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CENTRALI-AMERICANA.

INSECTA.

COLEOPTERA. Vol. II. Part 1.

BY
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1887–1905.
INTRODUCTION.

Twenty-two families of beetles are dealt with in this Volume: the Silphidae, Corylophidae, Trichoptyrgidae, Sphæriidae, and Scaphidiidae by the Rev. A. Matthews, the Histeridae by Mr. Lewis, and the remainder by Dr. Sharp. The Heteroceridae, Parnidae, Georissidae, and Cyathoceridae were placed with the other aquatic and subaquatic beetles in Vol. I. part 2, and the Erotylidae and Endomychidae in Vol. VII., of the Coleoptera, these families being sometimes included amongst those here enumerated. We have delayed closing the present volume in the hope of being able to add descriptions of the various "Genera incertæ sedis" still remaining in our collection, but this has proved to be impracticable. Dr. Sharp, however, has described the Rhipidandri, Lec. (=Eutomides, Lacord.), a group that has been variously referred by different authors to the Tenebrionidae, Scolytidae, Cioidae, and Trogidae. A certain amount of supplementory material has come to hand, and the numerous missing Hapalips from Guatemala and Panama (to which attention was called in Vol. VII. p 250) have now been found, but too late to be included here.

For the families Pselaphidae to Byrrhidae, inclusive, and the Rhipidandri, 1532 species are altogether enumerated, of which 996 are described as new, with 83 new genera. The number for each family is as follows:—Pselaphidae, 100 (69 new); Scydmaenidae, 67 (49 new); Silphidae, 33 (20 new); Corylophidae, 29 (25 new); Trichoptyrgidae, 54; Sphæriidae, 1 (new); Scaphidiidae, 35 (27 new); Histeridae, 247 (86 new); Phalacridae, 49 (41 new); Nitidulidae, 286 (196 new); Trogositidae, 107 (65 new); Synteliidae, 2; Adnieridae (new family), 3 (all new); Colydiidae, 96 (75 new); Rhysodidae, 2 (1 new); Cucujidae, 140 (98 new); Monotomidae, 31 (29 new); Cryptophagidae, 103 (94 new); Latridiidae, 23 (17 new); Mycetophagidae, 9 (6 new); Dermestidae, 71 (54 new); Byrrhidae, 37 (34 new); and Rhipidandri, 3 (2 new).

During the progress of the work, 97 species (27 of which were obtained amongst the refuse of Mexican tobacco stored in Paris) have been described by various authors
Class INSECTA.

Order COLEOPTERA.

Fam. PSELAPHIDÆ*.

This family consists of minute Beetles, many of which are found in ants’ nests. The majority of the species are rare and difficult to find even by experienced collectors. Mr. Champion procured a fair series of species in Guatemala and the State of Panama, but from the other divisions of our region we have received but little. Salle’s Mexican collection was very deficient in Pselaphidæ; from Nicaragua we have received only two or three species, and from Costa Rica none.

The arrangement followed is that given by Reitter in his paper entitled “Versuch einer systematischen Eintheilung der Clavigerinen und Pselaphiden” [Verh. Ver. Brünn, xx. pp. 177–211 (1882)].

In the ‘Études entomologiques’ (1855, pp. 8–25) there is a letter written by Victor de Motschulsky on board ship, giving an account of an entomological collecting expedition just made by him on the isthmus of Panama. He had established himself there at Obispo for two or three weeks, and succeeded in finding in that brief time about thirty species of Pselaphidæ. Most of these were new, scarcely anything being then known of the Panama Coleopterous fauna; and in the letter I am alluding to Motschulsky mentions these novelties seriatim, giving them names and occasionally adding a word or two of explanation. These names have no claim to be adopted, and I mention them only because they have been given as “published” in the list of Motschulsky’s genera and species issued by the Entomological Society of Russia in 1868. In the case of three or four genera rude outline figures were given, and as these enable us to form an imperfect idea of what Motschulsky intended, their names have been adopted by Reitter and are also included in our list. It is certainly unfortunate that this letter

