Dr. Malcolm Cameron on Staphylinidae from Singapore, 213

(212)

X. New species of Staphylinidae from Singapore. Part III. By MALCOLM CAMERON, M.B., R.N., F.E.S.

[Continued from Trans. Ent. Soc. Lond. 1918 (1919), p. 246.]

[Read November 19th, 1919.]

The groups Oligotini, Bolitocharini, Myrmedoniini and Aleocharini are dealt with in this part of the paper together with additions to the Lispini, Pinophilini, Paederini, Staphylinini and Tachyporini.

Oligotini.

64. Oligota forticornis, n. sp.

Minute, convex, attenuated posteriorly, entirely testaceous, shining, exceedingly finely punctured, and covered with fine yellowish pubescence. Antennae very short and stout with 4-jointed club, entirely testaceous. Legs testaceous. Length .75 mm.

Head exceedingly finely, scarcely perceptibly and moderately closely punctured. Antennae with the 2nd joint a little longer than broad, the 3rd to the 6th minute, quadrate, differing but little from one another, the 7th distinctly transverse and larger than the 6th, the 8th and 9th much more strongly transverse, three times as broad as long, the 10th large, oval, nearly equal in length to the three preceding together. Thorax widest at the base, twice as broad as long, the sides evenly rounded and contracted to the anterior angles; puncturation and pubescence similar to that of the head. Elytra transverse, as broad as, and a little longer than, the thorax (measured along the suture), the sides parallel; puncturation and pubescence exceedingly fine, rather closer than on the thorax. Abdomen gradually narrowed posteriorly, uniformly and exceedingly finely punctured, much the same as the elytra; pubescence yellow, a little coarser than that of the fore-parts.

Hab. District unknown. Found under bark.

65. Oligota moultoni, n. sp.

Minute, gradually attenuate posteriorly, black, elytra pitchybrown, apex of abdomen rufescent. Antennae and legs testaceous, the former a little infuscate towards the apex. Length scarcely .75 mm.

TRANS. ENT. SOC. LOND. 1920.—PARTS I, II. (JULY)

In build and coloration very similar to O. pusillima Grav., of Europe; it is, however, a little smaller, the antennae and elvtra are shorter, the latter a little more finely punctured, and the abdomen more narrowed behind. Head exceedingly finely and not very closely punctured and pubescent. Antennae with the 1st and 2nd joints stout, of equal length, the 3rd a triffe longer than broad, the 4th square, the 5th a little broader, the 6th to the 9th distinctly transverse, gradually increasing in breadth, the last two of them quite three times as broad as long, the 10th short, oval. Thorax at the base almost twice as broad as long, the sides narrowed and rounded anteriorly; exceedingly finely and rather closely punctured and pubescent. Elytra at the base as broad as, and a little longer (measured along the suture) than, the thorax, very slightly widened behind, transverse, exceedingly finely but more distinctly punctured than the thorax, finely pubescent. Abdomen very gradually narrowed behind, exceedingly finely and moderately closely punctured and pubescent throughout.

Hab. Bukit Panjang.

BOLITOCHARINI.

PSEUDOLIGOTA, n. gen.

Labrum transverse, the anterior margin slightly emarginate in the middle, the anterior angles rounded. Mandibles rather stout, the apices pointed and incurved, the right with a small tooth at the middle of the inner margin. Maxillary palpi 4-jointed, the 1st joint small, the 2nd moderate, lightly curved and widened towards apex, the 3rd much longer and larger than the 2nd, regularly dilated from the base to the apex, the 4th subulate about half the length of the 3rd. Inner lobe of the maxilla moderately broad, parallel, the apex truncate and very finely and shortly pectinate; the outer lobe broader, the apex pectinate, the teeth longer than those of the inner lobe. The tongue very small, triangular, split at the apex. Paraglossae finely ciliate. Labial palpi 2-jointed, the 1st joint elongate, cylindrical, the 2nd shorter and much narrower than the 1st. Temples not bordered below. Prosternum short, rounded behind in the middle. Prothoracic epimera wanting.

Mesosternum moderately broad, fused with the metasternum without visible suture. Intermediate coxae moderately distant. Elytra not sinuate internal to the postero-external angle. Tarsal formula 4, 4, 5. The first pair with the first three joints short, subequal, the 4th joint longer than their combined length; the



214 Dr. Malcolm Cameron on

second pair with the first three joints rather short, subequal, the 4th longer than the three preceding together; the third pair with the first two joints moderately long, equal, the 3rd and 4th gradually decreasing in length, the 5th rather longer than the two preceding together. Tibiae finely ciliate. The structure of the antennae and the maxillae is similar to that of *Gyrophaena*; the 3rd joint of the maxillary palpi is more enlarged, however, than in that genus. Whilst the build of the thorax, which is widest behind with the sides gently rounded and converging anteriorly, approaches *Brachida*. At first view the species on which the genus is founded might well be taken for an *Oligota*.

66. Pseudoligota varians, n. sp.

Black, moderately shining, minute, the abdomen obscure pitchybrown; first four joints of the antennae, palpi and legs testaceous. Length 1 mm.

Head transverse, eyes large but not prominent, the temples small, passing insensibly into the base; sculpture consisting of exceedingly fine, scarcely perceptible and very sparing punctures. Antennae moderate, the first four joints pale testaceous, the rest infuscate, the 1st and 2nd joints moderately stout, equal in length and thickness, the 3rd much shorter and smaller than the 2nd, the 4th transverse, broader than the 3rd, the 5th to 10th much more strongly transverse, gradually increasing in breadth, the penultimate about one and a half times as broad as long, the 11th stout, oval-oblong, fully as long as the two preceding together. Thorax strongly transverse, twice as broad as long, convex, widest behind, the sides gently rounded and converging anteriorly, posterior angles obtuse, the base slightly bisinuate; very finely and moderately closely punctured and pubescent. Elytra transverse, as long as, and a little broader than, the thorax, very finely, moderately closely and somewhat asperately punctured, finely pubescent, in the \mathcal{J} with four or five minute tubercles along the sutural margin posteriorly on either side. The abdomen pointed, obscure pitchy-brown with the seventh segment darker, very finely and moderately closely punctured and pubescent on the first four visible segments, much more sparingly on the seventh and eighth; the sides and apex furnished with black setae. Examples are found varying in colour through every gradation of testaceous and fusco-testaceous; they are possibly immature.

 δ . The sutural margin of the elytra posteriorly with four or five minute tubercles on either side. Seventh abdominal segment with a fine, short keel in the middle line before the posterior margin;

eighth abdominal segment produced in the middle into a short blunt spine, the sides and apex of which are furnished with short stiff yellowish setae.

Hab. In fungus; generally distributed.

67. Pseudoligota robustus, n. sp.

Minute, convex, robust, black, shining; first four joints of the antennae and palpi pitchy-testaccous; legs testaceous. Length 1.1 mm.

Very similar to the preceding, but broader, more convex and robust, deeper black in colour, with darker antennae (which are also rather stouter) and mouth-parts.

 \mathcal{J} . Sutural margin of the elytra behind the middle with a small tuberele on either side and sometimes with traces of two others in front. Seventh abdominal segment with a short keel in the middle line before the posterior margin; eighth abdominal segment produced into a short blunt spine, which is not furnished with setae.

Hab. In fungus. Woodlands, Mandai.

68. Gyrophaena (s. str.) tridentata, n. sp.

Black, shining, thorax sometimes and base of the abdomen more or less pitchy, the former biserially punctured; the humeral angles of the elytra and sometimes more or less of the base and suture testaceous; the first four joints of the antennae and legs testaceousyellow. Length 1.5 to 2.5 mm.

Very similar in build to *G. affinis* Sahlb., of Europe, but the penultimate joints of the antennae are shorter, the thorax is broader and the elytra are shorter. Head with a very few irregular punctures, occasionally with a larger pair towards the front. Antennae with the 1st and 2nd joints of equal length, the 3rd much shorter and narrower, the 4th stouter, about as long as broad, the 5th a little longer than broad, the 6th square, the 7th to the 10th scarcely transverse. Thorax twice as broad as long, the disc on either side with a row of three punctures (sometimes not very distinct), the sides with two or three more. Elytra transverse, about one-third longer than the thorax, finely, asperately and exceedingly sparingly punctured. Abdomen with the first two visible segments almost impunctate, the rest exceedingly finely and exceedingly sparingly punctured.

5. Eighth dorsal segment with a median stout spine and on either side a slightly curved pointed tooth projecting very slightly beyond

Dr. Malcolm Cameron on

the level of the apex of the median spine and separated from it by a semicircular excision.

Hab. Woodlands, in fungus.

69. Gyrophaena (s. str.) granulosa, n. sp.

Black or pitchy, shining; the thorax and base of the abdomen more or less pitchy-brown, the former biscrially punctured on the disc. Elytra testaceous, the postero-external angles more or less dark. Antennae and legs testaceous-yellow. Length 1.2 mm.

A shining species of the build of *G. lucidula* Er., but smaller and narrower. Head strongly transverse with a few scattered punctures on either side of the disc posteriorly, and sometimes with a pair of rather larger ones towards the front. Ground-sculpture very finely strigose. Antennae with the first two joints stout, of equal length, the 3rd shorter and more slender, the 4th small, transverse, the 5th to the 10th transverse, the 11th oval, pointed. Thorax twice as broad as long, the sides rounded; disc with a row of three punctures on either side of the middle line and one or two externally towards the sides; ground-sculpture exceedingly fine, transversely strigose. Scutellum smooth. Elytra broader than, and one-third longer than, the thorax, transverse; the sculpture consisting of fine sparing granules more evident in the σ ; ground-sculpture as on the thorax; the sides with three or four setae. Abdomen very finely and very sparingly punctured.

 \mathcal{J} . Seventh dorsal segment with curved transverse row of six small tubercles, of which the central pair are considerably larger than the rest and the lateral are sometimes more or less obsolete. Eighth dorsal segment narrowed and slightly emarginate on either side, thus forming three short processes, the central being bluntly rounded, wider and more produced than the lateral, which are triangular.

Hab. Woodlands and Mandai, in fungus.

· 70. Gyrophaena (s. str.) crenulata, n. sp.

Black or pitchy, shining, base and apex of the abdomen more or less ferruginous. Thorax biserially punctured. Elytra testaceous, the postero-external angles black. Antennae and legs testaceous. Length 1.75 mm.

Closely allied to the preceding, from which it differs in the following respects. The size is larger, the base of the abdomen is more extensively ferruginous, the antennae are longer, the 5th joint is not transverse and the penultimate are less transverse, and the \mathcal{S} characters.

 \mathcal{S} . Seventh dorsal segment with a very obsolete transverse row of six tubercles; eighth with a large central flat tubercle at the base, the posterior margin on either side of the middle with a feeble emargination so that it presents three rounded crenulations, the central being the largest and most prominent. Elytra more closely sculptured.

Hab. Woodlands, in fungus.

71. Gyrophaena (s. str.) cristata, n. sp.

Minute, pitchy, shining; the thorax, base of the elytra and more or less of the base and apex of the abdomen dirty-testaceous. Thorax biserially punctured, no visible ground-sculpture. Antennae and legs testaceous. Length $\cdot 6$ mm.

A very minute species of the build of *G. minima* Er. The head pitchy, the sides punctured but without visible ground-sculpture. Antennae with the first two joints equal, the 3rd much smaller and shorter, the 4th minute, transverse, the 5th to the 10th transverse, gradually increasing in breadth, the penultimate about twice as broad as long, the 11th moderately long, oval, pointed. Thorax obscure testaceous, twice as broad as long, the disc on either side with a row of three punctures, and external to the second in the row is a still larger one, otherwise the surface is impunctate and without ground-sculpture. Elytra broader, and a little longer than the thorax, obscurely lighter at the base; sculpture consisting of very fine and very sparing granules. Abdomen exceedingly finely and exceedingly sparingly punctured, the sides with short black setae.

 \mathcal{J} . Postero-external angles of the elytra with a strong, raised, oblique crest; eighth dorsal abdominal segment narrowed and rounded.

Hab. Mandai, in fungus.

72. Gyrophaena (s. str.) bidens, n. sp.

Minute, black or pitchy, shining; the thorax, humeral angles of the elytra, base and apex of the abdomen more or less pitchytestaceous, the former without biscrial punctures; first four joints of the antennae and legs testaceous. Length 1 mm.

Of the build of *G. lucidula* Er., but smaller and narrower. Head exceedingly finely and exceedingly sparingly punctured, ground-sculpture strigose. Antennae moderate, the 3rd joint much shorter

Dr. Malcolm Cameron on

and narrower than the 2nd, the 4th very small, transverse, the 5th to the 10th transverse, the penultimate nearly two and a half times broader than long. Thorax nearly twice as broad as long, exceedingly finely and exceedingly sparingly punctured, the middle of the disc impunctate; ground-sculpture distinct, transversely strigose. Elytra transverse, a little longer and broader than the thorax, exceedingly finely and exceedingly sparingly punctured; ground-sculpture as on the thorax. Abdomen exceedingly finely and exceedingly sparingly punctured and pubescent.

J. Eighth dorsal segment produced on either side into a rather stout, slightly incurved spine, the posterior margin between these, bisinuate.

Hab. Woodlands, in fungus.

73. Gyrophaena (s. str.) dubia, n. sp.

Shining, black, thorax pitchy, elytra pitch-black, obscurely testaceous at the base and humeral angles; base and apex of the abdomen reddish-testaceous. Thorax very finely and irregularly punctured, the middle of the disc impunctate; first three joints of the antennae and legs testaceous. Length 1 mm.

Of the build of *G. poweri* Crotch, but smaller and narrower. Head with a few scattered punctures, irregular in size and distribution. Antennae with the 3rd joint small, much shorter than the 2nd, the 4th to the 10th transverse, the penultimate one and a half times broader than long. Thorax twice as broad as long, with a few fine, scattered, unequal and irregular punctures, the central part of the disc impunctate. Elytra transverse, broader and a little longer than the thorax, exceedingly finely and exceedingly sparingly punctured. Abdomen exceedingly finely and exceedingly sparingly punctured.

J. Unknown.

Hab. Woodlands, under bark.

74. Gyrophaena (s. str.) irregularis, n. sp.

Shining, pitchy-testaceous, elytra testaceous, more or less infuscate towards the postero-external angles. Abdomen reddish-testaceous, the fifth to the seventh segments blackish; disc of the thorax irregularly punctured, the sides impunctate. Antennae and legs testaceous. Length 1 mm.

Of the build of *G. minima* Er., but rather smaller. Head with several moderately large punctures on either side, the front and centre of the disc impunctate. Antennae rather long, the first two joints stouter of equal length, the 3rd much shorter and narrower, the 4th very small, the 5th square, the 6th to the 10th very slightly transverse, the 11th oval pointed. Thorax twice as broad as long, the sides evenly rounded; the disc with moderately fine sparing, irregular puncturation, not leaving any smooth impunctate area in the middle. Scutellum smooth. Elytra transverse, broader and a little longer than the thorax, finely, uniformly and not closely punctured. Abdomen very finely and very sparingly punctured, the seventh segment smooth.

J. Eighth dorsal segment with a short, stout, blunt, slightly incurved tooth on either side.

Hab. Bukit Panjang, in fungus.

75. Gyrophaena (s. str.) moultoni, n. sp.

Reddish-yellow, shining; the clytra (except the base) and fourth and fifth abdominal segments fusco-testaccous; head and thorax exceedingly finely and uniformly punctured. Antennae and legs testaceous, often the last eight joints of the former more or less infuscate. Length $\cdot75$ mm.

Of the build of *G. minima* Er., but much smaller. Head with a moderately large puncture on either side of the disc and a few very fine scattered ones as well. Antennae with the first three joints pale testaceous, the rest often more or less infuscate, the 1st and 2nd joints of equal length, the 3rd much shorter and narrower, the 4th small, scarcely transverse, the 5th to the 10th transverse, gradually increasing in width, the penultimate not double as broad as long, the 11th stout, oval, as long as the two preceding together. Thorax twice as broad as long, the sides evenly rounded, very finely, uniformly and sparingly punctured and pubescent. Scutellum impunctate. Elytra transverse, fusco-testaceous, lighter at the base, a little longer than the thorax, very finely, uniformly and not very closely punctured. Abdomen obscurely fuscous on the fourth and fifth segments, very finely and very sparingly punctured and pubescent, the sides and apex with short black setae.

 \mathcal{J} . Seventh dorsal segment with a flat, semicircular tubercle in front of the posterior margin in the middle. Eighth with a small triangular excision on either side of the middle of the posterior margin, so that a short, blunt triangular process is formed in the middle and the lateral margins form sharp triangular teeth.

Hab. Bukit Timah and Bukit Panjang, in fungus.

Dr. Malcolm Cameron on

76. Gyrophaena (Phaenogyra) metallica, n. sp.

Black, shining, thorax often pitchy, the head, thorax and elytra with copper-bronze metallic reflex; base of the abdomen more or less reddish; first three joints of the antennae and legs yellowtestaceous. Thorax irregularly punctured on the disc. Length 1.5 to 1.75 mm.

Readily distinguished by the metallic reflex of the fore-parts. Head but slightly transverse with three or four punctures on either side of the disc. Antennae with the 1st and 2nd joints stout and of about equal length, the 3rd much shorter and smaller, the 4th very small, transverse, the 5th much larger, slightly transverse, the 6th to the 10th slightly transverse, the 11th oval, pointed. Thorax about half as broad again as long, the sides but slightly rounded; puncturation irregular in size, sparing and limited to the disc, the sides being impunctate, often a larger puncture is visible on either side of the middle before the base. Elytra a little longer and broader than the thorax, very finely and very sparingly punctured. Abdomen practically impunctate.

 \mathcal{J} . Seventh dorsal segment with an obsolete tubercle on either side of the middle line in front of the posterior margin. Eighth dorsal segment with a rather slender slightly incurved spine on either side, the border between these with two minute teeth separated by a feeble emargination, and much nearer the lateral spines than to each other.

Hab. Bukit Timah, in fungus.

STERNOTROPA, n. gen.

Mandibles short and stout, the right with a small blunt tooth in the middle of the inner margin. Tongue divided almost to the base into two narrow-pointed lobes which extend to the level of the extremity of the 1st joint of the labial palpi. Labial palpi 2-jointed, the 1st stout, moderately long, the 2nd much narrower but quite as long as the 1st, cylindrical with rounded apex. Maxillary palpi 4-jointed, the 1st joint short, the 2nd moderately long, a little thickened towards the apex, the 3rd longer than the 2nd, the 4th slender, subulate, more than half as long as the 3rd. Prosternum without intercoxal process. Mesosternal process moderately broad, finely keeled, the intermediate coxae distant. Tarsal formula 4, 4, 5. The 1st and 2nd pairs with the first three joints short, subequal, the 4th as long as the three preceding together; the 3rd pair much as in the preceding, and with the last joint equal to the three preceding together. Elytra distinctly emarginate internal to the postero-external angles.

The genus is allied to *Pseudoligota*, but differs in the longer and more deeply divided tongue, the much longer 2nd joint of the labial palpi, the carinate mesosternum and the distinctly sinuate elytra internal to the postero-external angles.

77. Sternotropa nigra, n. sp.

Short, robust, black, shining, elytra often dark chestnut-brown; the first three joints of the antennae and legs testaceous-yellow, the rest of the former more or less infuscate. Length 1.3 mm.

