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Five new species of the genus *Gabrius* from Afrotropical region (Coleoptera: Staphylinidae: Staphylininae: Philothina)

L. HROMÁDKA

A b s t r a c t : Gabrius chrysochloris nov.sp. (Ethiopia), Gabrius elephantulus nov.sp. (Burundi), Gabrius istonyx nov.sp. (Democratic Republic of the Congo), Gabrius perodicticus nov.sp. (Burundi) and Gabrius serinus nov.sp. (Tanzania) are described and male characters are illustrated.

K e y w o r d s: Coleoptera, Staphylinidae, Philonthina, *Gabrius*, Afrotropical region, taxonomy, new species.

Introduction

The genus *Gabrius* STEPHENS 1829 belongs to the subtribe Philonthina, tribe Staphylinini and is distributed in all major geographical regions. The genus includes more than 80 species in the Afrotropical region. A new species are described below.

Material, methods and measurements

The following acronyms are used to refer to the collections mentioned:

cHro......Lubomír Hromádka, private collection, Praha (Czech Republic)

MRAT.....Musee Royal de l'Afrique centrale, Tervuren, Belgium (Marc De Meyer)

NMPC.....National Museum, Praha, Czech Republic (Jiří Hájek)

Separate labels are dividend in the text by a double slash //. All meaurements were taken

Separate labels are dividend in the text by a double slash //. All meaurements were taken from the beetles with their abdomen stretched. Ratios mentioned in the descriptions can be converted to lengths as 20 units = 1 mm.

Species descriptions

Gabrius chrysochloris nov.sp. (Figs 1-3)

Type material examined: <u>Holotype</u>: &, Ethiopia: Bale, 8 km W of Dinshu, 0706N. 3944E, 3050m. xii.1971, //Holotypus *Gabrius chrysochloris* nov.sp. Hromádka det., 2014, [red oblong label printed], (NMPC).

Description: Body length 5.8 mm, length of fore body (to end of elytra 3.0 mm.

C o l o u r a t i o n: Head black, pronotum and scutellum dark brown, abdomen slightly paler, posterior margin of all tergites narrowly brown-yellow, maxillary, labial palpi, antennomere 1 and base of antennomere 2 brown-yellow, remaining antennomeres black. Femora and tarsi brown, tibiae darker.

Head wider than long (ratio 27: 23), parallel-sided, posterior angles obtusely rounded, bearing several varying long bristles. Between eyes four coarse punctures, medial punctures distinctly shifted anteriad. Distance between medial punctures five times larger than distance between medial and lateral puncture. Clypeus with a large rounded depression medially. The interocular punctures consist of four punctures on each side arranged in a square like the four on gaming disc. Eyes small, more than twice shorter than temples (ratio 5: 11), posterior margin with one coarse puncture, temporal area with several coarse punctures. Surface with microsculpture consisting of transverse waves.

Antennae long, reaching posterior margin of pronotum when reclined. Antennomeres 1-3 and 11 distinctly longer than wide, antennomeres 4-5 slightly longer than wide, antennomeres 6-7 as long as wide, antennomeres 8-10 wider than long. Antennomere 1 longer than antennomere 11, antennomere 3 as long as antennomere 2.

Pronotum longer than wide (ratio 25: 22), parallel-sided, anterior angels obtusely rounded bearing several varying long bristles, posterior angles markedly rounded. Each dorsal row with six punctures, punctures 2-6 equidistant, distance between punctures 1-2 larger than distance between previous punctures. Each sublateral row with two punctures, puncture two shifted to the lateral margin. Surface with microsculpture similar to that on head.

Scutellum densely and coarsely punctured, diameter of punctures larger than eye-facets, separated mostly by one puncture diameter. Surface without microsculpture; setation dark.

Elytra as long as wide, very slightly widened posteriad. Punctation fine and dense, diameter of punctures slightly larger than that on scutellum, separated smaller than one puncture diameter. Surface without microsculture; setation dark.

