BIOLOGIA CENTRALI-AMERICANA,

INSECTA.

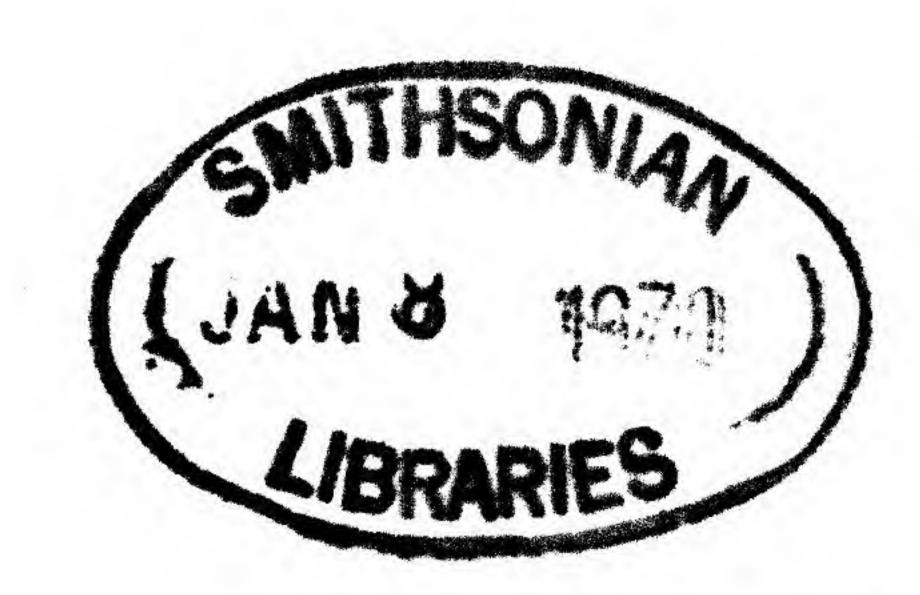
COLEOPTERA. Vol. VI. Part 1, Supplement.

PHYTOPHAGA (part).

BY

MARTIN JACOBY, F.E.S.

1888-1892.



CHÆTOCNEMA (p. 394).

12. Chætocnema smithi.

Dark æneous; the basal joints of the antennæ, the four anterior legs, and the posterior tibiæ and tarsi fulvous, the posterior femora æneous; head and thorax rather remotely punctured; elytra deeply punctate-striate, the interstices flat and impunctate.

Length 1 line.

Of rather elongate and robust shape; the head distinctly but not closely punctured; the antennæ rather short, the five lower joints fulvous, the others piceous, thickened; thorax at least twice as broad as long, the sides but feebly rounded, with indications of a thickened angle before the middle, the anterior angles not oblique, the surface remotely impressed with somewhat oblong punctures, which are a little larger and more rounded in shape at the sides; elytra convex, pointed at the apex, very regularly and deeply punctate-striate, the interstices flat, except near the lateral margin, impunctate.

Hab. Mexico, Teapa in Tabasco (H. H. Smith).

A single specimen. C. smithi seems to be very closely allied to C. protensa, Lec., but in that insect the thorax at the base is only one third wider than long and the femora are all bronze (according to Horn); in the present species the thorax is scarcely narrower in front than at the base.

13. Chætocnema fulvilabris.

Obscure æneous; the labrum, antennæ, and legs fulvous, the posterior femora piceous; head impunctate; thorax finely and closely punctured; elytra finely punctate-striate, the interstices flat and impunctate. Length $\frac{3}{4}$ line.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith).

A single example. In this species the head is entirely impunctate, the labrum and antennæ are fulvous, and the thorax, as in *C. smithi*, has not oblique anterior angles, the latter being, however, slightly thickened. It differs from *C. smithi* in having the thorax much more closely and finely punctured, and with a row of very fine punctures along the basal margin; the elytra are also more finely punctured, and the interstices are flat throughout.

14. Chætocnema interstitialis.

Oblong-ovate, robust, dark bronze-coloured, the basal joints of the antennæ, the tibiæ, and tarsi pale fulvous; head and thorax strongly punctured; elytra pointed at the apex, deeply punctate-striate, the interstices minutely punctured.

Length 1 line.

Head strongly but not very closely punctured, the clypeus rugosely punctate; antennæ extending to the base of the thorax only, black, the lower six joints fulvous; thorax twice as broad as long, the sides rounded, without oblique angulation anteriorly, the surface deeply and closely punctured laterally, less closely so on the disc; elytra with regular and deeply punctured striæ, the interstices extremely finely punctured, the punctures on each arranged in a single row; prosternum closely punctured, the abdomen more sparingly so.

Hab. Mexico, Chilpancingo in Guerrero (H. H. Smith).

A single specimen. Of the same robust and comparatively broad shape as C. capitata BIOL. CENTR.-AMER., Coleopt., Vol. VI. Pt. 1, Suppl., March 1892.

and *C. transversicollis*, differing from the former by the densely punctured, rugose clypeus, the broader thorax, the sides of which are more rounded, and the punctate elytral interstices; and from the latter by the deeply punctured head and flat elytral interstices. From the allied *C. denticulata* (Ill.), the brighter bronze-colour and the less closely and strongly punctured head and thorax sufficiently distinguish it.

15. Chætocnema horni.

Ovate, black, the antennæ, tibiæ, and tarsi flavous; head impunctate; thorax transverse, the anterior angles oblique, the surface finely and closely punctured; elytra with a slight æneous lustre, strongly punctate-striate, the interstices rather convex, impunctate.

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

Hab. Mexico, Teapa in Tabasco (H. H. Smith).

This small species seems to resemble in many respects *C. quadricollis*, Schwarz, and *C. decipiens*, Lec., but differs from both these in usually having all the femora dark and the elytral interstices impunctate. The head is rather opaque, without any trace of punctuation; the thorax may be described as transversely convex, with the sides very nearly straight and not converging in front, and the base without marginal line; the elytra are widened towards the middle, their interstices rather strongly convex and impunctate. In some specimens the four anterior femora are almost entirely flavous.

16. Chætocnema balyi.

Ovate-oblong, obscure æneous, the basal six joints of the antennæ, the tibiæ, and tarsi fulvous; head strongly, the clypeus coarsely, punctured; thorax closely and strongly punctured; elytra deeply punctate-striate, the interstices finely granulate, impunctate.

Length 1 line.

Head broad, strongly but not closely punctured, without carina, the clypeus coarsely and closely punctured; antennæ short, the lower six joints fulvous, the others black; thorax twice as broad as long, the sides straight, the punctures deep and of somewhat elongate shape, but not very closely placed, with a more or less distinct smooth central space; elytra deeply punctate-striate, the punctures closely placed, the short subsutural row straight, the interstices entirely impunctate; tibiæ and tarsi fulvous; prosternum strongly narrowed between the coxæ.

Hab. Mexico, near the city (Höge).

Closely allied to *C. gravida*, Baly, but smaller, and differing in the straight (not rounded) sides of the thorax. From *C. denticulata* (Ill.), it may be distinguished by the shining and much more strongly punctured head, and the different shape of the thorax.

17. Chætocnema costatipennis.

Black, above obscure dark æneous, the basal joints of the antennæ, and the tibiæ more or less, dark fulvous; head minutely granulate, scarcely punctured; thorax with straight sides, finely granulate and closely punctured; elytra with deep striæ, the latter closely punctured, the interstices costate.

Length 1 line.

Of rather elongate, somewhat medially widened shape; the head opaque, finely granulate, with a few very

minute punctures, the clypeus also extremely finely punctured, but more shining; antennæ with the basal six joints fulvous, the others black; thorax twice as broad as long, the sides straight, the anterior angles thickened and slightly oblique, the surface very closely and finely punctured, the interspaces minutely granulate; elytra slightly depressed near the suture, deeply striate, the punctures within the striæ very closely placed and sometimes obsolete, the interstices strongly costate.

Hab. Mexico, Guanajuato (Sallé).

The thorax in this species is not at all narrowed in front, but of even width; this character in connection with the costate elytra will help to distinguish *C. costatipennis*.

18. Chætocnema parcepunctata.

Chætocnema parcepunctata, Crotch, Proc. Ac. Phil. 1873, p. 74¹; Horn, Trans. Am. Ent. Soc. 1889, p. 265².

Hab. NORTH AMERICA, Lake Superior 1 to Florida 2 and Texas 2.—Mexico, near the city (H. H. Smith).

Dr. Horn's description of this species agrees well with some specimens from the neighbourhood of Mexico city. The impunctate head, the finely, sparingly punctured, alutaceous thorax, which is twice as broad as long, and the deeply punctured elytra, with impunctate interstices, are the principal structural characters of *C. parcepunctata*.

ASPHÆRA (p. 399).

Asphæra abdominalis (p. 400).

Homophæta abdominalis, Horn, Trans. Am. Ent. Soc. 1889, p. 1971.

To the localities given, add:—North America, Texas 1.—Mexico, Cuernavaca in Morelos, Xautipa in Guerrero (*H. H. Smith*), Tula in Hidalgo, Tacambaro in Michoacan (*Höge*).

HOMOPHŒTA (p. 405).

Dr. Horn (Trans. Am. Ent. Soc. 1889, p. 196) sinks the name Asphæra as a synonym of this genus, and perhaps rightly so; there is, however, always the distinguishing character of the white frontal patch present in Homophæta (unless the entire head is pale, as in some species), which I have never observed in Asphæra. For the present I prefer to retain the two genera as distinct, Homophæta possessing but few, Asphæra a great many, species. I may here remark that the name Asphæra is five years older than Homophæta, and that if they are put together the first-mentioned name should be retained.

Homophæta recticollis (p. 405).

To the localities given, add:—Mexico, Atoyac in Vera Cruz, Teapa in Tabasco (H. H. Smith), Tapachula in Chiapas (Höge).

6(A). Homophæta simulans. (Tab. XLII. figg. 24, 25.)

Fulvous; the antennæ, the four anterior legs, and the posterior tibiæ black; elytra metallic bluish, each with six more or less elongate pale flavous spots (2.2.2).

Var. a. The elytral spots partly coalescent.

Var. b. The elytra entirely metallic blue.

Length $3\frac{1}{2}$ lines.

Hab. Mexico, Ventanas in Durango, Tapachula in Chiapas (Höge).

This species, at first sight, closely resembles H. acquinoctialis, but differs from it in the following particulars: the antennæ are much shorter, only reaching a little beyond the base of the elytra, all the joints being much less elongate; the elytra are more depressed, and the spots (although similarly placed) are more elongate and often partly confluent.

In the var. b the elytra are entirely metallic blue.

8. Homophæta violacea.

Black, the base of the head, the clypeus, thorax, femora, and last abdominal segment fulvous; elytra violaceous or dark blue, scarcely perceptibly punctured.

Length 3½ lines.

Of broad, moderately convex shape; the head with a few fine punctures, a large frontal patch and the clypeus fulvous, the rest of the surface and the palpi black; antennæ black, not quite extending to the middle of the clytra, the third and fourth joints equal, wider than the others; thorax more than twice as broad as long, the sides but slightly rounded, narrowed in front, very narrowly margined, the anterior angles blunt, but little produced forwards, the surface convex, entirely impunctate, fulvous; clytra very slightly depressed below the base, extremely minutely punctured, the punctuation only visible under a strong lens; underside black, the flanks of the thorax, the sides and apex of the last abdominal segments, and the femora fulvous; metatarsus of posterior legs long, the claw-joint but little swollen.

Hab. Mexico, Omilteme and Xucumanatlan, both in Guerrero (H. H. Smith).

The system of coloration, the characteristic fulvous frontal patch, the scarcely margined thorax, and the structure of the posterior tarsi are the chief characters of this Homophœta, of which two specimens were obtained. It cannot be mistaken for the blue variety of H. simulans, as it is very much wider, has a more transversely shaped thorax, and is black (instead of fulvous) below.

ŒDIONYCHIS (p. 407).

Œdionychis reichei (p. 408).

To the Mexican localities given, add:—Tapachula in Chiapas (Höge).

Œdionychis ceracollis (p. 408).

Œ. ceracollis is not mentioned by Crotch or Dr. Horn, and it is therefore probable that it is not an Œdionychis at all.

The specimens I referred to it were labelled Œ. ceracollis, Say, in Sallé's collection.

Œdionychis acutangula (p. 409).

To the localities given, add:—Mexico, Ventanas in Durango, Acapulco (Höge), Chilpancingo, Dos Arroyos, Acaguizotla, and Mescala, all in Guerrero (H. H. Smith).

