



Tenebrionidae (Coleoptera) from Ivindo National Park in Gabon, Central Africa, with descriptions of four new species

Authors: Schawaller, Wolfgang, and Bellersheim, Aron

Source: Integrative Systematics: Stuttgart Contributions to Natural History, 5(1) : 37-47

Published By: Stuttgart State Museum of Natural History

URL: <https://doi.org/10.18476/2022.740108>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

RESEARCH ARTICLE

Tenebrionidae (Coleoptera) from Ivindo National Park in Gabon, Central Africa, with descriptions of four new species

WOLFGANG SCHAWALLER¹ & ARON BELLERSHEIM

Abstract

Recently-collected Tenebrionidae material from Ivindo National Park in Gabon, Central Africa, is discussed. The 72 species collected altogether, which include four species new to science, represent four subfamilies. Species in the subfamily Alleculinae Laporte, 1840 and some species in the tribe Lagriini Latreille, 1825 are not treated. The four, newly-described species are: *Enicmosoma ivindoense* **sp. n.**, *Platydemus telnovi* **sp. n.**, *Diaclina gabonica* **sp. n.**, and *Uloma gabonica* **sp. n.** The identification of some taxa from Gabon remains tentative, since no comprehensive taxonomic revision of the corresponding genera is available.

Key words: Afrotropical Region, darkling beetles, Diaperinae, Lagriinae, Stenochiinae, Tenebrioninae.

Zusammenfassung

Neu gesammelte Tenebrionidae aus dem Ivindo National Park in Gabon, Zentralafrika, werden aufgelistet. Die insgesamt 72 gesammelten Arten (einschließlich vier neuer Arten) gehören zu vier Unterfamilien. Arten der Unterfamilie Alleculinae Laporte, 1840 und einige Arten der Tribus Lagriini Latreille, 1825 werden nicht behandelt. Neu beschrieben werden die Arten *Enicmosoma ivindoense* **sp. n.**, *Platydemus telnovi* **sp. n.**, *Diaclina gabonica* **sp. n.** und *Uloma gabonica* **sp. n.** Die Identifizierung einiger Taxa aus Gabon bleibt ohne taxonomische Revision der betroffenen Gattungen unsicher.

Introduction

Comprehensive contributions to the Central African Tenebrionidae were presented by GEBIEN (1913, 1921, 1942), ARDOIN (1965), and KASZAB (1969). Nevertheless, the tenebrionid fauna of Central Africa remains poorly known compared to West, East, and Southern Africa. The Central African fauna of tenebrionids is mainly represented by arboreal taxa from different forest types and is considered highly threatened by deforestation. It is not uncommon that many taxa become extinct before they can be studied.

Recently, an intensive entomological survey was conducted by DMITRY TELNOV (NHMUK) in the Ivindo National Park in eastern Gabon. The park covers 300,000 ha, nearly all of which are forested with a mixture of the Atlantic coastal forest of the Lower Guinea province and semi-deciduous forest typical of the central Congo Basin. The discovered Tenebrionidae are presented herein, including four species new to science and a few other species sampled outside the park but in direct proximity of it. The 72 collected species belong to four sub-

families. The Alleculinae Laporte, 1840 and some species of Lagriini Latreille, 1825 are on loan to other specialists and are not discussed herein. Surprisingly, no species of the otherwise speciose genus *Strongylium* Kirby, 1819 were collected (D. TELNOV, personal communication). ROBICHE & LE GALL (2019) already mentioned several Pyconocerini Lacordaire, 1859, and ROBICHE (2019) treated the genera *Tenebrio* Linnaeus, 1857 and *Gridellia* Kammerer, 2006 from Ivindo National Park. GEBIEN (1942) recognised 82 tenebrionid species from the island of Fernando Po (Equatorial Guinea), ARDOIN (1969) 309 species and subspecies from Ivory Coast, and ROBICHE et al. (2002) 197 species from Benin.

The identification of a few species from Gabon remains tentative, since no comprehensive taxonomic revision of the corresponding genera is available. The detailed distributional pattern of the treated species in Africa remains unknown, therefore only rough information is given in the framework of the present contribution. Nevertheless, these recent collections provide a deeper insight into the faunal composition of Central African Tenebrionidae.

¹ Contribution to Tenebrionidae n. 167. For n. 166, see: Zootaxa **5068** (2021).

Material and methods

Most tenebrionids listed here were collected by D. TELNOV (NHMUK) at two localities in Ivindo National Park (0°30'52"N 12°48'21"E and 0°31'55"N 12°52'34"E). They were collected at altitudes of 480–540 m using various collecting methods, during the period 15–25.VI.2016. The detailed data are not specified in the list to avoid repetitions, with the exception of the type material of the new species. Additional species were collected by the same collector and during the same period in the vicinities of the National Park, as well as near Libreville (coastal sand dunes) (respectively 0°26'50"N 9°24'46"E and 0°27'05"N 9°24'41"E). The collected specimens are deposited in the Natural History Museum, London, United Kingdom (NHMUK), with duplicates in Staatliches Museum für Naturkunde, Stuttgart, Germany (SMNS) and in the private collection of D. TELNOV (DTC, Rīga, Latvia). A few taxa not seen by the authors were identified by the late OTTÓ MERKL (Budapest, Hungary) and by ENRICO RUZZIER (Mirano, Italy) and D. TELNOV (NHMUK).

Collecting and export permits were provided by the Centre National de la Recherche Scientifique et Technologique of the Ministère de l'Enseignement Supérieur et de la Recherche Scientifique in Libreville, Gabon (Permit No AR0018/16).

The designated holotypes and paratypes have been provided with red, printed labels. Aedeagi are mounted with a water-soluble glue on the same card as their corresponding specimen. Images were taken using a Visionary Digital photography system (LK Imaging System, Dun. Inc.) equipped with a Canon EOS 5DSR camera, and subsequently processed with the Helicon Focus Pro, Adobe Lightroom and Adobe Photoshop CS6 software.

Species list

Subfamily Lagriinae Latreille, 1825

Tribe Lagriini Latreille, 1825

Xanthalia sp.

Remarks. This species-rich genus, distributed in the Oriental and Afrotropical regions, needs a taxonomic revision.

Tribe Lupropini Ardoin, 1958

Anaedus camerunus Gebien, 1921

Distribution. West, Central, and East Africa.

Anaedus striatus Gebien, 1921

Distribution. West and Central Africa.

Enicmosoma ivindoense sp. n.

(Figs. 12, 22)

Type material

Holotype (♂): E Gabon, Ogooué-Ivindo Prov., 5–9 km SW Makokou, Ivindo NP, Ipassa forest research station, 0°30'52"N 12°48'21"E, 480–540 m, 19–20.VI.2016, leg. D. TELNOV (NHMUK).

