



Afrotropical Brentidae Arrhenodini and Eremoxenini (Insecta: Coleoptera) from the Natural History Museum collections, London

Eylon ORBACH¹ & Luca BARTOLOZZI²

¹49, Remez Street, Qiryat Tivon, 3604449 Israel, E-mail: eylonorbach@gmail.com

²Sistema Museale di Ateneo, Università degli Studi di Firenze, Museo di Storia Naturale,
Sede "La Specola", Via Romana 17, I-50125 Florence, Italy, E-mail: luca.bartolozzi@unifi.it

Abstract. 254 specimens of Arrhenodini and Eremoxenini (Coleoptera: Brentidae: Brentinae) from the collections of the Natural History Museum (London, United Kingdom) were studied and identified. Two taxa are described as new to science: *Spatherhinus telnovi*, new species from Ivory Coast, and *Symmorphocerus apelboimi*, new species from Zambia. The paper also includes 14 first records for several African countries: 3 for Ivory Coast, 2 for Liberia, 2 for Mozambique, 2 for the Republic of Guinea, 1 for Sierra Leone, 2 for Togo, and 2 for Zambia.

Riassunto. *Brentidae Arrhenodini e Eremoxenini afrotropicali (Insecta: Coleoptera) delle collezioni del Natural History Museum di Londra.* Un lotto di 254 esemplari di Arrhenodini ed Eremoxenini (Coleoptera: Brentidae: Brentinae) provenienti dalle collezioni del Natural History Museum di Londra (Regno Unito) è stato studiato e determinato. Due taxa vengono descritti come specie nuove per la scienza: *Spatherhinus telnovi*, nuova specie della Costa d'Avorio, e *Symmorphocerus apelboimi*, nuova specie dello Zambia. Il lavoro include anche quattordici nuove segnalazioni per diversi paesi africani: 3 per la Costa d'Avorio, 2 per la Liberia, 2 per il Mozambico, 2 per la Repubblica di Guinea, 1 per la Sierra Leone, 2 per il Togo e 2 per lo Zambia.

Key words. Coleoptera, Brentidae, Brentinae, Arrhenodini, Eremoxenini, Africa, faunistics, new species, first records, taxonomy, identification keys.

Introduction

The straight-snouted weevils (Coleoptera: Curculionoidea: Brentidae, Brentinae) is a subfamily of beetles containing about 1800 species (SFORZI & BARTOLOZZI, 2004; SFORZI *et al.*, 2014), mainly occurring in tropical and subtropical regions. Brentids are characterized by a long narrow body, non-geniculated and usually 11-segmented antennae, and by the absence of labrum and maxillary and labial palps. Members of several tribes exhibit a strong sexual dimorphism, mainly in the shape of the rostrum: males can have a broad rostrum with large mandibles, whereas females have a long and slender rostrum with pincer-shaped mandibles, used for boring holes deep in the wood of dead or decaying trees for laying eggs. A strong allometry is also present in many species. The length of most taxa ranges from 4 to 20 mm, but a few Indo-Pacific species can reach up to 80 mm.

Most brentid adults are associated with relatively fresh dead wood, feeding on either sap exuding from trees, or on fungi growing under the bark or in holes dug by other brentid beetles and their larvae or by beetles of other families, mostly Scolytidae and Platypodidae. Some species of the oriental genus *Cyphagogus* Parry are reported as being aggressive towards adults and larvae of Platypodidae, possibly killing and feeding on them occasionally (THOMPSON, 1996). Members of the tribe Eremoxenini are all myrmecophilous, and adults and larvae live in association with ants.

The objective of the present paper is to present the information, records and description of new taxa of brentids belonging to the tribes Arrhenodini and Eremoxenini being part of an unidentified

collection of African material which was sent us for study and that is deposited in the Natural History Museum of London.

Material and methods

The material studied in this work consists of 254 unidentified specimens of brentids, and is deposited in the Natural History Museum of London, United Kingdom, unless otherwise stated. The material was mostly determined by the first author; the new species were identified and described by both authors and the text written together. Labels information of species already known to occur in the countries they were collected in, is summarized briefly, to provide the reader information of the country of origin, locality, and date of collecting, but additional information such as collector names, ecological information and acquisition numbers, is generally not quoted. For species that represent new country records, individual labels are transcribed in full, separated by a double slash, but acquisition numbers are not cited.