* By D. Sharp.

of Motschulsky's should never have been followed by any proper description of the objects mentioned and named therein. It is quite clear that he could not have made a proper study of these minute creatures on board ship between Colon and New Orleans, where his letter was written; and, so far as we know, he never returned to their study except to sketch the rude outline figures I have alluded to. Although some of these insects have become disseminated to a small extent under Motschulsky's names, but little value can be attached to these "typical" examples. In the case of two of these names Reitter has had an opportunity of testing them, and finds they were incorrectly applied by Motschulsky; in short, Motschulsky not only failed to describe the species he gave names to, but actually did not even discriminate them.

For these reasons I think the authors of the Munich Catalogue did right in refusing to recognize these names, and certainly Reitter has done all that courtesy and consideration demand when he treated those that were accompanied by figures as entitled to validity.

Subfam. Ctenistinae.

Group Ctenistina.

Desimia.

Tetraspis, Sharp, Ent. Monthly Mag. xi. p. 79 (1874) (nom. praec.).


This genus has hitherto consisted of four or five African species; but in addition to the insect now added to it from our fauna I have still another in my collection from the Amazon valley, so that the genus is probably well represented in the New World.

1. Desimia dispar. (Tab. I. fig. 1, c.)

Rufescens, elytris sanguineis; antennis articulis ultimis elongatis; prothorace subtransverso, basi in medio pubescente-foveata, utrinque dense pallide pubescente; elytris apice dense pallide pubescentibus, stria suturali aliaque discoidalis integris.

Long. 1½ millim.

Hab. Mexico, Cordova (Salte); Guatemala, Paraíso 300 feet (Champion).

Antennæ dissimilar in the sexes: in the male, joints 4–7 very small, the eighth joint very elongate and as long as the five or six preceding it, the ninth considerably shorter than the eighth, the tenth nearly as long as the eighth, the terminal joint stouter and rather longer than the eighth; in the female, joints 4–7 not quite so small, the eighth joint similar to the seventh, the ninth as long as the preceding two together, the tenth rather broader and longer than the ninth, the terminal joint stouter and a good deal longer than the tenth, the three terminal joints together equal in length to the six or seven preceding. Head with the antennal tubercles quite connate, prominent; indistinctly
bifoveolate between the eyes; bearing much sugary-white pubescence behind the eyes. Thorax rather broader than long, a little narrowed in front; with a large fovea filled with white pubescence near the base in the middle, and a conspicuous patch of white sugary pubescence on each side of the base. Elytra shining, brighter red than the rest of the surface, narrowed at the shoulders, the latter scarcely elevated; with a curved, rather deep, discoidal stria and a deep suttural stria; the apex covered with a dense pallid, sugary, or glandular pubescence. Hind body rather short, strongly margined, with a depressed fine squamose pubescence.

**EPHIMIA.**


This genus has recently been established by Reitter for a West-Indian insect. I have now to add a species from our region.

1. _Ephimia crassicornis._ (Tab. I. fig. 2.)

_Ufo-castanea, elytris sanguineis, pubis depressa flavescente irregulariter vestita; antennis articulis 3° ad 7° brevissimis, tribus ultimis elongatis; prothorace parvo, basi in medio foveolata; elytris quam prothorax longioribus._

_Or. 2 millim._

_Hab. Panama, San Miguel in the Pearl Islands (Champion)._ Antennae thick; pubescent, so that the articulations are not very distinct; the terminal three joints elongate, quite as long as the other eight together; the terminal joint rather longer than the preceding two joints united. Head narrow, with convex coarsely faceted eyes; the antennal tubercles quite connate; the front placed quite at right angles with the vertex. Thorax only about half as broad as the elytra; finely pubescent, with a large pubescent basal fovea. Elytra rather elongate, narrow at the shoulders, the latter not raised; the surface within the shoulders broadly depressed; with a fine suttural stria, but no discoidal one; the hind margin very densely covered with yellow pubescence.