Of the build of Oligota granaria Er., which it much resembles except in the build of the antennae. Head large, transverse, scarcely perceptibly and very sparingly punctured, pubescence vellowish, very fine and sparing; eves large, not prominent. Antennae moderately long, the 1st and 2nd joints of about equal length, the 3rd a little shorter and more slender than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate about twice as broad as long, the 11th oval, longer than the two preceding together. The thorax fully twice as broad as long, widest about the middle, the sides evenly rounded, the anterior angles obtuse, the posterior rounded; the posterior border margined. feebly bisinuate; puncturation and pubescence fine, not very close. Elytra about as long as, and scarcely broader than, the thorax, transverse, finely, somewhat asperately and not very closely punctured and pubescent, distinctly sinuate internal to the postero-external angles. Abdomen finely and not very closely punctured and pubescent, the seventh and eighth segments much more sparingly; the sides with moderately long setae.

 \mathcal{J} . Eighth dorsal segment with a pointed tooth on either side of the middle line, separated by a nearly semicircular emargination.

Hab. Woodlands, in fungus.

78. Sternotropa ruficollis, n. sp.

Black, shining, the thorax and base and apex of the abdomen reddish-testaceous. Antennae pitchy; legs testaceous. Length 1.3 mm.

Of the size and build of the preceding. Head transverse, black, shining, scarcely perceptibly and exceedingly sparingly punctured. The antennae are stouter than in the preceding species, but the

222 Dr. Malcolm Cameron on

4th and 5th joints are not transverse, but a trifle longer than broad, otherwise similarly constructed. The thorax is shorter than in the preceding and more sparingly punctured. The elytra are transverse, a little longer, but scarcely broader than the thorax, with puncturation and pubescence as in the preceding. The abdomen is reddish-testaceous with the fifth and sixth segments blackish, the puncturation as in the preceding.

 \mathcal{J} . Suture of the elytra with a row of three obsolete granules towards the posterior part; seventh dorsal segment of abdomen with a minute tubercle on either side of the middle line in front of the posterior margin; eighth dorsal segment with a moderately long, pointed, slightly incurved tooth on either side of the posterior margin.

Hab. Mandai, in fungus.

Adelarthra, n. gen.

Maxillary palpi 4-jointed; the 1st joint small; the 2nd curved, dilated towards the extremity; the 3rd longer and broader than the 2nd, oval; the 4th narrow, elongate, subulate, quite half the length of the 3rd. The tongue broad, transverse, its sides and apex rounded, deeply bilobed. Labial palpi 3-jointed, the 1st joint stout, elongate, slightly curved; the 2nd much narrower but about as long as the 1st; the 3rd minute, subulate, scarcely visible. Inner lobe of the maxilla broad, obliquely truncate, closely pectinate; the outer lobe rather broad, slightly curved with apex ciliate. Mandibles short and stout and appear simple. Prosternum broadly emarginate posteriorly, not produced at all between the anterior coxae; prothoracic episterna small, triangular, the epimera wanting. Middle coxae distant; the mesosternum broad, finely keeled in the middle line, emarginate posteriorly and receiving the metasternal process. Elytra with lateral margins furnished with three long and strong setae, the epipleura not complete, failing posteriorly. Tarsal formula 4, 4, 5. The first pair with the first three joints short and subequal, the 4th joint as long as the three preceding together; the second pair with the first three joints short and subequal, the 4th joint longer than the three preceding together; the third pair with the 1st joint moderately long, the 2nd, 3rd and 4th gradually decreasing in length, the 5th longer than the two preceding together. The middle and posterior tibiae each with a distinct seta about the middle of the external border. Abdomen with the sides and upper surface setiferous.

In build this genus in well-extended examples much

resembles Oligota apicata Er., but is more elongate; retracted specimens are very similar to *Pseudoligota* in appearance, from which the strong setae of the elytra readily distinguish it.

79. Adelarthra barbara, n. sp.

Rather robust, convex, attenuate posteriorly, shining, dark pitchy-red, the elytra pitchy-black; the third, fourth and eighth abdominal segments reddish-testaceous; the legs and first four joints of the antennae testaceous, the rest of the latter black. Length 1.2 mm.

Head transverse, narrowed and rounded behind the eyes, the temples passing insensibly into the base; the eyes large, not prominent: glabrous and without visible sculpture. Antennae moderately long, the 1st and 2nd joints of about equal length, the 3rd shorter and narrower, the 4th transverse, smaller than the following, the 5th to the 10th slightly transverse but not increasing in breadth, the 11th elongate, oval, pointed, as long as the two preceding together. Thorax strongly transverse, nearly twice as broad as long, broadest posteriorly, the sides gradually narrowed and rounded to the anterior angles and with a short seta behind the middle; the base bisinuate, not bordered, the posterior angles obtuse; the disc with a small puncture on either side of the middle. Scutellum concealed. Elytra transverse, as long as, but broader than, the thorax, emarginate internal to the postero-external angles, sparingly, finely and asperately punctured and with (for a small species) rather coarse, long, yellowish, sparing pubescence and on each side with three long and stout black setae. Abdomen pointed, practically impunctate, the third and fourth segments with fine curved lines forming about ten or twelve half-hoops with the convexity forwards, the posterior extremities of the adjacent ones being crossed: the fifth, sixth and seventh segments impressed with fine parallel longitudinal lines, which in the seventh segment, however, are limited to the base. The sides are strongly setose, and the upper surface of each segment near the side except the first and second carries an erect black seta.

Hab. Bukit Timah, in rotten logs associated with Ants and Termites. Sembawang, in débris.

80. Hetairotermes, n. n. (Termophila, Lea, nom. praeoc.) agilis, n. sp.

Shining, castaneous, the abdomen pitchy-testaceous; mouth-

Dr. Malcolm Cameron on

parts, legs and antennae testaceous, the intermediate joints of the latter more or less infuscate. Elytra impunctate on the disc. Length 1.6 mm.

In size, colour and build very similar to Termophila latebricola Lea, of Australia, the sides of the elvtra are, however, distinctly punctured in the present species. Head concealed by the thorax up to the posterior borders of the eyes, which are large but not prominent, impunctate and glabrous. Antennae compact, setose, the 1st joint short and stout, the 2nd and 3rd subequal, longer than the 1st, the 4th to the 8th a little longer than broad, gradually decreasing in length, 9th and 10th as long as broad, the 11th elongate, pointed, about as long as the two preceding together. Thorax strongly transverse, widest at the middle, the sides equally narrowed and rounded anteriorly and posteriorly, margined, passing insensibly into the base, impunctate and glabrous except for a few setiferous punctures on the disc and towards the sides. Elytra as long as, out narrower than, the thorax, transverse, obliquely truncate posteriorly, the disc glabrous and impunctate, the sides and posteroexternal angles finely and moderately closely punctured and pubescent, the sides of the disc with a few fine erect setae. Abdomen narrowed posteriorly, deeply margined, finely and moderately closely punctured, pubescence rather long and rather coarse, interspersed with erect setae, the sides and apex finely setose. Intermediate and posterior tibiae with several long setae; tarsi pointed.

Hab. Associated with a wood-dwelling Termite. Wood-lands.

81. Hetairotermes piceus, n. sp.

Shining, pitchy; mouth-parts, legs and antennae testaceous. Elytra uniformly punctured. Length 1.6 mm.

Very similar to the preceding, but of uniform pitchy-black colour, the antennae with the intermediate joints scarcely infuscate and a little longer, and with the 11th scarcely longer than the 10th. The elytra are a little longer and uniformly but very sparingly covered with fine setiferous punctures.

Hab. With a wood-dwelling Termite, Bukit Timah.

PSEUDATHETA, n. gen.

Labrum transverse, the anterior angles rounded. Mandibles rather stout, curved, pointed, the right with a distinct tooth on inner margin. Maxillary palpi 4-jointed, the 1st joint small, 2nd elongate, gradually thickened towards the apex, 3rd slightly longer and stouter than the 2nd, 4th subulate fully half as long as the 3rd. Inner lobe of the maxilla narrow, lightly incurved and pointed at the apex, pectinate internally; outer lobe broader than the inner. narrowed and pointed at the apex which is ciliate. Tongue narrow and elongate, nearly extending to the level of the apex of the first joint of the labial palpi, bifid at the extremity. Paraglossae distinct, ciliate, not extending beyond the apex of the tongue. Labial palpi 3-jointed, the 1st joint moderately long, cylindrical, the 2nd narrower and about half as long as the 1st, the 3rd narrower and about twice as long as the 2nd, cylindrical. Gular sutures distant, slightly divergent behind. Temples bordered below. Prosternum broadly rounded behind. Mesosternal process narrow and pointed, extending two-thirds along the coxae, which are narrowly separated. Metasternal process rounded at the apex. Tarsal formula 4, 4, 5. The first pair of tarsi with the first three joints short and subequal, the 4th longer than the three preceding together: the second pair with the first two joints short and subequal, the 3rd a little longer, the 4th longer than the three preceding together; the third pair with the 1st joint moderately elongate, the 2nd, 3rd and 4th gradually decreasing in length, the 5th longer than the two preceding together. Elytra sinuate internal to the postero-external angle. Superficially the species on which this genus is founded might be taken for an Atheta of the nigritula group.

82. Pseudatheta elegans, n. sp.

Rufo-testaceous, moderately shining, the elytra (except the base), the posterior half of the fifth and the whole of the sixth abdominal segments black; the first three joints of the antennae and the legs testaceous. Length 1.75 mm.

Head transversely orbicular, darker in colour than the thorax; eyes moderate; very finely and indistinctly punctured, finely pubescent. Antennae moderate, the first three joints subequal, the 4th to the 10th transverse, the penultimate two and a half times as broad as long, the 11th large, oblong-oval, longer than the two preceding together. Thorax transverse one and a half times broader than long, widest just before the middle, the sides bordered, narrowed and rounded anteriorly, converging posteriorly in a nearly straight line to the obtuse posterior angles, the base bordered and feebly sinuate on either side; puncturation fine and moderately close, finely pubescent. Scutellum ferruginous, transverse, very finely punctured. Elytra transverse a little longer and broader than the thorax, black, the base more or less rufo-testaceous, very TRANS. ENT. SOC. LOND. 1920.—PARTS I, H. (JULY) Q

Dr. Malcolm Cameron on

finely, closely and asperately punctured, finely pubescent. Abdomen a little narrowed behind, the first four visible segments very finely and rather closely punctured and pubescent, the last two segments much more sparingly punctured.

3. Suture of elytra elevated posteriorly and on either side with a small tubercle. Seventh abdominal segment with two more or less transverse rows of small tubercles; eighth abdominal segment truncate, the margin very obscurely crenulate, the surface finely granulate.

Hab. Fungus; Bukit Timah, Woodlands, Mandai.

Pelekoglossa, n. gen.

Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate, narrow at the base, lightly curved and widened towards the apex, the 3rd a little longer than the 2nd, gradually and slightly dilated towards the extremity, the 4th subulate, more than half as long as the 1st, the apex indistinctly segmented into two small supplementary joints. Inner lobe of the maxilla furnished with short teeth along the inner margin anteriorly, and with longer ones posteriorly; outer lobe pectinate at apex. Tongue short and broad, halberd-shaped, the posterior portion corneous, the anterior membranous, the front border broadly rounded. Labial palpi 2-jointed, the 1st joint rather short, broad, the antero-external angle prominent and with a long seta, the inner border constricted before the apex, the 2nd joint as long as, but much narrower than, the 1st, lightly curved, the apex rounded. Paraglossae wanting. Gular sutures distant, divergent posteriorly. Temples bordered below. Prosternum broadly rounded behind; mesosternum triangular, the apex bluntly pointed, scarcely extending half the length of the middle coxac which are moderately separated; metasternum broadly rounded at apex, not nearly reaching the mesosternum. Tarsal formula 4, 4, 5; the anterior pair with the first three joints short and subequal, the 4th as long as the three preceding together; middle pair with the first three joints rather short, but all distinctly longer than broad and gradually decreasing in length, the 4th as long as the three preceding together; posterior pair with the 1st joint nearly twice as long as the 2nd; 2nd, 3rd and 4th subequal, two and a half times longer than broad, the 5th longer than the two preceding together. Middle tibiae with a distinct seta. Elvtra not sinuate. The facies of the species on which this genus is founded is very similar to that of the Acrolona group of Atheta.

New Species of Staphylinidae from Singapore. 227

83. Pelekoglossa cingulata, n. sp.

Pitchy, moderately shining; the thorax, base and apex of the abdomen, obscure reddish-testaceous; first three joints of the antennae fusco-testaceous; legs testaceous. Length 1.4 mm.

Head pitchy-black, suborbicular, finely and pretty closely punctured, finely publication. Antennae stout, the 1st and 2nd joints subequal, the 3rd shorter, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate two and a half times broader than long, the 11th stout, its apex broadly rounded. Thorax half as broad again as long, the sides evenly rounded, the posterior angles rounded passing insensibly into the base which is lightly bisinuate; puncturation fine and moderately close, finely publication finely and broader than the thorax, finely, closely and asperately punctured and finely publication or less pitchy, the rest more or less obscure, reddish-testaceous, exceedingly finely and moderately closely punctured and finely publication.

3. Eighth dorsal segment with a short, sharp tooth on either side, and with four short blunt teeth placed close together in the middle of the posterior margin; sixth ventral segment a little produced, narrowed and rounded.

Hab. Mandai, in rotting fruit.

84. Placusa (s. str.) conura, n. sp.

Pitchy, greasy lustrous; the head blackish; elytra testaceous, infuscate about the scutellum; first three joints of the antennae, mouth-parts and legs testaceous; penultimate joints of the antennae transverse; intermediate and posterior tibiae with a single seta. Length 2 mm.

Build of *P. tuchyporoides* Walk., of Europe, but smaller, more brightly coloured, with the antennae much more slender and the puncturation of the head, thorax and elytra much finer. Head transverse, black or blackish, the temples rounded, the eyes large; puncturation very fine and moderately close, finely pubescent. Antennae with the 2nd and 3rd joints of equal length, the 4th and 5th as long as broad, the 6th to the 10th transverse, gradually becoming shorter so that the thickness of the antenna is but little increased, the 11th rather stout, as long as the two preceding together. Thorax transverse, brown, the sides lighter, more than one-third as broad again as long, the sides gently rounded, the posterior angles rounded, very finely and rather closely punctured,

Dr. Malcolm Cameron on

finely pubescent. Elytra as long as, and a little broader than, the thorax, scarcely sinuate, very finely and rather closely punctured and pubescent. Abdomen pointed, often lighter at the base and apex, very finely and closely punctured and pubescent throughout, the sides and apex setiferous.

 \mathcal{J} . Posterior margin of the eighth dorsal segment finely creaulate; sixth ventral segment a little narrowed and produced.

Hab. Labrador Villa, in rotting fruit.

85. Placusa bispina, n. sp.

Pitchy-black, slightly shining; clytra obscure testaceous and first . three joints of the antennae testaceous. Legs testaceous. Length 1.6 mm.

Very similar to the preceding but smaller, the antennae shorter, the 5th joint distinctly transverse, the penultimate joints more transverse and the thorax shorter and more transverse and with different & characters. Head black or pitchy-black, transverse, finely closely and somewhat roughly punctured, finely pubescent. Antennae with the 3rd joint shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate nearly twice as broad as long. Thorax twice as broad as long, pitchy, the sides rounded and more strongly contracted anteriorly than posteriorly, the posterior angles rounded; the base on either side slightly emarginate; puncturation fine and rough, closer than on the head, finely pubescent. Elytra about one-third longer than the thorax, slightly transverse, of an obscure dirty testaceous colour, darker about the scutellum, finely, closely and roughly punctured, finely pubescent. Abdomen a little narrower behind, densely and finely punctured and pubescent throughout.

 \mathcal{Z} . Eighth dorsal segment deeply excavated on either side, so that the lateral margins form a long sharp incurved spine and the central portion a lobe with broadly rounded apex, not extending beyond the lateral spines, with a broad flat tubercle before the apex.

Hab. Mandai, Bukit Panjang, in rotting fruit.

86. Placusa (s. str.) lobata, n. sp.

Black, moderately shining, the elytra fusco-testaceous, the abdomen pitchy; first three joints of the antennae pitchy-brown; legs testaceous. Length 1.1 to 1.2 mm.

Very similar to *P. pumilio* Gr., in build, but much smaller and the thorax not so broad. Head finely, somewhat asperately and closely punctured. Antennae with the 3rd joint distinctly shorter than the 2nd, the 4th small, transverse, the 5th broader, the 6th to the 10th gradually increasing in breadth, the penultimate two and a half times as broad as long, the 11th stout, the apex rounded. Thorax more than half as broad again as long, the sides evenly rounded, the base bisinuate, puncturation very similar to that of the head, finely pubescent. Elytra a little longer but scarcely broader than the thorax, slightly transverse, finely and closely punctured, finely pubescent. Abdomen parallel, pitchy, lighter at the base, very finely and closely punctured and pubescent throughout.

3. Eighth dorsal segment triangularly produced, the apex rounded, deeply emarginate on either side, the emargination bounded by a long, pointed, incurved spine; sixth ventral segment produced, narrowed and rounded.

Hab. Pasir Panjang, Bukit Panjang, in rotting fruit.

87. Placusa (s. str.) notabilis, n. sp.

Head black, thorax and abdomen pitchy, moderately shining, the elytra fusco-testaceous, the first two joints of the antennae obscure testaceous; legs testaceous. Length 1 mm.

A small parallel species, with pitchy thorax which is not so broad as in the preceding and with finer puncturation. Head black, very finely and closely punctured, the antennae constructed as in the preceding species. Thorax pitchy, one-third as broad again as long, the sides evenly rounded, the base scarcely bisinuate, very finely and closely punctured and pubescent. Elytra a little longer and a little broader than the thorax, slightly transverse, very finely and closely punctured and pubescent. Abdomen parallel, pitchy, lighter at the base, very finely and closely punctured and pubescent throughout.

 σ . Eighth dorsal segment with three equal and closely-placed teeth at the middle of the posterior border, which is deeply emarginate on either side, the emargination bounded externally by a long, sharp, incurved spine; third dorsal segment either with (1) the posterior border triangularly produced in the middle into a short lobe with rounded apex, broadly emarginate on either side, the emargination bounded externally by a stout spine extending nearly to the level of the posterior margin of the fourth segment, or (2) the posterior border more shortly but more broadly produced. the apex itself with a small emargination, the lateral teeth shorter, or (3) the posterior border not at all produced in the middle, the lateral teeth only present as in (2).

Hab. Labrador Villa, Mandai, in rotting fruit.

230

Dr. Malcolm Cameron on

PSEUDOPLACUSA, n. gen.

Labrum transverse, the side and anterior angles rounded, the anterior margin very slightly emarginate. Mandibles not very stout, lightly curved and pointed at the apex, the right crenulate, the left simple. Maxillary palpi 4-jointed, the 1st joint small, the 2nd narrowed at the base, moderately enlarged towards the apex, the 3rd about as long and as stout as the 2nd, the 4th subulate, about half as long as the 3rd. Inner lobe of the maxilla narrow and pointed, the inner margin strongly pectinate; outer lobe broader than the inner, the apex ciliate. Tongue very narrow and elongate, extending beyond the level of the apex of the 1st joint of the labial palpi and bifid at the extremity. Paraglossae distinct, ciliate, extending to the level of the middle of the 1st joint of the labial palpi. Labial palpi 2-jointed, the 1st joint elongate, cylindrical, the 2nd cylindrical, fully as long but not so stout as the 1st. Gular sutures distant, slightly divergent posteriorly. Temples bordered below. Prosternum short, obtusely angled posteriorly in the middle line; mesosternal process narrow and pointed, extending one-half the length of the intermediate coxae, which are narrowly separated. Tarsal formula 4, 4, 5, the first pair with the first three joints short and subequal, the 4th joint longer than the three preceding together; the middle pair similarly built, but with the individual joints longer; the posterior pair with the 1st joint short, the 2nd, 3rd and 4th longer, subequal, the 5th rather longer than the two preceding together. Tibiae ciliate. Elytra distinctly sinuate internal to the postero-external angles. The species on which the genus is founded has a facies very similar to Placusa, but in the structure of the mouth-parts approaches Diestota.

