

PARC NATIONAL DE L'UPEMBA  
I. MISSION G. F. DE WITTE

en collaboration avec

W. ADAM, A. JANSSENS, L. VAN MEEL  
et R. VERHEYEN (1946-1949).

Fascicule 59 (4)

NATIONAAL UPEMBA PARK  
I. ZENDING G. F. DE WITTE

met medewerking van

W. ADAM, A. JANSSENS, L. VAN MEEL  
en R. VERHEYEN (1946-1949).

Aflevering 59 (4)

EUAESTHETINAE <sup>(1)</sup>  
(COLEOPTERA POLYPHAGA)  
Fam. STAPHYLINIDAE

BY

DAVID H. KISTNER (Chico)

The primary purpose of this paper is to report the three species of *Euaesthetinae* collected by the G. F. DE WITTE et. al. Mission in the Upemba National Park. Two of the three species are new and will be described here. The third species is better known from localities outside of the park and will therefore be redescribed and illustrated later. In order to describe one of the new species (*Octavius terreus* n. sp.), it became necessary to review all of the species <sup>(2)</sup> of the genus *Octavius* found south of the Sahara desert in Africa.

The author wishes to express his thanks to Mr. G. FAGEL, Institut des Parcs Nationaux du Congo Belge, Brussels (I.P.N.C.B.); Mr. RUPERT L. WENZEL, Chicago Natural History Museum, Chicago (C.N.H.M.); Mr. P. BASILEWSKY, Musée Royal du Congo Belge, Tervuren (M.R.C.B.); and Mr. J. BALFOUR-BROWNE, British Museum (Natural History), London (B.M.N.H.) for the loan of specimens included in this study. The initials given above will be used to indicate the institutions where specimens cited are deposited. Specimens retained in the collection of the author will be indicated (D.K.).

<sup>(1)</sup> This paper is part of a more general study of the *Euaesthetinae*, which has been supported in large part by the National Science Foundation (Grant No. G-6126).

<sup>(2)</sup> Specimens and species collected from localities outside of the boundaries of the park will be indicated between brackets.

1. — *Stenaesthetus gérardi* BERNHAUER.

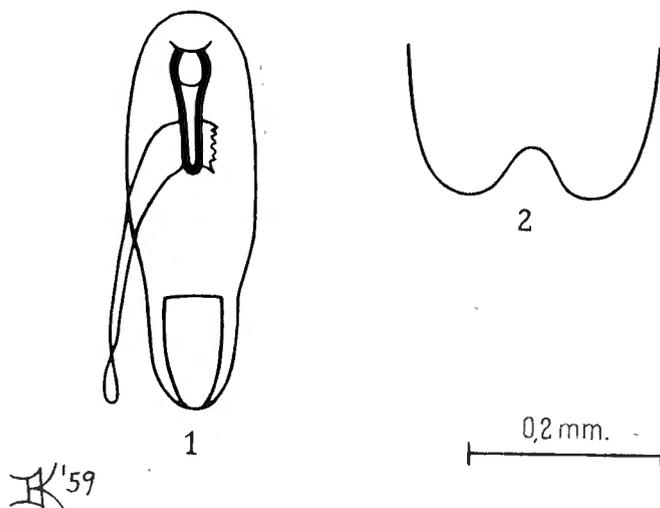
*Stenaesthetus gérardi* BERNHAUER, Verh. Zool.-Bot. Ges. Wien, 78, 1928, p. 108. — Musée Royal du Congo Belge, Tervuren [Belgian Congo : Elisabethville, Pweto, 1918, Dr. GÉRARD].

Material examined. — 1 ♀ : Parc National de l'Upemba : gorges de la Pelenge, 1.150 m, 31.V.1947, collected in detritus (I.P.N.C.B.).

2. — *Doletica wittei* n. sp.

(Figs. 1, 2.)

Dorsal surface of the head, pronotum, and elytra uniformly yellowish brown; surface of the venter somewhat lighter. Entire dorsal surface deeply and evenly punctate with the usual pronotal sculpture of the genus.



FIGS. 1, 2. — *Doletica wittei* n. sp.  
1 : Male genitalia; 2 : Apex of male abdominal sternite VIII.

Surface tends to be shiny when completely clean, but specimens are usually heavily encrusted with dirt so that the appearance is flat and dull. Wings are full-sized and functional. Male abdominal sternite VIII shaped as in figure 2. Male genitalia shaped as in figure 1.

Measurements. — Head length, 0,20-0,22 mm; pronotum length, 0,30-0,32 mm; elytra length, 0,29-0,32 mm. Number measured, 11.

