

## REVIEW OF THE HISTERIDAE (COLEOPTERA) OF MÉXICO

Slawomir Mazur

Department of Forest Protection and Ecology, WAU  
02-528 Warszawa, Rakowiecka 26/30, Poland  
mazur@delta.sggw.waw.pl

### ABSTRACT

The review of all known Mexican species of the Histeridae is compiled, based on existing literature. It includes 56 genera, 9 subgenera and 265 species. A key to the genera and subgenera in English and Spanish is provided.

### RESUMEN

Se presenta una compilación de las especies mexicanas conocidas de Histeridae con base en la literatura publicada. Para el país se han registrado a 56 géneros, nueve subgéneros y 265 especies. Se proporciona además una clave para los géneros y subgéneros en inglés y español.

The Mexican histerids have never been a subject of detailed studies. Information about their occurrence in México are to be found in various works in which they were described or in few faunistic elaborations of this region. The most famous one is that of Blackwelder (1944).

The initial purpose of the present paper is to summarize an actual state of the species composition on a base of the existing literature. The referring point here is the last catalogue of the author (1997) and some later works in which new species from México having been described (Caterino, 1999a, 1999b; Yélamos, 1995; Kovarik, Verity and Mitchell, 1999).

The paper contains three parts: morphological characteristic, key to the genera and subgenera and systematical arrangement of the family. The arrangement includes all the taxa from subfamily to subspecies known to occur in México.

The characteristics of the genera comprise general ecological and biological data as well as general distribution of the species classified here.

Subfamilies and genera within them are arranged in accordance with phyletic relationship, whereas species are placed in their respective genera in alphabetic order.

A systematical arrangement proposed recently by Ślipiński and Mazur (1999) has been adopted here. In the section devoted to the particular genera, a concise alphabetic list of the known Mexican species supplemented by their author, the year and the source of description is given.

Such a composition arises from the fact that since the time of the catalogue (1997) many species have been synonymized or transferred to other genera. Additionally, several new species have been described as well. Thus, giving only a number of species belonging to the particular genera it would be an invalid information because of difficulties with finding of the species given using only the catalogue mentioned. The author resigned a presentation of general distribution of particular species because it is easily to reconstruct it on a base of the literature cited. On the contrary, the presentation of the detailed distribution in México was quite impossible from existing sources.

The paper might have been treated as a first step what would make easier further studies upon the monographic elaboration of the Mexican histerids as a whole.

The author is fully aware that the review is not complete containing only a roughly estimated part of the species existing in México, especially those of the Hetaeriinae. On the other hand, in actual situation each trial of estimation of the hypothetical number of species that would be find in México, is only a speculation.

In order to find a satisfactory solution of this problem, the intensive thorough studies dealing with faunistic, taxonomy and origin of the Mexican histerids are needed, to which, as it is hoped, this paper might be an inspiration.

### MORPHOLOGICAL CHARACTERISTIC

This family is a distinctive group of small to moderate sized, hard, compact, usually black, shiny beetles, of oval, cylindrical, or depressed shape. The clubbed, geniculate antennae, head and legs coapted, keeled prosternum and short elytra exposing the hard last one or two abdominal tergites serve to characterize the family.

Diagnosis: Shape round, oval, cylindrical or flattened oval, size 0.5 to 10 mm, color black, bronze or green/blue metallic, sometimes marked with red, yellow or orange, shiny.

Head usually deflexed, sometimes prognathous, smooth, punctate, carinate or with glandular lobes (some myrmecophiles), or raised bosses. Antennae of eleven segments, with a three-segmented club which is usually disc-shaped, segments often fused, sutures frequently absent; antennae geniculate, hidden beneath thorax and capable of being retracted, inserted under the front and usually placed in prothoracic fossae in repose. Labrum small, mandibles large, curved, frequently toothed.

Pronotum large, variously shaped, borders usually margined. Prosternum usually with a long, elevated carina which may be narrow or broad and flat, usually margined by striae, and articulated with the mesosternum; sometimes with fossae to receive the antennae. Procoxal cavities open behind. Mesosternum usually broad. Mesocoxal cavities widely separated. Metasternum very broad; metepisternum narrow to broad; metepimeron large, separated by a fine suture, or suture absent. Metacoxal cavities broadly separated. Legs usually short, retractile (greatly elongate in some myrmecophiles). Anterior coxae transverse, not prominent or globose. Middle and hind coxae not prominent, rounded or subquadrate, trochanters small. Femora somewhat swollen. Tibia usually compressed, anterior ones usually toothed or spinose, others nearly always spinulose. Spurs distinct, unequal. Tarsi 5-5-5 or 5-5-4, often slender, usually short. Claws usually two, sometimes fused. Scutellum usually exposed, triangular, small. Elytra apically truncate exposing the last two abdominal tergites (except in *Bacanius*), striae usually present, or with costae or tubercles. Striae variable and useful for species definition.

Abdomen with five visible sternites, the first visible sternite large, the fifth short; sutures distinct, surface smooth, punctate or rugose. Edeagus usually a slender tube, parameres often fused forming a tube enclosing the penis; basal piece usually distinct, large, from about one-fourth to two or three times the length of the parameres, sometimes fused (*Abraeinae*). The terminology used is explained on Figs. 1, 2.

There are 332 genera, 3793 species found in all areas, of these, 56 genera and 265 species have been reported from México.

### KEY TO THE GENERA AND SUBGENERA

1. Prosternum with lateral notch receiving antennal funicle (Figs. 4, 6, 12, 15, 18, 22, 36, 39, 44) . . . . . 2
  - Prosternum without lateral notch, with prosternal lobe and alae usually covering antennal cavities in repose (Figs. 2, 50, 53, 59, 72, 104) . . . . . 26
2. Prosternum with deep basal grooves in front of coxae, receiving long apical spine of protibia (Fig. 39) (*Dendrophilinae: Paromalini*) . . . . . 3
  - Prosternum without basal groove . . . . . 5
3. Elytral disc with normal dorsal striae, usually with sutural in addition to subhumeral (Figs. 37, 38) . . . . . 4
  - Elytral disc punctate, without striae except vague rudiments, these usually basal (Figs. 41, 42) . . . . . 22. *Paromalus*
    - a) sutural stria present in apical part (Fig. 41) . . . . . subg. *Isolomalus*
4. Fourth dorsal stria arched over to and recurved along suture (Fig. 37) . . . . . 20. *Xestipyge*
  - Fourth dorsal stria sometimes arched over to, but not recurved along suture (Fig. 38) . . . . . 21. *Carcinops*

5. Body strongly elongate (Figs. 43,45) with pronotum subcylindrical (Fig. 44), usually as long as elytra (Fig. 43). Protibiae with strong tooth at outer margin (Fig. 47). (*Trypanaeinae*) ..... 6
- Body usually oval (Figs. 3, 7, 30, 31), pronotum shorter than elytra. Outer margin of tibiae without teeth
6. Pro-, meso- and metasternum with a deep groove medially (Fig. 42) ..... 23. *Xylonaeus*
- Usually metasternum (sometimes mesosternum) with deep, longitudinal groove (Fig. 45) ..... 7
7. Prosternum emarginate basally, mesosternum with median projection (Figs. 45, 46) ..... 24. *Trypanaeus*
- Prosternum truncate at both ends, mesosternum rounded or straight anteriorly (Fig. 48) ..... 25. *Coptotrophis*
8. Antennal cavities situated on lateral sides of prosternum, approaching prosternal keel (Figs. 20- 29). Dorsal striae (Figs. 30, 31) rarely absent, if so, then at least sutural stria present. Antennal insertion always hidden. Front coxae narrowly separated (*Saprininae*) ..... 9
- Antennal cavities, if defined, on hypomera or along prosternum (Figs. 4, 6, 12). Elytra at most with vague impressions. Antennal insertions usually exposed (Fig. 9). Front coxae moderately to broadly separated (*Abraeinae*) ..... 18
9. Preapical foveae absent (Figs. 20 - 22, 29) ..... 10
- Preapical foveae present (Figs. 23 - 28) ..... 15
10. Prosternum acutely carinate, keel knife like or nearly so (Figs. 29, 36) ..... 11
- Prosternum not acutely carinate ..... 13
11. Hypomera not ciliate. Carinal striae absent or strongly reduced (Fig. 29) ..... 12
- Hypomera covered with long, yellow and dense pilosity (Fig. 35). Carinal striae at least basally present (Fig. 36) ..... 19. *Philoxenus*
12. Frontal stria complete, frons additionally with arcuate stria. Elytra punctate (Fig. 34) ..... 17. *Neopachylopus*
- Frontal stria interrupted, usually appearing as two short, weak lateral carinae. Elytra glabrous ..... 18. *Pachylopus*
13. Prosternum only with carinal striae rather widely separated, united anteriorly in some species (Fig. 21). Lateral striae absent ..... 11. *Eremosaprinus*
- Prosternum with both carinal and lateral striae, carinal striae often united with lateral striae ..... 14
14. Carinal striae parallel and rather widely separated for most of their length but angulately bent and converging toward apex, lateral striae short, joining carinal striae usually about one-third from apex (Fig. 20) ..... 10. *Gnathoncus*
- Carinal striae diverging apically and joining lateral striae, the latter usually united by submarginal transverse apical stria (Fig. 22) ..... 12. *Saprinus*
15. Neither lateral nor carinal striae terminating in preapical foveae (Fig. 28) which are isolated and lie between lateral striae and apical margin of prosternum. Frons generally separated from clypeus by transverse carina or subcariniform stria ..... 16. *Hypocaccus*
- a) pronotum impunctate, except for band along basal margin ..... subg. *Baeckmanniolus*
- Lateral prosternal striae (and sometimes also carinal striae) terminating in preapical foveae (Figs. 23 - 27) ..... 16
16. Carinal striae usually parallel or nearly so, not terminating in preapical fovea, usually abbreviated near apex, without joining lateral striae (Fig. 25) ..... 15. *Geomysaprinus*
- a) sides of pronotum sometimes subrugose but never distinctly, longitudinally rugulose; pygidium without marginal sulcus ..... subg. *Priscosaprinus*

- Carinal striae either united with lateral striae or laying more or less parallel to lateral striae and terminating in preapical foveae independent of lateral striae (Figs. 23, 24, 26, 27) ..... 17
- 17. Carinal striae diverging slightly near apex and ending in preapical foveae independent of lateral striae (Fig. 26, 27). Hypomera ciliate (Fig. 32) ..... 14. *Xerosaprinus*
  - a) prosternal keel rather flat or feebly convex (Fig. 27) ..... subg. *Vastosaprinus*
- Carinal striae joining lateral striae which continue anteriorly to terminate in preapical fovea ..... (Figs. 23, 24). Hypomera not ciliate ..... 13. *Euspilotus*
  - a) preapical fovea not united by sulcus (Fig. 23) ..... subg. *Hesperosaprinus*
  - b) preapical fovea united by transverse subapical sulcus (Fig. 24) ..... subg. *Neosaprinus*
- 18. Hind tarsi with four segments (Figs. 10, 13) ..... 19
- Hind tarsi with five segments ..... 21
- 19. Scutellum not visible. Epistoma with marginal stria along each side and often along anterior margin (Fig. 9). Pygidium usually with continuous stria along lateral and apical margin ..... 5. *Aeletes*
- Scutellum visible, though sometimes minute. Epistoma and pygidium not margined ..... 20
- 20. Protibiae distinctly expanded apically their outer margin adorned with spinules (Fig. 11). Mesosternum projecting forward, its marginal stria strongly angulate (Fig. 12) ..... 6. *Halacritus*
- Protibiae slender and finely multisetose. Anterior mesosternal margin straight or slightly angulate (Fig. 8) ..... 4. *Acritus*
- 21. Body moderately to strongly convex, often subglobular, propygidium usually covered or nearly covered by elytra; pygidium inflexed and ventral or nearly so (Figs. 14, 25, 17, 18) (*Bacaniini*) ..... 22
- Body less convex, oval or elongate; propygidium not covered by elytra ..... 23
- 22. Legs very long, the mid and hind femora jutting out of body outline more than a half of their length (Fig. 17) ..... 8. *Troglobacanius*
- Legs of normal length, only femoral tips visible from above (Fig. 15) ..... 7. *Bacanius*
  - a) inner subhumeral stria complete, distant from marginal stria (Fig. 16) ..... subg. *Gomyister*
- 23. Elytra strongly margined by rounded ridge along upper edge of which lies marginal stria. Apex of protibiae without spinule (Fig. 19) (*Anapleini*) ..... 9. *Anapleus*
- Elytra not margined, apical spinule present ..... 24
- 24. Pronotum with longitudinal groove on each side, these often connected by transverse groove (Fig. 3). Body oval (*Plegaderini*) ..... 1. *Plegaderus*
- Form cylindrical (Fig. 5), pronotum without such grooves. (*Teretriini*) ..... 25
- 25. Colour with metallic tinge. Pygidium of two shapes, upper part convex, lower part almost flat or concave, sometimes pygidium produced into a conical tubercle ..... 3. *Teretriosoma*
- Colour non metallic, pygidium proportionately convex ..... 2. *Teretrius*
  - a) lateral metasternal stria recurved and extending to mesepimeral-metasternal suture (Fig. 6) .. subg. *Neotepetrius*
- 26. Labrum and clypeus fused, their juncture never membranous. Antennal scape enlarged, antennal club without annular rings, sclerotized on, at least, part of surface (Figs. 94, 98, 100) (*Hetaeriinae*) ..... 27
- Labrum separated from clypeus by membranous juncture. Antennal scape normal, antennal club with distinct annular rings, not sclerotized ..... 38
- 27. Antennal club cylindrical, tomentose, sensory area restricted to truncate apex (Fig. 100) ..... 28
- Antennal club oval, tomentose sensory area present on apical and lateral margins, usually on about apical half (Figs. 94, 98) ..... 29
- 28. Mesosternum with deep fossae on each ridge in antero-lateral angle. Sides of pronotum modified as a lobe or lobes which are set off from disc by an oblique furrow (Fig. 99) ..... 50. *Haeterius*
- Mesosternum without fossae, pronotum lacking such a structure ..... 51. *Pinaxister*

29. Upper side smooth, without hairs and setae (Fig. 103) ..... 30  
 - Upper side setose or with hairs (Fig. 101) ..... 32
30. Pronotum and elytra costate ..... 47. *Hemicolonides*  
 - Upper body side without costae ..... 31
31. Prosternal keel very broad and flat, its posterior margin broadly, very deeply emarginate (Fig. 104) ...  
 ..... 54. *Hippeutister*  
 - Prosternal keel convex, narrow, its posterior margin feebly emarginate ..... 52. *Euclasea*
32. Each elytron with three complete dorsal striae ..... 33  
 - Elytral striation different ..... 34
33. Sutural stria present. Mesosternum flat or slightly incised laterally. Pronotum short, broadest at base ..  
 ..... 49. *Hetaeriomorphus*  
 - Sutural stria absent, replaced by row of long setae. Mesosternum with deep, transverse fossa. Pronotum  
 long, narrowest at base ..... 48. *Opadosister*
34. Pronotum with costiform elevations along lateral striae ..... 35  
 - Pronotum without elevations ..... 36
35. Inner dorsal striae inwardly hooked, fourth joined to sutural basally ..... 45. *Trichoreninus*  
 - Dorsal striae parallel, not joined with sutural ..... 56. *Hetaeriodes*
36. Pronotum swollen laterally, incised at middle and divided into two parts (Figs. 95,96). Hind tibiae strongly  
 expanded, very angulate (Fig. 97) ..... 46. *Terapus*  
 - Pronotum at most with median, transverse depression ..... 37
37. Body oval, dorsal striae marked by setigerous points, arched towards suture apically and basally (Fig. 101,  
 102) ..... 53. *Mesynodites*  
 - Body elongate, dorsal striae cariniform, not arched ..... 55. *Aphanister*
38. Labrum with setigerous punctures (Figs. 85, 87). Antennal cavities situated in anterior prothoracic  
 angles, at least partly closed beneath by prosternal alae (Figs. 84, 88). Protibiae multidentate (Fig. 89)  
 (*Onthophilinae*) ..... 39  
 - Labrum without setigerous punctures. Antennal cavities at least partially exposed (Figs. 2, 59, 63) or the  
 cavities not defined (Figs. 50, 53). Protibiae usually broad, with teeth along external margin  
 (*Histerinae*) ..... 42.
39. Pronotum with discal costae, elytra multicostae, appearance very rough and heavily sculptured (Fig. 84)  
 ..... 41. *Onthophilus*  
 - Pronotal and elytral disc smooth or normally striate, elytral disc usually remotely punctate or smooth 40
40. Body strongly convex, nearly circular in outline. Elytra without striae ..... 44. *Idolla*  
 - Body normally convex, oval. Elytra with normal dorsal striation (Fig. 86) ..... 41
41. Mesosternum with meso-metasternal stria besides the marginal mesosternal one (Fig. 91). Parameres  
 long, reaching over the tip of the penis (Figs. 92, 93) ..... 43. *Plagiogramma*  
 - Mesosternum only with marginal stria which may be interrupted anteriorly (Fig. 88). Parameres short,  
 rounded laterally and dilated, reaching strictly to the top or shortly beyond it (Fig. 90) .... 42. *Epiurus*
42. Head horizontal in repose (Fig. 51). Antennal cavities not defined (Figs. 50, 53). Body form flat and broad  
 (Fig. 55) (*Hololeptini*) ..... 43  
 - Head vertical in repose, antennal cavities present. Body form more rounded ..... 45
43. Prosternum not carinate, rounded or truncate anteriorly. Teeth on middle and hind tibiae unequally  
 spaced, lower two arising from same process, more distant from upper than from each other (Fig. 52)  
 ..... 44  
 - Prosternum carinate, terminating apically in sharp point. Teeth of hind and middle tibiae arising from  
 different processes, equally spaced, long, spiniform (Fig. 54) ..... 28. *Ilionota*

- 
44. Labrum fairly large, in front deeply incised, the two lobes thus formed are about as long as broad at base (Fig. 49) ..... 26. *Platyentidium*  
 - Labrum very short, the lobes small, tubercleform (Fig. 55) ..... 27. *Hololepta*  
   a) prosternum narrowed, partly convex, usually rounded anteriorly (Fig. 53) .....  
     ..... subg. *Leionota*
45. Antennal club with two oblique sutures, V-shaped (Figs. 56, 60) ..... 46  
 - Antennal sutures straight, if at all ..... 47
46. At least one of sutures of antennal club interrupted on underside (Fig. 56). Prosternal lobe longer, not or weakly broader than its length (Fig. 57). Body more or less depressed, subparallel or parallel. (*Platysomatini*) ..... 29. *Latinolister*  
 - Both sutures complete on underside of club (Fig. 60). Prosternal lobe shorter, at least twice as long as broad (Fig. 59). Body convex, usually broadly-oval (Fig. 58). (*Omalodini*) ..... 30. *Omalodes*
47. Antennal club without annuli of sensorial foveae (Fig. 61) or with only a straight, transverse subapical annulus of short setae. Frontal stria reaching the antennal base, if present. Edeagus simple, tubular (Fig. 67, 68). (*Exosternini*) ..... 48  
 - Antennal club with two annuli (Fig. 73). Frontal stria, if present, distant from antennal base. Edeagus modified, strongly sclerotized, with distinct posterior apodeme and median lobe (Figs. 74, 76), sometimes with median armature (Fig. 74)(*Histerini*). ..... 52
48. Pygidium with a sulcus or stria, very densely, almost contiguously punctulate (Fig. 64). Carinal striae united apically and basally, triangle shaped (Fig. 63) ..... 31. *Operclipygus*  
 - Pygidium without sulci or striae, usually less densely punctulate. Carinal striae, if present, not thus . 49
40. Anterior margin of mesosternum deeply emarginate (Fig. 71) ..... 34. *Pseudister*  
 - Anterior margin of mesosternum bisinuate, with more or less distinct median projection (Figs. 65, 69, 72) ..... 50
50. Prosternal lobe very short, almost four times as broad as long (Fig. 72). Lateral metasternal stria curved outwards and extending to metasternal-metepisternal suture (Fig. 72) ..... 35. *Kaszabister*  
 - Prosternal lobe longer, at most twice as broad as long. Lateral metasternal stria never curved, extending or not, to apical margin (Fig. 65) ..... 51
51. Pronotal disc depressed behind each anterior angle. Protibia tridentate, obliquely truncate at apex, its tarsal groove bisinuate (Fig. 66)31. .... *Baconia*  
 - Pronotum without depressions. Protibia usually oligodentate, its tarsal groove straight (Fig.70) .....  
     ..... 33. *Phelister*
52. Elytra with elevated costae, without dorsal striation (Fig. 78) ..... 39. *Epiglyptus*  
 - Elytra normally striated, without costae ..... 53
53. Pronotal hypomeron setose (Fig.77), protibiae strongly bidentate, elytra usually with orange-red maculations ..... 38. *Spilodiscus*  
 - Such a combination never occurring ..... 54
54. Outer subhumeral stria complete in most individuals. Edeagus with long, sclerotized median armature (Fig. 74). (Subg. *Ptomister*) ..... 36. *Margarinotus*  
 - Outer subhumeral stria absent or present in basal half only. Edeagus without median armature (Fig. 76)55
55. Mesosternum truncate or very slightly emarginate (Figs. 80, 82). Anterolateral angle of protibia with 2 or 3 closely appressed denticles (Fig. 81) ..... 40. *Atholus*  
 - Mesosternum emarginate, receiving projection of prosternum. Anterolateral angle sometimes with more than 3 denticles, but never so strongly appressed ..... 37. *Hister*