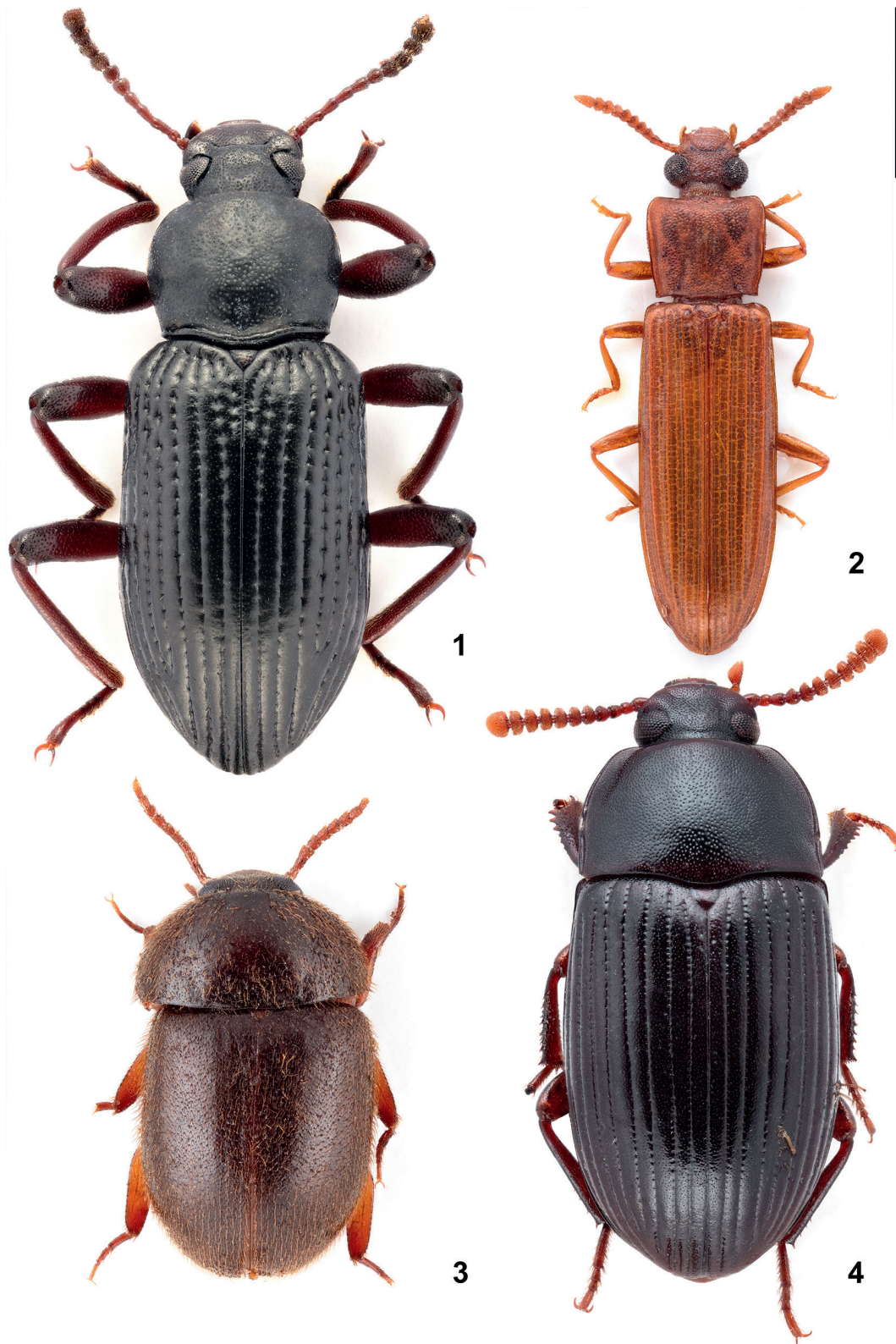
Paratypes: Same data as holotype, 3 exx. (NHMUK, DTC). – E Gabon, Ogooué-Ivindo Prov., 5–9 km SW Makokou, Ivindo NP, Ipassa Forest Station, 0°30'52"N 12°48'21"E, 480–540 m, 18–19.VI.2016, leg. D. TELNOV, 1 ♀ (NHMUK). – E Gabon, Ogooué-Ivindo Prov., 5–9 km SW Makokou, Ivindo NP, Ipassa forest research station, 0°30'52"N 12°48'21"E, 540 m, 24–25.VI.2016, leg. D. TELNOV, 3 exx. (SMNS).

Description

Body length 2.8–3.2 mm. Dorsal and ventral surfaces and all appendages brown, without colour pattern and without metallic shine; dorsal and ventral surfaces punctured, punctures with short, adpressed, pale setae, intervening space shiny (Fig. 12). Head with punctures similarly coarse and partly confluent, as on pronotum; genae somewhat swollen but not dilated, with distinct transverse impression between them; anterior margin of epistome straight and without an excavation or other modifications; eyes circular and prominent, not encroached by genae; antennae composed of 10 antennomeres, shape of antennomeres as in Fig. 12, antennomere 3 distinctly longer than antennomere 2, terminal two antennomeres forming loose club, terminal antennomere feebly bipartite. Pronotum widest across middle, anterior and posterior margins not beaded, lateral margins not beaded but distinctly crenulate, anterior angles slightly marked but not prominent or acute, posterior angles rectangular; surface convex with irregular, coarse and partly confluent punctures, punctures similar to those on head and elytra, prothoracic hypomera with punctures and setation similar to those on disc of pronotum, metasternal punctures larger laterally than medially. Hind wings completely developed (functional). Elytra widest behind middle, lateral margins completely visible in dorsal view, surface with irregular punctures not arranged in rows or striae, epipleura with large and dense punctures, similar to those of dorsal side of elytra. Ventrites with punctures larger laterally than medially, terminal ventrite not beaded. Legs without specific modifications. Aedeagus (Fig. 22) with long basale and triangular apicale with rounded apex.

