

Remarks upon some African Histerini (Coleoptera: Histeridae)

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Taxonomy, new synonyms, new combinations, Coleoptera, Histeridae, Histerini, Afrotropical region

Abstract. Taxonomical and systematic status of some African Histerini was analyzed. The following new synonyms have been established: *Hister nomas* Erichson, 1834 (= *H. nigrinus* Fahraeus, 1851 syn. n., = *H. impressipygus* Théron, 1964 syn. n., = *H. craeteris* Vienna, 1987 syn. n.). Lecto- and paralectotypes for some species are designated. The species *Exorhabdus aenescens* Théron, 1961 has been transferred to the genus *Quassarus*. New localities for some species are given.

INTRODUCTION

This is a next paper presenting further efforts to explain the taxonomical and systematic position of some species classified among the Histerini. The tribe still contains a number of genera and species having no unique and clearly discriminating characters, especially those based on pronotal and elytral striation and a few structural characters such as the tibial dentation and setation of the thorax. Thus, an examination of the structure of the male copulatory organ allowed to synonymize as well as to give more precise generic definition for some African species.

ACRONYMS

The paper is based on the materials loaned from the following institutions:

- CHPK collection of Piet Kanaar, Oegstgeest, the Netherlands;
CHSM author's collection;
MNHN Muséum National d'Histoire naturelle, Paris, France;
MNHUB Museum für Naturkunde der Humboldt-Universität zu Berlin, Germany;
MRAC Musée royal de l'Afrique Centrale, Tervuren, Belgie;
TMNH Transvaal Museum of Natural History, Pretoria, South Africa.

RESULTS

Pachylister caffer (Erichson, 1834)

Type material. Lectotype (♂): 1) [white, printed] 48785, 2) [green, handwritten] caffer Er., Caffraria, Kr., 3) [red, printed] Type, 4) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48785,

Hister Caffer Er.* , Caffraria, Krebs, Zool. Mus. Berlin, 5) [red, printed] Syntypus, Hister caffer Erichson, 1834, labeled by MNHUB 2007, 6) [white, printed] Lectotypus, 7) [white, printed] des. S. Mazur 2007, (MNHUB). Paralectotypes. I, (♀): 1) [red, printed] Type, 2) [blue, printed] Hist.-Coll. (Coleoptera), Hister Caffer Er., Caffraria, Krebs, Zool. Mus. Berlin, 3) [red, printed] Syntypus, Hister caffer Erichson, 1834, labeled by MNHUB 2007, 4) [white, printed] Paralectotypus, 5) [white, printed] des. S. Mazur 2007, II,III, (♀): as labeled as the paralectotype I, (MNHUB).

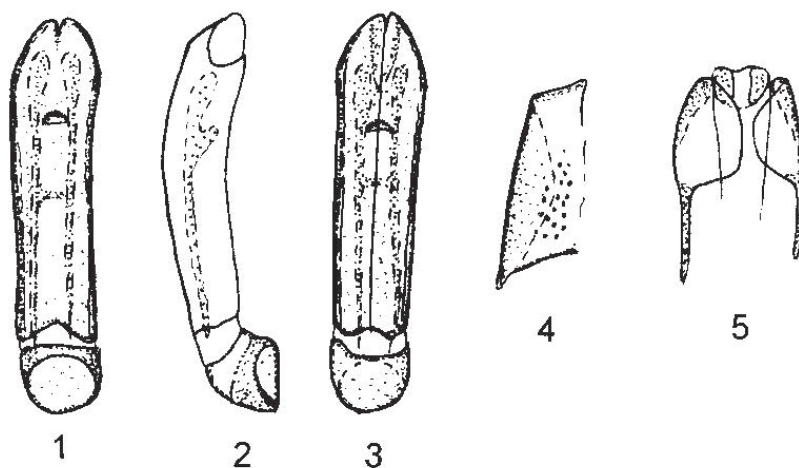
Remarks. Described based on 4 type specimens; thus, a designation of the lecto- and paralectotypes is given above. The genital structure of this species has been figured in the previous author's paper (Mazur, 2004, figs 4, 7).

