A cladistically based reinterpretation of the taxonomy of two Afrotropical tenebrionid genera Ectateus Koch, 1956 and Selinus Mulsant & Rey, 1853 (Coleoptera, Tenebrionidae, Platynotina)

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Abstract
On the basis of a newly performed cladistic analysis a new classification of the representatives of two Afrotropical tenebrionid genera, Ectateus Koch, 1956 and Selinus Mulsant & Rey, 1853 sensu Iwan 2002a, is provided. Eleoselinus is described as a new genus. The genus Monodius, previously synonymized with Selinus by Iwan (2002), is redescribed and considered as a separate genus. Following new combinations are proposed: Ectateus calcaripes (Gebien, 1904), Monodius laevistriatus (Fairmaire, 1897), Monodius lamottei (Gridelli, 1954), Monodius plicicollis (Fairmaire, 1897), Eleoselinus villieri (Ardoin, 1965) and Eleoselinus ursynowiensis (Kamiński, 2011). Neotype for Ectateus calcaripes and lectotypes for E. crenatus (Fairmaire, 1897), E. ghesquieri Koch, 1956 and Monodius malaisei malaisei Koch, 1956 are designated to fix the taxonomic status of these taxa. The following synonymies are proposed: Selinus monardi Kaszab, 1951 and Ectateus latipennis Koch, 1956 with E. crenatus (Fairmaire, 1897). Identification keys are provided to all known species of Ectateus sensu novum, Eleoselinus, Monodius and Selinus sensu novum.

Keywords
Africa, ecoregions, cladistics, identification key, new genus, taxonomy, Pedinini
Introduction

Pursuant to the classification of the family Tenebrionidae presented by Bouchard et al. (2005, 2011) Platynotina Mulsant & Rey, 1853 is one of the eight subtribes within the tribe Pedinini Eschscholtz, 1829. At present Platynotina consists of over 60 genera distributed in Afrotropical, Indomalayan, Nearctic and Neotropical realms (Iwan 2002b; Kamiński 2013c; Kamiński and Raś 2012).

According to the results of a cladystic analysis performed by Iwan (2002a), Ectateus Koch, 1956 and Selinus Mulsant & Rey, 1853 are the members of the platynotoid evolutionary lineage within the subtribe Platynotina Mulsant & Rey, 1853. The representatives of both genera are distributed in the western parts of Central Africa (Iwan 2004a).

The current taxonomic concept of the genus Ectateus was proposed by Iwan (2002a) and modified by Kamiński and Raś (2011) to: circular depressions on the lateral sides of clypeus and genae, pronotum with anterior angles distinctly protruding anteriorly, elytral humeri not protruding outwards, apical part of epipleuron and fifth ventrite unbordered. The taxonomic concept of Selinus was also established by Iwan (2002a) and is as follows: upper edge of elytral base fused with humerus, anterior pronotal angles distinctly protruding anteriad, short metasternum and bursa copulatrix with two sacs. Unfortunately both of the above mentioned taxonomic concepts were based only on a few representatives of their genera. The preliminary study of the entomological material has shown that some of the representatives of Ectateus shares many morphological characters and distributional pattern with certain species of the Selinus and vice versa.

According to the results of a cladistic analysis performed by Iwan (2002a) Ectateus and Selinus are members of two sister clades. In the key to the genera of World Platynotina they are distinguished by the structure of 5th abdominal ventrite (Selinus – with bordering or border interrupted; Ectateus – without bordering) (Iwan 2002a). Unfortunately, this feature is no longer relevant which may easily lead to misidentification (five of seven species of Selinus do not match this character). Additionally, Ectateus and Selinus shares some unique (within whole subtribe) morphological features (e.g. slender antennomeres, specific clavae structure) and similar distributional pattern (Iwan 2002a, 2002b, Kamiński and Raś 2011). All this suggests that both of the mentioned genera can be more closely related than it was implied by Iwan (2002a).

The aim of this paper was to test the monophyly of Ectateus and Selinus and propose a stable classification for the representatives of these genera.

Material and methods

Morphological studies. The descriptive sequence used in this study is in accordance with Kamiński (2013b). Morphological terms follow Matthews et al. (2010); with additional specialized terms used for the male (Iwan 2001b, 2004b) and female genitalia (Banaszkiewicz 2006).
Measurements, taken using a filar micrometer, were as follows: width of anterior elytral margin (from humeral angle to scutellum); body length (from anterior margin of labrum to elytral apex); body width (maximum elytral width).

For examination of internal structures, specimens were dissected and whole abdomens were cleared in 10% cold potassium hydroxide overnight (Iwan 2000).

Images were taken using a Canon 1000D body with accordion bellows and Industar 61L/3 MC 50 mm f/2.8 lens, and with a Hitachi S-3400N SEM in MIIZ. Chosen SEM photographs were colored using Photoshop CS5.

**Entomological material.** This study was based on the material from the following collections:

- **BMNH** Natural History Museum, London, Great Britain
- **HNHM** Hungarian Natural History Museum, Budapest, Hungary
- **JFCS** Julio Ferrer Collection, Haninge, Sweden
- **MHNG** Muséum d’histoire naturelle de la Ville de Genève, Geneva, Switzerland
- **MIIZ** Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland
- **MNB** Museum für Naturkunde, Germany, Berlin
- **MNHN** Muséum National d’Histoire naturelle, Paris, France
- **MHNL** Centre de Conservation des Collections, Muséum d’Histoire Naturelle, Lyon, France
- **MRAC** Royal Museum for Central Africa, Tervuren, Belgium
- **RBINS** Royal Belgian Institute of Natural Sciences, Brussels, Belgium
- **TMNH** Ditsong National Museum of Natural History, Pretoria, Republic of South Africa
- **SMNS** Staatliches Museum für Naturkunde, Stuttgart, Germany
- **ZMAS** Zoological Museum, Academy of Sciences, Sankt Petersburg, Russia

**Phylogenetic analysis.** Based on the results of a comparative analysis of the morphology of available material, including the type specimens, I propose a following synonymy: *Selinus monardi* Kaszab, 1951 and *Ectateus latipennis* Koch, 1956 with *Ectateus crenatus* (Fairmaire, 1897). Also, I disagree with the synonymy of *Selinus calcaripes* Gebien, 1904 with *Ectateus curtulus* (Fairmaire, 1893) proposed by Koch (1956) and I propose to treat this taxon as an independent species – not as a synonym of *E. curtulus*. For detailed information see the descriptions of these taxa included in the results section of this publication.

The operational taxonomic units (OTUs) representing the genus *Ectateus* consists of all (8) known species (considering above mentioned nomenclatural acts): *E. crenatus* (Fairmaire, 1897), *E. curtulus* (Fairmaire, 1893), *E. ghesquierei* Koch, 1956, *E. laevistriatus* (Fairmaire, 1897), *E. lamottei* (Gridelli, 1954), *E. modestus* (Fairmaire, 1887), *E. ursynowiensis* Kamiński, 2011 and *E. villiersi* Ardoin, 1965. Also, all (7) known species of *Selinus* were included in the phylogenetic analysis: *S. convexipennis* Gebien, 1904, *S. gravis* Koch, 1956, *S. malaisei* Koch, 1956, *S. medius* Fairmaire,
1897, *S. planus* (Fabricius, 1792), *S. plicicollis* Fairmaire, 1897 and *S. striatus* (Fabricius, 1794). The above mentioned taxa form the ingroup.

*Zidalus latipes* (Sahlberg, 1823) was used as the most distant outgroup on which the character polarization process was performed. According to Iwan’s (2002a) hypothesis the genus *Zidalus* Mulsant & Rey, 1853 is a sister clade to all afrotropical platynotoid genera.