Legs. Metatibia longer than metatarsus (ratio 21: 15), metatarsomere 1 as long as metatarsomere 5 and as metatarsomeres 2-3 combined.

Abdomem wide, from visible tergite III gradually narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines finely pnctate. Punctation at base of all tergites slighly finer than that on elytra. Surface without microsculpture; setation similar to that on elytra.

D i f f e r e n t i a l d i a g n o s i s : *Gabrius chrysochloris* nov.sp. may be distinguished from a similar *G. elephantulus* nov.sp. by the paler pronotum and abdomen, denser punctation and narrower elytra and by the different shape of the aedeagus.

Distribution: Ethiopia.

E t y m o l o g y: The name of this species, a noun in apposition, is the Latin generic of the African Cape golden mole *Chrysochloris asiatica* LINNAEUS 1758.

Gabrius elephantulus nov.sp. (Figs 4-6)

T y p e m a t e r i a l e x a m i n e d : <u>Holotype</u>: ♂, Burundi, Kaninya, vii.1940, A. J. Bréda leg., //Holotypus *Gabrius elephontulus* nov.sp. Hromádka det., 2014, [red oblong label printed], (NMPC).

Description: Body length 5.3 mm, length of fore body (to end of elytra) 3.0 mm.

Coloration: Head and pronotum black, elytra red-brown, abdomen brown-red, posterior margin of all tergites brown-yellow. Maxillary, labial palpi, antennomere 1 and base of antennomere 2 brown, remaining antennomeres black. Femora yellow, tibiae brown, tarsi brown, paler distally.

Head distinctly wider than long (ratio 24: 21), parallel-sided, posterior angles obtusely rounded. Between eyes four punctures, medial punctures distinctly shifted anteriad, distance between medial punctures three times larger than distance between medial and lateral puncture. Clypeus with round shallow depression medially. Eyes shorter than temples (ratio 6: 11), posterior margin with two coarse punctures, temporal area with several varying large punctures, anterior half impunctate. The interocular punctures consist of four punctures on each side arranged in the shape of rhombus. Surface very fine with microsculpture consisting of transverse waves.

Antennae short reaching middle 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 twice longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum as long as wide, parallel-sided. Anterior angles rectangular, very obtusely rounded, posterior angles markedly rounded. Each dorsal row with six coarse approximately equidistant punctures, each sublateral row with two punctures, puncture two distinctly shifted to the lateral margin. Surface with microsculpture similar to that on head

Scutellum coarsely and densely punctured, diameter of punctures larger than eye-facets, distance between punctures by one puncture diameter or smaller.

Elytra wider than long (ratio 33: 30) widened posteriad. Punctation coarse and dense, diameter of punctures larger than that on scutellum, separated by one puncture diameter, mostly smaller. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 17: 12), metatarsomere 1 shorter than metatarsomere 5, as long as metatarsomeres 2-3 combined.

Abdomen wide, very gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctation at base of all tergites finer and denser than that on elytra, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

D i f f e r e n t i a l d i a g n o s i s: Gabrius elephantulus nov.sp. may be distinguished from a similar G. chrysochloris by the darker pronotmj and abdomen, sparser punctation and wider elytra and by the different shape of the aedeagus.

Distribution: Burundi.

E t y m o l o g y: The name of this species, a noun in apposition, is the Latin generic name of the African Rufous sengi *Elephantulus rufescens* (PETERS 1878).

Gabrius istonyx nov.sp. (Figs 7-9)

T y p e m a t e r i a l e x a m i n e d : <u>Holotype</u>: &, Congo [Congo Belge]Massif Ruwenzori, Mont Ngulingo prés Nyamgaleke. 2500 m, ex. P.N.A., 29.iv.1954, P. Vanschuytbroeck & H. Synave, //Holotypus *Gabrius istonyx* nov.sp. Hromádka det., 2014, [red oblong label printed], (MRAT).

Description: Body length 6.5 mm, length of fore body (to end of elytra) 2.7 mm.

