

IX. *A List of the Phytophagous Coleoptera obtained by Mr. H. H. SMITH at St. Vincent, Grenada, and the Grenadines, with Descriptions of New Species: Crioceridæ—Galerucidæ.* By MARTIN JACOBY, F.E.S.

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THIS paper forms a continuation of others contributed to these Transactions by Messrs. Gahan and Champion and Professors Forel and Williston on the insects collected by Mr. H. H. Smith in the Islands of St. Vincent, Grenada, and the Grenadines, under the auspices of the West India Exploration Committee of the Royal Society and British Association. The Phytophagous Coleoptera are here dealt with, the families Crioceridæ to Galerucidæ inclusive having been worked out by myself, and the Hispidæ and Cassididæ by Mr. Champion. Of the first-mentioned families forty-six species are enumerated, twenty-one of which are described as new, several others remaining unidentified for want of sufficient material. Amongst the twenty-five known species of these groups six inhabit Central and South America, five South and Central America respectively, four are found in the Southern United States, two in North, South, and Central America, two in North and Central America, and one in the Island of Guadeloupe.

LIST OF THE SPECIES—CRIOCERIDÆ TO GALERUCIDÆ.

<i>Lema dorsalis</i> , Oliv.	<i>Colaspis lebasi</i> , Lefèvre.
„ <i>sharpi</i> , sp. n.	„ <i>fastidiosa</i> , Lefèvre.
„ <i>obscura</i> , Fabr.	„ <i>femoralis</i> , Lefèvre.
„ <i>vittatipennis</i> , Baly.	<i>Rhabdopterus picipes</i> , Oliv.
„ <i>marginata</i> , Oliv.	<i>Myochrous denticollis</i> , Say.
„ <i>insularis</i> , Jac.	<i>Typophorus viridicyaneus</i> ,
<i>Coscinoptera intermedia</i> , sp. n.	Crotch.
<i>Cryptocephalus tricostatus</i> , Jac.	<i>Phædon nigripes</i> , sp. n.
<i>Pachybrachys scabripennis</i> , sp. n.	<i>Lactica tibialis</i> , Oliv.
<i>Nodonota grenadensis</i> , sp. n.	„ <i>lævicollis</i> , sp. n.

LIST OF SPECIES—continued.

<i>Hermæophaga smithi</i> , sp. n.	<i>Chaetocnema nana</i> , sp. n.
<i>Haltica satellitia</i> , Jac.	„ ? <i>minuta</i> , Melsh.
<i>Disonycha glabrata</i> , Fabr.	<i>Homophyla unicolor</i> , sp. n.
„ <i>lævigata</i> , sp. n.	<i>Homophæta æquinoctialis</i> , Fabr.
<i>Systema s-littera</i> , Linn.	<i>Edionychis smithi</i> , sp. n.
„ <i>bicolor</i> , sp. n.	„ <i>sharpi</i> , sp. n.
<i>Pseudoepitrix suffriani</i> , sp. n.	<i>Physimerus smithi</i> , sp. n.
<i>Epitrix subfusca</i> , sp. n.	<i>Hypolampsis annulicornis</i> , sp. n.
„ <i>parvula</i> , Fabr.	<i>Megistops granulatus</i> , sp. n.
„ <i>fuscata</i> , Jacq. Duval.	<i>Schematiza livida</i> , Oliv.
<i>Glyptina nigrita</i> , sp. n.	<i>Diabrotica melanocephala</i> , Oliv.
<i>Aphthona maculipennis</i> , Jac.	„ <i>bivittata</i> , Fabr.
„ <i>grenadensis</i> , sp. n.	<i>Cerotoma ruficornis</i> , Oliv.
<i>Longitarsus horni</i> , sp. n.	

Fam. CRIOCERIDÆ.

LEMA, Fabr.

Lema dorsalis.

Crioceris dorsalis, Oliv., *Encycl. Méth.*, vi., p. 201 ;
Ent., vi., No. 94, p. 743, t. 2, fig. 27.

Lema dorsalis, Lacord., *Mon.*, p. 499 ; Jacq. Duval, in
Sagra's *Hist. fis. polit. y nat. de Cuba*, Ins., p. 119 ;
Jac., *Biol. Centr.-Am.*, Col., vi., 1, p. 12, and *Suppl.*,
p. 35, t. 1, fig. 9.

Lema nigricornis, Fabr., *Ent. Syst.*, *Suppl.*, p. 91.

Hab. St. Vincent—Windward side ; Grenada—Balthazar (Windward side), Mount Gay Estate (Leeward side).

A Tropical-American species, extending as far north as the Mexican State of Vera Cruz, and also occurring in Cuba.

Lema sharpi, sp. n.

Black, the upper part of the head and the thorax fulvous ; elytra very deeply punctate-striate, fulvous, a sutural spot below the base, a spot on the shoulders, and another on the disc before the middle, as well as a large apical patch, metallic blue, the ninth row of punctures interrupted.

Var. *a.* Elytral markings more or less confluent.

Var. *b.* Elytra entirely dark blue.

Length, $1\frac{1}{2}$ line.

Head impunctate, fulvous, the vertex with a shallow groove, the lateral sulci moderately deep, finely pubescent; lower portion of the face black, clothed with yellowish hairs; antennæ scarcely extending to the middle of the elytra, black, the third and fourth joints equal; thorax about one-half broader than long, the sides but little constricted at the middle, the transverse sulcus moderately deep, the surface with some distinct rows of punctures at the middle and some others near the anterior angles, the latter rounded; scutellum truncate at the apex; elytra without basal depression, very deeply and closely punctate-striate, the ninth row interrupted at the middle and the smooth space raised, as well as the following interstice, a spot on the shoulders, another near the middle, a rounded larger patch below the scutellum across the suture, and a still larger patch occupying the entire apical portion, dark blue; underside and legs covered with silvery pubescence, the knees and the anterior tibiæ sometimes stained with fulvous.

Hab. Grenada—Balthazar (Windward side), Mount Gay Estate (Leeward side).

This is another of the small species resembling in its elytral pattern *L. dorsalis* (Oliv.), and several closely allied forms. It is, however, quite distinct from any of the described species of the genus on account of the much shorter antennæ and the shape of the thorax, the latter being so little constricted at the sides as to appear nearly subquadrate; in *L. dorsalis* and others the thorax is very deeply constricted and shorter. In most of the specimens of *L. sharpi* the spots on the elytra are well separated, notably the two small lateral ones; but in some of them the basal and apical patches join at the suture, and are also connected with the spots on the disc, so that the pattern exactly resembles that of the other allied forms. I should have referred this species to *L. intermedia*, Suffr., from Cuba, had not the author described the thorax as deeply constricted at the middle. In the specimens of the variety *b* the head has a small black spot on the vertex, and the elytra are entirely metallic blue; these agree, however, so entirely in structural characters with the normal form that I cannot separate them, especially as in two of them there is a short fulvous stripe

at the base of the elytra, indicating the ground-colour of the type.

Lema obscura.

Lema obscura, Fabr., Syst. Eleuth., i., p. 476 ; Lacord., Mon., p. 361.

Hab. St. Vincent ; Grenada—Balthazar (Windward side).

Specimens from these localities agree entirely with others from Brazil in my collection. It is curious that Lacordaire, who gives a long description of this insect, does not mention the short pubescence which covers all the upper part of the body—a character of rare occurrence amongst the species of *Lema*. *L. obscura* is widely distributed in Tropical America, but is not known from so far north as the Isthmus of Panama.

Lema vittatipennis.

Lema vittatipennis, Baly, Cist. Ent., ii., p. 315.

Hab. St. Vincent.