Diagnosis

Enicmosoma ivindoense sp. n. differs from *E. cantaloubei* Ardoin, 1957 from Cameroon, the Democratic Republic of the Congo (former Zaire), Uganda, and Tanzania in the larger body (the total body length is 2.3 mm in *E. cantaloubei*) and the denser and partly confluent punctures of the pronotum and elytra. FERRER (2005) described *E. barclayi* from a single female, collected in Angola, with similarly dense dorsal punctures, but according to the description this species has an 11-segmented antenna (this observation is possibly incorrect, since the terminal antennomere might be bipartite) and a much stronger transverse pronotum with rounded posterior angles. The aedeagus of *E. barclayi* remains unknown. Further species of *Enicmosoma* Gebien, 1922 from West and Central Africa yet unknown, whereas



Figs. 1–4. Dorsal views of Tenebrionidae from Gabon. – 1. *Derosphaerus* sp., non-type ♂ (NHMUK). 2. *Tribolioides ferrugineus* (Fabricius), non-type (SMNS). 3. *Myrmecocatops vestitus* Ardoin, non-type (SMNS). 4. *Uloma gabonica* sp. n., holotype ♂ (NHMUK). Scale bar: 2 mm.

other species occur in Réunion, Mauritius, the Seychelles, and Madagascar. Additionally, SCHAWALLER (2013) recorded ten species of *Enicmosoma* from South Africa, presented a key for them, and provided a complete list of the 26 known species from Africa and adjacent islands.

Etymology

Toponymic. Named after Ivindo National Park, where the type series was collected.

Luprops badius Müller, 1887

Distribution. Sub-Saharan Africa.

Sphingocorse gabonicus (Pic, 1917)

Distribution. Central Africa.

Remarks. The genus *Sphingocorse* Gebien, 1921 is possibly a junior synonym of *Pseudolypros* Fairmaire, 1882.

Tribe Pyncocerini Larcordaire, 1859

Remarks. ROBICHE & LE GALL (2019) recently treated in detail the species of this tribe from Ivindo National Park.

Prioscelis thomsoni Gebien, 1904

Distribution. Central Africa.

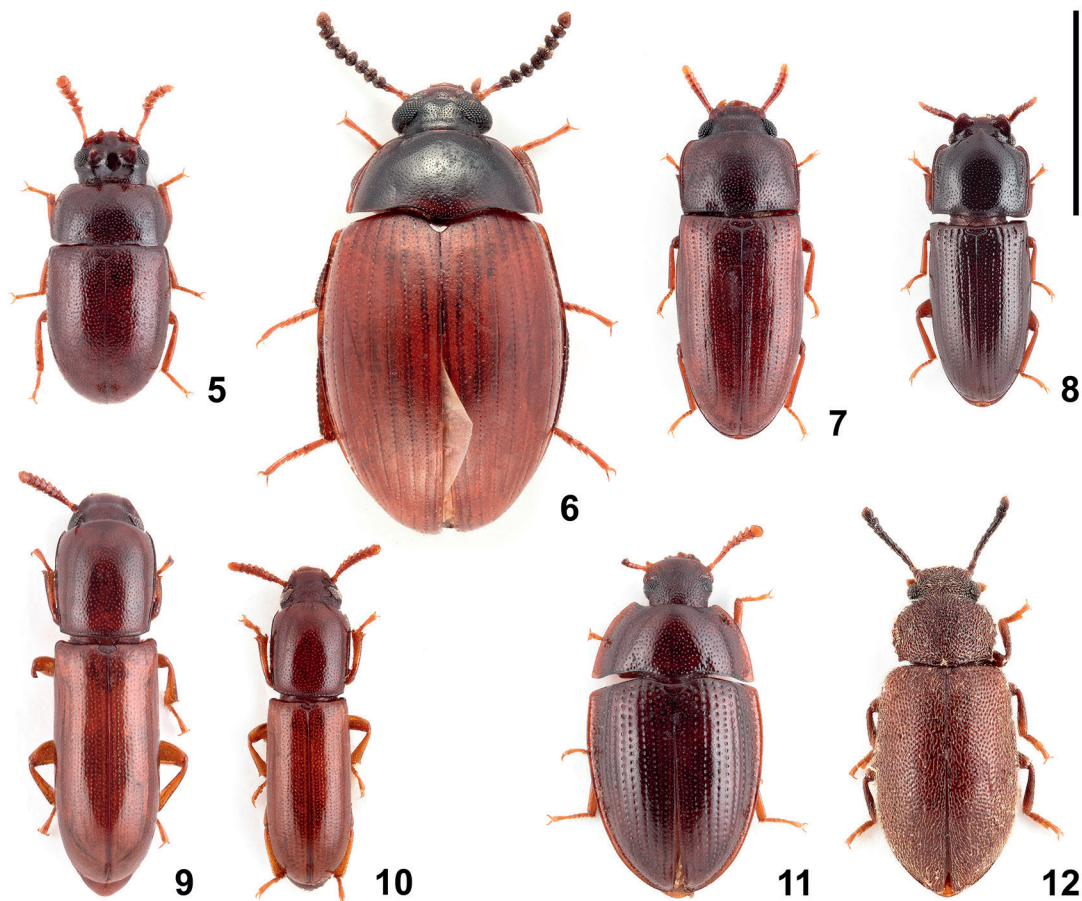
Calostegia cylindrica Gebien, 1904

Distribution. Central Africa.

Odontopezus cupreus (Fabricius, 1792)

Distribution. Central Africa.

Remarks. The collected specimens (det. E. RUZZIER and D. TELNOV) probably belong to the subspecies *regalis* (Harold, 1878). However, the status of several subspecies and aberration names pertaining to this taxon remain unclear.



Figs. 5–12. Dorsal views of Tenebrionidae from Gabon. – 5. *Pentaphyllus ardoini* Kaszab, non-type ♂ (SMNS). 6. *Platydemia telnovi* sp. n., ♀ paratype (SMNS). 7. *Palorus* sp., non-type (NHMUK). 8. *Palorus carinicollis* (Gebien), non-type (SMNS). 9. *Corticeus sternalis* (Gebien), non-type (NHMUK). 10. *Corticeus gabonicus* (Pic), non-type (NHMUK). 11. *Diaclina gabonica* sp. n., holotype ♂ (NHMUK). 12. *Enicmosoma ivindoense* sp. n., paratype (SMNS). Scale bar: 2 mm.

Metallonotus aeruginosus (Gerstaecker, 1855)

Distribution. West and Central Africa.

Metallonotus cariosus (Fairmaire, 1897)

Distribution. Guinea, Central Africa.

Metallonotus janssensi Koch, 1954

Distribution. Central Africa.

Remarks. Specimens identified by O. MERKL.

Pycnocerus sulcatus (Fabricius, 1792)

Distribution. Guinea, Central Africa.

Remarks. Specimens identified by E. RUZZIER and D. TELNOV.

Subfamily Tenebrioninae Latreille, 1802

Tribe Palorini Matthews, 2003

Palorus sp.

(Fig. 7)

Remarks. Three specimens were collected, all belonging to the *P. subdepressus* (Wollaston, 1864) species group. They could not be identified to species level because of the unclear taxonomic situation within the species group.

Palorus carinicollis (Gebien, 1907)

(Fig. 8)

Distribution. Central, East and Southern Africa.

