Onychium, 19(2): 137-144
ISSN: 2974-6949 (online)
1824-2669 (printed)

Published 11 July 2026
www.nuovogruppoentomologicotoscano.it

Description of a new African species of *Usambioproctus* Kolbe (Coleoptera: Brentidae: Cyphagoginae: Cyphagogini) from Cameroon, Central African Republic and Gabon, with some remarks on the genus

Eylon ORBACH[1*], Sandrine Mariella BAYENDI-LOUDIT[2] & Antonio SUSINI[3]

[1]49 Remez Street, Qiryat Tivon, Israel 3604449. Email: eylonorbach@gmail.com
[2]Institut de Recherches Agronomiques et Forestières (IFAN), BP 13 260, Libreville, Gabon. Email: sbayendiloudit@yahoo.fr
[3]Corso di Porta Ticinese, 42. 20123 Milano, Italy. Email: antonio.susini@hotmail.it
[*]Corresponding author

Abstract. *Usambioproctus bartolozzii* Orbach, Bayendi-Loudit, Susini, sp. nov. is described on specimens from Cameroon, Central African Republic and Gabon. It is close to *Usambioproctus compressicornis* (Kolbe, 1916) but can be distinguished by not having an antennal grooming device on the front tibiae and by having antennal segments 9 and 10 much wider than long. Description and illustration of habitus, antennae and spermatheca, and diagnostic characters of the new species are provided. Some remarks on the genus *Usambioproctus* are also given.

Riassunto. *Descrizione di una nuova specie africana di* Usambioproctus *Kolbe (Coleoptera: Brentidae: Cyphacoginae: Cyphacogini) del Camerun, Repubblica Centroafricana e Gabon con alcune osservazioni sul genere*. Viene descritto *Usambioproctus bartolozzii* Orbach, Bayendi-Loudit, Susini, sp. nov. su esemplari di Camerun, Repubblica Centroafricana e Gabon. Il nuovo taxon è vicino a *Usambioproctus compressicornis* (Kolbe, 1916), ma può esserne distinto per l'assenza di un organo di pulizia antennale sulle tibie anteriori e per i segmenti antennali 9 e 10 più larghi che lunghi. Vengono fornite la descrizione e le foto dell'habitus, delle antenne e della spermateca, così come I caratteri diagnostici della nuova specie. Vengono inoltre fornite alcune osservazioni sul genere *Usambioproctus*.

Résumé. *Description d'une nouvelle espèce africaine d'*Usambioproctus *Kolbe (Coleoptera: Brentidae: Cyphacoginae: Cyphacogini) du Cameroun, de la République centrafricaine et du Gabon, accompagnée de quelques observations sur le genre*. *Usambioproctus bartolozzii* Orbach, Bayendi-Loudit, Susini, sp. nov. est décrite à partir de spécimens provenant du Cameroun, de la République centrafricaine et du Gabon. Ce nouveau taxon est apparenté à *Usambioproctus compressicornis* (Kolbe, 1916), mais s'en distingue par l'absence d'organe de nettoyage antennaire sur les tibias antérieurs et par la largeur supérieure à la longueur des segments antennaires 9 et 10. Une description et des photographies de l'habitus, des antennes et de la spermathèque sont fournies, ainsi que les caractères diagnostiques de la nouvelle espèce. Quelques observations sur le genre *Usambioproctus* sont également présentées.

Keywords. Taxonomy, straight-snouted weevils, Brentidae, *Usambioproctus*, new species, Central African Republic, Cameroon, Gabon.

ZooBank registration. https://zoobank.org/nomenclaturalacts/91314550-79c5-4f33-ae8d-0774f268a283

Citation: ORBACH E., BAYENDI-LOUDIT S. M. & SUSINI A., 2026. Description of a new African species of *Usambioproctus* Kolbe (Coleoptera: Brentidae: Cyphagoginae: Cyphagogini) from Cameroon, Central African Republic and Gabon, with some remarks on the genus. *Onychium*, 19(2): 137-144.