*Lechius abacoides* (Fairmaire, 1902), *Pseudoselinus punctatostriatius* (Gerstaecker, 1854), *Upembarus upembaensis* Koch, 1956 were used to test the monophyly of the clade *Ectateus*+*Selinus*. According to the results of Iwan’s (2002a) cladistic analysis the genus *Lechius* Iwan, 1995 together with *Pseudoselinus* Iwan, 2002 and *Upembarus* Koch, 1956 form a sister clade to the *Ectateus* generic group (which includes *Ectateus* and *Selinus*). This hypothesis was supported by more recent studies (Iwan and Kamiński 2012, Kamiński 2012, Raś and Kamiński 2013).

The data matrix originated in Mesquite (Maddison and Maddison 2011). Parsimony analysis was conducted under equal weights in TNT (Goloboff et al. 2003). Most parsimonious tree was obtained by the “Implicit enumeration”. Jackknife support (absolute frequencies) was calculated with 36 removal probability using 2000 replicates. Consistency index (CI) and retention index (RI) were used to assess the fit of data to the cladograms (Farris 1989). The results were illustrated using WinClada (Nixon 2002).

Species distribution. The distribution of species was illustrated using DIVA-GIS version 7.5 (Hijmans et al. 2012). The raster layer used in Figs 41–44 was downloaded from naturalearthdata.com (“Made with Natural Earth. Free vector and raster map data”). The division of Afrotropical Realm into ecoregions was adopted after Olson et al. (2001).

Results

Character matrix. A matrix of 40 characters was constructed for 20 operational taxonomic units (Table 1). Characters used for phylogenetic analyses have been treated as unordered. The missing data for *Ectateus curtulus* are caused by the fact that this species is only known from one specimen (holotype, female). The character states are presented in this section.

Head (characters 1–7)
1. Antenna: (0) slender, longer than pronotum; (1) robust, shorter than pronotum.
2. Antennomeres from 7 to 11: (0) widened, their width greater than the length; (1) elongated, their length greater than the width (Fig. 3).
3. Circular depressions on the lateral sides of clypeus and genae: (0) absent (Fig. 1); (1) present (Fig. 2).
4. Fronto-clypeal suture: (0) fine (Fig. 1); (1) coarse, clearly visible (Fig. 2).
5. Indentation between frons and clypeus on the lateral edge: (0) shallow (Fig. 1); (1) deep (Fig. 2).
6. Anterior tentorial pit: (0) shallow; (1) deep, clearly visible (Fig. 4).
7. Anterior part of mentum: (0) not elongated; (1) elongated.
Table 1. Character matrix for the cladistic analysis of the species of *Ectateus* and *Selinus* (sensu Iwan 2002a), with selected outgroup taxa: *Z. latipes*, *L. abacoides*, *P. punctatostriatus*, *U. upembaensis* (see also text).

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Prothorax (characters 8–18)

8. Anterior pronotal angles: (0) straight; (1) curved outwards (Fig. 5).
9. Lateral pronotal sides: (0) rounded; (1) sinusoidal (Fig. 5).
10. Pronotum: (0) widest at the middle (Fig. 5); (1) widest at the base (Fig. 6).
11. Pronotal margins: (0) not erected upwards; (1) strongly erected upwards (Raś and Kamiński 2013, Kamiński 2013c).
12. Ratio of prothorax width (tw) and pronotal disc height (dh): (0) < 5; (1) > 6 (Raś and Kamiński 2013, Kamiński 2013c).
13. Apophyseal depressions: (0) absent; (1) trapezoidal (Fig. 6); (2) rounded (Fig. 5).
14. Pronotal base: (0) the same width as elytral base; (1) narrower than elytral base.
15. Posterior pronotal angles: (0) not protruding towards elytra; (1) strongly protruding towards elytra.
16. Punctures on pronotal disc: (0) fine, the intervals between the punctures are greater than the 2 diameters of the puncture; (1) coarse, the intervals between the punctures are smaller than the diameter of the puncture.
17. Intercoxal process of prosternum: (0) flat or dented (Fig. 12); (1) bellied (Kamiński and Raś 2011: 650).
18. Intercoxal process of prosternum: (0) not widened at the apex; (1) strongly widened at the apex.
Mesothorax (characters 19–24)
19. Scutellum: (0) situated at the level of elytra; (1) impressed.
20. Elytral surface: (0) dull; (1) shiny.
21. Elytral intervals with transverse sculpture: (0) no; (1) yes (Fig. 8, 27).
22. Elytral intervals: flat (0); strongly convex (1).
23. Elytral striae: (0) impressed on whole length, with fine punctures (Fig. 9); (1) im-
pressed mainly near conspicuous punctures (Fig. 8).
24. Margins of elytra in basal part: (0) rounded; (1) subparallel (elytral humeri slightly
protruding outwards).

Metathorax (character 25)
25. Metaventrite: (0) without a coarse longitudinal depression; (1) with a coarse lon-
gitudinal depression.

Abdomen (characters 26–27)
26. 5th abdominal ventrite: (0) relatively narrow; (1) strongly widened (Fig. 10).
27. 5th abdominal ventrite: (0) unbordered (Fig. 10); (1) bordered (Fig. 11).

Legs (character 28–31)
28. Male protarsi widened: (0) no; (1) yes (Fig. 13).
29. Female protarsi widened: (0) no; (1) yes.
30. Male profemora (0) relatively wide (length/width = 3.2-3.6); (1) relatively slender
(length/width = 4.0-5.6).
31. Denticle at the apex of the inner face of male mesotibia: (0) small, sometimes ab-
sent; (1) large (Fig. 7).

Male and female genitalia (character 32–39)
32. Penis wide: (0) no (Figs 20-21); (1) yes, at least 4 times wider than clavae (Figs 14–19).
33. Clavae: (0) straight (Figs 14-19, 21); (1) curved, hook-shaped (Fig. 20).
34. Clavae: (0) short, their length less than half of the length of parameres; long, their
length more than half of the length of parameres (1).
35. Parameres strongly extended apically: (0) no; (1) yes (Fig. 18).
36. Parameres narrowest in the half of their length (0) no; (1) yes (Fig. 20).
37. Apex of parameres: (0) not fused (Fig. 20); (1) fused, not emarginated at apex (Figs
14, 16); (2) fused, emarginated at apex (Figs 15, 17).
38. Bursa copulatrix: (0) without additional sacs; (1) with 2 additional sacs (Fig. 23).
39. Paraproct longer than coxites: (0) no (Fig. 22); (1) yes.

Other (character 40)
40. Body size: (0) more than 10.0 mm; (1) less than 9.0 mm.

Phylogenetic analysis. The cladistic analysis yield a single most parsimonious
cladogram (Fig. 25) with a length of 57 steps, a consistency index (CI) of 74 and a re-
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tention index (RI) of 90. According to the obtained cladogram the genera Ectateus and Selinus, in their current interpretations, are paraphyletic (Fig. 25). The Ectateus clade is supported by two synapomorphies: male protibia slender (length/width = 4.0-5.6) (char. 30:1) and clavae curved, hook-shaped (char. 33:1). Also one homoplasy was recovered for this clade – male protarsi relatively narrow (char. 28:0). The Selinus clade is supported by single synapomorphy – clavae long, their length more than half of the length of parameres (char. 34:1) – and two homoplasies: antennomeres from 7 to 11 elongated (their length greater than the width), anterior tentorial pit deep, clearly visible (char. 2:1, 6:1). The monophyly of the Ectateus+Selinus clade was supported during the analysis by the following two synapomorphies: ratio of prothorax width (tw) and pronotal disc height (dh) greater than 5 (char. 12: 0) and apophyseal depressions on pronotal disc present (char. 13:1).

