

Revision of Afrotropical species of the *Philonthus abyssinus* species group (Coleoptera: Staphylinidae: Philonthina)

Lubomír HROMÁDKA

Anny Letenské 7, CZ-120 00 Praha 2, Czech Republic; e-mail: hromadka@seznam.cz

Abstract. The *Philonthus abyssinus* species group of the genus *Philonthus* Stephens, 1829, is proposed, containing six species. Two species are described as new: *Philonthus brendelli* sp. nov. (Central African Republic) and *P. varanus* sp. nov. (Kenya); four species are redescribed: *P. abyssinus*, Fauvel, 1880, *P. elgonensis* Tottenham, 1940, *P. pseudoabyssinus* Tottenham, 1940, and *P. tottenhami* Last, 1953. All species of the *P. abyssinus* species group are keyed; the aedeagi and relevant morphological characters of all species are figured.

Key words. Coleoptera, Staphylinidae, Philonthina, *Philonthus abyssinus* species group, taxonomy, new species, key, Afrotropical region

Introduction

Philonthus Stephens, 1829 is the largest genus of the subtribe Philonthina, currently containing more than 1,250 species, which occur in all zoogeographical regions. It is represented in the Afrotropical region by approximately 300 known species (HERMAN 2001). The infrageneric classification of the Afrotropical species is not yet satisfactorily settled. TOTTENHAM (1949) proposed a subdivision of species in species groups, based on the number of punctures in the dorsal rows of the pronotum. Later, TOTTENHAM (1962) classified some Afrotropical species in five species groups: *P. caffer*, *P. circumcinctus*, *P. peliomerus*, *P. rudipennis*, and *P. xanthorhapis* – *P. discoideus*, but many species were not assigned to any group. A new species group containing species related to *Philonthus abyssinus* Fauvel, 1880, is proposed in the present paper. Moreover, on examining material from the Field Museum of Natural History, Chicago, the Natural History Museum, London, and from my collection, I found two new species belonging to the *Philonthus abyssinus* species group.

Material and methods

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

- BMNH The Natural History Museum, London, United Kingdom (Martin Brendell and Max Barclay);
FMNH Field Museum of Natural History, Chicago, USA (James Boone);

LHPC Lubomír Hromádka collection, Praha, Czech Republic;
NMPC National Museum, Praha, Czech Republic (Jiří Hájek).

Separate labels are divided in the text by a double slash (/). All measurements were taken with stretched abdomen. In ratios mentioned in the descriptions, 20 units = 1 mm.

Results

The *Philonthus abyssinus* species group is characterized by the following characters: middle sized species, 9.1-11.8 mm long, black to black-brown, shiny. Head transversely rectangular, tempora almost impunctate, eyes shorter or as long as temples, clypeus in middle with variably wide and deep depression, mandibles stout, medial margins each with simple tooth, dorsal surface with very fine and dense microsculpture of transverse waves. Pronotum parallel-sided, or slightly narrowed to base and to apex, sides with several black bristles of unequal length, dorsal rows each with 4 punctures, sublateral rows each with 2 punctures, surface with microsculpture similar to that on head. Scutellum densely and coarsely punctate. Punctuation of elytra coarse and sparse, surface without microsculpture. Abdomen without metallic lustre, punctuation of abdomen very fine and sparse, first three visible tergites with basal lines, elevated area between basal lines impunctate or very sparsely and finely punctate, first three protarsomeres of males relatively slightly dilated and sub-bilobed, each covered with modified pale setae ventrally. Paramere of aedeagus bilobed, divergent, each lobe furnished with moderate number of sensory peg setae.

The following six Afrotropical species are included in the group:

Philonthus abyssinus Fauvel, 1880

Philonthus brendelli sp. nov.

Philonthus elgonensis Tottenham, 1940

Philonthus pseudoabyssinus Tottenham, 1940

Philonthus tottenhami Last, 1953

Philonthus varanus sp. nov.

Philonthus abyssinus Fauvel, 1880

(Figs. 1-5)

Philonthus abyssinus Fauvel, 1880: 203.

Type locality. Ethiopia, Scioa, Mahal-Uonz, Let Marefia.

Type material. Not studied.

Additional material examined. ETHIOPIA: 2 ♂♂, 'Abessin', Kristensen lgt. (LHPC).

