

New species of the genus *Gabrius* from the Afrotropical Region (Coleoptera: Staphylinidae: Philonthini) - I

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Abstract. Six new species of the genus *Gabrius* are described: *Gabrius accipiter* sp. nov. (Botswana), *G. calonectris* sp. nov. (Tanzania), *G. coturnix* sp. nov. (Tanzania), *G. diomedea* sp. nov. (Democratic Republic of the Congo), *G. fulmarus* sp. nov. (Tanzania), *G. glareola* sp. nov. (Ethiopia). All the species are described and morphological details of some species and aedeagi of all the species are figured.

INTRODUCTION

The philonthine genus *Gabrius* was established and described by Stephens, 1829 and currently contains more 350 species occurring in all zoogeographical regions. The genus includes more than 90 species in the Afrotropical Region. I discovered another six new species as described below: *Gabrius accipiter* sp. nov., *Gabrius calonectris* sp. nov., *Gabrius coturnix* sp. nov., *Gabrius diomedea* sp. nov., *Gabrius fulmarus* sp. nov., and *Gabrius glareola* sp. nov.

MATERIAL AND METHODS

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

BMNH Natural History Museum, London, United Kingdom (Maxwell Barclay and Roger Booth);
LHPC Lubomír Hromádka, private collection, Praha (Czech Republic);
MRAT Musée Royal d'Afrique centrale, Tervuren, Belgium (Marc de Meyer);
NMPC National Museum, Praha, Czech Republic (Jiří Hájek).

A double slash (//) is used to divide separate labels of each type specimen. All measurements were taken from beetles with stretched abdomen. All ratios mentioned in the descriptions 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 accipiter* sp. nov.**

(Figs. 1-3)

Type locality. Botswana, Moremi Reserves, 19°23'S23°33'E.

Type material. Holotype (♂): Botswana, Moremi Reserves, 19°23'S23°33'E, 18.-20.vii. 1972. // Holotypus *Gabrius accipiter* sp. nov. Hromádka det. 2014 [red oblong printed label], (NMPC).

Description. Body length: 5.1 mm, length of fore body 2.8 mm.

Colouration. Head black, pronotum and scutellum brown-black, elytra dark brown, brown-red translucent in parts, posterior margin and elytral epipleura narrowly brown-yellow, abdomen black-brown, narrow posterior margin of all tergites and whole posterior half of all paratergites brown-yellow. Maxillary and labial palpi and base of antennomere 2 yellow-brown, antennae dark brown. Femora and tarsi brown, tarsi brown, paler distally.

Head as long as wide, parallel-sided, posterior angles markedly rounded. Four coarse punctures between eyes; medial punctures distinctly shifted anteriorly. Distance between medial punctures four times larger than distance between medial and lateral punctures. Eyes shorter than temples (ratio 7 : 10), posterior margin with two coarse punctures. Temporal area with 2 coarse punctures in posterior half. Surface with fine microsculpture consisting of transverse waves.

Antennae slender and 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, antennomere 3 longer than antennomere 2.

Pronotum slightly longer than wide, (ratio 25 : 23), parallel-sided, anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded, Each dorsal row with 6 approximately equidistant coarse punctures, each sublateral row with 2 punctures, puncture 2 on the same level as puncture 5 in dorsal row. Surface with microsculpture similar to that on head.

Scutellum coarsely and sparsely punctate, diameter of punctures slightly larger than eye-facets, separated by two puncture diameters in transverse direction. Surface with fine microsculpture; setation dark.

Elytra approximately as long as wide, slightly widened posteriorly. Punctuation coarse and dense, diameter of punctures larger than that on scutellum, distances between punctures equal to one puncture diameter, or smaller. Surface without microsculpture; setation brown.

Legs. Metatibia longer than metatarsus (ratio 19 : 17) metatarsomere 1 shorter than metatarsomere 5 and than metatarsomeres 2-3 combined.

Abdomen gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines very densely and finely punctate. Punctuation at base of all tergites much 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 accipiter* sp. nov. may be distinguished from the similar *G. monticola* Bernhauer, 1931 by the darker antennae, shorter head and eyes, denser punctuation of elytra and by a different shape of the aedeagus.