Œdionychis frontalis (p. 410).

To the localities given, add:—Mexico, Amula and Xucumanatlan, both in Guerrero (H. H. Smith).

The Mexican specimens differ from those from Guatemala in the rather larger amount of fulvous on the head, and by the thorax having three very obscure piceous spots placed triangularly on the disc.

6 (A). Œdionychis clypeata.

Fulvous, the antennæ and tibiæ more or less piceous, the head (the clypeus excepted) dark blue; thorax impunctate; elytra metallic dark blue, violet, or greenish, very finely and rather closely punctured. Length $2\frac{3}{4}-3$ lines.

Of ovate, medially rather widened shape; the head impunctate, except for a few punctures near the eyes, dark metallic blue; the clypeus raised, forming an acute transverse ridge, pale fulvous; antennæ long and slender, piceous or black, the basal three joints more or less pale; thorax strongly transverse, the sides greatly rounded and with a broad flattened margin, the anterior angles but slightly dentiform, the surface impunctate; scutellum variable in colour; elytra with a shallow depression below the base, very finely but not very closely punctured; underside and legs fulvous, the tibiæ black or piceous, the posterior pair sometimes fulvous; prosternum rather strongly longitudinally raised.

Hab. Mexico, Atoyac in Vera Cruz, Teapa in Tabasco (H. H. Smith), Tacambaro in Michoacan, Tapachula in Chiapas (Höge).

Closely allied to Œ. frontalis, but with the head almost impunctate, the thorax with much more strongly rounded sides, and the elytra more finely and less closely punctured. Many specimens.

Œdionychis lateralis (p. 412).

To the Mexican localities given, add:—Ventanas in Durango, Cuernavaca in Morelos (Höge), Tierra Colorada in Guerrero (H. H. Smith).

19 (A). Œdionychis æmula.

Œdionychis æmula, Horn, Trans. Am. Ent. Soc. xvi. p. 185, t. 5. fig. 7 (1889)1.

Hab. North America, Arizona 1.—Mexico, Northern Sonora (Morrison).

A single specimen obtained by Mr. Morrison agrees in every respect with Dr. Horn's description and figure, except that it has the third antennal joint shorter than the fourth instead of longer, as stated by that author.

19 (B). Œdionychis tenuilineata.

Œdionychis tenuilineata, Horn, Trans. Am. Ent. Soc. xvi. p. 186 (1889) 1.

Hab. North America, Southern Arizona 1.—Mexico, Acapulco (Höge).

24 (A). Œdionychis haroldi.

Obscure piceous, the head and the antennæ black; thorax fulvous, impunctate; elytra extremely minutely punctured anteriorly, obscure fulvous, the suture and a broad longitudinal stripe on the disc black.

Length 2-2½ lines.

Of broad and rather convex shape; the head nearly black, with a few punctures near the eyes only, the frontal tubercles broad and distinct, the eyes large and widely separated; antennæ short and robust, black, the lower three joints often obscure fulvous; thorax strongly transverse, the sides rounded in front only and rather broadly margined, the surface entirely impunctate, somewhat convex, and shining; scutellum black; elytra rather short, broad, and convex, extremely finely and closely punctured, fulvous, with two broad longitudinal black stripes—one sutural, generally narrowed towards the apex, the other discoidal, of nearly equal width, but slightly narrowed at the shoulders; underside and anterior legs more or less piceous, the posterior legs fulvous.

Hab. Mexico, Tepetlapa in Guerrero, Cuernavaca in Morelos (H. H. Smith), Jalapa (Höge).

Numerous examples. *Œ. haroldi* may be known from the other striped species of *Œdionychis* by its short convex shape and the width of the black elytral stripes, these being as wide as, or in some specimens even wider than, the fulvous intervening spaces; the discoidal stripe is always wider than the lateral fulvous portion. In one specimen the sutural stripe is greatly narrowed before the apex, and the discoidal one interrupted at the same place.

33. Œdionychis interjectionis.

Œdionychis interjectionis, Crotch, Proc. Acad. Phil. 1873, p. 61¹; Harold, Berl. ent. Zeitschr. 1881, p. 129²; Horn, Trans. Am. Ent. Soc. 1889, p. 184³. Œdionychis gracilis, huj. op. p. 420, Tab. XXIV. fig. 14.

Hab. North America, Texas 123.—Mexico 3; Guatemala.

Œdionychis tredecim-maculata (p. 431).

To the Mexican locality given, add:—Dos Arroyos in Guerrero (H. H. Smith), Acapulco, Iguala, and Chilpancingo, all in Guerrero, Huetamo in Michoacan (Höge).

Very variable in size, some specimens being nearly twice as large as others; the spots are sometimes confluent and form two transverse bands. This form greatly resembles in its markings E. maculata, Sturm, but that species has a black vertex and more strongly punctured elytra. In nearly all the specimens obtained by Herr Höge the two subapical spots of the elytra are wanting, so that only eleven spots are visible.

70. Œdionychis durangoensis.

Broadly ovate, subdepressed, testaceous, the sixth to the tenth joints of the antennæ black; thorax minutely punctured; scutellum black; elytra finely and closely punctured, with twelve small black spots placed transversely in three rows (six on each elytron), the last row oblique.

Length $2\frac{1}{2}-2\frac{3}{4}$ lines.

Head impunctate, the eyes rather closely approached; antennæ about half the length of the body, the lower five joints and the apical one also testaceous, the others black; thorax more than twice as broad as long,

with a broad flattened lateral margin, the posterior angles thickened but scarcely produced, the surface extremely minutely punctured; scutellum black; elytra much widened at the middle, with a very broad flattened margin, each with six small black spots—two at the base, two before, and two below the middle, the latter placed obliquely, the surface very finely and closely punctured, the interstices finely wrinkled, the flattened margin more strongly punctate, the epipleuræ very broad and concave; underside and legs rather darker than above; claw-joint piceous.

Hab. Mexico, Ventanas in Durango (Höge).

Many specimens. The position and number of the spots and the colour of the antennæ separate this species from any of its allies.

71. Œdionychis pavonina. (Tab. XLIII. fig. 1.)

Testaceous, the intermediate joints of the antennæ fuscous; thorax impunctate; elytra extremely minutely punctured, fulvous, a transverse band near the middle, a lateral spot below it, and a spot at the apex, flavous, margined with piceous.

Length $2\frac{1}{4}$ lines.

Head scarcely perceptibly punctured, the frontal tubercles indistinct, the eyes large, the interocular space not broader than their diameter; antennæ slender, extending to the middle of the elytra, testaceous, the fifth joint partly and the following three joints entirely obscure fuscous; thorax at least twice as broad as long, the sides broadly and flatly margined, strongly rounded, the anterior angles slightly dentiform, the surface impunctate, testaceous; scutellum fulvous; elytra microscopically punctured, narrowly margined, fulvous, with a transverse band immediately before the middle (composed of two coalescent spots), a round spot near the apex laterally, and the apex itself, pale flavous, these markings surrounded by a narrow piceous margin; underside and legs testaceous; claw-joint strongly swollen.

Hab. Mexico, Atoyac in Vera Cruz (H. H. Smith).

A single male specimen.

ALLOCHROMA (p. 436).

17 (A). Allochroma teapense. (Tab. XLIII. fig. 2, &.)

Black, the face and the basal and terminal joints of the antennæ fulvous; thorax finely and sparingly punctured; elytra fulvous, deeply punctate-striate, the interstices more or less costate, the base with a transverse black band.

Var. The legs and underside fulvous.

d. Antennæ with the sixth joint strongly swollen and elongate.

Length 2 lines.

Hab. Mexico, Teapa in Tabasco (H. H. Smith).

Very closely allied to A. guatemalense, and with similarly formed antennæ in the male, but of different coloration. The legs (the posterior tibiæ excepted) are black; the elytra have a transverse black band extending to one-third of their length, and the interstices are costate, but more distinctly so near the sides. The variety has fulvous legs. Two specimens.

24. Allochroma flohri. (Tab. XLIII. fig. 5, &.)

Fulvous; the antennæ black, with the apical two or three joints flavous; thorax finely and sparingly punctured; elytra fulvous, with a broad posteriorly narrowed black sutural stripe, punctate-striate, the interstices flat.

 σ . Antennæ with the sixth joint strongly thickened and elongate. Var. The breast and the legs more or less piceous. Length 2 lines.

Hab. Mexico (Flohr).

Of comparatively small size; the head longitudinally strigose on the vertex; the antennæ (o) formed as in the males of several of the allied species; the elytra with a black sutural stripe which is widened anteriorly, gradually narrowed behind, and does not extend to the apex. The elytra have a distinct transverse depression below the base, and the base itself is rather strongly raised. In the female the antennæ are simple, with the terminal joints only gradually thickened. I have lately received several specimens from Mr. Flohr, without particular locality.

MONOPLATUS (p. 452).

Monoplatus quadraticollis (p. 453).

This name must be erased. The single specimen from which I drew the description being gummed to a card, I unfortunately overlooked the simple claws; a re-examination of the insect proves that it is an immature example of Sangaria haagi (huj. op. p. 340).

2. Monoplatus puncticollis.

Pale fulvous, the head and thorax strongly punctured, the latter with a distinct transverse sulcus; elytra depressed below the base, strongly punctate-striate.

Length $1\frac{1}{4}-1\frac{1}{2}$ line.

Of narrowly elongate, depressed shape; head remotely and distinctly punctured, without frontal elevations, the clypeus thickened and convex between the point of insertion of the antennæ, the palpi filiform, but slightly thickened; antennæ slender, extending to the middle of the elytra, entirely fulvous, the first joint long, gradually thickened towards the apex, the second short, the third and fourth joints slender and long, the others gradually shortened, the terminal joints thicker and often darker in colour; thorax one-half broader than long, all the margins straight, the anterior angles slightly thickened, the posterior ones acute, the surface strongly and rather closely punctured, the basal sulcus distinct, but not extending to the sides; elytra depressed, narrowly margined, with the suture depressed below the base, the punctures rather strong and arranged in regular rows, distinct nearly to the apex, the interstices flat, the epipleuræ very broad and concave; posterior femora strongly incrassate; posterior tibiæ finely dentate externally, and with a distinct apical spur; the first joint of the posterior tarsi as long as the following joints together; clawjoint moderately swollen, appendiculate.

Hab. Mexico, Omilteme, Amula, and Chilpancingo, all in Guerrero (H. H. Smith).

Principally distinguishable by the strongly punctured head and thorax.

RHINOTMETUS (p. 455).

6. Rhinotmetus modestus.

Obscure fulvous, clothed with silvery-grey pubescence; head elongate; thorax slightly narrowed and rounded anteriorly, not perceptibly punctured; elytra darker than the thorax, finely punctate-striate, opaque, the interstices slightly raised.

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

Head produced in front, finely granulate, sparingly pubescent, the frontal tubercles obsolete, the clypeus with a distinct central ridge; the antennæ long, entirely fulvous, joints 1-10 (the second excepted) of nearly equal length, the apical one more elongate and pointed; thorax subquadrate, the sides straight, obsoletely angulate before the middle, and slightly narrowed in front, the surface pale fulvous, clothed with silvery-grey pubescence, not visibly sculptured; scutellum very small; elytra broader than the thorax at the base, and darker in colour, punctate-striate, the punctures not very closely placed, the interstices slightly costate; below and the legs pale fulvous.

Hab. Mexico, Chilpancingo in Guerrero (H. H. Smith).

Allied to R. canescens, but smaller, and with the pubescence silvery instead of golden-yellow. One specimen.

7. Rhinotmetus minutus.

Narrowly elongate, fulvous; the antennæ with thickened terminal joints; thorax finely rugose, scarcely pubescent; elytra shining, sparingly pubescent, punctate-striate anteriorly only.

Length 1½ line.

Head finely rugose, not longer than broad, the frontal elevations indistinct; antennæ fulvous, scarcely extending to the middle of the elytra, all the joints of nearly equal length, the fifth and following ones gradually (the terminal joints rather considerably) thickened; thorax a little longer than broad, slightly constricted behind, the sides subangulate before the middle, the anterior angles tuberculiform, the surface rather flat, finely rugose, dark fulvous, sparingly clothed with very short yellowish pubescence; elytra with a distinct depression below the base, punctate-striate to the middle, the punctures indistinct beyond, the surface shining, fulvous, very sparingly covered with yellowish hairs; legs fulvous, the tarsi nearly black; claws appendiculate.