For species new to science, individual labels are quoted in toto separated by a double slash, and data on different rows by a single slash. In the list, genera and species are arranged alphabetically, and synonyms by the year of description. Country records are listed alphabetically. Additional records from the first Author private collection have been included in a few cases.

The genitalia dissection was made after boiling the specimens in distilled water for 6 minutes, then removing the abdomen and soaking it in cold 10% KOH solution for 24 hours. Then the genital parts were gently cleaned and set on a cardboard, and included in DMHF (Dimethyl Hydantoin Formaldehyde) resin. The cardboard with the genitalia was placed on the same pin of the dissected specimen.

Photographs illustrating the habitus of the new taxa were taken by using a Pentax K20D camera mounted on a micrometric photo stand with magnifying lens Rodenstock 1: 4.5 – f 75; photos of the details were taken with the same camera and Lomo 3.7X lens. The images have been processed with software CombineZP.

Abbreviations used in the text:

ANHRT	African Natural History Research Trust
BMNH	The Natural History Museum (formerly British Museum, Natural History), London, United Kingdom
Coll.	Collection
EOCT	Eylon Orbach Collection, Qiryat Tivon, Israel
leg.	legit
Mt/Mts	Mount, Mountain, Mountains
N.P./NP	National Park
Prov.	Province
SRET	Station for Research in Ecology of Taï (=CRE, Centre de Recherche en Ecologie)

Results

BRENTINAE Billberg, 1820
ARRHENODINI Lacordaire, 1866

Debora bocandei Power, 1879

Debora bocandei Power, 1879: 490.

Debora thomsoni Power, 1879: 491.

Examined material

Democratic Republic of the Congo: 1♀, Kivu Prov., Mt. Kahusi [= Kahuzi] Region, ix-xii.1954.

Ivory Coast: 2♂, 2♀, Abidjan, Comoe NP, Mt Tonkoui.

Liberia: 1♂, Krahn-Bassa Reserve, 7.5 km SW Pellokon town, Juboe River, Sinoe country, 05°39'04"N, 08°39'04"W, 140 m, 14-21.i.2018 // Cold cathode (8W UV) bucket light trap, M. Geiser, Sz. Sáfián, G. Simonics; 1♀, Forest near Solve Problem village, 6.5 km NW of Jacksonville, Sinoe country, 05°26'25"N, 09°07'39.9"W, 103 m, 23-27.i.2018 // MV light trap (125W), M. Geiser, Sz. Sáfián, G. Simonics.

Republic of Guinea: 1♀, Ditinn, Chute de Ditinn, 18-25.xi.2019.

Togo: 1♀, Fazao-Malfakassa NP, 26.viii-8.ix.2018.

Remarks

New record for Liberia.

Debora forficata (J. Thomson, 1858).

Arrhenodes forficatus J. Thomson, 1858: 118.

Examined material

Ivory Coast: 4♂, 4♀, Abidjan, 22.iv-1.v.2017; Taï NP, 26.iii-16.iv 2017.

Liberia: 1♂, 1♀, Krahn-Bassa Reserve, 7.5 km SW Pellokon town, Juboe River, Sinoe country, 05°39'04"N, 08°39'04"W, 140 m, 14-20.i.2018 // MV light trap (125W), M. Geiser, Sz. Sáfián, G. Simonics; 1♀, Forest near Solve Problem village, 6.5 km NW of Jacksonville, Sinoe country, 05°26'25"N, 09°07'39.9"W, 103 m, 23-27.i.2018 // MV light trap (125W), M. Geiser, Sz. Sáfián, G. Simonics.

Remarks

New record for Liberia.

Orfilaia brevirostris (Kolbe, 1897)

Eupsalis brevirostris Kolbe, 1897: 286.

Eupsalis kolbei Kleine, 1917: 98.

Examined material

Democratic Republic of the Congo: 1♂, Uele Prov., 1959.

Ivory Coast: 2♂, Denguele Forest, 6-14.vi.2018.