Redescription. Body length 9.8-10.1 mm, length of fore body (to the end of elytra) 4.5-4.8 mm.

Colouration. Head and abdomen black, pronotum and elytra black-brown, clypeus along anterior margin and antennal sockets very narrowly yellow-brown, maxillary and labial palpi brown-yellow, terminal palpomere a little paler, mandibles dark brown, antennae black, base of antennomere 2 lighter, femora and tarsi brown-yellow, tibiae black.

Head wider than long (ratio 34 : 26). Clypeus with a small depression medially. Posterior angles of head capsule slightly rounded, with one long black bristle. Eyes as long as temples;

temples slightly narrowed behind eyes. Four coarse punctures between eyes, distance between medial interocular punctures three times as long as distance between medial and lateral punctures. Surface with very fine microsculpture of transverse waves.

Antennae relatively long, reaching posterior fourth of pronotum when reclined. Antennomeres 1-4 and 11 longer than wide, antennomeres 5-10 as long as wide. Antennomere 1 somewhat shorter than antennomeres 2-3 combined, antennomere 3 longer than antennomere 2, antennomere 11 by half as long as antennomere 1.

Pronotum as long as wide, parallel-sided, slightly narrowed anteriorly. Each dorsal row with 4 coarse punctures; each sublateral row with 2 punctures, placed in anterior half of pronotum. Sides of pronotum with several black bristles of unequal length. Microsculpture similar to that on head.

Scutellum coarsely and densely punctate, punctures fused here and there.

Elytra wider than long (ratio 47 : 44), slightly widened posteriorly. Punctuation coarse and sparse, diameters of punctures somewhat longer than those of eye-facets, punctures separated by two puncture diameters. Elytral surface without microsculpture; setation brown.

Legs. Metatibia somewhat longer than metatarsus (ratio 24 : 23). Metatarsomere 1 somewhat shorter than metatarsomeres 2-4 combined, metatarsomere 5 somewhat shorter than metatarsomere 1.

Abdomen slightly narrowed from tergite V towards both base and apex. Elevated area between two basal lines on first two visible tergites almost impunctate, basal lines on tergite III with several scattered punctures, basal lines on tergite IV much more densely punctate. Punctuation at base of all tergites slightly finer than that on elytra, gradually becoming finer and much sparser towards apex of each tergite. Surface between punctures without microsculpture, very shiny. Setation similar to that on elytra.

Male. Protarsomeres 1-3 relatively slightly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones; sternite VIII (Fig. 3), sternite IX (Fig. 4), tergite X (Fig. 5), aedeagus (Figs. 1-2).

Female. Unknown to the author.

Differential diagnosis. *Philonthus abyssinus* may be distinguished from the very similar species *P. pseudoabyssinus* and *P. varanus* sp. nov. by the apical portion of median lobe short in ventral view, with rather obtusely pointed apex (Fig. 1).

Distribution. Angola, Congo, Ethiopia, Kenya, Mozambique, South Africa, Tanzania, Zimbabwe (TOTTENHAM 1940, HERMAN 2001).