88. Pseudoplacusa rufiventris, n. sp.

Rufo-testaceous, moderately shining, the head and elytra pitchyblack. Mouth-parts and legs testaceous. Length 2.1 mm.

Head transverse, subpentagonal, rather large, enseconced in the thorax and leaving but little of the temples visible, the eyes large and moderately prominent; very finely and closely punctured and finely pubescent. Antennae reddish-testaceous, the 2nd and 3rd joints of equal length, a little shorter than the 1st, the 4th and 5th about as long as broad, the 6th to the 10th transverse gradually increasing in breadth, the penultimate scarcely twice as broad as long, the 11th elongate pointed, longer than the two preceding together. Thorax transverse, half as broad again as long, widest at the middle, from thence rounded and narrowed both anteriorly and posteriorly, but rather more posteriorly, the sides and base bordered, the latter distinctly sinuate on either side, the posterior angles obtuse, very finely and closely punctured and pubescent. Elytra a little longer and broader than the thorax, transverse, very finely and closely punctured and pubescent, the puncturation being, however, distinctly less fine than that of the thorax. Abdomen distinctly and gradually narrowed posteriorly, finely and closely punctured and pubescent, the puncturation, however, being less fine and less close than on the elytra, the last two segments much more sparingly punctured; the sides with sparing short setae, the apex with longer ones.

 \mathcal{S} . Seventh abdominal segment with a fine longitudinal keel in the middle line reaching the posterior margin but evanescent anteriorly.

Hab. Rotting fruit of a wild nutmeg, Mandai.

CHLEDOPHILA, n. gen.

Labrum transverse, the sides and anterior angles rounded, the anterior margin feebly sinuate on either side of the middle line. Mandibles rather stout, pointed at the apex, the right with a small tooth at the middle of the inner margin, which is crenulate between the tooth and the apex; the left simple. Maxillary palpi 4-jointed, the 1st joint small and short, the 2nd elongate, narrowed at the base gradually thickened to the apex, the 3rd shorter and stouter than the 2nd, widest at the apex, the 4th subulate fully half as long as the 3rd. Inner lobe of the maxilla rather narrow, strongly pectinate along the inner margin; outer lobe narrower than the inner, the apex strongly pectinate. The tongue oblong, extending to the level of the apex of the 1st joint of the labial palpi, triangularly emarginate in the middle of the apical margin. Paraglossae distinct, ciliate. Labial palpi 2-jointed; the 1st joint moderately long and stout, distinctly constricted on the inner margin near the base, the 2nd shorter and narrower than the 1st, a little enlarged towards the apex. Gular sutures distant, diverging posteriorly. Temples bordered below. Prosternum truncate posteriorly without intercoxal process. Mesosternal process narrow and pointed, extending half the length of the coxae, which are but narrowly separated. Metasternal process narrow, emarginate in front at its junction with the mesosternal process. Tarsal formula 4, 4, 5; the anterior pair with the first three joints short and subequal, the 4th as long as the three preceding together; the middle pair with the first three joints rather short and subequal, the 4th as long as

Dr. Malcolm Cameron on

the three preceding together; the posterior pair with the first four joints rather short (but longer than those of the middle pair), subequal, the 5th about as long as the two preceding together. Tibiae finely ciliate. Elytra sinuate internal to the postero-external angles. The species on which the genus is founded has somewhat the appearance of an *Oxypoda*.

89. Chledophila annularis, n. sp.

Narrow, elongate, scarcely shining, rufo-testaceous, the head pitchy-red; elytra, sixth abdominal segment and last seven joints of the antennae fuscous; mouth-parts, legs and first four joints of the antennae testaceous. Length 2.1 mm.

Head pitchy-red, transversely quadrate, the temples very slightly convergent posteriorly, almost straight; the eyes rather large but not prominent; finely and closely punctured and pubescent; antennae with the first three joints subequal, the 4th as long as broad. the 5th to the 10th transverse, the penultimate two and a half times broader than long, the 11th stout bluntly pointed. Thorax reddish-testaceous, transverse half as broad again as long, widest at the middle, from thence contracted and feebly rounded both in front and behind, but more strongly posteriorly; posterior angles obtuse; the sides and base finely bordered; puncturation and pubescence fine and close. Elytra a little longer and broader than the thorax, transverse; puncturation much more distinct than that of the thorax, fine, close and asperate, pubescence fine and close. Abdomen elongate, nearly parallel, very slightly narrowed at apex, finely and closely punctured and pubescent, rather more sparingly on the seventh and eighth segments.

 \mathcal{S} . Elytra with a minute tubercle on either side of the suture anteriorly; second abdominal segment with a small tubercle in front of the posterior margin in the middle, the third with a broad tubercle in front of the posterior margin in the middle.

Hab. In débris, Bukit Panjang.

NEOSILUSA, n. gen.

Labrum transverse, the anterior margin truncate, the sides and anterior angles rounded. Mandibles rather stout, curved, pointed, the right with a tooth at the middle of the inner border, the left simple. Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate, slightly thickened towards the apex, the 3rd a little longer than the 2nd and stouter at the apex, the 4th subulate, one-third the length of the 3rd. Inner lobe of the maxilla narrow

and elongate, the inner margin of the apical third furnished with short strong teeth, the middle third set with longer pectinations: outer lobe membranous, triangular, the apex ciliate. The tongue narrow, elongate, a little narrower at the base and slightly widened and rounded at the apex, about half as long as the first joint of the labial palpi. Paraglossae distinct ciliate. Labial palpi 2-jointed, the suture between the joints indistinct, styliform, the 1st joint elongate, the 2nd fully as long as the 1st. Gular sutures distant, diverging posteriorly. The temples bordered below. Prosternum pointed behind. Mesosternal process narrowed and rounded posteriorly, the intermediate coxae moderately distant. Metasternal process truncate. Tarsal formula 4, 4, 5; the anterior tarsi with the first three joints rather short and subequal, the 4th as long as the three preceding together; the middle tarsi with the first three joints moderately short (but longer than those of the anterior pair), subequal, the 4th as long as the three preceding together and furnished with an appendage near the apex; the posterior with the first four joints elongate, gradually decreasing in length, the 5th nearly as long as the two preceding together and with an appendage near the apex. Tibiae ciliate. Elytra distinctly sinuate internal to the postero-external angle.

I found this genus on *Silusa ccylonica* Kr., a species occurring in Singapore in rotting fruit. The facies is very different to that of the European species of *Silusa*, and much more nearly approaches that of *Gyrophaena*, the thorax is much more strongly contracted behind, and the structure of the mesosternum is different.

90. Neosilusa moultoni, n. sp.

Pale reddish-brown, rather shining, the sides and postero-external angles of the elytra and the fifth and sixth abdominal segments more or less pitchy; the antennae, legs and mouth-parts reddishtestaceous. Length 2 mm.

Very similar to Silusa (Neosilusa) ceylonica Kr., but at once distinguished by the more shining fore-parts, paler coloration, coarser but less rugose puncturation of the head and thorax, and the less strongly contracted sides of the thorax posteriorly. Head subpentagonal, the eyes moderately large and prominent, closely and coarsely punctured, rather shining. Antennae moderately long and stout, the first three joints subequal, the 4th slightly longer than broad, the 5th as long as broad, the 6th to the 10th gradually increasing in breadth, the 11th elongate oval. Thorax strongly transverse, more than one and a half times as broad as long, widest

234 Dr. Malcolm Cameron on

before the middle, the sides from thence rounded and contracted anteriorly, more strongly contracted and sinuate posteriorly to the obtuse posterior angles, the disc with distinct transverse impression before the scutellum and a rounded fovea internal to the posterior angles, strongly and closely punctured, moderately finely and sparingly pubescent, shining. Elytra a little longer and broader than the thorax and rather less coarsely and closely punctured, shining, moderately finely pubescent. Abdomen shining, very finely and very sparingly punctured except at the bases of the anterior segments, which are somewhat coarsely and closely punctured, the seventh and eighth segments nearly impunctate; sides and apex with moderately long setae.

 \mathcal{J} . Fourth abdominal segment with a small tubercle on either side of the middle line near the posterior margin; the seventh with six fine raised lines, two placed anteriorly and four in a transverse row posteriorly.

Hab. In fungus, Woodlands.

OUSILUSA, n. gen.

Labrum transverse, broadly and slightly emarginate anteriorly, the sides and anterior angles rounded. Mandibles rather stout, curved, pointed, the right one with a tooth at the middle of the inner border, the left simple. Maxillary palpi 4-jointed, the 1st joint small, the 2nd moderately elongate and thickened towards the apex, the 3rd longer than the 2nd and gradually thickened towards the extremity, the 4th subulate, about one-third the length of the 3rd. Inner lobe of the maxilla narrow, the inner margin anteriorly furnished with short stout pectinations, posteriorly with longer and more slender ones; outer lobe broader than the inner, its apex ciliate. The tongue narrow and elongate extending nearly to the level of the apex of the first joint of the labial palpi and split to the middle into two narrow lobes. Paraglossae distinct, ciliate. Labial palpi 2-jointed, the 1st joint elongate a little narrower at the apex before which at the inner border is a constriction, the 2nd as long as but a little narrower than the 1st slightly enlarged towards the apex. Gular sutures distant, divergent posteriorly. Temples bordered below. Prosternal process acuminate. Mesosternal process rather broad, truncate posteriorly, the intermediate coxae distant. Metasternal process broadly rounded at the apex. Tarsal formula 4, 4, 5. The anterior tarsi with the first three joints short and subequal, the 4th longer than the three preceding together; the middle tarsi with the first three joints short (but slightly increasing in length), the 4th longer than

the three preceding together; the posterior tarsi with the first four joints gradually increasing in length, the 5th longer than the two preceding together. Tibiae ciliate. Elytra distinctly sinuate internal to the postero-external angle.

This genus has the facies of *Neosilusa*, and, apart from the structure of the mouth-parts, the two species known to me are at once distinguished from it by the absence of close rugose puncturation of the thorax.

91. Ousilusa myrmicobia, n. sp.

Pale rufo-castaneous, shining. Head and elytra coarsely punctured. Mouth-parts, legs, the first three and the last joints of the antennae testaceous, the intermediate joints reddish. Length 2 mm.

Head rather large transverse, the eyes moderately large and prominent, the temples rounded and narrowed posteriorly; puncturation (for a small species) very coarse and close. Antennae with the first three joints subequal, the 4th square, the 5th to the 10th transverse, gradually increasing in breadth, the penultimate two and a half times broader than long, the 11th elongate, pointed, longer than the two preceding together. Thorax strongly transverse, one and a half times broader than long, widest just before the middle, the sides rounded and narrowed anteriorly, contracted posteriorly in a nearly straight line to the obtuse posterior angles, the sides and base bordered, the latter bisinuate, the disc with $(? \land)$ or without an oval impression in the middle occupying nearly the whole extent, and in front of the posterior margin always with a deeply impressed strongly punctured line; the sides exceedingly finely and very sparingly punctured, the middle and anterior areas (including the impression when present) with fine, shallow umbilicate nuncturation becoming evanescent posteriorly and laterally: pubescence distinct, yellow, rather coarse and long. Elytra broader and a little longer than the thorax, transverse, pretty closely and very strongly punctured; pubescence yellow, rather coarse and long. Abdomen very finely and very sparingly punctured, sparingly and rather coarsely pubescent.

Hab. In débris associated with a species of *Pheidole*, for the determination of which I am indebted to Mr. Donisthorpe. Bukit Timah and Sembawang.

92. Ousilusa castanea, n. sp.

Dark castaneous, shining; head and thorax finely and uniformly

Dr. Malcolm Cameron on

punctured; the first two joints of the antennae mouth-parts and legs testaceous. Length 2.4 mm.

Head rather large, transverse, the temples rounded and narrowed posteriorly, the eves large and moderately prominent, the disc longitudinally impressed in the middle, finely and rather closely punctured, finely pubescent. Antennae with the 2nd and 3rd joints of equal length, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate fully twice as broad as long, the 11th elongate, pointed, rather longer than the two preceding together. Thorax strongly transverse, one and a half times broader than long, widest before the middle from thence the sides rounded and narrowed anteriorly, narrowed and slightly sinuate to the obtuse posterior angles, bordered; the base slightly sinuate on either side, bordered; disc posteriorly with a broad impression sometimes obscurely divided into two, and before the base with a transverse row of rather large close punctures, the rest of the surface finely and uniformly punctured and finely pubescent. Elytra broader and a little longer than the thorax, transverse, the sides gently rounded, with a sculpture consisting of larger and smaller superficial punctures, which towards the shoulders tend to become rugose and much closer than those of the disc; pubescence fine. Abdomen more strongly and closely punctured anteriorly especially at the bases of the segments, more finely and sparingly posteriorly, rather finely and sparingly pubescent.

Hab. One specimen in seawced at Pasir Panjang; another at light on board off the town.

PROSILUSA, n. gen.

Labrum transverse slightly produced in front in the middle line, feebly sinuate on either side, the anterior angles rounded. Mandibles rather stout, somewhat prominent, curved at the extremity and pointed, the outer margin with a small notch, the inner border of the right with a tooth. Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate slightly widened towards the apex, the 3rd as long as, and scarcely wider than the 2nd, the 4th subulate about one-third the length of the 3rd. Inner lobe of the maxilla narrow and elongate, pointed and incurved at the tip, the inner margin furnished with short and stout pectinations anteriorly, and with long and stout pectinations posteriorly; outer lobe narrow, but broader than the inner, eiliate at the apex. The tongue small and rather short, not extending for half the length of the 1st joint of the labial palpi, split nearly to the base into two narrow lobes. Labial palpi 2-jointed, elongate, styliform, reaching to the extremity of the mandible, the joints of equal length and indistinctly separate. Temples bordered below. Gular sutures distant, slightly divergent behind. Prosternal process acuminate posteriorly. Mesosternum broadly rounded behind, carinate, extending for about one-half the length of the intermediate coxae, which are distant. Metasternal process truncate, not quite meeting the mesosternal process. Tarsal formula 4, 4, 5; the anterior tarsi with the first three joints short and subequal, the 4th longer than the three preceding together; the middle pair similarly constructed; the posterior pair with the first four joints, a little longer than broad, subequal, the 5th as long as the three preceding together. Elytra sinuate internal to the postero-external angles.

The genus has a facies much resembling *Neosilusa*, but differs structurally in the divided tongue and the keeled mesosternum.

93. Prosilusa rufa, n. sp.

Rufo-castaneous, shining; the elytra in great part, and the base of the sixth abdominal segment pitchy-black. Antennae, mouthparts and legs reddish-testaccous. Length 2.5 mm.

Head rather large, transverse, triangularly produced in front, the eyes large and rather prominent, their diameter greater than the length of the temples which are rounded and slightly convergent posteriorly passing insensibly into the base; finely and rather sparingly punctured, finely and sparingly pubescent. Antennae with the 2nd and 3rd joints subequal, not quite so long as the 1st, the 4th to the 10th transverse, gradually increasing in breadth, the 10th fully two and a half times broader than long, the 11th rather large, oval, bluntly pointed, longer than the two preceding together. Thorax strongly transverse, rather more than half as broad again as long, widest before the middle, the sides bordered, contracted and rounded anteriorly, more strongly contracted in a nearly straight line to the obtusely rounded posterior angles, the base bordered and distinctly bisinuate; disc before the scutellum with a deep transverse impression; finely and more closely punctured than the head, finely pubescent. Scutellum finely and indistinctly punctured. Elytra broader and one-third longer than the thorax, transverse, the sides gently rounded, pitchyblack, reddish towards the base, rather more finely and rather less closely punctured than the thorax and finely pubescent. Abdomen finely and rather sparingly punctured, much more so posteriorly, finely and sparingly pubescent, the sides with fine setae.

Dr. Malcolm Cameron on

 \mathcal{S} . Seventh dorsal segment with a tubercle in the middle line in front of the posterior margin; eighth dorsal segment at the posterior margin with a rather long straight tooth on either side, the margin between with four or five short blunt teeth.

Hab. Rotting fruit, Botanical Gardens.

DERALIA, n. gen.

Mandibles somewhat prominent, moderately stout, curved and pointed at the apex, the right with a tooth at the middle of the inner border. Maxillary palpi 4-jointed, the 1st joint small, the 2nd lightly curved and widened towards the apex, the 3rd a little longer than the 2nd, gradually widened from the base, the 4th narrow, subulate, scarcely half the length of the 3rd. Inner lobe of the maxilla narrow, furnished with short stout pectinations along the inner border anteriorly and with longer, but fully as stout ones posteriorly; outer lobe broader than the inner, the apex ciliate-plumose. The tongue elongate, reaching the level of the middle of the 2nd joint of the labial palpi, narrow at the base widened towards the apex, bifid for about one-fourth its length. Labial palpi 2-jointed, elongate, reaching to the tip of the mandibles, scarcely styliform, the 1st joint long and cylindrical, the 2nd a little longer and slightly narrower than the 1st, bulbous at the apex. Temples bordered below. Gular sutures distant, very slightly divergent posteriorly. Prosternal process obtusely angled; mesosternal process narrow and pointed, extending fully half the length of the intermediate coxae, which are narrowly separated; metasternal process bluntly pointed reaching the preceding. Tarsal formula 4, 4, 5. The 1st and 2nd pairs with the first three joints short and subequal, the 4th as long as the three preceding together; the posterior pair with the first four joints short and subequal, the 5th almost as long as the three preceding together. Tibiae with a seta at the middle of the outer margins. Elytra distinctly sinuate.

This genus is closely allied to *Prosilusa*, *Pseudosilusa*, etc., but is separated therefrom by the narrow mesosternal process and the scarcely styliform labial palpi. The head is pentagonal, the temples being straight and convergent posteriorly to the base.

94. Deralia fuscipennis, n. sp.

Pitchy-black, moderately shining, thorax and abdomen (except the fifth and sixth segments which are pitchy) rufo-testaceous. Antennae fuscous, the first three joints and apex of the last, mouthparts and legs testaceous. Length 2 mm.

Head about as broad as long, pentagonal, the eyes rather small and not prominent, the temples straight and convergent posteriorly; moderately finely, closely and superficially punctured at the sides and posteriorly almost impunctate in front; finely pubescent. Antennae with the first three joints gradually decreasing in length, the 4th as broad as long, the 5th to the 10th transverse, gradually increasing in breadth, the penultimate three times as broad as long, the 11th rather stout, oval. Thorax transverse, nearly one and a half times broader than long, broadest at the middle, the sides gradually rounded and contracted both in front and behind, but more strongly posteriorly, posterior angles obtuse a little prominent; sides and base bordered, the latter scarcely bisinuate: disc transversely impressed in front of scutellum and with a large puncture on either side between the impression and the posterior angles; puncturation moderately fine and moderately close somewhat asperate; pubescence fine. Scutellum transverse, coriaceous. Elytra a little longer and broader than the thorax, the sides nearly straight, moderately finely, moderately closely and asperately punctured; finely pubescent. Abdomen very finely and sparingly punctured and pubescent, finely coriaceous.

Hab. In rotten wood, Bukit Timah.

PSEUDOPHAENA, n. gen.