***Pachylister conilabris* (Schmidt, 1889)**

(Figs 1-5)

Type material. Holotype (♂): Caffraria, Type, Hister conilabris Schm., Typ, coll. J. Schmidt, Holotypus, Hister conilabris Schmidt, 1889, labeled by MNHUB 2007, Pachylister Conilabris Schmidt, S. Mazur 2007, (MNHUB).

Remarks. A rare species, apart from the type-locality recorded lately from Transvaal (Mazur, 2004: 171). Additionally, the male genital structure is figured (Figs 1-5).



Figs 1-5. *Pachylister conilabris*: 1-3- aedeagus, 4- 8th tergite, dorsally; 5- 9th and 10th tergites; 1- ventrally; 2- laterally; 3- dorsally.

***Hister bremeri* Mazur, 1979**

(Figs 6-12)

Type material. Paratype (♀): Sudan, prov. Darfur, El Fasher, and Kadaver, 3.viii.1977, H. J. Bremer leg., (CHSM).

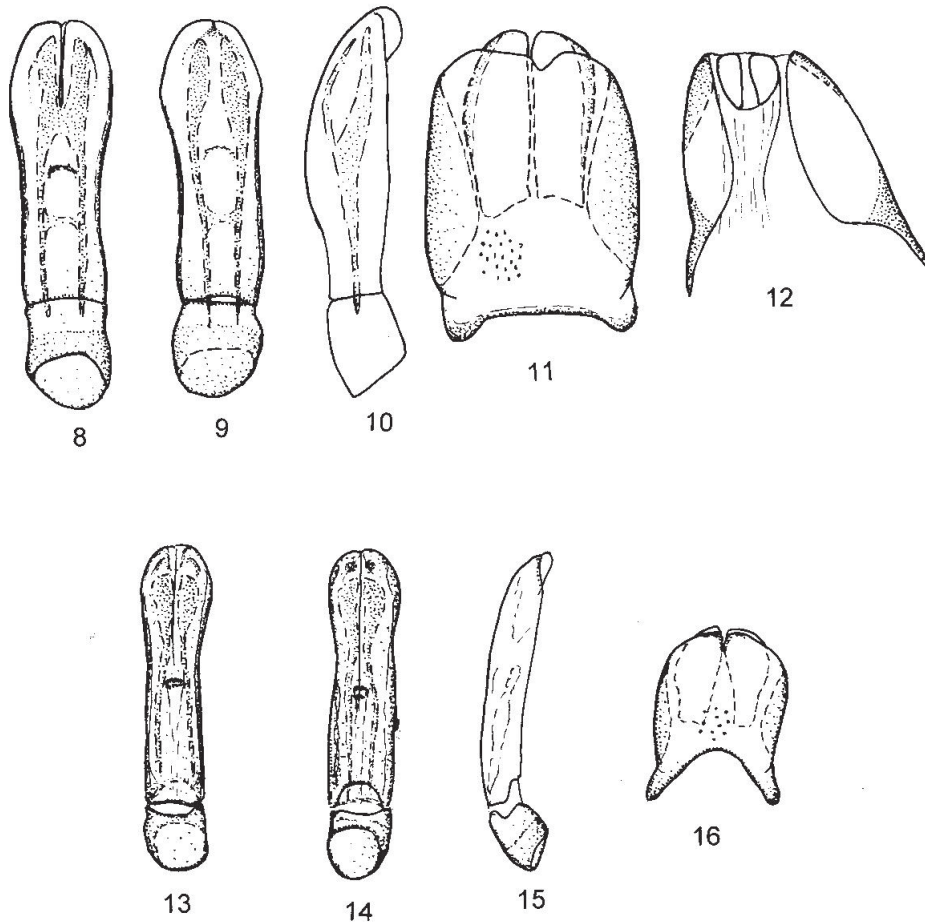
Other material studied: [RSA] Südafrika/E-Transv.[aal], Krüger Nat. Park., Skukuza, 20.I.1996, L. Schmidt leg, 1 ♀, (CHSM); Namibia: Gr. Namaland, Bethanien, i.ii.1885, A. Schenck S. leg, 1 ♀, (MNHUB); D. S. W. Afrika, von Omaruru nach Okahanjande, 18-22.ii.1909, S.G. Seewald leg, 1 ♂, (MNHUB).