Etymology. The name of the species, a noun in apposition, is the Latin generic name of the African Shikra *Accipiter badius* (J. F. Gmelin, 1788).

***Gabrius calonectris* sp. nov.**
(Figs. 4-8)

Type locality. Tanzania, Uru north, env. 1750 m, 16 km N of Moshi.

Type material. Holotype (♂): Tanzania, Uru north, env. 1750 m, 16 km N of Moshi, v. 2010, Milan Kuboň lgt. // Holotypus *Gabrius calonectris* sp. nov. Hromádka det. 2014 [red oblong printed label], (LHPC).

Description. Body length 7.2 mm, length of fore body 2.9 mm.

Colouration. Head brown-red, maxillary and labial palpi and antennomere 1 yellow-brown, remaining antennomeres paler brown, femora and tarsi brown, tibiae darker.

Head as long as wide, parallel-sided, posterior angles markedly rounded, bearing one long black bristle. Four coarse punctures between eyes, medial punctures distinctly shifted anteriorly. Distance between medial punctures four times larger than distance between medial and lateral punctures. Eyes much shorter than temples, (ratio 4 : 15). Posterior margin with one coarse puncture, temporal area with 3 punctures arranged in a vertical row. Surface with 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 slightly longer than wide, antennomeres 5-10 as long as wide, antennomere 3 longer than antennomere 2.

Pronotum longer than wide (ratio 34 : 26), parallel-sided. Anterior angles obtusely and posterior angles markedly rounded. Each dorsal row with 6 very fine punctures, punctures 2-6 equidistant, distance between punctures 1 and 2 larger than distance between previous punctures. Each sublateral row with 3 very fine punctures, puncture 2 shifted to lateral margin. Surface with microsculpture similar to that on head.

Scutellum almost impunctate.

Elytra short, wider than long (ratio 30 : 28), slightly widened posteriorly. Punctuation coarse and relatively sparse, diameter of punctures larger than eye-facets, distance between punctures by one and half puncture diameters in transverse direction. Surface without microsculpture; setation brown.

Legs. Metatibia longer than metatarsus (ratio 27 : 18). Metatarsomere 1 shorter than metatarsomere 5 and shorter than metatarsomeres 2 and 3 combined.

Abdomen wide, parallel-sided. First three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation at base of all 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.

Differential diagnosis. *Gabrius calonectris* sp. nov. differs from similar *G. claviger* Tottenham, 1956, by its narrower head, longer pronotum, shorter and finer punctuation of elytra and by a different shape of the aedeagus.

Etymology. The name of the species, a noun in apposition, is the Latin generic name of the African Cory's shearwater *Calonectris diomedea* (Scopoli, 1758).

***Gabrius coturnix* sp. nov.**

(Figs. 9-13)

Type locality. Tanzania, Mwanza.

Type material. Holotype (♂): Tanzania, Mwanza, 11.x.1969, Ardö leg. under damp vegetation // Holotypus *Gabrius coturnix* sp. nov. Hromádka det. 2014, [red oblong printed label], (NMPC).

Description. Body length 8.0 mm, length of fore body 3.3 mm.

Colouration. Body entirely brown-red, maxillary and labial palpi and antennomere 1 brown, remaining antennomeres darker, femora dirty yellow, dorsal side of tibiae brown-black, ventral

side brown-red, tarsi dirty yellow, paler distally. Pronotum slightly golden iridescent, particularly in posterior half.

Head as long as wide, slightly widened posteriorly, posterior angles markedly rounded, bearing two long and several short black bristles. Four punctures between eyes, medial punctures shifted anteriorly, distance between medial punctures three times larger than distance between medial and lateral punctures. Eyes shorter than temples (ratio 5 : 18), posterior margin with 3 punctures, temporal area with several punctures in posterior half. 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 4-6 slightly longer than wide, antennomeres 7-10 as long as wide. Antennomere 1 almost twice longer than antennomere 11, antennomere 3 longer than antennomere 2.