Hab. Mexico, Orizaba (Sallé, H. H. Smith).

A small and narrow species, distinguished by the non-produced head, the thickened antennæ, and the shining and only anteriorly punctured elytra. Notwithstanding the appendiculate claws, R. minutus seems to me to belong to the present genus. Two specimens.

PHYSIMERUS (p. 459).

Physimerus pygmæus (p. 462).

To the locality given, add:—Mexico, Atoyac in Vera Cruz, Teapa in Tabasco (H. H. Smith).

Some of the Mexican specimens are paler than those obtained in Chiriqui; they have the elytral spots scarcely perceptible, and the antennæ almost entirely pale.

14. Physimerus elongatulus.

Obscure fulvous, opaque, pubescent; thorax broader than long; elytra finely punctate-striate, the suture obscure fuscous; the posterior femora with an obscure spot at the apex.

Length 1½ line.

Head not visibly punctured, clothed with greyish pubescence; palpi with the penultimate joint slightly thickened; antennæ nearly two thirds the length of the body, entirely fulvous, the second joint thicker but scarcely shorter than the following one, the fourth and fifth joints a little longer, the others very gradually thickened and shorter; thorax about one half broader than long, the sides straight, the surface somewhat depressed on the disc, closely covered with short yellowish pubescence, entirely obscuring the

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sculpture, the disc slightly stained with fuscous; elytra wider at the base than the thorax, very elongate and subdepressed, the punctures very fine, the surface depressed below the base, pubescent like the thorax, fulvous, with an obscure fuscous sutural stripe, which is gradually narrowed towards the apex; underside and legs fulvous, the posterior femora with an obscure apical spot; claws appendiculate.

Hab. Mexico, Amula in Guerrero (H. H. Smith).

Two specimens.

15. Physimerus flavo-pilosus.

Fulvous, opaque, clothed with golden-yellow pubescence; antennæ piceous, long and robust; thorax subquadrate, granulate and pubescent; elytra very finely punctured, with an obscure spot below the middle.

Length 2 lines.

Head broad, extremely finely punctured on the vertex, the eyes large, the frontal elevations not strongly raised, divided by a distinct longitudinal groove, the clypeus in the form of a transverse ridge, the lower portion of the face glabrous, shining; the palpi with the penultimate joint slightly thickened; antennæ robust, extending to two thirds the length of the body, piceous, shining, furnished with scattered hairs, the third, fourth, and fifth joints elongate, slightly curved at the base, and of nearly equal length, the terminal joints shorter; thorax scarcely broader than long, the sides straight, the anterior angles with a small tubercle, the middle of the disc obsoletely transversely depressed, the sides clothed with very short silky golden-yellow pubescence, the disc finely granulate, partly denuded of hairs, fulvous; elytra with a slight depression below the base, very finely punctate-striate, the punctures for the most part obscured by the silky golden pubescence, which is more distinct below the middle, a small brownish spot is placed at some distance from the apex near the sides; posterior tibiæ obsoletely dentate externally, the apex with a robust spur.

Hab. Panama, Volcan de Chiriqui (Champion).

The robust and shining antennæ and the golden pubescence of the upper surface in connection with the size will help to distinguish this species.

OMOTYPHUS (p. 470).

11. Omotyphus suturalis. (Tab. XLIII. fig. 3.)

Black, sparingly pubescent, the fifth and sixth joints of the antennæ and the base of the tibiæ flavous; head and thorax strongly rugose-punctate, the thorax with two small elevations; elytra with a deep depression near the middle, strongly punctate-striate, the suture narrowly fulvous-pubescent.

Length 1¼ line.

Of elongate, robust shape, convex, black; the head broad, deeply and strongly rugose, without frontal tubercles or carina, the palpi slightly incrassate; the antennæ short, only extending to the base of the elytra, the terminal joints widened, joints 1-4 piceous, 5 and 6 flavous, 7-10 black, and 11 obscure fulvous, 7-10 transversely shaped; thorax but slightly broader than long, with all the margins straight, a small tubercle on each side near the apex, the surface sculptured like the head, sparingly clothed with blackish hairs; scutellum clothed with golden-yellow pubescence; elytra much wider at the base than the thorax, with a deep oblique depression extending from the shoulder to near the middle, where it is more plainly marked, the punctures comparatively large and deep, the surface rather shining, pubescent like the thorax, the pubescence at the suture forming a narrow fulvous margin; legs piceous, the base of the tibiæ and the tarsi paler, the posterior femora clothed with yellowish pubescence near the apex.

Hab. Mexico, Chilpancingo in Guerrero (H. H. Smith).

A single specimen.

12. Omotyphus carinatus. (Tab. XLIII. fig. 4.)

Subquadrate, black; the antennæ fulvous, the sixth and seventh joints fuscous; thorax with two high triangular ridges; elytra scarcely pubescent, deeply punctured, with longitudinal tubercles at the base and near the apex.

Length 1½ line.

Head finely rugose, the frontal tubercles in the shape of small oblique dark fulvous ridges, the intermediate space with some short pale fulvous pubescence; palpi moderately thickened; antennæ extending very little beyond the base of the elytra, fulvous, the sixth and seventh joints fuscous, the fourth and fifth of equal length, shorter than the third, the following joints transversely subquadrate; thorax nearly quadrate, the sides straight, obsoletely angulate before the middle, the surface here and there clothed with some very short fulvous hairs, granulate, with two very highly raised, acute, triangular ridges, the intermediate space with some obsolete transverse elevations, the sides with an obsolete longitudinal one; scutellum thickly clothed with yellow pubescence; elytra much wider at the base than the thorax, subquadrate, black, opaque, the punctures deep and not very regularly placed, with scattered spots of very short silvery pubescence, which are more distinct below the middle, and the following tubercles or ridges—one, strongly raised, at the centre of the base, three, less distinct, below the middle, placed transversely, and two near the apex,—the apex perpendicularly deflexed, and with its surface concave; underside black, sparingly covered with fulvous hairs; tibiæ and tarsi obscure fulvous.

Hab. Guatemala, Coban in Vera Paz (Conradt).

One specimen.

HYPOLAMPSIS. (To follow the genus Omotyphus, p. 476.)

Hypolampsis, Clark, Cat. of Halticidæ, p. 230 (1860).

More than thirty species have been placed in this genus by Clark. Its principal distinguishing characters are the subquadrate thorax, the incrassate palpi, the single spine to the posterior tibiæ, and the appendiculate claws.

1. Hypolampsis inornata.

Subdepressed, black, very finely pubescent; thorax subquadrate, finely granulate; elytra depressed near the suture and at the sides, punctate-striate anteriorly, the punctures becoming obsolete posteriorly; legs more or less fulvous, the posterior femora darker.

Length 2 lines.

Head finely rugose, black, the lower portion more or less flavous, the frontal elevations short, the clypeus in the shape of a triangular ridge; penultimate joint of the palpi but moderately incrassate, flavous; antennæ extending to about the middle of the elytra, black or piceous, the lower joints more or less flavous at their apex, the third, fourth, and fifth joints nearly equal, more elongate than the following ones; thorax about one fourth broader than long, narrower at the base, the sides being slightly widened and rounded before the middle, the anterior angles a little thickened, and each with a single hair, the surface somewhat depressed at the base, finely granulate, and clothed with thin, short, yellowish-grey pubescence; scutellum broad, pubescent; elytra obsoletely depressed below the base, and more distinctly and longitudinally so near the lateral margins, the pubescence similar to that of the thorax, the punctures rather strong anteriorly, becoming gradually more obsolete towards the apex, where the striæ are more prominent; legs pale fulvous, the femora sometimes darker, the posterior tibiæ with a small spine at the apex; claws appendiculate.

Hab. Mexico, Chilpancingo in Guerrero (H. H. Smith).

This species is of a sombre black colour; and the fine silky pubescence, which covers the entire upper surface, gives it an opaque appearance. Two specimens.

CORAIA (p. 482).

3. Coraia apicicornis. (Tab. XLIII. fig. 6.)

Pale fulvous, the antennæ (the apical joint excepted), the middle of the breast, and the legs partly, black; thorax with seven spots, strongly rugose; elytra obscure fusco-æneous, rather strongly rugose, glabrous. Length $3\frac{1}{2}$ lines.

Head longitudinally grooved in the middle in front, with a blackish patch on the vertex, the latter strongly rugose, the rest of the surface pale fulvous; labrum and palpi black; antennæ extending to about the middle of the elytra, black, the apical joint fulvous, the third and fourth joints equal, the seven basal joints shining, the others opaque; thorax twice as broad as long, the sides strongly widened or subangulate at the middle, the posterior angles acute, the surface obsoletely impressed at the sides, strongly rugose, testaceous, with four piceous spots placed transversely before and three others, larger, below the middle; scutellum black, strongly punctured; elytra obscure æneous or nearly black, closely rugose, the epipleuræ distinct nearly to the apex; underside pale fulvous, the middle of the breast black; the knees, the lower portion of the tibiæ, and the tarsi black; tibiæ distinctly sulcate; the first joint of the posterior tarsi as long as the following two joints together.

Hab. Mexico, Ventanas in Durango (Höge).

A species easily known by the seven-spotted thorax and the variegated legs. It agrees with *Coraia* in having the third and fourth joints of the antennæ equal in length; the epipleuræ, however, are prolonged beyond the middle of the elytra, and the surface of the latter is glabrous and rugose. Numerous examples.

NESTINUS (p. 483).

5. Nestinus longicornis.

Obscure fuscous or fulvous, finely pubescent, the antennæ, tibiæ, and tarsi nearly black; thorax irregularly rugose, with two foveæ and three black spots; elytra very finely rugose, pubescent. Length $3\frac{1}{2}$ lines.

d. Head finely rugose on the vertex, the frontal elevations smooth and shining; antennæ nearly extending to the apex of the elytra, black, the fourth joint much longer than the third, the following joints gradually shortened; thorax nearly three times broader than long, the sides rounded at the middle, the angles tuber-culiform, the surface with an oblique fovea on each side, rather shining, irregularly rugose and punctured, with three small blackish spots placed transversely; scutellum fuscous, pubescent, its apex truncate; elytra parallel, convex, very finely and evenly rugose, and sparingly clothed with short greyish pubescence, the epipleuræ rather narrow, disappearing below the middle; the first joint of the posterior tarsi as long as the following two joints together; claws bifid.

Hab. Mexico, Matamoros Izucar and Atlixco, both in Puebla (Höge).

N. longicornis might easily be mistaken for Coraia maculicollis. It is, however, less robust; the structure of the antennæ is different; and the elytra have no trace of the bluish hue peculiar to Coraia. The female is more dilated posteriorly, and the antennæ in this sex are, as usual, shorter.

TRIRRHABDA (p. 484).

1 (A). Trirrhabda vicina.

Pale flavous, the antennæ black; head and thorax strongly punctured, the former with the vertex, and the

latter with three spots, greenish; elytra finely rugose, bluish, æneous, or purplish, the disc with some obsolete longitudinal ridges, the lateral and apical margins flavous.

Length $2\frac{1}{2}$ —3 lines.

Hab. Mexico, Amula, Chilpancingo, Omilteme, Xucumanatlan, all in Guerrero (H. H. Smith).

T. vicina is very closely allied to T. variabilis, and is equally variable as regards the colour of the elytra; it differs from it in the following particulars:—The antennæ are less robust, the thorax is much more strongly (almost rugosely) and closely punctured, and the elytra are more distinctly rugose (in T. variabilis they are extremely finely coriaceous), and have three or four obsolete (sometimes more distinctly marked) longitudinal ridges. In some specimens the spots on the thorax are confluent. The elytra are similarly pubescent in both species. Numerous examples.

1 (B). Trirrhabda högei. (Tab. XLIII. fig. 8.)

Pale fulvous; the head and thorax sparingly punctured, the latter with two impressions; elytra green, finely rugose and pubescent.

Length $4\frac{1}{2}$ lines.

Of broad and robust shape; the head with a few punctures on each side, the vertex impunctate; antennæ extending to the middle of the elytra, fulvous, slender, the fourth joint longer than the third or fifth; thorax more than twice as broad as long, the sides strongly rounded and widened at the middle, the surface deeply transversely depressed, irregularly and sparingly punctured; scutellum fulvous; elytra clothed with very short pale fulvous pubescence, light green, finely rugose, with a rather broad and well-marked lateral margin, the epipleuræ indistinct below the middle; underside and legs fulvous; the last abdominal segment of the male with a deep triangular emargination, that of the female much less strongly emarginate.