Nigeria: 1♂, "near Benin", 19-27.v.1958; 1♂, Samaru (Kaduna state), 1-2.vi.1970.

Orfilaia reichei (Fairmaire, 1859)

Arrhenodes reichei Fairmaire, 1859: CLXIV.

Examined material

Tunisia: 4♀, Sfax, 10-22.vi.1950.

Orfilaia vulsellata (Gyllenhal, 1833)

Arrhenodes vulsellatus Gyllenhal, 1833 (in Schoenherr, 1833): 325.

Arrhenodes gentilis J. Thomson, 1858: 117.

Arrhenodes vulneratus Quedenfeldt, 1888:195.

Eupsalis callosoguttis Kolbe, 1897: 286.

Eupsalis parviornata Kleine, 1917: 115.

Examined material

Angola: 3♀, Bie Prov., Kuito, 19.xi.2012.

Ivory Coast: 4♂, Bringakro (Toumodi), 19-20.iii.2002; Azagny NP, 26.xi-1.xii.2015; Mt. Nimba, 8.v.2016.

Liberia: 2♂, 1♀, Lofa County, 10-19.xi.2017; Sinoe County, 22.i.2018.

Mozambique: 10♂, 12♀, Maputo Special Reserve, 21-30.xi.2016.

Nigeria: 2♀, Oyo State, 14.v.1911; near Samaru, 9.vi.1930; 1♀, near Benin, 1-12.v.1958, J. L. Gregory; 1♂, near Benin, 19-27.v.1958, J. L. Gregory.

Democratic Republic of the Congo: 1♂, Uele Prov., 1910.

South Africa: 2♂, 6♀, near Onseepkans, 8-10.i.1972; Noachabeb, 10-12.i.1972; Kuyseb Canyon, 22-23.i.1972.

Tanzania: 1♂, 1♀, South Pare Mts., 3.iv.2012; Kilimamoja, Rift Valley, 8-10.iv.2012.

Zambia: 2♂, 1♀, Lyangu, Liuwa Plain NP, 12-15.xi.2013; Chilambwe Falls, 8-9.xi.2014.

***Orfilaia* sp.**

Examined material

Zambia: 1♂, Jiwundo Swamp, Miombo / Riverine Forest Mosaic, 11°51'54"S, 25°33'20"E, 1340 m 29.x/4.xi.2018 // Actinic light trap, Aristophanous M., Derozier V., Laszlo G., Oram D., ANHRT: 2018.40, BMNH(E) 2019-90.

Remarks

A very interesting specimen, with a peculiar lateral rostral apophysis. It is probably a new species, however we decided to leave it as unidentified until more material is available in the future.

***Spatherhinus gabonicus* (J. Thomson, 1858)**

Arrhenodes gabonicus J. Thomson, 1858: 116.

Spatherinus juvenilis Kolbe, 1888: 307.

Eupsalis submaculatus Kolbe, 1883: 238.

Spatherinus stuhlmanni Kolbe, 1897: 286.

Spatherinus curiosus Kleine, 1926: 368.

Examined material

Democratic Republic of the Congo: 1♀, Kivu Prov., ix-xii.1954.

***Spatherhinus longiceps* Kolbe, 1888**

Spatherhinus longiceps Kolbe, 1888: 308.

Examined material

Sierra Leone: 1♂, 1♀, Loma Mountains, closed canopy forest, 09°10'35"N, 11°05'25"W, 1050 m // 7-10.v.2016, Takano, Miles & Goff.

Remarks

New record for Sierra Leone.

***Spatherhinus ophthalmicus* Kolbe, 1888**

Spatherhinus ophthalmicus Kolbe, 1888: 307.

Eupsalithopsis spatherinoides Kleine, 1914: 196.

Examined material

Cameroon: 1♂, Campo Ma'an NP, 10-22.iii.2018.

***Spatherhinus telnovi* n. sp. (Figs 1-3)**

Examined material

Holotype male. **Ivory Coast:** Ivory Coast, 174 m / Tai NP, Tai Research Station / (SRET) / 05°50'00"N, 07°20'32.0"W / 25.iii-17.iv.2017 // MV light / A. Aristophanous / M. Aristophanous / M. Geiser, P. Moretto leg. / BMNH(E) 2017-93 // NHMUK014376334 + barcode.