The types were from the Amazons.

Lema marginata.

Lema marginata, Oliv., Ent., vi., p. 748, t. 2, fig. 35 ; Lacord., Mon., p. 477.

Hab. Grenada—Mount Gay Estate (Leeward side).

Inhabits the northern part of South America.

Lema insularis.

Lema insularis, Jac., Biol. Centr.-Am., Col., vi., 1, Suppl., p. 30, t. 35, fig. 20.

Var. Antennæ entirely black.

Hab. St. Vincent—Leeward and Windward sides.

The St. Vincent specimens agree so nearly with the type from Taboga I., Panama, that I refer them to that species: the only difference I can detect is the entirely black colour of the antennæ, the apical three joints being flavous in the type ; the elytral band in the latter also

does not extend to the suture, but reaches it in the St. Vincent specimens.

Fam. CLYTHRIDÆ.

COSCINOPTERA, Lacord.

Coscinoptera intermedia, sp. n.

Hab. St. Vincent—Leeward side.

Dark æneous, the tibiæ more or less fulvous, the upper and under surfaces clothed with long, white pubescence; thorax closely punctured at the sides; elytra not more strongly punctured than the thorax.

Length, 2 lines.

Subcylindrical, scarcely narrowed posteriorly; head very broad, æneous, not closely, but distinctly punctured, and covered with long, white pubescence; labrum black, its anterior margin sometimes fulvous; antennæ very short, black, the second and third joints (and sometimes the fourth also) fulvous, the fourth and following joints strongly transverse; thorax nearly twice as broad as long, the sides almost straight, the posterior angles obtuse, but not rounded, the surface very closely and finely punctured at the sides, more remotely at the middle, with a more or less distinct central smooth line, the sides closely covered with long white pubescence, the middle nearly glabrous; scutellum covered with white hairs; elytra similarly punctured to the disc of the thorax and also pubescent, the hairs more numerous at the sides than on the disc; the underside and legs densely clothed with white pubescence, the femora more or less blackish, the tibiæ fulvous, the tarsi dark.

I cannot identify this species with any of the described members of the genus. There is only one specimen before me in which the legs and the antennæ are obscure dark fulvous; in all the others they are blackish, the tibiæ excepted. The general colour is distinctly bronze, in which the species differs from *C. dominicana* (Fabr.), the latter being also larger and differently sculptured. The pubescence in the present species is comparatively long: this and the differently sculptured upper surface separate *C. intermedia* from any of the species described by Lacordaire. The labrum in all the specimens is black.

Fam. CRYPTOCEPHALIDÆ.

CRYPTOCEPHALUS, Geoffr.

Cryptocephalus tricostatus.

Cryptocephalus tricostatus, Jac., Biol. Centr.-Am., Col., vi., 1, Suppl., p. 16.

Hab. St. Vincent—South end, Leeward and Windward sides, and Kingstown, up to 3,000 feet; Grenada—Mount Gay Estate and St. George's (Leeward side); Grenadines—Mustique I., Becquia I.

I cannot separate the numerous specimens from the above-mentioned localities from those described by me from Chiriqui under the above name, but the size and coloration of the insect is extremely variable. In well-marked specimens the thorax is piceous with a slight metallic gloss, the margins and two oblique spots at the base being flavous; the elytra are of the latter colour, with the suture broadly, and a more or less distinct transverse band near the apex, greenish-piceous, the punctures being of the same colour. Between these and nearly unicolorous flavous specimens there are numerous intermediate forms. The principal characters of distinction are:—The interruption below the shoulders of the fifth and sixth rows of punctures on the elytra by a transverse raised space ("Querfeld" of Suffrian), and the broad, convex interspaces at the sides (from which I named the insect *tricostatus*), as well as the smooth and raised apical portion. The species varies from $\frac{3}{4}$ to 1 line in length. It belongs, no doubt, to the group in which Suffrian placed his *C. stercorator*, from the W. Indies, to which it seems very closely allied; but neither the colour nor the description of the elytral sculpture agrees with the specimens before me. *C. signatellus*, Suffr., is also another allied form.

PACHYBRACHYS, Suffr.

Pachybrachys scabripennis, sp. n.

Flavous, closely covered with brown punctures; the thorax with some more or less distinct dark bands; elytra closely punctured in irregular rows, with raised interstices, with a small, smooth, raised, pale spot near the suture; femora with a brown spot.

Length, 2 lines.

Head closely and finely rugose-punctate, flavous, with a darker central line; the eyes large and rather closely approximate in the male, the dividing space being narrower than their diameter; antennæ long and slender, extending nearly to the middle of the elytra, pale flavous, the apex of the outer joints darker, the third joint nearly three times longer than the second, the terminal joints very slightly widened at the apex; thorax twice as broad as long, the sides strongly deflexed, the lateral margins nearly straight, the surface closely covered with brown punctures, which are a little less crowded at the sides than at the middle, the interspaces forming small, flavous, raised, smooth spaces, the margins very narrowly flavous and raised, the middle with a broad and the sides with a narrow brownish band, these being sometimes entirely obsolete; scutellum raised, its apex truncate, piceous; elytra somewhat similarly sculptured to the thorax, the punctures near the anterior part of the suture confused and closely placed, forming irregular rows at the sides, where they are less crowded, but extending quite to the apex, the interstices raised into narrow, very irregularly placed longitudinal smooth spaces, the shoulders and some small irregular spots on the disc dark brown, the disc usually with a small raised smooth flavous spot near the suture, about the middle; pygidium flavous, finely pubescent; the breast more or less darkened; abdomen and legs flavous, the femora with a rather large, the tibiæ with a smaller piceous spot.

Hab. St. Vincent; Grenada—Mount Gay Estate (Leeward side), Caliveny and Lake Antoine Estates (Windward side); Grenadines—Union I., Becquia I.

This *Pachybrachys* is very closely allied to *P. conglomeratus*, Suffr., *P. costipennis*, Suffr., and *P. pumicatus*, Suffr. (from Cuba), and *P. punctatissimus*, Jac. (from Mexico), but seems to differ in several respects from all these species. The following are the principal points of distinction:—*P. pumicatus* is smaller, differently marked, and has smooth apices of the elytra, according to Suffrian; *P. costipennis* has the disc of the thorax impunctate, the eyes of the male nearly contiguous, and the elytra differently sculptured; *P. conglomeratus* is larger, and has very regularly punctured elytral striæ, with a yellow transverse band, etc.; lastly, *P. punctatissimus* has shorter and entirely black antennæ, with greatly widened terminal joints, and a more closely punctured thorax. The prosternum in the present species is rather long,

slightly narrowed between the coxæ, and distinctly punctured.

Fam. EUMOLPIDÆ.

NODONOTA, Lefèvre.

Nodonota grenadensis, sp. n.

Piceous below, above metallic green or cupreous, the antennæ and legs flavous ; thorax transverse, evenly and moderately closely punctured ; elytra with single rows of strong punctures, the latter widely placed.

Length, $\frac{3}{4}$ –1 line.

Of oblong shape ; the head remotely and rather finely punctured, the vertex with a longitudinal groove ; clypeus distinctly separated at the sides by oblique grooves, nearly smooth ; labrum and palpi fulvous ; antennæ extending beyond the middle of the elytra in the male, flavous, the terminal joints stained with fuscous at the apex and scarcely thicker than the basal joints, all of equal length, with the exception of the second ; thorax strongly transverse, the sides much rounded, the base scarcely produced at the middle and narrowly margined, the anterior portion somewhat strongly deflexed, the disc rather strongly but not closely punctured, the punctures of equal size and slightly oblong in shape ; scutellum not broader than long ; elytra not wider in front than the thorax, with a very feeble depression below the base, the punctuation much stronger than that of the thorax and arranged in rather distantly placed rows, which show a tendency to run in pairs anteriorly, the humeral callus smooth and prominent ; under-side entirely impunctate, piceous, the apex of the abdomen generally obscure fulvous ; legs flavous.