Labrum transverse, truncate anteriorly, the sides and anterior angles rounded. Mandibles rather stout, curved pointed, the right with a tooth at the middle of the inner margin, the left simple. Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate, lightly curved and widened towards the apex, the 3rd as long as, but stouter than the 2nd, the 4th much narrower and about half as long as the 3rd, cylindrical. Inner lobe of the maxilla narrow, the inner margin anteriorly furnished with short stout pectinations, posteriorly with much longer and stouter ones; outer lobe ciliateplumose at the apex. The tongue narrower at the base, widened anteriorly and divided for one-third of its length, and extending to the level of the middle of the 1st joint of the labial palpi. Paraglossae distinct, ciliate. Labial palpi 2-jointed, the 1st joint elongate, distinctly constricted at the middle of the inner margin, the 2nd nearly half as long as, but narrower than the 1st, bulbous at the tip. Gular sutures distant, diverging behind. Temples bordered below. Prosternum acuminate posteriorly; mesosternal process

Dr. Malcolm Cameron on

broad and truncate, the intermediate coxae distant; metasternal process truncate, not quite meeting the mesosternum. Tarsal formula 4, 4, 5; the anterior and middle pairs with the first three joints short and subequal, the 4th as long as the three preceding together; the posterior pair with the first four joints short and subequal, the 5th as long as the three preceding together. Elytra distinctly sinuate.

The species on which this genus is founded has the facies of a *Gyrophaena*, but differs as above indicated by the constricted inner border of the 1st joint of the labial palpi, the very strongly toothed inner lobe of the maxilla, and the shorter 1st joint of the posterior tarsi. The genus appears to connect *Gyrophaena* with *Pseudosilusa*.

95. Pseudophaena castanea, n. sp.

Rufo-castaneous, shining; the elytra strongly punctured; first three joints of the antennae, mouth-parts and legs reddish-testaceous, the anterior tibiae and apex of intermediate and posterior tibia pitchy. Length 1.8 mm.

Head large, transverse, the eyes large and moderately prominent; temples strongly narrowed posteriorly; puncturation very sparing and superficial. Antennae with the 1st joint rather stout, longer and stouter than the 2nd, the 3rd a little shorter than the 2nd, the 4th moniliform, the 5th to the 10th transverse, gradually increasing in breadth, the penultimate three times as broad as long, the 11th short, stout, bluntly pointed. Thorax three-fourths as broad again as long, widest before the middle, the sides rounded and contracted anteriorly, narrowed in a nearly straight line to the obtuse but distinct posterior angles, the sides and base bordered; the disc with an impressed line in the middle, the base with a transverse row of rather large close punctures, the rest of the surface with a few scattered more or less obsolete punctures, sparingly pubescent. Elytra transverse, broader and a little longer than the thorax, for a small species rather coarsely but not closely punctured, sparingly pubescent. Abdomen very finely and very sparingly punctured, the fifth, sixth and seventh segments with coriaceous ground-sculpture.

Hab. Rotting fruit, Pasir Panjang beach.

96. Coenonica angusticollis, n. sp.

Black, moderately shining, the base of the abdomen more or less pitchy; elytra testaceous, infuscate about the scutellum and posteroexternal angles; the first three joints of the antennae and the legs testaceous. Length 2.4 mm.

Of the same coloration as C. puncticollis Kr., but narrower, the thorax especially being much less widened anteriorly and considerably less shining. Head subpentagonal, the temples convergent posteriorly in a straight line, the eyes large and prominent. the disc foveate in the middle, closely and coarsely punctured, the punctures obscurely umbilicate. Antennae with the 2nd and 3rd joints rather short and subequal, the 4th to the 10th transverse gradually increasing in breadth, the penultimate three times as broad as long, the 11th stout, conical. Thorax slightly transverse, widest at the middle, the sides gently rounded and narrowed anteriorly, more strongly narrowed posteriorly in a nearly straight line to the obtuse posterior angles and furnished with two or three moderately long setae; disc with a horseshoe-shaped impression with concavity forwards; puncturation as on the head. Elytra longer and broader than the thorax, square: puncturation about the same size as that of the thorax, but not so deep and scarcely so close, finely pubescent. Abdomen moderately, finely and moderately closely punctured anteriorly, more sparingly posteriorly, finely pubescent.

 \Im . Seventh dorsal segment with a small tubercle before the posterior margin in the middle line; eighth dorsal segment with a triangular tooth on either side, separated by a triangular notch from the broadly truncate median portion of the segment.

Hab. In débris, Sembawang.

97. Coenonica stricticollis, n. sp.

Moderately shining, head black, thorax pitchy-red, strongly contracted towards the base, elytra testaceous, abdomen pitchytestaceous. Length 2 mm.

Head subpentagonal, the eyes large and rather prominent, the temples convergent posteriorly; disc impressed rather broadly, coarsely and closely punctured, the punctures obscurely umbilicate, finely pubescent. Antennae reddish-testaceous, the first three joints paler, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate nearly three times as broad as long, the 11th elongate, oval, pointed as long as the three preceding together. Thorax transverse, one-third broader than long, widest at the middle, the sides rounded and contracted anteriorly, more strongly contracted and sinuate posteriorly to the obtuse and somewhat prominent posterior angles; disc with a horseshoe-shaped impression posteriorly, and another rather deep oval one anteriorly in the TRANS. ENT. SOC. LOND. 1920.—PARTS I, H. (JULY) R

Dr. Malcolm Cameron on

middle line, the sculpture close and granular. Elytra broader than, and about as long as the thorax, transverse, puncturation superficial moderately fine and moderately close. Abdomen rather finely and closely punctured anteriorly, the sixth to the eighth segments much more sparingly, finely pubescent.

 \mathcal{J} . Eighth dorsal segment with a sharp, short incurved tooth on either side, the margin between the lateral teeth with four shorter, blunt teeth.

Hab. In débris, Keppel Harbour.

MIMOMALOTA, n. gen.

Maxillary palpi 4-jointed, the 1st joint small, the 2nd moderate, thickened towards the extremity, the 3rd longer than the 2nd, narrowed at the base, the 4th small, subulate, about one-third as long as the preceding. Inner lobe of the maxilla narrow, strongly pectinate; outer lobe ciliate-plumose at apex. Mandibles stout. strongly curved at the extremities, the right one with a tooth, both crenulate towards the apex. Tongue narrowed at the base, widened towards the apex which is bifid, not extending as far as the apex of the 1st joint of the labial palpi. Paraglossae ciliate extending to the level of the tip of the tongue. Labial palpi 2-jointed, the 1st joint elongate and with two cilia at the inner border, the 2nd narrower about one-half as long as the 1st. Temples convergent posteriorly, bordered below. Prosternum rounded posteriorly without distinct intercoxal process. Mesosternal process narrow, its apex acuminate. Metasternal process acuminate, meeting the preceding at the level of the middle of the coxae. Intermediate coxae very narrowly separated. Tarsal formula 4, 4, 5. Anterior tarsi with the first three joints short, subequal, the 4th joint a little longer than the three preceding together. Middle tarsi with the first three joints short, slightly increasing in length, the 4th quite as long as the three preceding together. Posterior tarsi with the first four joints rather short, subequal, the 5th as long as the two preceding together. Middle and posterior tibiae with a weak seta at the middle of the external margin. Elytra slightly sinuate internal to the posteroexternal angles.

The genus has the build of *Homalota*, but is readily distinguished by the setae of the tibiae being feeble, the tongue is moreover narrowed at the base, the 1st joint of the labial palpi is not elbowed and the mandibles are finely crenulate towards the apex.

98. Mimomalota bispina, n. sp.

Linear, moderately shining, pitchy; thorax and abdomen brown, the fifth and sixth segments of the latter more or less pitchy; elytra fusco-testaceous. Antennae reddish-testaceous; legs testaceous. Length 2 mm.

Head as broad as long; the diameter of the eyes (seen from above) shorter than the temples, which are straight and rather strongly convergent posteriorly; puncturation moderately fine and rather close, the anterior portion of the disc and the front nearly impunctate; ground-sculpture distinct, coriaceous. Antennae with the 2nd joint shorter than the 1st, the 3rd subequal to the 2nd, the 4th slightly, the 5th to the 10th more strongly transverse, gradually increasing in breadth, the 11th conical. Thorax slightly transverse, wider than the head, broadest just before the middle, the sides from thence very slightly rounded but distinctly contracted anteriorly, more strongly contracted and slightly sinuate posteriorly to the obtuse posterior angles; disc rather broadly impressed throughout its length; the posterior border narrowly margined; puncturation much finer than that of the head, but nearly as close; ground-sculpture coriaceous; finely pubescent; the sides with two fine setae, one near the anterior angles, the other about the middle. Elytra a little longer and broader than the thorax, square, feebly emarginate internal to the postero-external angles, very finely, rather closely and obsoletely punctured, very fine pubescent and without visible ground-sculpture. Abdomen parallel, very finely and moderately closely punctured on the first two segments, much more sparingly on the third, the following almost impunctate; ground-sculpture very fine, coriaceous; pubescence very fine.

 \mathcal{S} . Eighth dorsal segment deeply excised on either side, so that the lateral margin forms a long incurved spine and the central portion a rounded lobe, not quite extending to the level of the apices of the lateral spines.

 $\ensuremath{\mathbb{Q}}$. Eighth dorsal segment with the posterior margin broadly rounded.

Hab. Woodlands, Mandai, Bukit Panjang, under bark of felled trees.

99. Mimomalota testacea, n. sp.

Parallel, shining testaceous, the head and elytra darker. Antennae and legs testaceous. Length 1.2 mm.

Dr. Malcolm Cameron on

A much smaller and more shining species than the preceding and without ground-sculpture. Head reddish-testaceous, shining, as broad as long: the temples longer than the diameter of the eyes and converging posteriorly in a nearly straight line; the disc with a fine longitudinal impressed line; puncturation (for a small species) rather large, not very close, finely and sparingly pubescent and without trace of ground-sculpture. Antennae with the 3rd joint smaller and distinctly shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate two and a half times as broad as long. Thorax testaceous-yellow, scarcely transverse, but little wider than the head, broadest just behind the anterior angles, the sides rounded and contracted anteriorly, more strongly narrowed posteriorly in a nearly straight line to the rounded posterior angles, the disc with distinct transverse impression before the scutellum and sometimes with a further longitudinal one in front of this; puncturation very fine, not very close, finely and sparingly pubescent; the sides with three fine setae, one at the anterior angles, one at the middle and one intermediate. Elytra a little longer and broader than the thorax, scarcely longer than broad, fusco-testaceous, puncturation very fine and rather more close than that of the thorax, very finely pubescent. Abdomen parallel, the seventh segment much longer than the sixth, the first four visible segments very finely and sparingly punctured, the seventh and eighth nearly impunctate; pubescence fine and sparing; no visible ground-sculpture.

Hab. Mandai, under bark. Two specimens, both of which are probably females, the eighth dorsal segment being broadly rounded.

NEOMALOTA, n. gen.

Labrum transverse, the sides and angles rounded, the anterior margin lightly emarginate. Mandibles moderate, lightly curved, the right with a small tooth about the middle of the inner border. Maxillary palpi with the 1st joint small, scarcely longer than broad, the 2nd elongate, widened towards the apex, the 3rd longer than the 2nd, the 4th small, subulate not half the length of the preceding. Inner lobe of the maxilla pectinate, the teeth decreasing in length towards the apex; outer lobe ciliate. Mentum transverse, narrower in front than behind, the anterior border broadly and rather deeply emarginate. The tongue narrow and elongate, extending beyond the base of the 2nd joint of the labial palpi, bifid at the extremity. Paraglossae ciliate extending to the level of the tip of the tongue. Labial palpi 2-jointed, the 1st joint elongate, lightly curved, slightly constricted at the inner border beyond the middle, the 2nd joint narrower and a little shorter than the 1st. The temples not bordered below. Prosternum lightly produced backwards in a short triangular process in the middle. Mesosternal process bluntly pointed extending half the length of the coxae, which are narrowly separated. Metasternal process not quite meeting the mesosternal process. Anterior tarsi with the first three joints short subequal, the 4th longer than these together. Middle tarsi with the first three joints short but slightly increasing in length, the 4th joint longer than the preceding together. Posterior tarsi with the first four joints rather short but gradually increasing in length, the 5th nearly as long as the preceding together. Middle and posterior tibiae with a short weak seta at the middle of the external border. The elytra sinuate internal to the postero-external angles.

The genus has much of the facies of *Homalota*, but the abdomen is less parallel, the thorax and humeral angles of the elytra are without setae and the posterior and middle tibiae are without evident setae, but these can be detected as mentioned above in a microscopical preparation.

100. Neomalota cingulata, n. sp.

Scarcely shining; the head, elytra, and the sixth abdominal segments black or pitchy; the rest of the latter and the antennae reddish-testaceous. Legs testaceous. Length 2 mm.

Head black (sometimes reddish-brown like the thorax), transverse, the temples strongly rounded and contracted passing insensibly into the base; the eyes rather large and prominent; puncturation fine. very close and rugose. The antennae rather long, the 1st joint longer than the 2nd, the 2nd a little shorter than the 3rd, the 4th and 5th square, the 6th to the 10th slightly transverse, the 11th as long as the two preceding together. Thorax reddish-brown, slightly transverse, widest at the middle, the sides rounded and narrowed anteriorly, more strongly narrowed posteriorly in a nearly straight line to the obtuse posterior angles; the disc grooved in the middle line throughout the whole length; puncturation close, fine and rugose as on the head, very finely pubescent. Scutellum triangular, rugose. Elytra scarcely longer, but broader than the thorax, slightly transverse and less dull than the fore-parts, blackish, sometimes a little rufescent at the extreme base; sculpture consisting of a number of moderately large irregular-scattered punctures on the disc and towards the sides a close rugose puncturation similar to that of the thorax, ground-sculpture very finely coriaceous. Abdomen very finely and rather closely punctured and pubescent throughout,

Dr. Malcolm Cameron on

The 3rd to the 5th abdominal segments transversely impressed at the base. There appear to be no secondary sexual characters.

Hab. Bukit Timah and Mandai, in débris; I believe associated with Ants.

LAMPROMALOTA, n. gen.

Mandibles short and robust, the right with a small tooth. Maxillary palpi 4-jointed, the 1st joint short, the 2nd elongate, lightly curved and thickened towards the apex, the 3rd a little longer than the 2nd, the 4th subulate, nearly half as long as the preceding. The temples bordered below. Prosternal process obtuse. Mesosternal process obtuse, rounded at the apex. Metasternal process broadly rounded, not nearly meeting the preceding. Coxae narrowly separated. Tarsal formula 4, 4, 5. The anterior with the first three joints short and subequal, the 4th nearly as long as the first three together; the middle with the first three joints short and subequal, the 4th as long as the three preceding together; the posterior with the first four joints short and subequal, the 5th as long as the three preceding together. The tibiae without setae.

This genus has the build of *Homalota*, from which it is distinguished by the shining, obsoletely punctured head and thorax, and the absence of setae on the middle and posterior tibiae. The specimen being unique I am unable to give further details of the structure of the mouth-parts.

101. Lampromalota brunneicollis, n. sp.

[•] Sub-parallel, depressed, shining. Head black; thorax pitchybrown; elytra and abdomen and first three joints of the antennae fusco-testaceous; legs testaceous. Length 1.8 mm.

Head large, black, shining, transversely suborbicular, the front truncate, eyes rather large, temples rounded and converging, slightly constricted behind; puncturation exceedingly fine and sparing and without visible ground-sculpture. Antennae with the first three joints fusco-testaceous, the others black; the 2nd joint shorter than the 1st, the 3rd shorter than the 2nd, the 4th as broad as long, the 5th to the 10th transverse, gradually increasing in breadth, the penultimate fully twice as broad as long, the 11th oval. Thorax transverse, a little broader than the head, widest just behind the anterior angles; the sides narrowed and rounded anteriorly, more strongly contracted behind in a straight line to the obtuse posterior angles; the base finely bordered; puncturation and pubescence very fine and sparing; the sides with two setae near the anterior angles. Scutellum finely punctured. Elytra fusco-testaceous, obscurely darker at the base, parallel, a little longer than, but as wide as, the thorax, scarcely longer than broad, finely and obsoletely but moderately closely punctured and finely pubescent; the sides with a seta behind the humeral angles. Abdomen very slightly widened behind, less shining than the fore-parts, very finely but pretty closely punctured and pubescent throughout, rather more sparingly on the last two segments.

Hab. Bukit Panjang. A single specimen in a decaying . log.

102. Homalota nitescens, n. sp.

Black, a little shining, clytra and legs testaceous; the first two joints of the antennae reddish-testaceous. Length 2 mm.

Of the size and build of *H. tuberculicollis* Kr., of Ceylon, but distinctly more shining and with the elytra of a clearer testaceous; the ground-sculpture of the head and thorax is less marked so that the puncturation is more defined, otherwise there is but little difference between the species. Head black, closely and finely punctured, ground-sculpture fine, coriaceous: finely pubescent. Antennae with the 2nd joint shorter than the 3rd, the 4th transverse, smaller than the following, the 5th to the 10th transverse, gradually increasing in breadth, the 11th conical. Thorax as in *tuberculicollis*, but more shining, puncturation very fine and close; ground-sculpture fine and coriaceous; disc obsoletely impressed along the middle. Elytra square, a little broader than the thorax, scarcely infuscate at the scutellum and the postero-external angles, very finely punctured and pubescent. Abdomen very finely and closely punctured and pubescent throughout.

3. Unknown.

Hab. District not noted. A single specimen apparently a \bigcirc taken in rotting fruit.

103. Homalota bidens, n. sp.

Black, subopaque, the thorax reddish-brown, the seventh and eighth abdominal segments reddish; the first two joints of the antennae and legs testaceous. Length 1.4 mm.

Head closely and finely punctured, coriaceous with a short longitudinal impression on the vertex. Antennae rather short and stout, the 2nd and 3rd joints of equal length, the 4th to the 10th transverse gradually increasing in breadth, the penultimate more than twice as broad as long, the 11th conical. Thorax transverse, broader than

Dr. Malcolm Cameron on

the head, the sides rounded and narrowed before the middle anteriorly, narrowed in a nearly straight line to the obtuse posterior angles, the disc rather broadly impressed throughout in the middle; closely and finely punctured and pubescent, coriaceous. Elytra square, a little longer and broader than the thorax, very finely and closely punctured and pubescent. Abdomen closely and finely punctured and pubescent in front, much more sparingly on the sixth, seventh and eighth segments.

♂. Posterior margin of the eighth abdominal segment with a semicircular excision on either side bounded externally by a sharp inwardly directed spine; the margin between the excisions crenulate.

Hab. Mandai, in rotting fruit.

248

104. Homalota cingulata, n. sp.

Black, scarcely shining; the thorax reddish-brown; the abdomen (with the exception of the sixth segment) dark reddish-testaceous. First two joints of the antennae and legs testaceous. Length 1.5 mm.

Head transverse, quadrate, narrowed behind the eyes, finely and closely punctured except on the front, which is impressed, groundsculpture fine and coriaceous. Antennae stout, the 2nd joint longer than the 3rd, the 4th to the 10th transverse and gradually increasing in breadth, the penultimate joints about two and a half times broader than long, the 11th rather long, conical. Thorax transverse broadest about the middle, gradually rounded and narrowed anteriorly, more strongly narrowed and very slightly sinuate to the posterior angles, which are obtuse and form a minute blunt tooth; the base very indistinctly sinuate on either side, not at all produced in front of the scutellum; the disc broadly impressed in the middle throughout its length, very closely and finely punctured and pubescent, finely coriaceous; anterior angles and middle of the sides with a seta. Elytra one-third longer and a little broader than the thorax, square, very finely and closely punctured and pubescent. Abdomen very finely and very sparingly punctured and pubescent.

 \mathcal{J} (?). Sixth ventral segment a little produced, narrowed and rounded at the extremity.

Hab. District not noted; in rotting fruit.

