

**Two new species of the genus *Gabrius* from the Afrotropical Region
(Coleoptera: Staphylinidae: Philonthini)**

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Abstract. Two new species of the genus *Gabrius* are described: *Gabrius arenaria* sp. nov. (Ethiopia) and *Gabrius assingi* sp. nov. (Sierra Leone). The male genitalia of both species are illustrated and compared with related species.

INTRODUCTION

The genus *Gabrius* Stephens, 1829 belongs to the subtribe Philonthina, tribe Philonthini and is distributed in all major zoogeographical regions. The genus includes around 140 species in the Afrotropical region. Two new species are described below as *Gabrius arenaria* sp. nov., which (based on external characters and morphology of genitalia) is not possible to affiliate to any hitherto defined species group, *Gabrius assingi* sp. nov., belonging to the species group *Gabrius burgeoni* (Hromádka 2015a,b).

MATERIAL AND METHODS

The following acronyms are used, which refer to particular collections as follows:

LHPC Lubomír Hromádka, private collection, Praha, Czech Republic;

VAHC Volker Assing, private collection, Hannover, Germany.

A double slash // is used to divide separate labels of type specimen. All measurements were taken from beetles with stretched abdomen. All ratios mentioned in the description are dimensionless but can be converted to lengths in millimetres as follows: 20 units = 1 mm.

The morphological studies were conducted using the SMZ 168 TL Zoom (Italy) stereoscopic microscope.

TAXONOMY

***Gabrius arenaria* sp. nov.**

(Figs. 1-3)

Type locality. Ethiopia, Bale 8 km W. of Dinshu, 07°06'N 39°44'E, 3050 m.

Type material. Holotype (♂): Ethiopia, Bale 8 km. W. of Dinshu, 07°06'N 39°44'E, 3050 m xii.1971. // Holotypus *Gabrius arenaria* sp. nov. Hromádka det. 2015, [orange oblong printed label], (LHPC).

Description. Body length 7.1 mm, length of fore body 3.0 mm.

Colouration. Head black, pronotum, scutellum and abdomen dark brown, elytra and posterior margin of all abdominal tergites narrowly brown-reddish. Maxillary and labial palpi and antennae dark brown, femora and tarsi brown-yellow, tibiae darker.

Head approximately as long as wide, parallel-sided, posterior angles obtusely rounded, bearing one long bristle and several shorter bristles. Between eyes with four punctures, medial punctures distinctly shifted anteriorly, distance between medial punctures five times larger than distance between medial and lateral ones. Eyes flat, twice shorter than temples (ratio 7 : 14), posterior margin with one coarse puncture, temporal area with one coarse puncture and several small punctures in posterior half. Surface with very fine microsculpture consisting of transverse waves.

Antennae reaching posterior third of pronotum when reclined. Antennomeres 1-3 and 11 distinctly longer than wide, antennomeres 4-5 slightly longer than wide, antennomere 6 as long as wide, antennomeres 7-10 slightly wider than long.

Pronotum longer than wide (ratio 30 : 28), widest just in the middle, from here slightly narrowed anteriorly and posteriorly, anterior angles obtusely and posterior angles distinctly rounded. Each dorsal row with six punctures, punctures 3- 6 equidistant, distance between punctures 1 and 2 and between 2 and 3 larger than distance between previous punctures. Each sublateral row with 2 punctures, puncture 2 shifted to lateral margin. Surface with microsculpture similar to that on head.

Scutellum finely and sparsely punctate in posterior half, diameter of punctures as large as eye-facets, separated by one and half puncture diameters or slightly larger. Anterior half impunctate, surface with fine microsculpture.

Elytra longer than wide (ratio 34 : 32), slightly widened posteriorly. Punctuation coarsely and densely punctured, diameter of punctures larger than that on scutellum, separated by one or one and half puncture diameters. Surface without microsculpture; setation brown-yellow.