Two main species groups were recovered within the Ectateus clade – modestus group and villiersi group. The branch support reported for these groups was relatively high (Fig. 25). The phylogenetic relationships within the modestus group were supported unequally. Relatively low Jackknife values were reported within the clade composed of E. modestus, S. calcaripes, E. ghesquierei and E. crenatus. According to the results of a cladistic analysis the modestus group is characterized by following synapomorphies: fronto-clypeal suture coarse, clearly visible (char. 4:1), anterior pronotal angles curved outwards (char. 8:1), pronotal margins strongly erected upwards (char. 11:1), apophyseal depressions rounded (char. 13:2), pronotal base narrower than elytral base (char. 14:1), scutellum impressed (char. 19:1) and elytral intervals with transverse sculpture (char. 21:1). Additionally, one homoplasy was recovered: posterior pronotal angles strongly protruding towards elytra (char. 15:1).

Despite the fact that the species aggregated in the modestus group (Fig. 25) are homogeneous in their morphology the cladistic analysis revealed some species groups. According to the results E. curtulus is a sister taxon to all other modestus group species. This relationship is supported highly supported (Jackknife support = 91; char. 3:1, 6:1, 9:1). Unfortunately, E. curtulus is known only form a single specimen (holotype, female), therefore the above mentioned phylogenetic hypothesis should be reconsidered once the male specimen will be found.

The four remaining species occurred in two separate clades (Fig. 25). The first clade which consists of E. ghesquierei and E. crenatus is defined by the following synapomorphies: convex elytral intervals (char. 22:1) and a small body size (char. 40:1). The other clade composed of E. modestus and E. calcaripes comb. n. is only supported by a single homoplasy - antennomeres from 7 to 11 elongated (char. 2:1). However, these two species are very similar in general morphology – the females are almost impossible to separate or distinguish (Figs 45, 49).

According to the results of a cladistic analysis the villiersi group is characterized by following synapomorphies: antenna robust, shorter than pronotum (char. 1:1), intercoxal process of prosternum bellied (char. 17:1) and metaventrite with coarse longitudinal depression (char. 25: 1).
Taking into consideration other significant morphological differences between modestus and villiersi groups (char. 1, 4, 8, 11, 13–15, 17, 19, 21, 25) it is reasonable to treat them as two separate genera.

Two main highly supported species group were recovered within the Selinus clade – convexipennis group and planus group (Fig. 25). The first group contains the type species (convexipennis) of Monodius Koch, 1956 (genus synonymized with Selinus by Iwan in 2002a).

According to the results of a cladistic analysis the convexipennis group is characterized by following synapomorphies: 5th abdominal ventrite strongly widened (char. 26:1), female protarsi widened (char. 29:1), penis wide, at least 4 times wider than clavae (char. 32:1), apex of parameres fused (char. 37:1) and bursa copulatrix with 2 additional sacs (char. 38:1).

S. gravis occurred as a sister taxon to all other convexipennis group species, however this relationship is not highly supported (Fig. 25). The remaining species of the above mentioned group were divided into two separate clades (Fig. 25). The first one which consists of S. malisei, S. medius and S. plicicollis is defined by the following synapomorphies: margins of elytra in basal part subparallel (elytral humeri slightly protruding outwards) (char. 24:1), denticle at the apex of the inner face of male mesotibia large (char. 31:1), apex of parameres fused and emarginated at apex (char. 37:2). This clade is also supported by a single homoplasy – elytral surface shiny (char. 20:0). The second clade (S. convexipennis, S. laevistriatus and S. lamottei) is defined by two homoplasies: indentation between frons and clypeus on the lateral edge deep (char. 5:1) and posterior pronotal angles strongly protruding towards elytra (char. 15:1).

According to the results of a cladistic analysis the planus group is characterized by a following synapomorphy: paraproct longer than coxites (char. 39:1). Additionally, two homoplasies were recovered: pronotum widest at the base (char. 10:1) and 5th abdominal ventrite bordered (char. 27:1).

Because of significant morphological differences between convexipennis group and planus group, especially the ones concerning the male (char. 32, 37) and female genitalia (char. 38, 39), I propose to consider them as two separate genera.

On the basis of the aforementioned results I propose to classify the analyzed ingroup species in four genera: Ectateus (based on modestus group), Monodius stat. r. (based on convexipennis group), Eleoselinus gen. n. (based on villiersi group) and Selinus (based on planus group).

A new classification and diagnostic characters of the analyzed ingroups species are presented below.

Genus Ectateus Koch, 1956
http://species-id.net/wiki/Ectateus

Type species. Anchophthalmus modestus Fairmaire, 1887; by original designation.

Diagnosis. The following character combination is unique for Ectateus within the whole subtribe Platynotina: (1) fronto-clypeal suture coarse, clearly visible, (2) anterior pronotal angles curved outwards, (3) pronotal margins strongly erected upwards, (4) apophyseal depressions rounded, (5) pronotal base narrower than elytral base, (6) posterior pronotal angles strongly protruding towards elytra, (7) scutellum impressed, (8) elytral intervals with transverse sculpture (9) male protarsi relatively narrow, (10) male protibia slender (length/width = 4.0–5.6) and (11) clavae curved, hook-shaped.

Distribution. Ectateus specimens have been collected in the following ecoregions of Central Africa (Cameroon, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabonese Republic, Republic of Rwanda, Republic of the Congo, South Sudan): Albertine Rift montane forests, Angolan Miombo woodlands, Atlantic Equatorial coastal forests, East Sudanian savanna, Mount Cameroon and Bioko montane forests, Northeastern Congolian lowland forests, Northwestern Congolian lowland forests, Northern Congolian forest-savanna mosaic, Southern Congolian forest-savanna mosaic, Western Congolian forest-savanna mosaic (Fig. 41).

Species included (5). Ectateus calcaripes (Gebien, 1904), comb. n., E. crenatus (Fairmaire, 1897), E. curtulus (Fairmaire, 1893), E. ghesquierei Koch, 1956 and E. modestus (Fairmaire, 1887).

Key to the species of Ectateus

1 Clypeus and genae without depressions. Pronotal margins rounded. Elytral intervals with conspicuous punctures ......................... Ectateus curtulus
   – Circular depressions on the lateral sides of clypeus and genae (Fig. 2). Pronotal margins sinusoidal (Fig. 5). Elytral intervals without punctures or punctures very fine (Fig. 8, 27) .......................................................... 2

2 Body size: 7.0–9.0 mm. Antennomeres form 7 to 11 transverse. Elytral striae with deep punctures; intervals convex (Fig. 8) ......................
   – Body size: 11.5–14.0 mm. Antennomeres form 7 to 11 elongated. Elytral striae with superficial punctures; intervals flat (Fig. 27) ................. 4

3 Pronotal disc with a longitudinal groove in the middle (Fig. 5). Male protibiae as in Fig. 33; mesofemorae simple .................. Ectateus ghesquierei
   – Pronotal disc without longitudinal groove. Male protibiae as in Fig. 34; mesofemorae with a large denticle on the posterior face (Fig. 35) ..........
   ....................................................................................................................... Ectateus crenatus

4 Intercoxal process protruding towards mesoventrite; peaked at the apex. Male protibiae as in Fig. 31 ............................................ Ectateus calcaripes
   – Intercoxal process not protruding towards mesoventrite; rounded at the apex. Male protibiae as in Fig. 32 .............................................. Ectateus modestus
Ectateus calcaripes (Gebien, 1904), comb. n.
http://species-id.net/wiki/Ectateus_calcaripes
Figs 3, 20, 27, 31, 41, 45


Notes. The types of Selinus calcaripes seems to be lost. According to the information provided by Iwan (2002b) they should be deposited in Naturhistorisches Museum collection (Basel, Switzerland). Unfortunately, the curators do not confirm this statement. Additionally, during the preparation of my recent scientific project – Phylogeny, biogeography and generic classification of the Ectateus generic group (Coleoptera: Tenebrionidae: Platynotina) – I have studied diverse entomological material concerning the subtribe Platynotina from several collections across the World and I did not managed to locate these specimens.

