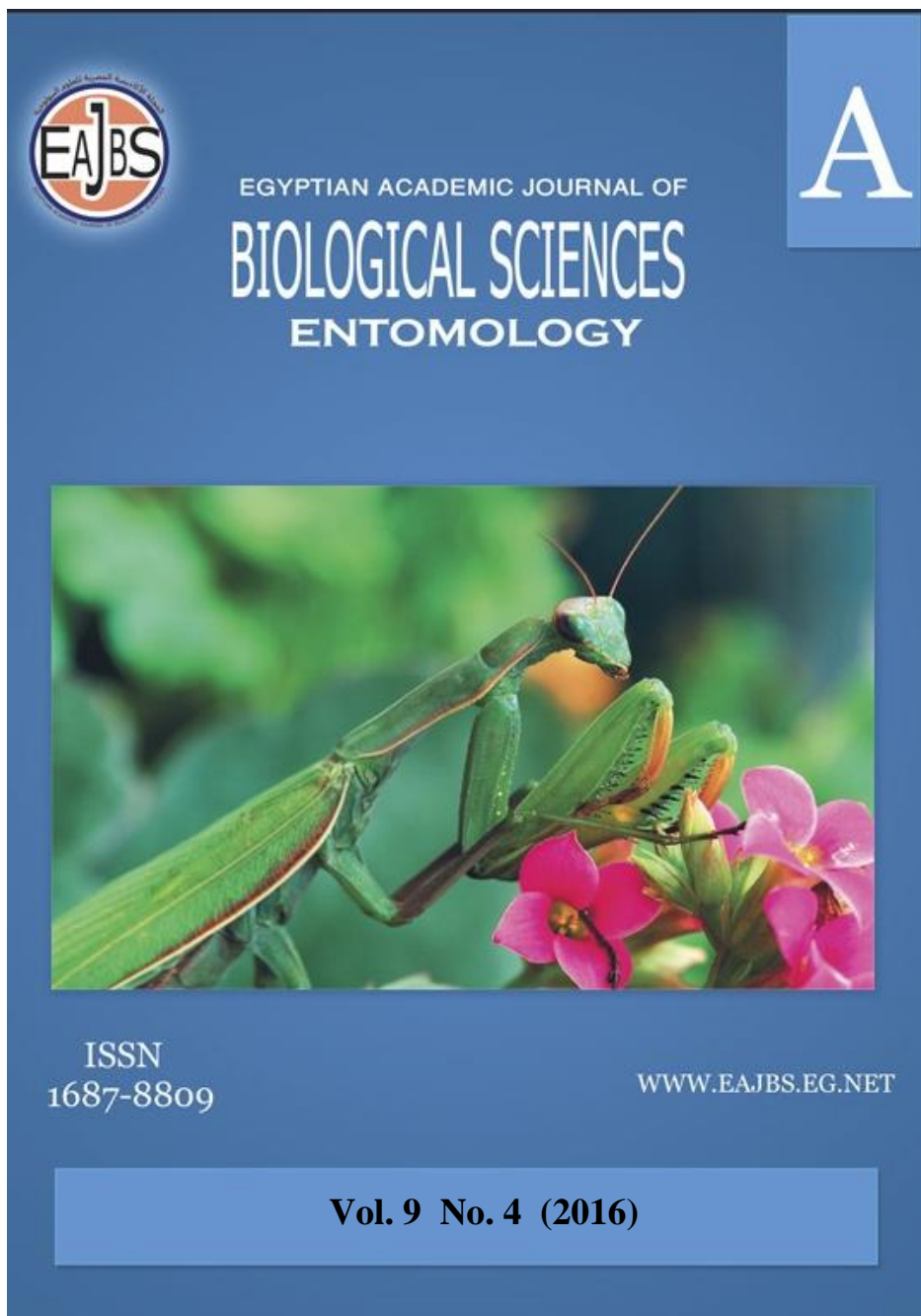


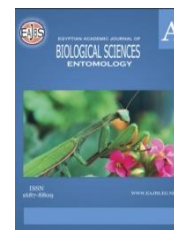
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**Key to Some Tribes, Genera and Species of Subfamily Meloinae
(Coleoptera: Meloidae) in Egypt**

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ABSTRACT

Subfamily Meloinae, were represented by 5 tribes: Cerocomini Leach, 1815, Epicautini Denier, 1935, Lyttini Solier, 1851, Mylabrini Laporte, 1840 and Meloini Gyllenhal, 1810. Tribe Mylabrini was covered by Elmetwaly *et. al.* (2015), and tribe Meloini was covered by El-Gharbawy (2006). Accordingly, the present study was planned to revise and update the available information about tribe Cerocomini, Epicautini and Lyttini. Key to the tribes and species was treated. During the present work, twenty two species in ten genera recorded in three tribes are covered in the present work.

INTRODUCTION

In Egypt, no work was done on the family Meloidae, except the work of Alfieri (1976), who monographed the Coleoptera of Egypt, including family Meloidae. He presented a list of meloids of 145 species belonging to 20 genera, with notes on distribution and host plants of some species, he divided the family into 2 subfamilies (Lyttinae and Nemognathinae). Subfamily Nemognathini was covered by Abd El-Dayem (1995), under the name (Horiinae and zonitini), and the former included 124 species belonging to 14 genera within 3 tribes (Lyttini, Mylabrini and Meloini), the first tribe represented by 10 species belonging to 4 genera which are (*Cabalia* Muls., *Cylindrothorax* Escher., *Epicauta* Redt. and *Lyttonyx* Mars.). The second tribe represented by 105 species belonging to 9 genera which are (*Cerocoma* Geoffr., *Ceroctis* Mars., *Coryna* Billb., *Decapotoma* Voigts, *Diaphorocera* Heyd., *Lydoceras* Mars., *Lydus* Latr., *Oenas* Latr, and *Mylabris* F.). The third tribe represented by 9 species belonging to 1 genus which is (*Meloe* L.), which covered by El-Gharbawy (2006). He revised 7 species from nine species of this genus under subfamily Meloinae and tribe Meloini regarded as taxonomic status of Alfieri (1976).

The present work started by examining old and recent available literature about the so-called blister beetles or family Meloidae in general. Simultaneously with this step, the main Egyptian reference insect collections were examined for materials regarded as meloid beetles.

MATERIAL AND METHODS

The present taxonomic work started by examination of the Egyptian Reference Insect Collections for materials regarded as meloids beetles. These collections are: Collection of Ministry of Agriculture, Plant Protection Research Institute (MAC); Collection of Egyptian Entomological Society (EESC); Collection of Faculty of Science, Cairo University (CUC), Alfieri Collection, Faculty of Agriculture, Al-Azhar University (ALC) and Collection of Faculty of Science, Ain Shams University (ASUC). A field survey of meloids beetles was under taken over a great area of the Egyptian territories and covered the main geographical zones.