- Distinguished from all other species by the shape of the male genitalia. Also distinguished from *Doletica bicolor* CAMERON by its uniform coloration and smaller size, from *D. brevipennis* CAMERON by its longer elytra and full-sized wings, and from *D. machadoi* CAMERON by its lighter color.

Holotype : ♂ : No. e242, Parc National de l'Upemba : gorges de la Pelenge, 1.150 m, 31.V.1947, collected in detritus. In the collection of the Institut des Parcs Nationaux du Congo Belge, Brussels.

Paratypes : 1 ♀ : Parc National de l'Upemba, Kabwe-sur-Muye, affl. Lubanga, 1.320 m, 12.V.1948, collected by sifting (I.P.N.C.B.).

(1 ♂, 1 ♀) : Parc National de l'Upemba : Kabwe-sur-Muye, affl. Mitembo, 1.320 m, 14.V.1948, collected by sifting (I.P.N.C.B., D.K.).

Remarks. — CAMERON (1938) originally described this genus in the *Oxytelinae*. From the structure of the labrum, the mandible, and the antennae, as well as the absence of abdominal sternite II, it is clear that it belongs to the *Euaesthetinae*. The rest of the species need to be reviewed and a better generic definition given. This will be done at a later date.

#### Genus **OCTAVIUS** FAUVEL.

*Octavius* FAUVEL, Bull. Soc. Linn. Normandie, sér. 2, 6, 1873, p. 62; DEVILLE, Bull. Soc. Ent. France, 1911, p. 214; PORTEVIN, Encyc. Ent., 12, 1929, p. 390; COIFFAIT, Rev. Franç. d'Ent., 25(2), 1958, pp. 78-80.

*Thaxterius* BERNHAUER, Stylops, 4, 1935, p. 213, fig. 1. Generitype : *Thaxterius sulcicollis* BERNHAUER. New synonym.

Type of the genus : *Octavius pyrenaicus* FAUVEL.

The palearctic species of *Octavius* have been recently revised by COIFFAIT (1958). In this revision, he gives an excellent diagnosis of the genus as well as good descriptions and illustrations of most of the European species. One of these European species has been reported from North Africa, but was unavailable for study at this time. This review will be concerned only with the African species found south of the Sahara desert.

COIFFAIT (loc. cit.) organized the European species into two sections containing various species groups. The subsaharan species do not fit well into either section, although they are more closely related to the species of Section II. The following key will serve to distinguish the species of Section III (new) from species belonging to Sections I and II of COIFFAIT (loc. cit).

1. Sides of pronotum not toothed or notched (except *Octavius cerberus* COIFFAIT); punctuation of dorsum feeble so that the surface appears smooth (except *transadriaticus* group) ..... Section I.
- Sides of pronotum toothed or notched. Punctuation of the dorsum distinct and dense ..... 2

2. Species without eyes ..... Section II.  
 — Species usually with large eyes, but always with at least small ones;  
 labrum constant in shape (fig. 11) ..... Section III (new).

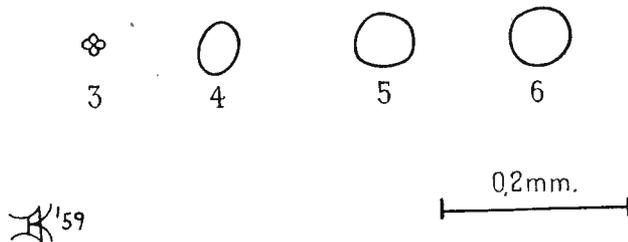
## KEY TO SPECIES OF SECTION III.

1. Eyes small, four pigmented facets ..... *africanus* CAMERON.  
 — Eyes large, too many facets to conveniently count ..... 2  
 2. Eyes large, size as shown in figures 5 and 6 ..... 3  
 — Eyes smaller, size as shown in figure 4; male genitalia shaped as in  
 figure 9 ..... *terrensis* n. sp.  
 3. Male genitalia shaped as in figure 10; pronotum with median sulcus  
 indistinct ..... *ituriensis* n. sp.  
 — Pronotum with median sulcus indistinct ..... *sulcicollis* BERNHAUER.

3. — [**Octavius africanus** CAMERON].

(Fig. 3.)

*Octavius africanus* CAMERON, Publ. cult. Mus. Dundo, Comph. Diam. Angola,  
 7, 1950, p. 119. — British Museum (Natural History), London [Angola :  
 Dundo, Luachimo forest, VI.1949].



FIGS. 3-6. — Eyes, lateral view.

3 : *Octavius africanus* CAMERON; 4 : *O. terrensis* n. sp.;  
 5 : *O. ituriensis* n. sp.; 6 : *O. sulcicollis* BERNHAUER.