CLAVE PARA LOS GÉNEROS Y SUBGÉNEROS<sup>1</sup>

1. Prosterno con una escotadura lateral la cual recibe el funículo antenal (Figs. 4, 6, 12, 15, 18, 22, 36, 39, 44) ..... 2
- Prosterno sin escotadura lateral, con el lóbulo y las extensiones (*alae*) prosternales usualmente cubriendo las cavidades antenales en reposo (Figs. 2, 50, 53, 59, 72, 104) ..... 26
2. Prosterno con profundos surcos basales en frente de las coxas los cuales reciben la larga espina apical de la protibia (Fig. 39) (**Dendrophilinae: Paromalini**) ..... 3
- Prosterno sin surcos basales ..... 5
3. Disco elitral con estrias dorsales normales, usualmente con una estria sutural además de la subhumeral (Figs. 37, 38) ..... 4
- Disco elitral punteado, sin estrias definidas sólo con vagas impresiones basales (Figs. 41, 42) ..... 22. *Paromalus*
  - a) Estria sutural presente en la región apical (Fig. 41) ..... Subg. *Isolomalus*
4. Cuarta estria dorsal arqueada hacia y recurvada a lo largo de la sutura (Fig. 37) ..... 20. *Xestipyge*
- Cuarta estria dorsal a veces arqueada hacia la sutura pero no recurvada a lo largo de la misma (*Cingidops*)
5. Cuerpo muy alargado (Figs. 43, 45), con el pronoto subcilíndrico (Fig. 44), usualmente tan largo como los élitros (Fig. 43). Protibias con un fuerte diente en el margen externo (Fig. 47) (**Trypanaeinae**) ..... 6
- Cuerpo usualmente oval (Figs. 3, 7, 30, 31), pronoto más corto que los élitros. Margen externo de las tibias sin dientes ..... 8
6. Pro, meso y metasterno medialmente con un surco profundo (Fig. 42) ..... 23. *Xylonaeus*
- Usualmente el metasterno (a veces el mesosterno) con un profundo surco longitudinal (Fig. 45) ..... 7
7. Prosterno emarginado basalmente, mesosterno con una proyección mesial (Figs. 45, 46) ..... 24. *Tryponaeus*
- Prosterno truncado en ambos extremos, mesosterno redondeado o recto anteriormente (Fig. 48) ..... 25. *Coptotrophis*
8. Cavidades antenales situadas sobre los lados del prosterno, próximas a la quilla prosternal (Figs. 20-29). Élitros con estrias dorsales (Figs. 30, 31) raramente ausentes, si tanto, entonces la estria sutural presente. Inserciones antenales siempre escondidas. Coxas frontales raramente separadas (**Saprininae**) ..... 9
- Cavidades antenales, si definidas, situadas sobre los hipómeros o a lo largo del prosterno (Figs. 4, 6, 12). Élitros a lo más con impresiones vagas. Inserciones antenales usualmente expuestas (Fig. 9). Coxas frontales moderada a ampliamente separadas (**Abraeinae**) ..... 18
9. Foveas preapicales ausentes (Figs. 20-22, 29) ..... 10
- Foveas preapicales presentes (Figs. 23-28) ..... 15
10. Prosterno agudamente carinado, quilla casi en forma de cuchilla (Figs. 29, 36) ..... 11
- Prosterno no agudamente carinado ..... 13
11. Hipómeros no ciliados. Estria carinal ausente o muy reducida (Fig. 29) ..... 12
- Hipómeros cubiertos con pilosidad larga, densa y amarilla (Fig. 35). Estria carinal presente al menos en la base (Fig. 36) ..... 19. *Philoxenus*
12. Estria frontal completa, la frente además con una estria arqueada. Élitros punteados (Fig. 34) ..... 17. *Neopachylopus*
- Estria frontal interrumpida, usualmente apareciendo como dos cortas carinas laterales débiles. Élitros lisos

<sup>1</sup>Translated by L. Delgado.

- ..... 18. *Pachylopus*
13. Prosterno sólo con la estría carinal, ésta más bien ampliamente separada y unida anteriormente en algunas especies (Fig. 21); estría lateral ausente ..... 11. *Eremosaprinus*
- Prosterno con sendas estrías carinal y lateral, estría carinal frecuentemente unida con la estría lateral ... 14
14. Estría carinal paralela y más bien ampliamente separada en la mayor parte de su longitud, pero angularmente curvada y convergiendo hacia el ápice, estría lateral corta y usualmente juntándose con la estría carinal casi a un tercio del ápice (Fig. 20) ..... 10. *Gnathoncus*
- Estría carinal divergiendo apicalmente y uniéndose a la estría lateral, esta última usualmente unida por una estría apical transversa submarginal (Fig. 22) ..... 12. *Saprinus*
15. Ni la estría carinal ni la lateral terminando en foveas preapicales (Fig. 28) las cuales están aisladas y situadas entre la estría lateral y el margen apical del prosterno. Frente generalmente separada del cíleo por una carina transversa o estría subcariniforme ..... 16. *Hypocaccus*
- a) Pronoto impunteado, excepto por una banda a lo largo del margen basal ..... Subg. *Baeckmanniolus*
- Estría prosternal lateral (y a veces también la estría carinal) terminando en foveas preapicales (Figs. 23-27) ..... 16
16. Estría carinal usualmente paralela o casi, no terminando en foveas preapicales, usualmente abreviada cerca del ápice y sin unirse a la estría lateral (Fig. 25) ..... 15. *Geomysaprinus*
- a) Lados del pronoto a veces subrugosos pero nunca evidentemente longitudinalmente rugulosos; pigidio sin surco marginal ..... Subg. *Priscosaprinus*
- Estría carinal ya sea unida con la estría lateral o situada más o menos paralela a la carina lateral y terminando en foveas preapicales independiente de la carina lateral (Figs. 23, 24, 26, 27) ..... 17
17. Estría carinal ligeramente divergiendo cerca del ápice y terminando en foveas preapicales independiente de la estría lateral (Figs. 26, 27). Hipómeros ciliados (Fig. 32) ..... 14. *Xerosaprinus*
- a) Quilla prosternal más bien aplanada o débilmente convexa (Fig. 27) ..... Subg. *Vastosaprinus*
- Estría carinal uniéndose a la estría lateral la cual continúa anteriormente para terminar en foveas preapicales (Figs. 23, 24). Hipómeros no ciliados ..... 13. *Euspilotus*
- a) Foveas preapicales no unidas por un surco (Fig. 23) ..... Subg. *Hesperosaprinus*
- b) Foveas preapicales unidas por un surco subapical transverso (Fig. 24) ..... Subg. *Neosaprinus*
18. Tarsos posteriores con cuatro segmentos (Figs. 10, 13) ..... 19
- Tarsos posteriores con cinco segmentos ..... 21
19. Escutelo no visible. Epistoma con estría marginal a lo largo de cada lado y frecuentemente a lo largo del margen anterior (Fig. 9). Pigidio usualmente con una estría continua a lo largo de los márgenes apical y laterales ..... 5. *Aeletes*
- Escutelo visible, aunque a veces diminuto. Epistoma y pigidio no marginados ..... 20
20. Protibias claramente expandidas apicalmente, su margen externo adornado con espínulas (Fig. 11). Mesosterno proyectándose hacia adelante, su estría marginal fuertemente angulada (Fig. 12) ..... 6. *Halacritus*
- Protibias esbeltas y finamente multisetosas. Margen mesosternal anterior recto o ligeramente angulado (Fig. 8) ..... 4. *Acritus*
21. Cuerpo moderada a fuertemente convexo, frecuentemente subglobular, propigidio usualmente cubierto o casi por los élitros; pigidio inflexo y en posición ventral o casi (Figs. 14, 25, 17, 18) (**Bacaniini**) ... 22



- Cuerpo menos convexo, oval o alargado; propigidio no cubierto por los élitros ..... 23
22. Patas muy largas, los fémures medios y posteriores sobresaliendo de la línea del cuerpo por más de la mitad de su longitud (Fig. 17) ..... 8. *Troglobacanius*
- Patas de longitud normal, sólo los extremos de los fémures visibles desde arriba (Fig. 15) ..... 7. *Bacanius*
- a) Estría subhumeral interna completa, distante de la estría marginal (Fig. 16) ..... Subg. *Gomyister*
23. Élitros fuertemente marginados por una carina redondeada a lo largo del borde superior el cual lleva la estría marginal. Ápice de la protibia sin espínula (Fig. 19) (*Anapleini*) ..... 9. *Anapleus*
- Élitros no marginados. Protibia sin espínula apical ..... 24
24. Pronoto con surco longitudinal sobre cada lado, éstos frecuentemente conectados por un surco transversal (Fig. 3). Cuerpo oval. (*Plegaderini*) ..... 1. *Plegaderus*
- Pronoto sin tales surcos. Cuerpo cilíndrico (Fig. 5) (*Teretriini*) ..... 25
25. Color con tinte metálico. Pigidio con dos formas, parte superior convexa, parte inferior aplanada o cóncava, a veces el pigidio extendido en un tubérculo cónico ..... 3. *Teretiosoma*
- Color no metálico. Pigidio proporcionalmente convexo ..... 2. *Teretrius*
- a) Estría metasternal lateral recurvada y extendiéndose a la sutura mesepimera-metasternal (Fig. 6) ..... Subg. *Neotepetrius*
26. Labro y clipeo fusionados, su unión no membranosa. Escapo antenal ensanchado, maza antenal sin impresiones anulares y esclerotizada total o parcialmente (Figs. 94, 98, 100) (*Hetaeriinae*) ..... 27
- Labro separado del clipeo por una unión membranosa. Escapo antenal normal, maza antenal con evidentes impresiones anulares y no esclerotizada ..... 38
27. Maza antenal cilíndrica y tomentosa, área sensorial restringida al ápice truncado (Fig. 100) ..... 28
- Maza antenal oval y tomentosa, área sensorial presente en los márgenes apical y lateral, usualmente en casi toda la mitad apical (Figs. 94, 98) ..... 29
28. Mesosterno con profundas fosas sobre cada carina en los ángulos antero-laterales. Lados del pronoto modificados como un lóbulo o lóbulos los cuales se separan del disco por un surco oblicuo (Fig. 99) ..... 50. *Haeterius*
- Mesosterno sin fosas. Pronoto sin tal estructura ..... 51. *Pinaxister*
29. Dorso glabro, sin sedas (Fig. 103) ..... 30
- Dorso setoso o pubescente (Fig. 101) ..... 32
30. Pronoto y élitros con costillas ..... 47. *Hemicolonides*
- Pronoto y élitros sin costillas ..... 31
31. Quilla prosternal muy ancha y aplanada, su margen posterior amplia y muy profundamente escotado (Fig. 104) ..... 54. *Hippeutister*
- Quilla prosternal convexa, estrecha, con su margen posterior débilmente escotado ..... 52. *Euclasea*
32. Cada élitro con tres estrías dorsales completas ..... 33
- Eстриación elitral diferente ..... 34
33. Eстриa sutural presente. Mesosterno aplanado o ligeramente impreso lateralmente. Pronoto corto, más ancho en la base ..... 49. *Hetaeriomorphus*
- Eстриa sutural ausente, reemplazada por una fila de sedas largas. Mesosterno con fosa profunda transversa. Pronoto largo, más estrecho en la base ..... 48. *Opadosister*
34. Pronoto con elevaciones costilliformes a lo largo de las estrías laterales ..... 35
- Pronoto sin elevaciones ..... 36

35. Estrias dorsales internas anguladas hacia adentro, la cuarta unida basalmente a la estria sutural ..... 45. *Trichorenius*  
 - Estrias dorsales paralelas, no unidas con la estria sutural ..... 56. *Hetaeriodes*
36. Pronoto lateralmente tumido, inciso en la mitad y dividido en dos partes (Figs. 95, 96). Tibias posteriores fuertemente expandidas, muy anguladas (Fig. 97) ..... 46. *Terapus*  
 - Pronoto a lo más con una depresión media transversal ..... 37
37. Cuerpo oval, estrias dorsales marcadas con puntos setíferos, apical y basalmente arqueadas hacia la sutura (Figs. 101, 102) ..... 53. *Mesynodites*  
 - Cuerpo alargado, estrias dorsales cariniformes, no arqueadas ..... 55. *Aphanister*
38. Labro con puntos setíferos (Figs. 85, 87). Cavidades antenales situadas en los ángulos protorácicos anteriores, al menos parcialmente encerradas por las extensiones (*alae*) prosternales (Figs. 84, 88). Protibias multidentadas (Fig. 89). (*Onthophilinae*) ..... 39  
 - Labro sin puntos setíferos. Cavidades antenales al menos parcialmente expuestas (Figs. 2, 59, 63) o éstas no definidas (Figs. 50, 53). Protibias usualmente anchas, con dientes a lo largo del margen externo. (*Histerinae*) ..... 42
39. Pronoto con costillas discales, élitros multicostillados con apariencia muy rugosa y gruesa escultura (Fig. 84) ..... 41. *Onthophilus*  
 - Disco pronotal y elitral liso o normalmente estriado, disco elitral por lo general escasamente punteado o liso ..... 40
40. Cuerpo notablemente convexo, casi de contorno circular. Élitros sin estrias ..... 44. *Idolia*  
 - Cuerpo normalmente convexo, oval. Élitros con estriación dorsal normal (Fig. 86) ..... 41
41. Mesosterno con estria meso-metasternal al lado de la estria mesosternal marginal (Fig. 91). Parámetros largos, alcanzando la punta del pene (Figs. 92, 93) ..... 43. *Plagiogramma*  
 - Mesosterno sólo con estria marginal la cual puede estar interrumpida anteriormente (Fig. 88). Parámetros cortos, redondeados lateralmente y dilatados, alcanzando la parte superior o un poco más allá (Fig. 90) ..... 42. *Epiurus*
42. Cabeza horizontal en reposo (Fig. 51). Cavidades antenales no definidas (Figs. 50, 53). Cuerpo aplanado y ancho (Fig. 55). (*Hololeptini*) ..... 43  
 - Cabeza vertical en reposo. Cavidades antenales presentes. Cuerpo más redondeado ..... 45
43. Prosterno no carinado, redondeado o truncado anteriormente. Dientes de las tibias medias y posteriores desigualmente espaciados, los dos inferiores surgiendo del mismo proceso y más distantes del inmediato superior que entre ellos mismos (Fig. 52) ..... 44  
 - Prosterno carinado, terminando apicalmente en punta. Dientes de las tibias medias y posteriores surgiendo de procesos distintos, igualmente espaciados, largos y espiniformes (Fig. 54) ..... 28. *Ilitona*
44. Labro notablemente grande, en frente profundamente escotado formando dos lóbulos los cuales son casi tan largos como el ancho de su base (Fig. 49) ..... 26. *Platyentidium*  
 - Labro muy corto, los lóbulos pequeños y tuberculiformes (Fig. 55) ..... 27. *Hololepta*  
 a) Prosterno estrechado, parcialmente convexo y usualmente redondeado anteriormente (Fig. 53) ..... Subg. *Leionota*
45. Maza antenal con dos suturas oblicuas en forma de V (Figs. 56, 60) ..... 46  
 - Sutures antenales a lo más rectas ..... 47
46. Al menos una de las suturas de la maza antenal interrumpidas en la cara inferior (Fig. 56). Lóbulo prosternal largo, no o escasamente más ancho que su longitud (Fig. 57). Cuerpo más o menos deprimido, subparalelo o paralelo. (*Platysomatini*) ..... 29. *Latinolister*  
 - Ambas suturas de la maza antenal completas sobre la cara inferior (Fig. 60). Lóbulo prosternal más corto, al menos el doble tan largo como ancho (Fig. 59). Cuerpo convexo, por lo general ampliamente

- ovalado (Fig. 58). (**Omalodini**) ..... 30. **Omalodes**
47. Maza antenal sin anillos de foveas sensoriales (Fig. 61) o con sólo un anillo recto, transverso y subapical de sedas cortas. Estría frontal, cuando presente, alcanzando la base antenal. Edeago simple, tubular (Figs. 67, 68). (**Exosternini**) ..... 48
- Maza antenal con dos anillos (Fig. 73). Estría frontal, cuando presente, distante de la base antenal. Edeago modificado, muy esclerotizado, con evidentes apodema posterior y lóbulo medio (Figs. 74, 76), a veces con armadura media (Fig. 74). (**Histerini**) ..... 52
48. Pigidio con un surco o estría, muy densamente, casi contiguamente puntulado (Fig. 64). Estrías carinales unidas apical y basalmente, en forma de triángulo (Fig. 63) ..... 31. **Operclippygus**
- Pigidio sin surcos o estrías, por lo general menos densamente puntulado. Estrías carinales, cuando presentes, no de esa manera ..... 49
49. Margen anterior del mesosterno profundamente escotado (Fig. 71) ..... 34. **Pseudister**
- Margen anterior del mesosterno bisinuado, con una proyección mesial más o menos evidente ..... 50
50. Lóbulo prosternal muy corto, casi cuatro veces tan ancho como largo (Fig. 72). Estría metasternal lateral curvada hacia afuera y extendiéndose a la sutura metasterna-metepisternal (Fig. 72) ..... 35. **Kaszabister**
- Lóbulo prosternal más largo, a lo más el doble tan ancho como largo. Estría metasternal lateral nunca curvada y extendiéndose o no al margen apical (Fig. 65) ..... 51
51. Disco pronotal deprimido detrás de cada ángulo anterior. Protibia tridentada, oblicuamente truncada en el ápice y con su surco tarsal bisinuado (Fig. 66) ..... 31. **Baconia**
- Pronoto sin depresiones. Protibia usualmente oligodentada, con su surco tarsal recto (Fig. 70) ..... 33. **Phelister**
52. Élitros con costillas elevadas, sin estriación dorsal (Fig. 78) ..... 39. **Epiglyptus**
- Élitros estriados normalmente, sin costillas ..... 53
53. Hipomero pronotal setoso (Fig. 77), protibias fuertemente bidentadas, élitros usualmente con manchas rojo-naranja ..... 38. **Spilodiscus**
- Con diferente combinación de caracteres ..... 54
54. Estría subhumeral externa completa en muchos individuos. Edeago con armadura media larga y esclerotizada (Fig. 74). (Subg. **Ptomister**) ..... 36. **Margarinotus**
- Estría subhumeral externa ausente o presente sólo en la mitad basal. Edeago sin armadura media (Fig. 76) ..... 55
55. Mesosterno truncado o muy ligeramente escotado (Figs. 80, 82). Ángulo anterolateral de la protibia con dos o tres denticulos estrechamente aproximados (Fig. 81) ..... 40. **Atholus**
- Mesosterno escotado, recibiendo la proyección del prosterno. Ángulo anterolateral de la protibia con más de tres denticulos levemente aproximados ..... 37. **Hister**

## CLASSIFICATION OF THE MEXICAN HISTERIDAE

HISTERIDAE Gyllenhal, 1808

ABRAEINAE MacLeay, 1819

Plegaderini Portevin, 1929

1. *Plegaderus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 203Type species: *Hister caesus* Herbst, 1792

The genus is characteristic exclusively to the forest zone of the northern Hemisphere. The adults and larvae living under the bark of dead trees, preying on small scolytids and the eggs of other subcortical insects, probably

they prey also on mites and small arthropods. There are two subgenera: monotypic *Hemitrichoderus* Reichardt from the eastern Mediterranean, and the nominative one, with 26 species, where all the Mexican species belong.

1. *P. comonforti* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 683  
*consors* Horn, 1873. Trans. Amer. Ent. Soc., 5, p. 350  
*vegrandis* Casey, 1916. Mem. Coleopt., VII, p. 281
2. *P. densus* Casey, 1916. Mem. Coleopt., VII, p. 280
3. *P. monachus* Marseul, 1870. Ann. Soc. Ent. Belge, 13, p. 124
4. *P. transversus* (Say, 1825). J. Acad. Nat. Sci. Philad., 5, p. 45

#### Teretriini Bickhardt, 1914

2. *Teretrius* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 2/8

Type species: *Teretrius fabricii* Mazur, 1972 (= *picipes* Fabricius, 1792 nec Olivier, 1789)

All the members of this genus living predominantly in the galleries of scolytids, bostrychids and anobids in dead branches and stumps. Over 70 species, world widely distributed, divided into two subgenera.