Cololouration: Head black, pronotum black-brown, scutellum brown-black, elytra redbrown, suture narrowly black, posterior margin narrowly yellow, abdomen black, whole epipleura and posterior margin of visible tergites 1-4 narrowly red-brown, posterior margin of tergites 5-6 wider red-brown. Maxillary and labial palpi, antennomere 1 and base of antennomere 2 yellow-brown, remaining antennomeres brown-black. Femora and tarsi yellow, tibiae black. Head and pronotum slightly golden iridescent.

Head slightly trapezoidal, wider than long (ratio 23:20), posterior angles obtusely rounded. Clypeus with a wide, deep and round depression medially. Between eyes four coarse punctures, medial punctures slightly shifted anteriad. Distance between medial punctures four times as large as distance between medial and lateral puncture. The interocular punctures consist of three punctures on each side arranged in a oblique row. Eyes twice shorter than temples, posterior margin with two coarse punctures, temporal area in posterior half with three coarse punctures, anterior half impunctate. Surface with fine microsculpture consisting of very fine waves.

Antennae long, reaching posterior margin of pronotum when reclined. Antennomeres 1-4 and 11 distinctly longer than wide, antennomeres 5 slightly longer than wide, antennomeres 6-8 as long as wide, antennomeres 9-10 slightly wider than long. Antennomere 1 twice longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum as long as wide, parallel-sided, anterior angles obtusely, posterior angles markedly rounded. Each dorsal row with six approximately equidistant, coarse punctures, each sublateral row with two punctures, puncture two shifted to the posterior margin. Surface with microsculpture similar two that on head.

Scutellum finely and densely punctured, diameter of punctures slightly larger than eye-facets, separated by one puncture diameter or smaller. Surface with microsculpture.

Elytra wider than long (ratio 33: 29), distinctly widened posteriad. Punctation coarse and dense, diameter of punctures larger than that on scutellum, separated smaller than one puncture diameter. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 25: 21), metatarsomere 1 slightly shorter than metatarsomere 5, as long as metatarsomeres 2-3 combined.

Abdomen narrow, from visible tergite III very gradually narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines impunctate. Punctation at base of all tergites finer and sparser than that on elytra, becoming sparser to the posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

D i f f e r e n t i a l d i a g n o s i s: *Gabrius istonyx* nov.sp. is similar to *G. serinus* nov.sp., but differs by its paler antennomere 1, darker head and pronotum golden iridescent, shorter pronotum, paler elytra and abdomen and by the different shape of the aedeagus.

D i s t r i b u t i o n : Democratic Republic of the Congo.

E t y m o l o g y: The name of this species, a noun in apposition, is the generic Latin name of the African Striped polecat *Ictonyx striatus* PERRY 1810.

Gabrius perodicticus nov.sp. (Figs 10-12)

Type material examined: <u>Holotype</u>: &, Burundi, NE. Ruvubu-Parc, 25.-26.iii.1992, Arndt, leg. //Holotypus *Gabrius perodicticus* nov.sp. Hromádka det., 2013 det., [red oblong label printed] (eHro).

Description: Body length 4.8 mm, length of fore body, (to end of elytra) 2.5 mm. Colouration. Head, pronotum and abdomen brown, posterior margin of all visible tergites narrowly brown-yellow, scutellum and elytra brown-yellow. Maxillary, labial palpi, antennomere 1 and base of antennomere 2 brown-yellow, remaining antennomeres brown, femora and tarsi yellow-brown, tibiae darker.

Head narrow, longer than wide (ratio 17: 15), sides behind eyes nearly straight, posterior angels indistinct. Between eyes four coarse punctures, medial punctures shifted anteriad, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes flat, twice shorter than temples, posterior angles with one small puncture, temporal area impunctate. Surface with very fine microsculpture consisting of transverse waves.

Antennae long, reaching posterior fifth of pronotum when reclined. Antennomeres 1-3 and 11 distinctly longer than wide, antennomeres 4-7 slightly longer than wide, antennomeres 8-10 as long as wide.