The Holotype is deposited in BMNH, and has the collection number NHMUK014663406.

Description

Size (in mm). Holotype male – Total length: 20.5, head and rostrum (including mandibles): 5.3, prothorax: 5.2, elytra: 10.0, antenna: 6.5, max width (at elytra): 3.9.

Body strong, convex, elongate; colour brown, nearly black at anterior part of prorostrum, mandibles, and antennae, with light brown-reddish pale markings on elytra (Fig. 1).

Head (Fig. 2) slightly larger than long, vertex slightly convex, anteriorly depressed, eyes large and prominent, temples nearly as long as eye diameter, laterally wrinkled. Rostrum elongate, about two times as long as head, distally enlarged; metarostrum shorter than head, elevated, with two longitudinal carinae slightly diverging distally and terminating on mesorostrum; lateral apophysis rounded, prominent, starting at middle of metarostrum and ending just in front of eyes, but not touching the eye margin; mesorostrum short, rounded and enlarged over antennal insertion, medially with a groove enlarging anteriorly, terminating on expansion of prorostrum, and with two elevated longitudinal carinae on both sides of groove; prorostrum slightly longer than meta- and mesorostrum together, parallel sided from mesorostrum to about one third of its length, then widening anteriorly, anterior margin semicircularly hollowed in the middle; mandibles short, strong, with forked tip and basal inner tooth; underside with thin longitudinal medial carina starting on mesorostrum and ending before the expansion of prorostrum.

Antennae slender, scape subconical, strongly enlarging distally, article 2 much shorter than scape, article 3 longer than 2, 4-8 subconical, 9 and 10 longer than 8, subequal, rounded, 11 pointed apically, nearly as long as 9 and 10 together.

Prothorax convex, ovoidal, basally constricted, widest at 1/5th from base, with some superficial vertical wrinkles at lateral sides on first third behind anterior margin; punctuation practically absent; base of prothorax with smooth transverse ring separating two smooth furrows.

Elytra about as long as head, rostrum and prothorax together; all striae and interstriae present and complete, interstriae much larger than striae, which are punctuated; brown-reddish pale marks are present on interstriae forming a pattern as shown in fig. C; basal mark on interstria 2 more elevate than the other ones on the rest of elytra.

Underside smooth and shiny, abdominal plate (sternites III-IV) longitudinally deeply concave; last visible abdominal segment (sternite VII) convex, with sparse small punctuation laterally and at posterior half.

Anterior legs strong; profemora with a very strong spine in the middle, protibiae thinner, strongly curved inwards, with a small spine on the inner side on the distal 1/8th, a spine that is the start of a semicircular incision with hairbrush on inner margin, serving as antennal cleaning organ; protarsi long. Median legs shorter than fore ones and less strong; mesofemora with a very small tooth, mesotibiae straight. Posterior legs slightly stronger than median ones but not as strong as fore legs, metafemora with a very small tooth, metatibiae almost straight.

Genitalia (Fig. 3): parameroid lobes short and wide, with distinct very short setae disposed apically and on inner and outer sides; penis with rounded apex.

Female unknown.

Etymology

It is a great pleasure for us to dedicate this new species to our colleague and friend Dr Dmitri Telnov, University of Latvia, Riga (Latvia), and the Natural History Museum, London (UK), for constantly challenging us with the identification of the brentid specimens collected by him and/or deposited in the collections under his care.

Distribution

The new species is known so far only from Ivory Coast.

Discussion

This species can be easily separated from all the other *Spatherhinus* species by having the lateral rostral apophysis shaped as a nearly perfect quarter of a circle arc. It is a glabrous species, so it cannot be confused with *S. medioximus* and *S. ophthalmicus*, which are hairy. It has no lateral longitudinal dark stripes on pronotum, therefore differing from *S. opacus* and *S. longiceps*. The new species has a clear metarostral apophysis, while in *S. grandis* it is absent; its pronotum is not punctuated basally in comparison to *S. gabonicus*, and its pronotum is shiny, while in *S. cenaresti* it is opaque.

Since there is no up-to-date key for the genus *Spatherhinus* Power, 1879 we find it useful to supply one including all the eight species known so far.