Subgenus *Neotepetrius* G. Müller, 1937. Ent. Bl., 33, p. 337

Type species: *Teretrius parasita* Marseul, 1862

*Cyclosternum* G. Müller, 1937. Ent. Bl., 33, p. 98 nec Ausserer, 1871

1. *T. nigrescens* (Lewis, 1891). Ann. Mag. Nat. Hist., (6)8, p. 398  
*striatum* Lewis, 1910. Ann. Mag. Nat. Hist., (8)6, p. 48
2. *T. orbis* Lewis, 1888. Biol. Centr.-Amer., 2, p. 232  
*levatus* Horn, 1894. Bull. Calif. Acad. Sci., (2)4, p. 322  
*latirostre* Lewis, 1899. Ann. Mag. Nat. Hist., (7)4, p. 28

Subgenus *Teretrius* s. str.

3. *T. longulus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 232

3. *Teretriosoma* Horn, 1873. Proc. Amer. Phil. Soc., 13, p. 347

Type species: *Teretriosoma chalybaeum* Horn, 1873

A little is known about the way of living of the species classified here. A cylindrical form of body indicates that the species are found in the galleries of bark beetles and other wood boring insects. A total of 9 species having been described as far, inhabiting exclusively the New World.

1. *T. cavifrons* Lewis, 1888. Biol. Centr.-Amer., 2, p. 234
2. *T. paradoxum* Lewis, 1888. Biol. Centr.-Amer., 2, p. 234

#### Acritini Wenzel, 1944

4. *Acritus* J.L. LeConte, 1853. Proc. Acad. Nat. Sci. Philad., 6, p. 288

Type species: *Hister nigricornis* Hoffmann, 1803

*Phloeocritus* Houlbert and Monnot, 1923. Bull. Soc. Sci. Med. Ouest., 31-32, p. 73

*Ittrion* Deane, 1932. Proc. Linn. Soc. N.S. Wales, 57, p. 334

Numerous species of this genus, about 110 in number, are found in decaying vegetable matter, under bark of trees, in leaf litter, in tree holes, etc., where they feed on Collembola and other small insects. The worldwide dispersion of such environments as the soil humus and forest litter enabled these species to settle in the particular continents and geographical regions. Two subgenera, all the Mexican species belong to the nominative subgenus.

1. *A. exiguus* (Erichson, 1834). Jahrb. Ins.-kunde, 1, p. 208  
*aciculatus* J.E. LeConte, 1844. Proc. Boston Soc. Nat. Hist., 1, p. 187  
*obliquulus* J.E. LeConte, 1844. Proc. Boston Soc. Nat. Hist., 1, p. 187

- natchez* Marseul, 1856. Ann. Soc. Ent. France, (3)4, p. 604  
*cribripennis* Marseul, 1856. Ann. Soc. Ent. France, (3)4, p. 605  
*ellipticus* Casey, 1916. Mem. Coleopt., VII, p. 250  
*sparsellus* Casey, 1916. Mem. Coleopt., VII, p. 250  
*angustatus* Casey, 1916. Mem. Coleopt., VII, p. 251  
*subdepressus* Blatchley, 1922. Canad. Ent., 54, p. 13  
 2. *A. komai* Lewis, 1879. Ann. Mag. Nat. Hist., (5)4, p. 461  
*insularis* Sharp, 1885. Sci. Trans. Roy. Dublin Soc., (2)3, p. 129  
*volitans* Fall, 1901. Occ. Pap. Calif. Acad. Sci., 8, p. 238  
*apicestrigosus* Bickhardt, 1921. Arch. Naturg., 87, A, 6, p. 103  
*duchainei* Cooman, 1935. Rev. Franç. Ent., 2, p. 92  
*optatus* Cooman, 1947. Not. Ent. Chin., 11, p. 423  
*oregonensis* Hatch, 1962. Univ. Wash. Publ. Biol., 16, p. 255  
 3. *A. mexicanus* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 238  
 4. *A. substriatus* Marseul, 1856. Ann. Soc. Ent. France, (3)4, p. 602

5. *Aeletes* Horn, 1873. Proc. Amer. Phil. Soc., 13, p. 356

Type species: *Acritus politus* J.L. LeConte, 1853

A poorly known genus, the members of which are found in dead trees of various kind, either just under the bark, or deeper in the rotten wood, often associated with ants. Over 60 species, a half of them occurring on the Hawaiian Islands, some in the Holarctic and the Central America. Selected are two subgenera, all the Mexican species belong to the nominative one.

1. *Ae. dybasi* Wenzel, 1944. Fieldiana, zool., 28, p. 71
2. *Ae. simpliculus* (Marseul, 1856). Ann. Soc. Ent. France, (3)4, p. 616  
*rugulosus* Marseul, 1856. Ann. Soc. Ent. France, (3)4, p. 617

6. *Halacritus* Schmidt, 1893. Bull. Soc. Ent. France, 1893, p. ciii

Type species: *Abraeus punctum* Aubé, 1842

*Paracritus* Brethés, 1924. Rev. Chili. Hist. Valparaiso, 27, p. 40

The species of this genus are maritime and without a known exception are found in and under decaying seaweed. Specific information regarding their food habits is lacking, but it is possible they might be scavengers rather than predators. 23 species, dispersed along the coasts of the Atlantic, Indian and Pacific Ocean.

1. *H. blackwelderi pacificus* Gomy, 1989. Nouv. Rev. Ent., 6(n.s.), p. 426

**Bacaniini Kryzhanovskij et Reichardt, 1976**

7. *Bacanius* J.L. LeConte, 1853. Proc. Acad. Nat. Sci. Philad., 6, p. 291

Type species: *Bacanius tantillus* J.L. LeConte, 1853

The beetles of this genus are found in rotten wood, under bark, in forest litter, in decaying vegetable matter, some of them in ant nests and caves. Over 90 species distributed worldwide. The genus divided into 7 subgenera, the representatives of two of them belong to the Mexican fauna.

Subgenus *Gomyister* Mazur, 1984. Pol. Pismo Ent., 54(3-4), p. 120

Type species: *Bacanius peyrrierasi* Gomy, 1969

*Antongilus* Gomy, 1977. Ann. Hist.-nat. Mus. Nat. Hung., 69, p. 109 nec Gomy, 1969

1. *B. gomyi* Yélamos, 1995. Nouv. Rev. Ent., 12 (n.s.), p. 256

2. *B. subcarinatus* Wenzel and Dybas, 1941. Fieldiana, zool., 22, p. 436

Subgenus *Bacanius* s. str.

3. *B. hamatus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 238  
 4. *B. pusillus* Wenzel, 1944. Fieldiana, zool., 28, p. 98  
 5. *B. scalptus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 237

8. *Troglobacanius* Vomero, 1974. Atti Acad. Lincei, 374, p. 329

Type species: *Troglobacanius maya* Vomero, 1974

All species described show a considerable degree of specialization to cave life, though the level of troglobiosis reached by the different species is fairly varied. Four species, endemic to México.

1. *T. bolivari* Vomero, 1974. Atti Acad. Lincei, 374, p. 341  
 2. *T. maya* Vomero, 1974. Atti Acad. Lincei, 374, p. 331  
 3. *T. reddelli* Vomero, 1974. Atti Acad. Lincei, 374, p. 336  
 4. *T. sbordonii* Vomero, 1974. Atti Acad. Lincei, 374, p. 345

**Anapleini Olexa, 1982**

9. *Anapleus* Horn, 1873. Proc. Amer. Phil. Soc., 13, p. 311

Type species: *Bacanius marginatus* J.L. LeConte, 1853

*Sphaeroderma* J.L. LeConte, 1861. Smithson. Misc. Coll., 6, p. 76 nec Stephens, 1831

*Abraeodes* Reitter, 1886. Wien. Ent. Ztg., 5, p. 272

*Tadzhister* Kryzhanovskij, 1966. Trudy Zool. Inst. Akad. Nauk SSSR, 37, p. 55

Very little is known on the biology of the species belonging here. Most of them have adopted to live in rodents burrows, some are poorly specialized to the cave life and must be considered as a troglaphyle living on rotting wood fungi where they prey on tiny arthropods. 16 species distributed in the Holarctis and the Oriental Region.

1. *A. mexicanus* Casey, 1916. Mem. Coleopt., VII, p. 248  
 2. *A. wenzeli* Vomero, 1977. Atti Acad. Lincei, 370, p. 341

**SAPRININAE Blanchard, 1845**

10. *Gnathoncus* Jacquelin-Duval, 1858. Gen. Col. Eur., II, p. 112

Type species: *Hister rotundatus* Kugelann, 1792

All the species of *Gnathoncus*, the biology of which is known, are more or less connected with birds' nests or rodents' burrows where they occur sometimes in great number and, probably, play an important role controlling the flies and dipterous larvae or other insects living in the nests. A total of 22 species is known, occurring world widely.

1. *G. rotundatus* (Kugelann, 1792). Neustes Mag. Schneider, I, 3, p. 304  
*nanus* Scriba, 1790. Journ. Liebh. Ent., I, 1, p. 73 nec Piller and Mitterpacher, 1783  
*deletus* J.E. LeConte, 1844. Proc. Boston Soc. Nat. Hist., 1, p. 186  
*punctulatus* Thomson, 1862. Skand. Coleopt., VI, p. 242.  
*ovulatus* Casey, 1916. Mem. Coleopt., VII, p. 256

11. *Eremosaprinus* Ross, 1939. Pan.-Pacific Entomol., 15, p. 39Type species: *Saprinus unguiculatus* Ross, 1939*Erebicus* Reichardt, 1941. Fauna SSSR, V, 3, p. 170

All the species, 5 in number, are nidicol, living in burrows of kangaroo rats (*Dipodomys*) or other rodents (only a Central Asian species).

1. *E. falli* (Ross, 1939). Pan.-Pacific Entomol., 15, p. 41
2. *E. opacus* (Horn, 1873). Proc. Amer. Phil. Soc., 13, p. 322  
*carinifer* Fall, 1917. Cand. Ent., 49, p. 167 nec Desbordes, 1914  
*distinctus* Lundgren, 1991. Pol. Pismo Ent., 61(2), p. 13 (emend.)

12. *Saprinus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 172Type species: *Hister nitidulus* Fabricius, 1801

A large and differentiated group, comprising over 150 species world widely distributed. Majority of the species moderately xerophilous, connected with open land, only few species inhabiting, on one hand, the forested areas, or, on the other, deserts (there are some extremely specialized sabulicolous species). They occur predominantly on carrion and dung, some in rodent burrows. The genus divided into 4 subgenera. All the Mexican species belong to the nominative one.

1. *S. alienus* J.L. LeConte, 1851. Ann. Lyc. Nat. Hist. N.Y., 5, p. 167  
*shantzi* Casey, 1924. Mem. Coleopt., IX, p. 200
2. *S. guyanensis* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 453
3. *S. incusus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 461.
4. *S. lugens* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 181  
*californicus* Mannerheim, 1843. Bull. Soc. Imp. Nat. Moscou, 16, p. 259  
*consimilis* Walker, 1866. Natural. Vancouv., 2, p. 319  
*pseudodetersus* Dahlgren, 1964. Opusc. Ent., 29, p. 157  
ab. *distinguendoides* Hatch, 1929. Can. Ent., 61, p. 78  
ab. *oregonensoides* Hatch, 1929. Can. Ent., 61, p. 78  
ab. *sejunctoides* Hatch, 1929. Can. Ent., 61, p. 78
5. *S. oregonensis* J.E. LeConte, 1844. Proc. Boston Soc. Nat. Hist., 1, p. 187  
*spurcus* J.L. LeConte, 1859. Smithson. Contr. Knowl., 11, p. 7  
*sejunctus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 449  
*prosternalis* Hinton, 1935. Can. Ent., 67, p. 78  
ab. *lecontoides* Hatch, 1929. Can. Ent., 61, p. 79  
ab. *pseudodistinguendus* Hatch, 1929. Can. Ent., 61, p. 79  
ab. *pseudosejunctoides* Hatch, 1929. Can. Ent., 61, p. 79  
ab. *pseudosejunctus* Hatch, 1929. Can. Ent., 61, p. 79
6. *S. subdiptychus* Marseul, 1870. Ann. Soc. Ent. Belge, 13, p. 111

13. *Euspilotus* Lewis, 1907. Ann. Mag. Nat. Hist., (7)19, p. 320Type species: *Euspilotus zonalis* Lewis, 1907

The biology of this genus is poorly known. Some species are strictly connected with rodent burrows or bird nests. About 80 species, distributed predominantly in the New World, only few species are recorded from the Palearctic or the Oriental Region. 4 subgenera, from which two ones are represented in the Mexican fauna.

Subgenus *Hesperosaprinus* Wenzel, 1962. Arnett: Beetl. USA, p. 375Type species: *Hister assimilis* Paykull, 1811

1. *E. arrogans* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 487  
*vescus* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 488  
*tarnieri* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 488  
*liticolus* Fall, 1901. Occ. Pap. Calif. Acad. Sci., 8, p. 236  
*oppiodanus* Casey, 1916. Mem. Coleopt., VII, p. 265
2. *E. auctus* (Schmidt, 1890). Ent. Nachr., 16, p. 45  
*neglectoides* Hinton, 1935. Stylops, 4, p. 57
3. *E. azurescens* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 423  
*nigrita* Blanchard, 1843. Orbigny: Ins. Amer. MÉR., 6, 2, p. 70 (preocc.)  
*aeneicollis* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 424  
*bonariensis* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 429  
*violaceipennis* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 428
4. *E. blandus* (Erichson, 1834). Jahrb. Ins.-kunde, 1, p. 177
5. *E. campechianus* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 474
6. *E. milium* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 476  
*granatensis* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 481
7. *E. placidus* (Erichson, 1834). Jahrb. Ins.-kunde, 1, p. 189  
*discors* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 315  
*latubris* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 315  
*oviformis* Blatchley, 1910. Bull. Ind. Dept. Geol. Nat. Res., 1, p. 622
8. *E. pusio* (Hinton, 1935). Ent. News Philad., 16, p. 50
9. *E. pygidialis* (Lewis, 1903). Ann. Mag. Nat. Hist., (7)12, p. 428

Subgenus *Neosaprinus* Bickhardt, 1909. Ent. Bl., 5, p. 243

Type species: *Saprinus gnathoncooides* Bickhardt, 1909

*Myrmeosaprinus* Mazur, 1974. Beitr. Ent., 24, p. 55

10. *E. scrupularis* (J.E. LeConte, 1860). Proc. Acad. Nat. Sci. Philad., [11], p. 315  
*contractus* Casey, 1893. Ann. N.Y. Acad. Sci., 7, p. 570  
*nanulus* Casey, 1924. Mem. Coleopt., IX, p. 202

14. *Xerosaprinus* Wenzel, 1962. Arnett: Beetl. USA, p. 374

Type species: *Saprinus lubricus* J.L. LeConte, 1851

The members of this genus occur in the sandy areas, in dung and carrion, praying on fly larvae. 26 species distributed exclusively in the New World, divided in four subgenera. In México two of them.

Subgenus *Vastosaprinus* Wenzel, 1962. Arnett: Beetl. USA, p. 375

Type species: *Saprinus ciliatus* J.L. LeConte, 1851

Only two species, both ones in México.

1. *X. ciliatoides* (Fall, 1917). Can. Ent., 49, p. 168
2. *X. ciliatus* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 168

Subgenus *Xerosaprinus* s. str.

3. *X. bispeculatus* (Casey, 1916). Mem. Coleopt., VII, p. 268
4. *X. coeruleascens* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 169
5. *X. diptychus* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 418
6. *X. fimbriatus* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 169  
*desertorum* Marseul, 1857. Ann. Soc. Ent. France, (3)5, p. 442



7. *X. hidalgo* Mazur, 1990. Elytron, 3, p. 34
8. *X. ignotus* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 496
9. *X. lubricus* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 169  
*plenus* J.L. LeConte, 1851. Ann. Lyc. Nat. Hist. N.Y., 5, p. 169  
*pratensis* J.L. LeConte, 1859. Smithson. Contr. Knowl., 11, p. 8  
*olidus* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 316  
*rotundifrons* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 464
10. *X. martini* (Fall, 1917). Can. Ent., 49, p. 169
11. *X. orbiculatus* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 497
12. *X. psyche* (Casey, 1916). Mem. Coleopt., VII, p. 267  
*tardus* Casey, 1916. Mem. Coleopt., VII, p. 268
13. *X. vafer* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 498
14. *X. vitiosus* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 169  
*solitarius* Lewis, 1888. Biol. Centr.-Amer., 2, p. 222

15. *Geomysaprinus* Ross, 1940. Ann. Ent. Soc. Amer., 33, p. 2

Type species: *Geomysaprinus goffi* Ross, 1940

A little is known about the biology of this genus. Some species are associated with burrowing mammals and reptiles while the others are found under moss or stones together with ants. About 30 species distributed exclusively in the North and Central America. Two subgenera, all the Mexican species belong to the subgenus *Priscosaprinus*.

Subgenus *Priscosaprinus* Wenzel, 1962. Arnett: Beetl. USA, p. 375

Type species: *Saprinus posthumus* Marseul, 1855

1. *G. belioculus* (Marseul, 1862). Ann. Soc. Ent. France, (4)2, p. 473
2. *G. formicus* (Hinton, 1935). Ent. News Philad., 16, p. 51
3. *G. oblongus* (Wenzel, 1944). Fieldiana, zool., 28, p. 83
4. *G. pectoralis* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 166  
*behrensii* Horn, 1873. Proc. Amer. Phil. Soc., 13, p. 315
5. *G. posthumus* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 460
6. *G. quaesitus* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 225
7. *G. triangulifer* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 462  
*subaeratus* Casey, 1893. Ann. N.Y. Acad. Sci., 7, p. 564

16. *Hypocaccus* Thomson, 1867. Scand. Coleopt., IX, p. 400

Type species: *Hister quadristriatus* Hoffmann, 1803

*Rhytidoprinus* Houlbert and Monnot, 1923. Bull. Soc. Sci. Med. Ouest., 31-32, p. 46

All the species included here are sabulicolous, living on the dunes, along beaches and shores of lakes, seas and oceans. The larvae of some species live in sand around roots of dune grasses and probably feed on larvae of weevils and flies. About 60 species distributed over all the continents. Two subgenera, both represented in the Mexican fauna.

Subgenus *Hypocaccus* s. str.

1. *H. bigemmeus* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 169  
*parvus* Casey, 1916. Mem. Coleopt., VII, p. 273  
*strigilarius* Casey, 1916. Mem. Coleopt., VII, p. 274
2. *H. brasiliensis* (Paykull, 1811). Monogr. Hister., p. 66  
*apricarius* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 194

- dentipes* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 728  
*bistrigifrons* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 729  
*laxatus* Casey, 1893. Ann. N.Y. Acad. Sci., 7, p. 572  
*permixtus* J.L. LeConte, 1878. Proc. Amer. Phil. Soc., 17(101), p. 401  
*piscarius* Blackburn, 1903. Trans. Proc. R. Soc. S. Austr., 27, p. 108  
 3. *H. gemmeus* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 225  
 4. *H. strigithorax* Hinton, 1935. Can. Ent., 67, p. 79

Subgenus *Baeckmanniolus* Reichardt, 1926. Ent. Bl., 22, p. 14

Type species: *Hister dimidiatus* Illiger, 1807

5. *H. consputus* (Marseul, 1855). Ann. Soc. Ent. France, (3)3, p. 708  
 6. *H. gaudens* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 165  
*balloui* Hinton, 1935. Can. Ent., 67, p. 80  
 7. *H. serrulatus* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, 165

17. *Neopachylopus* Reichardt, 1926. Ent. Bl., 22, p. 13

Type species: *Saprinus sulcifrons* Mannerheim, 1843

Coastal group, the members of which live on shores of the Pacific and Indian Ocean. Four species, occurring on the Pacific coastal shores of North America, in Somali and New Zealand.

1. *N. sulcifrons* (Mannerheim, 1843). Bull. Soc. Imp. Nat. Moscow, 16, p. 259

18. *Pachylopus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 196

Type species: *Pachylopus dispar* Erichson, 1834

A small genus, including only two species. The African *P. dispar* is restricted to marine shorelines while the Central American species was found beneath wrack, probably preying on wrack-associated dipteran larvae.

1. *P. rossi* Kovarik and Verity, 1999. Col. Bull., 53, p. 193

19. *Philoxenus* Mazur, 1991. Ann. Warsaw Agricult. Univ.-SGGW, For. and Wood. Technol., 42, p. 93

Type species: *Philoxenus desertorum* Mazur, 1991

A typical sabulicolous genus of the most specialized shape. Monotypic.