This insect is rather larger than _E. simoni_, Reitter, and also has a longer terminal joint to the antennae, much larger eyes, broader thorax, and longer elytra. The sex of the unique example discovered by Mr. Champion is doubtful.

Group **TYRINA.**

**HAMOTUS.**


This is a genus peculiar to Tropical America; it comprises about twenty very closely allied species. An examination of the maxillary palpi is essential for the discrimination.
of the species, these organs being very variable in structure in this genus and often differing in species otherwise exceedingly similar.

Hamotus is numerously represented in our region.

§ 1. Thorax with a transverse sulcus in front of the base.

1. Hamotus pubiventris.

Major, parum latus, rufus, densius fulvo-pubescent; antennae crassae, clava triarticulata, maxima; palpis maxillaribus articulo ultimo elongato, apice intus curvato, acuminato; elytrorum stria discoidalis elongata. Long. 3½ millim.

Hab. Nicaragua, Chontales (Janson).

Antennae thick; joints 2–8 subequal, the second joint, however, rather longer than the others; the club extremely large; the ninth joint rather longer than broad, the tenth slightly longer, though scarcely so long as broad, the terminal joint very large, broader than the preceding one, subrotundate, but still longer than broad. Terminal joint of the maxillary palpus of peculiar form, and with its appendage larger than in the other known species. Head with thick antennary tubercles, which are strongly elevated and separated by a deep depression; the two foveae on the vertex large, approximate, and but little distant from the frontal depression. Thorax subglobose; the basal fovea extending back to the basal margin, and connected to the lateral fovea by a very fine sulcus. Elytra flat, ferruginous in colour, with a remarkably distinct discoidal stria extending three fourths of their length. Hind body elongate, very broadly margined, very densely covered with a depressed fulvous pubescence.

Only one example was received of this very distinct species. I suppose it to be a female, from the absence of any peculiar structure, and from the form of the hind body.

2. Hamotus commodus.


Hab. Mexico, Teapa.

3. Hamotus tritomus.


Hab. Mexico (Reitter); Guatemala, El Reposo, Zapote, San Isidro, Cahabon, San Juan in Vera Paz, Teleman, Panzos, La Tinta (Champion); Nicaragua, Granada (Sallé), Chontales (Janson); Panama, Bugaba, Volcan de Chiriqui, David (Champion).—South America, Colombia.

Though we have a good series of this species from Zapote and El Reposo, I have not been able to detect any sexual distinction; from most of the other localities only one or
two examples were obtained. The only Mexican exponent I have seen was sent to me by Herr Reitter, who obtained it from Hamburg. Judging from this fact and the way in which the specimen was mounted, I conclude that it was probably found by Herr Höge at Jalapa.

This species, though exceedingly similar to those following, is distinguished by the fact that the curvate sulcus in front of the base of the thorax has no definite fovea on the middle; the sulcus, however, may be described as subfoveate, as it is deeper in the middle and in this part slightly expanded in front, this expansion being somewhat concealed by a gibbosity or convexity of the surface of the thorax in front of it.

4. *Hamotus vicinus.*

Rufus, elytris dilate sanguineis, pubes depresse minus dense vestitus; antennarum clava triarticulata, elongata; elytris plica intrahumerali abbreviata; abdomine segmento secundo dorsali quam segmentum basale paullo majore.

Long. 2\1{3} millim.

*Hab.* GUATEMALA, Capetillo (*Champion*).

Antennæ with joints 4–8 quite similar to one another, small and transverse; joints 9–11 forming an elongate club; the ninth joint quadrate, the tenth a little broader and slightly transverse, the terminal joint a good deal broader and quite as long as the preceding two together. Head rather broad and short, with a moderate fovea on each side near the eye. Thorax subglobose; with a large fovea in front of the base in the middle connected by a fine sulcus with the lateral fovea. Elytra with a very abbreviate intrahumeral depression.