Hab. Mexico, Acapulco in Guerrero (Höge).

A large, robust species, with entirely green elytra and an unspotted thorax. Many specimens.

2 (A). Trirrhabda sublævicollis. (Tab. XLIII. fig. 7.)

Flavous, the antennæ black; the thorax with three blackish spots, nearly impunctate; elytra obscure purplish or æneous, with the lateral margins flavous, the disc finely punctured, the interspaces strongly transversely rugose or wrinkled.

Length 3 lines.

Head with a few fine punctures on the vertex, the latter æneous or purplish, the lower portion of the face flavous; antennæ extending beyond the middle of the elytra, black, the fourth joint one-half longer than the third; thorax transverse, the sides but little rounded at the middle, the disc with a deep transverse depression, which is sometimes interrupted in the centre, the surface with only a few fine irregularly distributed punctures, flavous, with a spot on each side and a median stripe blackish; scutellum smooth, black; elytra glabrous, dark metallic purplish, finely punctured, and rather strongly rugore throughout, the lateral and apical margins flavous; legs flavous, the upper edge of the femora and the tibiæ and tarsi piceous or black.

Hab. Mexico, Omilteme, Xautipa, and Chilpancingo, all in Guerrero (H. H. Smith).

Allied to T. ænea, but with the thorax nearly impunctate and the elytra much more strongly wrinkled.

9. Trirrhabda semiviridis. (Tab. XLIII. fig. 9.)

Obscure testaceous, the antennæ and tarsi fuscous; head rugose on the vertex; thorax transversely depressed, sparingly punctured; elytra obscure greenish, closely punctured, shining.

Length 3 lines.

Elongate, rather convex, parallel; the head fulvous on the vertex, the latter closely rugose, the frontal tubercles well-developed, piceous, the lower portion of the face testaceous; antennæ extending beyond the middle of the elytra, black, the basal joints testaceous beneath, the fourth joint the longest, more than one-half longer than the third, the following joints gradually shortened; thorax transverse, the sides strongly rounded, the angles obtuse, the surface deeply obliquely depressed at the sides, finely and sparingly punctured; elytra very closely and finely punctured, and finely wrinkled, obscure greenish, rather shining; underside and legs testaceous, the sides of the breast, the apex of the tibiæ, and the tarsi more or less fuscous.

Hab. Guatemala, Quiche Mountains, Totonicapam (Champion).

T. semiviridis may be known from its allies by the obscure greenish elytra, which are glabrous and have a varnished appearance. Three specimens.

10. Trirrhabda rugosa. (Tab. XLIII. fig. 10.)

Fuscous, the antennæ black; thorax coarsely punctured, æneous, narrowly margined with flavous; elytra æneous, strongly rugose and closely punctured, the lateral margins obscure flavous; legs flavous, the outer edge of the femora, the tibiæ, and tarsi piceous.

Length 2 lines.

Hab. Mexico, Xucumanatlan in Guerrero (H. H. Smith).

Distinct from any of its congeners by the strongly rugose head, thorax, and elytra in connection with the æneous upper and the dark under surface. Two specimens.

11. Trirrhabda guatemalensis.

Fulvous, the base of the head, the antennæ, breast, and tarsi more or less piceous; thorax transversely sulcate, strongly punctured; elytra pale greenish, grey, or fulvous, opaque, finely rugose, clothed with very short pubescence.

Length $2\frac{1}{2}$ -3 lines.

Of rather robust and convex shape, the base of the head piceous or fuscous, rugosely punctured, the lower portion pale fulvous, shining; antennæ nearly extending to the apex of the elytra, piceous or black, shining, the joints elongate, the fourth longer than the third; thorax transverse, the sides strongly rounded, the angles obtuse, the surface deeply transversely sulcate, the sulcation not quite extending to the sides, strongly punctured, pale fulvous; scutellum fuscous; elytra slightly widened posteriorly, the entire surface finely rugose and clothed with scarcely perceptible pubescence.

Hab. Guatemala, Dueñas (Champion).

T. guatemalensis varies greatly in the colour of the elytra; the latter are coriaceous throughout, but more strongly so than in the other members of the genus from our region. This character in connection with the unspotted thorax will assist in the recognition of the present species. Many specimens.

GALERUCELLA (p. 488).

Galerucella godmani (p. 492).

To the locality given, add:—Mexico, Acapulco in Guerrero (Höge).

8. Galerucella amabilis. (Tab. XLIII. fig. 11.)

Pale fulvous, the base of the head, the antennæ, and tarsi piceous or black; the thorax sparingly punctured, deeply depressed at the sides; elytra bright green, subopaque, finely rugose throughout. Length $2\frac{1}{2}-2\frac{3}{4}$ lines.

Head finely rugose on the vertex, the latter fuscous or black, the lower portion of the face fulvous, the eyes widely separated; the antennæ extending to the middle of the elytra, black, the lower joints more or less testaceous at their base, the third twice the length of the second, the fourth longer than the preceding, the fifth as long as the third; thorax transverse, short, the sides very strongly rounded at the middle, the angles obsolete, the surface with a deep depression on each side, somewhat uneven, and very sparingly and finely punctured; scutellum fuscous; elytra scarcely wider at the base than the thorax, gradually widened posteriorly, finely and evenly rugose, semi-opaque, bright metallic green; underside and legs pale fulvous, the tarsi fuscous.

Hab. Mexico, Chilpancingo in Guerrero (H. H. Smith).

Three specimens.

9. Galerucella terminalis.

Pale flavous; the antennæ piceous, with the terminal three joints flavous; head and thorax strongly punctured, the latter deeply depressed at the sides; elytra fuscous or obscure purplish, finely rugose and pubescent. Length 3½ lines.

Head strongly punctured on the vertex, the frontal elevations distinct; the antennæ rather widely separated at their point of insertion, extending to the middle of the elytra, piceous, the terminal three joints more or less distinctly flavous, the third and fourth joints equal; thorax transverse, more than twice as broad as long, the sides rounded, all the angles obtuse, the surface deeply excavated at the sides, rather strongly and closely punctured, shining; scutellum pale; elytra opaque, obscure dark purplish or fuscous, finely rugose and pubescent, the epipleuræ continued below the middle; the first joint of the posterior tarsi as long as the following two joints together; tibiæ unarmed; claws bifid; anterior coxal cavities open.

Hab. Panama, Bugaba, Volcan de Chiriqui (Champion).

The pale terminal joints of the antennæ, the deeply impressed and strongly punctured thorax, and the colour of the elytra will help to distinguish this species.

OPHRÆA (p. 492).

8. Ophræa opaca.

Ophræa elongata, huj. op. p. 495 (partim).

Elongate, black; thorax rufous or fulvous, with a broad black median stripe; elytra opaque, very finely rugose. Length 3 lines.

Head finely rugose, without frontal elevations or carina; antennæ short and robust, only extending to the base of the elytra; thorax more than twice as broad as long, the sides rounded, the surface obsoletely depressed at the sides and at the middle, finely rugose and pubescent, rufous, the middle of the disc occupied by a black stripe; elytra black, finely rugose throughout.

Hab. Mexico, Acapulco in Guerrero (Höge); Guatemala, Cerro Zunil, Capetillo (Champion).

Additional specimens of this insect prove that it is quite distinct from O. elongata, from which it may be distinguished by the entirely black, opaque (not metallic) elytra, and their much finer sculpture; the antennæ are also shorter and more robust. Both species occur at Capetillo. O. elongata appears to be not uncommon at Guanajuato, whence we have received numerous examples.

DIABROTICA (p. 502).

2. Diabrotica fraterna.

Diabrotica morosa, huj. op. p. 503 (partim) (excl. fig.).

The name morosa proposed by me for this species is not required, as the previously described D. fraterna, Baly, belongs to the genus Dircema, Clark (cf. Baly, Trans. Ent. Soc. London, 1891, p. 428). According to Baly, op. cit. 1890, p. 6, I have incorrectly identified our Panama examples with his species, the type of which is from Guatemala; the Panama localities quoted by me must be transferred to the following, D. lacordairei.

2 (A). Diabrotica lacordairei.

Diabrotica lacordairei, Kirsch, Berl. ent. Zeitschr. 1883, p. 199¹; Baly, Trans. Ent. Soc. Lond. 1890, p. 6².

Diabrotica morosa, huj. op. p. 503 (partim), Tab. XXVIII. fig. 19.

To the localities given, add:—Colombia 12; Upper Amazons 2.

Baly states 2 that his D. fraterna, from Guatemala, is much narrower than D. lacordairei, and quite distinct from it.

11. Diabrotica pulchra.

Crioceris pulchra, Sahlb. Peric. Ent. Sp. Ins. p. 68, t. 4. fig. 3 (1823) (nec Baly). Diabrotica albosignata, Baly, huj. op. p. 506, Tab. XXIX. fig. 14.

To the localities given, add:—British Honduras, R. Sarstoon (Blancaneaux); Honduras 1.

28. Diabrotica litterata.

Crioceris litterata, Sahlb. Peric. Ent. Sp. Ins. p. 70, t. 4. fig. 5 (1823) ; Gahan, Trans. Ent. Soc. Lond. 1891, p. 523, nota.

Diabrotica delineata, huj. op. p. 514, Tab. XXIX. fig. 10.

The locality given by Sahlberg is Mexico 1.

Diabrotica tripunctata (p. 516).

According to Baly (Trans. Ent. Soc. Lond. 1890, p. 13), D. tripunctata is synonymous with the previously described D. melanocephala (Fabr.).

40 (A). Diabrotica sedata.

Diabrotica sedata, Baly, Trans. Ent. Soc. Lond. 1890, p. 481.

Hab. Guatemala¹; Brazil¹.

Evidently closely allied to, if not identical with, *D. apicicornis*, or some other closely allied Central-American species. We may be permitted to doubt if the insects from these widely separated localities are really conspecific.

59 (A). Diabrotica speciosa.

Galeruca speciosa, Germ. Ins. Spec. i. p. 602 (1824) 1.

Diabrotica speciosa, Baly, Trans. Ent. Soc. Lond. 1890, p. 412.

Diabrotica hexaspilota, Baly, Journ. Linn. Soc., Zool. xix. p. 2283.

Var. Diabrotica vigens, Er. in Wiegm. Archiv, xiii. 1, p. 167 (1847) 4.

Var. Diabrotica simoni, Jac. P. Z. S. 1889, p. 2805.

Var. Diabrotica amabilis, Baly, loc. cit. p. 2226.

Var. Diabrotica simulans, Baly, loc. cit. p. 2227.

Hab. Mexico (Baly²).—South America¹⁻⁷ to Peru.

I have not seen specimens of this species from our region.

60 (A). Diabrotica curvipustulata.

Diabrotica curvipustulata, Baly, Trans. Ent. Soc. Lond. 1890, p. 441.

Hab. Nicaragua (Janson 1).—Colombia 1.

Unknown to me; evidently closely allied to D. selecta, Jac.

61. Diabrotica viridula.

Crioceris viridula, Fahr. Syst. Eleuth. i. p. 453.

Diabrotica viridula, Baly, Trans. Ent. Soc. Lond. 1890, p. 40.

Diabrotica optiva, Erichs. in Wiegm. Archiv, xiii. 1, p. 169 (1847).

Diabrotica fusco-maculata, huj. op. p. 528, Tab. XXIX. fig. 25.

The correction of the synonymy of this species is given on Baly's authority.

Diabrotica rufo-maculata (p. 529).

To the Mexican locality given, add:—Omilteme in Guerrero 8000 feet (H. H. Smith). The additional specimens received agree perfectly with the type.

69 (A). Diabrotica innuba.

Cistela innuba, Fabr. Syst. Ent. p. 1171.

Diabrotica innuba, Baly, Journ. Linn. Soc., Zool. xix. p. 230²; Gahan, Trans. Ent. Soc. Lond. 1891, p. 418³.

Hab. Mexico ^{2 3}.—South America ^{2 3}, Colombia ^{2 3}, Cayenne ^{2 3}; West Indies ^{2 3}.

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I have not seen a specimen of this species from within our limits, and the locality "Mexico," therefore, requires confirmation.

75 (A). Diabrotica kirschi.

Diabrotica kirschi, Baly, Journ. Linn. Soc., Zool. xix. p. 231¹; Gahan, Trans. Ent. Soc. Lond. 1891, p. 421².