Introduction

The genus *Usambioproctus* Kolbe (Brentidae: Cyphagoginae) was erected by KOLBE (1916) based on several unnumbered specimens of unknown sex of the new species *Usambioproctus paniscus* Kolbe, 1916 from Cameroon and Spanish Guinea (today Equatorial Guinea). In the same paper (KOLBE, 1916) erected another genus, *Hesperobius*, for describing *H. rufus*, *H. tempestivus* and *H. vestigialis*. In the same year, KLEINE (1916) erected the genus *Xestocoryphus* for describing four species: *X. gracilis*, *X. dissimilis*, *X. compressicornis* and *X. conjunctus*, and included a key for them. Later, KLEINE (1927) regarded *Usambioproctus* and *Hesperobius* as synonyms of *Xestocoryphus*, while synonymizing *H. rufus* and *H. paniscus* with *X. dissimilis*, and *H. tempestivus* with *X. gracilis*, regarding *X. vestigialis* as a valid species. Kleine checked the types of the four species described by Kolbe in the Natural History Museum of the Humboldt University in Berlin, Germany, (KLEINE, 1928). KLEINE (1927) regarded Kolbe's (1916) genus *Usambioproctus* as a synonym of his genus *Xestocoryphus* published in the same year (KLEINE, 1916), but ALONSO-ZARAZAGA & LYAL (1999) verified the exact dates of publication of the two papers and resurrected Kolbe's name *Usambioproctus* as the valid one for priority.
In 1955, a sixth species belonging to the genus was described by DE MUIZON (1955), and six more species were described some years later by DAMOISEAU (1961, 1963, 1967). DAMOISEAU (1967) presented a checklist of species of *Usambioproctus*, adding a question mark to the three species synonymized by KLEINE (1927). However, SFORZI & BARTOLOZZI (2004) regard these three species as valid but stating that their holotypes were not found in the MNHUB. As for *U. vestigialis*, although DAMOISEAU (1967) did not quote it in his Monograph on the African Brentidae, and its HT is not found in the MNHUB as well, it is at present considered a valid taxon (SFORZI & BARTOLOZZI, 2004). *Usambioproctus* is characterized by the combination of the following characters: head at least as long as wide, temples as long or longer than eye diameter, rostrum about as large as head, on the same plain and slightly curving downwards, intermediate antennal segments conical or transverse, prothorax long, narrowing anteriorly, not or slightly grooved longitudinally, elytral base straight, shoulders and apex rounded, hind femora surpassing apex of elytra, meta and hind tarsi long. As for today, the genus consists of 15 species, the last two described 59 years ago (DAMOISEAU, 1967). While studying material collected during several entomological expeditions in Gabon and Central African Republic in the last 15 years, and specimens from the private collection of the first author, we found a new species of *Usambioproctus*, providing here its description, illustrations and diagnostic characters.

Material and Methods

The material studied in this work consists of 18 female specimens, and the types are deposited in the Museo di Storia Naturale, Sezione di Zoologia "La Specola", Università di Firenze, Italy, in Dmitry Telnov's private collection, Rīga, Latvia, in Antonio Susini's private collection, Milano, Italy and in Eylon Orbach's private collection, Qiryat Tivon, Israel. The material was mostly determined by the first author. Individual labels are quoted separated by a double slash, and data on different rows by a single slash. Country records are arranged alphabetically. Photographs were taken with an EOS 5D Mark II camera (Canon, Tokyo, Japan) attached to an Axio Zoom.V16 stereoscope (Zeiss, Oberkochen, Germany).The images were stacked using Zerene Stacker v.1.4 software (https://zerenesystems.com/cms/stacker) and edited in Adobe

Photoshop CC (https://www.adobe.com/products/photoshop.html) and DxO Photolab 5 (https://www.dxo.com/dxo-photolab/).