Based only on the original species descriptions Koch (1956) proposed to consider Selinus calcaripes as a synonym of Ectateus curtulus (Fairmaire, 1893). Unfortunately, the morphology of the holotype of Ectateus curtulus (damaged female – Fig. 47) do not correspond to Gebien’s (1904) description of Selinus calcaripes and Koch’s (1956) interpretation of Ectateus curtulus. Both publications refer rather to a morphological form that is very closely to Ectateus modestus and differers from it mainly by the structure of male protibiae (Figs 31–32). A consistent to the above mentioned descriptions morph was found in the studied material. It was included in the cladistic analysis as Selinus calcaripes.

The results of a cladistic analysis confirmed the aforementioned assumption that Ectateus curtulus and Selinus calcaripes represent two distinct morphological forms (Fig. 25). They can be easily distinguished by the structure of head (char. 3, 5), pronotum (char. 9) and elytra (elytral intervals with conspicuous punctures in E. curtulus). Additionally, the results shows that Selinus calcaripes is very closely related to Ectateus modestus – which is consistent with Gebien’s (1904) description and Koch’s (1956) interpretation.

Taking into consideration the difficulties associated with Selinus calcaripes I propose to designate a neotype to clarify the taxonomic status of this species. Additionally, on the basis of the results of a cladistic analysis I propose to treat this taxon as an independent species – not as a synonym of Ectateus curtulus.

Figures 1–7. Head, dorsal view (1, 2), ventral view (4); antenna (3); pronotal disc (5, 6); mesotibia (7). E. calcaripes (3), E. crenatus (2), E. ghesquierei (5), M. medius (7), M. plicicollis (4), S. planus (1, 6).

Redescription. Habitus as in Fig. 45. Body length = 11.5–14.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.4–2.6).

Dorsal side of head dull, with punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture coarse. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 8.0–8.6). Mentum with median part narrow. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.0–1.1). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.1–1.2). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–3.0).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.4–0.5); dull, with coarse punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and protruding outwards. Lateral margins of pronotal disc sinusoidal. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions rounded. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures; intervals non-convex, with transverse sculpture (Fig. 27). Elytral base slightly rounded. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular; situated in a depression.

Intercoxal process protruding towards mesoventrite; peaked at the apex. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.2). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).
Male legs. Protarsi slightly narrow. Protibiae as in Fig. 31. Mesotibiae and mesofemorae with large denticle. Metafemorae with an hair fringe. Female legs simple.

Male genitalia. Parameres narrowest in the half of their length; length equal to the 0.2 of the rest of aedeagal tegmen (Fig. 20). Clavae hook-shaped (Fig. 20). Female genitalia. Paraproct equal to coxites. Bursa copulatrix with a sclerite in the distal part. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of Central Africa (Cameroon, Central African Republic, Democratic Republic of the Congo, South Sudan): Atlantic Equatorial coastal forests, East Sudanian savanna, Mount Cameroon and Bioko montane forests, Northeastern Congolian lowland forests, Northwestern Congolian lowland forests (Fig. 41).

**Ectateus crenatus** (Fairmaire, 1897)
http://species-id.net/wiki/Ectateus_crenatus
Figs 2, 8, 12, 34–36, 41, 46


*Selinus monardi* Kaszab, 1951: 2 (syn. nov.)


**Notes.** While describing *Ectateus latipennis*, Koch has noted that types of *Ectateus crenatus* were unknown to him. The characters used by Koch to separate those two species (body size, pronotum structure) were based only on the Fairmaire (1897) description. During the examination of available material I have not found any consistent morphological characters to separate those two species. Therefore, I propose to consider *E. latipennis* as a synonym of *E. crenatus*.

The examination of the type material representing *Selinus monardi* resulted in similar conclusions – there are no consistent morphological characters to separate it from *E. crenatus*.

Figures 8–13. Elytral disc (8, 9); 5th abdominal ventrite (10, 11), intercoxal process of prothorax (12), male protarsi (13). *E. crenatus* (8, 12), *M. convexipennis* (10), *M. malaiset* (9), *M. plicicollis* (13), *S. striatus* (11).
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**Redescription.** Habitus as in Fig. 46. Body length = 7.0–9.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.4–2.6).

Dorsal side of head shiny, with punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture coarse. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 5.7–6.5). Mentum with median part narrow. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.0–1.2). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.1–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–3.0).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6); shiny, with coarse punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and protruding outwards. Lateral margins of pronotal disc sinusoidal. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions rounded. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with coarse punctures (Fig. 8); intervals convex, with transverse sculpture and fine punctuation (Fig. 8). Elytral base slightly rounded. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular; situated in a depression.

Intercoxal process protruding towards mesoventrite, peaked at the apex, slightly saddle-like. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of
metaventrite = 2.1–2.2). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Male legs. Protarsi slightly narrow. Protibiae as in Fig. 34. Mesotibiae and mesofemorae with large denticle (Figs 35–36). Metafemorae with an hair fringe. Female legs simple.

Male genitalia. Parameres narrowest in the half of their length; length equal to 0.2 of the rest of aedeagal tegmen. Clavae hook-shaped. Female genitalia. Paraproct equal to coxites. Bursa copulatrix without sclerites. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of Central Africa (Cameroon, Democratic Republic of the Congo, Equatorial Guinea, Gabonese Republic, Republic of the Congo): Atlantic Equatorial coastal forests, Northern Congolian forest-savanna mosaic, Northwestern Congolian lowland forests, Southern Congolian forest-savanna mosaic, Western Congolian forest-savanna mosaic (Fig. 41).

**Ectateus curtulus** (Fairmaire, 1893)
http://species-id.net/wiki/Ectateus_curtulus
Fig. 47


**Studied material.** Holotype (Fig. 47), female (MNHN): „l’Oubanghi“.

**Redescription.** Habitus as in Fig. 47. Body length ca. 12.5 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum ca. 1.2; length ratio elytra / the middle of pronotum ca. 2.6).

Dorsal side of head dull, with punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture coarse. Clypeal emargination relatively deep (clypeal emargination width / depth ratio ca. 8.1). Mentum with median part wide. Submentum with short base. 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd ca. 3.0).

Pronotal disc transverse (middle of pronotum length / width ratio ca. 0.5); dull, with coarse punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and protruding outwards. Lateral margins of pronotal disc rounded. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions rounded. Pronotal hypomera dull, without punctures.

Elytra oblong (elytra length / width ratio ca. 1.2). Elytral striae with conspicuous punctures; intervals non-convex, with transverse sculpture and conspicuous punctuation (2 diameters apart). Elytral base slightly rounded. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular; situated in a depression.

Intercoxal process protruding towards mesoventrite, peaked at the apex, slightly saddle-like. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite be-
tween the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite ca. 2.1). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Female legs simple.


**Distribution.** The only known specimen was collected in the Oubanghi (Central Africa). Because of the general character of the geographical reference it can not be translated into ecoregions.

**Ectateus ghesquierei** Koch, 1956
[http://species-id.net/wiki/Ectateus_ghesquierei](http://species-id.net/wiki/Ectateus_ghesquierei)
Figs 5, 33, 41, 48


**Redescription.** Habitus as in Fig. 48. Body length = 8.0–9.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.5–2.6).

Dorsal side of head dull, with punctures (the intervals between the smaller than the diameter of the puncture). Frontoclypeal suture coarse. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 9.0–9.3). Mentum with median part narrow. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.0–1.1). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.1–1.2). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.7–3.0).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.4–0.5); dull, with coarse punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and protruding outwards. Lateral margins of pronotum sinusoidal. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions rounded (Fig. 5). Pronotal hypomera shiny; without punctures.
Elytra oblong (elytra length / width ratio = 1.1–1.3). Elytral striae with conspicuous punctures; intervals convex, with transverse sculpture. Elytral base slightly rounded. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular, situated in a depression.

