BIOLOGIA CENTRALI-AMERICANA.

INSECTA.

COLEOPTERA. Vol. V.

LONGICORNIA

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BRUCHIDES

BY
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1879-1886.
INTRODUCTION.

The Tribe Longicornia, which occupies nearly the whole of the present volume *, is equivalent to the family Cerambycidae of most modern entomologists, and is one of the largest of the seventy-two groups into which MM. Lacordaire and Chapuis divided the Coleoptera, in their great work on the order brought to a completion in 1876. Compared with the Tribe Geodephaga, it is beyond doubt far more numerously represented in tropical than in extra-tropical lands, and its species and genera are naturally multiplied to the highest degree in tropical forests, where woody vegetable growths, to which the Longicornia are almost exclusively attached in their larval states, are most numerous and varied. Although their beauty of form and colours has led to their having been industriously collected, it is evident, from the number of new species continually arriving from countries supposed to be fairly well explored, that we are yet far from possessing even an approximately complete knowledge of the whole product of Nature in this department. This is partly due to the recondite and, to a great extent, nocturnal habits of a vast proportion of the species, and the difficulty of the search for them in dense primæval forests where few clearings offer the necessary openings.

The total number of species described down to 1883, the date of M. Lameere’s Supplement to the Munich Catalogue, amounted to 8968. In the following pages 1273 species are enumerated or described from the region embraced in the present work, a number which is probably not more than a third of the total inhabiting Tropical America, even allowing for the generally-distributed species, which form but a small proportion of the Longicorn fauna in any one extensive section of the area. It is probable that an equal number exists in Tropical Asia and in Tropical Africa. In the Malay Archipelago, Mr. Wallace collected 1046 species, a number which has since been considerably increased by subsequent explorers. In the Amazons valley I

* The general remarks on the Tribe Bruchides, which occupy the remainder of the volume, are given by Dr. Sharp at p. 437.
BIOLOGIA CENTRALI-AMERICANA.

ZOLOGIA.

Class INSECTA.

Order COLEOPTERA.

Tribe LONGICORNIA.

Fam. PRIONIDÆ.

Subfam. PRIONINÆ.

In this subfamily are included the whole of Legions I. & II., and of the latter Cohortes I. & II. of Lacordaire's system, resting the definition of the combined subdivisions chiefly on the character of coarsely-faceted eyes. The highly artificial separation of diverse abnormal forms as a "Legion" equivalent to a natural group of the same rank, as proposed by Lacordaire, is here avoided. The character of coarsely-faceted eyes, in Prionidae as in other subfamilies of Longicornia, seems very generally associated with nocturnal habits and sombre colours.

PARANDRA.

Parandra, Latreille, Gen. Crust. et Ins. iii. p. 28 (1802).

Thirty-five species of this aberrant Longicorn genus were recorded in the Munich Catalogue (Catalogus Coleopterorum, auctoris Dr. Gemminger et B. de Harold) in 1873; but many of these have since been shown to be slight varieties or synonyms. The general form (or facies), colour, and sculpture are remarkably similar in all; and unless close attention is paid to the dentition of the mandibles in the males and the accessories of the tarsal claw-joint, it is impossible to distinguish them with accuracy. Some twenty distinct species, however, are known; and their distribution is remarkable: America (Tropical and North) is their metropolis, Western Tropical Africa, the Cape of Good Hope, the Moluccas, and New Caledonia having each one or two species; and one isolated member is found on the borders of the Caspian.

1. Parandra glabra.


_Hab._ NICARAGUA, Chontales (Belt, Janson); COSTA RICA, Volcan de Irazu (Rogers).—COLOMBIA; VENEZUELA; ECUADOR; SOUTH BRAZIL to Rio Janeiro.

I have compared numerous Central-American examples of this largest of the _Parandra_ with others from Ecuador, Venezuela, and South Brazil, without finding any difference of specific value amongst them. Slight differences in strength of punctuation occur; but in the more essential characters of the form and dentition of the mandibles, and in the outline of the thorax and front edge of the clypeus, all agree closely.