Abbreviations used in the text:

ASCM	Antonio Susini Collection, Milano, Italy
DTLC	Dmitry Telnov collection, Riga, Latvia
EOCT	Eylon Orbach Collection, Qiryat Tivon, Israel
MNHUB	Museum für Naturkunde der Humboldt-Universität, Berlin, Germany
MZUF	Museo di Storia Naturale, Sezione di Zoologia "La Specola", Università di Firenze, Italy

Additional abbreviation:

N.P.	National Park

Results

Usambioproctus bartolozzii Orbach, Bayendi-Loudit, Susini, **sp. nov.** (Figs. 1-3)

Type material. Holotype. ♀, Gabon: Makokou/Station de Ipassa / 20.vi.2016, A. Susini (The HT is deposited in MZUF,collection number: MZUF-INS-COL-114045). Paratypes. Cameroon: 1♀, Sud-ouest/Lokomo, 10.xi.1990 / R. Mourglia (EOCT); 1♀, Cameroon int., no date, Konradt (EOCT). Central African Republic: 1♀, Ndoki N. P., Camp 1 / 02°28'51.0N 016°13'04.5E / 3-4.ii.2012, 35m, canopy UV / light trap, Exp. Sangha / 2012, P. Moretto (EOCT). Gabon: 3♀, Parco dell' Ivindo / May 2009, A. Susini (MZUF, ASCM); 2♀, Parco dell' Ivindo / 1-15.iv.2010, A. Susini (MZUF, ASCM); 4♀, Ipassa (Makokou) / xii.2011-i.2012 / A. Susini (MZUF, ASCM); 1♀, Ogooué-Ivindo / Parc National de l'Ivindo / Station de Ipassa / 0°30'45''N 12°48'10''E / 20-29.ii.2012, M. Pavesi (EOCT); 1♀, Ogooué-Ivindo Prov. / Makokou, 5-9 km SW, Ivindo N.P., Ipassa / forest research station, 0°30'52''N / 12°48'21''E, 20-21.vi.2016, 540m / edge of secondary lowland rainforest / MV light, D. Telnov (EOCT); 1♀, Ogooué-Ivindo Prov. / Makokou 5-9 km SW, Ivindo N.P., Ipassa / forest research station, 0°30'52''N / 12°48'21''E, 21-22.vi.2016, 540m / edge of secondary lowland rainforest / MV light, D. Telnov (DTLC); 1♀, Ogooué-Ivindo Prov. / Makokou 5 km SW, Ivindo N.P., Ipassa / forest research station, 0°30'52''N / 12°48'21''E, 23-24.vi.2016, 520m / edge of secondary lowland rainforest / MV light, D. Telnov (DTLC); 1♀, Ogooué-Ivindo Prov. / Makokou 5-9 km SW, Ivindo N.P., Ipassa / forest research station, 0°30'52''N / 12°48'21''E, 24-25.vi.2016, 480-540m / edge of secondary lowland rainforest / white light trap in canopy, D. Telnov (DTLC). (Note: accession numbers of Paratypes in MZUF: MZUF-INS-COL-114046 to 114050).

Description. Size (in mm). Holotype female (Fig. 1) – Total length: 8.0, head and rostrum (including mandibles): 1.8, prothorax: 2.6, elytra: 3.6, max width (at prothorax): 0.9. Body elongate, parallel sided; color reddish brown, antenna dark brown. Head subsquare, slightly convex, clearly separated from neck, surface of head and rostrum with very tiny sparse superficial punctuation; rostrum about as long as head, metarostrum parallel sided, with small median fovea dorsally, mesorostrum laterally slightly narrowing on scrobes, prorostrum as long as metarostrum, slightly enlarged at apex, with deep large median semicircular notch, mandibles small, slightly curving inwards; eyes small, oval, temples about as long as eye diameter; underside of head flat, with medial longitudinal shallow groove, and scattered short white hairs; Antenna (Fig. 2) directing backwards slightly surpassing anterior margin of prothorax, club shaped, thick, gradually thickening from article 3 to 10, scape short, subcylindrical, its proximal part looking spiny, article 2 conical, asymmetric, 3 and 4 subcylindrical, 3 shorter than 2, 4 shorter than 3, 5-8 transverse and appressed, antenna directing forwards each article thinner externally than in inner side, 9 transverse, about twice as long than 8, 10 as long as 9, 11

Fig. 1. *Usambioproctus bartolozzii* sp. nov. HT female, Gabon, habitus.