Key to the species of the genus *Spatherhinus*

1. Prothorax and elytra with sparse hairs..... 2
- Prothorax and elytra glabrous..... 3
2. Antennomeres 1-5 with thick, golden, stiff hairs..... *S. medioximus* (J. Thomson)
- Antennomeres 1-5 without such hairs..... *S. ophthalmicus* Kolbe
3. Pronotum with lateral longitudinal dark stripes..... 4
- Pronotum opaque or shiny, without lateral longitudinal dark stripes 5
4. Antennomeres 3-6 distinctly ovoidal, metarostral apophysis not reaching anterior margin of eyes..... *S. opacus* (J. Thomson)
- Antennomeres 3-6 subconical, metarostral apophysis reaching anterior margin of eyes..... *S. longiceps* Kolbe
5. Pronotum densely punctuated basally and laterally..... *S. gabonicus* (J. Thomson)
- Pronotum smooth or wrinkled, never with dense punctuation..... 6
6. Metarostral apophysis practically absent..... *S. grandis* Kleine
- Metarostral apophysis present and clearly visible..... 7
7. Pronotum opaque..... *S. cenaresti* Bartolozzi, Bayendi-Loudit & Susini
- Pronotum shiny..... *S. telnovi* n. sp.



Fig. 1 - *Spatherhinus telnovi* n. sp., habitus
(total length 20.5 mm).



Fig. 2 - *Spatherhinus telnovi* n. sp., head, dorsal view.



Fig. 3 - *Spatherhinus telnovi* n. sp., male genitalia.

EREMOXENINI Semenov-Tian-Shanskij, 1892

Acramorphocephalus gebieni Kleine, 1918

Acramorphocephalus gebieni Kleine, 1918: 120.

Acramorphocephalus robustus Kleine, 1922b: 141.

Examined material

Ivory Coast: 1♀, Abidjan, 22.iv-1.v.2017.

Acramorphocephalus schoutedeni Kleine, 1918

Acramorphocephalus schoutedeni Kleine, 1918: 122.

Examined material

Zambia: 1♀, Fibwe Mushitu, Kasanka NP, 12°35'15"S, 30°14'52"E, 1191 m, 2-4.xii.2012, flight interception, R. Smith, H. Takano.

Remarks

New record for Zambia.

Acramorphocephalus stabilis Kleine, 1918

Acramorphocephalus stabilis Kleine, 1918: 122.

Examined material

Zambia: 1♂, West Lunga NP, 9-15.xi.2018.

Afrocordus asper (Calabresi, 1920)

Cordus asper Calabresi, 1920: 30.

Examined material

Ivory Coast: 1♂, Yéalé Village, Mt. Nimba, track before reserve border, 07°32'18.8"N, 08°25'23.8"W, 376 m, 18-29.iv.2016 // M. Aristophanous, M. Geiser, P. Moretto; 1♂, Taï NP, Taï Research Station (SRET), 05°50'00"N, 07°20'32.0"W, 174 m, 26.iii-17.iv.2017 // A. Aristophanous, M. Aristophanous, M. Geiser, P. Moretto.

Remarks

New record for Ivory Coast.

Afrocordus vicarius (Kleine, 1922)

Cordus vicarius Kleine, 1922a: 154.

Cordus gigas De Muizon, 1955: 886.

Examined material

Ivory Coast: 1♂, Dolla Ranch, 27.v-5.vi.2018.

Amorphocephala calcarata Damoiseau, 1967

Amorphocephala calcarata Damoiseau, 1967: 432.

Examined material

Mozambique: 1♀, Maputo special reserve, West Gate (Sand Thicket), 26°30'14.2"S, 32°42'59.6"E, 22 m, 21-30.xi.2016, light trap // M. Aristophanous, J. Cristóvão, G. Laszlo, W. Miles, BMNH(E) 2016-162, Trip Ref. MZ-001 (ANHRT 22).

Remarks

New record for Mozambique.

Amorphocephala dahomeensis (Senna, 1894)

Amorphocephalus dahomeensis Senna, 1894: 407.

Amorphocephalus intermedius Kleine, 1918: 94.

Amorphocephalus parasitus Kleine, 1938: 86.