2. *Parandra polita._ (Tab. I. fig. 3.)


_Hab._ NORTH AMERICA, Indiana¹.—MEXICO (Sallé); GUATEMALA, Zapote (Champion).

The figure is taken from a well-developed male, with very dark-coloured head, from Mexico.

Dr. Horn, of Philadelphia, first pointed out the identity of Say’s species with the well-known _cylindrica_ (so called, although a linear and flat insect).

3. Parandra scaritoides.


_Hab._ NICARAGUA, Chontales (Belt, 1 ♀)._—SOUTH AMERICA, Carthagena.

Very closely allied to _P. polita_, differing chiefly in the more projecting and acute angles of the orbit of the eyes in the ♂, and by the more conspicuous punctuation of the surface. The insect is also relatively broader.

4. *Parandra angulicollis._

Medie elongata, rufo-ferruginea, passim fortiter (subutus minus erebro) punctata; antennis thoracis basin attin- gentibus, articulo 3° subgloboso, 4°–10° subquadratris; thorace quadrato, ante basin sinuatis fortiter angustato, angulis omnibus productis acutis; tarsi paronymchi unico.

Long. 9–10½ lin. ♂ ♀.


♂ mandibula dentibus apicalibus, supra longitudinaliter fortiter concavo. ♂ minoris mandibula breviore, minus arcuate, dentibus distantioribus, primo late apice sinuato. Epistoma medio producto-lobatum, lobo quadrato, apice sinuato. Thorax valde transversus, apud angulos antices acutos latissimus.

Hab. Guatemala, Zapote, Capetillo (Champion); British Honduras, R. Sarstoon (Blancaneau); Nicaragua, Chontales (Belt, Janson).

Having recently examined the type of White's *P. punctata* in the British Museum, I find it different from the Chontales species. It is a female, with, for this genus, remarkably long antennae. The present species is allied to *P. levis* (Latr.) of Cuba and St. Domingo, agreeing with that pretty well in general form, but differing at once in the position of the first, or lowest, tooth of the mandibles in well-developed males, this tooth in *P. levis* being situated far below the other two (which are close together and terminal), and in *P. angulicollis* close to the terminal teeth.

The thorax in the male and the majority of the females in *P. angulicollis* is remarkably broad and short, uniformly and strongly punctured, and with prominent, acute angles; a little before the posterior margin it is somewhat strongly narrowed, in a curved line. The anterior angles in the male project further than they do in *P. levis*.

*P. angulicollis* belongs to a group of closely-allied species which appears to be numerous in Tropical America, and which is distinguished by the quadrate and strong median lobe of the epistome and the single paronychium to the tarsal claw-joint.

ERICHSONIA.


One of the principal characters on which Lacordaire relied for separating this curious little Prionid from *Parandra*, viz. the absence of paronychia, proves to be untenable, since true *Parandra* exist in which there are no paronychia.

1. *Erichsonia dentifrons*.


*Hab.* Mexico1; British Honduras, R. Sarstoon (Blancaneau).

PSALIDOGNATHUS.


This fine genus is peculiar to the Andean region of Tropical America, the forest region east of La Paz being apparently its southern limit. A species of East Peru (*P. limenius*) descends a little way into the plains of the Upper Amazons; but the genus does not occur in Guiana or Brazil. We have now to record for the first time the occurrence of a species in Central America*.

1. *Psalidognathus modestus*.


* The locality "Panama" for *P. bowardi* and *P. batesi*, supplied to M. Thomson (Typi Cerambycicid, pp. 7 & 10), is probably incorrect. I have seen numbers of the first-named from the neighbourhood of Medellin, in the Cauca valley.
LONGICORNIA.

Hab. COSTA RICA, Volcan de Iruzu (Rogers).—ECUADOR.
A pair ($\varpi \varrho$) taken by Rogers on the Volcano of Irazu, in Costa Rica, agree closely with specimens received from Loja, in Ecuador, which I refer to P. modestus, Fries, but with much doubt, as the description is not quite satisfactory.

PITHOCLES.

Contains one species only, peculiar to Mexico. The genus is very closely allied to the following, differing chiefly in the flattened antennal joints of the male.