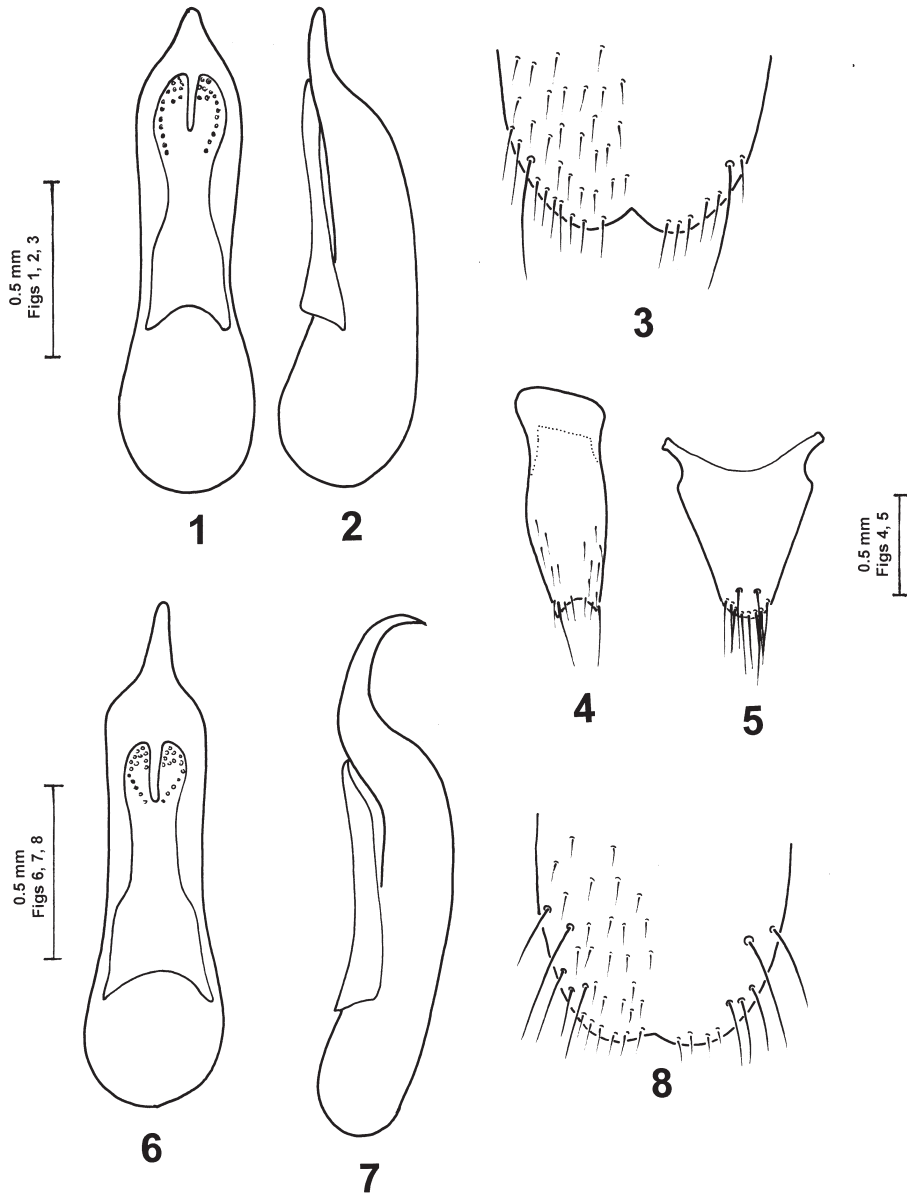
Philonthus brendelli sp. nov.

(Figs. 6-8)

Type locality. Central African Republic, Uamgebiet Bosum [= Ouham river valey, Bosum].

Type material. HOLOTYPE: ♂, 'Central African Republic, Uamgebiet Bosum, 9°19'00"S;15°11'00"E, 11.-20. vi., Tessmann, S [red oblong printed label]' (NMPC). PARATYPE: ♂, 'Central African Republic, Quango Gebiet, 4°19'00"N; 22°33'00"E, V. Mechow [red oblong printed label]' (LHPC).

Description. Body length 9.1-9.3 mm, length of fore body (to the end of elytra) 4.8-5.0 mm.



Figs. 1-8. 1-5 – *Philonthus abyssinus* Fauvel, 1880; 6-8 – *P. brendelli* sp. nov. 1, 6 – aedeagus, ventral view; 2, 7 – aedeagus, lateral view; 3, 8 – apical portion of sternite VIII, ventral view; 4 – sternite IX, ventral view; 5 – tergite X, dorsal view.

Colouration. Head black, pronotum, elytra and abdomen black-brown, posterior margins of first four visible tergites rather broadly reddish-brown, paratergites reddish-brown, clypeus along anterior margin and antennal sockets narrowly yellow-brown, mandibles, maxillary and labial palpi, antennae and legs brown.

Head quadrangular, wider than long (ratio 33 : 26), parallel-sided, vaguely narrowed behind eyes. Posterior angles of head capsule slightly rounded, with 2 long black bristles. Clypeus medially with wide and deep depression. Temples a little longer than eyes (ratio 12 : 11). Four coarse punctures between eyes, distance between medial interocular punctures four times as long as distance between medial and lateral punctures. Posterior margin of eyes with 2 coarse punctures. Surface with very irregular, almost indistinct microsculpture.