Pronotum longer than wide (ratio 40 : 33), parallel-sided. Anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Left dorsal row with 7 punctures of irregular length, right dorsal row with 8 punctures of irregular length. Each sublateral row with 2 punctures arranged in a row parallel to the dorsal row and half way between it and side. Surface with microsculpture similar to that on head.

Scutellum finely and sparsely punctate, diameter of punctures smaller than eye-facets, separated much more than one puncture diameter. Surface with fine microsculpture; setation dark.

Elytra short, much shorter than wide (ratio 33 : 40), widened posteriorly. Punctuation coarse and dense, diameter of punctures much larger than eye-facets, distance between them as large as puncture diameter, or smaller, most punctures contiguous. Surface without microsculpture; setation brown.

Legs. Metatibia longer than metatarsus (ratio 29 : 23), metatarsomere 1 shorter than metatarsomere 5, almost as long as metatarsomeres 2-3 combined.

Abdomen wide, gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines impunctate, punctuation at base of all 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.

Differential diagnosis. *Gabrius coturnix* sp. nov. differs from *G. parabadilicus* Tottenham, 1962 by its wider head, shorter eyes, denser punctuation of elytra and by a different shape of the aedeagus.

Etymology. The name of the species, a noun in apposition, is the Latin generic name of the African Common Quail *Coturnix* (Linné, 1758).

***Gabrius diomedea* sp. nov.**

(Figs. 14-16)

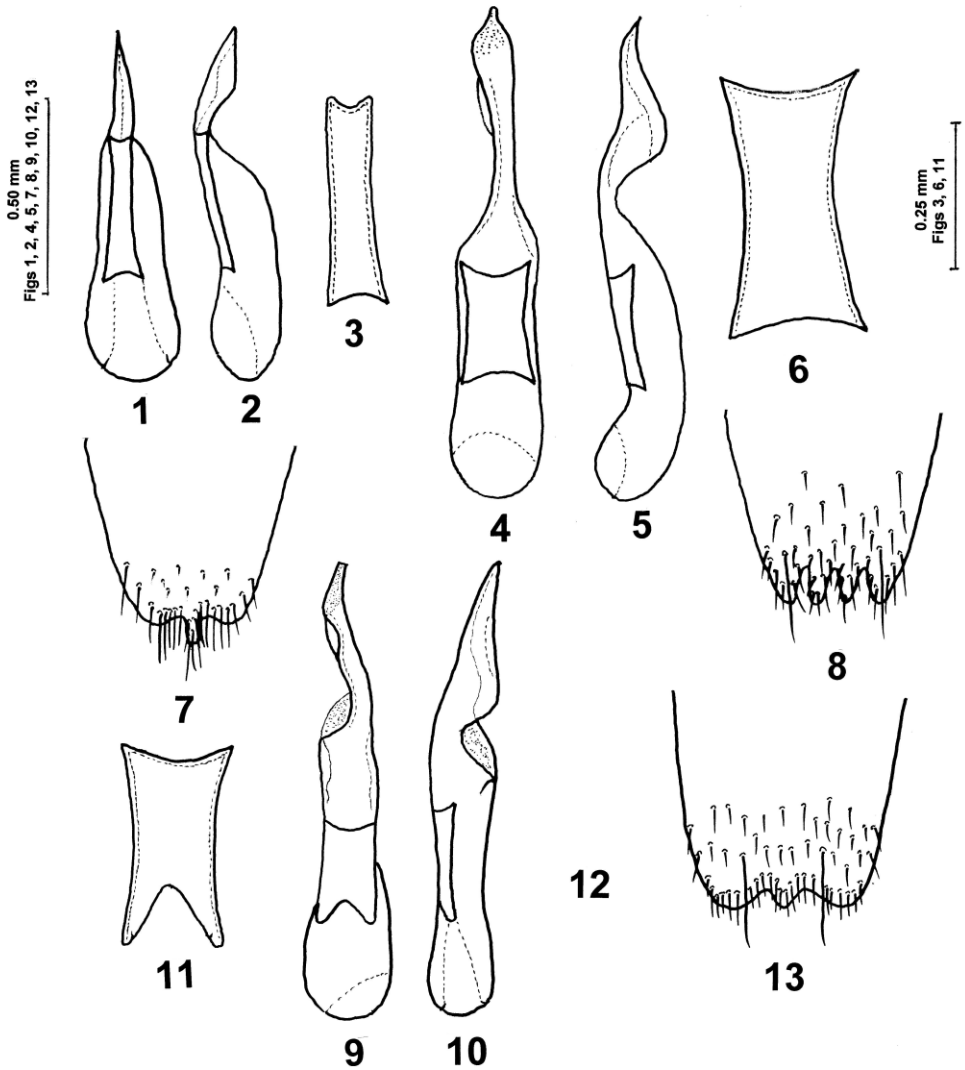
Type locality. Democratic Republic of the Congo, Zaire: P. N. Virunga, Volcan Sabinyo.