1. Pithocles procerus.
Hab. MEXICO (Sallé).

DEROBRACHUS.


This genus is well represented in Central America, and may be cited as one of the characteristic forms of the region. Two species only are foreign—one (D. brevicollis) found in the South-eastern States of North America, and the other (D. agyleus) in "Colombia."

1. Derobrachus longicornis. (Tab. I. fig. 9.)
Braderochus longicornis, Bates, Tr. Ent. Soc. 1869, p. 166.
Hab. NICARAGUA, Chontales (Belt).

2. Derobrachus inaequalis.
Hab. GUATEMALA.

3. Derobrachus asperatus. (Tab. I. fig. 4 $\sigma$, fig. 5 $\varrho$.)
Elongato-oblongus, supra omnino intricato-punctatus, nitidus, niger, elytris maris interdum castaneis; thorace utrinque equaliter tripinoso; elytris nullo modo costatis, apice ad suturam spinosis; antennis $\sigma$ corpore paullulum brevioribus, articulis 1$^{\text{a}}$–3$^{\text{a}}$ asperato-punctatis, 3$^{\text{a}}$ supra sulcato, 4$^{\text{a}}$–5$^{\text{a}}$ lateribus, 6$^{\text{a}}$–11$^{\text{a}}$ omnino subtiliter acute strigosis; pedibus asperato-granulatis et punctatis; corpore subitus lavi, pectore lateribus punctatis et fulvo-piloosis.
Long. $\sigma$ 1 poll. 9 lin., $\varrho$ 2 poll. 3 lin.
Hab. COSTA RICA, Volcan de Irazu (Rogers).

4. Derobrachus apterus.
$\varrho$ apterus; elongato-oblongus, nigro-piceus, nitidus, palpis fulvis; capite grosse sebroseo; thorace minus transverso, nigro-polito, grosse sed haud cerebro sebroseo, lateribus utrinque 4-apinosis, 2 anticus conjunctis;
DEROBRACHUS.—CALLIPOGON.

elytris passim crebre subvermiculata rugosis, apice muticis apud suturam dehiscentibus; corpore subtan pedibusque lavigatis; metasternum abbreviato, pedibusque 4 posticis paulo approximatis.

Long. 2 poll. 2 lin.  2.

Hab. GUATEMALA (Boucard).

A species remarkable for the abbreviation of the metasternum and the consequent approximation of the middle and hind legs—a character which, taken together with the apterous condition of the females, reveals an affinity with *Psalidognathus*. In all essential points, however, the species agrees with *Derobrachus*. The male is at present unknown.

MACRODONTIA.


Six species of this genus have been described from South America, one of which, the well-known *M. cervicornis*, has a wide range, from Rio Janeiro to the Upper Amazon, the others being local. The following is the only one hitherto known to occur beyond the Isthmus of Panama.

1. *Macrodontia dejeani*. (Tab. I. fig. 6, ♂.)


Hab. NICARAGUA, Chontales (Belt).—COLOMBIA.

The figure is from a Chontales specimen.

CALLIPOGON.


A genus of narrow range, extending from the tierra caliente of Mexico to Colombia. Three species only are known.

1. *Callipogon barbatum*.


Hab. NICARAGUA, Chontales (Belt, Janson).

The figure of Olivier, representing a male, and drawn from Fabricius's type specimen, justifies us in considering the original description to refer to the Central-American form, and not to the Mexican, to which it has been since applied, the two forms being quite distinct enough to be regarded as species. This is evident on comparing males of equal development, the Mexican species having mandibles twice the length of those of the Nicaraguan species, and antennae also relatively much longer. In Nicaragua the following interesting variety occurs, apparently frequently, and in company with the type.

Var. *ornatum*. (Tab. I. fig. 8.)

A typo differt elytris utrinque macula rotundata medio-basali et vitta lata postice attenuata cano-pubescentibus.
The whitish spot and stripe of the elytra are formed of distinct and separate short hairs, and not felted as in C. lemoinei, although their position is the same as in that distinct species.

2. *Callipogon senex*.