Pronotum longer than wide (ratio 24. 19), anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Each dorsal row with six approximately equidistant punctures, each sublateral row with two punctures, puncture two shifted to the lateral margin. Surface with microsculpture similar to that on head.

Scutellum with two coarse setiferous punctures in the middle.

Elytra wider than long (ratio 24: 22), widened posteriad. Punctation coarse and dense, diameter of punctures larger than that on scutellum, separated mostly smaller than one puncture diameter. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 15. 13), metatarsomere 1 as long as metatarsomere 5, slightly shorter than metatarsomeres 2-3 combined.

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

D if f e r e n t i a l d i a g n o s i s: *Gabrius perodicticus* nov.sp. may be distinguished from the similar *G. thermicola* by the antennomere one brown-yellow, paler and wider elytra and by the different shape of the aedeagus.

Distribution: Burundi.

E t y m o l o g y: The name of this species, a noun in apposition, is the generic Latin name of the African Slender lori *Perodicticus potoo* (MÜLLER 1766).

Gabrius serinus nov.sp. (Figs 13-15)

Type material examined: <u>Holotype</u>: δ , Tanzania: Uru north, env. 1750 m, 16 km. N. of Moshi, v.2010, M. Kuboň lgt, //Holotypus *Gabrius serinus* nov.sp. Hromádka det., 2013. [red oblong label printed] (cHro)).

Description: Body length 6.3 mm, length of fore body (to end of elytra) 3.6 mm.

Colouration. Body black, posterior margin of all tergites narrowly reddish, palpomere three of maxillary and labial palpi brown-yellow, remaining palpomeres and antennae black, femora brown-yellow, tibiae black, tarsi black, paler distally.

Head wider than long (ratio 26: 23), from posterior margin of eyes slightly narrowed posteriad, clypeus with a relatively large rounded depression medially. Posterior angles indisting. Between eyes four coarse punctures, medial punctures distinctly shifted anteriad, distance between medial punctures five times larger than distance between medial and lateral puncture. Three inter-ocular punctures on each side, arranged in a vertical row. Eyes twice shorter than temples (ratio 6: 12), posterior margin with two coarse punctures, temporal area with several varying large punctures. Surface without microsculpture.

Antennae short, reaching midlength of pronotum when reclined. Antennomeres 1-3 and 11 longer than wide, antennomere 4 as long as wide, antennomeres 5-10 wider than long. Antennomere 1 twice longer than antennomere 11, antennomere 3 longer than antennomere 2.

Pronotum as long as wide, anterior angles almost rectangular, obtusely rounded, posterior angles markedly rounded. Each dorsal row with six coarse approximately equidistant punctures, each sublateral row with two punctures, puncture two shifted to the lateral margin. One long bristle in anterior third of sides. Surface without microsculture.

Scutellum densely and finely punctured, diameter of punctures as large as eye-facets, punctures separated by mostly one puncture diameter.

Elytra wider than long /ratio 37: 33), distinctly widened posteriad. Punctation fine and dense, diameter of punctures slightly larger than eye-facets, separated by distance of one puncture diameter or smaller. Surface without microsculpture; setation brown.

Legs. Metatibia longer than metatarsus (ratio 20: 17), metatarsomere 1 shorter than metatarsomere 5, as long as metatarsomeres 3-4 combined.

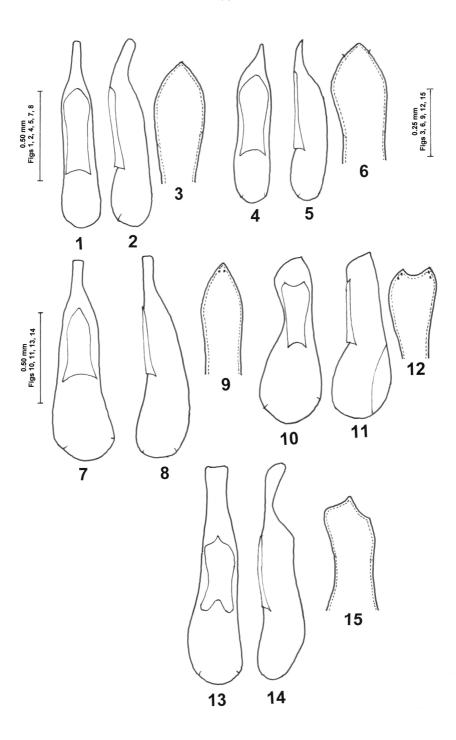
Abdomen wide, from visible tergite III gradually narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctation at base of visible tergites finer and sparser than that on elytra, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra, in posterior half, longer.,