Examined material

Ivory Coast: 8♂, 14♀, Denguele Classified Forest, 6-14.vi.2018; Gbando Village, 15-22.vi.2018.

Amorphocephala imitator (Fåhraeus, 1871)

Amorphocephalus imitator Fåhraeus, 1871: 434.

Amorphocephalus hospes Kolbe, 1885: 188.

Examined material

Angola: 1♂, 1♀, Kangumbe, 18-21.xi.2019.

Ivory Coast: 15♂, 5♀, Denguele Classified Forest, 6-14.vi.2018.

Zambia: 5♂, 4♀, Changwena Falls, 27-30.i.2019; Chilambwe Falls, 8-12.ii.2019; Choma, 28.ii-8.iii.2019.

Amorphocephala poweri (De Muizon, 1960)

Amorphocephalus poweri De Muizon, 1960: 161.

Amorphocephalus diadematus Kleine, 1918: 106.

Examined material

Ivory Coast: 1♀, Dolla Ranch, 27.v-5.vi.2018; 20♂, 10♀, Denguele Classified Forest, 6-14.vi.2018; 2♂, Gbando Village, 15-22.vi.2018.

Togo: 1♂, 5♀, Fazao-Malfakassa NP, 16-31.viii.2018.

Hemicordus guineensis (Calabresi, 1920)

Cordus guineensis Calabresi, 1920: 29.

Material examined

Ivory Coast: 1♂, Yéalé Village, Mt. Nimba, track before reserve border, 07°32'18.8"N, 08°25'23.8"W, 376m, 18-29.iv.2016 // M. Aristophanous, M. Geiser, P. Moretto.

Remarks

New record for Ivory Coast.

Hemicordus ivorensis Damoiseau, 1980

Hemicordus ivorensis Damoiseau, 1980: 28.

Examined material

Republic of Guinea: 1♂, "Guinea", 1413m / Dalaba, Foret de Goubel / (Upland Forest & Savannah) / 10°39'27"N, 12°15'44"W / 10-18.xi.2019, General Coll. // M. Geiser, M. Leno / S. Koivagui, W. Miles / L. Mulvaney, Sz. Safian / BMNH(E) 2020-19.

Remarks

New record for the Republic of Guinea.

Hemicordus plagiator (Kleine, 1922)

Cordus plagiator Kleine, 1922b: 142.

Examined material

Republic of Guinea: 1♂, "Guinea", 1413m / Dalaba, Foret de Goubel / (Upland Forest & Savannah) / 10°39'27"N, 12°15'44"W / 10-18.xi.2019, General Coll. // M. Geiser, M. Leno / S. Koivagui, W. Miles / L. Mulvaney, Sz. Safian / BMNH(E) 2020-19.

Togo: 1♂, Fazao-Malfakassa NP / Mare aux crocodiles campsite / Sudanian savannah/gallery forest / 08°44'58.8"N, 00°48'51.8"E // 26.viii-8.ix.2018, general coll. / M. Aristophanous, M. Geiser / P. Moretto, B. Sanbena leg. / ANHRT 2018.31 / BMNH(E) 2018-148 (BMNH).

Remarks

New records for the Republic of Guinea and Togo.

Micramorphocephalus consobrinus Kleine, 1918

Micramorphocephalus consobrinus Kleine, 1918: 131.

Examined material

Ivory Coast: 7♂, 2♀, Dolla Ranch, 27.v-5.vi.2018; 5♂, 3♀, Denguele Classified Forest, 6-14.vi.2018.

Togo: 1♂, 3♀, 415 m, Fazao-Malfakassa NP / Point de vue campsite / Sudanian savannah / 08°48'50"N, 00°49'3.2"E // 16-24.viii.2018 // MV/Altinic light trap / M. Aristophanous, M. Geiser / P. Moretto, B. Sanbena leg. / ANHRT 2018.31 / BMNH(E) 2018-148.

Zambia: 1♀, 350m / Luangwa, Redcliff Zambezi / lodge, (Mopane woodland) / 15°38'34.2"S, 30°16'32.9"E / 11-17.iii.2019 // lepiled light trap / V. Derozier, M. Imakando / W. Miles, L. Mulvaney / ANHRT 2019.5 / BMNH(E) 2020-19.