1. *Ph. desertorum* Mazur, 1991. Ann. Warsaw Agricult. Univ.-SGGW, For. and Wood Technol., 42, p. 93

#### DENDROPHILINAE Reitter, 1909

##### Paromalini Reitter, 1909

20. *Xestipyge* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 6

Type species: *Carcinops radula* Marseul, 1862

*Homalister* Reitter in Leder, 1881. Verh. Zool.-Bot. Ver. Wien., 30, p. 512

Almost nothing is known about the biology of this genus. Some species live in rodents and ants nests. 9 species known from the Holarctic, the Neotropical and Ethiopian Region.

1. *X. garbiglietti* (Marseul, 1867). Ann. Soc. Ent. France, (4)7, p. 55  
 2. *X. multistriatum* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 209

21. *Carcinops* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 83

Type species: *Dendrophilus quatuordecimstriatus* Stephens, 1835

*Carcinus* Marseul, 1885, t. 8 nec Latreille, 1796

About 50 species, majority of them known from the New World. Some species occurring in the Oriental, Ethiopian and Australian Region. The beetles are found in decaying rests of animal and plant origin, also in the bird and rodent nests. Two subgenera, in México only the nominative one.

1. *C. bellula* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 16
2. *C. collaris* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 13
3. *C. consors* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 164  
*tenuistriata* Lewis, 1898. Ann. Mag. Nat. Hist., (7)2, p. 172  
*nigra* Casey, 1916. Mem. Coleopt., VII, p. 242
4. *C. gilensis* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 164
5. *C. lanista* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 11
6. *C. merula* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 10
7. *C. prasina* Lewis, 1899. Ann. Mag. Nat. Hist., (7)4, p. 18
8. *C. pumilio* (Erichson, 1834). Jahrb. Ins.-kunde, 1, p. 169  
*quatuordecimstriata* Stephens, 1835. Illustr. Brit. Ent., Synopsis, IV, p. 412  
*nanus* J.E. LeConte, 1845. Boston J. Nat. Hist., 5, p. 61  
*krujanensis* Mader, 1921. Wien. Ent. Ztg., 38, p. 181
9. *C. punctinotum* Lewis, 1888. Biol. Centr.-Amer., 2, p. 209
10. *C. tantilla* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 93
11. *C. tejonica* (Horn, 1873). Trans. Amer. Ent. Soc., 5, p. 309
12. *C. tenella* (Erichson, 1834). Jahrb. Ins.-kunde, 1, p. 170  
*fumata* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 12
13. *C. viridicollis* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 96

22. *Paromalus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 167

Type species: *Hister flavicornis* Herbst, 1792

*Microlomalus* Lewis, 1907. Ann. Mag. Nat. Hist., (7)19, p. 318

A rather homogenous group, having the sexual differences in the pygidium, this, in the females being more distinctly and deeply sculptured. The species are found under the bark of trees; some occur in tree holes. About 60 species, divided into two subgenera.

Subgenus *Paromalus* s. str.

1. *P. bilineatus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 27
2. *P. convexus* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 118
3. *P. sagillatus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 219
4. *P. seminulum* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 171

Subgenus *Isolomalus* Lewis, 1907. Ann. Mag. Nat. Hist., (7)19, p. 316

Type species: *Paromalus verminosus* Lewis, 1888

The species of this subgenus are distributed exclusively in the New World.

5. *P. cordipygus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 19
6. *P. durangoensis* (Casey, 1916). Mem. Coleopt., VII, p. 247.
7. *P. hariolus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 22
8. *P. infimus* Marseul, 1855. Ann. Soc. Ent. France, (3)3, p. 112
9. *P. inunctus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 23
10. *P. luderti* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 25  
*schaufussi* Marseul, 1870. Ann. Soc. Ent. Belge, 13, p. 107  
*punctatus* Lindberg, 1950. Comment. Biol., 10(18), p. 2

11. *P. malus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 24  
*verminosus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 214
12. *P. mysticus* (Casey, 1916). Mem. Coleopt., VII, p. 247
13. *P. pupillus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 215
14. *P. selectus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 215

#### TRYPANAEINAE Marseul, 1857

23. *Xylonaeus* Lewis, 1902. Ann. Mag. Nat. Hist., (7)10, p. 274

Type species: *Trypanaeus bifidus* Lewis, 1888

A highly specialized group for living in the galleries of Platypodidae. 21 species, distributed in the Central and South America.

1. *X. bifidus* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 229
2. *X. pungens* Bickhardt, 1916. Gen. Ins., fasc. 166a, p. 37
3. *X. tuberculifrons* (Marseul, 1860). Ann. Soc. Ent. France, (3)2, p. 126

24. *Trypanaeus* Eschscholtz, 1829. Zoolog. Atlas, I, p. 10

Type species: *Bostrichus thoracicus* Fabricius, 1801

The beetles belonging here feed upon various species of *Platypus* and are often to be found in abundance in the hottest sunshine crawling on the bark of infected trees. As yet 46 species being described, inhabiting exclusively the Neotropical Region.

1. *T. flavipennis* Marseul, 1856. Ann. Soc. Ent. France, (3)4, p. 117  
*pallidipennis* Marseul, 1860. Ann. Soc. Ent. France, (3)8, p. 841
2. *T. hubenthalii* Bickhardt, 1920. Ent. Bl., 16, p. 172
3. *T. luteivestis* Marseul, 1860. Ann. Soc. Ent. France, (3)8, p. 842
4. *T. noxius* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 704
5. *T. punctinotus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 704
6. *T. quadricollis* Marseul, 1856. Ann. Soc. Ent. France, (3)4, p. 114  
*spiniger* Marseul, 1856. Ann. Soc. Ent. France, (3)4, p. 119

25. *Coptotrophis* Lewis, 1902. Ann. Mag. Nat. Hist., (7)10, p. 519

Type species: *Bostrichus proboscideus* Fabricius, 1801

*Coptotesthus* Lewis, 1902. Ann. Mag. Nat. Hist., (7)10, p. 273 nec Wollaston, 1854

A small genus, the biology of which is same as in the previous genera. 8 species, exclusively Neotropical.

1. *C. proboscideus* (Fabricius, 1801). Syst. Eleuth., II, p. 385  
*carthagenus* Marseul, 1857. Ann. Soc. Ent. France, (3)5, p. 402

#### HISTERINAE Gyllenhal, 1808

##### Hololeptini Hope, 1840

26. *Platyeutidium* Dillon, 1935. Ann. Ent. Soc. Amer., 28, p. 463

Type species: *Platyeutidium williamsi* Dillon, 1935

*Phylloma* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 96 nec Billberg, 1820

*Eutidium* Lewis, 1903. Ann. Mag. Nat. Hist., (7)12, p. 419

*Orphinium* Lewis, 1903. Ann. Mag. Nat. Hist., (7)12, p. 419

A little is known on the biology of the species. They are found from under bark. As yet 17 species being described, inhabiting exclusively Central and South America.

1. *P. williamsi* Dillon, 1935. Ann. Ent. Soc. Amer., 28, p. 463  
*corticale*: Fabricius, 1801. Syst. Eleuth., I, p. 91

27. *Hololepta* Paykull, 1811. Monogr. Hister., p. 101

Type species: *Hololepta humilis* Paykull, 1811

The life history and habits of the members of this genus are relatively well known. Some of the species are predators, others feed on the rancid oozing sap of bounded trees. In the New World they frequent the oozing sap of various trees, including that of the coco and other large palms. Divided into two subgenera. The subgenus *Hololepta* s. str. is distributed over the world and well represented in the Neotropical Region, while *Leionota* is found in the Nearctic, Neotropical and Ethiopian Regions.

Subgenus *Hololepta* s. str.

1. *H. aradiformis* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 93
2. *H. guidonis* Marseul, 1860. Ann. Soc. Ent. France, (3)8, p. 595  
*pygolissa* Marseul, 1870. Ann. Soc. Ent. Belg., 13, p. 59  
*enodipyga* Lewis, 1908. Ann. Mag. Nat. Hist., (8)2, p. 139
3. *H. meridiana* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 184
4. *H. obscura* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 150  
*pizarri* Marseul, 1857. Ann. Soc. Ent. France, (3)5, p. 468 (emend.)
5. *H. pontavicei* Marseul, 1860. Ann. Soc. Ent. France, (3)8, p. 594
6. *H. populnea* J.L. LeConte, 1851. Ann. Lyc. Nat. Hist. N.Y., 5, p. 163  
*bractea*: Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 147  
var. *punctata* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 382
7. *H. quadriiformis* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 186
8. *H. subhumilis* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 179
9. *H. vulpes* Marseul, 1870. Ann. Soc. Ent. Belg., 13, p. 58

Subgenus *Leionota* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 196

Type species: *Hister quadridentatus* Olivier, 1789

*Lioderma* Marseul, 1857. Ann. Soc. Ent. France, (3)5, p. 469 (emend.)

*Lionota* (sic!): J.L. LeConte, 1861. Smithsonian Misc. Coll., Part I, p. 75

10. *H. clauda* (Marseul, 1860). Ann. Soc. Ent. France, (3)8, p. 609
11. *H. confusa* (Marseul, 1853). Ann. Soc. Ent. France, (3)1, p. 205
12. *H. pervalida* Blaisdell, 1892. Zoë, 3, p. 337
13. *H. polita* (Marseul, 1853). Ann. Soc. Ent. France, (3)1, p. 208  
*mexicana* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 209  
*pumicata* Marseul, 1857. Ann. Soc. Ent. France, (3)5, p. 469 (emend.)
14. *H. quadridentata* (Olivier, 1789). Entomologia, I, 8, p. 14  
*surinamense* Herbst, 1792. Natursystem. IV, p. 51  
*flagellata* Kirby, 1818. Trans. Linn. Soc. London, 12, p. 395  
*platysma* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 95  
*floridae* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 391  
*minor* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 392  
*bifoveolata* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 393  
*decimstriata* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 393  
*kahli* Dillon, 1935. Ann. Soc. Ent. Amer., 28, p. 465  
var. *striatifera* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 392

15. *H. reichii* (Marseul, 1853). Ann. Soc. Ent. France, (3)1, p. 210
16. *H. subnitida* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 189
17. *H. vernicis* Casey, 1893. Ann. N.Y. Acad. Sci., 7, p. 534  
*sirpus* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 389
18. *H. yucateca* (Marseul, 1853). Ann. Soc. Ent. France, (3)1, p. 203  
*grandis* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 204

28. *Iliotona* Carnochan, 1917. Ann. Ent. Soc. Amer., 10, p. 396

Type species: *Hololepta cacti* J.L. LeConte, 1851

Only two species found in decaying cacti, taken from beneath the bark of decaying and water-soaked wood of the willow.

1. *I. cacti* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 162  
*strigicollis* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 207
2. *I. dorcoides* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 187  
*beyeri* Schaeffer, 1907. Ent. News, 18, p. 302

**Platysomatini Bickhardt, 1914**

29. *Latinolister* Mazur, 1999 Ann. Warsaw Agricult. Univ.-SGGW, For. and Wood Technol., 49, p. 10

Type species: *Platysoma cylindroides* Marseul, 1853

The species belonging here are predators preying on other insect larvae living under bark and decaying vegetable matter. Besides two Central American species listed below, probably the Brazilian *Platysoma directum* Lewis, 1885 should also be classified here.

1. *L. columellaris* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 190
2. *L. cylindroides* (Marseul, 1853). Ann. Soc. Ent. France, (3)1, p. 280

**Omalodini Kryzhanovskij, 1972**

30. *Omalodes* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 114

Type species: *Hister omega* Kirby, 1818

*Homalodes* Agassiz, 1846. Nomen. Zool., p. 184 (emend.)

Almost nothing is known about the biology of this genus. The species might be classified as "saprobionts", living under carcasses, in dung and excrements, in decaying vegetable matter, etc. About 60 species having been described, inhabiting exclusively the New World. The genus divided into 3 subgenera; all the Mexican species representing the nominative one.

1. *O. fassli* Bickhardt, 1911. Ent. Bl., 7, p. 212
2. *O. fortunatus* Lewis, 1898. Ann. Mag. Nat. Hist., (7)2, p. 166
3. *O. grossus* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 522  
*texanus* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 523
4. *O. humerosus* Schmidt, 1889. Ent. Nachr., 15, p. 362
5. *O. monilifer* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 520
6. *O. obliquistrius* Lewis, 1908. Ann. Mag. Nat. Hist., (8)2, p. 142
7. *O. sobrinus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 122  
*rotundatus* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 311  
*rotundiceps* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 707 (emend.)

8. *O. soulouquii* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 184  
*laevigatus*: Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 530
9. *O. vapulo* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 178

#### Exosternini Bickhardt, 1914

31. ***Operclippygus*** Marseul, 1870. Ann. Soc. Ent. Belg., 13, p. 75  
Type species: *Operclippygus sulcistrius* Marseul, 1870  
*Phelisteroides* Wenzel and Dybas, 1941. Fieldiana, zool., 22(7), p. 448  
A heterogeneous group in which the position of several species remains still unclear, also the biology is very poorly known. All the species, 37 in number, distributed exclusively in the Nearctic Region.
  1. *O. dubius* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 208
  2. *O. propygidialis* (Hinton, 1935). Can. Ent., 67, p. 12
32. ***Baconia*** Lewis, 1885. Ann. Mag. Nat. Hist., (5)15, p. 462  
Type species: *Baconia loricata* Lewis, 1885  
Nothing is known about the way of living of the species belonging here, some of them were found from under bark of trees. Described are 27 species, mostly New World in distribution, divided into two subgenera. The subgenus *Binhister* Cooman, 1934 includes 3 species (two from Oriental Region). Only Mexican species belongs to *Baconia* s. str.
  1. *B. dives* (Marseul, 1862). Ann. Soc. Ent. France, (4)2, p. 706
33. ***Phelister*** Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 462  
Type species: *Paromalus rouzeti* Fairmaire, 1849  
The genus as now constituted contains at least several distinct groups, some of which may eventually be separated as distinct genera. The genus is predominantly Neotropical and is rich in number of species, about 100 having been described. The species are found under loose bark, in dung, decaying vegetable matter, in the nests of birds, small mammals and ants, in debris pile of *Atta* sp., etc.
  1. *Ph. aduncus* Schmidt, 1893. Ent. Nachr., 19, p. 89
  2. *Ph. affinis* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 311  
*solator* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 164  
*distractus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 707 (emend.)  
*contractus* Casey, 1916. Mem. Coleopt., VII, p. 230  
*simplex* Casey, 1916. Mem. Coleopt., VII, p. 229
  3. *Ph. brevis* Bickhardt, 1917. Gen. Ins., fasc. 166b, p. 215  
*parvulus*: Marseul, 1853, Ann. Soc. Ent. France, (3)1, p. 486
  4. *Ph. brevistriatus* Casey, 1916. Mem. Coleopt., VII, p. 233
  5. *Ph. completus* Schmidt, 1893. Ent. Nachr., 19, p. 81
  6. *Ph. gracilis* Schmidt, 1889. Ent. Nachr., 15, p. 340
  7. *Ph. haemorrhous* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 476  
*egenus* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 480
  8. *Ph. hamistrius* Schmidt, 1893. Ent. Nachr., 19, p. 13
  9. *Ph. impunctipennis* Hinton, 1935. Stylops, 4, p. 58
  10. *Ph. insolitus* Schmidt, 1893. Ent. Nachr., 19, p. 12
  11. *Ph. luculentus* Bickhardt, Gen. Ins., fasc. 166b, p. 216
  12. *Ph. miramon* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 163

13. *Ph. panamensis* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 311  
*panamae* Marseul, 1860. Ann. Soc. Ent. France, (4)2, p. 707 (emend.)  
*omissus* Schmidt, 1893. Ent. Nachr., 19, p. 85  
*atrolucens* Casey, 1916. Mem. Coleopt., VII, p. 231  
*assimilis* Wenzel and Dybas, 1941. Fieldiana, zool., 22(7), p. 467
14. *Ph. parallelisternus* Schmidt, 1893. Ent. Nachr., 19, p. 86
15. *Ph. plicicollis* Schmidt, 1893. Ent. Nachr., 19, p. 87
16. *Ph. pulvis* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 173
17. *Ph. pusillus* Hinton, 1935. Stylops, 4, p. 59
18. *Ph. pusio* (Erichson, 1847). Arch. Naturges., 13(1), p. 155  
*confusaneus* Marseul, 1870. Ann. Soc. Ent. Belg., 13, p. 78
19. *Ph. rouzeti* (Fairmaire, 1849). Ann. Soc. Ent. France, (2)7, p. 421  
*aztecanus* Casey, 1916. Mem. Coleopt., VII, p. 233  
*pimalis* Casey, 1916. Mem. Coleopt., VII, p. 232
20. *Ph. rubidus* Hinton, 1935. Stylops, 4, p. 59
21. *Ph. rufinotus* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 170  
*fairmairei* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 172
22. *Ph. sculpturatus* Schmidt, 1893. Ent. Nachr., 19, p. 12
23. *Ph. subgibbosus* Hinton, 1935. Stylops, 4, p. 60
24. *Ph. teapensis* Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 482
25. *Ph. tristriatus* Hinton, 1935. Stylops, 4, p. 64
26. *Ph. unciarius* Lewis, 1888. Biol. Centr.-Amer., 2, p. 192
27. *Ph. wickhami* Casey, 1916. Mem. Coleopt., VII, p. 231
34. ***Pseudister*** Bickhardt, 1917. Gen. Ins., fasc. 166b, p. 164  
Type species: *Epiurus rufulus* Lewis, 1888  
This genus seems to be an artificial combination of different taxa, especially the extra-South American species. Very few is known on the biology of the species. Both the Mexican species were taken in the deposits of waste material near the nests of various species of leaf cutting ants of the genus *Atta*. 12 species, distributed in the Neotropics, Oriental and Ethiopian Region and Australia.  
1. *P. rufulus* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 208  
2. *P. striatifrons* Hinton, 1935. Can. Ent., 67, p. 14
35. ***Kaszabister*** Mazur, 1972. Ann. Hist.-Nat. Mus. Hung., 64, p. 198  
Type species: *Epiurus rubellus* Erichson, 1834  
A small genus including only three Central and South American species. All the species were collected in the nests of *Solenopsis* sp.  
1. *K. carinatus* (Lewis, 1888). Biol. Centr.-Amer., 2, p. 194

#### Histerini Gyllenhal, 1808

36. ***Margarinotus*** Marseul, 1853. Ann. Soc. Ent. France, (3)1, p. 549  
Type species: *Hister scaber* Fabricius, 1787  
A heterogenous genus, including 9 subgenera and over 95 species distributed in the Holarctics and Oriental Region. The species live chiefly in deciduous forests containing oaks; primarily in mammal burrows and in fungi, a few species in decayed detritus and carrion, on carcasses, sometimes on sap. Adults of some species are



predators on larvae of Noctuidae. The only Mexican species belongs to the subgenus *Ptomister* Houlbert and Monnot, 1923. Bull. Soc. Sci. Med. Ouest., 31-32, p. 23

1. *M. sexstriatus* (J.L. LeConte, 1851). Ann. Lyc. Nat. Hist. N.Y., 5, p. 163
- maritimus* Casey, 1916. Mem. Coleopt., VII, p. 214

37. *Hister* Linnaeus, 1758. Syst. Nat., [10], I, p. 358

Type species: *Hister unicolor* Linnaeus, 1758

*Histerna* Rafinesque, 1815. Analyse nat., p.112

*Humister* Houlbert and Monnot, 1923. Bull. Soc. Sci. Med. Ouest, 31-32, p. 23

*Rhabdister* Houlbert and Monnot, 1923. Bull. Soc. Sci. Med. Ouest, 31-32, p. 35

*Campylister* Houlbert and Monnot, 1923. Bull. Soc. Sci. Med. Ouest, 31-32, p. 34

*Spilister* Houlbert and Monnot, 1923. Bull. Soc. Sci. Med. Ouest, 31-32, p. 26

The genus still contains a number of species, having no unique and clearly discriminating character states, that is, it is a large complex genus. But phylogenetic survey of the genus, as regards the world species, is not satisfactory and needs detailed reexaminations. Little has been published on the biology of members of this genus. As with most histerids, the species are probably all predaceous, although feeding has actually been observed in only few instances. Several species are found primarily in the dung of large mammals. Several dung-inhabiting species have been investigated as potential biological control agents of horn fly (*Haematobia irritans*). In addition to dung, there are numerous records of specimens of these and other species associated with various types of vertebrate carrion. Several species have been found in association with rotting fruit and various type of fungi as well. In all the above habitats, the beetles are presumed to be consuming immature *Diptera* of some sort. *Hister malkini* is unusual in having only been collected in beach habitats in association with rotting vegetation. A few species seem to have only facultative associations with attine ants, having been collected more often in free-living situations. However, for some species, the association may be obligate: *H. ciliatus*, *H. latistrius*, *H. kovariki* and *H. subquadratus* have been found almost exclusively in the detritus pile of *Atta* nests. At present nothing is known of the nature of the relationship of any of these ant-associates with their hosts. About 220 species, world widely distributed.