Antennae short, reaching middle of pronotum when reclined, antennomeres 6-10 slightly wider than long. Antennomere 1 almost as long as antennomeres 2-3 combined, antennomere 11 distinctly longer than antennomere 3.

Pronotum vaguely longer than wide (ratio 35 : 33), parallel-sided, widest at middle, vaguely narrowed both posteriad and anteriad. Posterior angles of pronotum markedly rounded. Each dorsal row with 4 coarse punctures; each sublateral row with 2 punctures. Pronotal margin with 1 long black bristle at anterior third. Microsculpture similar to that on head.

Scutellum densely and coarsely punctate, punctures somewhat larger than diameters of punctures on elytra, distance between punctures much smaller than their diameters. Surface without microsculpture.

Elytra hardly wider than long (ratio 47 : 46), parallel-sided. Punctuation fine and scattered, punctures somewhat larger than eye-facets, separated by two (sometimes by three) diameters of punctures. Anterior angles of elytra with 1 long black bristle; sides of elytra with several shorter black bristles. Surface without microsculpture, very shiny, setation grey.

Legs. Metatibia longer than metatarsus (ratio 24 : 21). Metatarsomere 1 somewhat shorter than metatarsomere 5, metatarsomere 5 shorter than metatarsomeres 2-3 combined.

Abdomen parallel-sided, first four visible tergites with two basal lines, elevated area between basal lines on first three visible tergites impunctate, on fourth tergite sparsely punctate. Punctuation of tergites somewhat finer than that on elytra, becoming sparser towards apex of each tergite. Surface between punctures without microsculpture; setation similar to that on elytra.

Male. Protasomeres 1-3 simple, moderately dilated, each covered with modified pale setae ventrally; sternite VIII (Fig. 8); aedeagus (Figs. 6-7).

Female. Unknown to the author.

Differential diagnosis. This new species is very similar to *P. elgonensis*, but differs by the apical portion of median lobe in ventral view almost parallel-sided with truncate apex (Fig. 9).

Etymology. The species is named in honour of my friend Martin Brendell, curator of the Natural History Museum, London, United Kingdom.

Distribution. Central African Republic.

Philonthus elgonensis Tottenham, 1940

(Figs. 9-12)

Philonthus elgonensis Tottenham, 1940: 149.**Type locality.** Uganda, Mt. Elgon.**Type material.** HOLOTYPE: ♂, 'UGANDA, Mt. Elgon 10,000 ft., 10.iii.1934, H. B. Johnston, Bamboo zone, Pres. by Imp. Inst. Ent. B. M. 1935-40 // [white round label with red margin]' (BMNH).**Redescription.** Body black, length 11.4 mm, length of fore body (to the end of elytra) 5.1 mm.

Colouration. Body black, clypeus along anterior margin and antennal sockets narrowly brown-yellow; mandibles, maxillary and labial palpi black-brown; antennae black, base of antennomeres 1-2 brown-yellow, remaining antennomeres darker; legs brown-black, all tarsi with claws somewhat paler.

Head markedly transverse (ratio 44 : 31), slightly narrowed posteriad. Posterior angles of head capsule obtusely rounded. Eyes shorter than temples (ratio 8 : 16), distance between medial interocular punctures about 3 times as long as distance between medial and lateral interocular punctures. Temples with single coarse puncture. Surface with very irregular, almost indistinct microsculpture.

Antennae short, reaching to middle of pronotum when reclined, antennomeres 1-3 and 11 longer than wide, antennomeres 4-10 as long as wide. Antennomere 1 distinctly shorter than antennomeres 2-3 combined, antennomere 2 as long as antennomere 3, antennomere 11 half as long as antennomere 1.

Pronotum about as long as wide (ratio 41 : 40), widest around middle, vaguely narrowed anteriorly and posteriorly. Each dorsal row with 4 coarse, equidistant punctures; each sublateral row with 2 punctures. Anterior pronotal angles and sides with bristles of unequal length. Microsculpture similar to that on head.

Scutellum coarsely and densely punctate, punctures somewhat larger than eye-facets, distance between punctures smaller than their diameters. Surface without microsculpture.