Color yellowish-brown throughout. Sculpture of head, pronotum, and elytra consists of closely packed, fine punctures. Eyes small; 4 pigmented facets (fig. 3). Pronotum with lateral border notched or finely toothed; also with a shallow but distinct median sulcus which is straight and without flattened lateral ramifications. Two moderately deep fossae on the base of the pronotum; one on each side of the mid-line. Median sulcus 0,08 mm long; extends from 0,04 mm from the anterior border to 0,09 mm from the posterior border of the pronotum. Male unknown.

Measurements. — Head length, 0,16 mm; pronotum length, 0,21 mm; elytra length, 0,16 mm. Number measured, 1.

Distinguished from all other species by the small, four-faceted eyes.

Material examined. — 1 ♀ : No. e 1167, Paratype, *O. africanus* CAMERON, det. M. CAMERON [Angola : Dundo, Luachimo forest, VI.1949, Coll. by A. DE BARROS MACHADO, Field No. Ang. 1522.9 (B.M.N.H.)]

4. — **Octavius terreus** n. sp.

(Figs. 4, 7, 9, 11.)

Color reddish-brown throughout. Sculpture of the head, pronotum, and elytra consists of closely packed, fine punctures. Eyes larger; many pigmented facets (fig. 4). Pronotum with the lateral borders finely toothed or notched; also with a shallow but distinct median sulcus which is straight without lateral flattened ramifications. Two moderately deep fossae at the base of the pronotum; one on each side of the mid-line. Median sulcus 0,08 mm long; extends from 0,08 mm from the anterior border to 0,09 mm from the posterior border. Male abdominal sternite IX shaped as in figure 7. Male genitalia shaped as in figure 9.

Measurements. — Head length, 0,18-0,21 mm; pronotum length, 0,25-0,27 mm; elytra length, 0,18-0,21 mm. Number measured, 11.

Distinguished from all other species by the shape of the male genitalia and the relative size of the eye.

Holotype : ♂ · No. e 228, Parc National de l'Upemba : Kabwe-sur-Muye, affl. Mitembo, 1.320 m, 14.V.1948, collected by sifting. In the collection of the Institut des Parcs Nationaux du Congo Belge, Brussels.

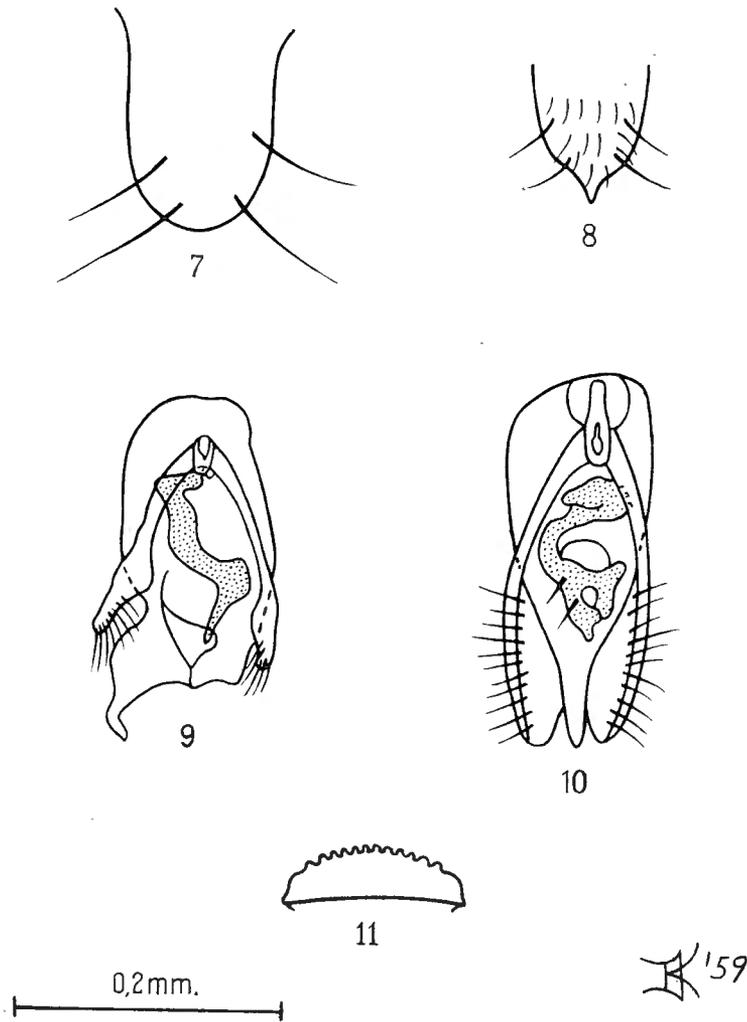
Paratypes : 11 (1 ♀) : same data as holotype (I.P.N.C.B., D.K.); 1 ♂ : Parc National de l'Upemba, Kabwe, s. riv. dr. Muye, affl. Lubanga, 1.320 m, 12.V.1948, collected by sifting dirt (I.P.N.C.B.).