RESULTS AND DISCUSSION

Key to some tribes, genera and species of subfamily Meloinae:

- 1- Fore femora with apical half of ventral surface (that opposing tibia) slightly excavated, excavation with a patch of appressed, transversely directed silky pubescence (Pl. I, fig. 1). Mandibles shorter, not pointed at apex, lateral margins appearing distinctly curved in frontal view, apical half not reclinate. Labrum longer, extending beyond basal half of mandibles. Aedeagus with one or two dorsal hooks; endo-phallus well sclerotized and also hooked..... **Epicautini** 2
- Fore femora without a ventroapical excavation and lacking a patch of transversely directed pubescence (Pl. I, fig. 2) 4
- 2- The middle antennal segments (3rd - 5th) in male greatly extended and flat, 3rd segment long triangular, and from 6th spindly..... **Epicauta fasciceps Walker**
- Antenna in male less or doesn't widen, 3rd segment not triangular. The upper side with or without distinct black stains..... 3
- 3- Forehead in the middle between eyes with a big, heart-shaped black stain **Epicauta sanguineiceps (Fairmaire)**
- Forehead in the middle between eyes without distinct black stains **Epicauta aethiops (Latreille)**
- 4- Dorsal blade of tarsal claws smooth or at most, with a single large tooth-like projection, in which case a distinct ventral blade is absent (Pl. I, fig. 3). Labrum elongate and longitudinally furrowed or carinate. Antennae 9-11 segmented, antennae more or less elaviform in female (Pl. I, fig. 4). Antennal sockets distant from eyes, usually placed below or on frontal suture; antennae, foretibiae and often maxillae strongly and bizarrely modified in male (Pl. I, Figs. 5); Elytra completely or partially metallic. Protibiae usually with two apical spurs (rarely one or both spurs absent). Male foretarsi usually strongly modified..... **Cerocomini**..... 5
- Dorsal blade of tarsal claws with one or two rows of teeth along ventral margin, Claws always with a distinct ventral blade may be fringed with micropubescence, at least al basal half (Pl. I Figs. 6) or not (Pl. I, Figs. 3,7). Labrum not longitudinally furrowed or carinate. Maxillary galeae not fringed with elongate, shaggy setae with a tuft of dense relatively elongate medially directed setae (Pl. I, fig. 8). Antennal sockets closer to eyes, placed above frontal suture. Elytral color variable, metallic or not..... **Lyttini** 9
- 5- Antennae nine-segmented. 6
- Antennae 11-segmented. Head, pronotum and abdomen either black or metallic, never yellow-orange. 7
- 6- Abdomen, rarely completely red or orange red, at least the tip of the abdomen is

- dark metallic color. Anterior tarsi unequally widened. Middle tibia simply or weakly curved..... ***Cerocoma ephesica* Reitter**
- The abdomen is always dark metallic color. Anterior tarsi shorter on which not only the second, but also the 3rd and 4th segments clearly widened, very much remarkable decreased..... ***Cerocoma scovitzii intermedia* Maran**
- 7-** Fore tibiae simple. 11th antennal segment sub quadrate, with two black and shiny lines on 11th antennal segment and one on 10th antennal segment. In female, Labrum completely dark; temples slightly diverging posteriorly, maximum width of head on temples. Femurs and tibiae orange-red (Pl. II, Figs. 9-13) ***Diaphorocera obscuritarsis* Fairmaire**
- Fore tibiae variously modified. 11th antennal segment elongate. **8**
- 8-** Head, pronotum, abdomen and 1st antennal segments black. In female, head and pronotum black (Pl. II, Figs. 14-17)..... ***Diaphorocera promelaena* Fairmaire**
- Head, pronotum, abdomen and 1st antennal segments not Black, 10th antennal segments about as wide as the length of 11th , anterior portion slender and pointed at apex; 11th segment about as wide as 8th segment. In female, head and pronotum metallic, Body and fore coxae green metallic, Temples shorter than the eye length, narrowing evenly posteriorly (Pl. III, Figs. 18-22)..... ***Diaphorocera hemprichi* Heyden**
- 9-** Dorsal blade of tarsal claws with one or two rows of teeth along ventral margin (only basally in one Mediterranean species). Claws always with a distinct ventral blade. (Pl. III, Figs. 23-24). Elytral color variable. **10**
- Dorsal blade of tarsal claws smooth (Pl. I, Figs. 6,7 & Pl. III, Figs. 25,26), or at most, with a single large tooth-like projection, in which case a distinct ventral blade is absent (Pl. I, fig. 3) **12**
- 10-** Last segment of maxillary palpi distinctly narrowed apically (Pl. IV, fig. 27). Male head strongly impressed behind eye. Antennal segments 4th -10th transverse and symmetrical (Pl. IV, fig. 28); antennae short, usually not attaining base of pronotum. Claws with relatively short teeth (Pl. III, fig. 24). Middle tarsi with segment I always enlarged in male (Pl. IV, fig. 29). Colour never metallic **11**
- Last segment of maxillary palpi not distinctly narrowed apically (Pl. IV, fig. 30). Male head not impressed behind eye. Antennal segments 4th -10th more elongate or if transverse then at least slightly asymmetrical (Pl. IV, Figs. 31, 32); antennae usually longer and attaining base of pronotum. Claws with relatively large teeth (Pl. III, fig. 29). Middle tarsi with segment I enlarged in male or not. Color metallic or not **13**
- 11-** Elytra black or brown black; Pronotum delicate, thin; Last segment of the antenna more shortly, hardly doubles as long as the penultimate up to the middle parallel, then suddenly narrow conically and less extended ***Oenas pseudifer* Kaszab**
- Elytra yellow; Pronotum spherical; Last segment of the antenna long almost as long as two previous segments, acuminate. (Pl. IV, fig.33)..... ***Oenas crassicornis* (Illiger)**
- 12-** Pronotum longer than wide or, less commonly, as wide as long (Pl. V, fig. 34). Antennal segments 4th -10th as wide or wider than long with acentric sockets (segments appearing at least slightly asymmetrical); 3rd segment usually noticeably longer than 4th (Pl. IV, fig. 32). Color never metallic..... ***Lydus tenuitarsis* Abeille de Perrin**
- Pronotum wider than long (Pl. V, fig. 35). Antennal segments 4th -10th more