*Callipogon senex*, Dupont, Mag. Zool. 1832, Cl. ix. t. 33. 1.


*Callipogon lucanecus* (Chevr.), Serv. Ann. Soc. Ent. Fr. 1832, p. 142. 3.

*Hab. Mexico*, Orizaba. 3.

M. Dupont, in the text accompanying the figure above cited 1, gives his reasons for considering the present species distinct from that figured by Olivier as *C. barbatum*, but seems not to recognize the important fact of the different habitat of the two forms. The large males were named by Chevrolat *C. lucanecus*, but not formally described 3.

3. *Callipogon lemoinei*.


*Hab. Panama*, Chiriqui (Ribbe).—*Colombia*.

**STRONGYLASPIS.**


This small Central-American genus is distinguished from the Old-World *Macrotoma* solely by the tumid and roughened scutellum and the strongly arcuated prosternal process—characters that can only be considered specific, inasmuch as they are variable in the Old-World genus. The genus might therefore very well be united to *Macrotoma*. It is remarkable as being the only form at all nearly related to that well-marked type of Prionida occurring on the American continent. *Macrotoma* is distributed over the warm parts of Africa and Asia, the Mediterranean region, and the islands of the Indian Ocean and Malayan region. M. Thomson has recently described a *Strongylaspis* from Guiana; and M. Chevrolat records the genus from Cuba.

1. *Strongylaspis scobinatus*. (Tab. I. fig. 7, 8; Tab. II. fig. 9, 8.)


*Hab. Mexico*; *Nicaragua*, Chontales (*Bell, Janson*).—*Cuba*.

The figures are from Chontales examples.

2. *Strongylaspis bullatus*. (Tab. II. fig. 10.)


*Hab. Nicaragua*, Chontales (*Bell*).
MALLODONOPSIS.—APLAGIOGNATHUS.

MALLODONOPSIS.


This small group is generically distinct from other described American forms, except *Mallodonoplus* and *Aplagiognathus*, from which it is difficult to distinguish it by characters of more than specific value. It contains, like its allies, a limited number of species, confined to North and Central America and the northern parts of South America. Its affinities seem to be towards genera of the Old World, such as the Australian *Eurynassa*, rather than towards *Mallodon*, with the American species of which it is nevertheless liable to be confounded. The length and slenderness of the antennal scape which distinguish the type species (*M. mexicanus*) are not retained in species closely allied to it.

1. **Mallodonopsis mexicanus.** (Tab. I. fig. 1, ♂; fig. 2, ♀.)


*Hab. Mexico* (Boucard); *Nicaragua*, Chontales (*Belt*).

The figures are from Chontales specimens.

2. **Mallodonopsis corrosus.**

Elongatus, angustus, nigro-piceus; antennis (scapo excepto), palpis et tarsi rufo-piceis; capite, mandibulis thoracisque lateribus utroque sexu grosse et crebro sebroso; ♂ scapo, femoribus tibiasque quatuor anticas cernam sebroso-punctatis, ♀ fere lavibus; thorase disco antice et postice subclevato fere lev, lateribus denticulis acutissimis 8--10; elytris parallelis, punctulatis, utrinque vago trisulcatis, apice suturalt spinoso. Long. 1 poll. 2 lin. usque 1 poll. 6 lin. ♂ ♀.

*Hab. Guatemala* (Salvin), Capetillo (*Champion*); *British Honduras*, R. Sarstoon (*Blancaneau*)

Distinguished by its narrow convex form, in which it resembles *Aplagiognathus spinosus* more than it does its congener *M. mexicanus*. It forms, indeed, a connecting link between the two genera, the scape being much shorter than in *Mallodonopsis*, though retaining the same curved and compressed shape and thus differing from the short, thick, clavate form of the same joint in *Aplagiognathus*.

APLAGIOGNATHUS.