Remarks. Described originally from Sudan (Mazur, 1979: 145) and compared with *H. capicola* Marseul, 1854 from which it differs, however, by the quadridentate foretibiae, complete outer lateral stria and by the lack of sutural stria (Figs 6-7). To a better recognition of this species, the figures of the male copulatory organ are also given (Figs 8-12).

Distribution. Sudan, new for Namibia and RSA.



Figs 6-7. *Hister bremeri* (holotype): 6- upper side; 7- under side.



Figs 8-16. Genital structure of the male: 8-12: *Hister bremeri*; 13-16: *H. distinguendus*; 8-10, 13-15- aedeagus; 11, 16- 8th tergite, dorsally; 12- 9th and 10th tergites; 8, 14- ventrally; 9, 13- dorsally; 10, 15- laterally.

***Hister distinguendus* Schmidt, 1895**

(Figs 13-16)

Type material. Syntypus (♂): [DR Congo] Kuitu, Hister n. sp. prope circulus, *Hister distinguendus* Schm., (MNHUB).

Remarks. A poorly known species recorded only from the type-locality. To a better recognition of this species, the figures of the structure of the male copulatory organ are given (Figs 13-16).

Hister nomas Erichson, 1834

(Figs 17-18)

Hister nigrinus Fahraeus in Boheman, 1851: 533 **syn. n.**

Hister impressipygus Théron, 1964: 349 **syn. n.**

Hister craeteris Vienna, 1987: 224 **syn. n.**

Type material. *Hister nomas*, Lectotype (♀): 1) [green, handwritten] *nomas* Er., Pr. b. sp. Kr.*[RSA], 2) [white, printed] 48810, 3) [red, printed] Type, 4) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48810, *Hister nomas* Er.*, Pr. b. sp. Krebs, Zool. Mus. Berlin, 5) [red, printed] Syntypus, *Hister nomas* Erichson, 1834, labeled by MNHUB 2007, 6) [white, printed] Lectotypus, 7) des. S. Mazur 2007, (MNHUB). Paralectotype (♂): 1) [blue, handwritten] Natal Boh., 2) [blue, printed] Hist.-Coll. (Coleoptera) Nr 48810, *Hister nomas* Er.*, [RSA] Port Natal, Bohem., Zool. Mus. Berlin, 3) [white, printed] Paralectotypus, 4) des. S. Mazur 2007, (MNHUB).

Hister impressipygus, Holotype (♀): Musée du Congo, [Rwanda] Ruanda: Ninda, 11-I-1934, G.F. de Witte, Parc. Nat. Albert, *Hister impressipygus* Thér. n. sp., (MRAC).

Hister craeteris, Holotype (♀): [Tanzania] Ngorongoro - Tang., xi.1961, P. de Moor, (TMNH).

Remarks. This species exhibits a great deal of variability, including the body size, the elytral and pronotal striation as well as the density and size of pygidial punctation.

The only differences between *Hister nomas* and *H. nigrinus*, noted by Bickhardt (1919: 81) are the presence of apical depression on elytra and lateral foveae on propygidium. Detailed examination of the types of both, *H. nomas* and *H. nigrinus*, clearly showed that these species were identical, especially in the genital structure (Mazur, 2006, figs 16-18).