Intercoxal process protruding towards mesoventrite, peaked at the apex, slightly saddle-shaped. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.0–2.2). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Male legs. Protarsi slightly narrow. Protibiae as in Fig. 33. Mesotibiae with large denticle. Metafemorae without fringle of hairs. Female legs simple.

Male genitalia. Parameres narrowest in the half of their length; length equal to the 0.2 of the rest of aedeagal tegmen. Clavae hook-shaped. Female genitalia. Paraproct equal to coxites. Bursa copulatrix without sclerites. Spermatheca with narrow ducts.

Distribution. This species has been collected in the following ecoregions of Central Africa (Democratic Republic of the Congo, Republic of the Congo): Southern Congolian forest-savanna mosaic, Western Congolian forest-savanna mosaic (Fig. 41).

_Ectateus modestus_ (Fairmaire, 1887)

http://species-id.net/wiki/Ectateus_modestus

Figs 32, 41, 49


Mayumbe: T. Kipanzu, de, Singa à Mbomba V/VI-58, Dr R. Laurent”, female (MNHN):

Redescription. Habitus as in Fig. 49. Body length = 12.0–14.0 mm. Elytra wider
and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio
elytra / the middle of pronotum = 2.4–2.6).

Dorsal side of head dull, with punctures (the intervals between the punctures are
smaller than the diameter of the puncture). Frontoclypeal suture coarse. Clypeal emar-
gination relatively deep (clypeal emargination width / depth ratio = 8.0–8.4). Mentum
with median part narrow. Submentum with short base. Maxillary palp not widened
(width of maxillary palp / length of 3rd antennomere = 1.0–1.1). Length of antennae
greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal
angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long
(length ratio of antennomere 3rd / 2nd = 2.7–3.0).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.4–0.5); dull,
with coarse punctures (the intervals between the punctures are smaller than the diam-
eter of the puncture). Anterior pronotal angles sharp and protruding outwards. Lateral
margins of pronotum sinusoidal. Apophyseal and basal depressions on pronotal disc
present; apophyseal depressions rounded. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punc-
tures; intervals non-convex, with transverse sculpture. Elytral base slightly rounded.
Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular;
situated in a depression.

Intercoxal process not protruding towards mesoventrite, rounded at the apex.
Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the in-
sertions of mid and hind coxae ca. 2). In both sexes abdominal process without tuber-
cles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite ca.
2.0. 5th abdominal ventrite without bordering; punctures fine (the intervals between
the punctures are greater than the 2 diameters of the puncture).

Male legs. Protarsi slightly narrow. Protibiae as in Fig. 32. Mesotibiae and mes-
ofemorae with large denticle. Metafemorae with an hair fringe. Female legs simple.

Male genitalia. Parameres narrowest in the half of their length; length equal to 0.2
of the rest of aedeagal tegmen. Clavae hook-shaped. Female genitalia. Paraproct equal
to coxites. Bursa copulatrix with a sclerite in distal part. Spermatheca with narrow ducts.

Distribution. This species has been collected in the following ecoregions of Central
Africa (Angola, Democratic Republic of the Congo, Republic of Rwanda, Republic of
the Congo): Albertine Rift montane forests, Angolan Miombo woodlands, Atlantic
Equatorial coastal forests, Western Congolian forest-savanna mosaic (Fig. 41).
Genus *Eleoselinus* gen. n.
http://zoobank.org/D78C17B9-5607-472D-BE6F-D28B8C33E23F
http://species-id.net/wiki/Eleoselinus

**Type species.** *Ectateus villiersi* Ardoin, 1965; here designated.


Non-dimorphic legs distinguish *Eleoselinus* from: *Anchophthalmops*, *Anchophthalmus*, *Ectateus*, *Microselinus*, *Monodius*, *Phymatoplata*, *Platykochius*, *Platymedvedevia* and *Selinus*. From *Kochogaster* it can be easily distinguished by a triangular submentum and lack of sclerites in bursa copulatrix (Kamiński and Iwan 2013). Not parallel body sides separates *Eleoselinus* form *Quadrieres* and *Glyptopteryx*. Additionally, from the latter it can be distinguished by flat elytral intervals and slightly sinusoidal base of pronotum (Iwan 2002). Fine hairs covering the body surface, narrow apical segments of maxillary palps and long basal apophyses of aedeagal tegmen separates *Eleoselinus* from *Phallocentrion* (Iwan 2001a).

The following character combination is unique for *Eleoselinus* within the whole subtribe Platynotina: (1) antenna robust, shorter than pronotum, (2) shallow anterior tentorial pits, (3) presence of apophyseal and basal depressions on pronotal disc, (4) intercoxal process of prosternum bellied, (5) metaventrite with coarse longitudinal depression, (6) 5th abdominal ventrite unbordered, (7) non dimorphic legs and maillary palps, (8) elytral intervals with fine punctures, (9) curved, hook-shaped clavae and (10) longitudinal coxites of ovipositor.

**Description.** Body length = 10.5–13.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.4–2.9).

Dorsal side of head dull, with fine punctures (the intervals between the punctures are greater than the 2 diameters of the puncture). Fronto-clypeal suture fine. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 5.5–5.7). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.0–1.2). Length of antennae slightly greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle ca. 0.9). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 3.2–3.5).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6); dull, with fine punctures (the intervals between the punctures are greater than the 3 diameters of the puncture). Lateral margins of pronotum narrowing towards apex. Apophyseal and basal depressions on pronotal disc present. Pronotal hypomera dull, without punctures.
Elytra oblong (elytra length / width ratio = 1.1–1.3). Elytral striae with fine punctures (the intervals between the punctures are greater than the 2 diameters of the puncture). Elytral intervals dull, non-convex, without punctures of with very fine punctuation. Elytral base slightly sinusoidal. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular.

Intercoxal process of prosternum bellied. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2), with longitudinal depression. In both sexes abdominal process without tubercles, relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.2). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Legs. Protarsi narrow. Other leg segments simple.

Male genitalia. Parameres narrowing towards apex; length equal to the 0.2 of the rest of aedeagal tegmen. Clavae hook-shaped. Female genitalia. Paraproct equal to coxites. Coxites narrow and long. Bursa copulatrix without sclerites.

**Etymology.** The name is derived from the combination of Eleo (prefix indicating the genus Eleodes Eschscholtz, 1829 – a poster beetle genus of the Third International Tenebrionoidea Symposium in Tempe, Arizona) and Selinus. This genus is named to thank the Steering Committee of the Third International Tenebrionoidea Symposium: Aaron Smith (lead organizer), Rolf Aalbu, Patrice Bouchard, Kojun Kanda, Nico Franz, Warren Steiner and Quentin Wheeler.

**Distribution.** Eleoselinus gen. n. specimens have been collected in the following ecoregion of Central Africa (Republic of the Congo): Western Congolian forest-savanna mosaic (Fig. 42).

**Species included** (2). _Eleoselinus villiersi_ (Ardoin, 1965), comb. n. and _E. ursynowiensis_ (Kamiński, 2011), comb. n.

**Key to the species of Eleoselinus gen. n.**

1. Pronotal sides evenly narrowing towards apex. Elytral striae impressed on whole length (see Kamiński and Raś 2011: 651). Intercoxal process of prosternum strongly protruding towards mesosternum (see Kamiński and Raś 2011: 650) .......................................................... **Eleoselinus villiersi**

– Pronotal sides rounded. Elytral striae impressed only near the punctures (see Kamiński and Raś 2011: 651). Intercoxal process of prosternum slightly protruding towards mesosternum (see Kamiński and Raś 2011: 650) ..................

.......................................................... **Eleoselinus ursynowiensis**
Eleoselinus villiersi (Ardoin, 1965), comb. n.
http://species-id.net/wiki/Eleoselinus_villiersi
Fig. 58


Redescription. Habitus as in Fig. 58. Body length = 10.5–12.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.7–2.9).