Although extremely similar to *H. tritomus*, this insect is readily distinguished by the definite basal thoracic fovea, and the more abbreviate basal dorsal segment of the hind body. The last joint of the maxillary palpus is similar in form to that of *H. tritomus*, but is distinctly broader and shorter.

Only two examples were obtained; they are quite similar to one another and of uncertain sex.

5. *Hamotus difficilis.*

Rufus, elytris dilate sanguineis, pubes depresse minus dense vestitus; antennarum clava triarticulata, elongata; elytris plica intrahumerali abbreviata; abdomine minus lato margiato, segmentis dorsalibus primo et secundo aequalibus.

Long. 2\1{3} millim.

*Hab.* GUATEMALA, Zapote (*Champion*).

Although only one example of this insect was obtained, and it is very similar to *H. vicinus*, yet, as I have failed to reconcile it therewith, and it will not agree with any of the other species, I treat it as distinct. It differs from *H. vicinus* in possessing a narrower hind body with less broad lateral margins, a more slender terminal joint to
the maxillary palpus (resembling in this respect *H. tritomus*), and a rather more slender club to the antenna.

The example has no mark which would lead me to believe it to be a male.

6. **Hamotus monachus.**


Rufus, elytris dilute sanguineis, pubes depressa minus dense vestitus; antennarum clava triarticulata, elongata; elytris plica intrahumerali sat abbreviata; abdominis segmento secundo dorsali quam segmentum basale paullo minore.

Long. 2 ½ millim.

*Hab.* Mexico, Yucatan; Guatemala, El Reposo, Zapote (*Champion*).

This insect presents the closest resemblance to *H. vicinus* and *H. tritomus*; from the latter it is readily distinguished by the definite thoracic fovea; from the former it presents the following distinctions:—The terminal joint of the maxillary palpus is rather more elongate, the intrahumeral depression on the elytra is prolonged to form a short but definite plica, and the first dorsal segment is more elongate and evidently longer than the second.

The unique example transmitted to me by Herr Reitter is a female, and is remarkable from the elongation of the apical segments of the hind body. This was the only sex known to Reitter. Mr. Champion met with only two examples, both males, the whole of the ventral plates being rather broadly and deeply impressed along the middle. The typical example received from Herr Reitter and the individual found at El Reposo by Mr. Champion are both darker in colour than I have described above; but this, I believe, is chiefly due to their imperfect preservation.

7. **Hamotus latipalpis.**

Rufus, elytris dilute sanguineis, pubes subtili depressa vestitus; antennarum clava triarticulata, elongata; elytris plica intrahumerali abbreviata; abdominis segmento basali dorsali quam segmentum secundum minore.

Long. 2 ½ millim.

*Hab.* Guatemala, Zapote (*Champion*).

Extremely similar to *H. vicinus*, but with very important distinctions:—The pubescence of the surface much finer and shorter; the eyes larger, and placed quite at the hinder part of the head; the terminal joint of the maxillary palpus remarkable on account of its very short broad form, being in fact nearly as broad as long, so that its extremity is not acuminate; and the basal dorsal segment is abbreviate.

Only one example, of uncertain sex, was found.

8. **Hamotus curtipalpis.**

Rufo-brunneus, elytris sanguineis, pubes subdepressa vestitus; antennarum clava triarticulata, elongata; elytris
Hamotus.

Hab. Panama, Bugaba, David (Champion).

This species is extremely similar to H. vicinus and the allied species, but differs from all of them in the shape of the last joint of the maxillary palpus. This latter is comparatively small, its inner margin nearly straight though minutely prolonged internally at the apex, while the outer margin is very convex; the length of this joint is about the same as that of the tenth joint of the antennae.

Only two examples are extant; they are in a very decayed condition, and are, I believe, both of the male sex, though this is indicated only by a minute flattening of the basal ventral segments.

9. Hamotus suturalis.

Hab. Mexico, Teapa.


Hab. Mexico.

§ 2. Thorax without transverse sulcus.