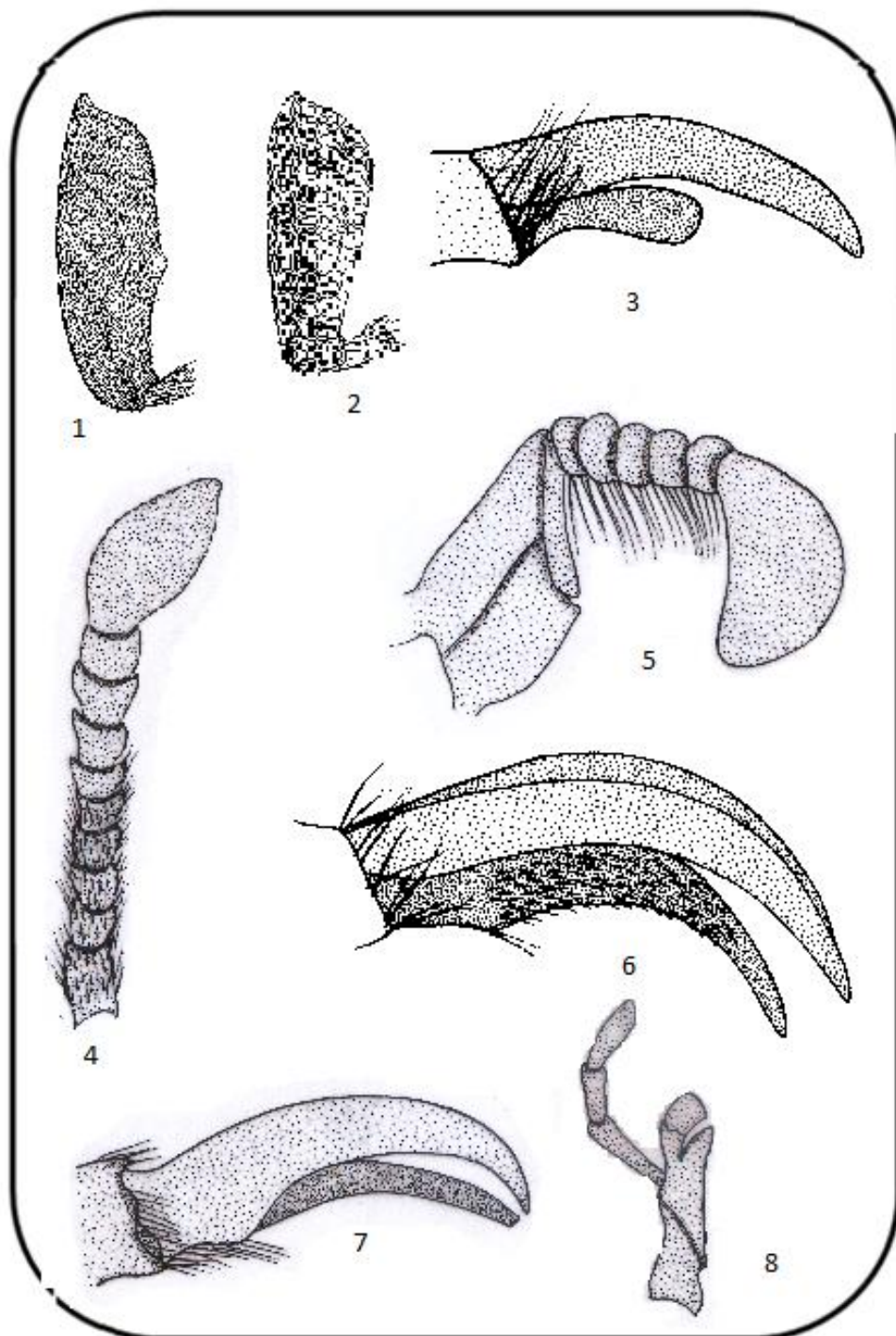
- elongate, 5th -6th (often 5th -10th) usually longer than wide with sockets centrally placed (segments appearing symmetrical); 3rd segment subequal in length to 4th or only slightly longer (Pl. V, fig.36). Color metallic or not. 15
- 13- Head without a red spot in the middle between the eyes.....
.....*Alosimus viridissimus* (Lucas)
- Head with a red spot in the middle between the eyes14
- 14- Head with a fine central groove, elytra narrower and longer (Pl. V, Fig. 37).
.....*Alosimus syriacus syriacus* (Linnaeus)
- Head without a fine central groove, elytra broad and short (Pl. V, fig 38).....
.....*Alosimus syriacus rauterbergi* (Reitter)
- 15- Claws with ventral blade fringed with micropubescence, at least al basal half (Pl. 1, fig. 6 & Pl. III, Figs. 25) 16
- Claws with ventral blade not fringed with micropubescence (Pl. 1, fig. 7 & Pl. III, Figs. 26). Claws with ventral blade separate from dorsal blade, both of similar length (ventral blade rarely shorter, claws not appearing toothed). Maxillary galeae not fringed with elongate, shaggy setae (Pl. I, fig. 8)..... 17
- 16- Genae and mouthparts with elongate golden setae, these setae distinctly longer than those on other surfaces of head. Hind tibial spurs similar, spiniform. (Pl. VI, fig. 39) *Lytonyx bicolor* (Walker)
- Genae and mouthparts with variable setation but if elongate then setae similar to those on other surfaces of head. Hind tibial spurs variable but both never spiniform. Tarsal segments not bilobed. Elytral ribbing not evident. Frons not swollen between eyes, at same level as clypeus. Male gonoforceps elongate and relatively slender, narrowing in apical half, not recurved. Eyes distinctly notched anteriorly. Hind tibia with apex fringed laterally with setae which are no longer or denser than on other surfaces; dorsoapical margin arcuate but not deeply incised; hind tibia less distinctly widened to apex with apical width only ca. 1.75 that near base. Male gonostyli elongate, distinctly setose at apex; acdeagus with one apical dorsal hook..... *Cabalia rufiventris* (Walker)
- 17- Pronotum elongate, at least 1.1 as long as wide, disk usually smooth, shiny, micro- punctate (Pl. VI, fig. 40). Male with last abdominal sternum in most species lightly sclerotized, deeply cleft to near base with the divided sections elongate and usually twisted to bring their ventral surface to face laterally. Eyes large, bulged, extending to maxillae on underside of head, Male genitalia with gonoforceps usually poorly sclerotized18
- Pronotum as wide as long, or if slightly longer than wide, then less than 1.1 as long as wide. Male with last abdominal sternum V-emarginate, emargination confined to apical half of segment. Eyes variable but rarely bulged; interocular distance greater than half head width at eyes. Male genitalia with gonoforceps well sclerotized. Antennae subclavate, segments 6th-10th each about as wide as long; antennae only attaining very base of elytra, not sexually dimorphic. Eyes somewhat bulged, almost extending to maxilla on underside of head.....20
- 18- Head decorated with an orange forehead spot; black elytra and orange abdomen (Pl.VI, fig. 41)*Lydomorphus palaestinus* (Kirsch)
- Head without an orange forehead spot..... 19
- 19- Elytra without any blackish stitching (Pl. VI, fig.42).....
.....*Lydomorphus verrucicollis* (Karsch)
- Elytral suture with blackish stitching continued to make a blackish spot apically (Pl. VII, fig. 43).....*Lydomorphus angusticollis suturellus* (Haag-Rutenberg)
- 20- Forehead without a median red spot....*Lyttolydulus cinereovestitus* (Fairmaire)

- Forehead with a median red spot **21**
21- Red pronotum, elytra yellow red with a black stain before the tip on each side (Pl. VII, fig 44)..... *Lyttolydulus thiebaulti* (Fairmaire)
 - Dark brown or black pronotum, Elytra yellow red, but without a black stain before the tip on each side (Pl. VII, fig. 45)..... *Lyttolydulus nubeculosus* Kaszab