Théron (1964: 349) compared *Hister impressipygus* with *H. nigrinus* and *H. nomas* finding the following differences: “Les stries dorsales, cependant, ne sont pas aussi profondément gravées et aussi fortement crénelées que chez ces deux espèces. Les élytres n’ont pas une dépression transversale devant leur apex, comme on la voit chez *H. nigrinus*; la mentonnière du prosternum n’est pas étirée en pointe, comme chez *H. nomas*, mais au contraire parfaitement arrondie”. These differences, however, are normal individual variation being also met among other specimens. Thus, there is no doubt that *H. impressipygus* is a synonym of *H. nomas*.

When describing *Hister craeteris*, Vienna (1987: 225) placed it near *Hister scabripygus* Schmidt (now *Afrohister scabripygus*) and *H. parumstriatus* Desbordes but it is hard to find closer relationships between them. He pointed out, however, the principal character discriminating *H. craeteris* from both these species mentioned: “... fondamentalemente differisce par l’assenza di tomentosità nelle epipleure del prosterno”. *Hister craeteris* differs externally from *H. nomas* by complete outer lateral pronotal stria and tridentate foretibia. The length of pronotal striae is also variable. Erichson (1834: 138) described them originally as being complete: “... der äussere Streif reicht fast bis zum Hinterrande, der innere ist ganz”. In fact, the outer lateral pronotal stria is interrupted in the lectotype and in the paralectotype (Fig. 17).

The number of tibial dents is usually four but this feature is also variable, even in same specimen: one male from Ivory Coast [CHSM] has got 3 dents on left tibia and 4 on right one whereas a female from Madagascar [CHSM] has got 5 dents on left tibia and 4 on the right one. So, there is no reason to treat *H. craeteris* as a separate species and it should be regarded as a synonym of *H. nomas*.

Hister nomas occupies a rather isolated position among the African *Hister*-species, showing closer relationship to *H. leopoldi* Desbordes, 1929. Both these species differ from the majority of African species by the lack of pronotal pilosity and clearly expressed sexual dimorphism: the ventral margin of male foretibia is angular and distinctly broadened (Fig. 18) whereas the female foretibia is broadened gradually, less markedly. *Hister leopoldi* may be separated from *H. nomas* mainly by widely interrupted frontal stria (Mazur, 1981: 182, fig. 7).

Hister nomas has been described based on 2-type specimens, so a designation of the lecto- and paralectotype is given above.

***Hister pygolaevis* Desbordes, 1917**

(Figs 19-22)

Type material. Holotype (♂): Museum Paris, [DR Congo] Congo belge, Maniema: Kindu, L. Burgeon, 1917, Type unique, *Hister pygolaevis* n. sp. H. Desbordes det. 1917, (MNHN).

Other material studied: [Central African Republic]: Rép. Centralafricaine, riv. Oubangui, 13 km en amont de Bangui, sous bouses sur plage sable, iii-1980, 2 ex.; Bozo, in/under excrements, viii-1981, N. Dégallier leg., 1 ex.; [Senegal], Dakar, M. André, 1 ex.; [Cameroon] Cameroun, Bertousa / ORSOM Paris, Mouchet 1959, 1 ex., (all in CHPK).

Remarks. Compared originally (Desbordes, 1917: 215) with *Hister aequatorius* Marseul, 1854. Later Bickhardt (1919: 215) placed it between *H. mirus* Bickhardt, 1919 and *H. cribrurus* Marseul, 1854. From all these species it may be distinguished by the genital structure (Figs 19-22).

