Wien. 31 (1881).
- GRESSITT, J. L. New longicorns from the Japanese Empire. I. Coleopt.: Cerambycidae. Pan-Pacific Ent. 9 (1934) 163-170.
- GRESSITT, J. L. New longicorn beetles from the Japanese Empire, II. Philip. Journ. Sci. 55 (1935) 379-386.
- GRESSITT, J. L. New species and records of longicorns from Formosa. Coleoptera Cerambycidae. Ibid. 57 (1935) 181–194.
- GRESSITT, J. L. New longicorn beetles from Formosa. III. Coleoptera: Cerambycidae. Ibid. (1936) 89-111, pl. 1.
- 27. GRESSITT, J. L. New longicorn beetles from Formosa. IV. Ibid. 65 (1938) 147-172, pl. 1.
- GRESSITT, J. L. New longicorn beetles from China. I. Coleoptera: Cerambycidae. Lingnan Sci. Journ. 14 (1935) 567-574.
- GRESSITT, J. L. New longicorn beetles from China. II. Ibid. 16 (1937) 89-94.
- GRESSITT, J. L. New longicorn beetles from China. III. tom. cit. (1937) 447-456, pl. 4.
- *31. GRESSITT, J. L. New longicorn beetles from China. IV. tom. cit. (1937) 595-621, pls. 19, 20.
- GRESSITT, J. L. New longicorn beetles from China. V. Lingnan Sci. Journ. 17 (1938) 45-56, pl. 4.
- GRESSITT, J. L. New longicorn beetles from China. VII. Ibid. 18 (1939) 209-216, pl. 8.
- *34. GRESSITT, J. L. Notes on collecting in Hainan Island with data on localities. Ibid. 15 (1936) 465-470.
- GRESSITT, J. L. A study of the longicorn beetles of Kwangtung Province, S. China. Coleoptera: Cerambycidae. Ibid. 18 (1939) 1-122, pls. 1-33.
- GYLLENHAL, L. In Schönherr: Synonymia Insecta. III. Appendix (1817).
- HELLER, K. M. Bestimmungsschlüssel aussereuropäischer Käfer. Cerambycidae, Molorchini: Genera Epania und Merionoeda. Ent. Blätter 20 (1924) 26-34.
- LACORDAIRE, T. Histoire naturelle des insectes. Genera des coléoptères. Longicornes 8 (1869) 1-552.
- LACORDAIRE, T. Histoire naturelle des insectes. Genera des coleoptères. Longicornes pt. 1 9 (1869) 1-409.
- LACORDAIRE, T. Histoire naturelle des insectes. Genera des coléoptéres. Longicornes pt. 2 1 (1872) 410-930.
- 41. LAMEERE, A. Contributions à la faune Indo-Chinoise. 13. Longicornes. Ann. Soc. ent. France 62 (1893) 281-286.
- 42. LAMEERE, A. Revision des prionides. Ann. Soc. ent. Belg. 53 (1909) 151.
- +43. LAMEERE, A. Revision des prionides. Ibid. 55 (1911) 338.
 - 44. LAMEERE, A. Coleopterorum Catalogus. 52. Prioninae. Schenkling and Junk (1913) 1-108.
 - 45. LAMEERE, A. General Insectorum. 172. Prioninae. Wytsman (1919).
 - LE CONTE, J. L., and G. H. HORN. Classification of the Coleoptera of North America. Smiths. Misc. Coll. (26) 507 (1883) i-xxxviii, 1-507.