1. *H. bullatus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 203
2. *H. californicus* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 544
- areolifer* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 526
- mexicanus* Reichardt, 1933. Acta Ent. Mus. Nat. Prag., 11, p. 85
3. *H. cavifrons* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 267
- punctifer*: Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 265
- opacicauda* Casey, 1916. Mem. Coleopt., VII, p. 218
4. *H. ciliatus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 199
5. *H. coenosus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 140
- brunnipes* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 141
- decisus* J.E. LeConte, 1844. Ann. Lyc. Nat. Hist., N.Y., 1(1), p. 185
- panamensis* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 234
- granadensis* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 312
- granadius* Marseul, 1860. Ann. Soc. Ent. France, (4)2, p. 711 (emend.)
- confector* Lewis, 1903. Ann. Mag. Nat. Hist., (7)12, p. 423
6. *H. comes* Lewis, 1888. Biol. Centr.-Amer., 2, p. 204
- temporalis* Fall, 1910. Trans. Amer. Ent. Soc., 36, p. 120
- sternalis* Casey, 1916. Mem. Coleopt., VII, p. 223
7. *H. coronatus* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 545

8. *H. criticus* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 551
9. *H. doyeri* Caterino, 1999. Syst. Ent., 24, p. 363
10. *H. guatemalica* Caterino, 1999. Univ. Calif. Publ. Ent., 119, p. 55
11. *H. gringo* Caterino, 1999. Univ. Calif. Publ. Ent., 119, p. 17
12. *H. hormiguera* Caterino, 1999. Univ. Calif. Publ. Ent., 119, p. 27
13. *H. humilis* Fall, 1910. Trans. Amer. Ent. Soc., 36, p. 120
14. *H. kovariki* Caterino, 1999. Univ. Calif. Publ. Ent., 119, p. 25
15. *H. laevipes* Germar, 1824. Ins. Spec. I - Coleopt., p. 87
16. *H. latimargo* Schmidt, 1893. Ent. Nachr., 19, p. 14
17. *H. latistrius* Lewis, 1891. Ent. Monthly Mag., (2)2, p. 106
18. *H. litus* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 541  
*lateralis* Casey, 1916. Mem. Coleopt., VII, p. 219
19. *H. lucanus* Horn, 1873. Proc. Amer. Phil. Soc., 13, p. 283  
*patagiatus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 202  
*pennulatus* Lewis, 1911. Ann. Mag. Nat. Hist., (8)8, p. 84
20. *H. malkini* Caterino, 1999. Univ. Calif. Publ. Ent., 119, p. 29
21. *H. matador* Caterino, 1999. Syst. Ent., 24, p. 359
22. *H. montivagus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 203
23. *H. newtoni* Caterino, 1999. Univ. Calif. Publ. Ent., 119, p. 27
24. *H. politus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 202
25. *H. sallei* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 584
26. *H. sarcinatus* Lewis, 1898. Ann. Mag. Nat. Hist., (7)2, p. 169  
*tunicatus* Lewis, 1898. Ann. Mag. Nat. Hist., (7)2, p. 170  
*quadratus* Casey, 1916. Mem. Coleopt., VII, p. 212  
*bilobatus* Casey, 1916. Mem. Coleopt., VII, p. 209
27. *H. servus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 147  
*obliteratus* Lewis, 1888. Biol. Centr.-Amer., 2, p. 203  
*gibberosus* Lewis, 1900. Ann. Mag. Nat. Hist., (7)5, p. 232  
*meridanus* Lewis, 1900. Ann. Mag. Nat. Hist., (7)5, p. 233  
*densicauda* Casey, 1916. Mem. Coleopt., VII, p. 222  
*cribricauda* Casey, 1916. Mem. Coleopt., VII, p. 222
28. *H. subquadratus* (Marseul, 1853). Ann. Soc. Ent. France, (3)1, p. 548
29. *H. tricuspis* Lewis, 1903. Ann. Mag. Nat. Hist., (7)12, p. 424

38. *Spilodiscus* Lewis, 1906. Ann. Mag. Nat. Hist., (7)17, p. 343

Type species: *Hister arcuatus* Say, 1825

Biological generalizations for the genus are difficult to make because little is presently known about the individual species. The species are primarily subterranean, which have further specialized to a life of inquilinism. Members of *Spilodiscus* show associations with a variety of burrowing rodents and some birds as well. The strength of this association varies, from apparently facultative and rare, to entirely obligate. The genus is a monophyletic group of Nearctic histerids, including 9 species. The known range of *Spilodiscus* extends as far south as approximately México City.

1. *S. biplagiatus* (J.E. LeConte, 1845). Boston J. Nat. Hist., 5, p. 55
2. *S. flohri* (Lewis, 1898). Ann. Mag. Nat. Hist., (7)2, p. 168
3. *S. ulkei* (Horn, 1870). Trans. Amer. Ent. Soc., 3, p. 134  
*arizonae* Horn, 1870. Trans. Amer. Ent. Soc., p. 134

*sculpticauda* Casey, 1893. Ann. N.Y. Acad. Sci., 7, p. 540  
*subcruentus* Casey, 1916. Mem. Coleopt., VII, p. 208  
*coruscans* Casey, 1916. Mem. Coleopt., VII, p. 209  
*iowensis* Casey, 1916. Mem. Coleopt., VII, p. 211

39. *Epiglyptus* Lewis, 1906. Ann. Mag. Nat. Hist., (7)17, p. 342

Type species: *Hister costatus* J.L. LeConte, 1852

Only one myrmecophilous species being classified here.

1. *E. costatus* (J.L. LeConte, 1852). Proc. Acad. Nat. Sci. Philad., 6, p. 38

40. *Atholus* Thomson, Skand. Coleopt., I, p. 76

Type species: *Hister bimaculatus* Linnaeus, 1758

*Peranus* Lewis, 1906. Ann. Mag. Nat. Hist., (7)18, p. 401

*Atholister* Reitter, 1909. Fauna Germ., II, p. 286

*Euatholus* Kryzhanovskij and Reichardt, 1976. Fauna SSSR, V, 4, p. 387

A differentiated group in both, morphology and biology. The species having been found in excrements, decaying vegetable matter and under carcasses. Some of them live in rodent burrows. About 70 species, known from the Holarctics, the Ethiopian and Oriental Region as well as from the Mexican Subregion.

1. *A. bimaculatus* (Linnaeus, 1758). Syst. Nat., [10], I, p. 358  
*erythropterus* Fabricius, 1798. Suppl. Ent. Syst., p. 38  
*obliquus* Say, 1825. J. Acad. Nat. Sci. Philad., 5, p. 37  
*ab. morio* Schmidt, 1885. Berlin Ent. Z., 29, p. 296  
*var. spissatus* Rey, 1888. Echange, 4(47), p. 4
2. *A. nubilus* (J.L. LeConte, 1859). Smithsonian. Contr. Knowl., 11, p. 7  
*pollutus* J.L. LeConte, 1859. Smithsonian. Contr. Knowl., 11, p. 7  
*truncatisternum* Lewis, 1888. Biol. Centr.-Amer., 2, p. 201  
*diffRACTUS* Casey, 1916. Mem. Coleopt., VII, p. 225  
*abducens* Casey, 1916. Mem. Coleopt., VII, p. 226  
*laevicauda* Casey, 1916. Mem. Coleopt., VII, p. 227  
*vestigialis* Casey, 1916. Mem. Coleopt., VII, p. 228  
*fluviatilis* Casey, 1916. Mem. Coleopt., VII, p. 228  
*laevicaudoides* Hatch, 1929. Can. Ent., 61, p. 77

**ONTHOPHILINAE MacLeay, 1819**

41. *Onthophilus* Leach, 1817. Zool. Misc., 3, p. 76

Type species: *Scolytus punctatus* Müller, 1776

*Scolytus* Müller, 1776. Zool. Dan. Prodrum., p. xxii nec Geoffroy, 1762

*Hypsenor* A. and G. Villa, 1833. Coleopt. Eur., p. 14

Vey few is known about the biology of *Onthophilus*. The species have been taken in deer droppings, under bark and in fungi including the stinkhorn fungus, some are inhabitants of pocket gopher and prairie dog burrows. They are general predators of fly larvae or of other small arthropods in leaf litter, in dung, in carrion and in the nest and fecal chamber of some rodents and other small mammals. A total of 37 species are known, distributed in the Holarctics.

1. *O. deflectus* Helava, 1978. Contr. Amer. Ent. Inst., 15(5), p. 12
2. *O. flohri* Lewis, 1888. Biol. Centr.-Amer., 2, p. 235
3. *O. julii* Lewis, 1892. Ent. Monthly Mag., (2)3, p. 124

4. *O. reyesi* Kryzhanovskij, 1992. Fol. Ent. Mex., 85, p. 22
5. *O. thomomysi* Helava, 1978. Contr. Amer. Ent. Inst., 15(5), p. 27

42. *Epierus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 158

Type species: *Hister fulvicornis* Fabricius, 1801

The species are found under bark, in rotten wood and plant debris. They are thought to be fungivorous. About 50 species distributed over the world, excluding Africa and Australia, but most commonly in tropical regions.

1. *E. alutaceus* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 694  
*divisus* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 562  
*axillaris* Marseul, 1870. Ann. Soc. Ent. Belg., 13, p. 91
2. *E. antillarum* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 700  
*ellipticus* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 313  
*ellipsodes* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 712 (emend.)  
*cutbensis* Casey, 1916. Mem. Coleopt., VII, p. 238
3. *E. brunnipennis* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 697  
*rufipennis* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 711 (emend.)
4. *E. cornutus* Casey, 1893. Ann. N.Y. Acad. Sci., 7, p. 552
5. *E. decipiens* J.L. LeConte, 1851. Ann. Lyc. Nat. Hist. N.Y., 5, p. 164  
*nasutus* Horn, 1873. Proc. Amer. Phil. Soc., 5, p. 301
6. *E. foveolatus* Hinton, 1935. Stylops, 4, p. 57
7. *E. incultus* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 703
8. *E. longulus* Marseul, 1854. Ann. Soc. Ent. France, (3)2, p. 704
9. *E. lucidulus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 161  
*vagans* Marseul, 1861. Ann. Soc. Ent. France, (4)1, p. 563
10. *E. mehicanus* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 313  
*devius* J.E. LeConte, 1860. Proc. Acad. Nat. Sci. Philad., [11], p. 314  
*devians* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 712 (emend.)  
*obsolescens* Casey, 1916. Mem. Coleopt., VII, p. 240
11. *E. mundus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 160
12. *E. planulus* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 162

43. *Plagiogramma* Tarsia in Curia, 1935. Annu. Mus. Zool. Napoli, 6(n.s.), no. 15, p. 1

Type species: *Plagiogramma brasiliense* Tarsia in Curia, 1935

Same way of living as in the previous genus. 31 species distributed exclusively in Central and South America.

1. *P. caviscuta* (Marseul, 1861). Ann. Soc. Ent. France, (4)1, p. 158
2. *P. frater* (Marseul, 1854). Ann. Soc. Ent. France, (3)2, p. 690
3. *P. intermedia* (Marseul, 1854). Ann. Soc. Ent. France, (3)2, p. 691
4. *P. lucens* (Marseul, 1854). Ann. Soc. Ent. France, (3)2, p. 689
5. *P. pubifrons* (Hinton, 1935). Ent. News Philad., 16, p. 52
6. *P. schmidtii* (Wenzel and Dybas, 1941). Fieldiana, zool., 22(7), p. 446
7. *P. singulistria* (Hinton, 1935). Ent. News Philad., 16, p. 53
8. *P. trux* (Marseul, 1861). Ann. Soc. Ent. France, (4)1, p. 555

44. *Idolia* Lewis, 1885. Ann. Mag. Nat. Hist., (5)16, p. 214Type species: *Idolia gibba* Lewis, 1886

The biology of the species belonging here remains virtually unknown. Some species being found under the bark of trees. Only 5 species, Neotropical in distribution.

1. *I. gibba* Lewis, 1886. Ent. Monthly Mag., 23, p. 64
- laevigata*: Lewis, 1885. Ann. Mag. Nat. Hist., (5)16, p. 214
- integra* Lewis, 1889. Ann. Mag. Nat. Hist., (6)4, p. 46
2. *I. laevis* (J.L. LeConte, 1852). Proc. Acad. Nat. Sci. Philad., 6, p. 40
- laevigata*: Paykull, 1811. Monogr. Hister., p. 85
- nucleola* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 713

**HETAERIINAE Marseul, 1857**45. *Trichorenius* Lewis, 1891. Ent. Monthly Mag., (2)2, p. 106Type species: *Trichorenius flohri* Lewis, 1891

A myrmecophilous genus, but the relations with ants, ant hosts and the type of myrmecophily remains still unknown. 3 species, distributed through Central and South America.

1. *T. flohri* Lewis, 1891. Ent. Monthly Mag., (2)2, p. 107

46. *Terapus* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 680Type species: *Terapus mnizechi* Marseul, 1862*Melanetaerius* Fall, 1907. Psyche, 14, p. 69

The species of *Terapus* are true and guests (symphiles) which have on various parts of their bodies clusters of golden-yellow hairs or trichomes associated with the openings of exudate glands. They occur, as far as is known, only in the nests of ants of the genus *Pheidole*. 14 species, distributed from the southern USA to Brazil and Argentina.

1. *T. balloui* Hinton, 1934. Ent. News Philad., 14, p. 270
2. *T. manni* Hinton, 1945. Proc. Roy. Ent. Soc. London, 14(B), p. 42
3. *T. mexicanus* Mann, 1926. J. Wash. Acad. Sci., 16, p. 448
4. *T. mnizechi* Marseul, 1862. Ann. Soc. Ent. France, (4)2, p. 682
5. *T. nigritus* Hinton, 1934. Ent. News Philad., 14, p. 271

47. *Hemicolonides* Reichensperger, 1939. Zool. Jb. Syst., 73, p. 278Type species: *Hemicolonides plaumanni* Reichensperger, 1939

Very few is known about the biology of this genus which is believed to be of some kind of myrmecophily, as in *H. plaumanni*, associated with *Labidus praedator*. Only two New World species.

1. *H. parvulus* (Lewis, 1891). Ann. Mag. Nat. Hist., (6)8, p. 404

48. *Opadosister* Helava, 1985. Sociobiology, 10, p. 221Type species: *Opadosister longipes* Helava, 1985

Poorly known genus, associated with ants or termites. Only one species.

1. *O. longipes* Helava, 1985. Sociobiology, 10, p. 223

49. *Hetaeriomorphus* Schmidt, 1893. Dtsch. Ent. Z., p. 186Type species: *Hetaeriomorphus perplexus* Schmidt, 1893

A single species belonging here is predominantly associated with ecitonine ants, *Neivamyrmex*.

1. *H. perplexus* Schmidt, 1893. Dtsch. Ent. Z., p. 186

50. *Haeterius* Dejean, 1833. Cat. Col., 2, p. 128

Type species: *Hister ferrugineus* Olivier, 1789

*Eupelogonus* Gistel, 1856. Myst. Eur. Insectenwelt, p. 363

*Hetaerius* Erichson, 1834. Jahrb. Ins.-kunde, 1, p. 156

*Haeterius* is a large and rather variable genus. The species (predominantly very hairy ones) have reached the state of symphiles (true ant-guests, amicably treated by ants). They live in the nests of *Formica* sp. A Holarctic genus with about 30 species, penetrating also the Mexican Subregion.

1. *H. helenae* Mann, 1914. Psyche, 21, p. 178

2. *H. morsus* J.L. LeConte, 1859. Proc. Acad. Nat. Sci. Philad., 1859, p. 70

51. *Pinaxister* Reichensperger, 1939. Rev. Ent., 10, p. 129

Type species: *Pinaxister henricischmidti* Reichensperger, 1939

*Echinodes* Zimmermann in J.L. LeConte, 1869. Trans. Amer. Ent. Soc. 2, p. 253 nec Meigen, 1800

*Mroczkowskiella* Mazur, 1984. Pol. Pismo Ent., 54(3-4), p. 324

A myrmecophilous genus associated with myrmecine ants, *Pheidole* sp. Four species, from the USA to Costa Rica.

1. *P. peninsularis* (Mann, 1924). Ann. Ent. Soc. Amer., 17, p. 92

52. *Euclasea* Lewis, 1888. Biol. Centr.-Amer., 2, p. 220

Type species: *Euclasea godmani* Lewis, 1888

This genus belongs also to myrmecophilous histerids, but its kind of myrmecophily and hosts remains still unknown. Distributed exclusively in the Neotropical Region. Five species.

1. *E. obliqua* Lewis, 1893. Ann. Mag. Nat. Hist., (6)11, p. 425

53. *Mesynodites* Reichardt, 1924. Ent. Bl., 20, p. 166

Type species: *Synodites schuppii* Schmidt, 1893

*Synodites* Schmidt, 1893. Dtsch. Ent. Z., 1893, p. 175 nec Foerster, 1868

A large and heterogenous genus, but not precisely defined as yet, composed in fact of a number of genera. Distributed exclusively in the Neotropical Region. All the species, about 45 in number, seem to be probably myrmecophilous, associated with both, army ants, *Eciton* sp., and leaf-cutter ants, *Atta* sp.

1. *M. detritus* (Schmidt, 1893). Dtsch. Ent. Z., 1893, p. 180

2. *M. gibbidorsum* (Schmidt, 1893). Dtsch. Ent. Z., 1893, p. 180

3. *M. graniformis* (Schmidt, 1893). Dtsch. Ent. Z., 1893, p. 181

54. *Hippeutister* Reichensperger, 1935. Arb. Morphol. Taxon. Ent., 2, p. 207

Type species: *Hippeutister solenopsidis* Reichensperger, 1935

Syn.: *Solenopsister* Wenzel, 1938. Rev. Ent., 9, p. 318

A small genus, members of which are associated with fire ants, *Solenopsis*. Central and South America, 5 species.

1. *H. amabilis* (Wenzel, 1938). Rev. Ent., 9, p. 318

2. *H. castaneus* (Lewis, 1891). Ann. Mag. Nat. Hist., (6)8, p. 391

3. *H. manicatus* (Lewis, 1891). Ann. Mag. Nat. Hist., (6)8, p. 390

55. *Aphanister* Reichensperger, 1933. Rev. Ent., 3, p. 302

Type species: *Aphanister fungifer* Reichensperger, 1933

Monotypic genus, occurring in Central America. The species is myrmecophilous, living among army ant, *Eciton hamatum*.

1. *A. fungifer* Reichensperger, 1933. Rev. Ent., 3, p. 303

56. *Hetaeriodes* Schmidt, 1893. Dtsch. Ent. Z., 1893, p. 188

Type species: *Hetaeriodes fraudulentus* Schmidt, 1893

Little known monotypic genus. The relations with ants unknown.

1. *H. fraudulentus* Schmidt, 1893. Dtsch. Ent. Z., 1893, p. 188

#### ACKNOWLEDGMENTS

Thanks are due to Y. Bousquets and The Association des Entomologistes Amateurs du Quebec for the use of the drawings included in *Les Coleopteres Histerides du Quebec* book; to Biol. Leonardo Delgado (Instituto de Ecología, México) for translation of the key to Spanish. Finally to the anonymous reviewers for their comments. Figures used here are just for scientific use, without any economical damage to the printers or scientific societies.

#### LITERATURE CITED

- Blackwelder, R. E. 1944. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Part I. *Bulletin of the United States National Museum*. No. 185, xii+188 pp.
- Caterino, M. S. 1999a. The taxonomy and phylogenetics of the coenosus group of Hister Linnaeus. *University of California Publications in Entomology*, 119: 1-75.
- Caterino, M.S. 1999b. Taxonomy and phylogeny of the *Hister servus* group: a Neotropical Radiation. *Systematic Entomology*, 24: 351-376.
- Kovarik, P.W., D.S. Verity and J. C. Mitchell. 1999. Two new Saprinine histerids from south west North America. *The Coleopterists Bulletin*. 53(2): 187-198.
- Mazur, S. 1997. A world catalogue of the Histeridae (Coleoptera: Histeroidea). *Genus, International Journal of Invertebrate Taxonomy (Supplement)*. 373 pp.
- Ślipiński, A. S and S. Mazur. 1999. *Epuraiosoma*, a new genus of Histerinae and phylogeny of the family Histeridae (Coleoptera, Histeroidea). *Annales Zoologici (Warszawa)*, 49(3): 209-230.
- Yélamos, T. 1995. Descripción de una nueva especie de *Bacanius* (Coleoptera: Histeridae) endógeno de México. *Nouvelle Revue d'Entomologie (Nouvelle Série)*, 12(4): 255-258.