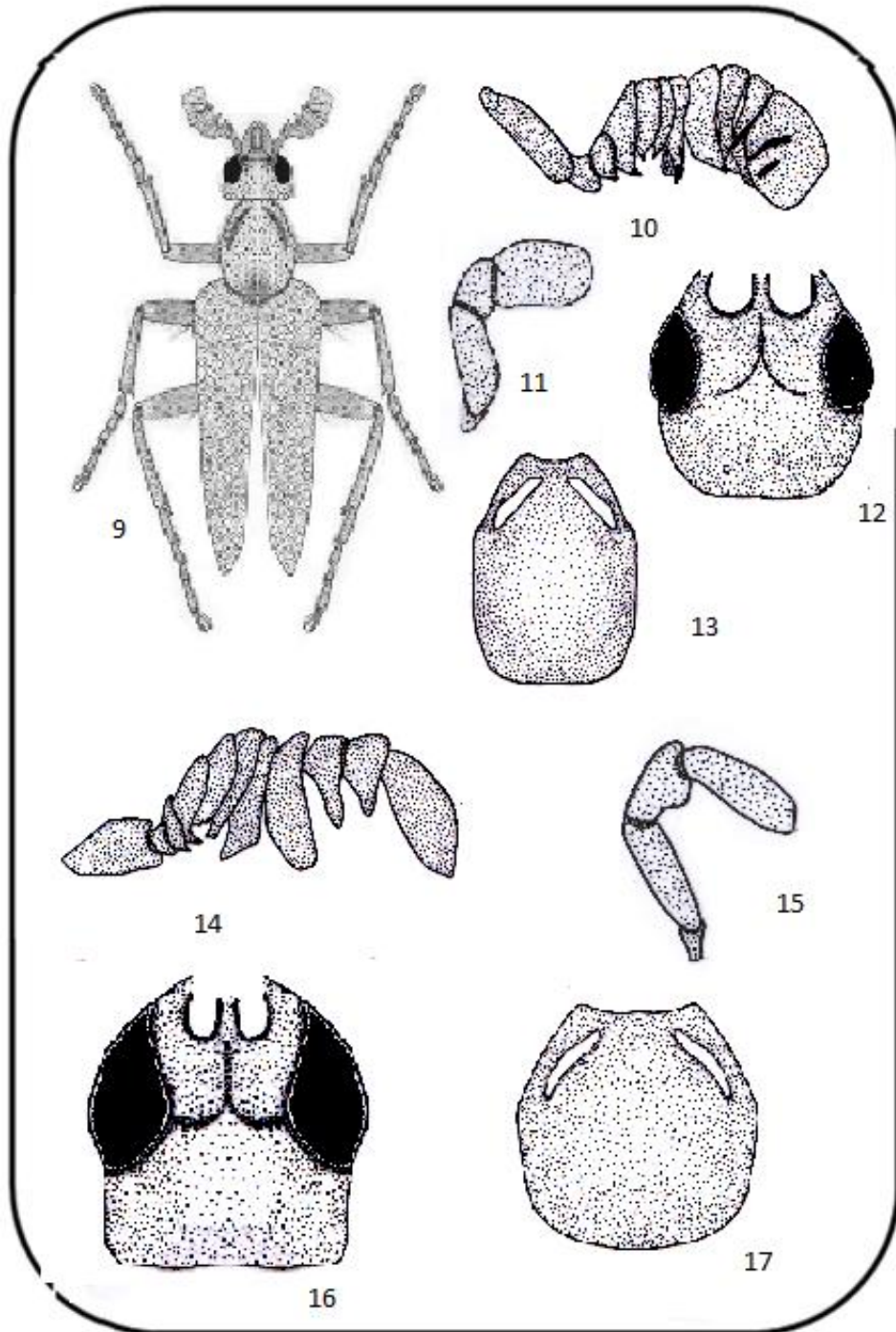
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No. fig.	name	No. fig.	name
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3	Tarsal claw (ventral view) of <i>Mylabris</i>	4	Antenna of female <i>Cerocoma</i>
5	Antenna of male <i>Cerocoma</i>	6	Tarsal claw (ventral view) of <i>Cabalia</i>
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23	Tarsal claw of <i>Alosimus</i> (ventral view)	24	Tarsal claw of <i>Oenas</i> (ventral view)
25	Tarsal claw of <i>Eletica</i> (ventral view)	26	Tarsal claw of <i>Lytta</i> (ventral view)
27	Maxillary palp of <i>Oenas</i>	28	Antenna of <i>Oenas</i>
29	Tarsus of <i>Oenas</i> (male mid leg)	30	Maxillary palp of <i>Alosimus</i>
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35	Pronotum of <i>Alosimus</i>	36	Antenna of male <i>Ceroctis</i>
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41	Adult of <i>Lydomorphus palaestinus</i>	42	Adult of <i>Lydomorphus verrucicollis</i>
43	Adult of <i>Lydomorphus angusticollis suturellus</i>	44	Adult of <i>Lyttolydulus thiebaulti</i>
		45	Adult of <i>Lyttolydulus nubeculosus</i>