Remarks

New records for Togo and Zambia.

Micramorphocephalus soror Kleine, 1918

Micramorphocephalus soror Kleine, 1918: 130.

Examined material

Ivory Coast: 1♂, Denguele Classified Forest (sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 479m, 6-14.vi.2018 // lepiled light trap, M. Aristophanous, W. Miles, P. Moretto, Y. Outtara.

Togo: 1♀, Fazao-Malfakassa NP, 26.viii-8.ix.2018.

Remarks

New record for Ivory Coast.

Pericordus occidentalis Damoiseau, 1964

Pericordus occidentalis Damoiseau, 1964: 420.

Examined material

Ivory Coast: 1♂, 2♀, Dolla Ranch, 27.v-5.vi.2018; Denguele Classified Forest, 6-14.vi.2018.

Perisymmorphocerus latirostris (Power, 1879)

Cordus latirostris Power, 1879: 484.

Perisymmorphocerus gracilis Kleine, 1919: 15.

Examined material

Ivory Coast: 5♂, 3♀, Denguele Classified Forest, 6-14.vi.2018.

Togo: 6♂, 19♀, Fazao-Malfakassa NP, 16-31.viii.2018.

Symmorphocerus alluaudi Senna, 1894

Symmorphocerus alluaudi Senna, 1894: 409.

Examined material

Ivory Coast: 1♂, 1♀, Denguele Forest, 6-14.vi.2018 (BMNH).

Togo: 1♂, 1♀, Fazao-Malfakassa NP, 18-31viii.2018.

Symmorphocerus frontalis (Olivier, 1807).

Brenthus frontalis Olivier, 1807: 434.

Symmorphocerus lottoi De Muizon, 1960: 139.

Examined material

Ivory Coast: 1♂, Abidjan, 22.iv-1.v.2017.

Symmorphocerus monticola Schoenherr, 1847.

Symmorphocerus monticola Schoenherr, 1847: 8.

Cordus semipunctatus Pascoe, 1872: 321.

Examined material

Mozambique: 1♀, Maputo special reserve, West Gate (Sand Thicket), 26°30'14.2"S, 32°42'59.6"E, 22 m, 21-30.xi.2016, light trap // M. Aristophanous, J. Cristóvão, G. Laszlo, W. Miles.

Zambia: 1♂, Northern Province, 14-17.ii.2019.

Remarks

New record for Mozambique.

Symmorphocerus apelboimi n. sp. (Figs 4-6)

Examined material

Holotype male. **Zambia:** 1♂, Zambia, 1147m / Lukwakwa, West Lunga NP / Cryptosepalum Forest/Dambo / 12°39'40"S, 24°26'13"E, 9-15.xi.2018 // Actinic light trap / Aristophanous, M., Derozier, V. / Laszlo, G., Oram, D. / ANHRT: 2018.40 / BMNH(E) 2019-90.

The Holotype is deposited in BMNH, and has the collection number NHMUK014663405.

Description

Size (in mm). Holotype male – Total length: 18.0, head and rostrum (including mandibles): 5.0, prothorax: 4.0, elytra: 9.0, antennae: 5.0, max width (at elytra): 3.1.

Body strong, elongate; color dark brown (Fig. 4).

Head (Figs 5-6) including eyes slightly larger than long, vertex subsquare, medially and longitudinally slightly depressed, lateral edges elevated, nearly straight and slightly carinated, basally carinated at external margins, surface wrinkled but central depression smooth; eyes large, oval and prominent, temples as long as half of eye diameter. Rostrum longer and about as wide as head; metarostrum short, metarostral longitudinal carina reaching the medial smooth depression of vertex, diverging into Y shape on front edge of mesorostral plate, which is large and laterally rounded; lateral apophysis long, laterally slightly rounded, anteriorly connected to the base of metarostral plate, and posteriorly nearly touching the anterior margin of eyes; prorostrum enlarged, reaching maximum width at its two thirds, anterior margin concave at semicircle, with elevated carina directed upwards;

mandibles relatively small, left mandible curved at 90° and overlapping the right one; ventral side of head slightly convex, covered with short hairs directed anteriorly; ventral side of meta and mesorostrum deeply concave, prorostrum ventrally with strong elevated medial longitudinal carina. Antennae slender, scape subconical, enlarged at apex, article 2 short, article 3-10 subequal, slightly shorter than long, 11 longer than 10 but shorter than 9 and 10 together, pointed apically; antennomeres with coarse punctuation (Fig. 6), starting at scape, denser towards article 6, from 7-11 forming complete, serrate longitudinal rows on each article.