*A. spinosus* (Newm.) is cited by M. Thomson as the type of his genus *Aplagiognathus*, which cannot be reunited to *Mallodon*, as Lacordaire attempted, without rendering the definition of the latter impracticable. In his later work, ‘Physis’ (vol. i. p. 90), M. Thomson enumerates eight species (besides two doubtful) as belonging to his genus, all Central- and North-American. Newman referred the type species to the Australian genus *Cnemoplites*, with which it has only a distant connexion.
1. **Aplagiognathus spinosus.**


_Hab._ México, near the capital (*Flohr*).

2. **Aplagiognathus hybostoma.**

♂ _A. spinosus_ proxi ne affinis, sed differt mandibularum tubere altiore et lateraliter compresso. Paullo minor, oblongo-linearis, castaneo-fuscus, cape et mandibulis rufo-hirmis, his intus acute tridentatis, dentibus 1–2 medialis contignuis; thorace creberime punctulato, plagis tribus discoidalibus lincisque brevibus exterioribus latibus sparsim grosse punctatis; lateribus fere ut in _A. spinosus_ acute multispinosis; elytris cornicis et punctatatis, vage sulcatis, apice singulatim fortiter rotundatis, ad suturam breviter spinosis.

_Long._ 1 poll. 6 lin. ♂.

_Hab._ Guatemala, Calderas, Dueñas (*Champion*).

Closely allied to _A. spinosus_, but well distinguished by the different form of the tuber on the upper surface of the mandibles, which in _A. spinosus_ is broad and convex in front and on the sides, and in the new species is a high compressed elevation, concave on its exterior face. It is also a smaller and rather narrower insect; but the colour and sculpture are very similar. Two examples only have been sent by Mr. Champion.

3. **Aplagiognathus serratus.**


_Hab._ México.

Unknown to me.

**NOTHOPLEURUS.**


The following are the only known species:—

1. **Notohpleurus ebeninus.**

_Notohpleurus ebeninus_, Lac. loc. cit.

_Hab._ Yucatan.

2. **Notohpleurus gnatho.**


_Hab._ Honduras (*Dyson*).

Mr. C. O. Waterhouse has discovered that this species belongs to the genus *Notohpleurus*.

**MALLODON.**


Thirty-six species of this genus are enumerated in the Munich catalogue; some, however, have evidently been erroneously referred to it; and others are synonyms. Notwithstanding these deductions, the genus will remain a large one. Its head
quarters are America, temperate and tropical—species closely allied to Tropical-American ones being common insects in Western Africa, and others being recorded from Madagascar and Arabia. The species have all a similar general form and sculpture, and form a most difficult study; but trustworthy and definite characters may generally be found in the mandibles of the males and in the form of the genæ, which parts of structure have been overlooked by almost all describers.

1. **Mallodon spinibarbe.**
   

   **Hab.** Mexico.—CAYENNE, AMAZONS, SOUTH BRAZIL.

   Received from M. Henri Deyrolle, of Paris, as from Mexico.

2. **Mallodon molarium.** (Tab. I. figg. 10, 11.)

   ♂ *M. spinibarbi* (Lin.) simillimum, at differt margine superiore mandibularum juxta basin tuberculiformiter elevato. Elongato-oblongum, subdepressum, nigro-piceum, nitidum; capitis vertice grosse, epistomate subdilatator punctatis; genarum angulis antico-lateralibus productis, ac huld spiniformibus; thorace erebrerrine punctalato, plagis et lineis levibus ut in *M. spinibarbi*.

   ♀ minor. Mandibulae capitae haud longiores.

   ♂ major. Mandibulae capitae dimidio longiores, spatium vacuum magnum ovatum includentes.

   ♀. Mandibulae parvae, tubercula basali minus prominentes; thoraces totidem discolevi polito; cetera ut in ♂.

   **Long.** 2 usque 3 poll. (mas. incl.) ♂, 1 poll. 9 lin. usque 2 poll. 6 lin. ♀.

   **Hab.** Mexico (Salé); NICARAGUA (Belt, Janson); PANAMA.—COLOMBIA.

   The figures are from Chontales specimens.