Hab. St. Vincent ; Grenada—Mount Gay Estate, Mt. Maitland, and St. George's (Leeward side), Balthazar (Windward side).

In distinguishing this species from its many very closely allied congeners the following characters must be taken into account:—The piceous colour of the under-side, the flavous antennæ and legs, and the strong and rather remote punctuation of the elytra. The sexes do not differ much ; but in the female the antennæ are shorter, the thorax is less transverse, and the anterior tarsi are not widened.

COLASPIS, Fabr.

Colaspis lebasi.

Colaspis lebasi, Lefèvre, Mittheil. Münch. ent. Ver., 1878, p. 121; Jac., Biol. Centr.-Am., Col., vi., 1, p. 139, and Suppl., p. 221.

Hab. Grenada—Balthazar, and Mirabeau and Chantilly Estates (Windward side), Windsor.

On the mainland this species ranges from Mexico to Colombia.

Colaspis fastidiosa.

Colaspis fastidiosa, Lefèvre, Bull. Soc. Ent. Fr., 1885, p. cxc. ; Jac., Biol. Centr.-Am., Col., vi., 1, Suppl., p. 221.

Hab. St. Vincent—South end; Grenada—Mount Gay Estate and St. George's (Leeward side), Granville, Balthazar, Caliveny Estate (Windward side); Grenadines—Union I., Mustique I., Becquia I.

Inhabits Venezuela and Colombia, extending on to the Isthmus of Panama.

Colaspis femoralis.

Colaspis femoralis, Lefèvre, Mittheil. Münch. ent. Ver., 1878, p. 122; Jac., Biol. Centr.-Am., Col., vi., 1, Suppl., p. 225.

Hab. St. Vincent—Kingstown, and Leeward and Windward sides.

Inhabits Colombia, including the State of Panama.

RHABDOPTERUS, Lefèvre.

Rhabdopterus picipes.

Colaspis picipes, Oliv., Ent., vi., p. 886, t. 2, fig. 15.

Hab. St. Vincent—Summit of Soufrière; Grenada—Balthazar (Windward side).

Inhabits the Southern United States.

MYOCHROUS, Erichs.

Myochrous denticollis.

Colaspis denticollis, Say, Journ. Acad. Phil., iii., p. 448 (1824) ; Complete Writings, ii., p. 215.

Hab. Grenada—Balthazar (Windward side), Mount Gay Estate (Windward side).

Inhabits the United States of North America.

TYPOPHORUS, Erichs.

Typophorus viridicyaneus.

Paria viridicyanea, Crotch, Proc. Acad. Phil., 1873, p. 40.

Typophorus viridicyaneus, Jac., Biol. Centr.-Am., Col., vi., 1, p. 179, t. 7, fig. 21.

Typophorus sturmi, Lefèvre, Am. Soc. Ent. Fr., 1877, p. 317.

Hab. St. Vincent—Kingstown and Windward side ; Grenada—Mount Gay, Vendôme, and Woodford Estates (Leeward side), Balthazar, Mirabeau and Lake Antoine Estates (Windward side) ; Grenadines—Becquia I.

Inhabits the United States of North America, extending southwards to Costa Rica.

Fam. CHRYSOMELIDÆ.

PHÆDON, Latr.

Phædon nigripes, sp. n.

Black, the basal joints of the antennæ, the head, and the sides of the thorax rufous, the latter minutely punctured ; elytra metallic dark blue, distinctly punctate-striate, the interstices impunctate.

Length, $1\frac{3}{4}$ line.

Head with a few fine punctures, the clypeus separated by shallow oblique grooves from the face ; palpi piceous ; antennæ extending to the base of the elytra, black, the basal two joints more or less fulvous, the terminal five joints transverse, forming a club ; thorax more than twice as broad as long, narrowed

in front, the sides nearly straight, the surface very finely and somewhat closely punctured, rufous, with a narrow bluish-black median band extending from the apex to the base; scutellum black; elytra with ten rows of distinct punctures, the sutural one short, the submarginal row consisting of some finer and more irregularly-placed punctures, the interstices minutely granulate; the underside and the legs black, the knees, tarsi, and the last two abdominal segments more or less fulvous; the sides of the breast strongly punctured, the rest of the under surface nearly impunctate; penis short and broad, strongly curved, the apex broadly rounded.

Hab. Grenada—Mount Gay Estate (Leeward side), Balthazar (Windward side).

This species is very similarly coloured to many South American forms, but differs from all of them in the black underside and legs; in some specimens, however, the tibiae are obscurely stained with fulvous below, but to a small extent. In nearly all the South- and Central-American species of the genus the colour of the underside and legs is fulvous.

Fam. GALERUCIDÆ.

Subfam. HALTICINÆ.

LACTICA, Erichs.

Lactica tibialis.

Altica tibialis, Oliv., Ent., vi., p. 697, t. 3, fig. 52.

Monomacra religata, Jacq. Duval, in Sagr's Hist. fis. polit. y nat. de Cuba, Ins., p. 129.

Hab. St. Vincent; Grenada—Balthazar (Windward side).

Inhabits the Southern United States and Cuba.

Lactica lævicollis, sp. n.

Fulvous, the antennæ (the basal joint excepted), the tibiae, tarsi, and abdomen black; thorax without transverse sulcus, but with perpendicular grooves, impunctate; elytra metallic violaceous-blue, distinctly punctured.

Length, $1\frac{3}{4}$ line.

Oblong, parallel ; the head impunctate, fulvous, the frontal tubercles small, oblique, the carina rather broad and short ; palpi robust, piceous ; antennæ not extending to the middle of the elytra, black, the basal joint fulvous, the third joint slightly longer than the fourth, this and the following joints rather robust, the terminal one elongate, slender ; thorax twice as broad as long, the sides nearly straight, the anterior angles oblique, thickened, the posterior margin straight, the surface rather strongly convex, entirely impunctate, fulvous, the basal margin with a short but deep perpendicular groove on each side ; scutellum fulvous ; elytra not depressed below the base, metallic blue, evenly, finely, and regularly punctured in semi-regular distant rows, the punctures scarcely finer at the apex ; abdomen and legs black, the four anterior femora fulvous.

Hab. St. Vincent—Leeward side.

One specimen. A nearly typical *Lactica*, but differing from almost all the species of the genus in the complete absence of a thoracic transverse sulcus ; this latter in itself often shows modification, but scarcely ever entirely disappears, as in the present case. The species cannot be generically separated from *Lactica*.

HERMÆOPHAGA, Foudr.

Hermæophaga smithi, sp. n.

Black, above metallic dark blue, the basal joints of the antennæ, the four anterior legs, and the posterior tibiæ and tarsi flavous ; thorax with a deep transverse sulcus, impunctate ; elytra distinctly punctured in closely approached semi-regular rows.

Length, $1-1\frac{1}{4}$ line.

Subcylindrical ; the head impunctate on the vertex, the frontal tubercles linear, the carina very acute, the clypeus longitudinally depressed on each side ; antennæ scarcely extending to the middle of the elytra, black, the lower four joints, and sometimes the fifth also, flavous ; thorax about one-half broader than long, the sides straight at the base, rather strongly rounded and also obsoletely angulate before the middle, the surface convex, entirely impunctate, and shining, the posterior margin broadly produced at the middle, the base with a very deep, slightly sinuate, transverse sulcus, which extends to the sides but is not bounded by a lateral groove ; elytra with a slight depression below the base, strongly punctured in closely approached, semi-regular rows ; underside black ; the four

anterior legs flavous, the posterior femora more or less bluish or black, the anterior femora sometimes stained with piceous, the first joint of the tarsi as long as the following two joints together; penis slender, not thickened, the apical cavity short.