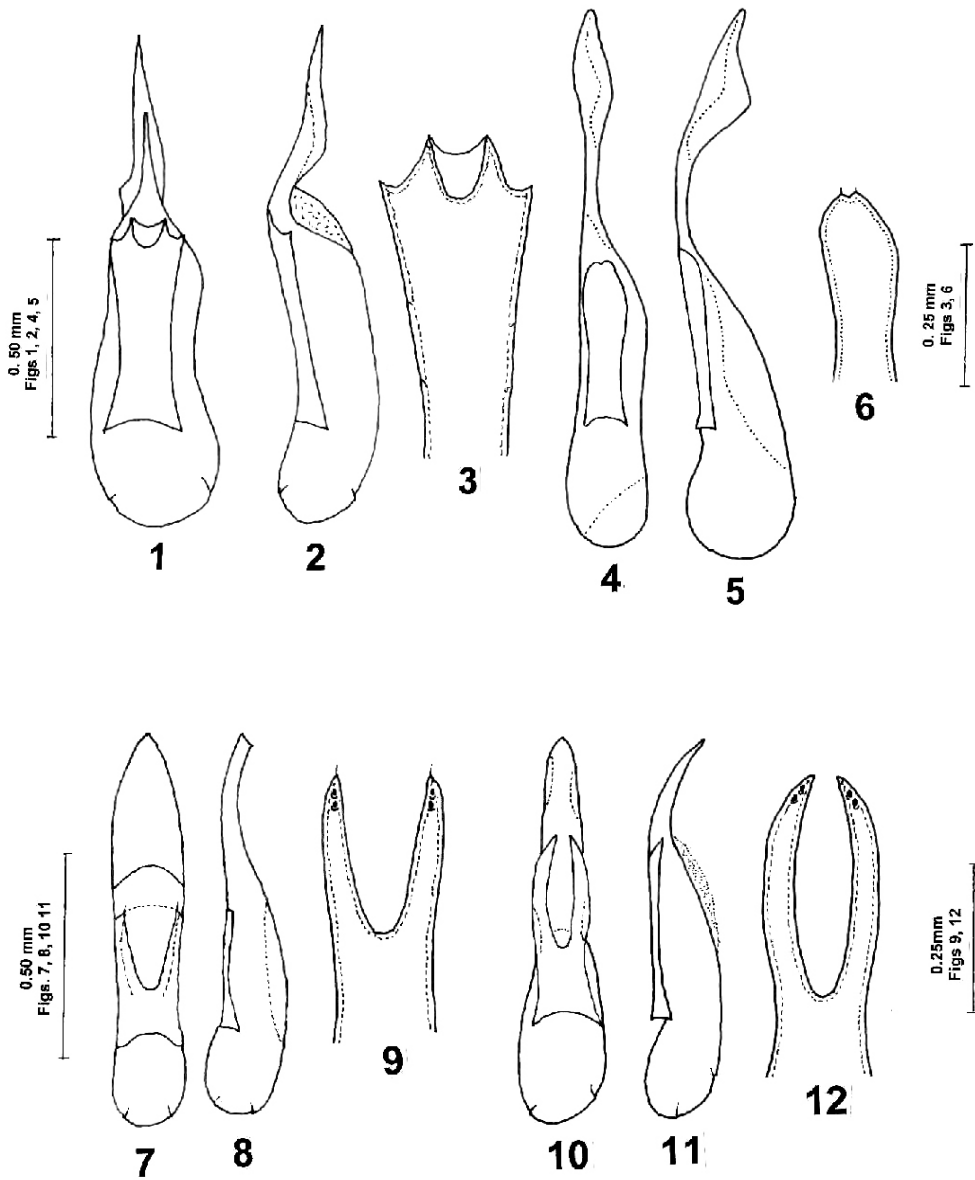
Legs. Metatibia longer than metatarsus (ratio 21 : 17), metatarsomere 1 shorter than metatarsomere 5, slightly shorter than metatarsomeres 2-3 combined.

Abdomen from visible tergite III slightly narrowed anteriorly and posteriorly. First three visible tergites with two basal lines, elevated area between lines, with scattered very fine punctures, punctuation at base of all tergites much finer than that on elytra, becoming sparser to the posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Differential diagnosis. *Gabrius arenaria* sp. nov. may be distinguished from similar *G. claviger* Tottenham, 1956 (Figs. 4-6), by its shorter antennae, narrower head, denser punctuation of abdomen and by a different shape of the aedeagus.

Etymology. The name of this species, a noun in apposition is the Latin generic name of the African Ruddy Turnstone *Arenaria interpres* (Linnaeus, 1758)

Distribution. Ethiopia.



Figs. 1-12. *Gabrius arenaria* sp. nov.: 1- aedeagus, ventral view; 2- aedeagus, lateral view; 3- apex of paramere, ventral view; *Gabrius claviger* Tottenham, 1956: 4- aedeagus, ventral view; 5- aedeagus, lateral view; 6- apex of paramere, ventral view; *Gabrius assingi* sp. nov.: 7- aedeagus, ventral view; 8- aedeagus, lateral view; 9- apex of paramere, with sensory peg setae, ventral view; *Gabrius sterna* Hromádka, 2014: 10- aedeagus, ventral view; 11- aedeagus, lateral view; 12- apex of paramere, with sensory peg setae, ventral view.