11. Hamotus singularis.

Hab. Mexico (Bilimek). Cordova (Sallé); Guatemala, San Isidro 1600 feet, near the city, Acatunco, Capetillo, San Juan in Vera Paz, Senahu (Champion); Panama, Bugaba 800 to 1500 feet, David (Champion).

I am not able to point with certainty to any external sexual distinctions of this insect; the condition of the pencil of hairs at the extremity of the hind tibia varies according to the state of the individual, and, moreover, can be flexed outwards under the apex of the tibia and tarsus so as to be concealed, though actually present.

12. Hamotus setipes. (Tab. I. fig. 3.)

Hab. Panama, Bugaba 800 to 1500 feet, Volcan de Chiriqui 2000 to 4000 feet (Champion).

Head broad, with two moderately large foveae on the posterior portion; the antennal tubercles clearly separated, so that a third fovea just behind the space separating them
remains quite distinct. The ninth and tenth joints of the antennae are transverse, but not excessively short; the terminal joint very thick and large. The fovea near the middle of the base of the thorax is large and distinct. The elytra have a well-marked sutural stria which is extremely deeply impressed at the base; and external to this stria, and separated therefrom by a raised space, another deep rather long impression which is not continued backwards as a stria.

Though very similar to *H. singularis* this is a larger insect, readily distinguished by the broader head, the more widely separated antennary tubercles, and the long setosity of the tibiae. The sexual distinctions are slight, and almost confined to a difference in the shape of the hind body, this latter being rather longer, with the under surface more curvate, and the middle of the ventral rings flattened, in the male. In each sex there is a fine pencil of hairs at the extremity of the hind tibia, and an extremely slight incurvation of the tibia itself near the apex.

13. **Hamotus parvipalpis.**

Bufo-niger, pedibus rufis; palpis testaceis, his articulo ultimo parum magno et graeciter subovali; elytris intra humeros breviter impressis.

Long. 2½ millim.

*Hab. Panama, Bugaba, Volcan de Chiriqui 2500 to 4000 feet (Champion).*

This species is closely allied to *H. singularis*, having a similar structure of the antennae and of the thoracic foveae; it is, however, well distinguished by a number of characters, the most important of which is the smaller and more slender terminal joint of the maxillary palpi. The pubescence of the surface is darker than in the allied species; the antennae are extremely thick, with the joints 4–10 strongly transverse, and the terminal joint very broad; the head is not broad, and the antennary tubercles, though not very broad, are well separated, so that the small fovea between them is quite definite. The thorax is smaller and more globose than in *H. singularis*.

I have seen only two examples; unfortunately both are in a very decayed condition.

14. **Hamotus rostratus.**

Piceus, elytris sanguineis, palpis pedibusque rufis, pube elongata minus dense vestitus; antennis longioribus, articulis intermediis hund transversis; capite gracili rostrate, vertice foveolis grandibus impresso; palpis majoribus.

Long. 3 millim.

*Hab. Panama, Bugaba (Champion).*

Antennae with the ninth and tenth joints elongate, intermediate in breadth between those preceding it and the terminal joint, this latter elongate, rather stout, not quite twice as long as broad. Palpi very large. Antennary tubercles convex, separated by a deep depression in which the frontal fovea is lost; the two foveae on the vertex large. Thorax subglobose, rather large; the basal fovea only moderately large, filled with fine pubescence. Elytra red, with very elongate erect pubescence, the intrahumeral plica
elongate, densely pubescent at their hind margin. Tibiae pubescent externally; those of the hind legs quite straight and slender, and without definite tuft of hairs at the extremity.

Only one example was met with of this fine species; it forms a natural transition to the following.

15. **Hamotus grandipalpis.** (Tab. 1. fig. 4.)

Piceo-sanguineus, pube elongata erecta dense vestitus; antennis, palpis pedibusque rufu-obscerus, illis elongatis gracilibus; palpis maxillaris maximis; capite gracili rostrate, vertice trifoveolate; abdomine segmentis dorsalisibus quatro conspicuis, longitudini subequalibus.

Long: 3½ millim.