105. Homalota fuscipennis, n. sp.

Black scarcely shining, the thorax opaque, the elytra pitchy-black; antennae rather long, fuscous; legs testaceous. Length 2 mm. Head obsoletely foveolate on the disc, very finely and closely punctured except in front which is nearly impunctate and slightly more shining, very finely coriaceous. Antennae with the 2nd and 3rd joints of equal length, the 4th to the 7th longer than broad gradually decreasing in length, the 8th to the 10th scarcely transverse, the 11th longer than the two preceding together, pointed. Thorax a little transverse, widest just before the middle, the sides slightly rounded and narrowed anteriorly, more strongly narrowed in an almost straight line to the obtuse posterior angles, the base truncate in the middle, the disc impressed in the middle line throughout; sculpture densely coriaceous, definite puncturation being scarcely discernible; the anterior angles and middle of the sides with a seta. Elytra a little longer and broader than the thorax; square very finely and thickly punctured, finely pubescent, humeral angles with a seta.

Abdomen finely and rather closely punctured, more sparingly on the sixth, seventh and eighth segments, the sides and apex setose. $\mathcal{J}(?)$. Sixth ventral segment a little produced, narrowed and rounded.

 φ (?). Eighth dorsal segment truncate its apical margin with short stiff yellow setae.

Hab. Mandai and Botanical Gardens, in rotting fruit.

106. Homalota serrata, n. sp.

Head black; thorax reddish-brown; elytra and legs testaceous; abdomen (except the sixth segment which is blackish) and the antennae reddish-testaceous. Length 2 mm.

A larger, broader and more depressed species than H. variventris Kr., with more broadly impressed thorax and more sparingly punctured abdomen and different 3 characters. Head black, scarcely shining, very finely and closely punctured, finely and densely coriaceous, finely pubescent. Antennae stouter than in variventris, the 2nd and 3rd joints of equal length, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate joints nearly twice as broad as long, the 11th conical, longer than the two preceding together. Thorax transverse widest just before the middle, the sides rounded and narrowed anteriorly, more strongly contracted in a nearly straight line to the obtuse posterior angles; the base a little produced backwards in the middle, the border here being a little raised; the disc broadly impressed throughout; puncturation very fine and close, ground-sculpture coriaceous, pubescence fine. Elytra a little longer and broader than the thorax, square, more shining than the fore-parts, yellow testaceous, obscurely infuscate about the postero-external angles, very finely and closely punctured

Dr. Malcolm Cameron on

and pubescent. Abdomen finely and pretty closely punctured and pubescent throughout; but rather more sparingly on the two last segments.

 \mathcal{J} . Eighth dorsal segment with a feeble emargination on either side bounded externally by a small tooth, the border between the emarginations finely serrate.

Hab. District not noted; in rotting fruit. A single \mathcal{J} .

107. Homalota denticulata, n. sp.

This species differs only from the preceding by its larger (length 2.4 mm.) and more robust build, coarser sculpture of the fore-parts and the 3 characters.

 \mathcal{J} . Eighth dorsal segment emarginate on either side, the emargination bounded externally by a rather long sharp tooth, the posterior border between the emarginations with eight sharp teeth.

Hab. Mandai and Woodlands, in rotting fruit.

108. Thectura brunneicollis, n. sp.

Rather shining; the head black, the thorax pitchy-brown, the elytra and fifth and sixth abdominal segments pitchy, the rest of the latter reddish-testaceous. Legs testaceous. Length 1.6 mm.

A narrow, elongate, parallel, depressed and somewhat shining species, the head black, quadrate, scarcely transverse, the eyes moderate in size, the temples very slightly dilated; vertex with a narrow longitudinal impunctate impression, the front smooth, the rest of the surface with (for a small species), moderately large and moderately close puncturation; ground-sculpture coriaccous, but very fine and obsolete; pubescence very fine. Antennae blackish, the first two joints obscure testaceous, the 2nd joint shorter than the 1st, the 3rd shorter and smaller than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate quite three times as broad as long, the 11th short, conical; mouth-parts obscure testaceous. Thorax a little transverse, scarcely broader than the head, the sides scarcely rounded anteriorly, contracted slightly in a nearly straight line to the rounded posterior angles; the disc impressed throughout its length in the middle line and with a transverse impression before the scutellum; puncturation and pubescence very fine and sparing; ground-sculpture very fine and obsolete, coriaceous. The elvtra pitchy, as broad as, but slightly longer than, the thorax and very finely but more closely punctured, very finely pubescent. Abdomen exceedingly finely and sparingly punctured and pubescent, almost glabrous posteriorly.

3. Eighth dorsal segment with the posterior border deeply emarginate on either side, the emargination bounded externally by a sharp slightly incurved spine and with a sharp, short triangular tooth on either side of the middle line separated by a small notch; the extremities of both the teeth and spines being on the same level.

Hab. Mandai, in rotten fungus.

109. Heterota arenaria, n. sp.

Black, with greasy lustre, the elytra with an indeterminate orange spot occupying the sutural region towards the apex. Antennae, mouth-parts and legs reddish-testaceous. Length 2 mm.

Extremely similar to Alianta (Heterota) pictipennis* Fauy., the only differences being that the coriaceous sculpture at the bases of the abdominal segments is much coarser, the puncturation of the sixth and seventh segments is less fine and more asperate and the orange spot on the elytra is more diffuse and tends to spread towards the humeral angles, and the palpi are reddish-testaceous in the present species. Head transverse, the eyes rather large but not prominent. the temples convergent and but little rounded posteriorly, very finely and moderately closely punctured, densely and finely coriaceous, with very fine greyish pubescence. Antennae with the 1st joint shorter than the 2nd, the 3rd longer than the preceding, the 4th and 5th a little longer than broad, the 6th as long as broad, the 7th to the 10th transverse gradually increasing in breadth, the 11th fully as long as the two preceding together, conical. Thorax slightly transverse, widest about the middle, from thence the sides rounded and contracted anteriorly, more strongly contracted in a nearly straight line to the obtuse posterior angles; the base obscurely bifoveolate before the scutellum, the disc in the middle rather broadly impressed throughout nearly the whole length, but less broadly in front; puncturation, ground-sculpture and pubescence similar to that of the head. Scutellum triangular, densely coriaceous, the margins towards the apex shining. Elytra longer and broader than the thorax, as long as broad, scarcely punctured, densely and finely coriaceous, with a finely granular appearance; pubescence as on the thorax. Abdomen more shining than the fore-parts, the bases of the segments densely and rather coarsely coriaceous, the third, fourth and fifth segments with a transverse row of fine asperate punctures at the apices, the sixth, seventh and eighth segments finely, asperately and sparingly punctured.

Hab. Seaweed on sandy beach at Changi.

* As pointed out by me in Ent. Mo. Mag., vol. liv, 1918, p. 183, this insect belongs to the genus *Heterota*.

Dr. Malcolm Cameron on

MYRMEDONIINI.

110. Falagria tenuicornis, n. sp.

Pitchy-brown, dull, the first two joints of the antennae, the base of the elytra, 1st visible abdominal segment, posterior margin of the 2nd and legs yellow-testaceous, the distal half of the intermediate and posterior femora and bases of the corresponding tibiae, a little infuscate. Length 3 mm.

Smaller and much narrower than F. opacicollis Kr., with much smaller head, more slender antennae and much less shining elytra and abdomen than in that species and moreover with only the third (first visible) and posterior margin of the second abdominal segment testaceous, which with the elytra are much more closely punctured. Head suborbicular, the temples rounded and passing insensibly into the base, sculpture finely and densely coriaceous without visible puncturation. Antennae slender with all the joints considerably longer than broad, the 2nd about as long as, but more slender than the 1st, the 3rd longer than the 2nd, the 4th to the 10th longer than broad, gradually decreasing in length, the 11th elongate as long as the two preceding together. Thorax one-fourth as long again as the breadth at the widest part, contracted behind, rounded and dilated anteriorly, the disc narrowly sulcate in the middle throughout its length; sculpture as on the head. Scutellum impunctate and without keel. Elytra broader than, but (at the suture) a little shorter than the thorax, not so dull as the fore-parts, very finely and closely punctured, finely pubescent. Abdomen less dull than the thorax, very finely and closely punctured and pubescent throughout.

Hab. Sembawang, on bank of a jungle stream.

111. Falagria brevicornis, n. sp.

Reddish-brown, shining; the elytra fusco-testaceous; base of the abdomen, the first four and the last joints of the antennae and the legs testaceous, the intermediate joints of the antennae and the apical half of the intermediate and posterior femora more or less infuscate. Length 2.8 mm.

In build and coloration so similar to F. dimidiata Motsch., that an enumeration of the points of difference should suffice. The antennae are stouter and shorter, the 8th joint being as long as broad and the 9th and 10th distinctly transverse, the puncturation of the thorax is distinctly more sparse, the base is more strongly constricted and the posterior angles more prominent; the puncturation of the abdomen is distinctly less close. Hab. Woodlands and Bukit Timah, in rotten wood; Singapore town at light.

112. Falagria (s. str.) flavipennis, n. sp.

Black, shining; the elytra testaceous-yellow, the base and scutellary region infuscate; antennae black, legs testaceous. Length 1.75 mm.

About the size and build of F. pygmaea Kr., but of different coloration, the antennae entirely dark, longer and more slender, and the thorax a little shorter. Head transversely subquadrate, the temples scarcely dilated, longer than the diameter of the eves, vertex deeply sulcate in the middle, puncturation fine, obsolete, moderately close. Antennae with the 2nd joint a little shorter than the 1st, the 3rd distinctly shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the 11th short, conical. Thorax transverse the sides rounded in front, pretty strongly narrowed towards the base; disc with a small transverse impression before the seutellum and with a deep narrow channel throughout its length in the middle line; puncturation similar to that of the head, pubescence fine and sparing. Elytra scarcely longer but a little broader than the thorax, transverse, very finely and moderately closely punctured, finely and sparingly pubescent. Abdomen pretty closely and finely punctured on the first three visible segments, more sparingly towards apex.

Hab. Botanical Gardens, under bark.

EUSTENIAMORPHA, n. gen.

Labrum transverse, corneous, truncate, the sides and anterior angles rounded. Mandibles short, stout, pointed, the right with a small tooth at the middle of the inner border. Maxillary palpi 4-jointed, the 1st joint small, the 2nd narrow at the base dilated gradually towards the apex, the 3rd as long as the 2nd, but a little thicker towards the extremity, the 4th subulate, about one-third as long as the preceding. Inner lobe of the maxilla narrow, pointed and incurved at the apex, pectinate internally, the teeth increasing in length from before backwards; outer lobe narrow the apex shortly ciliate. Tongue broad, membranous as long as the 1st joint of the labial palpi, the sides and apex rounded. Paraglossae distinct, shortly ciliate, not extending beyond the apex of the tongue. Labial palpi 3-jointed, the 1st joint short (but longer than broad), the 2nd shorter and narrower than the 1st, the 3rd a little longer but narrower than the 2nd. Gular sutures distant, slightly diver-

254 Dr. Malcolm Cameron on

gent behind. Temples strongly bordered below. Neck broad, the temples constricted behind. Prosternum long, carinate; mesosternal process extending for half the length of the intermediate coxae. truncate, the coxae moderately separated: metasternal process truncate meeting the mesosternum. Elytra not sinuate. Tarsal formula 3, 4, 4: the anterior pair with the first two joints short and subequal, the 3rd longer than the two preceding together; middle pair with the 1st joint moderately long, the 2nd and 3rd short, and subequal, the 4th nearly as long as the three preceding together; posterior pair with the 1st joint moderately long, the 2nd and 3rd subequal, shorter than the 1st, the 4th nearly as long as the three preceding together. Abdomen strongly constricted at the base and dilated posteriorly. The third to the fifth dorsal segments lightly impressed transversely at the bases. Thorax strongly contracted before the base, the sides dilated and rounded anteriorly, the posterior angles rectangular, prominent.

This genus would appear to be closely related to *Eustenia* and *Falagria*, yet is at once separated from both by the structure of the tarsi. The broad neck and build of the temples is very similar to that of *Trogophloeus*, the temples being constricted behind the eyes, but the antennae are freely inserted in front of the eyes, the gular sutures are distinct and widely separated and the structure of the prosternum and anterior coxae indicate the position of the genus as being in the *Aleocharinae*.

113. Eusteniamorpha rufa, n. sp.

Rufo-castaneous, moderately shining, the sixth abdominal segment pitch-black. Antennae mouth-parts and legs reddish-testaceous. Length 2 mm.

Eyes moderate, rather prominent, their diameter of the length of the temples, which are convergent posteriorly and but slightly rounded, the neck broad; the front smooth and shining, the posterior and lateral portions finely, superficially and rather closely punctured; pubescence fine, scanty and ycllow. Antennae with the 1st joint a little shorter and stouter than the 2nd, the 3rd a little shorter than the preceding, the 4th to the 6th longer than broad, gradually decreasing in length, the 7th to the 9th as long as broad, the 10th very slightly transverse, the 11th elongate pointed, as long as the two preceding together. Thorax broader than the head, as long as the breadth at the widest part, strongly constricted at the base, the sides much dilated and rounded anteriorly, the disc sulcate throughout nearly the whole length in the middle, the sulcus wider posteriorly; puncturation fine, superficial and close: pubescence yellow and fine. Scutellum triangular, impunctate, with a keel on either side converging to the apex. Elytra ample, rather convex, broader, but a little shorter at the suture than the thorax, the sides lightly rounded, the posterior borders broadly emarginate; sculpture consisting of scattered, superficial and rather fine punctures, between which a few exceedingly fine points are sparingly distributed; pubescence fine, yellow. Abdomen strongly contracted at the base, enlarged posteriorly, very finely and pretty closely punctured and pubescent throughout.

Hab. Bukit Timah, Sembawang, in débris, etc., associated with a species of *Pheidole*.

114. Atheta (Glossola) moultoni, n. sp.

Reddish-testaceous, moderately shining, the head darker, the elytra broadly infuscate on the disc and sides leaving the base and apical margin more or less testaceous; abdomen with the fifth, sixth and greater part of the seventh dorsal segments, black. Antennae with the first three and the last joints testaceous, the intermediate ferruginous; mouth-parts and legs testaceous. Length 2.8 mm.

Head ferruginous, transversely orbicular, the eyes rather large and moderately prominent, the temples convergent and rounded to the base; finely and closely punctured and pubescent. Antennae moderate, the first three joints subequal, the 4th to the 7th longer than broad, gradually decreasing in length, the 8th and 9th about as long as broad, the 10th slightly transverse, 11th elongate oval, acuminate, as long as the two preceding together. Thorax slightly transverse, widest at the junction of the first and second thirds, the sides from thence rounded and narrowed anteriorly, more strongly narrowed and slightly sinuate behind to the obtuse posterior angles; base with a small impression in front of the scutellum, disc with fine median line throughout; puncturation fine and close, finely pubescent. Scutellum triangular, closely and finely punctured. Elytra as long as, but broader than the thorax, slightly transverse, finely and closely punctured and pubescent, the posterior margin not sinuate at the postero-external angle. Abdomen finely and moderately closely punctured and pubescent throughout, the sides and apex with a few black setae.

 δ . Sixth ventral segment narrowed, produced and rounded at the extremity.

This species would appear to be properly placed near

Dr. Malcolm Cameron on

A. gregaria Er., which it resembles in the build of the thorax and the structure of the posterior tarsi.

Hab. Keppel Harbour and Bukit Timah, in débris.

115. Atheta (Metaxya) alophila, n. sp.

Black, moderately shining, the elytra brown; first two joints of the antennae and legs fusco-testaceous. Length 2-2.5 mm.

Of exactly the coloration and greasy shining lustre and build of A. meridionalis Rev, of Europe, but a little more robust, the antennae a little longer and distinctly more slender, the elytra a little shorter and the abdomen rather more finely punctured. Head rather large suborbicular with distinct median longitudinal impression anteriorly; finely and not very closely punctured, finely pubescent, with fine coriaceous ground-sculpture; eyes rather large, not prominent. Antennae long and slender, the first three joints elongate, sub-equal, the 4th distinctly, the 5th to the 7th joints slightly longer than broad, the 8th to the 10th scarcely transverse, the 11th elongate pointed, as long as the two preceding together. Thorax transverse, of similar build to that of A. meridionalis, the base before the scutellum with a small transverse impression, the disc with fine longitudinal impression; finely and not very closely punctured, finely pubescent; ground-sculpture fine and coriaceous. Elvtra a little longer and distinctly broader than the thorax, transverse, with puncturation, ground-sculpture and pubescence much as on the fore-parts. Abdomen very finely but not closely punctured and pubescent, more sparingly on the last two segments.

3. Eighth dorsal segment truncate; sixth ventral segment a little narrower and more produced than in the Q.

Q. Eighth dorsal segment feebly emarginate posteriorly.

Hab. Pasir Panjang, in seaweed.

116. Atheta (Dralica) picea, n. sp.

Pitchy, greasy-shining, the head and fifth, sixth and seventh abdominal segments blackish. First two joints of the antennae, mouth-parts and legs, testaceous. Length 1.4 mm.

Head transverse, the temples very slightly dilated, the eyes moderate, their diameter less than the length of the temples, exceedingly finely and rather closely punctured and finely pubescent. Antennae moderately long and stout, the first two joints subequal, the 3rd shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in width, the penultimate two and a half times as broad as long, the 11th stout more than double the length of the two preceding together, rounded at the apex. Thorax a little transverse and of the shape of that of *Meotica indocilis* Heer, exceedingly finely and closely punctured and pubescent. Elytra scarcely longer, but a little broader than the thorax, slightly transverse, exceedingly finely and closely punctured and pubescent, not sinuated. Abdomen parallel, exceedingly finely and moderately closely punctured and pubescent, less so on the seventh segment.

This small distinctly pubescent species appears to be properly placed in proximity to *vilis* Er.

Hab. Woodlands, in rotten wood.

117. Atheta (Microdota) melata, n. sp.

Sub-depressed, parallel, black, shining; elytra pitchy; legs fusco-testaceous. Length 1.75 mm.

Of the build and general appearance of *A. puberula* Shp., but with the elytra shorter. Head rather large, transversely quadrate, the eyes rather large, the temples rounded posteriorly, the vertex impressed; puncturation and pubescence exceedingly fine and not very close; ground-sculpture scarcely visible, coriaceous. Antennae with the 1st and 2nd joints subequal, the 3rd shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate about one-half as broad again as long; the 11th oval, pointed, as long as the two preceding joints together. Thorax as in *puberula*, but less transverse, one-fourth as broad again as long, with puncturation and pubescence much as on the head. Elytra scarcely longer, but a little broader than the thorax, square, exceedingly finely and not closely punctured and pubescent. Abdomen with the first six segments exceedingly finely and sparingly punctured, the seventh and eighth still more sparingly.

 \mathcal{J} . Head impressed on the disc. Eighth dorsal segment with a broad and deep semicircular emargination of the posterior border.

Hab. District not noted; in dung. A single \mathcal{J} .

118. Atheta (Microdota) malayana, n. sp.

Shining; head black, thorax and base and apex of the abdomen pitchy-brown, elytra fusco-testaceous; first two joints of the antennae and legs testaceous. Length 1.3 mm.

Head transversely quadrate, the temples rounded, eyes moderate, not prominent; exceedingly finely and sparingly punctured, finely pubescent; disc (in the 3) with a small impression. Antennae with the first two joints subequal, the 3rd shorter than the 2nd, TRANS. ENT. SOC. LOND. 1920.—PARTS I, II. (JULY) S

258 Dr. Malcolm Cameron on

the 4th scarcely as broad as long, the 5th to the 10th transverse, gradually increasing in breadth, the penultimate about half as broad again as long, the 11th oval, pointed, about as long as the two preceding together. Thorax transverse, half as broad again as long, the sides slightly rounded and contracted posteriorly, exceedingly finely but rather more closely punctured than the head, finely pubescent; dise not impressed. Elytra a little longer and a little broader than the thorax, slightly transverse, exceedingly finely and about as closely punctured as the thorax, finely pubescent. Abdomen very finely but not closely punctured and pubescent throughout, a little more sparingly on the seventh and eighth segments. Intermediate tibiae with a fine seta.

