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## A new species of the genus *Gabronthus* from the Afrotropical Region (Coleoptera: Staphylinidae: Philonthina)

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#### Taxonomy, new species, Coleoptera, Staphylinidae, Philonthina, Gabronthus, Afrotropical Region

Abstract. Six new species of the genus *Gabronthus* Tottenham, 1955 from the Afrotropical Region are described as follows: *Gabronthus apaloderma* sp. nov. (Uganda), *Gabronthus bycanister* sp. nov. (Burundi), *Gabronthus corythaeola* sp. nov. (Tanzania), *Gabronthus mandrillus* sp. nov. (Republic of South Africa), *Gabronthus mirafra* sp. nov. (Kenya) and *Gabronthus mycteria* sp. nov. (Democratic Republic of the Congo). The male genitalia of all species are illustrated.

#### INTRODUCTION

The philonthine genus *Gabronthus* was established and described by Tottenham, with type species *Gabrius maritimus* Motschulsky, 1858. Thirty nine species of this genus are known from the Neotropical, Nearctic, Palaearctic, Afrotropical, Madagascan, Oriental, Australian and Oceanic Regions. Nineteen species are known from the Afrotropical Region. The genus is closely allied to *Gabrius* Stephens, 1829, but is easily distinguished by the following important characters: labial palpi with the penultimate palpomere much broader than the last one; pronotum dorsal rows each consisting of five punctures; head longer than wide, usually somewhat quadrate, eyes small, first four segments of protarsus at least slightly dilated and with at least a few tenent setae ventrally, size very small, not exceeding 5.5 mm.

#### MATERIAL AND METHODS

The following acronyms are used to refer to the collections mentioned: HNMH Hungary Natural History Museum, Budapest, Hungary (Gyorgy Makranczy); NMPC National Museum, Praha, Czech Republic (Jiří Hájek); LHPC Lubomír Hromádka, private collection, Praha, (Czech Republic).

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

#### DESCRIPTIONS

## Gabronthus apaloderma sp. nov. (Figs 1-3)

Type locality. Uganda CW, Kasese, Kilembe, E Ruwenzori.

**Type material.** Holotype ( $\mathcal{C}$ ): "Uganda CW, Kasese, Kilembe, E Renzori, 23.ii.2001, M. Snížek lgt., // Holotypus *Gabronthus apaloderma* sp. nov. Hromádka det., 2013, [orange oblong label printed]", (LHPC).

Description. Body length 4.2 mm, length of fore body (to end of elytra) 1.7 mm.

Colouration. Head black, pronotum and scutellum dark brown, elytra paler brown, abdomen dark brown, posterior margins of all tergites narrowly paler brown. Maxillary and labial palpi brown, antennomeres 1-2 brown, remaining antennomeres brown-black. Femora yellow-brown, tibiae darker, tarsi brown, paler distally.

Head as long as wide, parallel-sided, posterior angels markedly rounded. Four punctures present between eyes, lateral punctures slightly shifted anteriad distance between medial punctures five times larger than distance between medial and lateral puncture. Eyes flat shorter than temples (ratio 8 : 10). Temporal area with one coarse puncture in the middle. Surface lacking microsculpture.

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

Pronotum longer than wide (ratio 19 : 17), parallel-sided, anterior and posterior angles markedly rounded. Dorsal rows of irregular length, each with five punctures, each sublateral row with two punctures arranged in a row almost parallel to the dorsal row and half way between it and lateral margin. Surface lacking microsculpture.

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

Elytra longer than wide (ratio 31 : 28) slightly widened posteriad. Punctuation coarse and relatively sparse, diameter of punctures larger than those of eye-facets, punctures separated by distance one or one and half puncture diameter. Surface lacking microsculpture and setation.

Legs. Metatibia longer than metatarsus (ratio 16 : 14), metatarsomere 1 shorter than metatarsomere 5.

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

Male. Aedeagus as in Figs 1-3.

**Differential diagnosis.** *G. apaloderma* sp. nov. can be separated from a similar species *G. kisirianus* Tottenham, 1955 (Figs 19-21), by its shorter head, darker colouring of antennomeres 1-2, finer and coarser punctation of elytra and by a different shape of the aedeagus.

## Distribution. Uganda.

**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African Marina triton *Apaloderma marina* (Stephens, 1815).

# Gabronthus bycanistes sp. nov. (Figs 4-6)

Type locality. Burundi, Kananya.

**Type material.** Holotype ( $\mathcal{C}$ ): "BURUNDI, Kaninya, vii.1940, A. J. Bréda //HOLOTYPE *Gabronthus bycanister* sp. nov.. Hromádka det., 2013, [red oblong label printed]", (NMPC). Paratype ( $\mathcal{C}$ ): same label data as holotype, (LHPC).