? Diabrotica demissa, Er. in Wiegm. Archiv, xiii. 1, p. 169 (1847)3.

Hab. Mexico².—Colombia¹²; Peru³.

Diabrotica difformis (p. 536).

To the localities given, add:—Mexico, Teapa in Tabasco (H. H. Smith).

Found in some numbers by Mr. Herbert Smith.

Diabrotica setosa (p. 537).

Mr. Herbert Smith has sent us specimens of this species from Teapa, and we are thus able to verify the original locality quoted by Baly.

91 (A). Diabrotica smithi.

Black, above flavous; thorax strongly punctured; elytra very strongly and closely punctured, flavous, with a narrow sutural and a broader lateral stripe, the latter not extending to the apex, black; legs pale, the femora streaked with black above.

Length 23 lines.

Head fulvous, the vertex with a deep fovea and two small black spots; antennæ extending to the middle of the elytra, black, the lower joints flavous at the base, the third joint much longer than the second, but shorter than the fourth; thorax twice as broad as long, the sides obsoletely angulate at the middle, the surface strongly and closely punctured, shining, the disc with a rather obsolete depression on either side; scutellum black; elytra rather convex, much more strongly punctured than the thorax, the punctures deep and round, the suture narrowly black, the lateral stripe broader, commencing at the shoulder and not quite reaching the apex; underside black; the femora above and the outer edge of the tibiæ, as well as the tarsi, more or less black.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith).

A single specimen. Differs from the allied similarly-coloured species by the strong and close punctuation of the thorax and elytra.

100 (A). Diabrotica peregrina. (Tab. XLIII. fig. 12.)

Black, the basal and apical joints of the antennæ pale; thorax quadrate, shining, black, nearly impunctate, without fovea; elytra flavous, the suture, and a broad fascia before and a narrower one below the middle, black; the base of the femora pale flavous.

Length 13 line.

Head impunctate, black; antennæ only extending to the base of the elytra, the basal and the apical three joints testaceous, the first joint stained with piceous above, the others black, the third joint more than twice as long as the second; thorax quadrate, the sides straight, the surface smooth, shining, black, with a few very minute punctures; scutellum black; elytra strongly punctured in very close irregular rows, flavous, with a broad fascia before the middle (widened at the sides and not extending to the lateral margins), and a much narrower one near the apex, as well as the suture, black, the interstices sparsely pubescent; underside and legs black, the basal half of the femora pale testaceous.

Hab. Mexico, Venta de Pelegrino in Guerrero (H. H. Smith).

A single specimen. Somewhat allied in coloration to D. dohrni and D. subsignata, but differing in the elytral pattern.

109 (A). Diabrotica guerreroensis. (Tab. XLIII. fig. 13.)

Black, the antennæ and legs flavous; thorax fulvous, scarcely impressed, impunctate; elytra finely punctured, flavous or fulvous, an elongate humeral spot, the suture at the base, a transverse band below the middle, and the extreme apex, black.

Length 3 lines.

Of posteriorly widened shape; the head impunctate, black or partly fulvous, the lower portion forming a plane surface, without any elevations; antennæ extending to about the middle of the elytra, fulvous or flavous, the third and fourth joints nearly three times as long as the second; thorax subquadrate, rather convex, slightly narrowed in front, the surface obsoletely obliquely impressed at the sides, impunctate; scutellum black; elytra convex, widened posteriorly, finely punctured in semi-regular rows, fulvous, with an elongate spot at the shoulder (widened posteriorly, and extending to a third of the length of the elytra), a somewhat similar spot surrounding the scutellum, a broad transverse band below the middle (not quite extending to either margin), and a transverse spot at the apex, black; underside and pygidium black.

Hab. Mexico, Xautipa and Soledad, both in Guerrero (H. H. Smith).

Differing in the elytral pattern from any of its allies in this section.

111 (A). Diabrotica blattoides.

Broadly depressed, pale flavous; the antennæ, underside, tibiæ, and tarsi black; thorax bifoveolate, impunctate; elytra closely and rather strongly punctured.

Length 3 lines.

Head broad, foveolate on the vertex; the antennæ extending to two-thirds of the length of the elytra, black, rather robust, the third joint elongate, slightly shorter than the fourth, the terminal joints gradually shorter; thorax one-half broader than long, the sides straight, the surface rather flat, with a small but deep fovea on each side and a more shallow depression at the base, the disc impunctate; scutellum very broad, concave in the middle; elytra not wider at the base than the thorax, very closely and strongly punctured; legs long and slender, the femora pale flavous, the tibiæ and tarsi black.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith). A single specimen.

Of the same depressed shape as D. sublævicollis, but without any darker markings.

112. Diabrotica tricincta.

Galleruca tricincta, Say, Journ. Acad. Phil. iii. p. 457 (1824)1.

Diabrotica tricincta, Lec. Proc. Acad. Phil. 1865, p. 2122.

Diabrotica suffriani, huj. op. p. 55, Tab. XXXII. fig. 3.

To the locality given, add:—North America 1, Arizona 2.

Diabrotica sexplagiata (p. 553).

This species, as noted by Mr. Gahan (Trans. Ent. Soc. Lond. 1891, p. 524), belongs to the genus Neobrotica.

Diabrotica hirsuta (p. 552).

To the Mexican locality given, add:—Teapa in Tabasco (H. H. Smith).

130 (A). Diabrotica quatuordecim-punctata. (Tab. XLIII. fig. 14.)

Black, the antennæ and legs fulvous; the head testaceous; thorax testaceous, with four black spots; elytra closely punctured, testaceous, each with seven black spots (1, 2, 2, 2).

Length 3 lines.

Head with a deep fovea on the vertex, the latter with two black spots; the antennæ extending to the middle of the elytra, fulvous, the third joint twice as long as the second, the fourth much longer than the preceding one; thorax one-half broader than long, the sides rounded anteriorly, the surface impunctate, with two foveæ and four black spots, the latter placed transversely before the middle; scutellum black; elytra closely and rather strongly punctured, testaceous, each with seven black spots—one at the shoulder, two immediately below it, placed transversely, one near the lateral margin below the middle, another near the suture a little lower down, and two near the apex, placed transversely; underside black; legs fulvous.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith).

A single specimen. The elytral spots are placed in two longitudinal rows, the four outer spots at equal distances near the lateral margin, and the three inner ones at unequal distances near the suture. In the position of the spots the present species differs from any of its congeners in this section.

Diabrotica nitidula (p. 563).

To the localities given, add:—Mexico, Cordova (Sallé, Höge).

150 (A). Diabrotica semiopaca.

Piceous, the head in part, the thorax, and femora flavous; elytra black or bronze-black, opaque, closely and finely punctured in rows, the interstices finely transversely rugose; the third joint of the antennæ elongate.

Length 1½ line.

Head piceous on the vertex, the latter minutely granulate, and with a central depression, the lower part of the face flavous, rather convex, with a central ridge, the labrum piceous; the antennæ extending to the middle of the elytra, piceous, the lower four joints fulvous, the third joint nearly three times as long as the second and as long as the fourth; thorax twice as broad as long, the sides narrowly margined, slightly constricted at the base, the disc with a deep oblique depression on either side, the surface impunctate, flavous; scutellum black; elytra with very close and distinct rows of punctures, the interstices minutely granulate and finely rugose; underside piceous; legs fulvous, the posterior tibiæ and the tarsi nearly black.

Hab. Mexico, Acapulco in Guerrero (Höge), Yautepec in Morelos (Flohr).

The head and the underside vary in colour. The long third joint of the antennæ, and the blackish, opaque, and slightly rugose elytra are the chief characters of this species.

Diabrotica longitarsis (p. 567).

To the localities given, add: —Mexico, Jalapa (M. Trujillo).

159(A). Diabrotica ribbei.

Black; antennæ fulvous, the third joint elongate; thorax flavous, depressed at the sides, impunctate; elytra finely and irregularly punctured, flavous, a spot on the suture at the base and the posterior third black.

Length 2 lines.

Hab. Panama, Chiriqui (coll. Jacoby).

D. ribbei may be chiefly recognized by the pattern of the elytra. The head is impunctate; the antennæ extend to the middle of the elytra, and have their fourth joint slightly longer than the third, both being of elongate shape; the thorax is nearly twice as broad as long, impunctate, and with a distinct fovea on each side; the elytra are finely and not very closely punctured, and the sutural spot surrounds the scutellum, the entire posterior third being black and shining; the underside and legs are black, the extreme base of the femora having a yellow spot. A single specimen.

165. Diabrotica (?) antennata. (Tab. XLIII. fig. 15.)

Black; the antennæ, head, thorax, and legs fulvous; thorax bifoveolate, impunctate; elytra finely punctured, flavous, the suture anteriorly, a sublateral band, and three spots placed longitudinally near the suture, black.

J. Face excavated anteriorly; the third joint of the antennæ very elongate, and thickened towards the apex.

Length $2\frac{3}{4}$ lines.

Hab. Mexico (Sallé, ex coll. Sturm).

Of this curious species there is a single specimen in Sallé's collection; it is labelled Diabrotica scutellata, Sturm. The claw-joints being all broken off I am unable to say whether the species really belongs to Diabrotica. The head is transversely excavate at its lower portion; the palpi are strongly incrassate; and the antennæ have their third joint extremely long and gradually thickened, the other joints being comparatively short. The thorax is about one-half broader than long, impunctate and bifoveolate. The sutural stripe of the elytra extends to one-third of their length and is pointed at its apex; the lateral band does not quite reach the apex and is indented at the middle; of the three spots placed near the suture, the first is small and antemedian, the second is large, ovate, and placed below the middle, and the third is elongate and does not extend to the apex.

AGELASTICA. (To follow the genus Diabrotica, p. 569.)

Agelastica, Redtenbacher, Fauna Austriaca, ed. 1, p. 525 (1849).

I refer, with some doubt, a single species from Mexico to this genus, which contains but few representatives, and has not hitherto been recorded from our region. In the Mexican insect, however, the tibiæ are all armed with a spine, the first joint of the posterior tarsi is as long as the following two joints together, the claws are appendiculate, and the anterior coxal cavities are open. In its general shape and appearance A. viridis differs considerably from the European A. alni.

1. Agelastica viridis.

Fulvous, the antennæ piceous; thorax subquadrate, shining, impunctate; scutellum black; elytra metallic green, finely and closely punctured, the interstices here and there minutely wrinkled.

Length 2 lines.

Of elongate, parallel shape; the head impunctate, fulvous, the vertex with a faint metallic gloss, and a more or less distinct dark central spot, the frontal elevations narrowly oblique; the clypeus in the shape of a triangular ridge; the palpi slender, piceous; the antennæ rather widely separated at their point of insertion, scarcely extending to the middle of the elytra, piceous, the lower three or four joints fulvous, the third joint one-half longer than the second, the following joints slightly longer than the third and nearly equal; thorax about one-half broader than long, rather convex, the sides slightly constricted at the base and rounded before the middle, the anterior angles in the shape of a small tubercle, and furnished with a single seta, the surface shining, impunctate, fulvous; elytra a little wider at the base than the thorax, with a scarcely perceptible post-basal depression, rather convex and parallel, metallic green, very closely and finely punctured, the interstices minutely granulate and transversely wrinkled, the epipleuræ distinct nearly to the apex; underside and legs fulvous, the breast metallic greenish at the sides; all the tibiæ mucronate; the prosternum not visible between the coxæ.

Hab. Mexico, Chilpancingo and Acapulco, both in Guerrero (Höge).

PSEUDODIABROTICA. (To precede the genus Microbrotica, p. 569.)

Elongate; antennæ long and slender; the thorax quadrate, with two oblique depressions; elytra narrow, parallel, irregularly punctured, their epipleuræ broad anteriorly and extending below the middle; legs very long and slender; the intermediate and posterior tibiæ mucronate; the first joint of the posterior tarsi as long as the following joints together; claws bifid; anterior coxal cavities open.

This genus is proposed for a single species from Western Mexico. Pseudodiabrotica possesses nearly all the structural characters of Diabrotica, but is narrower and more slender. The legs are more elongate than is generally the case in Diabrotica, and the first joint of the posterior tarsi is much longer than in that genus. The male is further distinguished by the curious excavation at the apex of the elytra.

1. Pseudodiabrotica metallica. (Tab. XLIII. fig. 16, &.)

Black, above metallic green; head and thorax impunctate; elytra finely punctured, the interstices here and there transversely wrinkled.