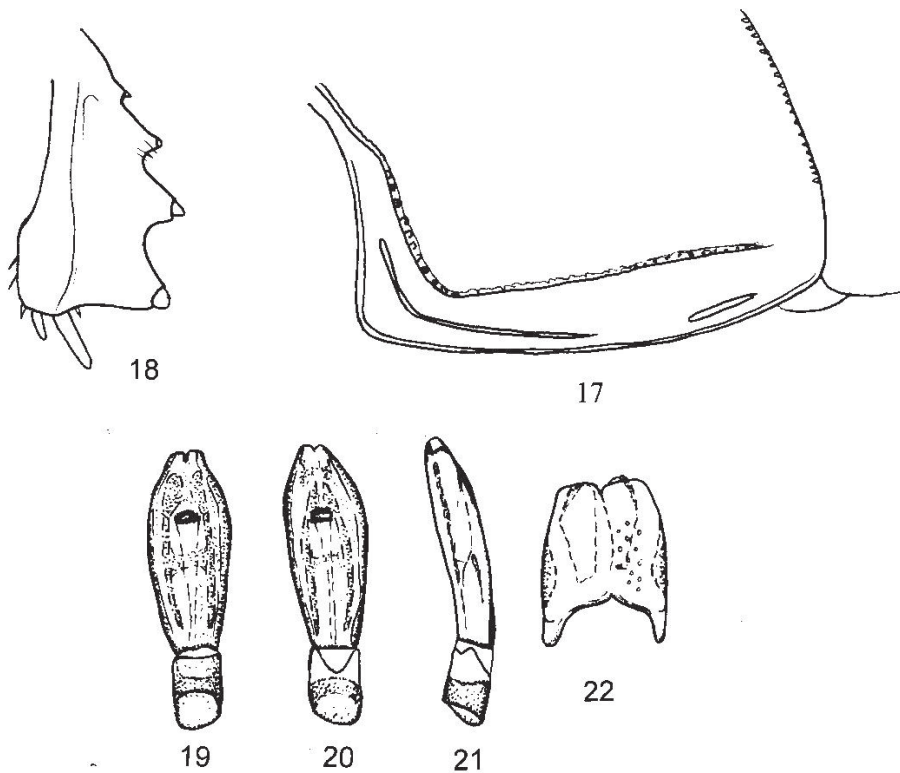
Distribution. DR Congo, Congo, Ghana, new to Central African Republic, Senegal and Cameroon.

***Exorhabdus schoutedeni* Desbordes, 1919**

(Figs 23-30)

Type material. Holotype (♂): [DR Congo]: Musée du Congo, Kapiri, x.1912, Miss. Agric. R. Det. 501, Holotypus, Type no 1, *Exorhabdus Schoutedeni* n. sp., H. Desbordes, 1919, (MRAC). Paratypes. I: (1 ♂): as labelled as the holotype, Paratypus, Type no 4, x.1912; II: (1 sex undetermined): as labelled as the holotype, Paratypus, Type no 5, III: (1 sex undetermined): as labeled as the holotype, Paratypus, Type no 3, x.1912, (all in MRAC).

Remarks. Described as having three lateral pronotal striae and, owing to this, compared with *Zabromorphus pachysomus* (Ancy, 1882) (Desbordes, 1919: 74): "Le pronotum de cette espèce est pourvu, en dehors de sa strie marginale de trois stries laterales et il est



Figs 17-22. *Hister nomas*: 17-18; *H. pygolaevis*, genital structure of the male: 19-22; 17- pronotal side; 18- foretibia of the male; 19-21- aedeagus; 22- 8th tergite; 19- ventrally; 20- dorsally; 21- laterally.

marqué latéralement de stries et de points. Ce caractère exceptionnel lui est commun avec *Zabromorphus pachysomus* Ancy... “.

An examination of the type-series showed, however, that the pronotal striation was incomplete, consisting of more or less reduced outer lateral stria with some punctiform striae accompanying it (Fig. 24).