3. Head with a small impression on the disc. Eighth dorsal segment truncate; sixth ventral segment produced, narrowed and rounded at the apex.

Hab. Mandai and Woodlands, in fungus, rotten wood and fruit.

119. Atheta (Microdota) vulgaris, n. sp.

Black, shining, elytra fusco-testaceous; first two joints of the antennae pitchy. Legs testaceous. Length 1.3 mm.

Very similar to A. malayana in coloration and size, the thorax is, however, narrower and the puncturation is much more distinct on the fore-parts; that of the sixth, seventh and eighth segments of the abdomen much more sparing and the antennae are a little longer, the intermediate tibiae are furnished with a distinct. black seta near the middle, which in A. malayana is very feebly represented. Its position would appear to be near A. inquinula Gr. Head suborbicular, very finely but distinctly, and moderately closely punctured, finely pubescent. Antennae with the first two joints subequal, the 3rd shorter than the 2nd, the 4th as long as broad, the 5th to the 10th transverse gradually increasing in width. the penultimate about half as broad again as long. Thorax transverse, about one-third as broad again as long, the sides narrowed posteriorly, disc with a fine longitudinal channel in the middle, puncturation and pubescence very similar to that of the head. Elytra scarcely longer but distinctly broader than the thorax, transverse, with puncturation and pubescence as on the fore-parts. Abdomen very finely and sparingly punctured anteriorly, the sixth, seventh and eighth segments nearly impunctate. Intermediate tibiae with distinct black seta about the middle.

3. Eighth dorsal segment truncate, sixth ventral segment a little produced, narrowed and rounded.

New Species of Staphylinidae from Singapore. 259

 $\ensuremath{\mathbb{Q}}.$ Eighth dorsal segment very feebly emarginate posteriorly.

Hab. Generally distributed in dung and rotting fruit.

120. Atheta (Microdota) purpurascens, n. sp.

Black, shining with slight bronze-copper metallic reflex. Antennae with the first two joints pitchy-testaceous; legs pale testaceous. Length 1.3 mm.

A small shining species of exactly the build of *A. atomaria* Kr., with a slight somewhat purplish-bronze reflex and pale legs. Head quadrate, the temples broadly rounded, the eyes rather large but not prominent; puncturation and pubescence exceedingly fine and sparing; ground-sculpture exceedingly fine, coriaceous, scarcely visible. Antennae with the 3rd joint shorter than the 2nd, the 4th to the 10th transverse, the penultimate joints more than twice as broad as long, the 11th conical quite as long as the two preceding together. Thorax pitchy, about one-third broader than long, with puncturation, pubescence and ground-sculpture as on the head. Elytra one-third longer, and a little broader than the thorax, slightly transverse, exceedingly finely and rather closely punctured and pubescent. Abdomen very finely and sparingly punctured and pubescent, especially posteriorly.

Hab. Bukit Timah.

121. Atheta (s. str.) miriventris, n. sp.

Bright reddish-testaceous, the elytra obscure testaceous infuscate towards the postero-external angles; abdomen with a black transverse band before the apex; first two joints of the antennae and base of the 3rd, mouth-parts and legs testaceous. Length 2.5-3.5 mm.

 \Diamond . Head transverse, reddish-testaceous not very shining (greasy lustre only), the eyes large, moderately prominent, their diameter considerably greater than the length of the temples which are rounded and narrowed posteriorly; the centre of the disc impunctate, the rest of the surface very finely and not closely punctured and pubescent; ground-sculpture fine and coriaceous. Antennae with the 2nd and 3rd joints of equal length, the 4th to the 7th scarcely longer than broad, the 8th to the 10th transverse gradually increasing in width, the 11th elongate, pointed, longer than the two preceding together. Thorax transverse, more than half as broad again as long, widest a little behind the anterior angles, the sides bordered, rounded and narrowed anteriorly, more strongly contracted posteriorly to the obtuse posterior angles; puncturation

Dr. Malcolm Cameron on

and pubescence very similar to that of the head, but not quite so fine; ground-sculpture as on the head; each side with two distinct setae. Elytra a little longer and wider than the thorax,'transverse, very finely, rather closely and somewhat asperately punctured, finely pubescent. Abdomen more shining than the fore-parts, bright reddish-testaceous, the fifth, sixth and anterior part of the seventh segments, black glabrous and except for a few setiferous punctures, impunctate. Middle and posterior tibiae each with three setae of which the middle is the strongest.

A. Head anteriorly with a small crateriform tubercle, from which • arises a seta. Antennae a little longer than in the Q. Thorax with a small fovea before the scutellum, the disc with a fine longitudinal groove throughout. Elytra with the postero-external angle usually furnished with a keel. Abdomen with the sixth abdominal segment only black; the third to the sixth dorsal segments elevated in the middle line, appearing tectiform on transverse section: the third segment with a small semicircular emargination in the middle of the posterior border; the fourth with a stout triangular tubercle at the base, the fifth with a broad triangular process arising from the base, the apex pointed and extending backwards for about a third of the length of the segment; * the sixth with the posterior margin produced backwards in the middle line as a pointed tooth reaching the level of the middle of the seventh segment: the eighth narrowed posteriorly, the posterior margin produced backwards in the middle line as a short blunt tooth; first ventral segment embracing the sides of the third dorsal, its upper free edge bluntly pointed posteriorly. Viewed from above it appears as a lamina springing from the second dorsal segment and extending parallel to the third, its true relations are however revealed on dissection.

The Q of this species has quite the facies of A. crassicornis F. The \mathcal{J} characters are reminiscent of Myrmedonia. The structure of the mouth-parts is that of Atheta, with the exception that the 4th joint of the maxillary palpi is more than half the length of the 3rd.

Hab. Labrador Villa, in rotting fruit.

122. Atheta (Dimetrota) carpophila, n. sp.

Black, greasy-lustrous; the thorax pitchy-red; the second, third, fourth, posterior portion of the seventh and whole of the eighth abdominal segments, bright reddish-testaceous: antennae reddish, the first two joints and the legs, testaceous. Length 2.5 mm.

Very similar in build to A. mycetophaga mihi, but more brightly coloured, less shining and with differently formed antennae. Head transverse, the temples small and rounded, the eyes large but not prominent, very finely and sparingly punctured and pubescent. Antennae with the 2nd joint a little shorter than the 3rd, the 4th as broad as long, the 5th to the 10th transverse gradually increasing in breadth, the 11th longer than the two preceding together. Thorax transverse, about half as broad again as long formed as in mycetophaga, very finely and closely punctured, finely pubescent; the sides each with two rather fine setae. Elvtra a little longer and broader than the thorax, transverse, very finely, closely and more distinctly punctured than the thorax, finely pubescent. Abdomen distinctly narrowed posteriorly, very finely and moderately closely punctured and pubescent anteriorly, the seventh and eighth segments nearly impunctate; the sides sparingly setiferous, the apex more closely. Middle and posterior tibiae each with two distinct setae.

Although the setae of the thorax and middle tibiae are finer than those usually present in the sub-genus *Dimetrota*, yet owing to the distinctly narrowed abdomen and the build of the thorax, it would appear that this species has its closest affinity with this group.

Hab. Bukit Panjang, in rotting fruit.

123. Atheta (Dimetrota) xylophila, n. sp.

Black moderately shining, the elytra pitch-brown; first three joints of the antennae and the legs testaceous. Length 2.4 mm.

Build of *A. cadaverina* Bris., but smaller, differently coloured, the eyes much larger and the elytra shorter. Head broad, the eyes very large, their diameter much greater than the length of the temples, very finely and moderately closely punctured, finely coriaceous. Antennae with the 2nd and 3rd joints of equal length, the 4th small, transverse, the 5th larger than the preceding, scarcely transverse, the 6th to the 10th transverse, gradually increasing in breadth, the penultimate fully twice as broad as long, the 11th longer than the two preceding together. Thorax transverse, fully half as broad again as long, very finely and rather closely punctured, finely pubescent, rather more shining than the head and with similar ground-sculpture; the sides with well developed setae. Elytra scarcely longer, but a little broader than the thorax, transverse, not sinuate posteriorly, the humeral angles with a seta; punctura-

^{*} The development of these processes on the fourth and fifth segments is very variable and they are rudimentary in specimens in which the postero-external angle of the elytra is simple.

Dr. Malcolm Cameron on

tion very fine, close and asperate. Abdomen but little narrowed posteriorly, the anterior segments very finely and not closely punctured, the seventh segment almost impunctate; the sides and apex setiferous. Middle tibiae with three setae of which the middle one is much longer and stronger; posterior tibiae with two rather fine setae.

 ς . Eighth dorsal segment truncate, on either side with a short stout tooth, the margin between the teeth very finely crenulate.

Hab. Woodlands, under bark.

124. Atheta (Dimetrota) mycetophaga, n. sp.

Pitch-brown, moderately shining, the head and sixth abdominal segment black; the first two joints of the antennae and the mouthparts pitchy-testaceous; legs testaceous. Length 1.8 mm.

Build of Atheta parvula Mannh., but of different coloration and antennal structure. Head transverse and broader than in parvula, the eyes much larger, the temples short, very finely and rather closely, asperately punctured, finely pubescent. Antennae with the 2nd joint a little shorter than the 1st and 3rd which are equal. the 4th scarcely longer than broad, the 5th, 6th and 7th longer than broad, gradually decreasing in length, the 8th to the 10th scarcely longer than broad, the 11th elongate, pointed as long as the two preceding together. Thorax transverse about half as broad again as long, the sides each with three distinct setae, the disc with a small impression before the scutellum, very finely, closely and somewhat asperately punctured, finely pubescent. Elytra a little longer and broader than the thorax transverse, the humeral angles with a seta, the puncturation and pubescence as on the thorax. Abdomen slightly narrowed posteriorly, very finely but not closely punctured anteriorly, more sparingly posteriorly, sides and apex setiferous. Middle and posterior tibiac each with two rather long setae, one (the shorter) below the knee, the other nearer the middle. Sexual differences unknown.

Hab. Mandai, in rotting fungus.

125. Atheta (Datomicra) onthophila, n. sp.

Minute, black, shining, clytra brown; the fore-parts closely distinctly and asperately punctured. Legs testaceous. Length 1.2 mm.

Head transverse, the eyes rather small, their diameter considerably less than the length of the temples; puncturation asperate, fine, distinct and close. Antennae entirely dark, the 3rd joint distinctly shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate nearly twice as broad as long, the 11th as long as the two preceding together. Thorax one-third as broad again as long, the sides with two or three distinct setae, closely, asperately and for a small species rather coarsely punctured. Elytra as long as, but a little broader than the thorax, transverse and similarly punctured. Abdomen distinctly narrowed posteriorly, finely and pretty closely punctured and pubescent throughout, but rather more sparingly behind; sides and apex setiferous. Middle tibiae with two long setae, posterior tibiae with a single long seta.

In build somewhat resembling A. canescens Shp., but much more shining, puncturation coarser, thorax narrower and penultimate joints of the antennac more transverse.

Hab. District not noted; in dung.

126. Atheta (Datomicra) mycetophila, n. sp.

Pitchy, rather shining, the thorax and more or less of the base of the elvtra pitchy-red; the abdomen reddish-testaceous, the sixth segment pitchy; first two joints of the antennae, mouth-parts and legs, testaceous. Length 1 mm.

Head pitchy-black, transverse, exceedingly finely and rather closely punctured; the eyes large, their diameter much greater than the length of the temples. Antennae with the 3rd joint shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate about twice as broad as long, the 11th elongate gradually pointed. Thorax rather shining pitchy-red, about half as broad again as long, the posterior angles rounded; disc with an obsolete longitudinal impression before the scutellum, each side with two distinct setae; puncturation exceedingly fine and close; pubescence fine. Elytra pitchy-black, obscurely reddish towards the base, scarcely longer, but a little broader than the thorax, transverse, exceedingly finely, closely and rather asperately punctured, finely pubescent; posterior border not sinuate. Abdomen distinctly narrowed posteriorly, very finely and sparingly punctured, the seventh and eighth segments nearly impunctate; sides and apex setiferous. Middle tibiae with two distinct setae, posterior, with a rather weak seta. Facies somewhat of a minute cauta Er.

Hab. Sembawang, in rotting fungus.

Dr. Malcolm Cameron on

127. Atheta (Colpodota) ruparia, n. sp.

Pitchy, greasy-lustrous; the head black; elytra testaceous infuscate about the scutellum; first two joints of the antennae and the mouth-parts fusco-testaceous, penultimate joints of the former as long as broad; legs testaceous, the intermediate and posterior tibiae each with two strong setae. Length 2-3-2-5 mm.

Build of A. pygmaea Grav., but more brightly coloured, the thorax narrower and the abdomen much more finely and thickly punctured. From A. peregrina Kr., it differs by the longer penultimate joints of the antennae, and the thickly pubescent, sericeous abdomen. Head transverse, black, finely and moderately closely punctured, finely pubescent. Antennae moderately long, the 2nd joint a little shorter than the 3rd, the 4th as long as broad, the 5th to the 7th a little longer than broad, gradually decreasing in length, the 8th to the 10th as long as broad, the 11th oval, pointed. as long as the two preceding together. Thorax one-third as broad again as long, brown, the lateral margins a little lighter, the sides lightly rounded and but little contracted anteriorly, the posterior angles rounded; the surface finely, closely and somewhat roughly punctured, finely pubescent. Elytra brownish-testaccous, infuscate at the scutellum, as long as, but a little broader than the thorax. transverse, with puncturation as on the thorax; humeral angles with a stout seta. Abdomen pointed, exceedingly finely and closely punctured throughout, exceedingly finely and closely pubescent as in the genus Oxypoda; sides and apex setiferous. Middle and posterior tibiae each with two long and strong setae.

Hab. Here and there, in dung.

128. Atheta (Acrotona) rufiventris, n. sp.

Rather shining; head black; thorax and abdomen bright reddishtestaceous; elytra, first three joints of the antennae and legs testaceous. Length 1.8 mm.

Head black, suborbicular, the eyes large and temples short, moderately finely and closely punctured, the pubescence fine and sparing. Antennae fuscous, the first three joints testaceous, the 2nd and 3rd of equal length, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate about twice as broad as long, the 11th longer than the two preceding together, pointed. Thorax bright reddish-testaceous, about half as broad again as long, the sides evenly rounded, more strongly narrowed in front than behind, the posterior angles rounded; puncturation and pubescence similar to that of the head. Elytra testaceous, as long as and slightly broader than the thorax, transverse, not sinuate internal to the postero-external angles, with puncturation similar to that of the thorax but scarcely so close. Abdomen narrowed posteriorly, entirely bright reddish-testaceous, very finely and not very closely punctured anteriorly, the seventh and eighth segments much more sparingly; the sides and apex with long black setae. Intermediate tibiae each with two distinct black setae of which the middle one is the longer and stouter; posterior tibiae with two setae which are not so strong as those of the middle pair.

Hab. Bukit Panjang, in rotting fruit.

EXATHETA, n. gen.

Labrum corneous, transverse, the anterior border truncate, the angles rounded. Mandibles moderate lightly curved, pointed, the right with a small tooth at the middle of the inner margin, both furnished internally with a ciliated membrane. Maxillary palpi 4-jointed, the 1st joint small, the 2nd narrow at the base, enlarged gradually towards the apex, the 3rd elongate, oval, longer than the 2nd, the 4th subulate, half as long as the 3rd. Inner lobe of maxilla corneous, rather narrow, the inner margin anteriorly with 7 or 8 rather short and stout pectinations, posteriorly ciliate; outer lobe membranous, the apex shortly ciliate. Tongue narrow and elongate, a little widened anteriorly and split nearly to the middle. Paraglossae distinct, ciliate. Labial palpi 2-jointed, the 1st joint elongate, slightly curved, cylindrical, longer than the tongue, the 2nd about half the length of the 1st, as wide at the base as the apex of the preceding and separated from it by an oblique suture, the apex slightly enlarged and rounded. Gular sutures widely separated, slightly divergent posteriorly. Temples bordered below. Prosternum feebly and obtusely angulate behind; mesosternal process bluntly pointed extending fully two-thirds of the length of the coxae, which are narrowly separated; metasternal process meeting the mesosternum, the apex rounded. Tarsal formula 4, 5, 5; anterior pair with the first three joints short and equal, the 4th longer than the preceding together; middle pair with the first four joints short and equal, the 5th as long as the preceding together; the posterior pair with the first four joints short and subequal, the 5th as long as the three preceding together. Elytra slightly sinuate internal to the postero-external angles.

The species on which this genus is founded has a facies somewhat resembling *Atheta canescens* Shp.

129. Exatheta cingulata, n. sp.

Rufous, rather shining, the head pitchy-red, the clytra black obscurely reddish at the shoulders; abdomen with the sixth segment a little infuscate; first three joints of the antennae, mouthparts and legs reddish-testaccous. Length 1.1 mm.

Head transversely suborbicular, pitchy-red, the eyes large, their diameter greater than the length of the temples, moderately prominent. the disc exceedingly finely and moderately closely punctured. pubescence very fine and scanty. Antennae with the 1st and 2nd joints of equal length, the 3rd much shorter than the 2nd, the 4th small, transverse, the 5th to the 10th strongly transverse gradually increasing in breadth, the penultimate fully three times as broad as long, the 11th short conical. Thorax more than a third as broad again as long, widest just before the base, the sides slightly rounded and contracted anteriorly, bordered, the posterior angles obtuse, scarcely traceable, the base bordered; exceedingly finely (but more distinctly) punctured than the head, very finely and sparingly pubescent, in front of the base with a transverse row of rather obsolete larger punctures. Elytra a little longer and broader than the thorax, transverse, sinuate internal to the postero-external angles, finely, somewhat asperately and pretty closely punctured and finely pubescent. Abdomen but little narrowed behind, very finely and sparingly punctured and pubescent, the seventh and eighth segments almost glabrous. Tibiae without distinct setae.

Hab. Sembawang, in rotting fungus.

130. Exatheta consors, n. sp.

So similar to the preceding that enumeration of the points of difference should suffice. In build this species is a little more robust and somewhat larger $(1\cdot1-1\cdot5 \text{ mm.})$, the thorax one-half as broad again as long, the antennae are a little longer but similarly formed, the puncturation of the head and thorax (especially the latter) is much more distinct and somewhat asperate, and a fine coriaceous ground-sculpture is also visible (which is absent in the preceding species); a transverse impression before the scutellum is sometimes present and the elytra are rather less finely punctured.

Hab. Sembawang, one specimen in rotting fungus and another in rotting fruit.

MIMATHETA, n. gen.

Labrum corneous, transverse, feebly emarginate, the sides and anterior angles rounded. Mandibles moderate, lightly curved, pointed, the right with a distinct tooth at the middle of the inner margin. Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate, lightly dilated towards the apex, the 3rd scarcely longer than the 2nd, gradually and slightly thickened distally, the 4th subulate, half as long as the preceding. Inner lobe of the maxilla narrow, corneous, uncinate at apex, the inner margin strongly pectinate, the teeth rather short and stout; outer lobe membranous, ciliate-plumose at the apex. Tongue not so long as the Ist joint of the labial palpi, split nearly to the base into two narrow diverging lobes. Labial palpi 2-jointed, the 1st joint elongate, slightly curved and feebly constricted at the inner margin beyond the middle; 2nd joint narrower at the base, slightly enlarged towards the apex and rather more than half as long as the preceding. Gular sutures widely separated, slight divergent posteriorly. Temples bordered below. Mesosternal process gradually pointed, the apex rounded, extending for two-thirds of the length of the intermediate coxae which are moderately separated; metasternal process pointed gradually, the apex rounded, reaching the mesosternum. Tarsal formula 4, 5, 5. The anterior pair with the first three joints short and subequal, the last longer than the three preceding together; the middle pair with the 1st joint short, the 2nd and 3rd longer and subequal, the 4th a little longer than the 3rd, the 5th longer than the two preceding together; posterior pair with the 1st joint a little shorter than the 2nd, the 2nd, 3rd and 4th moderately elongate and subequal, the 5th scarcely as long as the two preceding together. All the claws simple, the empodium forming a spine. Middle tibiae with a distinct seta at the middle externally. Elytra scarcely sinuate.