J. Elytra with a deep longitudinal excavation before the apex, and the surface in front of this swollen, the apex itself pointed.

Length 2-2½ lines.

d. Head impunctate, the frontal elevations small and indistinct, the clypeus with a strongly raised central ridge extending between the point of insertion of the antennæ; the penultimate joint of the palpi incrassate, the apical joint acutely pointed; antennæ black, extending to the middle of the elytra, all the joints (with the exception of the second) long and slender, and of nearly equal length; thorax slightly broader than long, the sides coverging towards the base, the anterior angles furnished with a small tubercle and a single seta, the surface rather flat, metallic green, impunctate, and with a deep oblique fovea on each side, the anterior and posterior margins straight; scutellum black; elytra narrowed posteriorly, wider at the base than the thorax, the shoulders scarcely prominent but distinct, the surface metallic green, finely and closely punctured in irregular rows, the interstices minutely granulate, the apex with a deep longitudinal excavation, and the surface in front of this much swollen; legs black, slender, elongate.

Hab. Mexico, Omilteme and Chilpancingo, both in Guerrero (H. H. Smith).

In the female the elytra are devoid of the apical excavation.

TRIARIUS (p. 571).

1. Triarius lividus.

Phyllobrotica livida, Lec. Trans. Am. Ent. Soc. xii. p. 28 (1885) ¹. Triarius mexicanus, huj. op. p. 571 (1887).

Dr. Horn has kindly given me a specimen of *Phyllobrotica livida*, Lec., and it proves to belong to the species described by myself under the name of *Triarius mexicanus*. The insect is incorrectly referred to *Phyllobrotica* by Leconte, the tibiæ being mucronate and the claws bifid.

NEOBROTICA (p. 571).

22. Neobrotica pallida.

Pale fulvous, the antennæ, tibiæ, and tarsi black; thorax with a deep transverse depression, impunctate; elytra pale fulvous, impunctate.

Length 2 lines.

Head impunctate, the frontal elevations indistinct; eyes large and convex, occupying almost the entire side of the head; antennæ elongate, extending beyond the middle of the elytra, black (the apical two joints wanting), the second joint very short, the fourth longer than the third; thorax subquadrate, about one-half broader than long, slightly narrowed towards the base, impunctate, the disc with a deep, somewhat curved, broad depression; elytra with a deep post-basal depression and the suture depressed below the scutellum, entirely impunctate; below and the femora fulvous, the apical portion of the femora above and the tibiæ and tarsi black; the first joint of the posterior tarsi longer than the following three joints together; claws appendiculate.

Hab. Mexico, Panistlahuaca (Sallé). Two specimens.

23. Neobrotica ruatanæ. (Tab. XLIII. fig. 17.)

Fulvous, the antennæ (the lower two joints excepted) black; thorax obsoletely impressed, impunctate; elytra extremely minutely punctured, fulvous, the suture broadly, and the posterior portion black.

Length 2 lines.

Head impunctate, flat, without any elevations; antennæ black, the lower two joints fulvous, the fourth longer than the preceding two joints together; thorax scarcely broader than long, slightly constricted at the base, the surface impunctate, with two shallow but large depressions; scutellum fulvous; elytra scarcely perceptibly punctured in irregular rows, with a distinct flattened margin, fulvous, a sutural stripe, widening anteriorly, and the posterior portion (the lateral margin excepted) violaceous-black; legs fulvous; the first joint of the posterior tarsi as long as the following three joints together; claws appendiculate.

Hab. Honduras, Ruatan Island (Gaumer).

The system of coloration in this species is very different from that of the other members of the genus. Four specimens.

24. Neobrotica sexplagiata.

Diabrotica sexplagiata, huj. op. p. 553, Tab. XXXI. figg. 14, 15.

Diabrotica bivittaticollis, Baly, Journ. Linn. Soc., Zool. xix. p. 257.

MALACOSOMA (p. 580).

M. Allard, Compt. Rend. Soc. Ent. Belg. 1889, p. lxvii, gives Mexico as a locality for M. narense, Har.; it is probable, however, that this determination is incorrect.

MALACORHINUS (p. 582).

Malacorhinus apicalis (p. 587).

To the localities given, add:—Mexico, Amula and R. Papagaio, both in Guerrero (H. H. Smith).

20. Malacorhinus cobanensis. (Tab. XLIII. fig. 18, &.)

Black, above fulvous; thorax impunctate; elytra very minutely punctured, with a subtriangular spot at the base and a transverse one below the middle, black.

3. Elytra strongly widened at the middle, the sides with a deep fovea before this, and the lateral margin turned inwards at the same place.

Length 2 lines.

Hab. Guatemala, Coban in Vera Paz (Conradt).

Closely allied to several other species, especially to *M. plagiatus* and *M. godmani*; but differing from the first mentioned in the shape of the elytral spots, and in the elytral fovea of the male being placed before (instead of below) the middle, and from *M. godmani* in the colour and structure of the antennæ, which are entirely black and have the intermediate joints in the male undilated. The anterior elytral spot is of elongate subtriangular shape, the species differing in this respect from all its allies. The female is of more parallel shape, and devoid of the elytral fovea.

21. Malacorhinus exclamationis. (Tab. XLIII. fig. 19, &.)

Testaceous, the antennæ, tibiæ, and tarsi black; head and thorax impunctate; elytra extremely minutely punctured, pale testaceous, the sutural and apical margins, and a narrow longitudinal stripe extending from the shoulder to the middle of the disc, usually connected with a post-median spot, fuscous or piceous.

5. Elytra with a deep elongate fovea at the middle of the lateral margin, bounded anteriorly and posteriorly by a tubercle, the tubercles fulvous in colour.

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

Hab. Mexico, Tapachula in Chiapas (Höge).

This small species, of which several specimens of both sexes were obtained, may be easily recognized by the pale testaceous colour, and by the !-like elytral markings. These markings, however, are sometimes more or less interrupted, or, on the contrary, confluent. The female is devoid of the elytral fovea, but has a slight humeral ridge instead.

LUPERODES (p. 590).

13. Luperodes salvini.

Flavous, the antennæ, tibiæ, and tarsi black; thorax impunctate, flavous, narrowly margined with black; elytra finely and closely punctured, the suture and lateral margins piceous or black.

Length 2 lines.

Head impunctate, deeply transversely grooved above the point of insertion of the antennæ, the vertex obscure fulvous, the frontal elevations strongly raised, the eyes large; antennæ rather slender, black, the third joint one-half longer than the second; thorax one-half broader than long, impunctate, the sides rounded,

the disc flavous, the sides and the posterior margin narrowly black; scutellum black; elytra closely punctured, flavous, the black sutural stripe suddenly widened below the base, then gradually narrowed to the apex, the basal and lateral margins more or less narrowly black or piceous, the epipleuræ indistinct below the middle; underside and the femora flavous; posterior tibiæ with a long spine; the first joint of the hind tarsi longer than the following three joints together; anterior coxal cavities open.

Hab. Guatemala, Llano grande (mus. Stuttgart).

Of this species I have received two specimens from the Stuttgart Museum.

METACYCLA (p. 601).

All the tibiæ in this genus are armed with a spine, not the four hinder ones only as stated by Chapuis.

5. Metacycla rugipennis.

Black; the thorax flavous, impunctate; elytra bluish-black, finely rugose and closely punctured. Length 3 lines.

Hab. Mexico, Amula and Chilpancingo, both in Guerrero (H. H. Smith).

M. rugipennis is so closely allied to M. cæruleipennis, Jac., that it may only be a local variety of that species; it differs from it, however, in the duller, more strongly punctured, rugose elytra. The antennæ extend nearly to the apex of the elytra in both species. Three examples, all males.

PTELEON (p. 603).

2. Pteleon pubescens.

Bluish-black, finely pubescent above; thorax very finely and sparingly punctured; elytra closely punctured and finely rugose throughout.

J. Elytra widened at the sides, each with a triangular elevation at the middle near the suture.

9. Elytra parallel, simple.

Length 3 lines.

Head with a few minute punctures, the frontal tubercles well developed; antennæ short, the first joint robust, the second short, the third nearly twice as long as the preceding one, subtriangular; thorax about one-half broader than long, rounded at the sides, rather convex, with an obsolete transverse depression near the base, finely and sparingly punctured and pubescent; elytra much wider at the base than the thorax, flattened and widened at the sides, finely rugose, and clothed with greyish pubescence, the disc with a highly raised subtriangular elevation near the suture, the epipleuræ extremely wide.

Hab. Mexico, near the city (Höge, Flohr).

Of this interesting species I have received several examples of both sexes from M. Flohr, who states that the insect is found upon the flowers of a species of Convolvulus. P. pubescens may be at once known from P. semicæruleus by the finely pubescent upper surface, and by the subtriangular elevation on the disc of the elytra in the male. The elytra are bluish in this sex, and nearly black in the female. Herr Höge only obtained one female specimen.

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CNEORANE (p. 604).

3. Cneorane nigripes.

Cneorane nigripes, Allard, Compt.-Rend. Soc. Ent. Belg. xxxiii. p. lxxi (1889) 1.

Hab. Mexico 1.

From the short diagnosis given, it is impossible to say whether this species is correctly placed in *Cneorane*.

METACORYNA (p. 605).

4. Metacoryna lævipennis.

Black, the head, antennæ (the last two joints excepted), thorax, and anterior legs flavous; head and thorax impunctate; elytra dark violaceous, impunctate.

3. Antennæ with the ninth joint enormously dilated, concave below, the apical two joints short and pointed. Length $1\frac{1}{2}$ line.

Hab. Guatemala (coll. Jacoby).

Of this species I have received a single male specimen from the Stuttgart Museum. It may be known from M. fulvipes and the allied forms by the flavous antennæ (the last two joints excepted, which are black); and by the ninth joint in the male being enormously dilated (instead of the eighth, as in M. fulvipes). In this respect M. lævipennis agrees with M. guatemalensis, but in that species the antennæ are nearly black, and the dilated joint is pear-shaped (not rounded). It also differs from M. guatemalensis in the thorax being much shorter and transverse, and the elytra entirely impunctate and of a metallic violaceous colour. The four anterior legs are flavous; the posterior femora are piceous (the posterior tibiæ and tarsi are broken off).

5. Metacoryna pretiosa. (Tab. XLIII. fig. 20, &.)

Black, the head metallic violaceous; the thorax flavous, impunctate; elytra violaceous, very finely punctured anteriorly.

J. Antennæ with the eighth and ninth joints very greatly thickened. Length 2 lines.

Hab. Mexico, Chilpancingo in Guerrero (H. H. Smith).

A single specimen. M. pretiosa (σ) agrees in the structure of the antennæ with the corresponding sex of M. fulvipes, but differs from it in the colour of the head, elytra, and legs. The antennæ have their lower joints more or less stained with fulvous; in the male sex the fifth to the seventh joints are gradually widened, the eighth joint greatly dilated and pear-shaped, and the ninth smaller. The head and thorax are impunctate, and the elytra have a small longitudinal depression close to the suture near the base.

CYPHOTARSIS. (To follow the genus Scelida, p. 609.)

Body elongate, glabrous; eyes entire, small; antennæ with the second and third joints subequal, the eighth, ninth, and tenth thickened (3); thorax subquadrate, narrowed at the base; elytra depressed, parallel; epipleuræ broad, indistinct at the apex; legs long and slender; tibiæ unarmed; the first joint of the four anterior tarsi broadly dilated and elongate, that of the posterior pair longer than the following three joints together; claws appendiculate; anterior coxal cavities open.

This genus is proposed for the reception of a single species allied to Scelida and Chthoneis. It differs from Scelida in the short third joint of the antennæ, and in the structure of these organs in the male; and from Chthoneis in the subquadrate thorax, and the differently formed antennæ. The elytral epipleuræ are also much broader than in either of these genera, and the anterior tarsi have their first joint more than usually widened in the male.

1. Cyphotarsis niger.

Entirely black, the head and thorax impunctate, the elytra microscopically punctured. Length 3 lines.

d. Head rather produced, entirely impunctate, the frontal tubercles broad and strongly developed; the palpi filiform and pointed; antennæ extending to the middle of the elytra, the third joint about one-half longer than the second, both short, the fourth joint twice the length of the third, the following three joints gradually widened, the eighth strongly thickened, robust and cylindrical, the apical joints shortened and becoming gradually thinner; thorax scarcely one-half broader than long, rounded at the sides before the middle, narrowed at the apex, the angles very slightly produced, the surface rather flat, with a shallow depression at the base, entirely impunctate; scutellum rather broad; elytra elongate and parallel, subdepressed, extremely minutely punctured, the punctuation only visible under a strong lens; legs long and slender; the first joint of the four anterior tarsi broadly dilated.