Hab. St. Vincent (Leeward side); Grenada—Caliveny Estate and Balthazar (Windward side), St. George's, Mt. Maitland, and Mount Gay Estate (Leeward side).

I am unable to indentify this species with *H. cylindrica*, Weise, from Puerto Rico, although it seems closely allied, the coloration being nearly similar. Weise describes his species as metallic green: in the present insect the underside is black; there is also no trace either of an oblique depression or punctuation on the thorax, and the head seems differently sculptured; the elytra, too, have a slight but distinct depression below the base, of which Weise says nothing. The antennæ in *H. smithi* have the second joint thickened, scarcely shorter than the third, and the terminal joints gradually becoming more elongate and slightly widened, but not suddenly thickened as in *H. cylindrica*. Found in abundance in Grenada.

HALTICA, Geoffr.

Haltica satellitia.

Haltica satellitia, Jac., Biol. Centr.-Am., Col., vi., 1, Suppl., p. 267.

Hab. St. Vincent; Grenada—Balthazar and Mirabeau Estate (Windward side), Mt. Maitland (Leeward side), and South end.

Originally described from Mexico and Guatemala.

DISONYCHA, Chevr.

Disonycha glabrata.

Crioceris glabrata, Fabr., Spec. Ins. i., p. 156 (1781).

Disonycha glabrata, Jac., Biol. Centr.-Am., Col., vi., 1, p. 311.

?*Crioceris tomentosa*, Fabr., Syst. Ent., p. 122.

Hab. Grenada—Mount Gay Estate (Leeward side).

A widely distributed American species, ranging from the United States to Peru, and also found in Jamaica.

Disonycha lævigata, sp. n.

Fulvous, the antennæ (the basal three joints excepted), the apex of the tibiæ, and the tarsi fuscous ; head and thorax impunctate, the latter obscurely marked with piceous ; elytra bright metallic green, microscopically punctured.

Length, 3 lines.

Head impunctate, with the exception of some deep punctures near the eyes ; frontal tubercles scarcely indicated, broad and flat ; clypeus rather strongly raised and broad ; labrum black ; antennæ not extending much beyond the base of the elytra, robust, black, the lower three joints fulvous beneath, the third joint one-half longer than the second and slightly shorter than the fourth, the following joints of nearly equal length and subquadrate in shape ; thorax twice as broad as long, the sides nearly straight, narrowed towards the apex, the anterior angles obliquely thickened, the posterior ones strongly oblique, the surface impunctate, with an obscure blackish transverse band towards the apex ; scutellum broad, black ; elytra bright metallic green, with a narrow reflexed margin, the surface extremely finely punctured (when seen under a very strong lens) ; underside and the femora fulvous.

Hab. Grenada—Lake Antoine and Telescope Estates (Windward side).

From those of its congeners with unicolorous metallic elytra, the present species may be distinguished by the fulvous head, thorax, underside, and femora, in which respect it differs from *D. mellicollis* (Say) and *D. collata* (Fabr.). The insect seems, however, more nearly allied (as far as coloration is concerned) to the Central-American *D. mexicana*, Jac. ; but may be separated from it by the black labrum, the bright metallic green elytra, the differently sculptured head, and rather large size. Two specimens.

SYSTEMA, Clark.

Systema s-littera.

Crioceris s-littera, Linn., Syst. Nat., 10th edit., p. 373.

Systema s-littera, Jac., Biol. Centr.-Am., Col., vi., 1, p. 331.

Systema sinuato-vittata, Clark, Journ. Ent., ii., p. 403.

Hab. St. Vincent—Windward and Leeward sides, Kingstown; Grenada—Balthazar and Mirabeau Estate (Windward side).

A widely distributed Tropical-American insect ranging from the Mexican State of Vera Cruz to Brazil. This species is subject, like many of its congeners, to great variation, almost entirely testaceous examples occurring, or with only a trace of darker bands on the elytra. In well-marked specimens the elytra are greenish-black, each with a curved testaceous stripe on the disc ending in a knob-like projection.

Systema bicolor, sp. n.

Flavous or fulvous, the apical joints of the antennæ fuscous; thorax with a narrow dark lateral stripe, impunctate; elytra finely punctate-striate, dark æneous or blackish-green, with a larger or smaller flavous lateral spot.

Var. *a*. Elytra flavous, a triangular spot surrounding the scutellum, and the apex, greenish-black.

Var. *b*. Elytra entirely dark-coloured.

Length, 1-1 $\frac{1}{4}$ line.

Head impunctate, flavous, the extreme base sometimes piceous; frontal tubercles small, transverse; palpi slender; antennæ extending beyond the middle of the elytra in the male, shorter in the female, the first joint thick and straight, the second one-half shorter, the third and fourth joints equal, the others slightly more elongate, all the joints furnished with rather long hairs, the lower four or five flavous, the remainder nearly black; thorax rather convex, about one-half broader than long, the lateral margins rounded in front, constricted at the base, the surface impunctate, flavous or fulvous, the sides with a very narrow piceous stripe (sometimes obsolete); elytra with a depression below the base, finely and rather closely punctate-striate, the greenish-black portion of variable size—in some specimens occupying the entire disc, leaving only a flavous spot at the sides, in others the latter colour prevails—the base with a triangular blackish spot surrounding the scutellum, the apex entirely of that colour; the underside and legs flavous, the abdomen sometimes stained with piceous; posterior femora but moderately thickened, the metatarsus of the posterior legs as long as the following three joints united; prosternum very narrow; anterior coxal cavities closed.

Hab. St. Vincent—Kingstown, Leeward side; Grenada—Balthazar (Windward side), Mount Gay Estate (Leeward side).

This *Systema* differs from most of its allies in the coloration of the elytra and their regular punctuation; the thorax also has no indication of a transverse groove; and the posterior femora are not strongly thickened. In many specimens the dark basal and apical portions of the elytra are connected by a similarly-coloured narrow sutural stripe, leaving an elongate flavous spot or band at the sides.

PSEUDOEPIRIX, Jac.

Pseudoepitrix suffriani, sp. n.

Elongate, flavous; antennæ long, joints 5—7 black; thorax subquadrate, with a deep transverse sulcus, impunctate; elytra with a sub-basal depression, strongly punctate-striate.

Length, $\frac{3}{4}$ line.

Head perpendicular, impunctate; the frontal tubercles strongly raised, subquadrate, nearly contiguous; lower portion of the face concave, formed of a single piece; antennæ extending nearly to the apex of the elytra, flavous, the basal joint long, strongly thickened at the tip, the second short, thick, the third slightly shorter than the fourth, the fifth, sixth, and seventh joints black, these and the following joints slender, elongate, not thickened; thorax one-half broader than long, narrowed at the base, the sides rounded anteriorly, the disc transversely convex, with a deep, sinuate, transverse sulcus near the base, extending nearly to the sides and punctured within, the basal margin slightly produced at the middle; elytra much wider at the base than the thorax, with a distinct transverse depression, the basal portion rather raised, the shoulders prominent, closely and strongly punctate-striate, the punctures extending to the base and distinct nearly to the apex; posterior tibiæ with a small spur; posterior metatarsus as long as the following two joints together; prosternum narrow, impunctate; anterior coxal cavities closed.