twice as long as 10, flattening distally, rounded at apex. Prothorax long, strongly compressed laterally in front, slightly rounded at sides on posterior half, disc flat with a thin medial groove present from base to nearly reaching neck. Elytra slightly longer than prothorax, all striae and interstriae present, interstriae flat, striae superficially punctuated, interstria 2 present at base and on posterior third and declivity, and absent on median third of elytra. Forelegs short, femora laterally compressed, tibiae shorter than femora, with short spur externally and a curved hooked longer tooth under first tarsal segment; tarsi much longer than tibia, first article long but not longer than 2 and 3 together; median legs slightly shorter and slender than forelegs, tarsal article 1 as long as 2 and 3 together; hind legs very long, femora strongly compressed basally and thickened distally, exceeding apex of elytra, tibia short, tarsite 1 as long as 2 and 3 together. Underside of body smooth, shiny, metasternum and abdominal plate slightly convex, with very short, scattered hairs, sternites 2, 3 and 4 flat. Spermatheca as in Fig. 3.

Fig. 2. *Usambioproctus bartolozzii* sp. nov. HT female, Gabon, head.

Fig. 3. *Usambioproctus bartolozzii* sp. nov. PT female, Gabon, spermatheca.

The shape of the antenna of the paratypes show great conformity with the holotype, a character that is very typical to the new species and which does not resemble any other *Usambioproctus* species. However, paratypes vary in size in comparison to the holotype, ranging from 5.2 to 8.1 mm; they also show some coloration differences between slightly lighter reddish brown to dark reddish brown, and in some paratype specimens the thin longitudinal medial groove on prothorax is present from base but reaches only about half length of prothorax and not the neck.

Etymology. The new species is dedicated to our dear friend Dr. Luca Bartolozzi, a well-known specialist of the beetle families Brentidae and Lucanidae and is a tribute to his recent retirement. Dr. Bartolozzi served until his retirement as curator of the Entomology Department in the Zoological Museum “La Specola” of the University of Florence, Italy. Luca has been a very good companion for us during many entomological expeditions in Africa and Asia, and his precious knowledge and generosity is highly appreciated.

Distribution. The new species is currently known from Cameroon, Central African Republic, and Gabon.

Discussion. The key to the species of *Usambioproctus* (Damoiseau, 1967: 83) should be modified as follows to include the new species:

4. Interstria 2 disappearing on median third of elytra, but present on base and declivity so that interstia 3 is undulated and not parallel to sutural band 4a
- Interstria 2 more or less rapidly, sometimes strongly narrowing, but not totally disappearing from middle 5

4a. Antennal segments 3-8 semiequal, segments 9 and 10 longer than wide .... *U. conjunctus* (Kleine)
- Antenna segments 3-10 form a club, strongly widening distally, much wider than long ..... ***U. bartolozzii* sp. nov.**

Remarks. In his key for *Usambioproctus*, Damoiseau (1967: 83) separates the genus for the first time into two groups of species: those with an antennal grooming device on the front tibiae, and those without it. The new species belongs to the group of *Usambioproctus* without such a grooming device on the front tibia. It is similar in general aspect to *U. compressicornis*. but differs by not having the grooming device on the protibiae, and by having a thickened antenna and articles 4-10 transverse, while in *U. compressicornis* the antenna is thickened but antennal articles 9-10 are not transverse. According to Kleine (1928), the holotype of 3 of the species of *Usambioproctus*, all described by Kolbe under the genus *Hesperobius*, later synonymized under *Xestocoryphus* by Kleine (1927) and later replaced under *Usambioproctus* stat. res. (Alonso-Zarazaga & Lyal, 1999), are deposited in MNHUB, however, they were not found there (Sforzi & Bartolozzi, 2004). Reading the original short description of these 3 species, eliminate the possibility to identify them as our new species: *Usambioproctus rufus* has a short and stocky-built prothorax ("prothorax kürzer und untersetzt gebaut"), unlike the slender long one of the new species, and *U. tempestivus* and *U. vestigialis* have slim antennae ("antennen schlanker") unlike the antennae of the new species. As for *U. paniscus*, Kolbe (1916: 63) only refers to its antennal color – antennae brown, club red-chestnut colored ("Antennen braun, Keule rotkastanienfarbig"), without stating anything about its unique shape or thickness.
The fact that all the 18 specimens belonging to the type series of the new species are females, even if they were not collected in the same place and date, is rather surprising. By comparing the specimens, and in particular their unusual shape of antennae to good photos of three of the types of the 5 species of *Usambioproctus* lacking the antennal grooming device, whose females are still unknown, we can eliminate the possibility that our new taxon could be the female of one of them, mainly because there is no sexual dimorphism in the antennae in the genus *Usambioproctus*. The presence of females only within the type series could be maybe explained either by a randomal collecting of females only, or by the hypothesis that males are not attracted to light traps. Another explanation could be the phenomenon of parthenogenesis in this species, a phenomenon known to occur sometimes in weevils (Saura *et al.*, 1993), although not yet known in Brentidae.