Hab. Mexico, Ixtlan (Flohr, in coll. Jacoby).

Mr. Flohr has kindly sent me a male specimen of this species; it is probable that the female has simple antennæ and tarsi.

SCELIDOPSIS (p. 609).

4. Scelidopsis (?) violacea.

Black; the thorax subquadrate, impunctate, without depressions; elytra metallic dark blue, closely punctured, the interstices slightly rugose.

Length 2 lines.

Of elongate, parallel shape; head black, impunctate, the frontal elevations elongate in shape, strongly raised, the labrum obscure piceous; the palpi long and slender; antennæ black, extending to the middle of the elytra, the lower three joints obscure piceous, the third joint one-half longer than the second, the fourth much longer than the third, the following joints rather shorter; thorax scarcely broader than long, constricted at the base, the sides narrowly margined, the surface impunctate, without depressions, black; scutellum black; elytra metallic blue, rather strongly and closely punctured, the interstices sometimes transversely rugose; epipleuræ moderately broad, extending to the apex of the elytra; legs and underside black; tibiæ unarmed; the first joint of the posterior tarsi as long as the following three joints together; claws appendiculate; anterior coxal cavities open, the prosternum extremely narrow but visible.

Hab. Mexico, Chilpancingo and Xucumanatlan, both in Guerrero (H. H. Smith).

S. violacea agrees with Scelidopsis in the very narrow prosternum; but differs from it in the thorax being without depressions, the elytra metallic and strongly punctured, and the epipleuræ not so broad. It may have eventually to be separated from this genus.

MIRACES (p. 611).

Miraces æneipennis (p. 611).

To the localities given, add:—Mexico, Amula in Guerrero (H. H. Smith).

MONOLEPTA (p. 619).

12 (A). Monolepta morosa.

Violaceous-black; thorax obsoletely impressed at the sides, finely wrinkled and punctured; elytra extremely minutely punctured, opaque.

Length 1½-2 lines.

Of elongate shape, entirely violaceous-black, opaque; head with a few fine punctures; the antennæ extending beyond the middle of the elytra, the second and third joints short, the third slightly longer than the second; thorax one-half broader than long, very slightly rounded at the sides, the anterior angles thickened, the posterior ones rounded and obsolete, the surface with an obsolete depression on either side, extremely finely wrinkled and punctured; elytra very similarly sculptured, but less distinctly wrinkled, the epipleuræ indistinct below the middle; legs slender; the first joint of the posterior tarsi nearly equalling half the tibia in length.

Hab. Mexico, Amula and Xucumanatlan, both in Guerrero (H. H. Smith). Many specimens.

ADDENDA.

LEMA (p. 2, and Suppl. p. 8).

3 (D). Lema smithi.

Black, above blue, green, or dark violaceous; head impunctate; thorax broader than long, punctured anteriorly and on the disc; elytra with a distinct basal depression, strongly punctate-striate, the ninth stria entire, the interstices costate at the apex.

Length 2 lines.

Head not constricted behind the eyes, impunctate, the anterior portion pubescent, the eyes not deeply notched; antennæ black, extending only a little beyond the base of the elytra, the fourth joint scarcely longer than the third, the following joints gradually thickened; thorax broader than long, moderately constricted at the sides, the basal sulcus deep and impressed with a fovea at the middle, the disc with a double row of punctures at the middle and some others near the anterior angles; elytra with a rather deep sutural depression below the base, strongly and regularly punctate-striate; underside and legs black, clothed with silvery-grey pubescence.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith).

From other similarly-coloured species from our region belonging to Lacordaire's first division, L. smithi is distinguished by the short antennæ, in connection with the punctured thorax, the basal depression of the elytra, and the black underside. Six examples.

3 (E). Lema fulvipes.

Æneous, the antennæ and legs fulvous; thorax broad, strongly and irregularly punctured; elytra deeply depressed below the base, strongly and regularly punctate-striate, the ninth stria entire, the interstices costate at the apex.

Length 2 lines.

Head rather long, very sparingly and finely punctured on the vertex, more closely and strongly so between the eyes, the latter but slightly notched, the interocular space divided by a longitudinal groove, the surface in front of the eyes rugosely punctured; antennæ scarcely extending to the middle of the elytra, fulvous, the apex of the terminal joint fuscous, the third and fourth joints equal; thorax metallic æneous, broader than long, the sides but moderately constricted, the anterior angles rather prominent, the disc somewhat uneven, obsoletely raised at the sides, and irregularly impressed with coarse and fine punctures; elytra much broader than the thorax, depressed within the shoulders and below the base near the suture, the punctures coarse anteriorly, fine posteriorly, and distantly placed, the interstices broadly raised near the apex, the extreme apical and sutural margin obscure fulvous; underside more obscure æneous, clothed with yellowish pubescence; legs fulvous.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith).

A single specimen, apparently allied to L. xanthopus, Lac., and distinguished by the uniform brilliant metallic æneous colour of the upper surface, the shape and sculpture of the thorax, and the fulvous antennæ and legs.

22 (A). Lema quinquelineata.

Flavous, the antennæ (the basal and apical joints excepted) black; thorax nearly impunctate; elytra very deeply punctate-striate, with a sutural and two narrow lateral stripes, not extending to the apex, black.

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

Head impunctate, the orbital grooves very deep, the eyes not very deeply notched; antennæ extending to about the middle of the elytra, black, the basal two joints flavous, the apical one obscure fulvous, the fourth joint one-half longer than the third; thorax slightly broader than long, moderately constricted at the sides, the basal sulcus distinct, the surface impunctate, except for a few punctures near the anterior angles; scutellum margined with black; elytra almost foveolate-punctate, the punctures very closely placed, the ninth stria entire, the interstices with a few minute punctures, a narrow stripe commencing a little below the shoulders, another one placed between the fourth and fifth rows of punctures (commencing from the middle of the base), and a sutural stripe, all of equal length and abbreviated before the apex, black; underside and legs flavous, the breast with a small black spot in front, the tarsi stained with fuscous.

Hab. Mexico, Xucumanatlan in Guerrero (H. H. Smith).

A single example.

35 (A). Lema sponsa.

Fulvous; the antennæ (the first joint excepted), a lateral thoracic spot, the sides of the breast, the base and apex of the femora, and the tibiæ and tarsi, black; elytra with the ninth stria entire, a rounded spot at the shoulder and another at the middle, an oblong mark on the suture before the middle, and the lateral margin, anteriorly, black.

Var. The lateral margin entirely fulvous.

Length 2½ lines.

Head entirely impunctate, reddish-fulvous, the orbital grooves deep, the eyes not very deeply notched; the antennæ only extending to the base of the elytra, black, the basal joint fulvous, the fourth joint twice as long as the third; thorax not longer than broad, the disc with a double row of fine punctures, and a few others near the anterior angles, the basal sulcus indistinct at the middle, the lateral constriction with a black mark; scutellum fulvous, margined with black; elytra convex, deeply punctate-striate anteriorly, the punctures becoming very much finer posteriorly, the interstices slightly costate at the apex, a common short sutural stripe or spot below the base, a round spot at the shoulder, and another at the middle, black, the lateral margin from below the base to the middle also black; below fulvous, the upper and lateral portion of the breast and a spot at the side of each abdominal segment black; the base and apex of the femora, the tibiæ, and tarsi black.

Hab. Mexico, Amula in Guerrero (H. H. Smith).

L. sponsa belongs to Lacordaire's division containing L. nupta, L. varipes, and others, from all of which the position and number of the elytral spots distinguish it.

Two specimens.

CRIOCERIS (p. 14, and Suppl. p. 44).

13 (A). Crioceris aterrima.

Entirely black, shining, sparingly pubescent; head finely rugose; thorax scarcely constricted, finely transversely strigose; elytra sparingly and irregularly punctured anteriorly, more closely and regularly so posteriorly, the interstices towards the apex rugose.

Length 4 lines.

Head rugosely punctured round the eyes, finely strigose on the vertex; antennæ not extending to the middle of the elytra, the basal four joints shining, the rest opaque, the fourth joint one-half longer than the third, the terminal joints thickened, longer than broad; thorax not longer than broad, subquadrate, finely transversely strigose; elytra remotely punctured anteriorly, the punctures more closely and semi-

regularly placed below the middle, the interstices at the apex subrugose, the sides sparingly clothed with yellowish hairs, the disc with two obsolete depressions placed transversely below the middle, and a less distinct one below the base near the suture; underside and legs finely pubescent.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith).

This may be readily known from all the other species of *Crioceris* from our region by its shining black colour. Two specimens.

MASTOSTHETUS (p. 19, and Suppl. p. 57).

22 (A). Mastosthethus angusto-vittatus.

Fulvous, the antennæ, a spot on the vertex, and two or three spots on the thorax, black; elytra flavous, not very closely punctured, the suture and a narrow submarginal stripe, as well as a spot at the middle of the base, black; tibiæ and tarsi black.

Length 4½ lines.

Q. Head reddish-fulvous, rugosely punctured near the eyes, the middle of the vertex with a black spot, the labrum and palpi black; antennæ extending to the base of the thorax, black, the lower four joints shining, the others opaque, transverse; thorax twice as broad as long, very sparingly punctured anteriorly, the posterior angles slightly produced outwards, the anterior transverse sulcus distinct at the sides, the posterior one indicated by a deep fovea at the angles, the surface fulvous, the anterior margin narrowly and three spots on the disc (one median and two lateral) black; scutellum black; elytra sparingly clothed with yellowish hairs, distinctly but not closely punctured, with a narrow sublateral stripe (commencing at the base but not quite reaching the apex), the suture very narrowly, and a spot at the middle of the base, black; underside reddish-fulvous, clothed with long yellowish hairs, a spot at the sides of the breast black; the base of the femora, the tibiæ, and tarsi black; metasternum triangularly raised in front.

Hab. Mexico, Omilteme in Guerrero (H. H. Smith).

In the male insect the thoracic spots are smaller and the median one is obsolete, and the posterior tibiæ are fulvous and broadly sulcate. Two specimens.

MEGALOPUS (p. 26, and Suppl. p. 64).

4. Megalopus basalis.

Black, clothed with greyish pubescence; the head closely, the thorax sparingly punctured; elytra very strongly and irregularly punctate, black, the base with a triangular red patch covering the shoulders.

Length $4\frac{1}{2}$ lines.

Of nearly parallel shape, flattened above; the head closely punctured at the sides, leaving a narrow longitudinal space in the centre smooth, the eyes deeply notched, the labrum edged with a fringe of fulvous hairs; antennæ black, extending to the base of the thorax, the lower four joints shining, the others opaque, transversely widened, the third joint very long and slender; thorax one-half broader than long, narrowed in front, the sides straight, the surface very sparingly punctured, with a rather well-marked transverse groove behind the anterior margin and an obsolete one near the base; scutellum obscure fulvous; elytra slightly depressed below the base at the suture, very strongly punctured, rather sparingly clothed with long greyish pubescence, black, with a red triangular patch at the shoulders, extending to the scutellum and downwards to about one-fourth from the base; underside and legs more closely covered with grey pubescence; posterior femora moderately thickened, not extending to the end of the abdomen; tibiæ rather curved.

Hab. Mexico, Tepetlapa in Guerrero (H. H. Smith).

Of this very distinct species three specimens (apparently representing both sexes) were obtained.

PACHYBRACHYS (p. 64, and Suppl. p. 136).

Pachybrachys reticulatus (p. 73).

To the localities given, add: —Panama (Boucard), David (Champion).

Found in abundance by Mr. Champion at David.

COLASPIS (p. 135, and Suppl. p. 220).

8 (A). Colaspis chapuisi.

Colaspis chapuisi, Jac. Stett. ent. Zeit. 1884, p. 1271.

Hab. Mexico, Misantla (Flohr¹, in coll. Jacoby).

One of the largest species of the genus; the specimen described is a female.

HOPLACERUS. (To follow the genus Diphaulaca, p. 269.)