Remarks. The type locality of the lectotype is “Gabon, Nkogo”. Some other records of *Palorus* from Africa were recently published by GRIMM & SCHAWALLER (2019). Unfortunately, the description of *Palorus halsteadii* Bremer, 1985 from the Democratic Republic of the Congo (former Zaire) (BREMER 1985) was overlooked in that paper.

Tribe Toxicini Lacordaire, 1859

Cryphaeus taurus (Fabricius, 1801)

Distribution. Subsaharan Africa, Madagascar.

Remarks. Collected only in the vicinities of Ivindo NP.

Tribe Tenebrionini Latreille, 1802

Derosphaerus sp. (♂)

(Figs. 1, 18)

Remarks. The single available specimen, a small male (total body length 7 mm, aedeagus as in Fig. 18) might represent an undescribed species and belongs to the group

of small African species near *D. brevipes* Kaszab, 1969, *D. espanoli* Ardoin, 1957, *D. inaequalis* Gebien, 1921, *D. ivoirensis* Ardoin, 1969, and *D. pusillus* Gebien, 1921. However, without a comprehensive taxonomic revision of this group, this single male from Gabon cannot be named.

Taraxides laevigatus (Fabricius, 1787)

Distribution. West and Central Africa.

Remarks. Collected only in the vicinities of Ivindo NP.

Taraxides punctatus (Fabricius, 1801)

Distribution. West and Central Africa.

Tenebrio guineensis Imhoff, 1843

Distribution. Cape Verde, West, and Central Africa, Chad.

Tribolioides ferrugineus (Fabricius, 1781)

(Figs. 2, 17)

Distribution. West and Central Africa.

Remarks. The genus *Tribolioides* was described by BLAIR (1913) with type species *Tenebrio ferrugineus* Fabricius, 1781 from “tropical” Africa. The lamellate prolongation beneath the penultimate tarsomere is very peculiar for *Tribolioides*. The assignment of this genus to Tenebrionidae or Cucujidae is not yet clear to the authors, although BOUCHARD et al. (2021) placed it in the family Cucujidae. However, a detailed examination in the framework of this inventory is not possible. The aedeagus was unknown so far and is shown in Fig. 17.

Gridellia muelleri (Gridelli, 1951)

Distribution. West, Central, and East Africa.

Remarks. The genus *Gridellia* Kammerer, 2006 was revised by FERRER (1994) under the preoccupied name *Villiersia* Gridelli, 1951; additional taxonomic notes were given by ROBICHE (2019).

Tribe Alphitobiini Reitter, 1917

Diaclina brevicollis Gebien, 1921

Distribution. West and Central Africa.

Remarks. The Subsaharan species of *Diaclina* Jacquelin du Val, 1861 were revised by SCHAWALLER (2019).

Diaclina cameruna Gebien, 1921

Distribution. Central and East Africa.

Diaclina gabonica **sp. n.**
(Figs. 11, 23)

Type material

Holotype (♂): E Gabon, Ogooué-Ivindo Prov., 6 km S Makokou, 0°30'58"N, 12°49'42"E, 480–510 m, 20.VI.2016, leg. D. TELNOV (NHMUK).

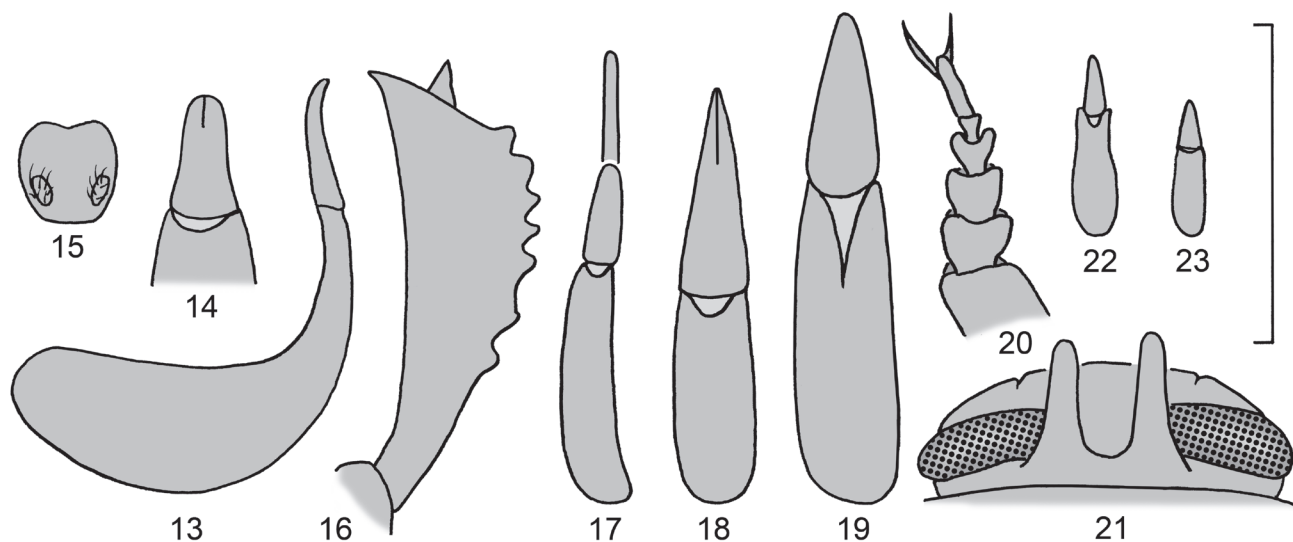
Description

Body length 3.0 mm. Ovale, blackish brown, shining; margins of pronotum and lateral margins of elytra paler reddish brown. Punctures of dorsal surface not bearing setae, punctures of head with a few microsetae. Head outline continuous, not interrupted between epistome and frons; apical margin of epistome straight, not medially emarginate; fronto-clypeal suture indistinct. Genal canthus not protruding beyond outline of eyes, with its outlines nearly continuous with the outlines of the eyes. Eyes large, constricted at genal canthus, dorsal part as large as ventral part. Antennae not extending towards base of pronotum, with six distal antennomeres forming a kind of club; antennomere 2 as wide as long; antennomere 3 elongate, about twice as long as wide; antennomeres 6–10 serrate, distal antennomere rounded apically (Fig. 11). Pronotum transverse, width to length ratio 2.2, dorsal surface convex; widest across posterior angles. Anterior margin emarginate, basal margin bisinuate, lateral margins finely beaded, distal and basal margins not beaded. Anterior angles rounded, posterior angles rectangular. Pronotal disc with larger and sparser punctures than on head,

subbasal impressions distinct. Prothoracic hypomera with smaller punctures than on pronotal disc, without setae, surface wrinkled. Prosternal process protruding. Elytra ovate with rounded lateral margins, base as wide as pronotal base. Rows of punctures without striae, diminishing posteriorly, scutellar striole absent, punctures in the rows larger than those on pronotal disc; all intervals nearly flat and smooth, impunctate; lateral margins in dorsal view visible over entire length till apex; humeral angles indistinct. Scutellum large, triangular. Abdominal ventrites 1–3 laterally with large punctures, larger than those on pronotum, terminal ventrites 4–5 with finer punctures, all punctures without setae. Tibiae gradually and faintly dilated towards apex, without external carinae or other modifications. Aedeagus with triangular apicale and acute tip (Fig. 23).