Hab. St. Vincent.

This insect differs from the two species from Panama included by me under the generic name *Pseudoepitrix* (Biol. Centr.-Am., Col., vi., 1, p. 341) in having the first joint of the antennæ more elongate and the thoracic

groove deeper. *Pseudoepitrix* has most of the characters of *Crepidodera*, but differs from it in the thoracic sulcus not being limited laterally by a perpendicular groove, the thorax itself being nearly quadrate; it closely resembles the Eastern genus *Manobia*, Jac., but may be at once distinguished by the closed, not open anterior coxal cavities.

EPITRIX, Foudr.

Epitrix subfusca, sp. n.

Broadly ovate, very convex, dark chestnut-brown, pubescent; antennæ and legs fulvous; thorax finely and remotely punctured, with deep ante-basal groove; elytra with round, strong, and closely-placed punctures, the interstices smooth, pubescent.

Length, $\frac{1}{2}$ line.

Of dark-brown colour, shining; the head entirely impunctate, with the usual oblique grooves at the sides; clypeus broad, impunctate; antennæ in the male long and slender, flavous or pale fulvous, the second joint thick and short, the third smaller than the fourth, the following joints gradually thickened; thorax one-half broader than long, the sides nearly straight, forming a distinct oblique angle anteriorly, the surface convex, very finely and remotely punctured towards the apex, the punctures becoming larger near the base, the sulcus deep and but little sinuate, placed close to the basal margin, with a row of deep punctures within, the base itself not much produced in front of the scutellum and rounded or slightly truncate; elytra broader than the thorax and very convex, with a feeble depression below the base, the punctures rather strong and round, closely placed, scarcely smaller at the apex, the interstices impunctate and sparingly pubescent, the pubescence consisting of scattered, short, stiff, light-coloured hairs; legs fulvous; prosternum rather strongly punctured.

Hab. Grenada—Mount Gay Estate (Leeward side), Balthazar and Chantilly (Windward side).

This small *Epitrix*, of which about a dozen specimens are before me, may be at once known from its many closely allied congeners by the dark chestnut-brown colour of the upper surface and the non-costate elytral interstices. There are but few species known of the same coloration, most of them being black, which is also the case with *E. fuscata* (Jacq. Duv.), from Cuba. From the brownish species described by me from Central

America the present insect may be separated by the very finely punctured thorax and other particulars.

Epitrix parvula.

Crioceris parvula, Fabr., Syst. Eleuth., i., p. 468.

Epitrix parvula, Jac., Biol. Centr.-Am., Col., vi., 1, p. 355, and Suppl., p. 289.

Crepidodera hirtipennis, Melsh., Proc. Acad. Phil., iii., p. 165.

Hab. St. Vincent—Leeward side; Grenada—Mount Gay Estate (Leeward side), Balthazar (Windward side).

Numerous examples. Extends over the whole of the United States, and through Central-America to Panama, and also inhabits Cuba.

Epitrix fuscata.

Crepidodera fuscata, Jacq. Duval, in Sagra's Hist. fis. polit. y nat. de Cuba, Ins., p. 130.

Epitrix fuscata, Jac., Biol. Centr.-Am., Col., vi., 1, p. 348.

Hab. Grenada—Mount Gay Estate (Leeward side).

Described originally from Cuba, and recorded by me somewhat doubtfully from Guatemala.

GLYPTINA, Lec.

Glyptina (Batophila) nigrita, sp. n.

Apterous, black, the basal joints of the antennæ and the legs dark fulvous; thorax very minutely punctate; elytra finely punctate-striate; posterior femora piceous.

Length, $\frac{1}{2}$ line.

Head impunctate, the frontal tubercles extremely small, limited at the sides by narrow oblique grooves; clypeus rather thick and broad, deflexed in front; antennæ scarcely extending to the middle of the elytra, fulvous, the four or five terminal joints fuscous and gradually thickened, the second joint small but much thickened, the following four joints thinner but not longer than the second; thorax nearly twice as broad as long, the sides straight, the anterior

angles oblique, the disc rather convex, very minutely and rather distantly punctured, the punctures evenly distributed, the base not margined; elytra strongly convex, pointed at the apex, black, without metallic gloss, very regularly, finely, and distinctly punctate-striate to the apex, the two outer interstices slightly costate; legs dark fulvous; posterior tibiæ straight, with a spur at the apex; posterior metatarsus as long as the following joints together; claws simple; prosternum longer than broad, nearly smooth; anterior coxal cavities open.

Hab. Grenada—Mount Gay Estate (Leeward side), Balthazar (Windward side).

Like its European congeners, this little species is apterous. The entirely black upper surface will separate it from any of the North-American forms. According to Dr. Horn, the genus *Glyptina*, Lec. (1859) = *Batophila*, Foudr. (1860), and therefore has priority.

APHTHONA, Chevr.

Aphthona maculipennis.

Aphthona maculipennis, Jac., Biol. Centr.-Am., Col., vi., 1, p. 365, and Suppl., p. 293.

Hab. St. Vincent—South end, and Windward and Leeward sides; Grenada—Balthazar (Windward side), St. George's, Vendôme and Mount Gay Estates (Leeward side).

Found in plenty in Grenada.

Inhabits Central America, from Mexico to Panama.

Aphthona grenadensis, sp. n.

Testaceous, the apical joints of the antennæ black; thorax extremely minutely punctured; elytra finely punctate-striate, shining, the suture very narrowly fuscous.

Length, 1 line.

Head entirely impunctate; the frontal tubercles indistinct, bounded at the sides by oblique grooves; clypeus not separated from the face; antennæ not extending much beyond the base of the elytra, blackish, the lower joints more or less flavous, the second joint scarcely shorter than the following ones, the terminal joints

slightly and gradually thickened, the apical one more elongate than those preceding; thorax transversely subquadrate, the sides perfectly straight, the anterior angles oblique, forming a slight tooth posteriorly, the surface microscopically punctured; elytra wider at the base than the thorax, with rows of fine, regularly placed punctures, which become indistinct towards the apex; underside and legs testaceous, the posterior femora slightly darker; posterior tibiae straight; the first joint of the posterior tarsi as long as the following joints together; prosternum narrow, constricted between the coxæ.

Hab. St. Vincent (Leeward side); Grenada—Mount Gay Estate (Leeward side), Balthazar and Lake Antoine Estate (Windward side).

This *Aphthona* seems to be closely allied to *A. fulvipennis*, Jac., from Guatemala; but differs from it in the nearly obsolete frontal tubercles and the indistinctly punctured apex of the elytra. The punctate-striate elytra will help to distinguish the species from most of its allies.

LONGITARSUS, Latr.

Longitarsus horni, sp. n.

Apterous, strongly convex, fulvous, the intermediate joints of the antennæ black; thorax subquadrate, impunctate; elytra extremely minutely and closely punctured.

Length, $\frac{1}{4}$ line.

Head impunctate, the clypeus triangularly raised; antennæ extending to the middle of the elytra, the basal four and the apical three joints flavous, the others black, joints 2–4 short, equal, the terminal joints slightly thickened; thorax scarcely broader than long, convex, and subcylindrical, the disc impunctate and shining, the lateral margins straight, the anterior angles thickened, very slightly oblique; elytra strongly convex and ovate, pointed at the apex, dark fulvous, closely and scarcely perceptibly punctured; underside and legs pale fulvous or flavous, the metatarsus of the posterior legs one-third the length of the tibiae.

Hab. St. Vincent—Leeward side; Grenada—St. John's River and Mount Gay Estate (Leeward side), Balthazar (Windward side).