Dorsal side of head dull, with fine punctures (the intervals between the punctures are greater than the 4 diameters of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 5.5–5.7). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.0–1.2). Length of antennae slightly greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle ca. 0.9). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 3.2–3.5).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6), dull, with fine punctures (the intervals between the punctures are greater than the 3 diameters of the puncture). Anterior pronotal angles rounded and slightly protruding towards apex. Lateral margins of pronotal disc narrowing towards apex. Apophyseal and basal depressions on pronotal disc present. Pronotal hypomera dull, without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.3). Elytral striae with fine punctures (the intervals between the punctures are greater than the 4 diameters of the puncture). Elytral intervals dull, non-convex, without punctures. Elytral base slightly sinusooidal. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular.

Intercoxal process of prosternum bellied. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2); with longitudinal depression. In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.2). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Legs. Protarsi slightly narrow. Legs simple.

Male genitalia. Parameres narrowing towards apex; length equal to the 0.2 of the rest of aedeagal tegmen. Clavae hook-shaped. Female genitalia. Paraproct equal to coxites. Coxites narrow and long. Bursa copulatrix without sclerites.

Distribution. This species has been collected in the following ecoregion Central Africa (Republic of the Congo).
Eleoselinus ursynowiensis (Kamiński, 2011), comb. n.
http://species-id.net/wiki/Eleoselinus_ursynowiensis
Fig. 59


Morphological data. Because the original description (Kamiński and Raś 2011) of this species is relatively recent and consistent with the description style adopted in this study the morphology of this species was not redescribed.

Distribution. This species has been collected in the following ecoregion Central Africa (Republic of the Congo).

Genus Monodius Koch, 1956, stat. r.


Type species. Selinus convexipennis Gebien, 1904; by original designation.

Diagnosis. The following character combination is unique for Monodius within the whole subtribe Platynotina: (1) antennomeres from 7 to 11 elongated (their length greater than the width), (2) anterior tentorial pit deep, clearly visible, (3) 5th abdominal ventrite strongly widened, (4) female protarsi widened, (5) penis wide, at least 4 times wider than clavae, (6) clavae long, their length more than half of the length of parameres, (7) apex of parameres fused and (8) bursa copulatrix with 2 additional sacs.

Distribution. Monodius specimens have been collected in the following ecoregions of West and Central Africa (Burkina Faso, Cameroon, Federal Republic of Nigeria, Ivory Coast, Republic of Benin, Republic of Ghana, Republic of Liberia, Republic of Niger, Sierra Leone, Togolese Republic): Cross-Sanaga-Bioko coastal forests, Atlantic Equatorial coastal forests, Central African mangroves, Eastern Guinean forests, Guinean forest-savanna mosaic, Mount Cameroon and Bioko montane forests, Northern Congolian forest-savanna mosaic, Northwestern Congolian lowland forests, West Sudanian savanna, Western Guinean lowland forests (Figs 42–43).

Species included (7). Monodius convexipennis (Gebien, 1904), M. gravis Koch, 1956, M. laevisstriatus (Fairmaire, 1897), comb. n., M. lamottei (Gridelli, 1954), comb. n., M. malaisei Koch, 1956, M. medius (Fairmaire, 1897), M. plicicollis (Fairmaire, 1897), comb. n.
Key to the species of *Monodius*

1  Elytral surface dull. Margins of elytra in the basal part subparallel (elytral humeri slightly protruding outwards). Dentine at the apex of the inner face of male mesotibia large (Fig. 7). Apex of parameres emarginated at the apex (Figs 15, 17) .......................................................... 2

- Elytral surface shiny. Margins of elytra in the basal part rounded. Dentine at the apex of the inner face of male mesotibia small or absent (e.g. Fig. 29). Apex of parameres connected (Figs 14, 16) .................................................. 4

2  Pronotal apophyal depressions coarse. Male mesofemora with a denticle (similar to the one in *E. laevistriatus*, Fig. 40). Parameres strongly emarginated at the apex (Fig. 15) .................................................. *Monodius plicicollis*

- Pronotal apophyal depressions fine. Male mesofemora without denticles. Parameres slightly emarginated at the apex (Fig. 17) .................................................. 3

3  Male protibiae with median dilatation on the inner face (similar to the one in *M. convexipennis*, Fig. 37) .................................................. *Monodius medius*

- Male protibiae almost straight (Fig. 38) .................................................. *Monodius malaisei*

4  Body size: 16.0–19.0 mm. Elytral intervals with fine punctures (Fig. 26). Male protibiae as in Fig. 30 .................................................. *Monodius gravis*

- Body size: 12.0–14.5 mm. Elytral intervals with conspicuous punctures. Male protibiae as in Fig. 37 .................................................. 5

5  Pronotal disc with two circular depressions in the middle. Aedeagal tegmen as in Fig. 19 .................................................. *Monodius laevistriatus*

- Pronotal disc without circular depressions. Aedeagal tegmen as in Fig. 16, 18... 6

6  Elytral intervals with conspicuous punctures. Elytral apex as in Fig. 51. Aedeagal tegmen as in Fig. 16 .................................................. *Monodius convexipennis*

- Elytral intervals with very coarse punctures (Fig. 28). Elytral apex rounded. Aedeagal tegmen as in Fig. 18 .................................................. *Monodius lamottei*

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**Monodius convexipennis** (Gebien, 1904)

http://species-id.net/wiki/Monodius_convexipennis

Figs 10, 16, 37, 42, 50, 51


**Monodius convexipennis** (Gebien, 1904).– Koch 1956: 181; Iwan 1990: 430.

Redescription. Habitus as in Fig. 50. Body length = 13.0–14.5 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.4–2.6).

Dorsal side of head dull, with punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontooclypeal suture fine. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 7.0–7.5). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.1–1.2). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–2.9).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6), dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and strongly protruding towards front. Lateral margins of pronotal disc subparallel at their basal half. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull; without punctures.

Male legs. Protarsi slightly widened. Protibiae as in Fig. 37. Mesofemorae with a small denticle at the apex. Metatibiae and Metafemorae with an hair fringe. Female legs. Protarsi slightly widened. Other leg parts simple.
Male genitalia. Parameres narrowing towards apex; length equal to the 0.3 of the rest of aedeagal tegmen (Fig. 16). Clavae straight (Fig. 16). Female genitalia. Paraproct equal to coxites. Bursa copulatrix with two sacs. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of Central Africa (Cameroon): Atlantic Equatorial coastal forests, Central African mangroves, Cross-Sanaga-Bioko coastal forests, Mount Cameroon and Bioko montane forests, Northern Congolian forest-savanna mosaic, Northwestern Congolian lowland forests (Fig. 42).

**Monodius gravis** Koch, 1956

http://species-id.net/wiki/Monodius_gravis

Figs 14, 24, 26, 29, 30, 42, 52

**Monodius gravis** Koch, 1956: 184.


**Redescription.** Habitus as in Fig. 52. Body length = 16.0–19.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / middle of pronotum = 2.2–2.4).

Dorsal side of head dull, with fine punctures (the intervals between the punctures are greater than the 2 diameters of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 7.1–7.5). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.1–1.2). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–2.9).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6), dull, with fine punctures (the intervals between the punctures are greater than the 3 diameters of the puncture). Anterior pronotal angles sharp and strongly protruding toward the front. Lateral margins of pronotal disc rounded. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures; impressed on the whole length. Elytral intervals shiny, non-convex, with fine punctures (the intervals between the punctures are smaller than the diameter of the

Intercoxal process slightly protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and
hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.3). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Male legs. Protarsi widened. Protibiae as in Fig. 30. Mesofemorae with a small denticle at the apex. Metafemorae with an hair fringe. Female legs. Protarsi slightly widened. Other leg parts simple.