Diagnosis

Diaclina gabonica **sp. n.** can be recognised by the small body size in combination with the continuously ovate body outline (similar to *Peltoides* Laporte de Castelnau, 1833), the pronotum and the elytra being widest at the base. In the species key of SCHAWALLER (2019), specimens of the new species would run to *D. ovalis* Gebien, 1921 (consider the Gabon record for this species, below). However, *D. ovalis* is larger (body length 4–5 mm) and its body outline is not continuously ovate but slightly interrupted between the pronotum and the elytra. The shape of the aedeagal apicale is similar in both species [compare Fig. 23 with SCHAWALLER (2019: fig. 17)].



Figs. 13–23. Diagnostic characters of Tenebrionidae from Gabon. – 13–16. *Uloma gabonica* **sp. n.**, holotype ♂ (NHMUK), aedeagus (13–14), mentum (15), right protibia (16). 17. *Tribolioides ferrugineus* (Fabricius), non-type ♂ (SMNS), aedeagus. 18. *Derosphaerus* sp., non-type ♂ (NHMUK), aedeagus. 19–21. *Platydemia telnovi* **sp. n.**, holotype ♂ (NHMUK), aedeagus (19), right protarsus (20), head, dorsal view (21). 22. *Enicmosoma ivindoense* **sp. n.**, holotype ♂ (NHMUK), aedeagus. 23. *Diaclina gabonica* **sp. n.**, holotype ♂ (NHMUK), aedeagus. Scale bar: 1 mm.

Etymology

Toponymic. Named after Gabon, where the holotype was collected.

Diaclina ovalis Gebien, 1921

Distribution. West, Central, and East Africa.

Diaclina parallela (Thomson, 1858)

Distribution. West, Central, East, and Southern Africa.

Remarks. The type locality is "Gabon".

Peltoides pustulosus Fairmaire, 1894

Distribution. Central Africa.

Peltoides quadriguttatus Fairmaire, 1894

Distribution. Guinea and Central Africa.

Peltoides senegalensis Laporte de Castelnau, 1833

Distribution. Sub-Saharan Africa.

Tribe Triboliini Mulsant, 1854

Lyphia colydidium Kaszab, 1969

Distribution. Central Africa.

Remarks. The African congeners were revised by FERRER (2007).

Lyphia depressa Hinton, 1947

Distribution. West and Central Africa.

Tribe Ulomini Blanchard, 1845

Cenoscelis pulla (Erichson, 1843)

Distribution. Afrotropical Region, including Cape Verde, Comoros, South Africa, western Saudi Arabia, and Yemen.

Uloma gabonica **sp. n.**

(Figs. 4, 13–16)

Type material

Holotype (♂): E Gabon, Ogooué-Ivindo Prov., 5–9 km SW Makokou, Ivindo NP, Ipassa forest research station, 0°30'52"N 12°48'21"E, 540 m, 21–22.VI.2016, leg. D. TELNOV (NHMUK).

Paratype: E Gabon, Ogooué-Ivindo Prov., 7.7 km SW Makokou, Ivindo NP, Ipassa forest research station, 0°30'52"N 12°48'21"E, 520 m, 19–20.VI.2016, leg. D. TELNOV, 1 ♂ (SMNS).

Description

Body dark brown, ovate, body length 6.0–7.5 mm. Male head dorsally without impressions or other modifications, with regular, fine and non-confluent punctures similar to those on pronotum. Male antenna (Fig. 4) without modifications, antennomeres 4–11 symmetrical.

Male mentum (Fig. 15) flat, with distinct, lateral, sparsely setose impressions. Male ligula with a few sparse setae. Male pronotum (Fig. 4) without impressions and tubercles, posterior margin entirely not beaded, anterior margin not beaded in the middle, lateral margins straight and parallel in basal half, regularly rounded in distal half, surface with regular, dense, non-confluent, fine punctures similar to those on head, intervening spaces without micropunctures at 25x magnification. Prothoracic hypomera with distinct, dense, fine longitudinal furrows. Prosternum prominent. Elytra ovate, widest across middle, punctures of elytral rows not distinctly wider than striae, elytral intervals flat and with fine, sparse punctures; these punctures distinctly smaller than those on pronotum. Ventrites laterally with longitudinal wrinkles, terminal ventrite not beaded. Male protibia (Fig. 16) regularly dilated towards apex, without internal excavations. Aedeagus (Fig. 13–14) with short, finger-like apicale with rounded apex, apicale bent upwards at apex.

Diagnosis

Uloma gabonica **sp. n.** belongs to the species group of *U. pusilla* Gerstaecker, 1871, *U. obscurina* Ardoïn, 1962, and *U. simplicollis* Ardoïn, 1962 based on the general body shape and size, the unmodified male head and pronotum, the shape of the male pronotum, and the similar male mentum. It would run to couplet 7 in the identification key of African *Uloma* Dejean, 1821 by SCHAWALLER (2015b). *Uloma gabonica* **sp. n.** can be differentiated mainly by the larger body size, the specific shape of the aedeagal apicale, and by the strigose sculpture of the prothoracic hypomera. *Uloma pusilla*, *U. obscurina*, and *U. simplicollis* are all smaller (maximum total body length around 5 mm). In *U. pusilla* the lateral margins of the pronotum are straight and parallel in the basal half, but the pronotal disc is just very finely and sparsely punctured and the prothoracic hypomera have only a few longitudinal wrinkles. In *U. obscurina* and *U. simplicollis* the pronotal disc is also less roughly punctured, but the prothoracic hypomera possess a distinctly strigose sculpture similar to that of *U. gabonica* **sp. n.** In *U. simplicollis* the lateral margins of the pronotum are straight and parallel in the basal half, whereas in *U. obscurina* they are constricted. See also figures in SCHAWALLER (2015b).

Etymology

Toponymic. Named after Gabon, where the type series was collected.

Tribe Amarygmini Gistel, 1856

Falsocossyphus adelotopus Heller, 1917

Distribution. West and Central Africa.

Remarks. Specimens identified by E. RUZZIER & D. TELNOV.

Rhyzodina schoutedeni (Reichensperger, 1928)

Distribution. Central Africa.