D i f f e r e n t i a l d i a g n o s i s: *Gabrius serinus* nov.sp. differs from *G. istonyx* nov.sp., by the darker antennomere 1, head and pronotum not golden iridescent, longer pronotm, darker elytra and abdomen and by the different shape of the aedeagus.

Distribution: Tanzania.

E t y m o l o g y: The name of this species, a noun in apposition, is the Latin generic of the African Abyssinian siskin *Serinus nigriceps* RÜPELL 1838.

Figs 1-3: Gabrius chrysochloris nov.sp. (1) aedeagus, ventral view, (2) aedeagus, lateral view, (3) apex of paramere, ventral view. Figs 4-6: Gabrius elephantulus nov.sp. (4) aedeagus, ventral view, (5) aedeagus, lateral view, (6) apex of paramere, ventral view. Figs 7-9: Gabrius istonyx nov.sp. (7) aedeagus, ventral view, (8) aedeagus, lateral view, (9) apex of paramere with sensory peg setae, ventral view. Figs 10-12: Gabrius perodicticus nov.sp. (10) aedeagus, ventral view, (11) aedeagus, lateral view, (12) apex of paramere with sensory peg setae, ventral view. Figs 13-15: Gabrius serinus nov.sp. (13) aedeagus, ventral view, (14) aedeagus, lateral view, (15) apex of paramere, ventral view.



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Zusammenfassung

Nachfolgend genannte fünf neue Kurzflüger-Arten (Coleptera: Staphylinidae: *Gabrius*) werden beschrieben und abgebildet: *Gabrius chrysochloris* nov.sp. (Äthiopien), *Gabrius elephantulus* nov.sp. (Burundi), *Gabrius istonyx* nov.sp. (Demokratische Republik Kongo), *Gabrius perodicticus* nov.sp. (Burundi) and *Gabrius serinus* nov.sp. (Tanzania)

References

- CAMERON M. (1947): New species of African Staphylinidae (Coleoptera). Bulletin Musée royal d'Histoire Naturelle de Belgique 13 (31): 1-4.
- HERMAN L. H. (2001): Catalog of the Staphylinidae (Insecta: Coleoptera) 1758 to the end of the second millenium. V. Staphylinine group (Part 2): Diochini, Maorothiini, Othiini, Platyprosopini, Staphylinini. — Bulletin of the American Museum of Natural History, 265: 2674-2694.
- TOTTENHAM C.E. (1956): Contributions à l'étude de la faune entomologique du Ruanda-Urundi (Mission P. Basilejsky 1953), LXXXVII: Coleoptera: Staphylinidae: Steninae, Xantholinae, Staphylinidae, Tachyporinae and Pygosteninae), — Annales du Musée Royal du Congo Belge, Tervuren (Sér. im 8°) Science Zoologiques 51: 221-332.
- TOTTENHAM C.E. (1962): Mission zoologique de I'I. R. S. A. C. en Afrique orientale (P. Basilewsky et N. Leleup, 1957), LXXVI. Coleoptera, Staphylinidae, Staphylininae. Annales du Musée de l'Afrique Centrale, Science Zoologiques, Ser. 8° 110: 133-258.

Author's address: Lubomír HROMÁDKA

Anny Letenské 7

CZ-120 00 Praha 2, Czech Republic E-mail: hromadkal@seznam.cz

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