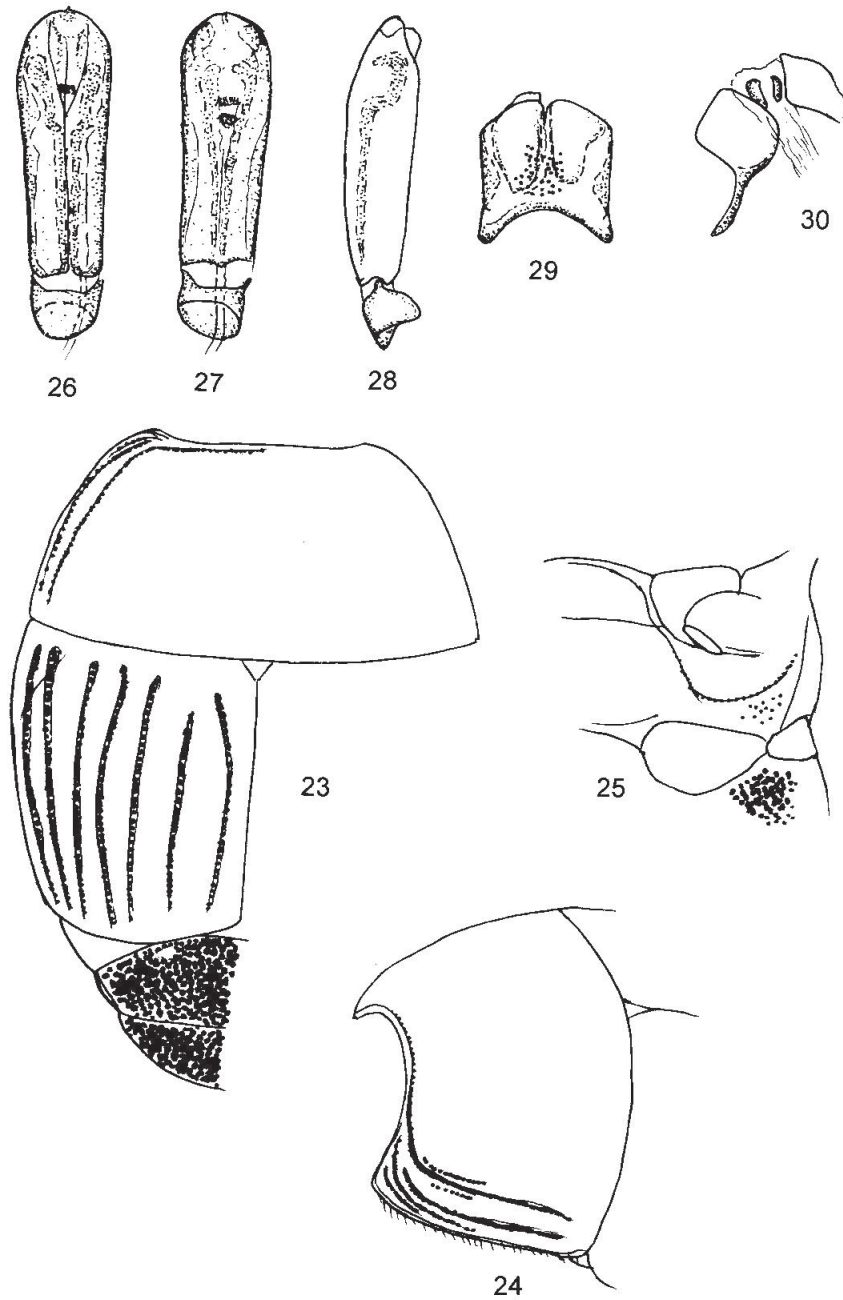
The structure of the male copulatory organ as well as the position of the recurrent arm of lateral metasternal stria and elytral striation are typical for the genus (Figs 23, 25-30).