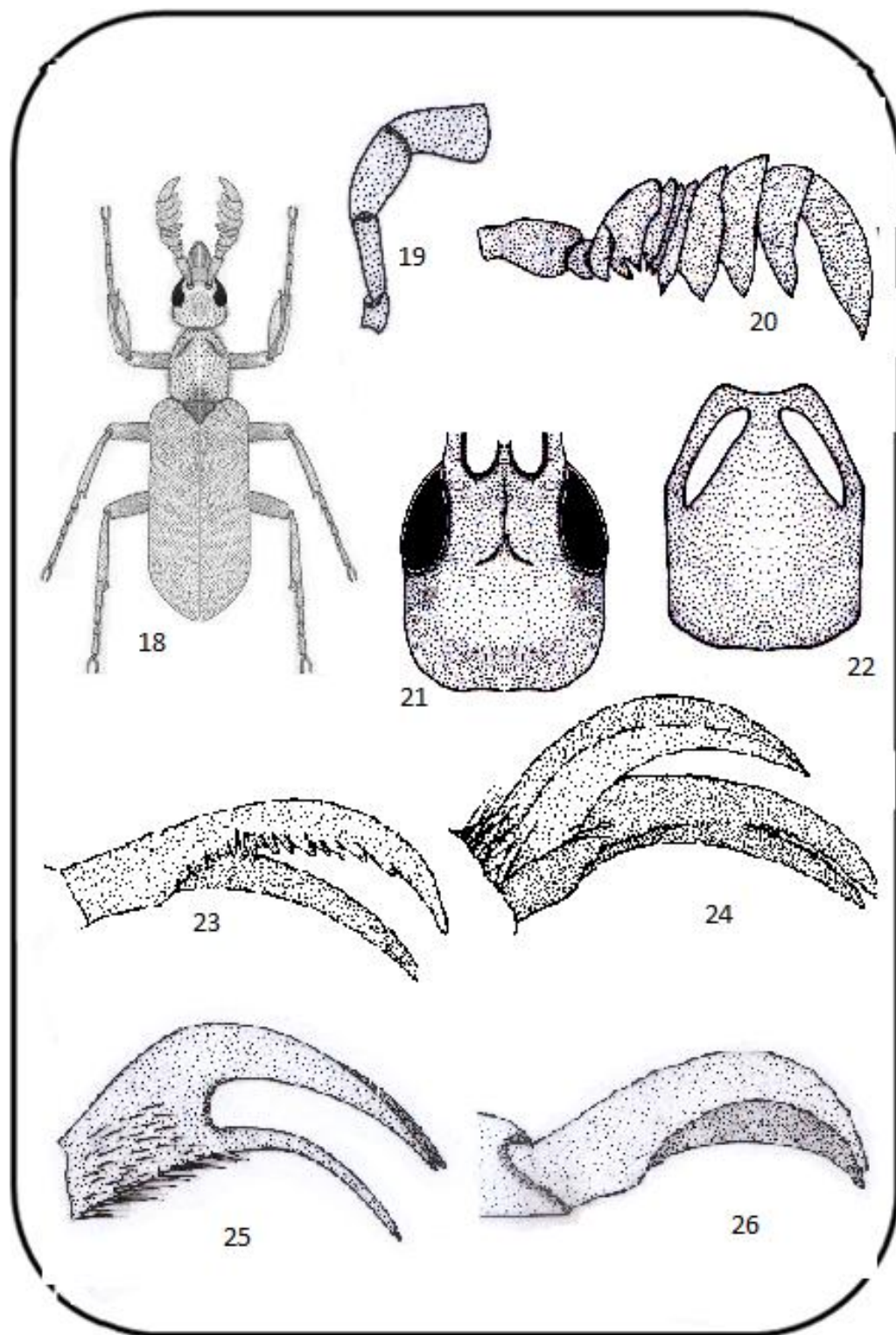
Plate, I



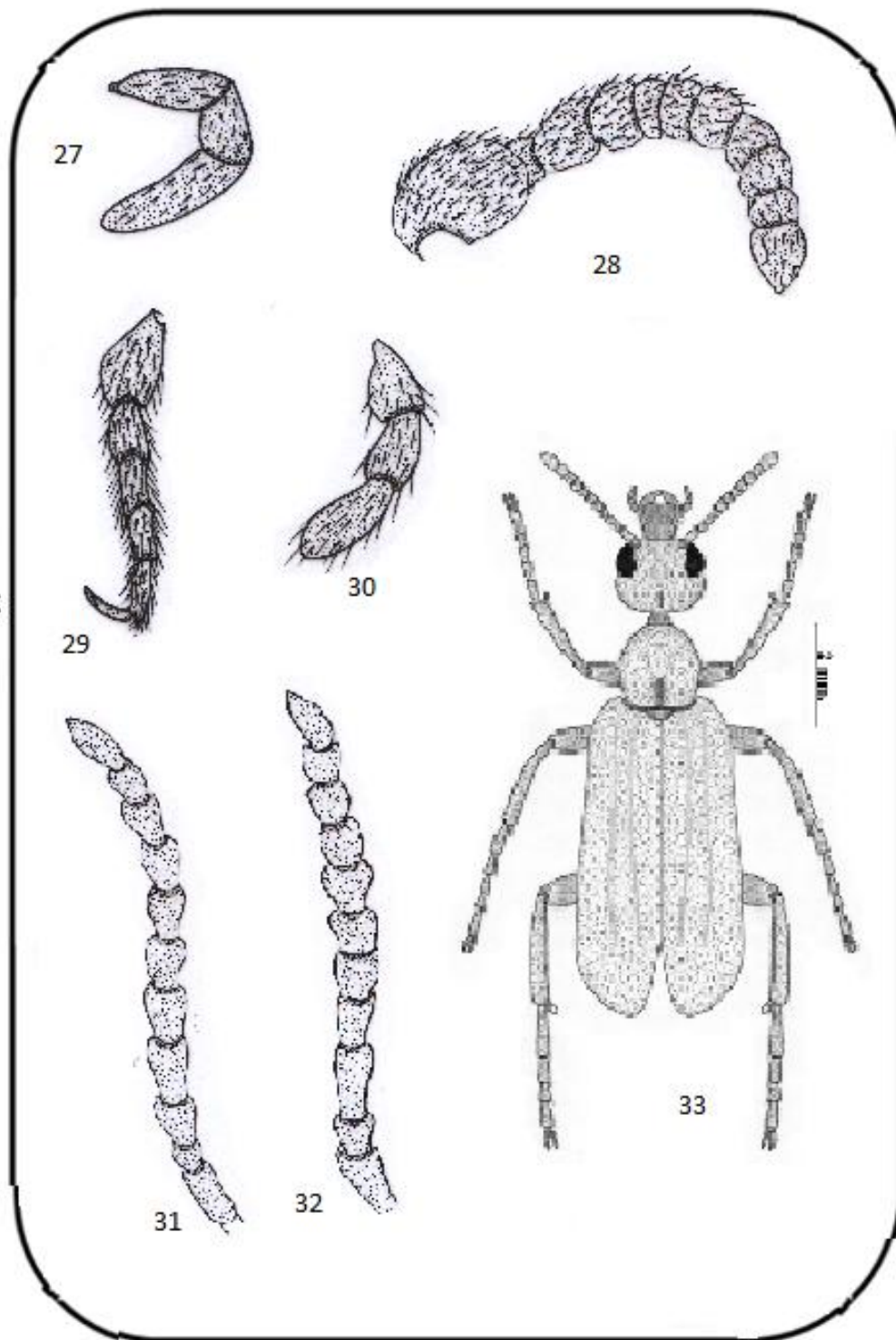
Plate, II



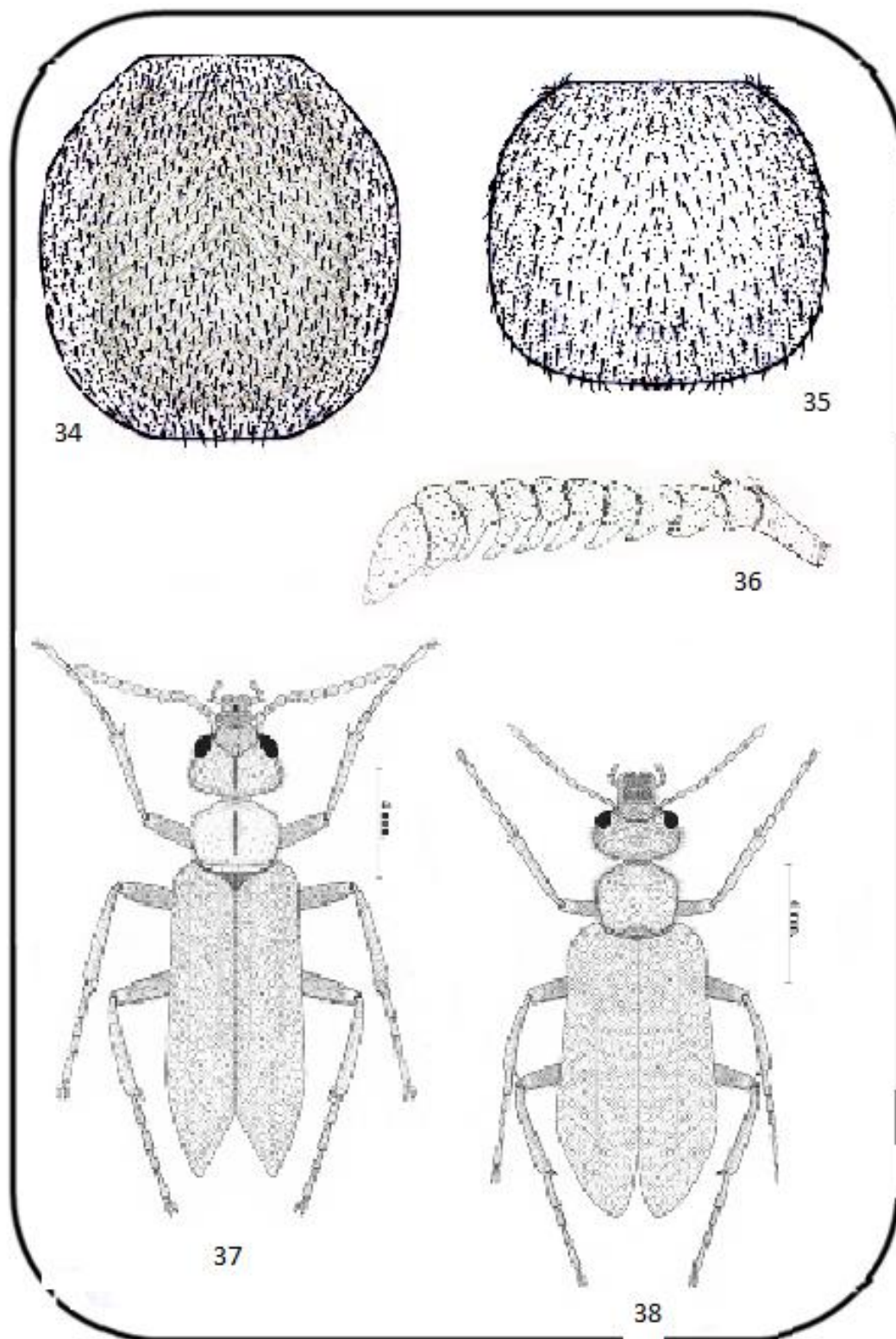
Plate, III



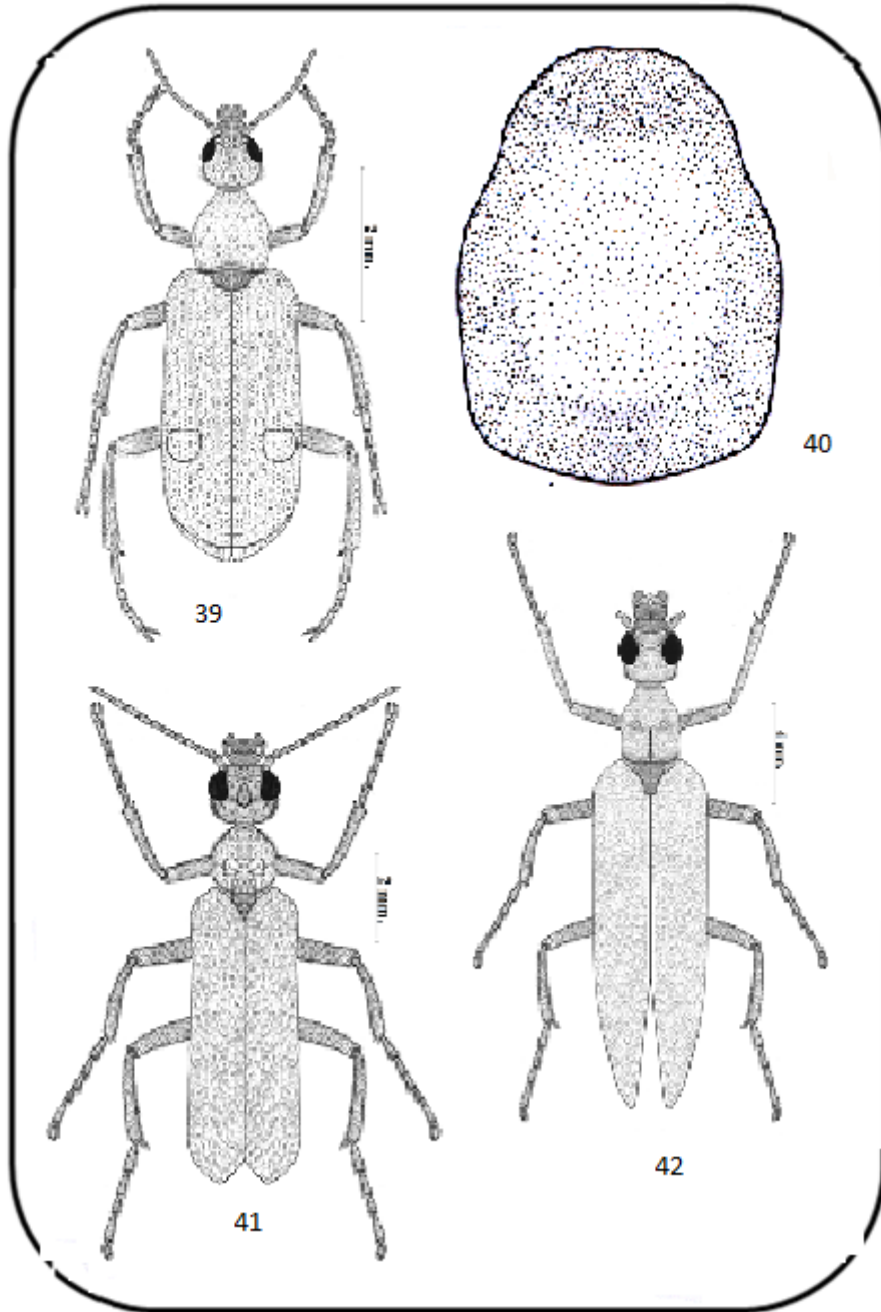
Plate, IV



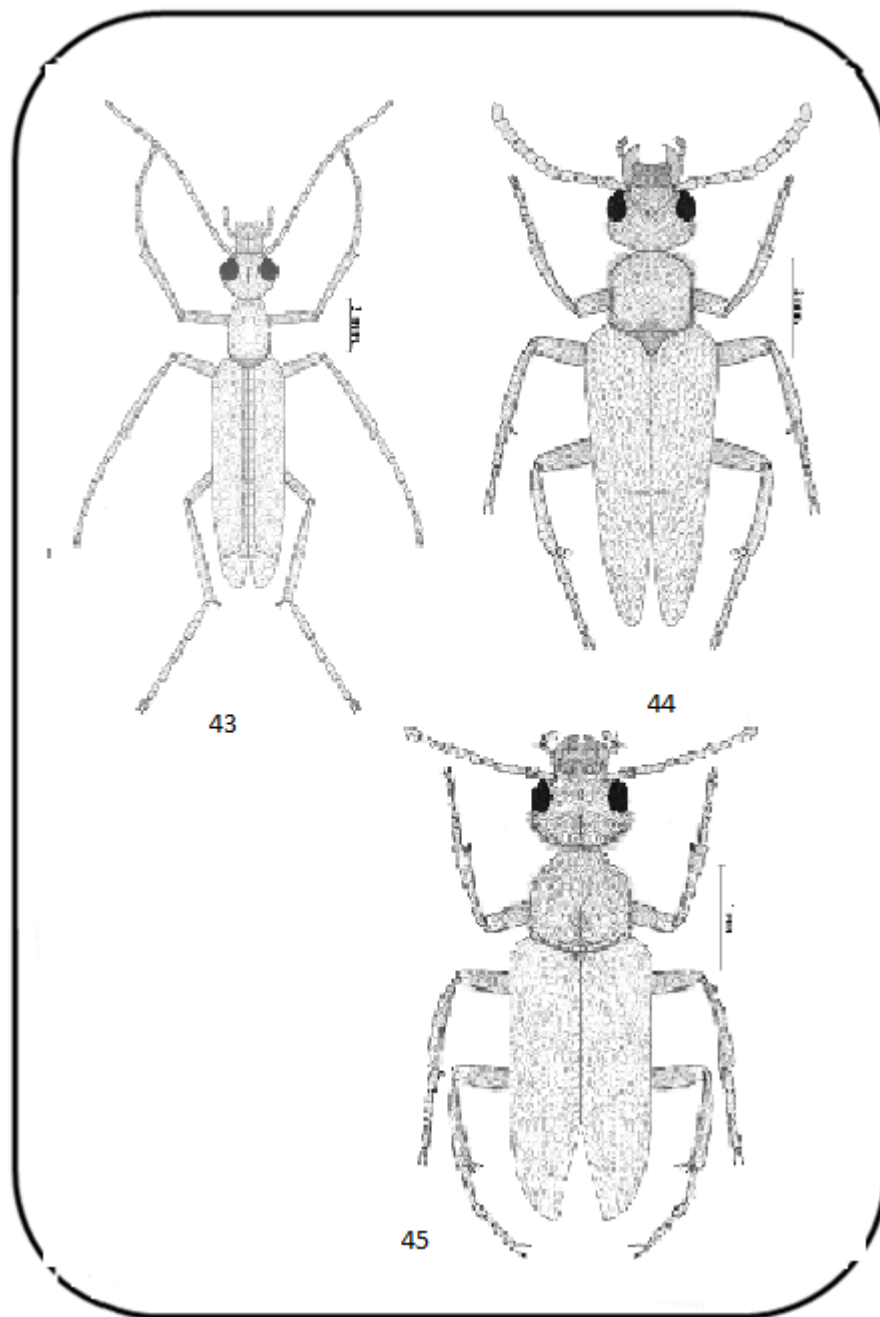
Plate, V



Plate, VI



Plate, VII



REFERENCES

- Abd El-Dayem, M. (1995): Taxonomic studies on some meloids (Family Meloidae-Order Coleoptera) in Egypt: 206Pp. (not published).
- Abeille de Perrin, E. (1880): Contribution à la fauna Coléoptérologique de la Méditerranéenne. *Bulletin de la Société d'Histoire Naturelle de Toulouse* 14: 233-262.
- Alfieri, A. (1976): The Coleoptera of Egypt (Monograph). *Mem. Soc. Ent. Egypté*, 5: Meloidae : 152-163.
- Baudi di Selve, F. (1878a): Europaea et circummediterraneae fauna Heteromerum specierum, quae Comes Dejean in suo Catalogo, edition 3a, consignavit, ex ejusdem collectione in R. Taurinensi Musaeo asservata, cum auctorum hodiernae recepta denominatione collatio. *Deutsche Entomologische Zeitschrift* 22: 337-376.