- 47. LINSLEY, E. G. Synonymical notes on some North American Cerambycidae. Pan-Pacific Ent. 14 (1938) 105-109.
- *48. LIU, GAINES. Catalogue of the phytophagous beetles of China. Lingnan Sci. Journ. 12 (1933) 389-408, 473-488.
- 49. LIU, GAINES. Catalogue of the phytophagous beetles of China. Ibid. 13,(1934) 109-133, 239-250, 633-660.
- MATSUSHITA, M. Beitrag zur Kenntnis der Cerambyciden des Japanischen Reichs. Journ. Fac. Agric. Hokkaido Imp. Univ. 34 (1933) 157-445, pls. 1-5.
- 51. MATSUSHITA, M. Ueber einige japanische Bockfäfer. Trans. Nat. Hist. Soc. Formosa 24 (1934) 237-241, fig.
- *52. MCCLURE, F. A. A brief historical survey of the Lingman University Herbarium. Lingman Sci. Journ. 7 (1931) 267-290, pl. 12, map.
- *53. MCCLURE, F. A. Outline maps of Kwangtung Province and Hainan Island with notes on the names of the districts and district cities. Ibid. 12 (1933) 367-380, pls. 17, 18; maps.
- *54. McClure, F. A. The Lingman University third and fourth Hainan Island expeditions. Tom. cit. 381-388.
- *55. MCCLURE, F. A. The Lingman University fifth Hainan Island expedition. Lingman Sci. Journ. 13 (1934) 163-170, pl. 13; map.
- *56. MCCLURE, F. A. The Lingman University sixth and seventh Hainan Island expeditions. Tom. cit. 577-601, pls. 58-61; 2 maps.
- *57. MONINGER, M. M. The Isle of Palms-Sketches of Hainan. Commercial Press. Shanghai (1919) 153 pp., 15 pls., 4 maps.
- NEWMAN, E. Cerambycitum Insularum Manillarum. Entomologist 1 (1842) 245-248, 275-277, 288-302, 318-324, 369-371, 381-383.
- 59. PASCOE, F. P. On new genera and species of longicorn Coleoptera. Trans. Ent. Soc. London (2) 4 (1857) 89-111, 236-266, pls. 25, 26.
- 60. PASCOE, F. P. New or little-known genera and species of Coleoptera. Journ. of Ent. 1 (1860) 36-64.
- PASCOE, F. P. On some new or little-known genera and species of Coleoptera. Journ. of Ent. 1 (1862) 319-370.
- 62. PASCOE, F. P. Longicornia Malayana. Trans. Ent. Soc. London (3)
 3 (1864–1869) 1–712, pls. 1–24.
- 63. PIC, M. Matériaux pour servir à l'étude des longicornes (1891-1917).
- 64. PIC, M. Mélanges Exotico-Entomologiques (1912-1939).
- 65. PLAVILSTSHIKOV, N. N. Bestimmungs-Tabellen europäischer Coleopteren 100 (1931).
- 66. PLAVILSTSHIKOV, N. N. Embrik-Strandia, eine neue Callichrominen-Gattung. Folia Zool. Hydrobiol. 3 (1931) 278-279.
- 67. REDTENBACHER, L. Coleopteren der Novara Reise. Wien (1868) 249 pp., 5 pls.
- SAUNDERS, W. W. Descriptions of some longicorn beetles discovered in northern China by Rob. Fortune, Esq. Trans. Ent. Soc. London (2) 2 (1853) 109-113, pl. 4.
- 69. SCHWARZER, B. Sauters Formosa-Ausbeute. Cerambycidae, Col. Ent. Blätter 21 (1925) 20-30, 58-68, 145-154.
- 70. SERVILLE, A. Nouvelle classification de la famille des longicornes. Ann. Soc. ent. France 1-4 (1832-1835).

- 71. THOMSON, J. Essai d'une classification de la famille des Cerambycides. Paris (1860) 396 pp., 3 pls.
- THOMSON, J. Systema Cerambycidarum, ou exposé de tous les genres compris dans la famille des Cerambycides et familles limitrophes. Mem. Soc. Roy. Sci. Liége 19 (1864-1865) 1-578.
- THOMSON, J. Typi Cerambycidarum Musei Thomsoniani. Rev. Mag. Zool. (3) 5 (1877) 249-279.
- 74. WESTWOOD, J. O. The cabinet of oriental entomology: a selection of some of the rare and more beautiful insects of India and the adjacent islands, most of them described and figured for the first time. (1848) 288 pp., 42 col. pls.
- 75. WHITE, A. Catalogue of coleopterous insects in the collection of the British Museum. Longicornia. I. 7 (1853) 1-174, pls. 1-4.
- WHITE, A. Catalogue of coleopterous insects in the collection of the British Museum. Longicornia. II. 8 (1855) 175-412, pls. 5-10.
- 77. WHITE, A. Descriptions of Monohammus bowringii, Batocera una, and other longicorn Coleoptera, apparently as yet unrecorded. Proc. Zool. Soc. London 26 (1858) 398-413, pl. 53.

ILLUSTRATIONS

[Plates 1 to 6 consist entirely of enlarged or natural-size photographs of dorsal aspects of Hainan longicorn beetles, partly taken by Mr. Charles Wilson and partly by Mr. W. Harry Lange and the author. Plate 7 consists of frontal outline drawings of Hainan longicorns of the subfamily Lamiine, partly drawn by Mr. J. Gomez and partly by the author. Plate 8 is a map of Hainan Island, drawn up by the author and based on the outline map published by F. A. McClure in Lingnan Sci. Journ. 12 (1933) pl. 18, and inked in by Mr. J. Gomez.]