Type material. Holotype (♂): Democratic Republic of the Congo, Zaire: P. N. Virunga, Volcan Sabinyo, vii.1964, R. P. Cellis, // Holotypus *Gabrius diomedea* sp. nov. Hromádka det. 2014, [red oblong printed label], coll. Mus. Tervuren, (MRAT).

Description. Body length 4.9 mm, length of fore body 2.5 mm.

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

Head longer than wide (ratio 20 : 15), parallel-sided, posterior angles indistinct, bearing two



Figs. 1-13. *Gabrius accipiter* sp. nov.: 1- aedeagus, ventral view; 2- aedeagus, lateral view; 3- paramere, ventral view; *Gabrius calonectris* sp. nov.: 4- aedeagus, ventral view; 5- aedeagus, lateral view; 6- paramere, ventral view; 7- male tergite IX, ventral view; 8- male sternite VIII, ventral view; *Gabrius coturnix* sp. nov.: 9- aedeagus, ventral view; 10- aedeagus, lateral view; 11- paramere, ventral view; 12- male sternite IX, ventral view; 13- male sternite VIII, ventral view.

long black bristles. Four coarse punctures between eyes, medial punctures distinctly shifted anteriad, distance between medial punctures four times larger than distance between medial and lateral punctures. Eyes flat, twice shorter than temples (ratio 5 : 10), posterior margin with two coarse punctures, temporal area with several punctures in posterior half. 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 4-7 slightly longer than wide, antennomeres 8-10 as long as wide.

Pronotum longer than wide (ratio 20 : 16), anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Each dorsal row with six coarse punctures, punctures 2-6 equidistant, separation between punctures 1-2 larger than that between previous punctures. Each sublateral row with two punctures, puncture two shifted to lateral margin. Surface with microsculpture similar to that on head.

Scutellum with several very small setiferous punctures in posterior half, anterior half impunctate.

Elytra approximately as long as wide, slightly widened posteriad, finely and densely punctate, diameter of punctures much larger than that on scutellum, distance between them as large as one puncture diameter or slightly larger. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 20 : 15), metatarsomere 1 shorter than metatarsomere 5.

Abdomen wide, gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines with several very fine punctures. Punctuation at base of all tergites much 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 diomedea* sp. nov. may be distinguished from the similar species *G. mirei* Levasseur, 1968 by its longer and narrower head and pronotum, darker elytra and different shape of the aedeagus.

Etymology. The name of the species, a noun in apposition, is the Latin generic name of the African Royal Albatros *Diomedea epomophora* Lesson, 1825.

***Gabrius fulmarus* sp. nov.**

(Figs. 17-19)

Type locality. Tanzania, Urv north env. 1750 m, 16 km n of Mochi.

Type material. Holotype (♂): Tanzania, Urv north env. 1750 m, 16 km n of Mochi, M. Kuboň leg. // Holotypus *Gabrius fulmarus* sp. nov. Hromádka det. 2014, [red oblong printed label], (NMPC).

Description. Body length 4.9 mm, length of fore body 2.5 mm.

Colouration. Head and pronotum black-brown, elytra and abdomen dark brown-red. Maxillary, labial palpi and antennomeres 2 and 11 brown-yellow, remaining antennomeres brown, femora and tarsi yellow-brown, tibiae darker.