   The males of minor development bear the closest possible general resemblance to the same sex of *M. spinibarbe*; but they may be readily distinguished by the form of the upper edge of the mandibles. In *M. spinibarbe* this edge describes an upward curve from the base; whilst in *M. molarium* there is a tubercular prominence at the base, after which the edge describes a downward curve; the result is to give a much greater vertical development to the mandible of *M. spinibarbe* as compared with that of *M. molarium*. In the males of greater development these peculiarities are still more strongly pronounced; and I have not seen males of *M. spinibarbe* with mandibles of the great length and curve which seem common in *M. molarium*. In the dentition of the inner side both species are very similar, presenting a little below the acute apex two obtuse teeth. There is another but minor specific difference in the form of the angles of the genæ or cheeks below the insertion of the mandibles: in both species the edge is slightly sinuated, and the angle forms a projection visible when the head of the insect is viewed from above; but in *M. molarium* the angle is blunt, whilst in *M. spinibarbe* it is developed into a distinct stout spine.

3. **Mallodon angustatum.**

   *Mallodon angustatum*, Thom. Physis, i. p. 100.

   **Hab.** Mexico; GUATEMALA, Chinaulta, 4100 feet (Salève), Capetillo (Champion); NICARAGUA, Chontales (Belt, Janson).

The angle of the genæ under the mandibles is obtusely tridentate; the upper edge of the mandibles is convex from the base, nearly as in M. spinibarbe.

4. Mallodon mandibulare.
Mallodon mandibulare, Gemminger, Col. Hefte, x. p. 254 (1872).
Hab. Sonora (Dr. Webb).

Dr. Gemminger changed the name in consequence of the prior use of gnatho for a species then considered by White to be of the same genus. Although White’s species has since proved not to be a Mallodon, the two genera are so closely allied that perhaps it is advisable to retain the correction, in order to avoid possible confusion.

TRICHODERES.

Trichoderes, Chevrolat, Mag. Zool. 1843, Ins. p. 35.

The following is the sole known species:—

1. Trichoderes pini.

Trichoderes pini, Chevr. loc. cit. p. 36, t. 113.
Hab. Mexico, Las Vegas (Sallé).

Subfam. PECILOSOMINÆ.

This subfamily is proposed to include those genera of Prionidae which have finely-faceted eyes, and is equivalent to Lacordaire’s “Cohorte III. Prionides vrais Pecillosomes.” The species, as a rule, are of brighter colours than those of the Prioninae, and are diurnal in their habits. Nearly all are Tropical-American.

MALLASPIS.

Mallaspis, Serv. Ann. Soc. Ent. Fr. 1832, p. 188.

About a dozen species are known of this handsome genus, all American.

1. Mallaspis moreleti.


Hab. Guatemala, Vera Paz (Morelet).

2. Mallaspis rhombodera. (Tab. II. figg. 4, 5.)

M. xanthaspidi (Guér.) affinis, at differt thorace antice valde angustato; supra viridi-aenea, elytris interdum castaneis aeneo tinetis, vel toto rufo-castanea elytris apec spicلقب obscuroirubis; antennis aeneis vel fulvo-castaneis; capite, thorace elytrorumque basi subconfluent ter punctatis, his a triente anteriore usque ad apicem subtiliter verruculato-rugulosis; scutellum maculis aureo-sericios duabus; antennis corpore multo brevioribus, articulis 3a-4a dilatato-compressis, tertio quam sequens duplo longiore, ceteris compressis gradatim brevioribus.

Long. 1 poll. ad 1 poll. 7 lin.

Hab. Panama, Chiriqui (Ribbe).—Colombia.
3-6. Parandra Polita.
7-8. Derobrachus Asperatus.
9-10. Macrodontia Dejeanii.

7-8. Strongylaspis Scobinatus.
9-10. Derobrachus Longicornis.

10. major; II. minor Mallodon Molariwm.
11. MALLASPI S BELTI
32. RHOMBODERA
51. PARADOXA
7. TRICHOSTETHA
12. OTHEOSTETHUS MELANURUS

8. MALLASPI S FRANCELLENS
94. STRONGYASPI S SCOBINATUS
10. BULLATUS
11. HOLONOTUS NIGROÆNEUS
12. OTHEOSTETHUS MELANURUS