PLATE 1

- FIG. 1. Baladeva walkeri Waterhouse, male; × 1. Nodoa, Hainan Island.
 2. Macrotoma (Zooblax) hainana Gressitt sp. nov., holotype, male;
 - × 1.
 - 3. Plocæderus obesus Gahan, male; \times 1. Tai-pin (Dwa-Bi).
 - 4. Philus pallescens tristis Gressitt subsp. nov., holotype, male; \times 1.55.
 - 5. Philus pallescens tristis Gressitt subsp. nov., allotype, female; \times 1.55.
 - 6. Chloridolum loochooanum hainanicum Gressitt subsp. nov., holo-type, male; \times 1.55.
 - 7. Sclethrus stenocylindricus Fairmaire, female; \times 1.55. Tai-pin.
 - 8. Purpuricenus malaccensis (Lacordaire), male; \times 1.55. Tai-pin.
 - 9. Chelidonium argentatum (Dalman), male; \times 1.55. "The Hummocks".
 - 10. Leontium nigroscutellatum Gressitt sp. nov., holotype, female; \times 1.55.
 - 11. Embrik-Strandia unifasciata (Ritsema), female; \times 1.55. Tingon.

PLATE 2

- FIG. 1. Noemia submetallica Gressitt sp. nov., holotype, male; \times 3.03.
 - 2. Ceresium geniculatum White, male; \times 3.03. Sam-a.
 - 3. Ephies gahani Gressitt sp. nov., holotype, male; \times 3.03.
 - 4. Kunbir pallidipennis Gressitt sp. nov., paratype, female; \times 3.03.
 - 5. Epipedocera hoffmanni Gressitt sp. nov., holotype, female; \times 3.03.
 - 6. Demonax matsushitai reticulicollis Gressitt subsp. nov., holotype, female; × 3.03.
 - 7. Perissus kankauensis chungkonensis Gressitt subsp. nov., holotype, male; \times 3.03.
 - 8. Rhaphuma pieli Gressitt sp. nov., holotype, female; \times 3.03.
 - 9. Xylotrechus nigrosulphureus Gressitt sp. nov., holotype, male; \times 3.03.
 - 10. Chlorophorus separatus Gressitt sp. nov., holotype, female; \times 3.03.
 - 11. Chlorophorus macaumensis (Chevrolat), male; \times 3.03; Kachek.
 - 12. Chlorophorus reductus Pic, female; \times 3.03. Shuiman.
 - Chlorophorus hainanicus Gressitt sp. nov., holotype, female; × 3.03.

PLATE 3

- FIG. 1. Epspectes tonkinensis (Aurivillius), male; \times 1.7. Cheung-konts'uen.
 - 2. Psacothea inarmata Gressitt sp. nov., holotype, male; \times 1.7.
 - 3. Coptops leucostictica rustica Gressitt subsp. nov., holotype, male; \times 1.7.
 - 4. Coptops lichenia Pascoe, female; \times 1.7. Tai-pin-ts'uen.
 - 5. Mesosa maculifemorata Gressitt sp. nov., paratopotype, male; \times 1.7.
 - 6. Mesocacia assamensis Heller, female; \times 1.7. Tai-pin-tsu'en.
 - 7. Pelargoderus apicalis Gahan, female; \times 1.55. Ta-hau.
 - 8. Blepephæus subcruciatus (White), male; \times 1.55. Sam-a.
 - 9. Niphona excisa Pascoe, male; \times 1.55. Chung-mei.
 - 10. Lychrosis zebrinus Pascoe, female; \times 1.55. Tai-pin-ts'uen.
 - 11. Palimna annulata tessellata Pascoe, male; \times 1.55. Nodoa.

PLATE 4

- FIG. 1. Hainanhammus griseopubens Gressitt sp. nov., paratype, male; \times 2.5.
 - 2. Chæromorpha formosana palminsulana Gressitt subsp. nov., holotype, female; \times 2.5.
 - 3. Niphona minor (Lameere), male; \times 2.5. Sam-ah-kong.
 - 4. Lychrosis fasciatus Gressitt sp. nov., holotype, male; \times 2.5.
 - 5. Pterolophia albonigra Gressitt sp. nov., holotype, female; \times 2.5.
 - 6. Pterolophia arctofasciata Gressitt sp. nov., allotype, male; \times 2.5.
 - 7. Rondibilis seatoni Gressitt sp. nov., holotype, female; \times 2.5.
 - 8. Euseboides matsudai spinipennis Gressitt subsp. nov., holotype; \times 2.5.
 - 9. Apomecyna cantator excavaticeps Pic, male; \times 2.5. Yuan-mentung.
 - 10. Apomecyna cantator excavaticeps Pic, female; \times 2.5. Sam-a.
 - 11. Enispia tholana Gressitt sp. nov., holotype, female; \times 2.5.
 - 12. Enispia quadristigma Gressitt sp. nov., paratype, male; \times 2.5.
 - 13. Phesates marmoratus Gressitt sp. nov., holotype, male; \times 2.5.
 - 14. Xenolea tomentosa asiatica (Pic), male; \times 2.5. Ta-hau.
 - 15. Pothyne seriata Gressitt sp. nov., holotype, female; \times 2.5.
 - 16. Pothyne obliquetruncata Gressitt, male; \times 2.5. Tai-pin.
 - 17. Pothyne chocolata Gressitt, female; \times 2.5. Ta-hau.
 - 18. Tetraglenes insignis sublineatus Gressitt, male; \times 2.5. Nam-fung.