**Description.** Length of body 4.1 mm, length of fore body (to end of elytra) 1.8 mm.

Colouration. Head black, pronotum chocolate brown, elytra dark brown-red, abdomen chocolate brown, posterior margins of all tergites narrowly red-brown. Maxillary and labial palpi dark brown, antennomere 1 and base of antennomere 2 brown-yellow, remaining antennomeres black-brown, femora and tarsi yellow-brown, tibiae darker.

Head longer than wide (ratio 21 : 19), parallel-sided, between eyes four punctures arranged in a straight row, distance between medial punctures 5 times larger than distance between medial and lateral ones. Posterior angles and sides bearing several variably long bristles. Eyes small, twice shorter than temples (ratio 6 : 12). Surface lacking microsculpture.

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

Pronotum longer than wide (27 : 24), slightly narrowed anteriad. Anterior angles and sides bearing several variably long bristles, posterior angles markedly rounded. Each dorsal row with five approximately equidistant punctures, each sublateral row with two punctures, puncture two shifted to lateral margin. Surface lacking microsculpture.

Scutellum with four coarse punctures arranged like the figure of four on gaming cube.

Elytra as long as wide, widened posteriad. Punctuation coarse and relatively sparse, diameter of punctures slightly larger than those on scutellum, punctures separated by mostly one and half puncture diameter. Surface lacking microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 22 : 18) metatarsomere 1 as long as metatarsomere 5 and as long as metatarsomeres 2-3 combined.

Abdomen wide, slightly narrowed posteriad beginning with visible tergite III. First three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation at base of all tergites finer than that on elytra, becoming sparser towards posterior margin of each tergite. Surface lacking microsculpture; setation like elytra.

Male. Aedeagus as in Figs 4-6.

**Differential diagnosis.** *Gabronthus bycanistes* sp. nov. can be distinguished from the similar *G.thermarum* (Aubé, 1850) (Fig. 24), by its stronger antennae, coarser and sparser punctuation of elytra; from *G. mandrillus* sp. nov. (Figs 10-12), it is clearly different by a longer head, paler elytra and abdomen, and from both of them by a different shape of the aedeagus.

Distribution. Burundi.

**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African Trumpeter hornbill *Bycanistes bucinator* (Temminck, 1824).

## Gabronthus corythaeola sp. nov. (Figs 7-9)

Type locality. Tanzania, Ngare Sero, 1200m, 20 km E of Arusha.

**Type material.** Holotype ( $\mathcal{S}$ ): "Tanzania sept., Ngare Sero, 1200 m, 20 km E of Arusha //HOLOTYPE *Gabronthus corythaeola* sp. nov. Hromádka det. 2013, [orange oblong label printed]", (HNMH). Paratypes: (7 spec.): same label data as holotype. [All paratypes with orange oblong label printed], (HNMH, LHPC).

**Description.** Length of body 3.8-4.2 mm, length of fore body (to end of elytra) 1.5-1.7 mm.

Colouration. Head black, pronotum and elytra brown, abdomen dark brown, posterior margins of all tergites narrowly brown-red. Maxillary, labial palpi and mandibles brown, antennomeres 1-2 and base of antennomere 3 yellow-brown, remaining antennomeres brown.

Head longer than wide (ratio 14.5 : 13.0) parallel-sided, posterior margin obtusely rounded, bearing one long black bristle. Four punctures present between eyes, distance between medial punctures approximately 6 times larger than distance between lateral and medial ones. Medial punctures distinctly shifted anteriad. Eyes small and flat, much shorter than temples (ratio 5 : 8). Surface with very fine microsculpture consisting of transverse waves.

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

Pronotum longer than wide (ratio 19:15), very slightly narrowed anteriad. Anterior angles obtusely rounded, bearing several variably long bristles, posterior angles markedly rounded. Each dorsal row with five coarse approximately equidistant punctures, each sublateral row with two punctures, puncture two shifted to the lateral margin. Surface with traces of fine microsculpture. Each side bearing several variably long bristles. Scutellum densely punctured, diameter of punctures larger than those of eye-facets, separated by distance of one puncture diameter or smaller.

Elytra wider than long (ratio 24 : 22), distinctly widened posteriad. Punctuation coarse and relatively sparse, diameter of punctures slightly larger than those on scutellum, separated by distance of one puncture diameter or slightly larger. Surface lacking microsculpture; setation brown.

Legs. Metatibia slightly longer than metatarsus (ratio 11 : 10), metatarsomere 1 slightly shorter than metatarsomere 5, as long as metatarsomeres 2-3 combined.

Abdomen wide, from visible tergite III very gradually narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation at base of all tergites much finer and sparser than that on elytra, becoming sparser towards posterior margin of each tergite. Surface lacking microsculpture; setation similar to that on elytra.

Male. Aedeagus as in Figs 7-9.