The facies of the species on which this genus is founded is that of the *Atheta trinotata* group.

131. Mimatheta fungicola, n. sp.

Black, moderately shining. Elytra obscure testaceous, more or less infuscate at the sides. First three joints of the antennae, mouth-parts and legs testaceous. Length 2 mm.

Head very finely and sparingly punctured and pubescent, the eyes rather large but not prominent. Antennae with the 2nd and 3rd joints subequal, shorter than the 1st, the 4th small, transverse, the 5th and 6th longer than broad, the 7th as long as broad, the

268 Dr. Malcolm Cameron on

8th to the 10th transverse, the penultimate fully half as broad again as long, the 11th elongate, pointed longer than the two preceding together. Thorax transverse, widest behind the anterior angles, the sides rounded and narrowed anteriorly, more strongly contracted posteriorly to the obtuse posterior angles, finely bordered, very finely and moderately closely punctured and pubescent. Elytra a little longer and broader than the thorax, transverse, very finely and moderately closely punctured and pubescent. Abdomen nearly parallel, very slightly narrowed posteriorly, very finely and rather sparingly punctured and pubescent, the seventh segment almost impunctate. Sexual differences unknown.

Hab. Mandai, in fungus.

MIMACROTONA, n. gen.

Labrum corneous, transverse, truncate, the anterior angles rounded. Mandibles rather short and stout, curved, pointed, the right with a small tooth at the middle of the inner margin which in front is obscurely crenulate. Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate, slightly thickened distally, the 3rd as long as, but a little stouter than the 2nd, the 4th subulate not half the length of the 3rd. Inner lobe of the maxilla rather broad, the apex pointed, the inner margin furnished with moderately long and rather stout pectinations; outer lobe with apex spinose. Tongue rather short and broad, not extending to the level of the apex of the 1st joint of the labial palpi, split to the middle into two diverging teat-shaped lobes. Paraglossae distinct, ciliate, not extending much beyond the base of the 1st joint of the labial palpi. Labial palpi 2-jointed, the 1st joint rather stout, moderately long, the 2nd much narrower and a little shorter than the 1st, the apex rounded. Gular sutures distant, divergent posteriorly. Temples bordered below. Prosternum obtusely angled posteriorly, keeled; mesosternal process narrow, sharply pointed extending fully two-thirds the length of the coxae, which are narrowly separated; metasternal process pointed, reaching to the mesosternal. Tarsal formula 4, 5, 5; the anterior pair with the first three joints short and subequal, the 4th longer than the three preceding together; middle pair with the first four joints short and subequal, but longer than those of the front pair, the 5th as long as the three preceding together; posterior pair with the 1st joint a little longer than the 2nd, the 2nd, 3rd and 4th gradually decreasing in length, the 5th a little longer than the two preceding together. Middle and posterior tibiac without distinct setae. Elytra sinuate. Facies of Acrotona.

132. Mimacrotona cingulata, n. sp.

Rufo-testaccous, moderately shining, the head, fifth, sixth and base of the seventh abdominal segments blackish, the elytra more or less infuscate; first three joints of the antennae, mouth-parts and legs testaceous. Length 1.2 mm.

Facies of a minute A. fungi Grav. Head black or pitchy-black, suborbicular, very finely and rather closely punctured, finely pubescent. Antennae rather short, the 2nd and 3rd joints of equal length, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate fully two and a half times broader than long, the 11th rather short and stout. Thorax bright reddishtestaceous, nearly half as broad again as long, the sides lightly rounded and narrowed more strongly in front than behind, the posterior angles rounded, very finely and pretty closely punctured, finely pubescent. Elytra a little longer and broader than the thorax, transverse, the posterior margin sinuate internal to the postero-external angle; puncturation and pubescence similar to that of the thorax. Abdomen narrowed behind, finely and pretty closely punctured and pubescent anteriorly, more sparingly behind; lateral and apical setae weak. Intermediate and posterior tibiae without setae.

Hab. Bukit Panjang and Woodlands, in fungus.

PARATHETA, n. gen.

Mandibles rather stout, curved, pointed, both furnished with a ciliate membrane internally; the right crenulate for the apical half of the inner margin. Maxillary palpi 4-jointed, the 1st joint small, the 2nd lightly curved and widened towards the apex, the 3rd a little longer than the 2nd, narrow at the base, gradually thickened towards apex, the 4th subulate, about half as long as the 3rd, distinctly constricted and narrowed before the apex (? accessory joint). Inner lobe of the maxilla narrow and pointed, corneous, the inner border with long and strong pectinations; outer lobe broader than the inner, ciliate at the apex. Tongue broad, scarcely longer than its breadth at the base, split to the middle into two teat-shaped lobes. Labial palpi obscurely 3-jointed, the 1st joint twice as long as broad, the 2nd as long as the 1st but narrower and obscurely separated from it by indistinct oblique suture, the 3rd almost as long as, but narrower than the 2nd, the apex rounded. Gular sutures distant, very slightly diverging behind. Temples bordered below. Prosternum truncate behind. Mesosternal pro-

270 Dr. Malcolm Cameron on

cess rather broad, truncate posteriorly, keeled longitudinally in the middle, extending the whole length of the intermediate coxae which are rather widely separated. Metasternum truncate in front, reaching the mesosternum. Elytra sinuate internal to the postero-external angles. Tarsal formula 4, 5, 5; the anterior tarsi with the first three joints short and subequal, the 4th as long as the three preceding together; the middle with the first four joints short and subequal, but longer than those of the anterior pair, the 5th as long as the three preceding together; the posterior with the first four joints rather short, subequal, the 5th as long as the two preceding together. All the tibiae spinulose. Abdomen with the third, fourth and fifth dorsal segments transversely impressed at the base; the sides without setae.

The facies of the species on which this genus is founded is very similar to that of the fungi group of *Atheta*.

133. Paratheta carnivora, n. sp.

Black, rather shining; the elytra castaneous-brown; first three joints of the antennae and legs reddish-testaceous. Length 2 mm.

A rather narrow, fusiform species. Head suborbicular, the eyes moderate, not prominent, their diameter less than the length of the temples; puncturation fine, rather sparing, the front impunctate, pubescence scanty. Antennae with the 1st joint a little shorter than the 2nd, the 2nd and 3rd of equal length, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate almost two and a half times broader than long, the 11th conical, as long as the two preceding together. Thorax more than one-third broader than long, the sides evenly rounded, rather more narrowed in front than behind, the posterior angles rounded, finely, somewhat obsoletely and not very closely punctured, pubescence fine, rather stiff and sparing. Elytra as long as, but a little broader than the thorax, transverse, sculpture moderately fine, not very close and distinctly granular, the pubescence as on the thorax. Abdomen narrowed behind, the third to the fifth segments very finely and not very closely punctured, with at the bases a transverse row of rather larger and closer punctures, sixth to eighth segments gradually yet more finely punctured; pubescence sparing, fine and stiff.

Hab. Woodlands, in a small carcase.

FENYESIA, n. gen.

Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate, slightly curved and a little thickened towards the apex, 3rd elongate, as long as but at the extremity broader than the 2nd, the 4th small subulate. The tongue moderately broad, bifid to the middle into two teat-shaped lobes. Paraglossae distinct ciliate, not extending beyond the tongue. Labial palpi 3-jointed, 1st joint rather short and stout, obliquely truncate at apex, the 2nd about as long as, but narrower than the 1st and indistinctly separated therefrom, the 3rd longer and narrower than the 2nd, cylindrical. Inner lobe of the maxilla narrow, pectinate internally; outer lobe broader, ciliate-plumose at apex. Mandibles rather stout, curved, the right with a tooth on the inner margin and crenulate between this and the apex, both with a ciliate membrane. Gular sutures divergent posteriorly. Temples bordered below. Prosternum obtusely emarginate posteriorly; mesosternal process narrow and pointed, the intermediate coxae very narrowly separated. Tibiae ciliate; tarsi slender, pointed, formula 4, 5, 5; the 1st pair with the first three joints short, equal, the 4th as long as the three preceding together; the 2nd pair with the first four joints moderately elongate, equal, the 5th nearly as long as the three preceding together; the 3rd pair with the 1st joint elongate, nearly as long as the last, twice the length of the 2nd, 2nd, 3rd, and 4th of equal length. Elytra not sinuate at the postero-external angle, the epipleurae complete. Thorax broader than the elytra, the posterior angles produced, the base bordered and bisinuate.

134. Fenyesia nigra, n. sp.

Black, shining, robust, convex; last two joints of the antennae and legs testaceous, the femora infuscate. Length 2 mm.

A broad robust little species with strongly transverse thorax (which is broader than the elytra) and somewhat pointed abdomen. Head large transverse concealed in the thorax nearly to the eves which are moderate in size and not prominent; puncturation very fine, moderately close, finely pubescent. Antennae slender, pitchy, the last two joints testaccous, the 2nd and 3rd joints of equal length, the 4th to the 7th longer than broad, gradually decreasing in length. the 8th to the 10th as long as broad, the 11th rather large, oblongoval, about as long as the two preceding together. Thorax strongly transverse, more than twice as broad as long, widest just behind the middle, the sides evenly rounded and contracted anteriorly, but less strongly posteriorly, posterior angles acute and produced, the base bordered and deeply bisinuate, very finely, uniformly and rather closely punctured, pubescence fine and ashy. Elytra as long as, but narrower than the thorax, transverse, puncturation and pubescence as on the thorax but rather coarser. Abdomen narrowed

Dr. Malcolm Cameron on

posteriorly very finely and moderately closely punctured and public publ

Hab. Woodlands, in rotten logs with Termites.

MYRMEDONOTA, n. gen.

Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate. scarcely thickened towards the apex, the 3rd as long as the preceding, slightly widened towards the extremity, the 4th subulate, fully half as long as the 3rd. Tongue short and broad, the anterior border obtusely emarginate, the sides rounded. Labial palpi 3-jointed, the 1st joint rather short and stout, the 2nd shorter and narrower, the 3rd narrower and longer than the preceding. Inner lobe of the maxilla narrow and elongate, the inner border anteriorly feebly and sparingly pectinate, posteriorly ciliate; outer lobe longer than the inner, densely ciliate. Mandibles simple. Gular sutures parallel in front, divergent behind. Temples strongly bordered below. Neck rather narrow. Prosternum broadly rounded behind. Mesosternum short, truncate posteriorly extending but little between the middle coxae which are widely separated. Metasternal process produced, gradually narrowed to the apex which is rounded and does not reach the mesosternum. Tarsal formula 4, 5, 5; the anterior with the 1st joint short, the 2nd a little longer, equal to the 3rd, the 4th as long as the two preceding together; the middle with the 1st joint moderately long, the 2nd, 3rd and 4th gradually decreasing in length, the 5th as long as the two preceding together, longer than the 1st, the posterior with the 1st joint very little longer than the 2nd, the 2nd, 3rd and 4th gradually decreasing in length, the 5th shorter than the two preceding together, scarcely as long as the 1st. Abdomen with the lateral margins not abnormally elevated, nearly parallel, a little narrowed at the apex. Tibiae ciliate.

This genus is related to *Orphnebius* Motsch., and *Myrmedonia* Er.; it differs from the former in the parallel-sided abdomen, the sides of which are not abnormally elevated, and the strongly bordered temples.

135. Myrmedonota cingulata, n. sp.

Black or pitchy-black, shining; the first two visible abdominal segments testaceous-yellow; first two joints of the antennae and the legs testaceous, the apices of the femora and the tibiae pitchy. Length 3 mm.

Head large, transverse, nearly as wide as the thorax, eyes large

and somewhat prominent, the temples strongly narrowed behind: puncturation very fine and very sparing, each puncture with a stiff hair. Antennae with the 2nd joint shorter than the 3rd, the 4th to the 10th transverse, gradually increasing in width, the 11th conical, longer than the two preceding together. Thorax transverse, nearly a third broader than long, widest just before the middle, the sides bordered, evenly rounded and contracted anteriorly and more strongly posteriorly, posterior angles completely effaced, the sides passing insensibly into the base, which is similarly bordered; very finely and sparingly punctured, each puncture with a stiff hair; the anterior border on either side with a long seta, the sides each with three others. Scutellum triangular, the base very finely punctured, the apex impunctate. Elytra a little longer and wider than the thorax, transverse, with puncturation and pubescence as on the thorax, the sides with two setae. Abdomen with the anterior segments testaceous-vellow, the fifth to the eighth black; the sides setiferous.

3. Abdomen glabrous and impunctate except for a very few setiferous punctures along the posterior margins of the fifth and sixth segments and a few similar ones towards the sides of the seventh and eighth segments; no visible ground-sculpture. Eighth abdominal segment feebly and broadly emarginate posteriorly and obscurely denticulate.

Q. Abdomen with a double row of setiferous punctures few in number, placed transversely on each segment, one row across the middle, the other along the posterior border; ground-sculpture fine and coriaccous. Eighth abdominal segment truncate posteriorly.

Hab. Sembawang, in logs associated with a species of Ant.

136. Myrmedonia apicalis, n. sp.

Black, shining, the base of the elytra rufescent, the second to the fifth dorsal segments of the abdomen bright testaceous-red. The first two joints of the antennae, mouth-parts and legs, testaceous. Length 3.8 mm.

In general appearance this species resembles to some extent the insects included under Zyras, s. str., and in view of the group being polymorphic and requiring considerable elucidation before a satisfactory arrangement can be arrived at, it is provisionally placed therein. Head transversely quadrate, the temples a little rounded and contracted posteriorly, the eyes moderate and not prominent, sculpture consisting of a very few scattered setiferous punctures,

TRANS. ENT. SOC. LOND. 1920.—PARTS I, II. (JULY) T

Dr. Malcolm Cameron on

otherwise glabrous. Antennae with the 2nd and 3rd joints of equal length, the 4th and 5th a little longer than broad, the 6th square, the 7th to the 10th transverse, gradually but very slightly increasing in breadth, the 11th oblong, rounded at the apex, longer than the two preceding together. Thorax a little transverse, widest just before the middle, the sides from thence rounded and narrowed anteriorly, more strongly contracted and slightly sinuate behind to the obtuse posterior angles; base and sides bordered, the former with a fovea in front of the scutellum; sculpture consisting of a few scattered setiferous punctures. Scutellum triangular, rather coarsely closely and deeply punctured. Elytra wider than and scarcely as long as the thorax, transverse, puncturation rather fine and by no means close, setiferous. Abdomen with the anterior segments bright testaceous-red, the sixth to the eighth black, shining glabrous and except for a transverse row of punctures at the bases of the anterior segments, impunctate.

Hab. At light, in the town. A single example.

ALEOCHARINI.

Myrmedonella, n. gen.

Maxillary palpi 4-jointed, the 1st joint short, the 2nd rather short and stout, slightly curved, the 3rd elongate, oval, longer than the 2nd, the 4th short, subulate. Tongue moderately long, bifid at the apex into two diverging lobes. Labial palpi 2-jointed, the 1st joint elongate, cylindrical, lightly curved, the 2nd much shorter and narrower than the 1st, cylindrical. Prosternum broadly truncate posteriorly: mesosternum narrowed and truncate at apex extending for about one-half the length of the intermediate coxae, which are distant; metasternal process short and broad, not quite attaining the mesosternal process. Tarsal formula 5, 5, 5. The anterior pair with the 1st joint short, the 2nd a little longer, the 3rd still longer, the 4th as long as the 3rd, the 5th as long as the two preceding together. Middle pair with the first three joints of equal length, the 4th a little longer than the 3rd, the 5th as long as the two preceding together. Posterior pair with the first four joints subequal, moderately long, the 5th a little longer than the two preceding together. Tibiae ciliate. Elytra slightly sinuate internal to the postero-external angle. Abdomen with the third to the fifth segments transversely impressed at the bases.

The facies of the species on which this genus is founded somewhat resembles *Hoplandria* Kr. The entire insect is covered with long sparing pubescence, intermixed with longer setae.

137. Myrmedonella rufa, n. sp.

Bright rufo-testaceous, shining, the clytra pitchy-red. Antennae, mouth-parts and legs reddish-testaceous. Length 1.8 mm.

Head large, transverse, the temples rounded, convergent and passing insensibly into the base; the eyes rather large and moderately prominent; puncturation very fine and sparing, pubescence sparing, long, crect. Antennae with long outstanding hairs, the 1st joint stout, the 2nd and 3rd of equal length, shorter than the 1st, the 4th a little longer than broad, the 5th and 6th as long as broad, the 7th to the 10th transverse, gradually increasing in breadth, the penultimate joints only slightly transverse, the 11th elongate pointed, as long as the three preceding together. Thorax onehalf as broad again as long, widest just behind the anterior angles, the sides margined, lightly rounded and more contracted posteriorly, the posterior angles obtuse, the base slightly bisinuate, margined; puncturation very fine, obsolete and sparing; pubescence yellow, erect, rather long and scanty, intermixed with longer setae. Elytra as long as, but broader than the thorax, transverse. more obscurely coloured than the rest of the insect. puncturation very fine (but much more distinct than that of the thorax), sparing, pubescence and setae as on the thorax. Abdomen with the sides lightly curved, not much narrower at the apex than at the base, very finely and very sparingly punctured, pubescence erect, scanty and long.

Hab. Bukit Timah, associated with a species of Ant.

PARALEOCHARA, n. gen.

Labrum transverse, the anterior margin truncate, the anterior angles rounded. Mandibles moderately long and stout, rather prominent, lightly curved and pointed at the apex, simple.

Maxillary palpi 5-jointed, the 1st joint small, the 2nd elongate, lightly curved and widened towards the apex, the 3rd a little longer than the 2nd, gradually widened towards the apex, the 4th small, subulate, about half as long as the preceding, the 5th very small, a little narrower than the 4th. Inner lobe of the maxilla narrow, slightly curved and pointed at the apex, the inner margin densely set with moderately long and rather fine pectinations; outer lobe oblong, lightly curved, densely ciliate at the anterior border.

Dr. Malcolm Cameron on

Tongue moderately broad and moderately long, extending to the level of the apex of the 1st joint of the labial palpi and split to the middle into two narrow lobes. Labial palpi 4-jointed, the 1st joint stout, moderately long, the 2nd about as long but not quite so stout as the 1st, the 3rd shorter and narrower than the 2nd, the 4th narrower and shorter than the 3rd. Gular sutures narrowly separated and parallel in front, diverging gradually posteriorly. Temples strongly bordered below. First joint of antennae sulcate for nearly one-third its length above. Prosternum broadly rounded behind. Mesosternal process very short, extending but a little distance between the coxae, broad and truncate posteriorly; metasternal process produced, meeting the mesosternal process, broad and truncate anteriorly, its sides and apex finely bordered. Intermediate coxae distant. Tarsal formula 5, 5, 5. The anterior pair with the first four joints short and subequal, the 5th about as long as the three preceding together, claws simple, the pulvinus with a rather long spine. The middle pair with the first four joints short and subequal (but longer than those of the anterior pair), the 5th elongate, about as long as the three preceding together. The posterior pair with the joints elongate, the 1st longer than the following which gradually decrease in length. Elytra not sinuate. Third and fourth dorsal segments of the abdomen transversely impressed at the base.

The facies of the species on which this genus is founded is very similar to *Amarochara*.

138. Paraleochara fungivora, n. sp.

Shining castaneous, the elytra pitchy-black; abdomen reddishtestaceous, the sixth and seventh segments black. First three joints of the antennae, mouth-parts and legs testaceous. Length 2.9 mm.