- Baudi di Selve, F. (1878b): Coleotteri eteromeri esistenti nelle collezioni del R. Museo zoologico di Torino ed in alter italiane. *Atti della Reale Accademia delle Scienze di Torino* 13: 765-866, 1027-1183.
- Bedel E. M. L. (1895): Synopsis du genre *Diaphorocera* Heyd. (1863). *L'Abeille* 28: 180.
- Bologna, M.A. (2008): New nomenclatorial and taxonomic acts, and comments, Meloidae, pp. 45–49; family Meloidae Gyllenhal, 1810, pp. 370–412. In: Löbl, I. & Smetana, A. (Eds) *Catalogue of Palaearctic Coleoptera. Vol. 5*. Apollo Books, Stenstrup. 670 p.
- Bologna, M.A. & Aloisi, G. (1992): Systematics of *Lydomorphus* Fairmaire 1882, with a description of the first instar larva of *L. dusaulti* (Dufour 1821) (Coleoptera Meloidae). *Tropical Zoology* 5: 55-71.
- Bologna, M. A. & Pinto, J.D. (2002): The Old World genera of Meloidae (Coleoptera): a key and synopsis. *Journal of Natural History* 36: 2013-2102.
- Borchmann, F. (1917): Pars 69: Meloidae, Cephaloidae. *Coleopterorum catalogus auspiciis et auxilio W. Junk, editus a S. Schenkling. Berlin: W. Junk*, 208 pp.
- Chobaut, A. (1921): Description d'un nouveau Diaphorocera (Col., Meloidae) de l'Algérie méridionale. *Bulletin de la société Entomologique* 1921: 298-299.