Male genitalia. Parameres narrowing towards apex; length equal to the 0.3 of the rest of aedeagal tegmen (Fig. 14). Clavae straight (Fig. 14). Female genitalia. Paraproct equal to coxites. Bursa copulatrix with two sacs. Spermatheca with narrow ducts (Fig. 24).

Distribution. This species has been collected in the following ecoregions of West Africa (Republic of Benin, Togolese Republic): Guinean forest-savanna mosaic (Fig. 42).

Monodius laevistriatus (Fairmaire, 1897), comb. n.
http://species-id.net/wiki/Monodius_laevistriatus
Figs 19, 40, 42, 53


Redescription. Habitus as in Fig. 53. Body length = 12.0–14.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.2–2.4).

Dorsal side of head dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 7.1–7.5). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.1–1.2). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–2.9).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6); dull, with fine punctures (the intervals between the punctures are greater than the 2 diameters of the puncture); with two circular depressions in the middle. Anterior pronotal angles sharp and strongly protruding towards front. Lateral margins of pronotal
disc rounded. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures; impressed on the whole length. Elytral intervals shiny, non-convex, with conspicuous punctures (the intervals between the punctures are smaller than the diameter of the puncture). Elytral base slightly sinusoidal. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum rounded.

Intercoxal process not protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles, relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.3). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

**Figure 25.** Phylogeny of the species of *Ectateus* and *Selinus sensu* Iwan 2002. Most parsimonious tree (L=57, CI=74, RI=90). Black circles represent single, non-homoplasious character state transformations, and white circles represent multiple, homoplasious character state transformations. The numbers above and below each circle correspond to character numbers and states, respectively. Additional numbers displayed at the top of branches represent Jackknife values (support below 50 was not illustrated). * – type species.
Male legs. Protarsi slightly widened. Protibiae as in *M. convexipennis*. Mesofemorae with a large denticle at the apex, mesotibia with a small denticle at the apex. Metafemorae with a hair fringe. Female legs. Protarsi slightly widened. Other leg parts simple.

Male genitalia. Parameres strongly narrowed toward apex; length equal to the 0.5 of the rest of aedeagal tegmen (Fig. 19). Clavae straight (Fig. 19). Female genitalia. Paraproct equal to coxites. Bursa copulatrix with two sacs. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of West Africa (Sierra Leone): Western Guinean lowland forests (Fig. 42).

*Monodius lamottei* (Gridelli, 1954), comb. n.
http://species-id.net/wiki/Monodius_lamottei
Figs 18, 28, 42, 54


**Redescription.** Habitus as in Fig. 54. Body length = 12.0–14.5 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.2–2.4).

Dorsal side of head dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Fronto-clypeal suture fine. Clypeal emargination relatively shallow (clypeal emargination width / depth ratio = 10.0–11.5). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.1–1.2). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–2.9).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6), dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and strongly protruding towards
front. Lateral margins of pronotal disc rounded. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull; without punctures.
Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures, impressed on the whole length. Elytral intervals shiny, non-convex, with coarse punctures (the intervals between the punctures are smaller than the diameter of the puncture). Elytral base slightly sinusoidal. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum rounded.

Intercoxal process protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles, relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.3). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).


Male genitalia. Parameres extended towards apex; length equal to the 0.5 of the rest of aedeagal tegmen (Fig. 18). Clavae straight (Fig. 18). Female genitalia. Paraproct equal to coxites. Bursa copulatrix with two sacs. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of West Africa (Ivory Coast, Republic of Liberia): Eastern Guinean forests, Western Guinean lowland forests (Fig. 42).

**Monodius malaisei** Koch, 1956

http://species-id.net/wiki/Monodius_malaisei

Figs 9, 17, 38, 43, 55

**Monodius malaisei** Koch, 1956: 188.


Redescription. Habitus as in Fig. 55. Body length = 13.0-14.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.2–1.3; length ratio elytra / the middle of pronotum = 2.2–2.4).

Figures 37–40. Male protibiae (37–39); male mesofemora (40). M. convexipennis (37), M. malaisei (38), S. planus (39), E. laevistriatus (40).
Dorsal side of head dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively shallow (clypeal emargination width / depth ratio = 10.0–11.5). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.1–1.2). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–2.9).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6), dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and strongly protruding towards front. Lateral margins of pronotal disc rounded. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull, without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures; impressed on the whole length. Elytral intervals dull, non-convex, with fine punctures (the intervals between the punctures are greater than the 4 diameters of the puncture). Elytral base slightly sinusoidal. Elytral humeri slightly protruding laterad. Wings absent. Scutellum rounded.

Intercoxal process protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles, relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.3). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).
Male legs. Protarsi slightly widened. Protibiae as in Fig. 38. Mesotibiae with a large denticle at the apex. Metafemorae with an hair fringe. Female legs. Protarsi slightly widened. Other leg parts simple.

Male genitalia. Parameres extended towards apex; length equal to the 0.2 of the rest of aedeagal tegmen (Fig. 17). Clavae straight (Fig. 17). Female genitalia. Paraproct equal to coxites. Bursa copulatrix with two sacs. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of West Africa (Republic of Ghana, Ivory Coast, Burkina Faso, Federal Republic of Nigeria, Republic of Niger): Eastern Guinean forests, Guinean forest-savanna mosaic, West Sudanian savanna (Fig. 43).

**Key to the subspecies of Monodius malaisei**

1. Male metatibiae curved and slightly dilated on distal half ..........................

   .................................................................................. *Monodius malaisei malaisei* Koch, 1956

   – Male metatibiae straight........... *Monodius malaisei nigeriensis* Koch, 1956

**Monodius medius** (Fairmaire, 1897)
http://species-id.net/wiki/Monodius_medius

Figs 7, 23, 43, 56


*Monodius medius* (Fairmaire, 1897).– Koch 1956: 185; Girard 1975: 342.


**Redescription.** Habitus as in Fig. 56. Body length = 12.0–15.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.2–1.3; length ratio elytra / the middle of pronotum = 2.2–2.4).

Dorsal side of head dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively shallow (clypeal emargination width / depth ratio = 10.0–11.5). Mentum with median part wide. Submentum with short base. Maxillary palp
not widened (width of maxillary palp / length of 3\textsuperscript{rd} antennomere = 1.1–1.2). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3\textsuperscript{rd} antennomere relatively long (length ratio of antennomere 3\textsuperscript{rd} / 2\textsuperscript{nd} = 2.8–2.9).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6); dull, with fine punctures (the intervals between the punctures are greater than the 2 diameters of the puncture). Anterior pronotal angles sharp and strongly protruding towards front. Lateral margins of pronotal disc rounded. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull, without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures, impressed on the whole length. Elytral intervals dull, non-convex, with fine punctures (the intervals between the punctures are greater than the 4 diameters of the puncture). Elytral base slightly sinusoidal. Elytral humeri slightly protruding laterad. Wings absent. Scutellum rounded.

Intercoxal process not protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles, relatively narrow (process of 1\textsuperscript{st} abdominal ventrite / process of metaventrite = 2.1–2.3). 5\textsuperscript{th} abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 3 diameters of the puncture).

Male genitalia. Similar as in *M. malaisei*. Female genitalia. Paraproct equal to coxites. Bursa copulatrix with two sacs (Fig. 23). Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of West Africa (Republic of Ghana, Ivory Coast): Eastern Guinean forests, Guinean forest-savanna mosaic (Fig. 43).

*Monodius plicicollis* (Fairmaire, 1897), comb. n.

http://species-id.net/wiki/Monodius_plicicollis

Figs 4, 13, 15, 22, 43, 57


**Paratype,** male (MNHN): same data as holotype. 11 males and 10 females.

**Redescription.** Habitus as in Fig. 57. Body length = 13.0–18.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.2–1.3; length ratio elytra / the middle of pronotum = 2.2–2.4).