Remarks. Specimens identified by E. RUZZIER & D. TELNOV. The type locality is given as Gabon, Libreville.

Gonocnemis myrmido Fairmaire, 1882

Distribution. West, Central, East, and Southern Africa.

Gonocnemis puberulus Fairmaire, 1898

Distribution. Central Africa.

Gonocnemis robusticornis Pic, 1937

Distribution. Central Africa.

Gonocnemis rusticus (Péringuey, 1896)

Distribution. Central, East, and Southern Africa.

Gonocnemis sp. cf. *rusticus* (Péringuey, 1896)

Remarks. Identification tentative. Body size and structure of pronotum and elytra are somewhat different from typical *G. rusticus* and it cannot be decided here if this is just a morphological variation or a specific difference.

Gonocnemis triimpressus Pic, 1931

Distribution. West, Central, East, and Southern Africa.

Lemoultia scabripennis Chatanay, 1913

Distribution. West, Central, and East Africa.

Paragonocnemis curtus Pic, 1922

Distribution. Cameroon, Guinea, and Central Africa.

Remarks. The type locality is Gabon, Ivinda (sic!; very probably another spelling of Ivindo).

Paragonocnemis foveicollis (Fairmaire, 1891)

Distribution. West, Central, and East Africa.

Megacantha dentata (Fabricius, 1801)

Distribution. West and Central Africa.

Remarks. The status of the subspecies *M. dentata latcollis* Pic, 1915 from Cameroon is doubtful.

Eupezus longipes (Fabricius, 1781)

Distribution. West and Central Africa.

Remarks. The specimens probably belong to the subspecies *E. longipes brevicollis* Harold, 1878.

Nesioticus flavopictus Westwood, 1842

Distribution. West and Central Africa.

Remarks. Specimens identified by E. RUZZIER and D. TELNOV. The status of the subspecies *N. flavopictus obliterated* Pic, 1915 is doubtful, and it is probably only a colour variation.

Tribe Praeugenini De Moor, 1970

Praeugena femorata (Thomson, 1858)

Distribution. Central Africa.

Remarks. The type locality is “Gabon”.

Praeugena lucidula (Mäklin, 1863)

Distribution. Central Africa.

Remarks. *Praeugena* (sic!) *cameruna* Gebien, 1912 was considered a junior synonym of *P. lucidula* by DE MOOR (1970).

Tribe Opatrini Brullé, 1832

Gonocephalum (*Opatropis*) *affine* (Billberg, 1815)

Distribution. Sub-Saharan Africa and parts of the Palearctic Region.

Remarks. The species was collected only near Libreville (coastal sand dunes).

Subfamily Diaperinae Latreille, 1802

Tribe Diaperini Latreille, 1802

Ulomoides castaneus (Fairmaire, 1893)

Distribution. Nearly cosmopolitan.

Remarks. The genus *Ulomoides* Blackburn, 1888 (syn. *Martianus* Fairmaire, 1893 and *Palembus* Casey, 1891) needs a taxonomic revision. The few species are mostly synanthropic, with a nearly cosmopolitan distribution, and were originally described in various genera. For example, SCHAWALLER & GRIMM (2014) transferred a species from *Alphitobius* Stephens, 1829 to *Ulomoides*, and ARDOIN (1969) described *Martianus ivoirensis* (which may be conspecific with *U. castaneus*) from the Ivory Coast and synonymised *Alphitobius cinctellus* (Fairmaire, 1902) with “*Martianus*” *castaneus*. A possible synapomorphic character state of *Ulomoides* is the distinctly crenulated outer margin of all tibiae.

Pentaphyllus ardoini Kaszab, 1969

(Fig. 5)

Distribution. Central Africa.

Remarks. KASZAB (1969) compiled an identification key for the six species of African *Pentaphyllus* Dejean, 1821 known at that time. The newly-collected specimens

have a somewhat more strongly rounded lateral margin of the pronotum compared to that figured in the original description, and the posterior angles are rounded. These differences are not considered significant herein. A further species, *Pentaphyllus ivoirensis* Ardoïn, 1969, was subsequently described from the Ivory Coast.

Stomylus apicatus (Gebien, 1910)

Distribution. West and Central Africa.

Remarks. The type locality of *Platydemia trituberculatum* Pic, 1926 is “Gabon”; this taxon is recognised as a junior synonym of *Stomylus apicatus* (Gebien, 1910) (SCHAWALLER 2006).

Stomylus notatus Ardoïn, 1969

Distribution. West and Central Africa; known also from Angola (SMNS, unpublished).

Stomylus schroederi (Gebien, 1904)

Distribution. West and Central Africa.

Platydemia goryi (Laporte & Brullé, 1831)

Distribution. West and Central Africa.

Platydemia hollmi Gebien, 1921

Distribution. West and Central Africa, Rwanda, Kenya, and Zambia.

Platydemia mocquersyi Pic, 1926

Distribution. Central Africa.

Remarks. The type locality is “Gabon”.

Platydemia nigrobrunneum Gebien, 1904

Distribution. Central Africa, Kenya.

Remarks. Collected only in the vicinities of Ivindo NP.

Platydemia telnovi **sp. n.**
(Figs. 6, 19–21)

Type material

Holotype (♂): E Gabon, Ogooué-Ivindo Prov., 5–9 km SW Makokou, Ivindo NP, Ipassa forest research station, 0°30'52"N 12°48'21"E, 480–540 m, 15–19.VI.2016, leg. D. TELNOV (NHMUK) (terminal antennomeres missing, body surface widely covered with a white layer of unknown material).

Paratype: Same data as holotype, 1 ♀ (SMNS).

Description

Body length 4.0–4.1 mm. Head and pronotum blackish, elytra uniformly brown, dorsal side dull, glabrous

(Fig. 6). Head in male: frons with a pair of symmetrical, straight, glabrous horns (Fig. 21), epistome without a medial tubercle, frons impressed between horns and with fine punctures similar to those on pronotum. Head in female: without armature, frons with weak medial impression, punctures regular, as those on pronotum. Ratios of the antennal segments (female) as in Fig. 6, antennomere 3 slightly elongate, antennomeres 1–3 pale brown, 4–11 blackish. Pronotum transverse, widest across base, surface with regular, fine and separate punctures similar to those on head, with feeble basal foveae; entire posterior margin not beaded, anterior margin finely and completely beaded; anterior margin not excavated, anterior and posterior angles rounded. Prothoracic hypomera with coarse confluent punctures and short setation. Elytra ovate, widest across middle, 1.3 times as long as wide, with, besides scutellar row and lateral margin, eight rows of punctures arranged into feeble striae (third row with about 50 punctures), punctures in rows of similar size as on pronotum. Intervals flat and distinctly shagreened, with scattered, fine punctures, glabrous. Abdominal ventrites with short setation, punctures fine and regular, surface feebly wrinkled, last ventrite not beaded. Male basal tarsomeres 1–3 of anterior and median tarsi distinctly dilated (Fig. 20), tibiae externally with indistinct, crenulated carinae. Aedeagus large compared to body length (Fig. 19), apicale long, subtriangular, with rounded apex.