***Gabrius assingi* sp. nov.**

(Figs. 7-9)

Type locality. Sierra Leone, Western Area, Banga Farm near Sussex.

Type material. Holotype (♂): Sierra Leone, Western Area, Banga Farm near Sussex, 25.i.2013, leg. W. Rossi.
// Holotypus *Gabrius assingi* sp. nov. Hromádka det, 2015, [orange oblong printed label] (VAHC). Paratypes (3 spec.): the same label data as holotype, (LHPC, VAHC).

Description. Body length 5.0 mm, length of fore body 2.2 mm.

Colouration. Head black, pronotum, scutellum and elytra chocolate brown, posterior margin of elytra narrowly yellow-red, whole epipleura yellow, abdomen brown, posterior margin of all tergites narrowly brown-yellow. Maxillary and labial palpi yellow-brown, antennomeres 1-2 yellow, remaining antennomeres dark brown, legs yellow.

Head wider than long (ratio 20 : 18) very slightly narrowed posteriad, posterior angles almost indistinct, bearing one long and one short black bristles. Clypeus with round shallow depression medially. Between eyes 4 coarse punctures, medial punctures slightly shifted anteriorly, distance between medial punctures four times larger than distance between medial and lateral ones. Eyes flat, shorter than temples (ratio 7 : 9), posterior margin with one coarse puncture, temporal area with one puncture in the middle. Surface with very fine microsculpture here and there.

Antennae slender and long, reaching posterior sixth of pronotum when reclined. Antennomeres 1-3 and 11 distinctly longer than wide, antennomeres 4-5 slightly longer than wide, antennomeres 6-10 approximately as long as wide, antennomere 1 almost twice longer than antennomere 11, antennomere 2 slightly shorter than antennomere 3.

Pronotum wider than long (ratio 19 : 17), parallel-sided, anterior angles obtusely rounded, bearing several short bristles, posterior angles markedly rounded. Each dorsal row with six approximately equidistant and setiferous punctures, each sublateral row with two setiferous punctures, puncture two shifted to the lateral margin. Surface with microsculpture similar to that on head.

Scutellum very finely and sparsely punctured, diameter of punctures as large as eye-facets, separated mostly by at least two puncture diameters. Surface with fine microsculpture.

Elytra slightly wider than long (27 : 25) widened posteriad. Punctuation coarser than that on scutellum, separated by one and half or two puncture diameters. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (15 : 12) metatarsomere 1 shorter than metatarsomere 5.

Abdomen wide, from visible tergite III slightly narrowed anteriorly and posteriorly. First three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation at base of all tergites denser and finer than that on elytra, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Differential diagnosis. *Gabrius assingi* sp. nov. may be distinguished from a similar *G. sterna* Hromádka, 2015 (Figs. 10-12) by its narrower head, longer and slender antennae, narrower and shorter elytra and by a different shape of the aedeagus.



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Figs. 13-14. Habitus: 13- *Gabrius arenaria* sp. nov.; 14- *Gabrius assingi* sp. nov. (photo by P. Krásenský)

Etymology. I dedicate this new species to my friend Volker Assing (Hannover, Germany) well known specialist in the family Staphylinidae.

Distribution. Sierra Leone.

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REFERENCES

- HROMÁDKA L. 2015a: New species of the genus *Gabrius* from the Afrotropical Region (Coleoptera: Staphylinidae: Philonthini) - I. *Folia Heyrovskyana, series A*, vol. 22(2-4) [2014]: 26-34.
- HROMÁDKA L. 2015b: New species of the genus *Gabrius* from the Afrotropical Region (Coleoptera: Staphylinidae: Philonthini) - II. *Folia Heyrovskyana, series A*, vol. 22(2-4) [2014]: 35-53.
- HROMÁDKA L. 2014: Revision of the Afrotropical species of the *Gabrius burgeoni* species group (Coleoptera: Staphylinidae: Philonthini). *Acta Societatis Zoologicae Bohemicae* 78: 171-193.
- TOTTENHAM C. E. 1956: Some African species of the genus *Gabrius* Stephens (Coleoptera: Staphylinidae). *Annals and Magazine of Natural History* 12 Series 9: 205-224.

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