PLATE 5

- FIG. 1. Apomecyna quadrifasciata Thomson, female; \times 4. Yuan-mentung.
 - 2. Eunidia lateralis Gahan, female; \times 4. "Hainan Id.".
 - 3. Serixia sedata Pascoe, female; \times 4. Ta-hian.
 - Serixia longicornis pubescens Gressitt subsp. nov., holotype, male; × 4.
 - 5. Pterolophia kaleea (Bates), female; \times 4. Tai-pin.
 - 6. Atimura cylindrica Gressitt sp. nov., holotype, female; \times 4.
 - 7. Serixia abbreviata Gressitt sp. nov., holotype, male; \times 4.

9. Ropica sublineata Gressitt sp. nov., holotype, male; \times 4.

- 10. Mixnia laterimaculata Gressitt sp. nov., holotype, male; × 4.
- 11. Sybra pascoei Lameere, male; \times 4. Ta-han.
- 12. Exocentrus constricticollis Gressitt sp. nov., holotype, female; \times 4.
- 13. Enispia anfracta Gressitt sp. nov., allotype, female; \times 4.
- 14. Pseudanæsthetis seticornis Gressitt sp. nov., holotype; female, \times 4.
- 15. Terinæa rufonigra Gressitt sp. nov., holotype, male; \times 4.
- 16. Exocentrus basirufus Gressitt sp. nov., holotype, male; \times 4.
- 17. Exocentrus trifasciellus Gressitt sp. nov., holotype, male; \times 4.

PLATE 6

- FIG. 1. Glenida cyaneipennis Gahan, male; \times 3.03. Sam-a.
 - 2. Glenea flavorubra Gressitt sp. nov., allotype, female; \times 3.03.
 - 3. Glenea tonkinea Aurivillius, female; \times 3.03. Tai-pin-ts'uen.
 - 4. Glenea humerosa Gressitt sp. nov., holotype, male; \times 3.03.
 - 5. Glenea (Stiroglenea) cantor (Fabricius), male; \times 3.03. Lia-mui.
 - 6. Nupserha corrugata Gressitt sp. nov., holotype, male; \times 3.03.
 - 7. Nupserha kankauensis (Schwarzer), female; \times 3.03. Ta-hian.
 - 8. Nupserha fricator Dalman, male; \times 3.03. Fan-ta.
 - 9. Oberea nigriventris Bates, female; \times 3.03. Ta-hian.
 - 10. Oberea fuscipennis Chevrolat, female; \times 3.03. "The Hummocks".
 - 11. Oberea rosi Gressitt sp. nov., holotype, female; \times 3.03.
 - 12. Oberea nigriceps (White), female; \times 3.03. Tai-pin-ts'uen.
 - 13. Lasiophrys tinhosensis Gressitt sp. nov., holotype, male; \times 3.03.
 - 14. Astathes cyanoptera Gahan, male; \times 3.03. Tinhosa Island.

PLATE 7

- FIG. 1. Mesocacia assamensis Heller, male; \times 7.1. Tai-pin-ts'uen.
 - 2. Mesocacia punctifasciata Gressit sp. nov., holotype, female; \times 7.
 - 3. ?Mesocacia rugicollis Gressitt sp. nov., holotype, female; \times 6.3.
 - 4. Niphona yanoi reducta Gressitt subsp. nov., holotype, male; \times 8.
 - 5. Cacia nigrofasciata Gressitt sp. nov., holotype, female; \times 11.7.
 - 6. Iproca acuminata Gressitt sp. nov., holotype, male; \times 22.
 - 7. Neacanista tuberculipenne Gressitt sp. nov., holotype, female; \times 10.7.
 - 8. Ropica ngauchiliæ Gressit sp. nov., holotype, male; \times 20.

PLATE 8

Outline map of Hainan Island, showing the thirteen district cities (all near the coast except Deng-ag) and key localities and mountain ranges in the interior. See page 228 for list of localities for other place names, their locations, various romanizations, and altitudes.



PLATE 1.



PLATE 2.



PLATE 3.



PLATE 4.





PLATE 6.



PLATE 7.





PLATE 8. Outline map of Hainan Island, showing the thirteen district cities (all near the coast except Deng-ag) and key localities and mountain ranges in the interior.