**Hab.** Panama, Volcan de Chiriqui 2000 to 3000 feet (Champion).

Antennae with very long basal joint; the second, third, and fourth joints subequal, the fifth and sixth rather elongate, the seventh and eighth a little shorter, but each a good deal longer than broad, the ninth and tenth elongate but scarcely at all thicker than the preceding two, the tenth very long and slender and with its inner margin curvate. Palpi with very elongate second joint and very large terminal joint. Head with the strongly elevated antennary tubercles separated by a deep depression; with two foveae near the vertex, and a third depression behind these in the middle. Thorax rather large, subglobose; the basal fovea distinct, quite isolated. Elytra with deep but short intrahumeral depression. Hind body with the margins of the first and second segments very largely developed. Hind tibia without apical pencil.

Only one example was met with of this species; it may be a male, as the depression on the metasternum is remarkably deep. Although the maxillary palpi are so strongly developed, I cannot treat this as a generic character at present, as there is very great variety in the size and form of these organs amongst the species of this genus inhabiting our region.

**CERCOCERUS.**

*Cercocerus,* Motschulsky, Etudes ent. 1855, p. 16, and 1856, tab. f. 4; Leconte, New Sp. N. Am. Coll. p. 27 (1863).


The characters given of this genus show nothing to distinguish it from *Hamotus,* of which I have little doubt it is merely a synonym. As, however, I do not actually know either of the species ascribed to it, I give it a distinct place in deference to Reitter, who treats it as a valid genus.

1. **Cercocerus batrisioides.**

*? Cercocerus perplexus,* Motsch. Etudes ent. 1855, p. 16 1.

*Cercocerus batrisioides,* Motsch. Etudes ent. 1856, tab. f. 4.


**Hab.** North America, New Orleans 2.—Panama, Obispo 1.

Motschulsky (Etudes ent. 1855, p. 16) speaks of what we may presume to be the same insect under the name of C. perplexus; C. batrisioides, Motsch., is said by Reitter to be the same as the North-American C. batrisoides, Lec.

Subfam. BATRISINÆ.

METOPIAS.


This genus is purely tropical American, and comprises five species; Reitter having recently separated another five species under the generic name of Metopioryxs.

1. Metopias elegans. (Tab. I. fig. 10.)
Pallide castaneus, elytris rufo-testaceis, antennis pedibusque testaceis, pubes erecta subtili vestitus; prothorace elongato, ante basin transversim sulcato; antennis valde elongatis, articulo terto graciliter ovali et sequentiibus tribus simul sumpsis majore.
Long. 2½ millim.

Hab. Panama, Volcan de Chiriquí 3000 to 4000 feet (Champion).

Antennæ pale yellow, longer than the insect itself; the first joint as long as the following seven or eight joints together, the second longer than broad, the third broader and very much longer than the second, the five following joints subequal to one another, simple, the ninth scarcely thicker but much more elongate, the tenth small, the eleventh rather longer than the ninth and quite acuminate at the apex. Palpi rather short. Head elongate, the vertex with a deep impression; the antennal tubercles divided by a groove, and the posterior part of their prolongation projecting backwards in an angular manner into the depression on the vertex. Thorax slender, unarmed; very obsolesly longitudinally canaliculate along the middle; with a deep fine transverse sulcus in front of the base, and without lateral channels. Elytra elongate, narrowed at the shoulders, the latter only slightly prominent, with a very deep depression along the suture, and a short basal depression external to this.

The solitary example discovered is no doubt a male, the extremity of the hind body beneath being deeply excavate, while in front of the excavation there are two erect subcurvate spinous processes. The species is not closely allied to any yet described, but perhaps is nearest to M. hirtus, Reitt., from Brazil.

BATRISUS.


This is now a very large genus comprising upwards of two hundred described species, and is found in most parts of the world. It contains a very great variety of forms, and is especially remarkable on account of the extraordinary sexual characters, scarcely any part of the body being exempt from being the seat of peculiar structures in the male