**Differential diagnosis.** *Gabronthus corythaeola* sp. nov. is similar to *G.oribates* (Jeannel et Paulian, 1945) (Figs 22-23), but distinguished by the paler antennomeres 1-2, narrower head, sparser punctuation of elytra and by a different shape of the aedeagus.

### Distribution. Tanzania.

**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African Great blue turaco *Corythaeola cristata* (Vieilloti, 1816).

# *Gabronthus mandrillus* sp. nov.

(Figs 10-12)

**Type locality.** Republic of South Africa, Northern Prov. Camp David, 5 km S Ofoolaco 475. **Type material.** Holotype (♂): ,,Republic of South Africa, Northern Prov. Camp David, 5 km S. Ofoolaco 475 m, 17-24.i.2002, leg. S. Murzin, //HOLOTYPE ♂, *Gabronthus mandrillus* sp. nov. Hromádka det., 2013, [red oblong label printed]", (NMPC).

Description. Body length 4.5 mm, length of fore body (to end of elytra) 1.8 mm.

Colouration. Head black, pronotum black-brown, scutellum and elytra dark brown-red, abdomen brown, posterior margins of all tergites narrowly brown-red, maxillary and labial palpi, mandibles and antennomeres 1 and base of antennomere 2 brown-yellow, remaining antennomeres dark brown.

Head as long as wide, slightly narrowed posteriad, posterior angles obtusely rounded. Four coarse punctures, between eyes lateral punctures slightly shifted anteriad. Distance between medial punctures five times larger than distance between lateral and medial ones. Eyes flat, shorter than temples (ratio 6 : 11). Surface lacking microsculpture.

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

Pronotum longer than wide (ratio 19 : 16), parallel-sided, anterior and posterior angles markedly rounded. Each dorsal row with five approximately equidistant punctures, each sublateral row with two punctures, puncture two shifted to lateral margin. Surface lacks microsculpture.

Scutellum with several coarse punctures in middle, diameter of punctures larger than those of eye-facets, separated by distance smaller than one puncture diameter.

Elytra as long as wide, slightly widened posteriad. Punctation coarse and sparse. Diameter of punctures larger than those on scutellum, separated by distance of one puncture diameter or slightly larger. Surface lacks microsculpture; setation brown.

Legs. Metatibia longer than metatarsus (ratio 14 : 11), metatarsomere 1 as long as metatarsomere 5 and as long as metatarsomeres 2-3 combined.

Abdomen wide, slightly narrowed posteriorly beginning with visible tergite II. First three visible tergites with two basal lines, elevated area between lines impunctate, punctation at base of all tergites much finer and sparser than that on elytra, becoming sparser towards posterior margin of each tergite. Surface lacking microsculpture; setation similar to that on elytra.

Male. Aedeagus (Figs 10-12).

**Differential diagnosis.** *Gabronthus mandrillus* sp. nov. can be separated from *G. bycanistes* sp. nov. (Figs 4-6), by a shorter head, darker elytra and abdomen and from *G.mirafra* sp. nov. (Figs 13-15), by a paler antennomere 1, narrower elytra, paler abdomen, and from both of them by a different shape of the aedeagus.

Distribution. Republic of South Africa.

**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African Mandrill *Mandrillus sphinx* (Linnaeus, 1758).

# Gabronthus mirafra sp. nov. (Figs 13-15)

**Type locality.** Kenya, Mt. Egon Nat. P. near Cheepnyalil Cave, dry evergreen montane Forest, 2500 m. **Type material.** Holotype (♂): "Kenya, Mt. Elgon Nat. P., near Chepnyalil Cave, dry evergreen montane Forest, 2500 m, 24.-28.i-1992, no. 507, O. Merkl & G. Várkonyi, //Holotype *Gabronthus mirafra* sp. nov. Hromádka, det. 2013, [red oblong printed label]", (NMPC).

Description. Body length 3.9 mm, length of fore body (to end of lytra) 1.5 mm.

Colouration. Head, pronotum and abdomen black, posterior margins of all tergites narrowly brown-red, elytra dark brown, maxillary and labial palpi and antennae black-brown, legs brown-yellow, tibiae darker.

Head slightly longer than wide (ratio 21 : 19), parallel-sided, posterior angles obtusely rounded. Four coarse punctures between eyes, arranged in a straight line. Distance between lateral and medial punctures five times larger than distance between lateral and medial ones. Eyes flat, shorter than temples (ratio 7 : 11). Surface lacks microsculpture.

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

Pronotum longer than wide (ratio 27 : 22), slightly narrowed anteriad. Anterior angles obtusely rounded, bearing several variably long, black bristles, posterior margin markedly rounded. Each dorsal row with five equidistant punctures, each sublateral row with two punctures, puncture two shifted to lateral margin. Surface lacks microsculpture. Scutellum with five coarse punctures in middle, diameters of punctures larger than those of eye-facets.