Prothorax subcylindrical, long, widest centrally, strongly punctuated basally and laterally, punctuations more superficial and fine on disc, leaving a smooth medial area.

Elytra. All striae and interstriae present and complete, all striae strongly punctuated and larger than interstriae, except for interstria 2 which is very large, flat and smooth.

Legs strong, femora claviform, tibiae straight, tarsal articles short, laterally compressed.

Because of the such particular characters in the external morphology, we felt that a dissection of the genitalia was unnecessary.

Female unknown.

Etymology

We are happy to name this new species after Mr. Uri Apelboim, the first author's son-in-law, an educator, builder and a relentless inventor, and who is a wonderful father to three of the first author's grandchildren.

Distribution

The new species is known so far only from Zambia.

Discussion

Symmorphocerus apelboimi n. sp. shows unique morphological characters that no other African species of the genus has: ventral side of prorostrum with a strong elevated medial longitudinal carina, in comparison to a convex, sometimes very swollen shaped, but never carinated longitudinally; all antennomeres (Fig. 6) with coarse and strong punctuation, from 7 to 11 forming longitudinal punctures that are long and serrate, in comparison to antennomeres that are smooth or with sparse superficial punctuation in all other taxa; semicircularly shaped and sharply elevated anterior margin of prorostrum, while in all other species anterior margin is slightly elevated, usually medially projecting forwards.

A key for the African species of the genus *Symmorphocerus* was given by DAMOISEAU (1967); we believe it useful to give a new key for the known males (*S. approximatus* was described only on two female specimens) of the African species described so far.

Key to males of African species of *Symmorphocerus*

1. Apex of elytra with caudal processes..... *S. constanti* Goossens
- Apex of elytra without such a processes, generally rounded..... 2
2. Anterior margin of prorostrum semicircularly concave; antennomeres with dense deep punctuation..... *S. apelboimi* n. sp.
- Anterior margin of prorostrum protruding or straight; antennomeres nearly smooth or superficially sparsely punctuated 3
3. Prothorax deeply grooved; underside of prorostrum with a strong tooth directed downwards, lateral apophysis dentate..... *S. minutus* Power
- Prothorax with at most the outline of a groove; underside of prorostrum without a tooth directed downwards, lateral apophysis not dentate..... 4
4. Vertex edges strongly carinated; lateral apophysis with almost straight margin..... *S. alluaudi* Senna
- Lateral edges of vertex distinct, but not carinated..... 5
5. Anterior angles of vertex as evident as the posterior ones, vertex densely punctuated..... *S. superciliatus* Damoiseau

- Anterior angles of vertex vanished, vertex surface wrinkled or punctuated posteriorly only..... 6
- 6. Lateral apophysis not reaching the bottom of the depression separating the underside of the metarostrum from the mesorostrum..... *S. frontalis* (Olivier)
- Lateral apophysis reaching the bottom of the depression separating the underside of the metarostrum from the mesorostrum..... *S. monticola* Schoenherr



Fig. 4 - *Symmorphocerus apelboimi* n. sp.,
habitus (total lenght 18.0 mm).



Fig. 5 - *Symmorphocerus apelboimi* n. sp.,
head, dorsal view.



Fig. 6 - *Symmorphocerus apelboimi* n. sp., head, lateral view.

Conclusions

The fourteen new country records and the presence of two new species in the first part of a small collection of African brentids clearly shows how much field work and taxonomic research are still needed, even in this relatively well known family of beetles.

Acknowledgements

We are grateful to our colleagues and friends Dimitry Telnov and Maxwell Barclay (Natural History Museum, London) for sending us this interesting material for study. We also thank Augusto Degiovanni (Bubano, Bologna) who kindly took the photos used in this paper.

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Received: 07 June 2023

Accepted: 18 July 2023