Head orbicular, but produced in front, the mandibles prominent; eyes moderate, not prominent; puncturation very fine and very sparing, pubescence sparing, stiff and coarse. Antennae stout, the 1st joint laterally compressed, the apical third of the upper border sulcate, the 3rd a little shorter than the 2nd, the 4th to the 10th transverse, gradually increasing in breadth, the penultimate nearly three times as broad as long, the 11th short, oval. Thorax transverse, one-fifth as broad again as long, widest at the middle, the sides rounded and contracted anteriorly, more strongly contracted posteriorly in a nearly straight line to the rounded posterior angles; puncturation fine, very sparing, pubescence coarse, stiff and sparing; the sides and base finely bordered. Elytra blackish, scarcely as long as but a little broader than the thorax, transverse, very obsoletely and sparingly punctured, pubescence scanty, stiff and sparing. Abdomen parallel, the third, fifth and sixth segments with a few fine punctures, the rest nearly impunctate, pubescence very sparing and stiff.

 \mathcal{E} (?). Eighth dorsal segment narrowed, emarginate posteriorly.

Hab. Sembawang, in rotting fungus.

139. Hoplandria frugivora, n. sp.

Pitchy-brown, shining, lightly convex, attenuated posteriorly; the elytra darker, the base of the abdomen lighter; the first three and apex of the last joint of the antennae, infuscate, the first four joints and legs testaceous. Length 2.8 mm.

Head transversely orbicular, the eyes large, moderately prominent; exceedingly finely and exceedingly sparingly punctured and pubescent. Antennae with the 2nd joint a little shorter and narrower than the 1st, the 3rd a little shorter than the 2nd, the 4th a little longer than broad, the 5th to the 10th transverse, the penultimate twice as broad as long, the 11th stout, oval, pointed longer than the two preceding together. Mouth-parts testaceous, the 3rd joint of the maxillary palpi more or less infuscate. Thorax transverse, more than half as broad again as long, convex, broadest at the middle, the sides bordered, rounded and narrowed anteriorly and posteriorly, but rather more strongly in front, the posterior angles rounded, the base bordered, lightly sinuate on either side: puncturation and pubescence exceedingly fine and sparing, the disc with four larger punctures quadrately, placed, but not always distinct; each side with two or three short setae. Elytra as long as and scarcely broader than the thorax, transverse, moderately finely and moderately closely asperately punctured; finely pubescent, the shoulders with a seta. Abdomen gradually pointed posteriorly, shining, exceedingly finely and exceedingly sparingly punctured. the sides and apex setiferous.

 \eth . Elytra with a small tubercle near the suture at the posterointernal angle; seventh abdominal segment with a longitudinal keel in the middle line and on either side with indications of three or four fine raised lines; eighth dorsal segment broadly emarginate posteriorly.

Hab. Mandai and Sembawang, in rotting fruit, and fungus.

Dr. Malcolm Cameron on

ADDITIONS.

2 (a). Lispinus sharpi, n. sp.

Pitchy-black, shining. Antennae, legs and apex of the abdomen rufo-testaceous. Head, thorax and clytra distinctly punctured, ground-sculpture very obsolete. Length 2.5 mm.

Of the size and build of L. impressicollis Kr., but darker coloured, much more shining, less depressed, with much more distinct puncturation, and much less distinct ground-sculpture, lateral impressions of the thorax much less marked and the median impressions scarcely visible. Head with rounded impression on either side of the front, puncturation moderately fine and not very close, ground-sculpture scarcely visible. Antennae with the 3rd joint shorter than the 2nd, the 4th as long as the preceding, the 5th as long as broad, the 6th larger than the 5th, slightly transverse, 7th, 8th and 9th transverse, 10th as long as broad, 11th conical. Thorax more than one-third broader again than long, widest just before the middle, the sides slightly rounded and gradually narrowed anteriorly, contracted for the posterior third in a nearly straight line to the obtuse posterior angles, before which on either side is a narrow, elongate, not very well-marked impression before which is a rather large puncture; disc very obsoletely impressed on either side of the middle line before the base; puncturation moderately fine, much closer on the disc and more scattered towards the sides: ground-sculpture very indistinct. Elytra more than a third as long again as the thorax, longer than broad, rather more finely and distinctly less closely punctured than the disc of the thorax, ground-sculpture obsolete. Abdomen almost impunctate, distinctly coriaceous.

Hab. Mandai, under bark.

16 (a). Pinophilus orientalis, n. sp.

Black, moderately shining, the head with rather large and moderately close umbilicate puncturation, a triangular space on the front smooth and shining; thorax and elytra closely punctured. Antennae with the first two joints stout, fusco-testaceous, the rest very slender, testaceous; legs testaceous, the apex of the femora infuscate. Length 5.75–6.5 mm.

This species would appear to be closely allied to *P. thoracicus* Fauv., from the description given, but differing in the smaller size and the entirely black elytra. Head more shining than the other parts, the temples not dentiform and scarcely perceptible; the sculpture consisting of large and only moderately close umbilicate

punctures, the antennal tubercles and a triangular space whose base corresponds to the anterior margin completely smooth and shining. Antennae with the first two joints stout, fusco-testaceous, the rest very slender, all longer than broad and pale testaceous. Thorax a little wider than the head, transverse, widest at the junction of the 1st and 2nd fourths, the sides gradually rounded both anteriorly and posteriorly, but more strongly posteriorly and passing insensibly into the base; disc with a short, raised, shining keel before the scutellum and slightly impressed on either side of this; puncturation less coarse, but much closer than that of the head, scarcely umbilicate. Scutellum with five or six moderately large punctures. Elytra a little narrower, but about as long as the thorax, scarcely transverse, the puncturation of about the density and size of that on the thorax but somewhat rugulose; pubescence grev, rather long and sparing. Abdomen moderately finely and moderately closely punctured on the first three segments, rather more sparingly behind; pubescence long and grey.

 \mathcal{Z} . Sixth ventral segment with a moderately broad triangular excision.

Hab. Woodlands, in old logs.

On page 70 of these Transactions for 1918, a species named *Pinophilus notabilis* is described; further examination of this insect shows that a new genus must be formed for it, as although evidently closely allied to *Pinophilus*, it differs in certain details of structure.

NEOPINOPHILUS, n. gen.

Labrum transverse, the anterior margin broadly rounded with a deep moderately broad excision in the middle. Mandibles long, slender, curved, near the base of each furnished with a sharp tooth. Maxillary palpi 4-jointed, the 1st joint small, obconical, the 2nd elongate, slightly thickened towards the apex, the 3rd shorter than the 2nd, narrower at the base, widened towards the apex, subtriangular, the 4th fusiform, almost securiform, its outer aspect deeply sulcate throughout its length, longer than the 3rd. Inner lobe of the maxilla broad, truncate, the apical border densely but rather shortly ciliate; outer lobe membranous, narrower than the inner and a little longer, the apex and outer border densely covered with long cilia. The tongue broad, very similar to that of *Palaminus*, but completely bilobed, the broadly rounded antero-internal aspect of each lobe densely ciliate. Paraglossae prominent, not extending

Dr. Malcolm Cameron on

280

beyond the lateral border of the tongue, shortly and closely ciliate. Labial palpi 3-jointed, the 1st joint rather stout, about twice as long as broad; the 2nd longer and much stouter than the 1st, oviform, furnished externally near the apex with two long and strong cilia; the 3rd a little shorter and much narrower than the 2nd. narrowed towards the apex which is truncate. Labium widest behind, deeply bisinuate in front. Mentum short and broad. Gular sutures separate, parallel. Temples strongly bordered below. Prosternal process carinate, acuminate; mesosternal process short, acuminate, extending but little between the intermediate coxae, which are contiguous in front; metasternal process acuminate, not reaching the mesosternal process. Anterior femora much thickened, all the tibiae setiferous. Tarsal formula 5, 5, 5. Anterior tarsi much dilated, the 1st joint triangular, transverse; the 2nd broader than the 1st; the 3rd broader than the preceding, the distal border emarginate; the 4th obcordate; the 5th elongate, claws simple; the first four joints each furnished below with a still broader membrane the margins of which are ciliate; middle pair with the 1st joint moderately long, the 2nd subtriangular, the 3rd nearly semicircular, the 4th lamelliform extending below the 5th (which is articulated to the dorsal surface near the base) for a short distance; posterior pair similarly constructed to the preceding. Posterior tibiae obliquely truncate before the apex, closely ciliate. Elytral epipleurae complete. Abdomen keeled at the base below.

The species on which this genus is founded has the facies of *Pinophilus*, but the labrum is bilobed and the last joint of the maxillary palpi is securiform. Type, *Pinophilus notabilis*, Trans. Ent. Soc. 1918, p. 70.

18 (a). Palaminus bryanti, n. sp.

Testaccous, shining, abdomen reddish-brown; elytra nearly half as long again as the thorax. Antennae and legs pale testaceousyellow. Length 3.4 mm.

Size and coloration of *P. ceylanensis* Kr., but the antennae are more slender, the penultimate joints being longer, the thorax is less transverse and the sides posteriorly straighter, the posterior angles obtuse, the elytra are shorter and their puncturation less close. Head transverse, the temples dentiform, the puncturation coarse and pretty close, pubescence, stiff, yellow and sparing. Antennae with the first three joints equal in length, the 4th to the 10th longer than broad, gradually decreasing in length, the 11th long, oval, pointed, as long as the two preceding together. Thorax a little narrower than the head, slightly transverse, widest at the rounded anterior angles, the sides almost straight and convergent from thence to the obtuse posterior angles; posterior half of the disc in the middle line with smooth raised line, puncturation coarse, umbilicate, sparing; pubescence coarse, stiff and scanty. Elytra wider than, and nearly half as long again as the thorax, puncturation rather coarse but more obsolete and closer than that of the thorax, pubescence long, stiff and yellow. Abdomen with imbricate sculpture of the first four visible segments, the following with a few asperate punctures; pubescence as on the fore-parts.

Hab. Bukit Timah. Collected by G. E. Bryant.

19 (a). Astenus castaneus, n. sp.

Rufo-castaneous, shining; antennae slender, pale testaceous; legs pale testaceous. Length 4.3-5.5 mm.

In size and build very similar to A. filum Aubé, except that the head is larger and more orbicular and the antennae much longer and more slender. Head large, the temples broadly rounded passing insensibly into the base, sculpture close and umbilicate. Antennae with all the joints much longer than broad, the 2nd joint shorter than the 1st, the 3rd longer than the 2nd, the 4th to the 11th differing but little if at all in length and thickness. Thorax narrower than the head, subpentagonal, the anterior angles distinct, onefifth as long again as broad, the sides with 6 or 7 long setae. Sculpture similar to that of the head. Elytra scarcely wider than the thorax at the anterior angles and of the same length, more shining than the fore-parts and rather lighter in colour, puncturation very coarse and close. Abdomen elongate, the first four visible segments rather coarsely punctured in transverse rows, the fifth and sixth much more finely and irregularly punctured; pubescence long and stiff. Anal styles elongate, lightly curved downwards.

 ς . Sixth ventral segment produced, narrowed, the sides sinuate, the posterior border with a deep and moderately broad excision the sides of which are parallel and the apex rounded; fifth ventral segment with a small feeble emargination at the middle of the posterior border, in front and corresponding to this is a horseshoeshaped impression, studded with a few black granules.

Hab. Bukit Panjang, in débris.

22 (a). Medon (s. str.) orientalis, n. sp.

Pitchy-red, nearly opaque, the elytra and abdomen rather more shining, the former with the postero-external angles and often with

282 Dr. Malcolm Cameron on

more or less of the posterior half, infuscate. Antennae, mouthparts and legs reddish-testaceous. Length 3 mm.

Allied to M. opacellus Fauv., but smaller and narrower, the antennae more slender, the vertex of the head a little shining, the sculpture consisting of close simple punctures not at all rugulose on the disc, but only granular at the base and temples. Head large, transversely quadrate, the posterior angles rounded, the base feebly emarginate; the eves moderate; sculpture on the disc consisting of moderately large close punctures, at the sides, base and temples of small granules. Antennae slender, the 2nd joint a little shorter than the 3rd, the 4th to the 6th all a little longer than broad, gradually decreasing in length, the 7th to the 10th about as long as broad. Thorax scarcely broader than long, the sides narrowed from the apex to the base and setose; sculpture consisting of a fine close granulation, the disc with a trace of a smooth median line. Elytra longer and a little broader than the thorax, longer than broad, with a close (but not so close as on the thorax) granular sculpture; pubescence fine and yellow. Abdomen closely and finely punctured throughout; pubescence close, yellow.

 \mathcal{J} . Seventh ventral segment with a deep emargination; sixth ventral segment with a broad, but not deep emargination.

Hab. Mandai, in débris.

26 (a). Medon (Charichirus) terminalis, n. sp.

Black, opaque (greasy lustre only), the posterior third of the elytra dull reddish. Antennae black, the last three or four joints reddish-testaceous; legs pitchy. Length 5.5 mm.

Exactly similar in build and puncturation to *C. chinensis* Boh., but at once distinguished by the dark antennae, the infuscate legs, the more obscure coloration of the clytra and the blacker abdomen.

Hab. Keppel Harbour, in débris.

On page 85 (Trans. Ent. Soc. 1918) of the first part of this paper, two species referred to the genus *Holisus* were described, but further investigation into their structure shows that although possessing a remarkable resemblance to this genus, yet the structure of the mouth-parts and tarsi is so different that it is necessary to form a new genus for their reception, which would appear to form a transition between the Bolitocharini and the Staphylinini, the genus *Thectura* probably being the closest relation in the former group.

New Species of Staphylinidae from Singapore. 283

Holisomimus, n. gen.

Antennae distant, situated on the front margin of the head, just external to the level of the inner margin of the mandibles. Eves small and flat. Mandibles long, stout, prominent, the right pointed at the apex and with a tooth at the middle of the inner margin, the left thickened at the apex, which is excavated internally. Maxillary palpi 4-jointed, the 1st joint small, the 2nd elongate, lightly curved and slightly thickened towards the apex, the 3rd a little longer than the 2nd, the 4th subulate, about half as long as the 3rd. Outer lobe of the maxilla elongate, truncate at the apex, which is ciliate: inner lobe narrower than the outer, uncinate at the apex, strongly pectinate along the inner margin. Tongue broad membranous, gradually narrowed towards the apex, which is divided for a short distance into two bluntly pointed lobes. Labial palpi 2-jointed, the 1st joint elongate, cylindrical, the 2nd narrower and a little shorter than the 1st, the apex rounded. Mentum (pars antica) short, transverse, broadly emarginate in front. Temples not bordered below. Gular sutures coalescing posteriorly. Prosternum large, triangular, obtusely pointed behind. Mesosternal process very short, scarcely extending between the intermediate coxae, which are contiguous. Femora stout. Tarsal formula 4, 4, 5; the anterior and intermediate pairs with the first three joints short and subequal, the 4th rather longer than the three preceding together: the posterior pair with the first four joints short and subequal, the 5th about as long as the three preceding together.

This genus is founded on the species described (loc. cit.) as Holisus parvus and H. cingulatus.

46 (a). Conosoma malayanum, n. sp.

Black, moderately shining, the posterior border of the thorax narrowly, the postero-external angles more broadly rufescent; elytra with small obscure reddish spot in the middle of basal margin. Antennae filiform, the first three and the last joints clear testaceous. Length (extended) $5\cdot3$ mm.

In build identical with C. pubescens Gr., but differs in the coloration, much longer antennae, much shorter elytra and more strongly setose abdomen. Antennae filiform, all the joints longer than broad, the 11th longer than the 10th. Thorax black, very finely and moderately closely punctured and pubescent, the postero-external angles and posterior margin rufescent but not sharply so. Elytra searcely as long as the thorax, transverse, as finely but less closely punctured than in C. pubescens, finely pubescent, the base with a

284 Dr. Malcolm Cameron on Staphylinidae from Singapore.

small ill-determined rounded reddish spot which does not extend to the suture or the lateral margin. Abdomen elongate, strongly pointed, very finely and closely punctured and pubescent throughout, the lateral setae stronger than in *C. pubescens*. Posterior tarsi longer than the tibiae.

Hab. Ang Mo Kio, in rotten timber.

56 (a). Coproporus varians, n. sp.

Black, shining, the extreme lateral margins of the thorax and of the elytra, the posterior margins of the dorsal segments of the abdomen, rufescent. Antennae, mouth-parts and legs reddishtestaceous. Length $2\cdot 2$ mm.

Var. 1. Thorax pitchy-red; elytra posteriorly near the suture more or less rufescent.

Var. 2. Entirely pitchy-red.

A variable species as regards coloration, which is probably related to the degree of maturity. Of about the build of C. minimus Motsch., but considerably larger and rather more convex, with the antennae considerably shorter, the 4th joint being transverse and the penultimate much more transverse than in that species; the clytra, moreover, do not present the fine wrinkling seen in C. minimus. Head black, shining, finely strigose transversely, with a very few, scarcely visible, punctures. Antennae with the 2nd joint shorter than the 1st and 3rd, the 4th to the 10th transverse. gradually increasing in breadth, the penultimate nearly twice as broad as long, the 11th conical. Thorax at the base, twice as broad as long, exceedingly finely and by no means closely punctured and without visible ground-sculpture. Elytra transverse, at the base as wide as, but a little longer than the thorax, narrowed behind, with sculpture similar to that of the thorax. Abdomen exceedingly finely and not very closely punctured, with a fine, short sparing yellow pubescence. Eighth dorsal segment posteriorly divided into four narrow pointed processes.

Hab. Woodlands, under bark.

XI. A Contribution to our knowledge of the Life-history of the Stick Insect, Carausius morosus Br. By George TALBOT, F.E.S.

[Read March 17th, 1920.]

Synopsis.

DAGE

1.	INTRODUCTION		•		•
2.	GENERAL LIFE-HISTORIES AND DESCRIPTION	ons of	f Spe	CIME	NS
	EGG DEVELOPMENT	•		•	
4.	VARIATION IN EGGS	•	•		•
5.	Period of Incubation of the Egg		•		•
6.	PERIOD OF INCUBATION OF TWO OR MORI	s Egg	S DEI	OSITI	ED
	WITHIN TWENTY-FOUR HOURS .		•		•
7.	THE ECDYSES		•		
8.	SUMMARY OF MOULTING PERIODS .	•			•
	Oviposition				
10.	POST-EMBRYONIC DEVELOPMENT AND L	ONGE	/ITY		
11.	RATE OF GROWTH				
	MEASUREMENTS AT MAXIMUM GROWTH				•
13.	CHANGES IN COLORATION		•	· •	•
14.	COLORATION AT THE FINAL STAGE		•		
	SUMMARY	•		· .	4
	THE RECONSTRUCTION OF A LOST LIMB			•	•
17.			HED		
18.	MORTALITY .		•		
	VARIATION AND PARTHENOGENESIS		• •	•	
	INHERITANCE OF VARIABILITY .		•		

1. INTRODUCTION.

THE observations here set forth were made during the years 1910, 1911, and 1912. They were carried out under various difficulties, and are not so thorough nor so extensive as those given to the entomological world by Mr. H. Ling Roth in his exhaustive paper published in these Transactions for 1916, p. 345. My results are not entirely the same, but the conditions under which the insects were reared were different. The most striking difference is seen in the number of moults; in most cases only three were observed and four on only two occasions, never five nor six.

I do not give here any notes on the mode of oviposition, emergence from the egg, and general habits, which differ in no particular from the observations made by Roth.

The specimens were kept in wooden boxes fitted with glass on one side and perforated on another side to admit plenty of air. These were stood on end on small receptacles containing water into which the stem of the food-plant was placed. The insects were fed on privet. [Cont. on p. 293.] TRANS. ENT. SOC. LOND. 1920.—PARTS I, II. (JULY)