A very small species, resembling in its ovate shape *L. oopterus*, Har., from Colombia, *L. ovipennis*, Jac., from

Mexico, and others. *L. varicornis*, Suffr., from Cuba, has a punctured thorax, with rounded sides, and prominent shoulders to the elytra; *L. subcinctus*, Har., from Colombia and Central America, is much larger, and has long antennæ (no mention is made in the description of the absence or presence of wings); *L. intermedius*, Jac., from Chiriqui, has differently coloured antennæ.

CHÆTOCNEMA, Steph.

Chætocnema nana, sp. n.

Below black, above obscure greenish-æneous, the basal joints of the antennæ and the tibiæ and tarsi flavous; thorax nearly impunctate, without oblique angles; elytra strongly punctate-striate, the interstices impunctate.

Length, $\frac{1}{4}$ line.

Head impunctate, opaque, greenish-æneous, sometimes with one or two punctures above the eyes; antennæ piceous, the lower three or four joints flavous, the second joint slightly smaller than the third and following joints, the last joint elongate, pointed; thorax nearly twice as broad as long, the sides feebly rounded, without distinct oblique anterior angles, the basal margin with a scarcely visible impressed line and without punctures, the surface minutely granulate and microscopically punctured; elytra nearly black, with the sutural and other striæ regular, the interstices impunctate; legs dark fulvous, the posterior femora piceous.

Hab. Grenada—Balthazar (Windward side), Mount Gay Estate (Leeward side).

This is one of the smallest species of the genus known to me. I cannot identify it with any of those described from North or Central America. It seems most nearly allied to *C. obesula*, Lec., and *C. ectypa*, Horn, on account of its small size and nearly impunctate thorax; but both these are described as having punctured elytral interstices. *C. nana* belongs to the division in which the thorax is not distinctly angulate anteriorly and shows no trace of a row of punctures along the basal margin.

Chætocnema minuta ?

Chætocnema minuta, Melsh., Proc. Acad. Phil., iii., p. 167; Horn, Trans. Am. Ent. Soc., xvi., p. 262.

Hab. St. Vincent; Grenada—Mount Gay Estate (Leeward side).

The specimens which I provisionally refer to *C. minuta*, Melsh., are about $\frac{1}{2}$ to $\frac{2}{3}$ of a line in length, of the usual dark bronze coloration. They have the head impunctate and minutely granulate; the antennæ with the lower four or five joints fulvous, the rest black, the terminal joints distinctly thickened and the apical one more elongate than those preceding; the thorax transverse, slightly wider at the middle, the sides very feebly rounded, the anterior angles scarcely obliquely truncate, the surface minutely and not closely punctured, with the interspaces finely granulate, the base with a row of distinct punctures at the sides; the elytra with closely placed distinct punctures, the striæ rather widely separated, the interstices impunctate, and, as usual, convex at the sides and apex; the underside and the femora piceous, the tibiæ and tarsi fulvous.

C. minuta is widely distributed in the Southern States of North America.

HOMOPHYLA, Har.

Homophyla unicolor, sp. n.

Darker or lighter brown, the basal and apical joints of the antennæ pale, the others black; thorax microscopically, the elytra as finely but more remotely, punctured.

Length, $1-1\frac{1}{4}$ line.

Head impunctate, the eyes very large, the clypeus broad and impunctate; antennæ extending to the middle of the elytra, black, the three basal and the three apical joints flavous; thorax about two and a-half times broader than long, the sides straight, narrowed towards the apex, the anterior angles thickened, the surface extremely minutely and closely punctured (when seen under a strong lens); scutellum broadly trigonate; elytra with the shoulders slightly prominent, nearly impunctate (when examined under a strong lens minute, distantly placed punctures are visible); posterior tibiæ broadly channelled, emarginate near the apex, the latter with a strong spur; the first joint of the posterior tarsi longer than the following joints together; abdomen paler than the breast and legs.

Hab. St. Vincent—Leeward side; Grenada—St. George's (Leeward side), Granville (Windward side).

This insect cannot be identified with *Homophyla krugi*,

Weise, from Puerto Rico, which differs, according to the description, in having the thorax *distantly* punctured and the elytra more strongly punctulate, neither of which is the case here. The other described representatives of the genus differ either in the colour of the antennæ or elytra, or in the more strongly sculptured upper surface.

HOMOPHÆTA, Erichs.

Homophæta æquinotialis.

Galleruca æquinotialis, Fabr., Syst. Eleuth., i., p. 493.

Homophæta æquinotialis, Jac., Biol. Centr.-Am., Col., vi., 1, p. 406 *; Fleut. et Sallé, Ann. Soc. Ent. Fr., 1889, p. 478.

Hab. St. Vincent; Grenada—Balthazar, Lake Antoine and Chantilly Estates (Windward side), Mount Gay Estate (Leeward side).

A common insect in Tropical America, extending northwards to Texas. It has been recorded from Guadeloupe.

ÆDIONYCHIS, Latr.

Ædionychis smithi, sp. n.

Piceous, the antennæ black; thorax flavous, nearly impunctate; elytra very closely punctured, obscure dark violaceous or bluish, the lateral margins, a transverse spot at the middle, and another near the apex, flavous.

Var. The anterior flavous spots on the elytra confluent at the suture, and the posterior spots nearly reaching it.

Length, $2\frac{1}{2}$ lines.

Head more or less dark metallic blue, the space between the eyes and the clypeus obscure fulvous, the former with some strong punctures, the frontal tubercles and carina distinct; antennæ not extending to the middle of the elytra, black, the lower three joints slightly stained with fulvous at the apex, all the joints, with the exception of the second, of nearly equal length; thorax more than twice as broad as long, flavous, the sides evenly but not strongly rounded, the anterior angles thickened, scarcely produced, the surface with a few very fine punctures, the lateral margins narrowly

* The full synonymy is given here.

flattened, the disc with some slight depressions at the sides ; scutellum triangular, black ; elytra very closely, evenly, and distinctly punctured, obscure metallic bluish-black or violaceous, with a short transverse flavous band or spot at the middle and another near the apex, these markings sometimes connected at the suture and forming fasciæ, the extreme lateral margins also flavous, as well as the epipleuræ ; underside and legs piceous, the base of the tibiæ and the extreme apex of the femora sometimes paler.

Hab. Grenada—Mount Gay Estate (Leeward side), Caliveny Estate (Windward side).

This *Edionychis* may, perhaps, best be compared with *O. chapuisi*, Jac., from the Amazons, in which the elytra are very similarly coloured ; but in that species they are nearly smooth and impunctate, and of a bright metallic blue or green. The present species is, however, like most of its kind, subject to variation : in one specimen the central spot assumes the shape of a narrow transverse band, which extends to the suture ; while in another the posterior portion of the elytra may be described as flavous, with the suture, a narrow stripe across it, a spot at the sides, and the apex, blackish-blue.

Edionychis sharpi, sp. n.

Black ; thorax flavous, impunctate ; elytra very closely and distinctly punctured, flavous, with a broad sutural and a sublateral stripe, extending from the base to near the apex, metallic dark blue.

Length, 2-2½ lines.

Head rugosely punctured, black, the vertex with two obscure fulvous spots, the clypeus flavous or fulvous ; antennæ scarcely extending to the middle of the elytra, black, the basal joint flavous beneath, the third and fourth joints equal ; thorax more than twice as broad as long, the sides slightly converging in front, but little rounded, the anterior angles acute, but scarcely produced, the disc impunctate, flavous, the lateral margins narrowly flattened ; scutellum black ; elytra gradually widened towards the middle, closely and rather strongly punctured, flavous, the suture with a broad dark blue stripe, extending to the apex and slightly constricted below the middle, the sides with a narrower similarly coloured stripe, not touching the margin nor extending to the apex, the epipleuræ flavous, more or less obscure piceous along their inner margin ; underside and legs black, the abdominal segments more or less edged with flavous.