- Dejean, P. F. M. A. (1821): *Catalogue de la collection des coléoptères de M. le Baron Dejean*. Paris: Crevot, viii + 136 + 2 (errata) pp.
- Dejean, P. F. M. A. (1834): *Catalogue des coléoptères de la collection de M. le Comte Dejean. Deuxième édition. 3 Livraison*. Paris: Méquignon-Marvis Pères et Fils, pp. 177-256.
- Denier, P. (1935): Coleopterorum americanorum familiae Meloidarum enumeration synonymica. *Revista de la Sociedad Entomologica Argentina* 7: 139-176.
- El-Gharbawy, A. (2006): Taxonomic revision of the genus *Meloe* Linnaeus (Meloidae: Coleoptera) in Egypt. *Al-Azhar Bull. Sci.* Vol 2(Dec): pp.91-101.
- Fairmaire, L. (1876): Diagnoses de coléoptères du nord de l'Afrique. *Petites Nouvelles Entomologiques* 2: 37-38, 49-50, 93-94.
- Fairmaire, L. (1882): Coléoptères recueillis Par M. G. Rèveil chez les çomalis. In: Rèveil G.: *Faune et flore des pays çomalis*. Paris: Challames Ainé, iv + 104 pp., 1pl.
- Fairmaire, L. (1885): Descriptions de deux coléoptères algériens . *Bulletin de la Société Entomologique de France* 1885: xxxviii-xxxix.