#### FIGURE'S SOURCES

- Bickhardt, H. 1916-1917. Histeridae. In: Wytzman, P. *Genera Insectorum. Coleoptera. Fasc. 166a, 166b*. M. Nijhoff, La Haye. (Figs. 42, 44, 46, 48, 49).
- Bousquet, Y. and S. Laplante. 1999. *Les Coleopteres Histerides du Quebec. Fabriques, Supplément 8*: 1-190. (Figs. 1 -4, 20, 22, 23, 25, 28, 30, 31, 38 - 40, 55, 69, 75, 82, 83).
- Bruch, C. 1922. Dos nuevos coleópteros mirmecófilos. *Physis: Revista de la Sociedad Argentina de Ciencias Naturales*, 5: 296-300. (Figs. 96 - 98).
- Bruch, C. 1939. Un nuevo histerido mirmecófilo (Coleopt.). *Notas del Museo de la Plata, Zoología*, 4: 259-262. (Fig. 94).
- Caterino, M.S. 1999. The taxonomy and phylogenetics of the coenosus group of Hister Linnaeus (Coleoptera: Histeridae). *University of California Publications. Entomology*, 119: 1-175. (Fig. 76).
- Carnochan, F.G. 1917. Hololeptinae of the United States. *Annals of the Entomological Society of America*, 10: 367-398. (Figs. 52 - 54).
- Degallier, N. 1998. Notes taxonomiques sure les Coleoptera Histeridae Hetaeriinae du Museum d'Histoire

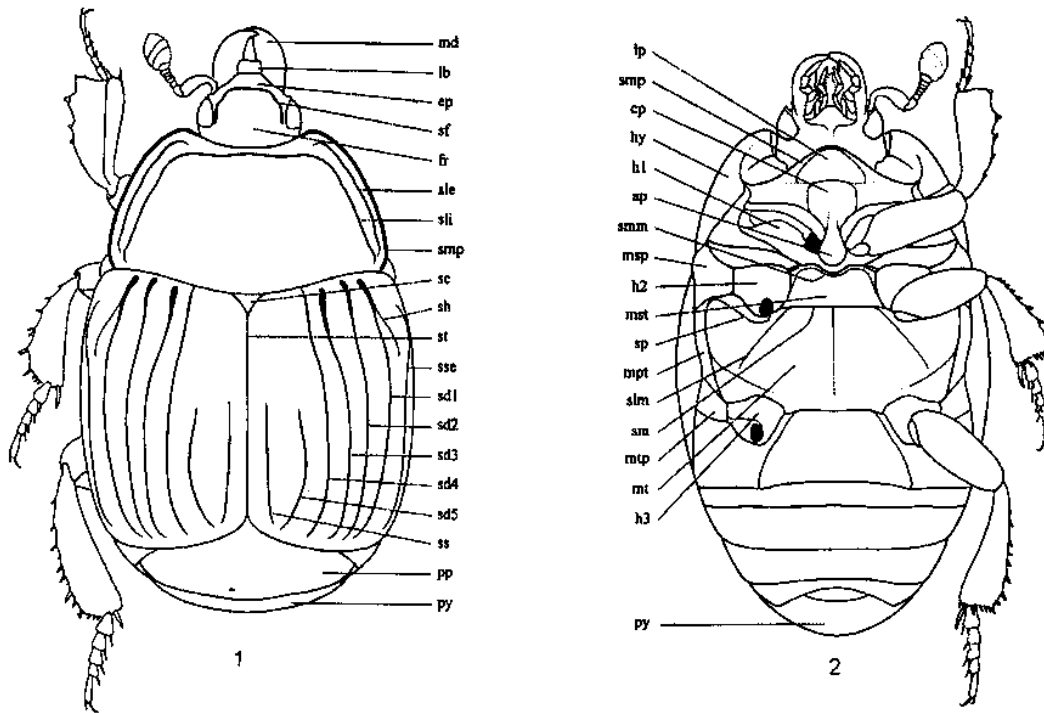
- naturelle de Berlin (MNHUB). *Mitteilungen des Museums für Naturkunde zu Berlin. Zoologische Reihe*, 74: 129-143. (Fig. 102).
- Gomy, Y. 1989. Contribution a la connaissance du genre *Halacritus* Schmidt (Coleoptera, Histeridae). *Nouvelle Revue d'Entomologie. Nouvelle Série*, 6, fasc. 4: 413-431. (Figs. 12, 13).
- Hatch, M.H. 1962 (1961). The beetles of the Pacific Northwest. Part III: Pselaphidae and Diversicornia I. *University of Washington Publications in Biology*, 16: 1-503. (Figs. 32 - 34, 77).
- Hinton, H.E. 1935. A short review of the North American species of *Pseudister* (Coleoptera, Histeridae). *The Canadian Entomologist*, 67: 11-15. (Fig. 71).
- Kannar, P. 1981. Two new Neotropical Histeridae (Coleoptera), with a redescription of *Peploglyptus belfragei* Le Conte. *Acta Zoologica Lilloana*, 36: 45-51. (Figs. 14, 15).
- Kryzhanovskij O.L. and A.N. Reichardt. 1976. Zhuki nadsemeystva Histeroidea (semeystva Sphaeritida, Histeridae, Synteliidae). *Fauna SSSR. Zhestkokrylye*, V, vyp. 4: 1-434. (Figs. 50, 51).
- Lewis, G.: 1888. Histeridae. [pp. 182-244]. In: *Biologia Centrali-Americana. Insecta. Coleoptera. Vol. II. Part 1*. Taylor & Francis, London. (Fig. 37).
- Lewis, G. 1914. On new species of Histeridae and notices of others. *The Annals and Magazine of Natural History, Series 8*, 13: 235-242. (Figs. 95, 99).
- Marseul, S.S. 1856. Essai monographique sur la famille des Histerides (Suite). *Annales de la Société Entomologique de France, Sér. 3*, 4: 97-144, 259-283, 549-628. (Figs. 43, 45, 47).
- Marseul, S.A. 1857. Essai monographique sur la famille des Histerides (Suite). *Annales de la Société Entomologique de France, Sér. 3*, 5: 109-167, 397-516. (Fig. 78).
- Mazur, S. 1977. Further new histerid-beetles (Histeridae, Coleoptera) from the tropics. *Bulletin de l'Académie polonaise des sciences. Série des sciences biologiques. Cl. II*, 25(10): 671-678. (Figs. 5, 6).
- Mazur, S. 1988. New Neotropical histerid beetles with additional notes on the genus *Plagiogramma* Tarsia in Curia (Coleoptera, Histeridae). *Polskie Pismo Entomologiczne*, 58: 287-299. (Figs. 91 -93).
- Mazur, S. 1991. New North American histerids (Col., Histeridae). *Annals of Warsaw Agricultural University - SGGW. Forestry and Wood Technology*, (42): 89-96. (Figs. 35, 36).
- Mazur, S. and Z. Kaszab. 1980. *Sutabogarak - Histeridae. Magyarország Állatvilága. VII. Kötet. Coleoptera II. 14. Füzet. Akadémiai Kiadó, Budapest*. (Fig. 86).
- Ôhara, M., Nakane, T. 1986. On the genus *Onthophilus* from Japan (Coleoptera, Histeridae). *Insecta Matsumarana, New series*, 35: 1-15. (Fig. 85).
- Ôhara M. 1989. Notes on six histerid beetles from Southern Asia (Coleoptera: Histeridae). *Insecta Matsumarana, New series*, 42: 31-42. (Figs. 65 - 68).
- Ôhara, M. 1992. A revision of the Japanese species of the genus *Atholus* (Coleoptera, Histeridae). Part 1. *Elytra, Tokyo*, 20 (2): 167-182. (Figs. 79 - 81).
- Ôhara, M. 1996. Taxonomic note on the Histeroidea of Japan. II. *Coleopterists' News*, (114): 1-5. (Figs. 84, 87-89).
- Reichardt, A.N. 1941. Sem. Sphaeritidae i Histeridae (Chast' 1). Fauna de l'URSS. Insectes Coléoptères. Vol. 5, no. 3, Izdatel'stvo Adamii Nauk, SSSR, Moscou - Leningrad. (Figs. 10, 11).
- Scott, H. Histeridae. [p. 367-579]. In: Sharp D. 1908. *Fauna Hawaiiensis or the zoology of the Sandwich (Hawaiian) Isles: Being results of the explorations instituted by the joint Committee appointed by the Royal Society of London for promoting natural knowledge and the British Association for the Advancement of Science and carried on with the assistance of those Bodies and of the Bernice Pauahi Bishop Museum at Honolulu. Vol. III, part V*. Cambridge, USA (Figs. 7, 8).
- Vomero, V. 1974 (1973). *Troglobacanius* n. gen. with four new species, a line of cave-adapted Mexican Histeridae (Coleoptera). *Sezione: Missioni ed esplorazioni - I. Quaderno n. 171*, 370: 325-361. (Figs. 17-18).



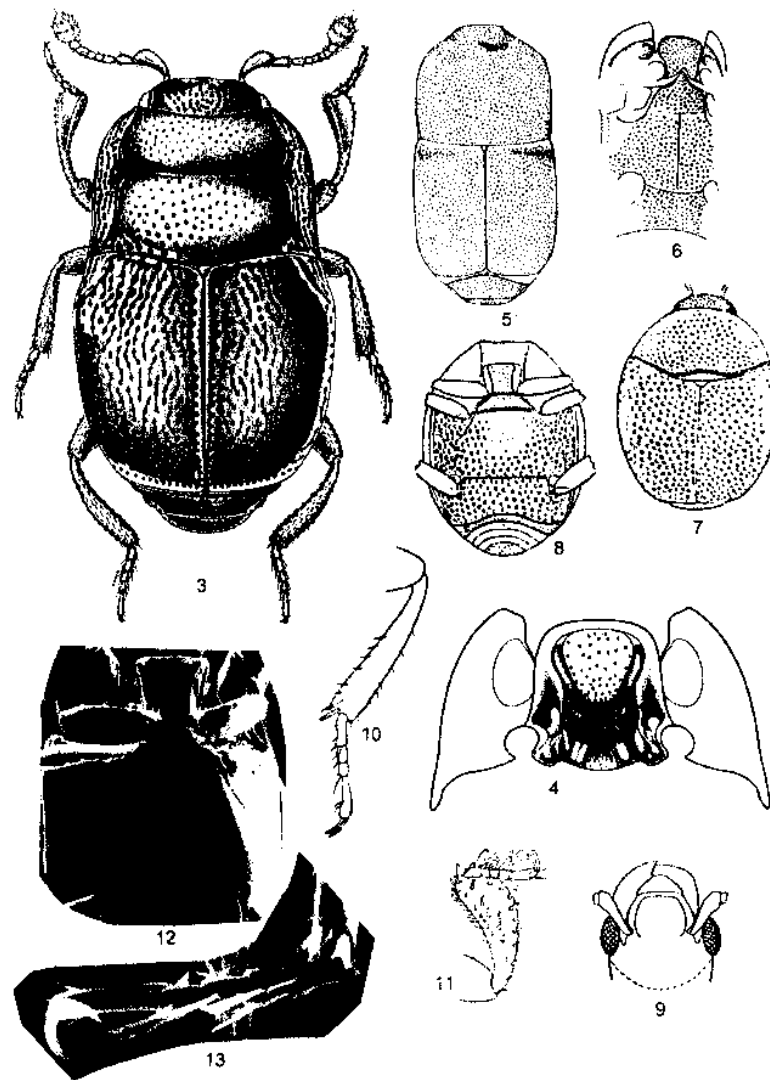
- 
- Vomero, V. 1977. *Anapleus wenzeli*, una nuova specie di Dendrophilinae (Col. Histeridae) proveniente da una grotta del messico meridionale, *Accademia Nazionale dei Lincei. Problemi attuali di scienza e di culture*, 374: 341-348. (Fig. 19).
- Wenzel, R.L. 1938. New and little known Neotropical Heteriomorphini. *Revista de Entomologia*, 9: 317-321. (Figs. 103 - 104).
- Wenzel, R.L. 1944. On the classification of the histerid beetles. *Field Museum of Natural History, Zoological series*, 28(2): 51-151. (Figs. 9, 74).
- Wenzel, R.L., Dybas, H. 1941. New and little known Neotropical Histeridae (Coleoptera). *Field Museum of Natural History, Zoological series*, 22(7): 433-472. (Figs. 62 - 64, 70).
- Yelamos, T. 1995. Descripción de una nueva especie de *Bacanius* (Coleoptera: Histeridae) endógeo de México. *Nouvelle Revue d'Entomologie. Nouvelle Série*, 12, fasc. 4: 55-258. (Fig. 16).

Recibido: 14 de noviembre del 2000

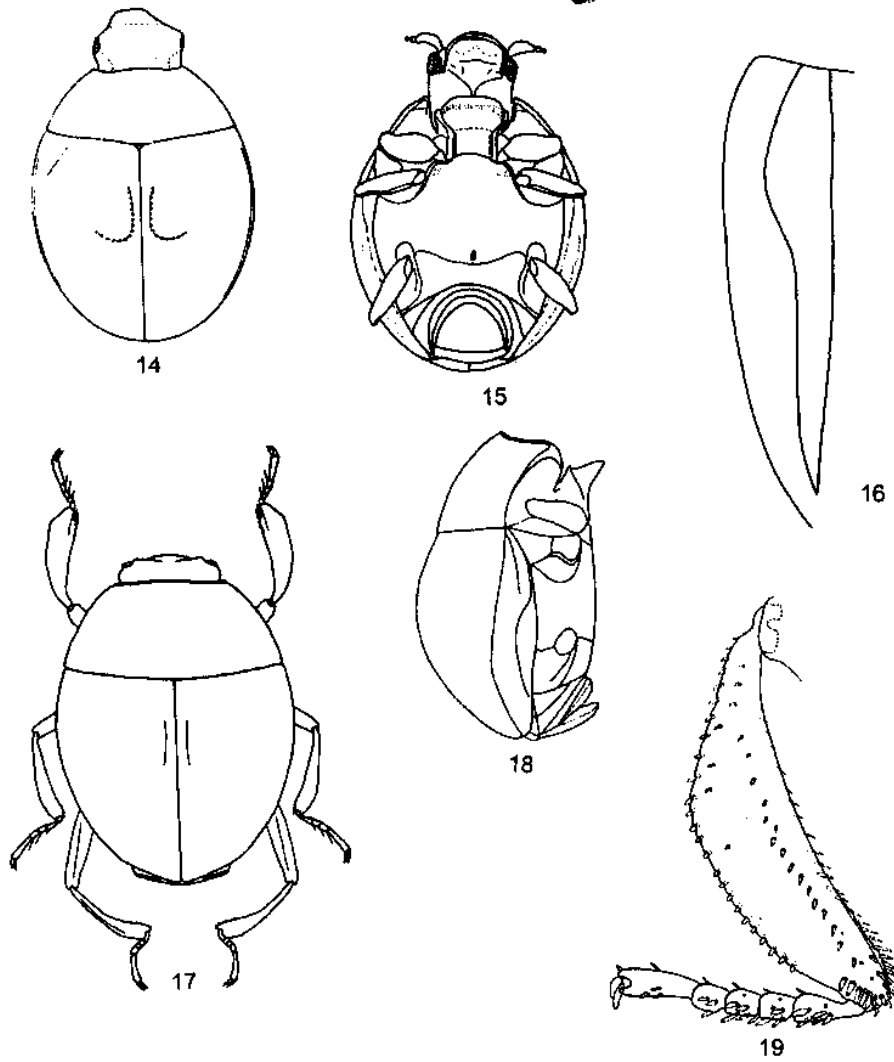
Aceptado: 19 de mayo del 2001



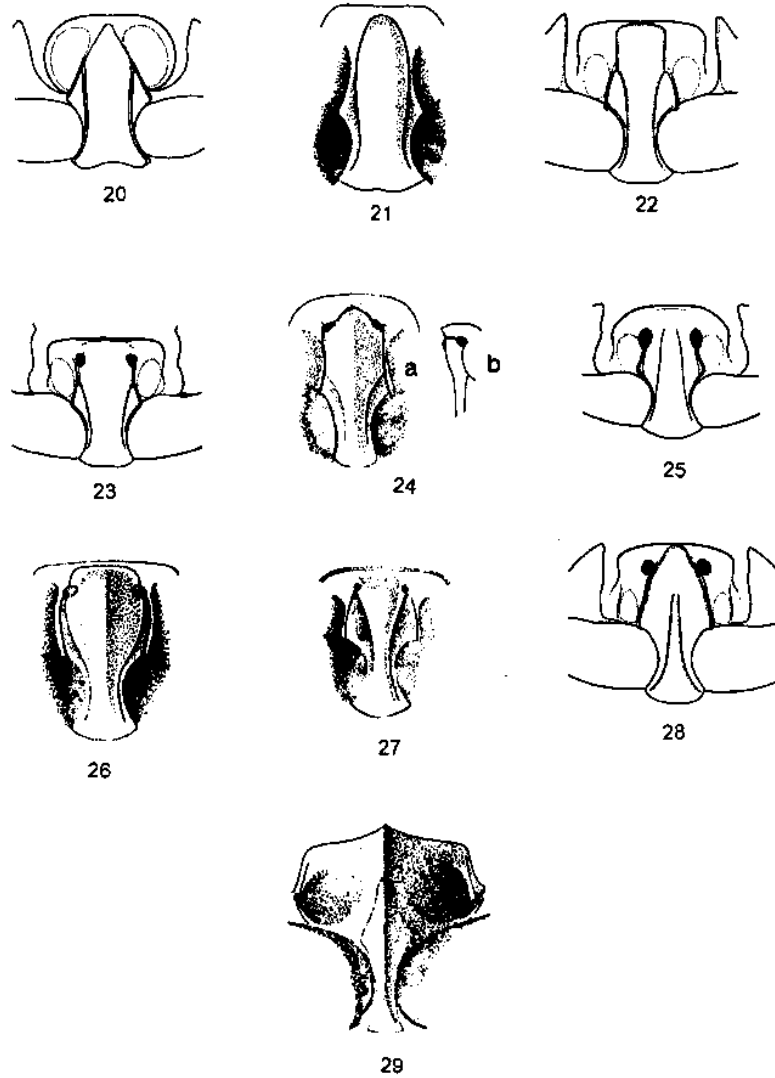
Figures 1 - 2. Scheme of the external structure of *Histeridae*: 1 - dorsal, 2 - ventral. md - mandibles, lb - labrum, ep - epistoma, sf - frontal stria, fr - frons, sle - external pronotal stria, sli - internal pronotal stria, smp - marginal pronotal (dorsally) stria or marginal stria of prosternal lobe (ventrally), sc - scutellum, st - suture, sse - external subhumeral stria, sd 1-5 - dorsal stria 1-5, ss - sutural stria, pp - propygidium, lp - prosternal lobe, cp - prosternal carina, hy - hypomeron, h 1-3 - pro-, mid- and hind coxae, ap - prosternal projection, smm - marginal mesosternal stria, msp - mesepimeron, mst - mesosternum, sm - meso-metasternal suture, sp - postcoxal stria, mpt - metepisternum, slm - lateral metasternal stria, mtp - metepimeron, mt - metasternum.



Figures 3 - 13. 3 - *Plegaderus* sp., dorsal; 4 - *P. transversus*, prosternum. 5, 6 - *Teretrius* (*Neotepetrius*) sp., 5 - body outline, 6 - ventral; 7, 8 - *Acritus komai*, 7 - body outline, 8 - ventral; 9, 10 - *Aeletes* sp., 9 - head, 10 - hind leg. 11 *Halacritus* sp., protibia; 12, 13 - *H. blackwelderi pacificus*, 12 - ventral, 13 - tarsus of hind leg.



Figures 14 - 19. 14 - *Bacanius (Bacanius) hamatus*, body outline, 15 - *B. (Bacanius) sp.*, ventral. 16 - *B. (Gomyister) gomyi*, elytral epipleura. 17, 18 - *Troglobacanius maya*, 17 - dorsal, 18 - lateral. 19 - *Anapleus wenzeli*, protibia with tarsus.



Figures 20 -29. Prosternum. 20 - *Gnathoncus rotundatus*, 21 - *Eremosaprinus* sp., 22 - *Saprinus lugens*, 23 - *Euspilotus* (*Hesperosaprinus*) sp., 24 - *E. (Neosaprinus)* sp., a - ventral, b- lateral, 25 - *Geomysaprinus* sp., 26 - *Xerosaprinus (Xerosaprinus)* sp., 27 - *X. (Vastosaprinus)* sp., 28 - *Hypocaccus* sp., 29 - *Neopachylopus sulcifrons*.