Hab. St. Vincent—Windward and Leeward sides.

This is one of the striped species, of which a great many have been described by von Harold in the "Berliner entomologische Zeitschrift" for 1881, with none of which it entirely agrees. *Æ. sharpi* belongs to the division in which the elytra have two stripes (instead of three), and amongst the species of this group it may be known by the immaculate thorax and the black underside and legs. *Æ. vittata*, Har., from Tropical South America, is closely allied, but is larger, broader, and more convex, and has a transverse black band on the thorax. The twenty specimens before me show no variation of importance, except that in one or two of them the dark stripes of the elytra are united at the apex.

PHYSIMERUS, Clark.

Physimerus smithi, sp. n.

Below piceous, above pale fuscous, fulvous, or flavous; antennæ (the apical joints excepted) and legs flavous; thorax with a lateral and a median fuscous stripe; elytra finely punctate-striate and pubescent, unspotted or with an obscure basal and post-median transverse fuscous band.

Length, 1-1½ line.

Head minutely rugose-punctate, the frontal tubercles feebly raised; clypeus strongly deflexed, shining; palpi filiform; antennæ extending beyond the middle of the elytra, filiform, flavous, the apical two or three joints fuscous, the basal joint rather long and robust, the second short, the third and fourth elongate, equal, the fifth joint slightly longer, the following joints rather shorter, the terminal one more elongate and pointed; thorax scarcely broader than long, very feebly narrowed at the base, the surface obsoletely, obliquely depressed on either side of the disc below the middle, clothed with short pubescence, which obscures the punctuation, fulvous, a narrow stripe at the middle and one on each side fuscous; scutellum small, fuscous; elytra with fine rows of punctures, scarcely perceptibly depressed below the base, opaque, fulvous, with a transverse band at the base and another below the middle fuscous, the lower one sometimes very broad and extending upwards at the sides, the surface clothed with short pubescence and scattered stiff yellowish bristles; legs flavous; posterior tibiæ with a spur; posterior tarsal joints short, of nearly equal length.

Hab. St. Vincent—Leeward side and South end ; Grenada—Grand Etang, 1,900 feet (Windward side).

The above description is based upon the few specimens which show the elytral bands rather distinctly ; in the majority of them, however, the bands are obsolete or faintly indicated. This small species may be known amongst its allies by the three narrow fuscous vittæ of the thorax.

HYPOLAMPSIS, Clark.

Hypolamopsis annulicornis, sp. n.

Below piceous, above fuscous, finely pubescent ; antennæ piceous, the ninth and tenth joints, and the apex of the others, pale ; elytra finely punctate-striate, clothed with short grey pubescence, paler or darker fuscous ; legs pale testaceous.

Var. Above and below pale testaceous, the elytra with a more or less distinct dentate darker band below the middle.

Length, $1\frac{1}{2}$ –2 lines.

Head finely and closely rugose-punctate, longitudinally depressed between the eyes, and clothed with very short yellow or grey pubescence, the space between the antennæ in the shape of an acutely-raised ridge ; labrum flavous ; palpi filiform, scarcely thickened ; antennæ extending to the middle of the elytra, rather robust, piceous, the joints testaceous at the apex, the ninth and tenth entirely of that colour, the seventh and eighth joints and also the terminal one entirely dark ; thorax subquadrate, distinctly narrowed at the base, the disc with two slightly raised tubercles before the middle, very finely punctured, fuscous, and clothed with very short pubescence ; elytra much broader than the thorax, obsoletely transversely depressed below the base, rather finely but distinctly punctate-striate, the interstices slightly costate, and clothed with short grey or yellowish pubescence ; underside piceous, impunctate ; legs pale, the femora sometimes darker at the apex ; posterior tibiæ straight, without small teeth, the apex with a short spur.

Hab. St. Vincent—Windward and Leeward sides ; Grenada—Balthazar (Windward side), Mount Gay Estate (Leeward side).

As in most of the species of this genus the coloration of the upper surface is dull and rather variable, the paler forms showing some obscure darker patches and the

others being entirely dark fuscous. The principal mark of distinction lies, however, in the coloration of the joints of the antennæ, which seems to be constant, even in the pale variety. The elytra in the latter show one or two pale fuscous, deeply indented, transverse bands, before and below the middle.

MEGISTOPS, Boh.

Megistops granulatus, sp. n.

Obscure pale fulvous, above pale flavous, the apical joints of the antennæ darker; thorax transverse, finely granulate, opaque; elytra similarly sculptured, the sides and two triangular spots at the middle dark brown.

Length, 2 lines.

Of elongate shape; the sides of the head entirely occupied by the large eyes, which, in the male, meet at the vertex, leaving a narrow triangular intermediate space below, the frontal elevations very small, the labrum piceous; antennæ extending to the base of the elytra, slender, fulvous, the terminal joints fuscous, the basal joint elongate and thickened, the second and third joints small, equal, the former also thickened, the fourth joint longer than the following ones, the terminal joints much shorter; thorax nearly three times broader than long, the sides straight and obliquely converging in front, the anterior angles thickened, slightly oblique, the surface minutely granulate, without any punctuation, flavous, opaque; scutellum piceous; elytra conjointly rounded at the apex, elongate, rather convex, somewhat subcylindrical, the surface coloured and sculptured like that of the thorax, the sides with a narrow piceous stripe, which, at the middle, widens into a small triangular spot, while a similar spot is placed transversely near the suture (this latter spot is absent in one specimen); legs obscure flavous; the posterior femora strongly incrassate; posterior tibiæ robust, dilated, with a broad spur, emarginate at the apex; posterior metatarsus as long as the following joints together.

Hab. Grenada—St. George's and Mount Gay Estates (Leeward side).

If *Megistops* is to be retained as distinct from *Dibolia*, on account of the large eyes meeting on the median line, the present species must be referred to it, although a difference will probably be found in regard to this structure in the two sexes. The prosternum, however, in *Megistops*

is not formed for the reception of the parts of the mouth, as in *Dibolia*. The present species is peculiar, owing to the almost complete absence of punctuation; a few feeble punctures are, however, visible near the suture of the elytra.

Subfam. GALERUCINÆ.

SCHEMATIZA, Blanch.

Schematiza livida.

Galeruca livida, Oliv., *Encycl. Méth.*, vi., p. 589;
Ent., vi., p. 631, t. 1, fig. 2.

Galerucella livida, Fleut. et Sallé, *Ann. Soc. Ent. Fr.*,
1889, p. 479.

Hab. Grenada—Caliveny Estate and Granville (Windward side), Mount Gay Estate (Leeward side).

Many specimens. Originally described from the Island of Guadeloupe.

DIABROTICA, Chevr.

Diabrotica melanocephala.

Galleruca melanocephala, Fabr., *Ent. Syst.*, *Suppl.*,
p. 95.

Galeruca melanocephala, Oliv., *Ent.*, vi., p. 652, t. 4,
fig. 65.

Hab. St. Vincent—Kingstown, and Leeward and Windward sides; Grenada—Balthazar, Mirabeau Estate (Windward side), Mount Gay and Vendôme Estates, Grand Etang Road (Leeward side).

Found in plenty in St. Vincent. A South-American species, not extending to Central America.

Diabrotica bivittata.

Crioceris bivittata, Fabr., *Syst. Eleuth.*, i., p. 455.

Hab. St. Vincent—Windward side; Grenada—Balthazar (Windward side), Mount Gay Estate (Leeward side).