Elytra as long as wide, widened posteriad. Punctation coarse and relatively sparse, diameters of punctures slightly larger than those on scutellum, separated by one puncture diameter, or slightly larger. Surface lacks microsculpture; setation brown.

Legs. Metatibia longer than metatarsus (ratio 20 : 16), metatarsomere 1 as long as metatarsomere 5 and as long as metatarsomeres 2-3 combined.

Abdomen wide, almost parallel-sided, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctation at bases of all tergites finer than that on elytra, becoming much sparser towards posterior margin of each tergite. Surface lacks microsculpture; setation similar to that on elytra.

Male. Aedeagus as in Figs 13-15.

**Differential diagnosis.** Gabronthus mirafra sp. nov. seems to be a similar species of G. mandrillus sp. nov. (Figs 10-12), but it differs by the darker antennomere 1, wider elytra, darker abdomen and by the different shape of the aedeagus.

#### Distribution. Kenya.

**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African Clapper lark *Mirafra adiata* (Viellot, 1816).

#### *Gabronthus mycteria* sp. nov. (Figs 16-18)

(Figs 10-18)

**Type locality.** Democratic Republic of the Congo [Congo Belge], Maniaka, Cafe Arabova. **Type material.** Holotype (♂): "Democratic Republic of the Congo [Congo Belge], Kaniama, Cafe arabica, 8.iv.1939, A. J. Bréda //Holotype *Gabronthus mycteria* sp. nov. Hromádka det., 2013, [red oblong printed label]", (NMPC).

Description. Body length 4.1 mm, length of fore body (to end of elytra) 1.6 mm.

Colouration. Head black, pronotum dark brown, elytra brown-red, abdomen dark brown, posterior margins of tergites narrowly brown-red. Maxillary and labial palpi, antennomere 1 and base of antennomeres 2 and 3 brown-yellow, remaining antennomeres dark brown, femora and tarsi yellow-brown, tarsi darker.

Head as long as wide, parallel-sided, posterior angles markedly rounded bearing several variably long black bristles. Five punctures between eyes, puncture three from left side slightly shifted posteriad. Eyes small, shorter than temples (ratio 7 : 11), temporal area in anterior two thirds impunctate, posterior third with one coarse puncture. Surface lacks microsculpture.

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

Pronotum longer than wide (ratio 25 : 21), parallel-sided. Anterior and posterior angles markedly rounded. Each dorsal row with five equidistant punctures, each sublateral row with two punctures, puncture two shifted to lateral margin. Surface lacks microsculpture.

Scutellum with several coarse punctures.

Elytra wider than long (ratio 34 : 31) distinctly widened posteriad. Punctation coarse, diameters of punctures larger than those on scutellum, separated by one puncture diameter in transverse direction. Surface lacks microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 18 : 15), metatarsomere 1 as long as metatarsomere 5.

Abdomen slightly narrowed posteriad beginning with visible tergite III. First three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctation at base of tergites much finer than that on elytra, becoming sparser towards posterior margin of each tergite. Surface lacks microsculpture; setation similar to that on elytra.

Male. Aedeagus as in Figs 16-18.

**Differential diagnosis.** *Gabronthus mycteria* sp. nov. is similar in habitus to *G. thermarum* (Aubé, 1850) (Fig. 24), but it differs by the more rounded head, longer pronotum wider elytra and by the different shape of the aedeagus.

Distribution. Democratic Republic of the Congo.

**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African Yellow billed stork *Mycteria ibis* (Linnaeus, 1766).



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Figs 1-24. *Gabronthus apaloderma* sp. nov.: 1- aedeagus, ventral view; 2- aedeagus, lateral view; 3- apex of paramere with sensory peg setae, ventral view; *Gabronthus bycanistes* sp. nov.: 4- aedeagus, ventral view; 5- aedeagus, lateral view; 6- apex of paramere with sensory peg setae, ventral view; *Gabronthus corythaeola* sp. nov.: 7- aedeagus, ventral view; 8- aedeagus, lateral view; 9- apex of paramere with sensory peg setae, vebtral view; *Gabronthus manarillus* sp. nov.: 10- aedeagus, ventral view; 11- aedeagus, lateral view; 12- apex of parameter with sensory peg setae, ventral view; *Gabronthus mirafra* sp. nov.: 13- aedeagus, ventral view; 14- aedeagus, lateral view; 15- apex of parameter with sensory peg setae, ventral view; 17- aedeagus, leteral view; 18- apex of parameter with sensory peg setae, ventral view; 19- aedeagus, leteral view; 20- aedeagus, lateral view; 21- parameter, ventral view; *Gabronthus oribates* (Jeannel et Paulian, 1955): 22- aedeagus, lateral view; 23- parameter with sensory peg setae, ventral view (original drawings after Frank, 1984).