Head longer than wide (ratio 22 : 19), posterior margin markedly rounded, bearing two long and one short black bristles. Four coarse punctures between eyes, medial punctures shifted anteriad. Distance between medial punctures four times larger than distance between medial and lateral punctures. Eyes flat, distinctly shorter than temples (ratio 5 : 14), posterior margin with one

coarse puncture, temporal area with one puncture in the middle and with four punctures in posterior half, anterior half impunctate. Surface with microsculpture consisting of transverse waves.

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

Pronotum longer than wide (ratio 28 : 25), narrowed anteriorly, Anterior and posterior margins markedly rounded. Each dorsal row with six coarse punctures, punctures 2-6 approximately equidistant, distance between punctures 1-2 larger than distance between previous punctures. Each sublateral row with two punctures, puncture shifted to lateral margin. Anterior angles and sides bearing several bristles variable in length. Surface with microsculpture similar to that on head.

Scutellum with several very small punctures.

Elytra short, wider than long (ratio 31 : 25), slightly widened posteriorly. Punctuation coarse, diameter of punctures much larger than eye-facets, distance between punctures one and half or two puncture diameters. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 23 : 18), metatarsomere 1 as long as metatarsomere 5 and as long as metatarsomeres 2-3 combined.

Abdomen wide, from visible tergite III very slightly narrowed anteriorly and posteriorly. First three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation at base of all tergites finer and sparser than that on elytra, becoming sparser towards posterior margin of each tergite.

Differential diagnosis. *Gabrius fulmarus* sp. nov. is similar to *G. brevissimus* Tottenham, 1956., from which it may be distinguished by its shorter eyes, coarser and denser punctuation of elytra and by a different shape of the aedeagus.

Etymology. The name of the species, a noun in apposition, is the Latin generic name of the African Southern fulmar *Fulmarus glacialis* (Smith, 1840).

***Gabrius glareola* sp. nov.**

(Figs. 20-22)

Type locality. Ethiopia: Wolamo Prov., Spur of Mt. Damota over 8,000 ft.

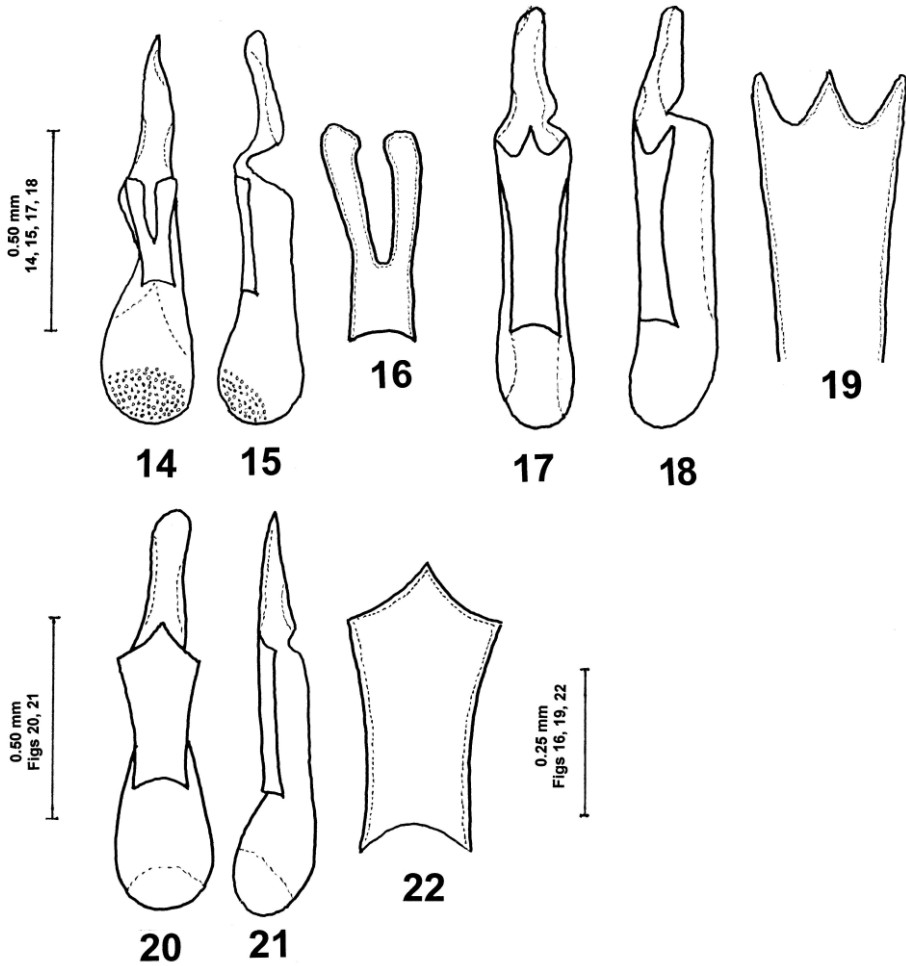
Type material. Holotype (♂): Ethiopia: Wolamo Prov., Spur of Mt. Damota over 8,000 ft, 28.x.1948, swept from bushes and flowers // Holotypus *Gabrius glareola* sp. nov. Hromádka det. 2014, [red oblong printed label] (BMNH). Paratype (1 ♂): Botswana, Moremi Reservoirs, 19°23' S 23°33' E, 18.-20.1972, (LHPC).