Acknowledgments

We would like to thank Dmitry Telnov (NHM) and Riccardo Mourglia (Torino, Italy), for allowing us the opportunity to study material collected during several expeditions they took part in. We wish to thank Philippe Moretto, who was kind enough to let us study the material collected during the 2012 Sangha expedition in Central African Republic. Together with Philippe Moretto we wish to thank the Faculté des Sciences de Bangui (Central African Republic) who gave the authorization of research 019/UB/DSV2012 dated January 16, 2012; the Central African authorities who gave access to the Ndoki N.P. and all the people who helped

the expedition in the field. We pay tribute to late Philippe Annoyer (1967-2020) who organized an exceptional expedition into Pygmy territory. Many thanks to Dávid Selnekovič (Bratislava, Slovakia) for the photos in this paper. We would also like to thank an anonymous reviewer for the useful remarks on this paper.

References

ALONSO-ZARAZAGA M.A. & LYAL C.H.C., 1999. A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae). *Entomopraxis, S. C. P.*, Barcellona, 315 pp.

DAMOISEAU R., 1961. Nouveaux Brenthides d'Afrique (Coleoptera Brenthidae). *Revue de Zoologie et de Botanique Africaines*, 63(3/4): 277-290.

DAMOISEAU R., 1963. Contribution à la connaissance des Brentides (Coleoptera - Brentidae). 6. Brentidae africains, descriptions et synonymies (deuxième partie). *Revue de Zoologie et de Botanique Africaines*, 67(1/2): 105-136.

DAMOISEAU R., 1967. Monographie des Coléoptères Brentidae du Continent africain. *Annales du Musée royal de l'Afrique centrale, Série in 8° (Sciences Zoologiques)*, 160: 1-507.

DE MUIZON J., 1955. Notes sur les Brenthides. Description et synonymies. (Première partie). *Bulletin de l'Institut français d'Afrique noire,* (A) 17(2/3): 455-529.

KLEINE R., 1916. Neue Taphroderini (Brenthidae, Col.). *Entomologische Mitteilungen*, 5(1/4): 1-92.

KLEINE R., 1927. Coleopterorum Catalogus. Pars 89: Brenthidae, Editio secunda. *W. Junk*, Berlin, 94 pp.

KLEINE R., 1928. Die Typen der Familie Brenthidae. *Stettiner Entomologische Zeitung*, 89 (1/2): 63-96.

KOLBE H. J., 1916. Beitrag zur Morphologie und Systematik der Taphroderinen (Familie der Brenthiden) Afrikas. *Deutsches Entomologische Zeitschrift*, 1916: 50-67.

SAURA A., LOKKI J. & SUOMALAINEN E., 1993. Origin of Polyploidy in Parthenogenetic Weevils. *Journal of Theoretical Biology,* 163 (4): 449-456.

SFORZI A. & BARTOLOZZI L., 2004. Brentidae Billberg, 1820 (Brentinae, Cyphagoginae, Pholidochlamydinae, Taphroderinae, Trachelizinae, Ulocerinae) (Coleoptera, Curculionoidea) (pp. 19-828). *In*: SFORZI A. & BARTOLOZZI L. (eds), Brentidae of the world (Coleoptera, Curculionoidea). *Monografie del Museo Regionale di Scienze Naturali*, *Torino*, 39: 1-976.

Received: 01 February 2026
Accepted: 21 March 2026

© 2026 Orbach *et al.* This is an open access work distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY), which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited. To view a copy of the license, visit http://creativecommons.org/licenses/by/4.0/