5. — [**Octavius ituriensis** n. sp.].

(Figs. 5, 8, 10.)

Color reddish-brown throughout. Sculpture of head, pronotum and elytra consists of closely packed, fine punctures from which arise very fine, short, yellow setae. Eyes relatively large; many faceted (fig. 5). Pronotum with lateral borders finely toothed or notched; also with a shallow median sulcus which is not distinct or well defined but is without flattened lateral ramifications characteristic of species belonging to Sections I and II. No fossae present at the base of the pronotum. Median sulcus too indistinct

to measure accurately. Male abdominal sternite IX shaped as in figure 8. Male genitalia shaped as in figure 10, note two setae on internal sac (stippled area).



FIGS. 7-8. — Apex of male abdominal sternite IX.

7: *Octavius terrensis* n. sp.; 8: *O. ituriensis* n. sp.

FIGS. 9-10. — Male genitalia (stippled area represents the internal sac):

9: *O. terrensis* n. sp.; 10: *O. ituriensis* n. sp.

Labrum: 11: *O. terrensis* n. sp.

Measurements. — Head length, 0,19-0,20 mm; pronotum length, 0,24-0,26 mm; elytra length, 0,22-0,24 mm. Number measured, 2.

Distinguished from all other species by the shape of the male genitalia. Most closely related to *O. sulcicollis* BERNHAUER from which it is distinguished by the indistinctness of the median sulcus and the absence of basal fossae on the pronotum.

Holotype: ♂: No. e 482, [Belgian Congo: Kibali-Ituri, between Mambasa and Mungbere, near Epulu, 900 m, II.1954, Coll. by N. LELEUP]. In the collection of the Musée Royal du Congo Belge, Tervuren.

Paratypes: 2 (1 ♀), same data as holotype (M.R.C.B., D.K.).

Remarks. — The female paratype is a callow and the measurements were not included in the limits given above.

6. — [***Octavius sulcicollis*** BERNHAUER new combination].

(Fig. 6.)

*Thaxterius sulcicollis* BERNHAUER, Stylops, 4, 1935, p. 214, fig. 1. — Chicago Natural History Museum, Chicago [Cameroons, no further locality data, THAXTER].

Color reddish-brown throughout. Sculpture of head, pronotum and elytra consists of closely packed, fine punctures. Eyes relatively large; many pigmented facets (fig. 6). Pronotum with lateral borders finely toothed or notched; also with a shallow but distinct median sulcus is without any flattened lateral ramifications. Two shallow fossae located at base of pronotum, one on each side of the mid-line. Median sulcus 0,08 mm long, located 0,04 mm from the anterior border and extends to 0,09 mm from the posterior border of the pronotum. Male genitalia unknown.

Measurements. — Head length, 0,16-0,20 mm; pronotum length, 0,21-0,25 mm; elytra length, 0,20-0,21 mm. Number measured, 2.

Distinguished from *O. terreus* n. sp. to which it is most closely related by the distinctness of the median sulcus of the pronotum, the presence of basal pronotal fossae, and the apparent scarceness of pilosity. Distinguished from the other species by the large size of the eyes.

Material examined. — 1 ♀: No. e 1305, Holotype, *T. sulcicollis* BERNHAUER, det. M. BERNHAUER [Cameroons, THAXTER, Field No. 2281 (C.N.H.M.)]; 1 ♂: (abdominal segment IX plus genitalia missing), Paratype, *T. sulcicollis* BERNHAUER, det. M. BERNHAUER [Cameroons, THAXTER, Field No. 2281-B (C.N.H.M.)].

Remarks. — The chief difference between *Thaxterius* BERNHAUER and *Octavius* FAUVEL was the presence of eyes in *Thaxterius*. With species

from Africa showing a graded series from large eyes down to four-faceted eyes (see COIFFAIT, 1958 and 1959), the apparently good generic character has slipped away. I do not see any good reasons for naming opposite ends of a graded series of species and I have therefore relegated *Thaxterius* BERNHAUER into synonymy. The fact that both groups of species occupy the same ecological niche seems to support this action also. The African species are more primitive than the Palearctic species which would indicate an Ethiopian origin for the European species.

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