Diagnosis

The African species of *Platydemia* were revised by SCHAWALLER (2004, 2015a). *Platydemia telnovi* **sp. n.** can be recognised by the dilated male anterior and median tarsi, the male head with a pair of long, glabrous horns, the absence of a medial tubercle on the male epistome, and the uniformly paler elytra lacking a colour pattern. The only other known African species with dilated male tarsi are *P. binotatum* Pic, 1926, *P. latitarse* Gebien, 1910, *P. rufovittatum* Pic, 1937, and *P. tarsatum* Ardoïn, 1969. However, in all these species the male head bears a pair of short and broad horns, the male epistome has a medial tubercle, and the elytra are not uniformly coloured and provided with a colour pattern. The aedeagus of *P. latitarse* was figured by SCHAWALLER (2004), that of *P. tarsatum* by ARDOÏN (1969); the aedeagi of *P. binotatum* and *P. rufovittatum* remain unknown.

Etymology

Patronymic. Named in honour of DMITRY TELNOV (NHMUK), the collector of the type series of this taxon and other Tenebrionidae from Ivindo National Park, Gabon.

Platydemia tomentosum Gebien, 1904

Distribution. West and Central Africa.

Ceropria anthracina Quedenfeldt, 1885

Distribution. West and Central Africa.

Tribe Crypticini Brullé, 1832

Microcrypticus metallicus Gebien, 1921

Distribution. Central Africa.

Remarks. Collected only near Libreville (coastal sand dunes).

Myrmecocatops vestitus Ardoin, 1969
(Fig. 3)

Distribution. West and Central Africa.

Remarks. The systematic position of the genus *Myrmecocatops* Wasmann, 1897 (type species *M. latus* Wasmann, 1897), described from Madagascar in Crypticini, is highly doubtful. Both known species possess highly apomorphic characters as an adaptation to life in ant nests. This taxonomic problem cannot be solved in the framework of an inventory of the Ivindo tenebrionids. The specimens from Gabon seem to be identical to the species described from the Ivory Coast by ARDOIN (1969) and were attracted to light.

Tribe Hypophlaeini Billberg, 1820
Corticeus gabonicus (Pic, 1924)
(Fig. 10)

Distribution. West, Central, and East Africa.

Remarks. This species was redescribed by BREMER (1995) in his revision of the genus *Corticeus* Piller & Mitterpacher, 1783 from Sub-Saharan Africa.

Corticeus glabratus (Kolbe, 1897)

Distribution. West, Central, East, and Southern Africa.

Remarks. BREMER (1995) downranked *C. nitidissimus* (Pic, 1914) from the Democratic Republic of the Congo (former Zaire) and *C. elongatus* (Pic, 1915) from Sierra Leone to subspecies of *C. glabratus*. The status of both subspecies should be re-evaluated.

Corticeus sternalis (Gebien, 1914)
(Fig. 9)

Distribution. West and Central Africa.

Remarks. Collected only in the vicinities of Ivindo NP.

Cheilopoma castaneum Murray, 1867

Distribution. West Africa.

Remarks. Collected only in the vicinities of Ivindo NP and identified by E. RUZZIER & D. TELNOV. This un-

sual-looking species for its tribe was originally described as a cucujid and was later moved to Tenebrionidae by LAWRENCE (1977).

Subfamily Stenochiinae Kirby, 1837

Tribe Cnodalonini Gistel, 1856

Alcyonotus excisus Gebien, 1921

Distribution. West Africa.

Alcyonotus pauper Gebien, 1907

Distribution. West Africa.

Remarks. GEBIEN (1921) published a key to the species of *Alcyonotus* Pascoe, 1882. According to this key, *A. pauper*, originally described from Guinea, can be recognised by the nearly straight epistome, the comparatively small body (6–7 mm), and the uniformly coloured legs.

Falsoperichilus dentaticeps (Pic, 1946)

Distribution. Central Africa.

Remarks. *Falsoperichilus alternatus* Ardoin, 1965 from Cameroon is considered a junior synonym (SCHAWALLER 2012).

Acknowledgements

DMITRY TELNOV (NHMUK) kindly entrusted us with these interesting specimens and allowed some duplicates to be deposited at SMNS. He also assisted with the compilation of the species list and identified a few species together with ENRICO RUZZIER (Mirano, Italy). ANDREW JOHNSTON (Tempe, USA) and KOJUN KANDA (Washington, D.C., USA) sent helpful information on the genus *Triboloides*. JOHANNES REIBNITZ (Tamm, Germany) arranged the drawings into a plate. We also thank two reviewers for their improvements.

References

- ARDOIN, P. (1965): Contribution à la faune du Congo (Brazzaville) (Mission A. VILLIERS et A. DESCARPENTRIES). VIII. Coléoptères Ténébrionides). – Bulletin de l'Institut Fondamental d'Afrique Noire **27**: 963–1011, pls. I–III.
- ARDOIN, P. (1969): Contribution à la connaissance de la faune entomologique de la Côte-d'Ivoire (J. DECALLE, 1961–1964). XXXVII. Coleoptera Tenebrionidae. – Annales du Musée Royal de l'Afrique Centrale (Zoologie) **175**: 139–285, pls. I–XI.
- BLAIR, K. G. (1913): *Tribolium castaneum*, Herbst = *ferrugineum*, auct. (nec Fab.). – The Entomologist's Monthly Magazine (Second Series) **24**: 222–224.
- BOUCHARD, P., BOUSQUET, Y., AALBU, R. L., ALONSO-ZARAZAGA, M. A., MERKL, O. & DAVIES, A. E. (2021): Review of genus-group names in the family Tenebrionidae (Insecta, Coleoptera). – ZooKeys **1050**: 1–633.
<https://doi.org/10.3897/zookeys.1050.64217>