Body elongate; head rather deeply inserted; eyes small; frontal tubercles and carina strongly developed; antennæ long and robust; thorax transverse, the angles strongly produced outwards, the base with a transverse sulcus, bounded on either side by a longitudinal groove; elytra punctate-striate and costate; legs robust, the posterior femora but moderately incrassate; tibiæ very broadly triangularly dilated, distinctly channelled, the posterior pair mucronate; the first joint of the posterior tarsi strongly widened, not much longer than the second; claws appendiculate; prosternum narrow but distinct; the anterior coxal cavities open.

The single species for which this new genus is proposed is one of the most peculiar amongst the numerous tribe of Halticinæ; it has the angles of the thorax acutely produced, the elytra deeply punctate-striate and costate, and the tibiæ very broadly dilated.

1. Hoplacerus tibialis. (Tab. XLIII. fig. 21.)

Pale fulvous, the antennæ (the first joint excepted) black; thorax deeply and remotely punctured; elytra deeply and closely punctate-striate, the interstices costate.

Length 2 lines.

Head impunctate, the frontal elevations strongly raised, the lower portion of the face rather concave, the clypeus in the shape of a narrow but strongly raised triangular ridge extending upwards between the point of insertion of the antennæ; palpi slender; antennæ about two-thirds the length of the body, black, the first joint pale fulvous, robust, the second one-half shorter, the third joint slightly longer than the fourth, the following joints nearly equal, the terminal one more elongate and pointed; thorax twice as broad as long, strongly rounded at the sides, the anterior angles produced outwards into a long and acute tooth, the posterior angles also produced but to a less extent, the surface irregularly convex in places, deeply and remotely punctured, with a deep sulcus at the base, not extending to the sides; scutellum triangular, impunctate; elytra parallel, scarcely wider at the base than the thorax, deeply and closely impressed with transversely-shaped punctures, the interstices strongly costate throughout; epipleuræ broad, extending to the apex of the elytra; underside sparsely pubescent; the posterior femora only a little more thickened than the others; the four anterior tibiæ broadly triangularly dilated, their edges acute; the first joint of the posterior tarsi nearly circular, broadly widened.

Hab. Mexico, Ventanas in Durango (Höge).

A single specimen, apparently of the male sex.

PIASUS. (To precede the genus Lactica, p. 270.)

Body ovate; antennæ robust, the basal joints swollen (3); thorax transverse, the anterior angles oblique, the base with a deep sinuate transverse groove bounded at the sides by a longitudinal impression; elytra irregularly punctured, their epipleuræ very broad, continued to the apex; tibiæ robust, sulcate, the posterior pair mucronate; claws appendiculate; prosternum narrowly elongate; anterior coxal cavities open.

This genus has most of the characters of *Lactica*, but differs from it in the form of the frontal elevations and carina, and in the shape of the thoracic sulcus; the antennæ in the male are also very pubescent and have their basal joints swollen.

1. Piasus fulvus. (Tab. XLIII. fig. 25, 2.)

Fulvous, the antennæ black (the three basal joints excepted); thorax impunctate; elytra extremely finely and sparingly punctured, the basal portion convex.

J. The antennæ fimbriate, their basal joints strongly thickened; the first joint of the tarsi dilated.

Q. Antennæ more slender; the elytra with three strongly raised lateral costæ.

Length $1\frac{1}{2}-1\frac{3}{4}$ lines.

divided, the clypeus strongly raised, deflexed in front; palpi slender, scarcely thickened, the terminal joint very short; antennæ rather narrowly separated at their point of insertion, extending to a little beyond the middle of the elytra, black, the lower three joints fulvous, the third and fourth joints equal, these as well as the basal one thickened towards their apex, all the joints furnished with a fringe of long hairs on their lower edge; thorax twice as broad as long, the sides rounded at the middle, the anterior angles oblique, the posterior ones acute, all furnished with a single seta, the base with a deep transverse sulcus bounded at the sides by a longitudinal groove; scutellum broad; elytra ovate, the basal portion slightly raised, the surface very sparingly and finely punctured.

Hab. Mexico, Acapulco in Guerrero (Höge).

In the females the elytra have three strongly raised costæ, of which the external two are joined below the shoulder. Numerous examples.

LACTICA (p. 270, and Suppl. p. 258).

40. Lactica vittatipennis. (Tab. XLIII. fig. 22.)

Piceous, the lower part of the head, the thorax, and legs testaceous; elytra finely punctured, black, with a longitudinal yellowish stripe near the suture extending from the base to near the apex.

Length 1½ line.

Head black on the vertex, the latter impunctate, opaque, with an obscure central ridge, the eyes very large, the lower portion of the face and the clypeus testaceous; antennæ extending to beyond the middle of the elytra, black, pubescent, the fourth joint longer than the third; thorax very short and transverse, nearly three times as broad as long, the sides straight, the anterior angles obliquely thickened, the surface impunctate, with a deep transverse sulcus behind, bounded on either side by an equally deep longitudinal groove; scutellum black; elytra parallel, finely and rather closely punctured, black, with a longitudinal yellowish stripe near the suture, this stripe abbreviated and widened at a short distance from the apex; legs testaceous, the apex of the tibiæ and the tarsi more or less fuscous or black.

Hab. Guatemala, Panima in Vera Paz (Champion); Panama, Volcan de Chiriqui (Champion).

This insect resembles greatly in coloration certain species of *Phyllotreta*, *Systena*, and *Pseudoepitrix*.

BIOL. CENTR.-AMER., Coleopt., Vol. VI. Pt. 1, Suppl., April 1892.

41. Lactica hidalgoensis.

Pale flavous, the apical eight joints of the antennæ fuscous; head and thorax impunctate, the transverse sulcus of the latter distinct; elytra metallic bluish, extremely minutely punctured.

Length 2 lines.

Head pale fulvous on the vertex, impunctate, except for a few fine punctures near the eyes, without frontal elevations or carina; the penultimate joint of the palpi robust; antennæ long and slender, the third joint one-half longer than the second, the lower four joints pale, the others fuscous; thorax transverse, more than twice as broad as long, the basal sulcus deep and bounded at the sides by a longitudinal groove, the surface impunctate; elytra with a longitudinal depression within the shoulders, scarcely perceptibly punctured; underside and legs flavous; the basal joint of the anterior tarsi strongly widened in the male.

Hab. Mexico, Zacualtipan in Hidalgo (Höge).

Differing from its allies in the pale head, thorax, underside, and legs, in connection with the transverse shape of the thorax and the colour and punctuation of the elytra.

42. Lactica (?) varicornis. (Tab. XLIII. fig. 24.)

Fulvous, the head black; antennæ robust, the apical five joints black; thorax quadrate, with a deep transverse sulcus, impunctate; elytra impunctate, each with a small black spot at the base and another near the apex; apex of the posterior femora black.

Length 1½ line.

Head black, impunctate, the frontal elevations obsolete, the carina distinct; penultimate joint of the palpi rather robust; antennæ narrowly separated at their point of insertion, extending to about the middle of the elytra, all the joints robust, subtriangular, and elongate, the third joint one-half longer than the second, the following joints of nearly equal length, the lower six joints flavous, the others black; thorax quadrate, the sides nearly straight, the posterior angles slightly produced outwards and each furnished with a single hair, the surface with a deep transverse sulcus at the base, bounded at the sides by a longitudinal groove, the disc impunctate; elytra entirely impunctate, fulvous, with a roundish spot at the shoulder and a more transversely shaped one near the apex; underside and legs fulvous, the posterior femora black at the apex; the first joint of the posterior tarsi as long as the following two joints together; claws appendiculate; anterior coxal cavities open.

Hab. Mexico, Vera Cruz (H. H. Smith); Guatemala, Paso Antonio (Champion).

The robust antennæ and quadrate thorax give this insect a different appearance from Lactica, in which genus I somewhat doubtfully include it.

CACOSCELIS (p. 302, and Suppl. p. 273).

Cacoscelis varians (Suppl. p. 273). (Prasona nigripennis, Tab. XVII. fig. 22, var.)

The insect figured on Tab. XVII. fig. 22 is a variety of this species.

9. Cacoscelis cæruleipennis.

Fulvous, the antennæ, tibiæ, and tarsi black; thorax minutely punctured, obsoletely grooved at the base; scutellum piceous; elytra dark metallic blue, closely and finely punctured.

Length 3 lines.

Head impunctate, fulvous, the frontal elevations strongly raised; antennæ extending to two-thirds the length of the elytra, black, the lower three joints more or less testaceous, the fourth joint slightly longer than the third; thorax one-half broader than long, reddish-fulvous, shining, the sides straight at the base,

rounded before the middle, the anterior angles slightly tuberculiform, the surface very finely and sparingly punctured, with an obsolete transverse depression at the base, limited by a short longitudinal groove at the sides; elytra dark metallic blue, very closely and finely punctured in irregular rows; underside and legs fulvous, the tibiæ and tarsi black or piceous; the posterior tibiæ mucronate; the first joint of the posterior tarsi as long as the following two joints together; prosternum narrow but distinct; the last abdominal segment grooved in the middle in the male.

Hab. Mexico, Teapa in Tabasco (H. H. Smith).

Allied to C. nigripes, but with differently coloured elytra and legs.

BLEPHARIDA (p. 385, and Suppl. p. 306).

13. Blepharida singularis. (Tab. XLIII. fig. 23.)

Flavous, the legs and abdomen fulvous; thorax strongly punctured, with a broad central mark and two small lateral spots; elytra closely and strongly punctured, a humeral and a lateral spot, a common triangular patch on the suture below the middle, and several small spots on the anterior and posterior portions, dark fulvous.

Length 3 lines.

Head fulvous, strongly punctured on the vertex, the clypeus and labrum testaceous; antennæ long and slender, flavous, the fourth joint slightly longer than the third, the tenth only half the length of the preceding joint; thorax more than twice as broad as long, the posterior angles rounded, the basal margin sinuate, the sides very slightly rounded before the middle, the surface closely and strongly punctured, pale flavous, the disc with a broad quadrate spot in the centre, the sides with two smaller spots placed one below the other; scutellum dark fulvous; elytra very strongly and closely punctured in irregular rows, pale flavous, with a spot at the shoulder, another surrounding the scutellum, a subovate spot below the middle near the lateral margin, a common triangular patch on the suture nearly in a line with it, and some small spots placed irregularly on the anterior and posterior portions, dark fulvous, the interior of the punctures also dark fulvous; legs dark fulvous; tibiæ broadly sulcate, the posterior pair emarginate at the apex; the first joint of the tarsi broadly dilated; claws bifid; the last abdominal segment of the male trilobate.

Hab. Mexico (Flohr), Atlixco in Puebla (Höge).

Differs from all of its congeners in the markings of the thorax and elytra.

MESODERA (p. 344).

2. Mesodera brevicollis.

Piceous, the head, antennæ, thorax, and legs fulvous or flavous; thorax transverse, impunctate; elytra dark fuscous or piceous, finely punctate-striate, the punctures obsolete near the apex, the base with a depression. Length $1\frac{1}{2}$ line.

Rather broadly ovate; head broad, not narrowed at the base, the frontal tubercles very strongly developed, the clypeus triangularly raised; antennæ extending a little below the middle of the elytra, fulvous or flavous, robust, tapering towards the apex, the third and following joints rather flattened at the base, nearly equal, each joint furnished with some hairs at the apex; thorax twice as broad as long, the sides slightly dilated towards the apex and rounded, the basal sulcus deep, sinuate at the middle, and not extending to the lateral margins, the surface impunctate, fulvous or flavous; scutellum flavous; elytra depressed below the base, distinctly punctate-striate anteriorly, more finely so towards the apex, the interstices flat and impunctate; epipleuræ very broad, extending to the apex of the elytra; legs robust; posterior tibiæ mucronate; anterior coxal cavities closed.

Hab. Mexico, Zacualtipan in Hidalgo (Höge).

This species agrees with the type of the genus, *M. fulvicollis* from Guatemala, in the strongly developed frontal tubercles and the robust and gradually tapering antennæ, in connection with the punctate-striate elytra and closed coxal cavities; the thorax, however, is much more transverse and the elytral epipleuræ are broader. The female has the antennæ much thinner, the third and fourth joints being slender and elongate, and the lateral interstices of the elytra costate. The elytra in both sexes have a slight metallic æneous lustre. Numerous specimens of both sexes.

PACHYBRACHYS (p. 64, and Suppl. pp. 136, 344).

32. Pachybrachys lecontei.

Pachybrachys brevicollis, Suppl. p. 152 (nec Lec.).

Just as we are closing this volume Dr. Horn has called my attention to the fact that my name brevicollis is preoccupied by Leconte; I therefore propose to change it as above.