Description. Body length 6.0 mm, length of fore body 3.1 mm.

Colouration. Head and abdomen dark brown, pronotum and scutellum milk chocolate-brown, elytra yellow-brown, slightly dark translucent in parts, suture narrowly dark brown. Maxillary and labial palpi, antennomere 1 and base of antennomere 2 yellow, remaining antennomeres brown. Femora and tarsi dirty yellow, tibiae darker.

Head as long as wide, parallel-sided, posterior angles indistinct, bearing one long black bristle. Clypeus with a small rounded depression medially. Between eyes with 4 coarse punctures, medial punctures shifted anteriorly, distance between medial punctures four times larger than distance between medial and lateral punctures. Eyes twice shorter than temples (ratio 6 : 12), posterior

margin with 2 coarse punctures. Temporal area with one coarse puncture in the middle, several small setiferous punctures in the posterior half, anterior half impunctate. Surface with very fine microsculpture. Antennae long, reaching posterior sixth of pronotum when reclined. Antennomeres 1-4 and 11 distinctly longer than wide, antennomeres 5-7 slightly longer than wide, antennomeres 8-10 as long as wide.



Figs. 14-22. *Gabrius diomedea* sp. nov.: 14- aedeagus, ventral view; 15- aedeagus, lateral view; 16- paramere, ventral view; *Gabrius fulmarus* sp. nov.: 17- aedeagus, ventral view; 18- aedeagus, lateral view; 19- apex of paramere, ventral view; *Gabrius glareola* sp. nov.: 20- aedeagus, ventral view; 21- aedeagus, lateral view; 22- paramere, ventral view.

Pronotum parallel-sided, longer than wide (ratio 30 : 26), anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Each dorsal row with 6 approximately equidistant punctures, each sublateral row with 2 punctures, puncture 2 shifted to the lateral margin. Sides bearing several bristles of variable lengths. Surface with microsculpture similar to that on head.

Scutellum finely and sparsely punctate, diameter of punctures slightly larger than eye-facets, punctures separated by two puncture diameters in transverse direction.

Elytra as long as wide, punctation coarser than that on scutellum, distance between punctures equal to one puncture diameter or larger. Surface without microsculpture; setation brown-yellow.

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

Abdomen wide and 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 towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Differential diagnosis. *Gabrius glareola* sp. nov. is similar to *G. parabadilicus* Tottenham, 1962, from which it may be distinguished by its narrower and longer head, longer and denser punctation of elytra and by a different shape of the aedeagus.

Etymology. The name of the species, a noun in apposition, is the Latin generic name of the African Collared pratincole *Glareola pratincola erlangeri* Neumann, 1920.

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