- Geoffroy, E. L. (1762): *Histoire abrégée des insectes qui se trouvent aux environs de Paris ; dans laquelle ces animaux sont rangés suivant un ordre méthodique . [1762-1763] Tome Première*. Paris: Durand, xxviii + 523 pp. + 22 pls.
- Gyllenhal, L. (1810): *Insecta Suecica descripta. Classis I. Coleoptera sive Eleuterata. Tom I. Pars II*. Scaris: F. J. Leverentz, xx + 660 pp.
- Haag-Rutenberg, G. J. (1880): Beiträge zur Kenntniss der Canthariden. *Deutsche Entomologische Zeitschrift* 24: 17-19.
- Heyden, L. F. J. D. von. (1863): Zewi neue Coleopteren-Gattungen aus dem Mittelmeergebiet. *Berliner Entomologische Zeitschrift* 7: 126-130.
- Illiger, J. C. W. (1800): Vierzig neue Insekten aus der Hellwigschen Sammlung in Braunschweig. *Archiv für Zoologie und Zootomie (Wiedemann)* 1 (2): 103-150.
- Jacquelin Du Val, M. (1859-1863): Genera des Coleopteres d'Europe., Tom III: 424-439.
- Karsch, F. A. F. (1881): Die Käfer der Rohlf'schen Afrikanischen Expedition 1878-79. *Berliner Entomologische Zeitschrift* 25:41-50, pl. 2.
- Kaszab, Z. (1951b): A new species of Gonocephalum (Col., Tenebrionidae) from the Philippine Islands. *The Annals and Magazine of Natural History* (12) 4: 182-185.
- Kaszab, Z. (1952b): Über *Lydus susicus* Esc. Und die neuen Arten der Gattung *Lyttolydulus* Reit. (Col. Meloidae). *Entomologische Arbeiten aus dem Museum G. Frey* 3: 89-95.
- Kirsch, T. F. W. (1871): Neue Käfer-Arten aus Egypten gesammelt von Dr. Schneider. *Berliner Entomologische Zeitschrift* 14 [1870]: 389-396.
- Latreille, P. A. (1802): *Histoire naturelle, générale et particulière des crustacés et des insectes. Ouvrage faisant suite à l'histoire naturelle, générale et particulière, composée par Leclerc de Buffon, et rédigée par C. S. Sonnini, member de plusieurs sociétés savants. Familles naturelles des genres. Tome troisième*. Paris: F. Dufart, xii + 13-467 + [1] pp.
- Latreille, P. A. (1827): Description d'insectes d'Afrique par M. Caillaud. Pp. 271-292. In: Caillaud F. *Voyage à Méroé, au fleuve Blanc, au-delà de Fazoql dans le midi du royaume de Sennâr, à Syouah et dans cinq autres oasis; fait dans les années 1819, 1820, 1821 et 1822. Tome IV*. Paris; Imprimerie Royale, 416 pp.
- Leach, W. E. (1815): III. An essay on the British species of the genus *Meloe*, with description of two exotic species. *Transactions of the Linnean Society of London* 11 [1810]: 35-49, 2pls.
- Linnaeus, C. (1758): *Systema Naturae Per regna tria naturae, Secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus I. Ed. Decima, Reformata*. Holmiae: Laurentii Salvii, [5] + 6-823 + [1] pp.
- Lucas, P. H. (1847): Pp. 361-448. In: *Exploration scientifique de l'Algerie Pendant les années 1840, 1841, 1842, Publiée par ordre du gouvernement et avec le concours d'une Commission Académique. Sciences physiques Zoologie. Vol. II. Histoire naturelle des animaux articulés. Cinquième classe. Insectes. Premier ordre. Les coléopteres*. Paris: Imprimerie Nationale [1849], 590 pp., 47 pls.
- Maran, J. (1944): Vorarbeiten für eine monographische Bearbeitung der Gattung *Cerocoma* Geoffr. *Věstník Československe Zoologicke Společnosti v Praze* 9: [1941-1944]: 78-101.
- Marseul, S. A. de (1870): Monographie des mylabrides d'Europe et des contrées limitrophes en Afrique et en Asie. *L' Abeille, Mémoires d'Entomologie* 7 (2): 1-204, 2pls.

- Marseul, S. A. (1876b): Nouvelles et faits divers de l'Abeille. Mélanges (Suit). *L'Abeille. Journal d'Entomologie* 16 [1876-1878]: 35-36, 38-40.
1. Mulsant, E. (1857): *Histoire naturelle de coléoptères de France. Vésicants*. Paris: Magnin & Blanchard et Cie., 201 pp., 1 pl. + [9pp. suppl.].
- Mulsant, E. & Rey, C. (1858): Coup d'oeil sur les insectes de la famille des cantharidiens accompagné de la description de diverses espèces nouvelles ou peu connues. *Mémoires de l'Académie Impériale des Sciences. Belles-Lettres et Arts de Lyon. Classe des Sciences* (N. S.) 8: 122-220, 3 pls.
- Pinto, J. D. & Bologna, M. A. (1999): The New World genera of Meloidae (Coleoptera): a key and synopsis. *J. Nat. Hist.* 33: 569-619.
- Pinto, J.D. & Bologna, M.A. (2002): American beetles. A text book, published by *Library of Congress Cataloging-in- Publication Data* 2: 522-529.
- Reitter, E. (1885): Uebersicht der Arten der Gattung Cerocoma Geoff. *Deutsche Entomologische Zeitschrift* 29: 1-14.
- Reitter, E. (1907): Einige neue palaarktische Coleopteren. *Deutsche Entomologische Zeitschrift* 51: 484-487.
- Reitter, E. (1913): Eine Serie neuer Coleopteren aus der Palaearktischen Fauna. *Deutsche Entomologische Zeitschrift* 1913: 649-666.
- Solier, A. J. J. (1851): Insectos. Coleopteros. Pp. 1-285. In: Gay C.: *Historia Fisica y Política de Chile. Fauna Chilena. Zoologie Tomo. 5*. Paris: Mauldeet Renou, 563 pp.
- Turco, F. & Bologna, M.A., (2007): Revision of the genus *Diaphorocera* Heyden, 1863 (Coleoptera, Meloidae, Cerocomini). *Contributions to Zoology*, 76 (2): 63-85.
- Turco, F. & Bologna, M.A. (2011): Systematic revision of the genus *Cerocoma* Geoffroy, 1762 (Coleoptera: Meloidae: Cerocomini). *Zootaxa* 2853: 1-71.
- Turco, F.; Di Giulio, A. & Bologna, M.A. (2003): Sexual and cleaning behaviour and related morphology in the genus *Cerocoma* (Coleoptera: Meloidae). *Journal of Insect Behavior* 16: 257-278.
- Walker, F. (1871): *List of coleopteran collected by J. k. Lord. Esq. in Egypt, Arabia and near the African shore of the red sea. With characters of the undescribed species*. London: E.W. Janson, 19pp.
- Wellman, F. C. (1910): On the synonymy of the Meloidae (Coleoptera). *Entomologische Zeitschrift* 54: 22-26.