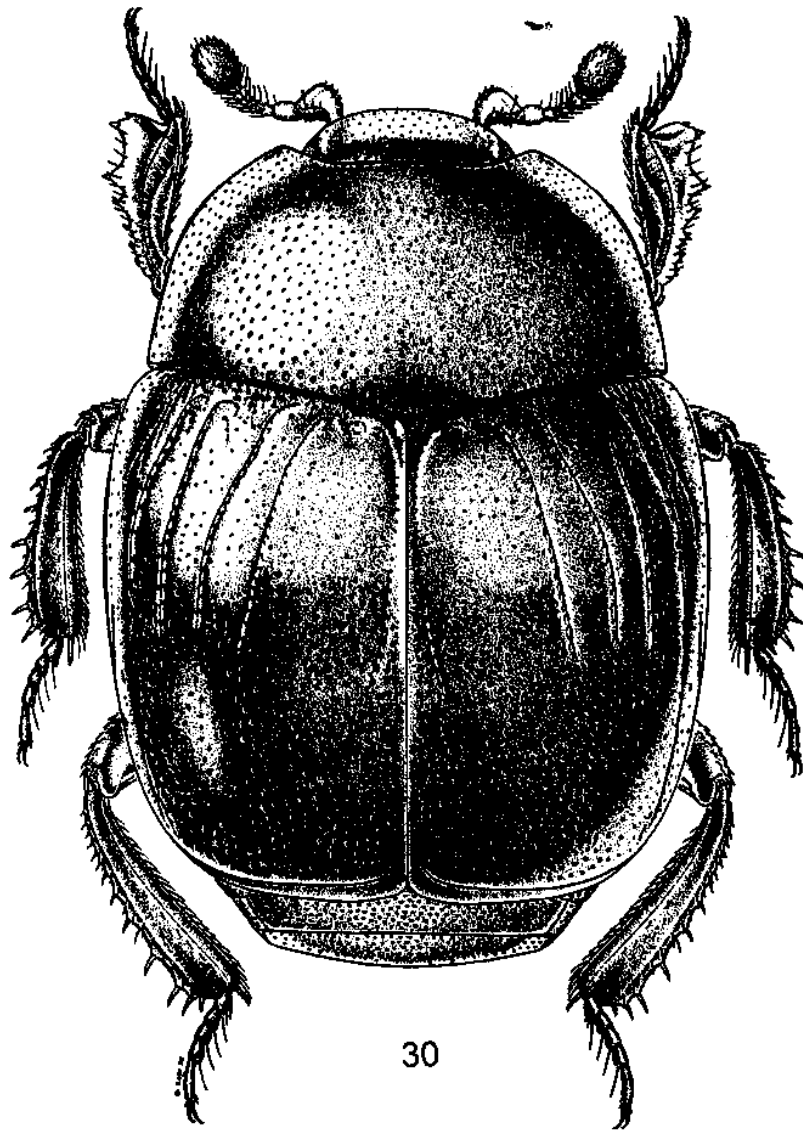


Figure 30. *Gnathoncus rotundatus*.

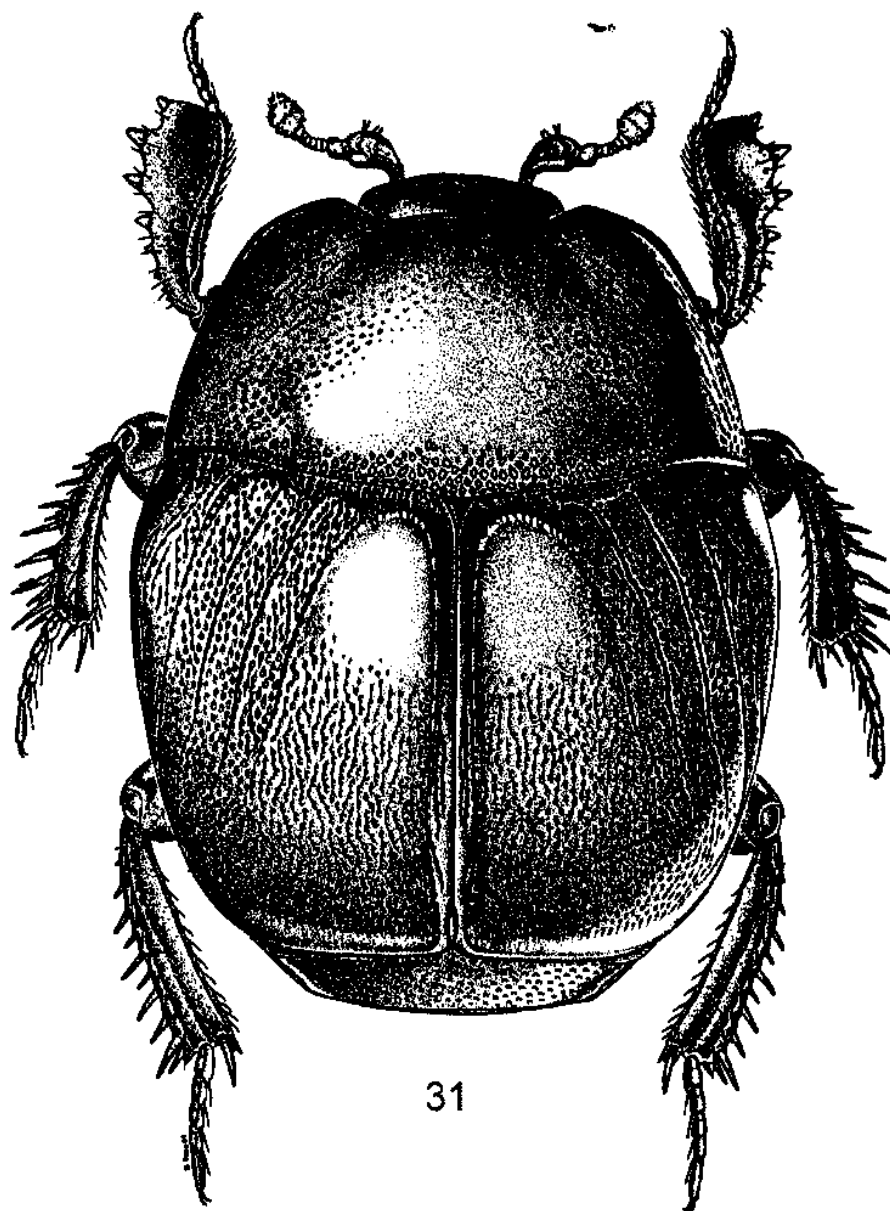
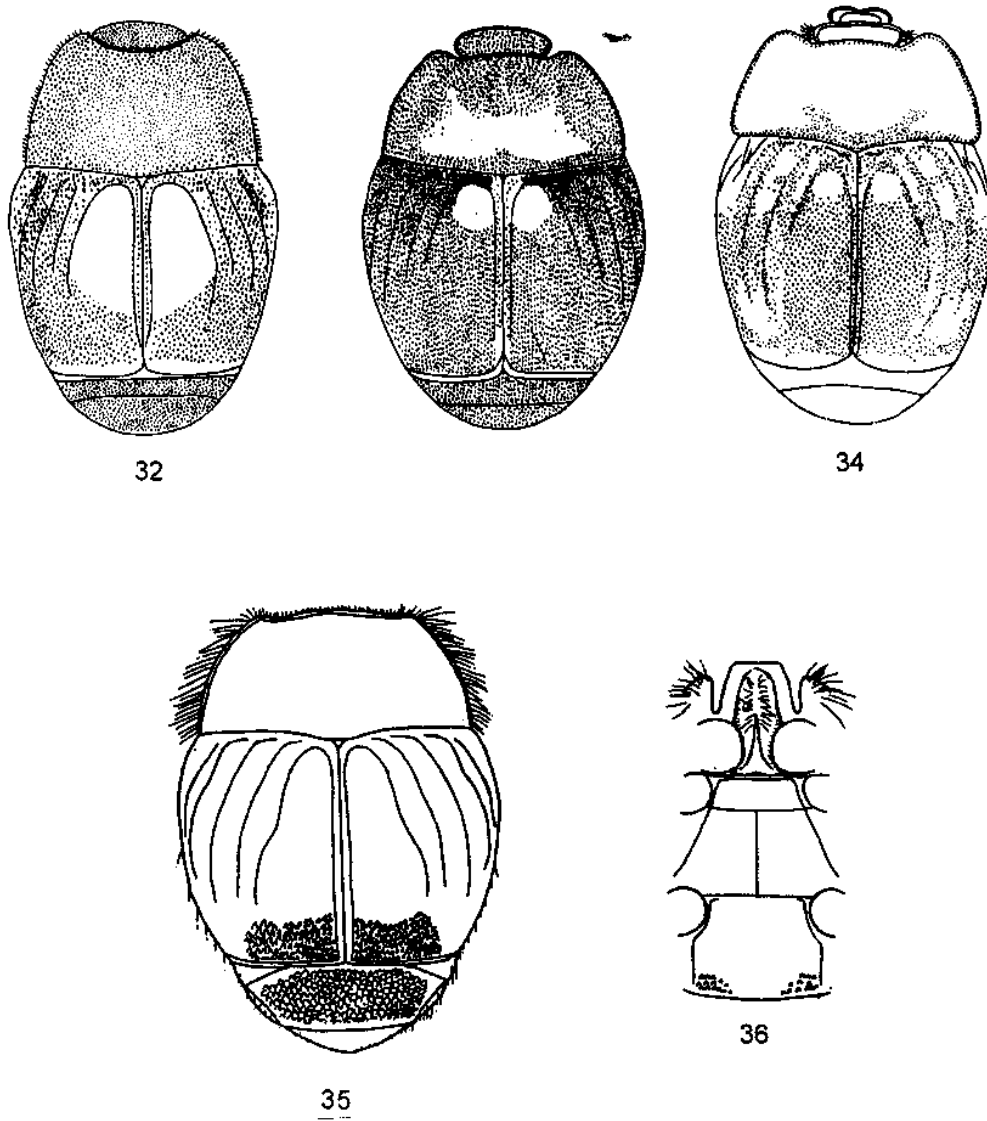
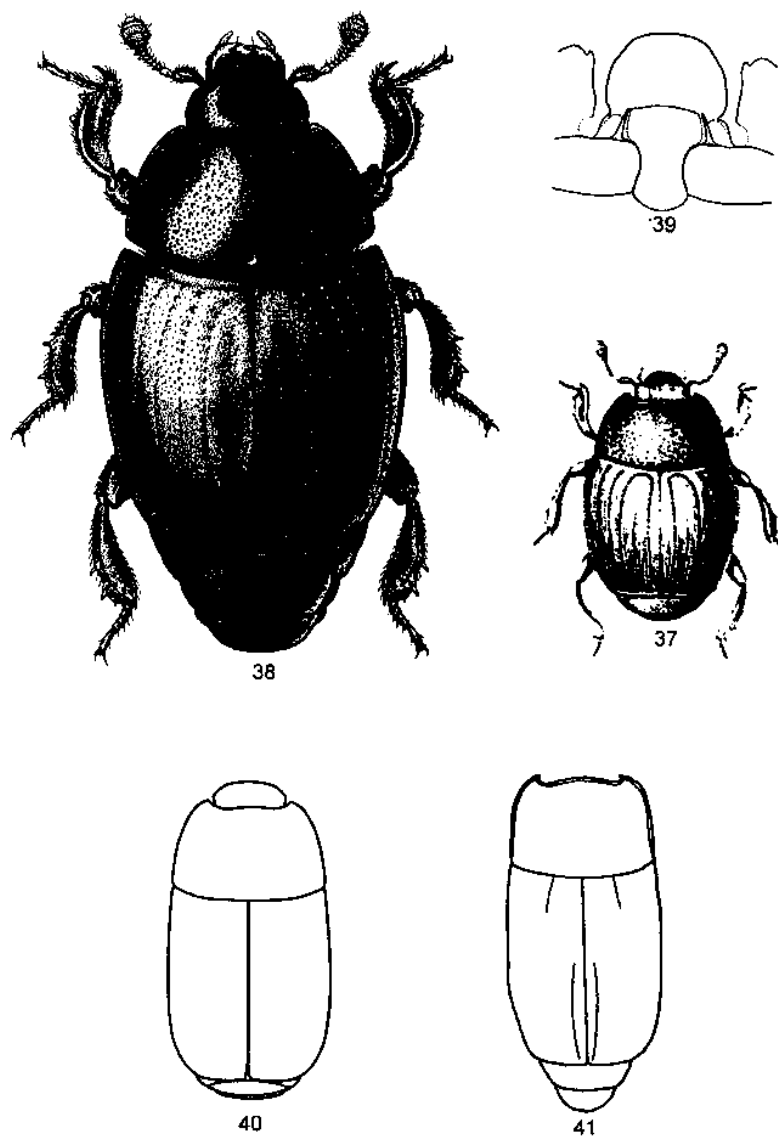


Figure 31. *Hypocaccus (Hypocaccus)* sp.

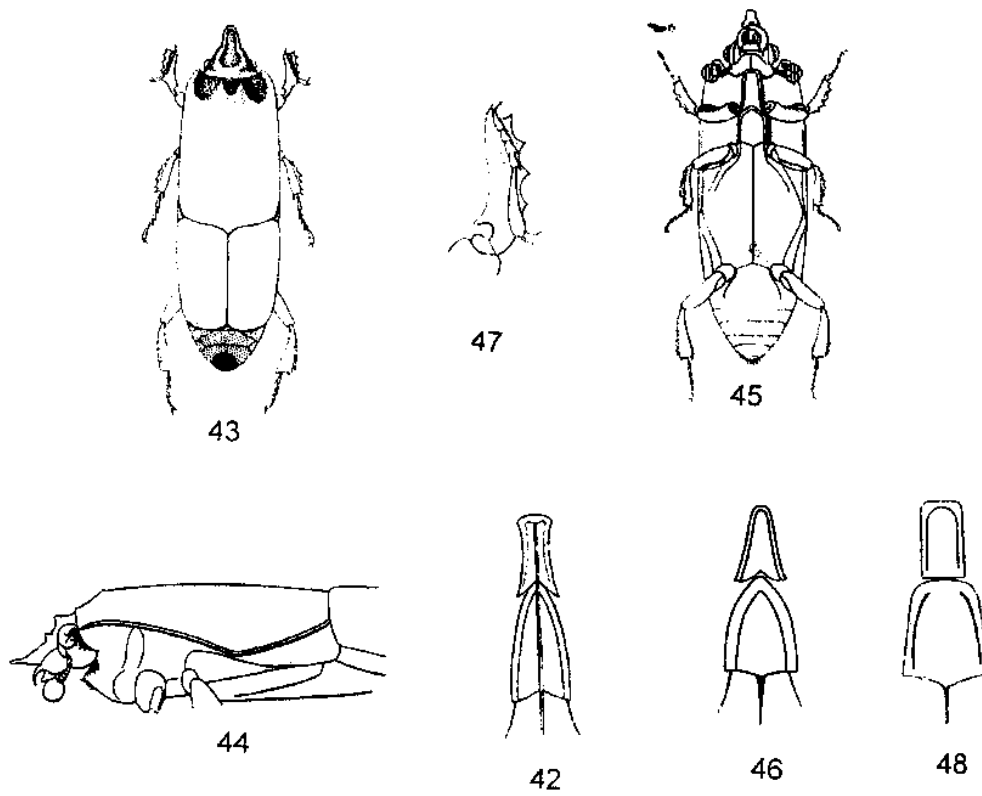


Figures 32 - 36. Body outline and ventral side. 32 - *Xerosaprinus (Xerosaprinus) lubricus*, 33 - *Hypocaccus (Hypocaccus) bigemmis*, 34 - *Neopachylopus sulcifrons*, 35, 36 - *Philoxenus desertorum*.

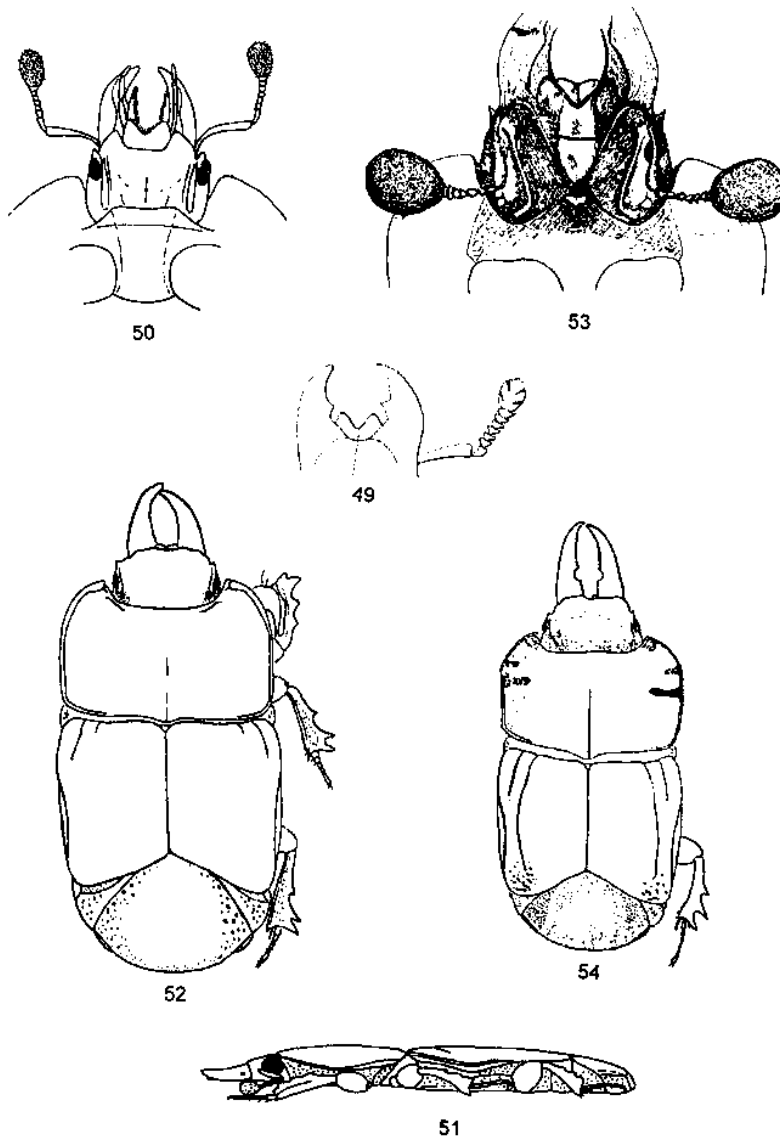




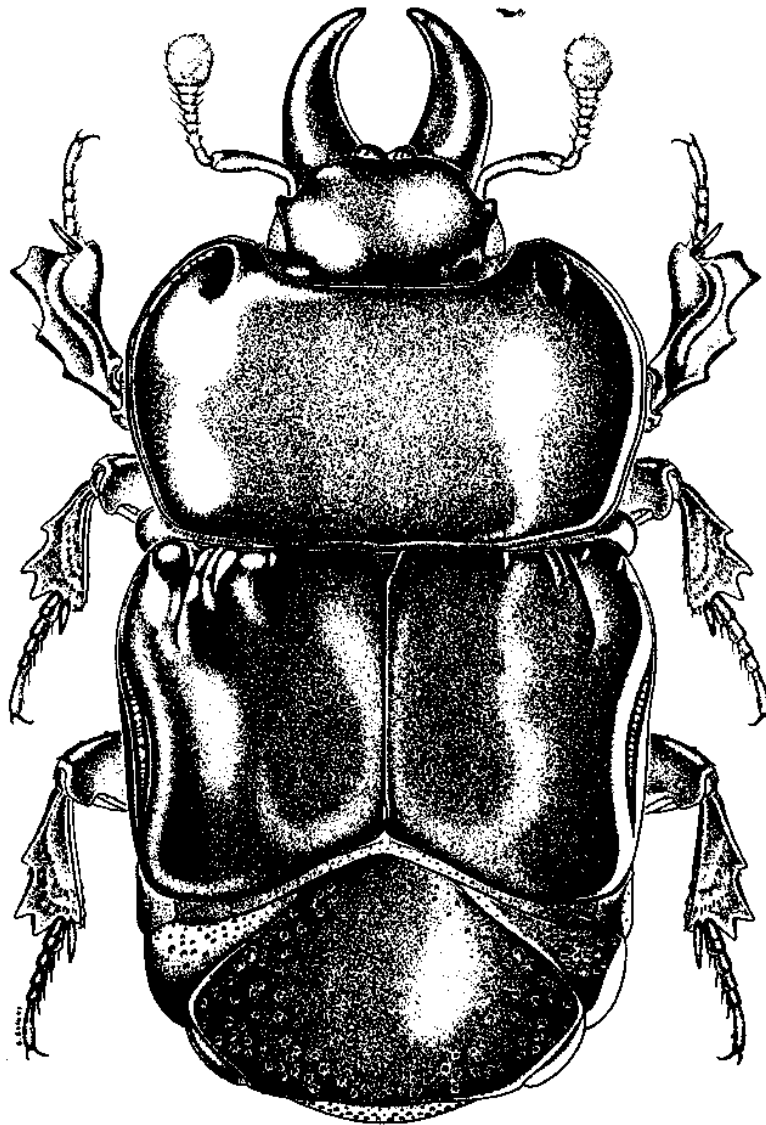
Figures 37 - 41. 37, 38 - dorsal view, 37 - *Xestipyge garbiglietti*, 38 - *Carcinops pumilio*; 39, 40 - *Paromalus* (*Paromalus*) sp., 41 - *P. (Isolomalus)* sp. 39 - prosternum, 40, 41 - body outline.