Dorsal side of head dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively shallow (clypeal emargination width / depth ratio = 10.0–11.5). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.1–1.2). Length
of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–2.9).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.5–0.6); dull, with fine punctures (the intervals between the punctures are greater than the 2 diameters of the puncture). Anterior pronotal angles sharp and strongly protruding towards front. Lateral margins of pronotal disc rounded. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal; very coarse. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures; impressed on the whole length. Elytral intervals dull, non-convex, with fine punctures (the intervals between the punctures are greater than the 4 diameters of the puncture). Elytral base slightly sinusoidal. Elytral humeri slightly protruding laterad. Wings absent. Scutellum rounded.

Intercoxal process not protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.3). 5th abdominal ventrite without bordering; punctures fine (the intervals between the punctures are greater than the 3 diameters of the puncture).


Male genitalia. Parameres extended towards apex; length equal to the 0.2 of the rest of aedeagal tegmen (Fig. 15). Clavae straight (Fig. 15). Female genitalia. Paraproct equal to coxites (Fig. 22). Bursa copulatrix with two sacs. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of West Africa (Togolese Republic, Republic of Benin, Federal Republic of Nigeria): Eastern Guinean forests, Guinean forest-savanna mosaic, West Sudanian savanna (Fig. 43).

**Genus Selinus Mulsant & Rey, 1853**

http://species-id.net/wiki/Selinus


**Type species.** *Opatrum planum* Fabricius, 1792; designated by Gebien (1938).

**Diagnosis.** The following character combination is unique for *Selinus* within the whole subtribe Platynotina: (1) anterior tentorial pit deep, clearly visible, (2) antennomeres from 7 to 11 elongated (their length greater than the width), (3) pronotum wid-
est at the base, (4) 5th abdominal ventrite bordered, (5) paraproct longer than coxites, (6) clavae long, their length more than half of the length of parameres.

**Distribution.** Specimens of this genus have been collected in the following ecoregions of West Africa (Ivory Coast, Republic of Benin, Republic of Ghana, Republic of Guinea, Republic of Mali, Togolese Republic): Eastern Guinean forests, Guinean forest-savanna mosaic, West Sudanian savanna, Western Guinean lowland forests (Fig. 44).

**Species included (2).** Selinus planus (Fabricius, 1792) and S. striatus (Fabricius, 1794).

**Key to the species of Selinus**

1. Body size: 12.0–14.0 mm. Pronotal sides evenly narrowing towards apex. Pronotal and elytral surface with fine punctures (the intervals between the punctures are greater than the 3 diameters of the puncture). Male protibiae as in Fig. 39

   - **Selinus planus**

   – Body size: 10.0–11.0 mm. Pronotal sides parallel in their basal half. Pronotal and elytral surface with conspicuous punctures (the intervals between the punctures are smaller than the diameter of the puncture). Male protibiae with very shallow dilatation near the middle

   - **Selinus striatus**

**Selinus planus** (Fabricius, 1792)

http://species-id.net/wiki/Selinus_planus

Figs 1, 6, 39, 44, 60

**Opatrum planum** Fabricius, 1792: 118.—Herbst 1793: 215; Fabricius 1801: 90.


Figures 50–54. Body habitus: *Monodius convexipennis* (50), *M. gravis* (52), *M. laevistriatus* (53) and *M. lamottei* (54). Apex of elytra of *M. convexipennis* (51).

**Redescription.** Habitus as in Fig. 60. Body length = 12.0–14.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.7–3.0).

Dorsal side of head dull, with punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 4.0–4.5). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.0–1.1). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–3.0).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.4–0.5); dull, with fine punctures (the intervals between the punctures are greater than the 3 diameters of the puncture). Anterior pronotal angles sharp and slightly protruding towards apex. Lateral margins of pronotum narrowing towards apex. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures (sometimes absent). Elytral intervals shiny, non-convex; with conspicuous punctures (the intervals between the punctures are greater than the 3 diameters of the puncture). Elytral base slightly sinusoidal. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular.

Intercoxal process protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.2). 5th abdominal ventrite with complete bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Male legs. Protarsi slightly widened. Protibiae as in Fig. 39. Metafemorae with an hair fringe. Female legs. Protarsi slightly widened. Other leg parts simple.

Male genitalia. Parameres narrowing towards apex; length equal to the 0.2 of the rest of aedeagal tegmen. Clavae straight. Female genitalia. Paraproct longer than coxites. Spermatheca with narrow ducts.

**Distribution.** This species has been collected in the following ecoregions of West Africa (Ivory Coast, Republic of Benin, Republic of Ghana, Republic of Guinea, Togolese Republic): Eastern Guinean forests, Guinean forest-savanna mosaic, West Sudanian savanna (Fig. 44).
Selinus striatus (Fabricius, 1794)
http://species-id.net/wiki/Selinus_striatus
Figs 11, 21, 44, 61


Redescription. Habitus as in Fig. 61. Body length = 10.0–11.0 mm. Elytra wider and longer than pronotum (width ratio elytra / pronotum = 1.1–1.2; length ratio elytra / the middle of pronotum = 2.7–2.9).

Dorsal side of head dull, with punctures (the intervals between the punctures are smaller than the diameter of the puncture). Frontoclypeal suture fine. Clypeal emargination relatively deep (clypeal emargination width / depth ratio = 4.0–4.4). Mentum with median part wide. Submentum with short base. Maxillary palp not widened (width of maxillary palp / length of 3rd antennomere = 1.1–1.3). Length of antennae greater than pronotal length (ratio antenna / pronotum from tip of anterior pronotal angle to tip of posterior pronotal angle = 1.2–1.3). 3rd antennomere relatively long (length ratio of antennomere 3rd / 2nd = 2.8–3.0).

Pronotal disc transverse (middle of pronotum length / width ratio = 0.4–0.5); dull, with fine punctures (the intervals between the punctures are smaller than the diameter of the puncture). Anterior pronotal angles sharp and slightly protruding towards apex. Lateral margins of pronotal disc narrowing towards apex. Apophyseal and basal depressions on pronotal disc present; apophyseal depressions trapezoidal. Pronotal hypomera dull; without punctures.

Elytra oblong (elytra length / width ratio = 1.1–1.2). Elytral striae with fine punctures (sometimes absent). Elytral intervals shiny, non-convex, with conspicuous punctures (the intervals between the punctures are smaller than the diameter of the puncture). Elytral base slightly sinusoidal. Elytral humeri rounded, not protruding laterad. Wings absent. Scutellum triangular.
Intercoxal process protruding towards mesoventrite. Metaventrite reduced (length ratio cavity of hind coxa / metaventrite between the insertions of mid and hind coxae ca. 2). In both sexes abdominal process without tubercles; relatively narrow (process of 1st abdominal ventrite / process of metaventrite = 2.1–2.2). 5th abdominal ventrite with complete bordering; punctures fine (the intervals between the punctures are greater than the 2 diameters of the puncture).

Male legs. Protarsi slightly slightly widened. Male protibiae with very shallow dilatation near the middle. Metafemorae with an hair fringe. Female legs. Protarsi slightly widened. Other leg parts simple.

Male genitalia. Parameres narrowing towards apex; length equal to the 0.2 of the rest of aedeagal tegmen (Fig. 21). Clavae straight (Fig. 21). Female genitalia. Paraproct longer than coxites. Spermatheca and bursa copulatrix as in S. planus.

**Distribution.** This species has been collected in the following ecoregions of West Africa (Ivory Coast, Republic of Ghana, Republic of Guinea, Republic of Mali): Eastern Guinean forests, Guinean forest-savanna mosaic, West Sudanian savanna, Western Guinean lowland forests (Fig. 44).

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References