- BREMER, H. J. (1985): Eine neue Art des Genus *Palorus* Mulsant (Coleoptera; Tenebrionidae; Ulomini) aus Zentralafrika. – *Revue Zoologique Africaine* **99**: 53–55.
- BREMER, H. J. (1995): Revision der Hypophloeini der äthiopischen Region Pars III: Die Arten des Genus *Corticeus* Piller et Mitterpacher, 1783, der subsaharischen Region sowie Beschreibung einer neuen *Corticeus*-Art aus Madagascar (Coleoptera: Tenebrionidae). – *Entomofauna, Supplement* **7**: 1–285.
- DE MOOR, P. P. (1970): Monograph of the Praeugenina (Coleoptera: Tenebrionidae, Strongyliini). – *Transvaal Museum Memoir* **17**: 1–203, 8 plates, 8 maps.
- FERRER, J. (1994): Description of a new species of *Villiersia* Gridelli, 1951, from South Africa and contributions to the knowledge of the genus (Coleoptera, Tenebrionidae, Tenebrionini). – *Entomofauna* **15**: 129–136.
- FERRER, J. (2005): Descripción de una nueva especie de *Enicmosoma* Gebien de Angola y de un nuevo género y especies de Transvaal (Coleoptera, Tenebrionidae, Lagrinae). – *Nouvelle Revue d'Entomologie (Nouvelle Série)* **21** (2004): 199–203.
- FERRER, J. (2007): Contribución al conocimiento del género *Lyphia* Mulsant & Rey, 1859, y descripción de una nueva especie de Senegal (Coleoptera, Tenebrionidae). – *Bulletin de la Société Entomologique de France* **112**: 105–116.
- GEBIEN, H. (1913): Coleoptera, Tenebrionidae. In: SCHUBOTZ, H. (ed.), *Wissenschaftliche Ergebnisse der Deutschen Zentral-Afrika-Expedition 1907–1908 unter Führung Adolf Friedrichs, Herzogs zu Mecklenburg* **4** (Zoologie II), pp. 57–79; Leipzig.
- GEBIEN, H. (1921): Die Tenebrioniden Westafrikas. – *Archiv für Naturgeschichte(A)* **86** (1920), 1–256.
- GEBIEN, H. (1942): Die Tenebrioniden der Guinea-Inseln. – *Zoologischer Anzeiger* **138**: 106–126.
- GRIMM, R. & SCHAWALLER, W. (2019): *Palorus ruthmuelleriae* sp. n. from Zimbabwe, with distributional data of other African species of *Palorus* (Coleoptera: Tenebrionidae: Palorini). – *Mitteilungen der Münchner Entomologischen Gesellschaft* **109**: 55–58.
- KASZAB, Z. (1969): The Scientific Results of the Hungarian Soil Zoological Expedition to the Brazzaville-Congo. 37. Coleoptera: Tenebrionidae. – *Annales Historico-Naturales Musei Nationalis Hungarici* **61**: 225–265.
- LAWRENCE, J. F. (1977): The family Pterogeniidae, with notes on the phylogeny of the Heteromera. – *Coleopterists Bulletin* **31**: 25–56.
- ROBICHE, G. (2019): Description d'un nouveaux sous-genre et de sa nouvelle espèce du Gabon appartenant au genre *Tenebrio* Linnaeus, 1758 et note systématique sur le genre *Gri-dellia* (Kammener, 2006) (Coleoptera, Tenebrionidae). – *Le Coléoptériste* **22**: 97–102.
- ROBICHE, G. & LE GALL, P. (2019): Les coléoptères de la réserve naturelle intégrale d'Ipasa-Makokou, Gabon (Coleoptera, Tenebrionidae, Lagrinae, Pycnocerini). – *Lambillionea* **119**: 137–150.
- ROBICHE, G., LE GALL, P. & GOERGEN, G. (2002): Contribution à l'étude de la biodiversité des coléoptères Tenebrionidae de la République du Bénin: premier inventaire. – *Lambillionea* **102**: 381–431.
- SCHAWALLER, W. (2004): The genus *Platydemia* Laporte & Brullé in Africa south of the Sahara, including adjacent islands (Coleoptera: Tenebrionidae). – *Annals of the Transvaal Museum* **41**: 1–27.
<https://hdl.handle.net/10520/EJC83626>
- SCHAWALLER, W. (2006): The species of the African genus *Stomylus* Fähræus (Coleoptera: Tenebrionidae: Diaperinae). – *Annales Zoologici* **56**: 471–479.
- SCHAWALLER, W. (2012): Taxonomic and faunistic notes on the genera *Danodema* Gebien, 1925 and *Falsomannocerus* Pic, 1946 (Insecta: Coleoptera: Tenebrionidae: Cnodalonini). – In: HARTMANN, M. & WEIPERT, J. (eds.): *Biodiversität und Naturlandschaft im Himalaya IV*, pp. 403–404, pl. XXIV; Erfurt (Verein der Freunde und Förderer des Naturkundemuseums).
- SCHAWALLER, W. (2013): *Ardoiniellus montanus* n. gen., n. sp. and nine new species of *Enicmosoma* Gebien from South Africa and Zimbabwe (Coleoptera: Tenebrionidae: Lupropini). – *Stuttgarter Beiträge zur Naturkunde A, Neue Serie* **6**: 137–149.
- SCHAWALLER, W. (2015a): A new species of the genus *Platydemia* Laporte & Brullé from Zambia, and new records of other African species (Coleoptera: Tenebrionidae). – *Annals of the Ditsong National Museum of Natural History* **5**: 11–14.
<https://hdl.handle.net/10520/EJC167420>
- SCHAWALLER, W. (2015b): The genus *Uloma* Dejean (Tenebrionidae: Tenebrioninae) in Africa south of the Sahara. – *Stuttgarter Beiträge zur Naturkunde A, Neue Serie* **8**: 195–206.
- SCHAWALLER, W. (2019): The species of the genus *Diaclina* Jacquelin de Val (Coleoptera: Tenebrionidae: Alphitobiini) from Sub-Saharan Africa. – *Zootaxa* **4609**: 499–508.
<https://doi.org/10.11646/zootaxa.4609.3.6>
- SCHAWALLER, W. & GRIMM, R. (2014): The genus *Alphitobius* Stephens (Coleoptera, Tenebrionidae, Alphitobiini) in Africa and adjacent islands. – *ZooKeys* **415**: 169–190.
<https://doi.org/10.3897/zookeys.415.6676>

Authors' address:

Staatliches Museum für Naturkunde Stuttgart, Rosenstein 1, D-70191 Stuttgart, Germany;
e-mail (corresponding author): schawaller.ehrenamt@smns-bw.de

ZooBank registration: <http://zoobank.org/References/D0526296-3DEA-4C62-AF11-D2A5D80408BB>

Manuscript received: 31.I.2022; accepted: 24.III.2022.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Integrative Systematics: Stuttgart Contributions to Natural History](#)

Jahr/Year: 2022

Band/Volume: [5](#)

Autor(en)/Author(s): Schawaller Wolfgang, Bellersheim Aron

Artikel/Article: [Tenebrionidae \(Coleoptera\) from Ivindo National Park in Gabon, Central Africa, with descriptions of four new species 37-47](#)