***Quassarus aenescens* (Thérond, 1961) comb. n.**

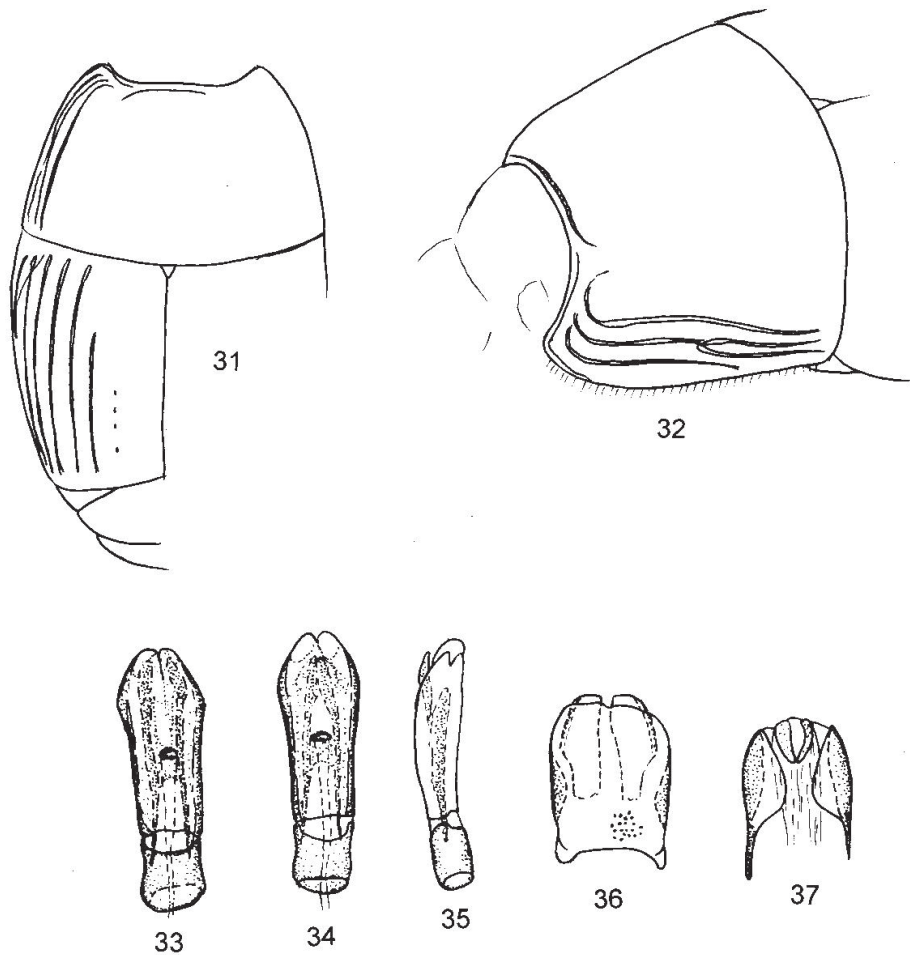
(Figs 31-37)

Type material. Holotype (♂) : I.R.S.A.C - Mus. Congo, [DR Congo] Kwango, Kianza, terr. de Feshi, à la lumière, Mme J. Leleup, iii-1959, Holotypus, *Exorhabdus aenescens* nov. J. Thérond det. 1960, (MRAC).

Paratype (♀) : I.R.S.A.C - Mus. Congo, [DR Congo] Kwango, Kianza, terr. de Feshi, savane boisée, Mme J. Leleup, iii-1959, Paratype, *Exorhabdus aenescens* nov. sp. Thérond, (MRAC).



Figs 23-30. *Exorhabdus schoutedeni*: 23- upper side; 24- pronotum, laterally; 25- lateral part of meso- and metasternum; 26-28- aedeagus; 29- 8th tergite; 30- 9th and 10th tergites; 26 - dorsally; 27- ventrally; 28- laterally.



Figs 31-37. *Quassarus aenescens*: 31- upper side; 32- pronotum, laterally; 33-35- aedeagus; 36- 8th tergite; 37- 9th and 10th tergites; 33- dorsally; 34- ventrally; 35- laterally.

Remarks. Described in the genus *Exorhabdus* and compared originally (Thérond, 1961: 111) with *E. schoutedeni* Desbordes owing to a presence of three lateral pronotal striae but there is no doubt that this species should be transferred to the genus *Quassarus* Mazur. From *Qu. rubripes* Mazur it differs by interrupted marginal pronotal stria (Figs 31-32; Mazur, 2007, figs 26-27) and by different genital structure (Figs 33-37; Mazur, 2007, figs 28-32).

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