Figures 42 - 48. 42 - *Xylonaeus* sp., 43-47 - *Tryponaeus* sp., 48 - *Coptotrophis* sp. 43 - body outline, 44 - prothorax laterally, 45 - ventral, 42, 46, 48 - pro- and mesosternum, 47 - protibia.

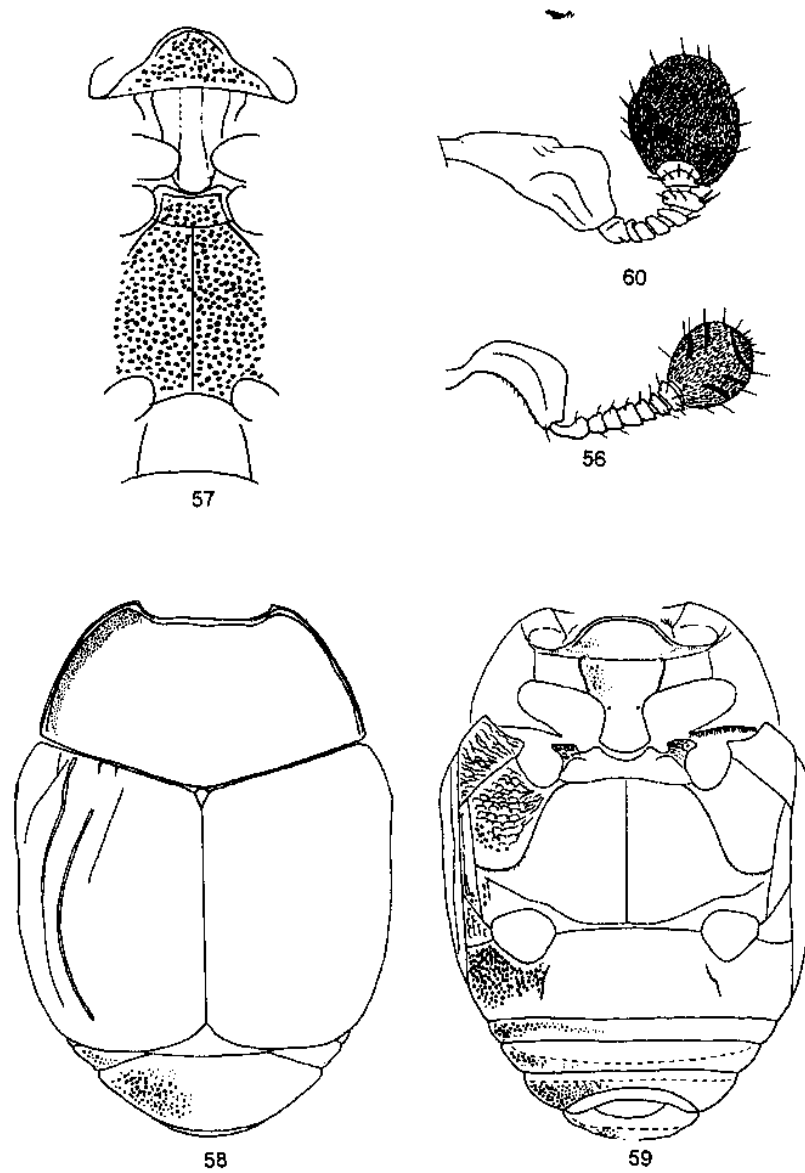


Figures 49 - 54. 49 - *Platyeutidium williamsi*, mandibles and labrum; 50, 53 - prosternum and head, ventral. 50 - *Hololepta (Hololepta) sp.*, 53 - *H. (Leionota) sp.*, 51 - *H. (Hololepta) sp.*, lateral, 52, 54 - body outline, 52 - *H. (Leionota) yucateca*, 54 - *Iliotona dorcoides*.

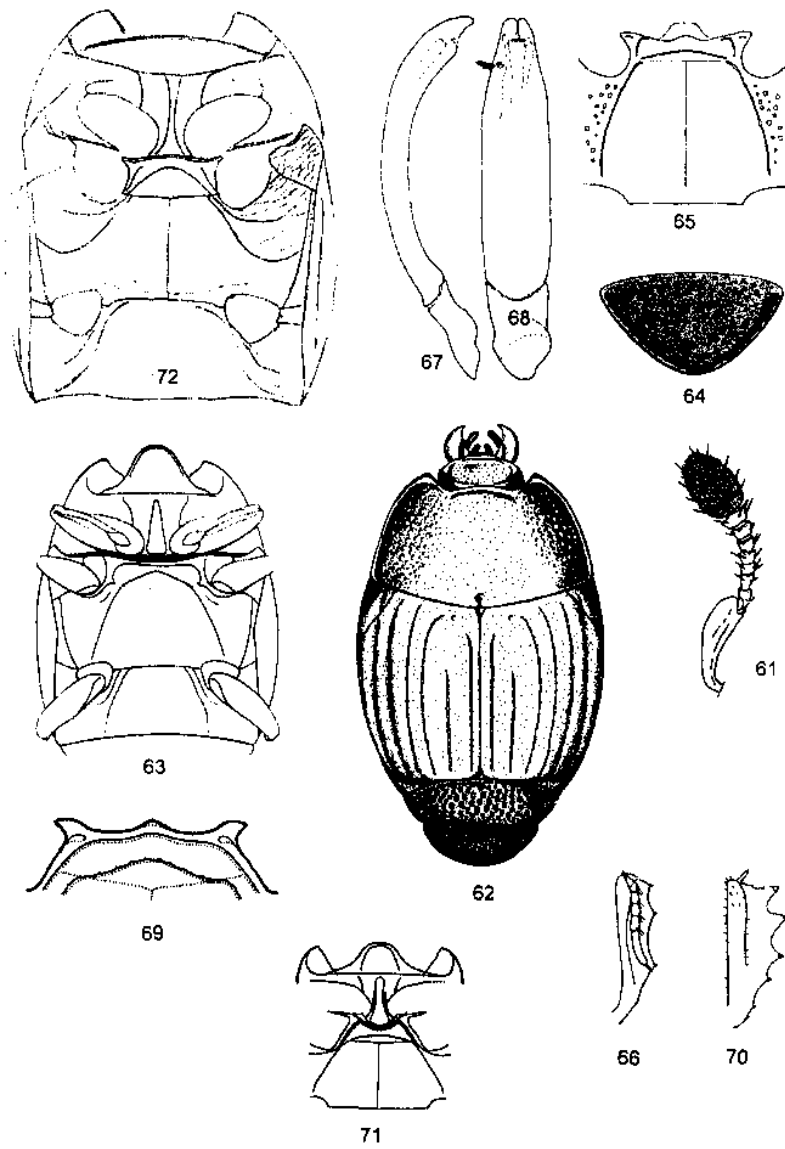


55

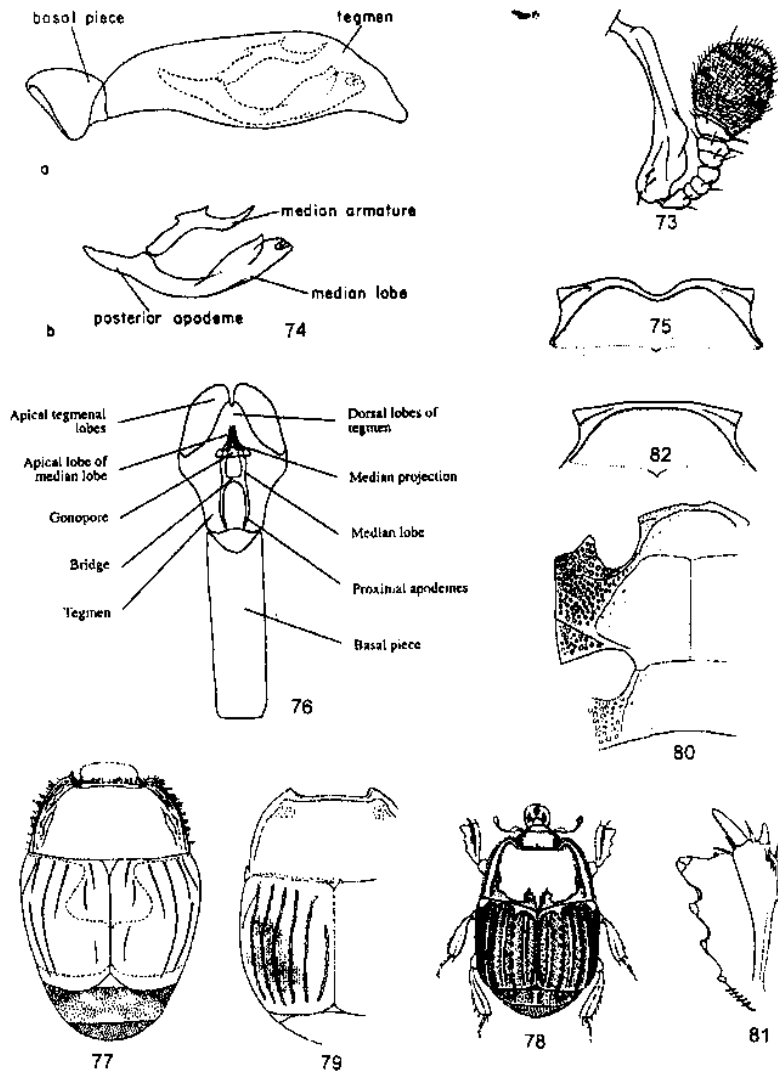
Figure 55. *Hololepta (Hololepta)* sp.



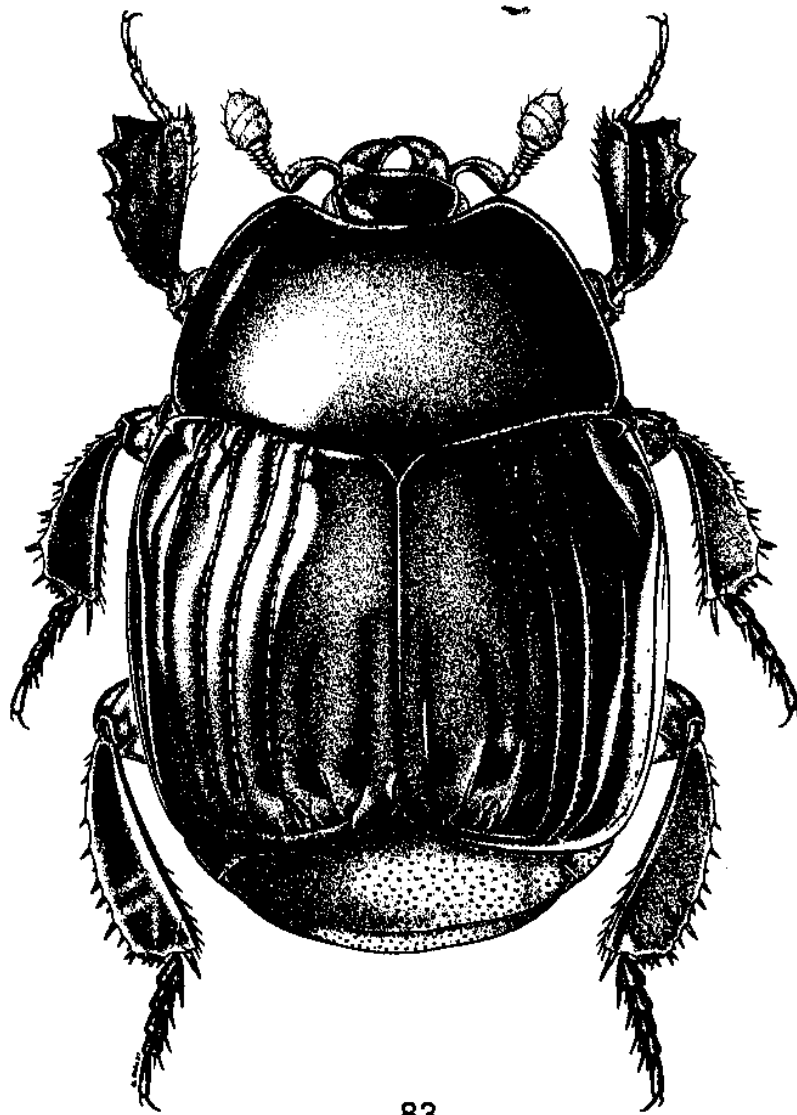
Figures 56 - 60. 56, 60 - antenna, 56 - *Platysoma* sp., 60 - *Omalodes* sp. 57, 59 - ventral, 57 - *Latinolister columellare*, 59 - *Omalodes* sp. 58 - *Omalodes* sp., body outline.



Figures 61 -72. 61 - antenna of *Exosternini* type. 62-64 - *Operclipygus sp.*, 62 - dorsal, 63 - ventral, 64 - pygidium. 65-68 - *Baconia sp.* 65 - meso- and metasternum, 66 - protibia, 67, 68 - edeagus, 67 - lateral, 68 - dorsal. 69, 70 - *Phelister sp.*, 69 - mesosternum, 70 - protibia. 71 - *Pseudister rufulus*, ventral. 72 - *Kszabister carinatus*, ventral.



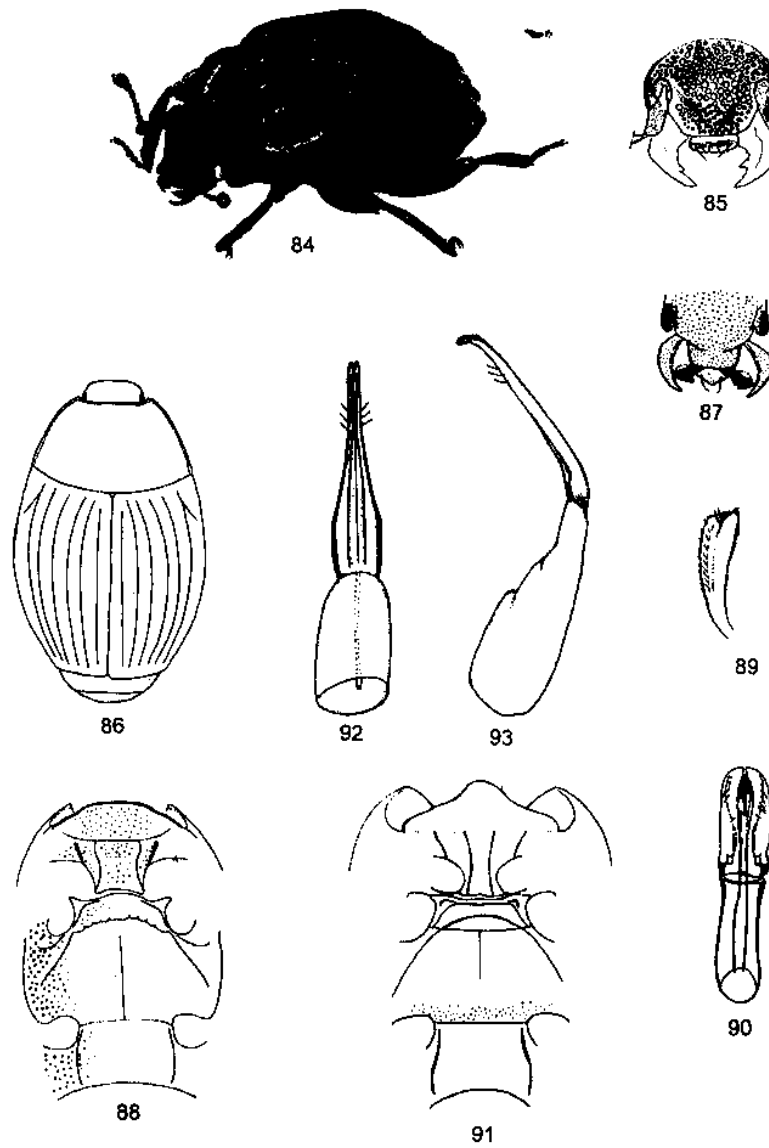
Figures 73 - 82. 73 - antenna of *Histerini* type. 74 - eedeagus of *Margarinotus*, showing internal structure, a - with basal piece and parameres, b - without them. 75, 76 - *Hister* sp., 77 - *Spilodiscus* sp., 78 - *Epigluptus costatus*, 79-81 - *Atholus bimaculatus*, 82 - *Atholus* sp. 76 - eedeagus, showing internal structure. 75, 82 - mesosternum. 77, 79 - body outline. 78 - dorsal, 80 - ventral. 81 - protibia.



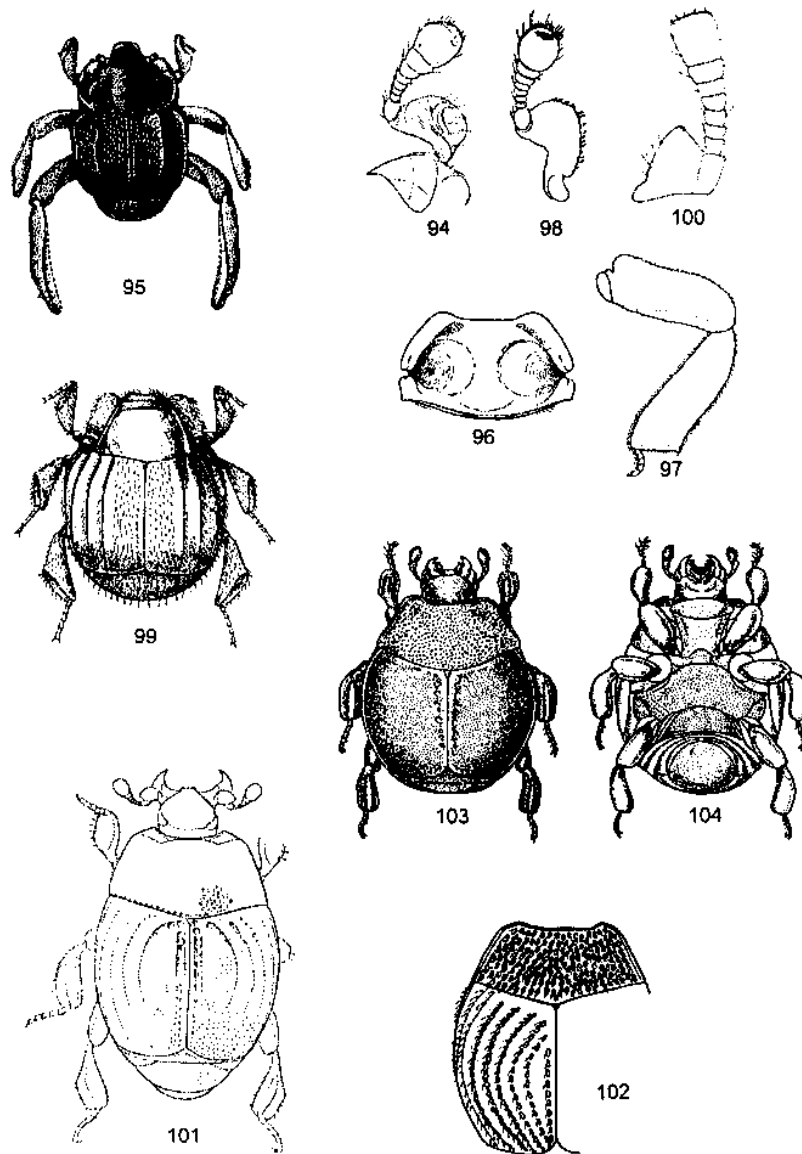
83

Figure 83. *Margarinotus (Ptomister)* sp., dorsal.





Figures 84 - 93. 85 - *Onthophilus sp.*, antero-lateral. 87-90 - *Epierus sp.*, 91-93 - *Plagiogramma sp.* 85,87 - head. 86 - body outline, 88,91 - ventral. 89 - protibia. 90, 92,93 - edeagus, 90,92 - ventral, 93- lateral.



Figures 94 - 104. 94 - *Trichoreninus* sp., antenna. 95-98 - *Terapus* sp., 95 - dorsal, 96 - pronotum, 97 - hind leg, 98 - antenna. 99-100 - *Haeterius* sp., 99 - dorsal, 100 - antenna. 101, 102 - *Mesynodites* sp., 101 - body outline, 102 - pronotum and left elytron. 103, 104 - *Hippeutister amabilis*, 103 - dorsal, 104 - ventral.