Another Tropical American species; not extending to Central America.

CEROTOMA, Chevr.

Cerotoma ruficornis.

Galeruca ruficornis, Oliv., *Encycl. Méth.*, vi., p. 200.

Cerotoma ruficornis, Jacq. Duval, in Sagra's *Hist. fis. polit. y nat. de Cuba*, Ins., p. 126, t. 2, fig. 8; Jac., *Biol. Centr.-Am.*, Col., vi., 1, p. 616; Fleut. et Sallé, *Ann. Soc. Ent. Fr.*, 1889, p. 480.

Galeruca denticornis, Oliv., *Ent.*, vi., p. 659, t. 5, fig. 78.

Cerotoma atrofasciata, Jac., *P.Z.S.*, 1879, p. 792.

Hab. St. Vincent—Kingstown; Grenada—Mount Gay and Vendôme Estates, Mt. Maitland (Leeward side), Balthazar, Granville (Windward side); Grenadines—Becquia I.

Found in plenty in both St. Vincent and Grenada, and also met with by Mr. Smith at Barbados. A common species in Tropical America, ranging from Mexico to Venezuela, and also known to occur in Cuba, Puerto Rico, and Guadeloupe.

HISPIDÆ AND CASSIDIDÆ.

BY G. C. CHAMPION.

Fam. HISPIDÆ.

CHALEPUS, Thunb.

Chalepus sanguinicollis.

Hispa sanguinicollis, Linn., *Mant. Plant. alt.*, vi., p. 530 (1771); Oliv., *Ent.*, vi., p. 765, no. 95, t. 1, figs. 12, a, b.

Odontota sanguinicollis, Chapuis, *Ann. Soc. Ent. Belg.*, xx., p. 13.

Hab. St. Vincent—Leeward and Windward sides; Grenada—Mount Gay Estate, St. George's, Mt. Maitland (Leeward side), Chantilly, Caliveny and Lake Antoine Estates, Granville, Balthazar (Windward side), Grand Ance (South end); Grenadines—Becquia I., Union I.

Inhabits San Domingo and Tropical South America.

Chalepus plebeius.

Odontota plebeia, Chapuis, Ann. Soc. Ent. Belg., xx., p. 16.

Hab. St. Vincent—Leeward and Windward sides; Grenada—Woodford Estate and Mt. Maitland (Leeward side), Mirabeau and Chantilly Estates and Grand Etang (Windward side).

The numerous specimens from the above localities seem to be referable to this species.

It is variable in colour, like many of its allies, three well-marked forms being present in the series obtained—one with a black median vitta or oblong mark on the disc of the thorax, one with the thorax immaculate, and one with the femora obscurely rufescent near the base. The head is black, smooth, and dull, and canaliculate between the eyes. The thorax is transverse, sub-conical, the sides being strongly constricted in front and slightly sinuate before the base; the surface is closely impressed with coarse, shallow punctures; it is ferruginous or flavo-ferruginous in colour, with a median vitta or oblong spot on the disc, which is sometimes completely obliterated or only faintly indicated. The elytra are long and parallel, with ten rows of punctures, except for a short distance before the middle, between the second and fourth costæ, where the number is reduced to nine; the second, fourth, and eighth interstices are strongly, and the sixth at the base and apex more feebly, costate; the apices are conjointly rounded, each with about six or eight rather long, fine teeth; each elytron has a very broad, marginal, ferruginous or flavo-ferruginous stripe extending from the base to far beyond the middle, leaving about the apical fourth, and the suture broadly, black. The legs are entirely black, except in one specimen.

Examples of the same species from Colombia and Venezuela are contained in the British Museum. Chapuis' type was from Colombia.

Fam. CASSIDIDÆ.

MESOMPHALIA, Hope.

Mesomphalia exclamationis.

Cassida exclamationis, Linn., Syst. Nat., 12th edit. i., 2, p. 577.

Mesomphalia exclamationis, Boh., Mon. Cassid., i., p. 379, and iv., p. 176; Champ., Biol. Centr.-Am., Col., vi., 2, p. 145; Fleut. et Sallé, Ann. Soc. Ent. Fr., 1889, p. 480; Horn, Proc. Calif. Acad. Sci. (2), iv., p. 344.

Hab. St. Vincent—Leeward side; Grenada—Lake Antoine Estate and Balthazar (Windward side), Mount Gay Estate (Leeward side); Grenadines—Union I.

A widely-distributed Tropical American insect, extending northwards to Lower California, and recorded from Trinidad, Martinique, and Guadeloupe.

CHELYMORPHA, Boh.

Chelymorpha polysticha.

Chelymorpha polysticha, Boh., Mon. Cassid., ii., p. 56; Fleut. et Sallé, Ann. Soc. Ent. Fr., 1889, p. 480.

Hab. St. Vincent; Grenada—Mirabeau and Chantilly Estates, Balthazar (Windward side), Woodford Estate, Mt. Maitland (Leeward side).

Found in numbers in Grenada. Described from Guadeloupe I.

COPTOCYCLA, Boh.

Coptocycla judaica.

Cassida judaica, Fabr., Spec. Ins., i., p. 109.

Coptocycla judaica, Boh., Mon. Cassid., iii., p. 293, and iv., p. 441; Champ., Biol. Centr.-Am., Col., vi., 2, p. 209.

Hab. St. Vincent—Leeward and Windward sides; Grenada—La Force, Mirabeau, and Lake Antoine Estates, Balthazar (Windward side), Mount Gay Estate (Leeward side).

A Tropical American species, extending to the southern part of the Isthmus of Panama.

Coptocycla bicolor.

Cassida bicolor, Fabr., Ent. Syst., Suppl., p. 83.

Coptocycla bicolor, Champ., Biol. Centr.-Am., Col., vi., 2, p. 212.

Coptocycla aurichalcea, Boh., Mon. Cassid., iii., p. 142, and iv., p. 402.

Coptocycla aurisplendens, Boh., loc. cit., iii., p. 349, and iv., p. 452.

? *Coptocycla bistrispunctata*, Fleut. et Sallé, Ann. Soc. Ent. Fr., 1889, p. 481.

Hab. St. Vincent—Leeward and Windward sides; Grenada—Mirabeau Estate (Windward side), Woodford Estate (Leeward side); Grenadines—Becquia I.

Twelve specimens, inseparable from the var. *aurisplendens* of *C. bicolor*, an abundant insect in the Southern United States and Central America.

Coptocycla guadeloupensis.

Coptocycla guadeloupensis, Boh., Mon. Cassid., iii., p. 427, and iv., p. 468; Fleut. et Sallé, Ann. Soc. Ent. Fr., 1889, p. 481.

Hab. St. Vincent—Leeward and Windward sides; Grenadines—Mustique I.

If I have correctly identified the nine specimens obtained by Mr. Smith, Boheman's description must have been made from a pallid variety, with the thoracic and elytral markings obliterated. In fully-coloured examples of the present species the thorax has a black or reddish-brown subquadrate patch on the disc at the base, this being deeply excised in the centre in front and dilated laterally behind; and the elytra have a broad fascia on the disc below the base, and a large patch before the apex, neither reaching the suture and sometimes connected laterally, fusco-olivaceous. In two specimens the markings of the thorax and elytra are almost obsolete, thus nearly agreeing with Boheman's description.



Jacoby, Martin. 1897. "IX. A List of the Phytophagous Coleoptera obtained by Mr. H. H. Smith at St. Vincent, Grenada, and the Grenadines, with Descriptions of New Species: Crioceridæ—Galerucidæ." *Transactions of the Entomological Society of London* 45, 249–280.

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