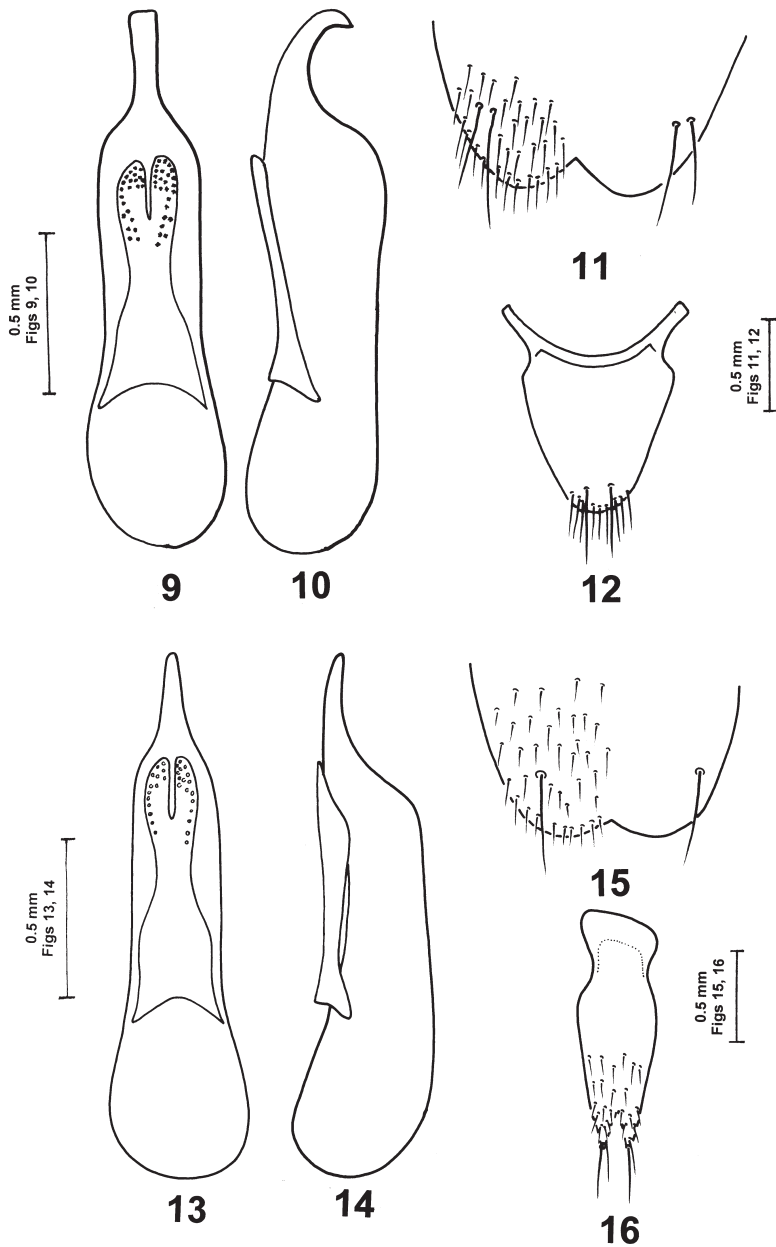
Elytra somewhat wider than long (ratio 55 : 52), parallel-sided. Punctuation fine and scattered, only around scutellum denser. Punctures similar to that on scutellum, distance between punctures two or three times as large as diameters of punctures. Surface between punctures without microsculpture. Sides with several long black bristles; setation grey.

Legs. Metatarsus as long as metatibia. Metatarsomere 1 somewhat longer than metatarsomeres 2-3 combined, metatarsomere 5 as long as metatarsomere 1.

Abdomen from tergite V slightly narrowed towards base and apex. First four visible abdominal tergites with two basal lines, elevated area between basal lines on first three visible tergites almost impunctate, that on fourth tergite with scattered punctures. Punctuation of tergites very irregular and scattered, diameters of punctures equal to those of eye-facets, distance between punctures variable. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1-3 slightly dilated, each covered with modified pale setae ventrally, protarsomere 4 narrowly heart-shaped; sternite VIII (Fig. 11), tergite X (Fig. 12), aedeagus (Figs. 9-10).

Female. Unknown to the author.



Figs. 9-16. 9-12 – *Philonthus elgonensis* Tottenham, 1940; 13-16 – *P. pseudoabyssinus* Tottenham, 1940. 9, 13 – aedeagus, ventral view; 10, 14 – aedeagus, lateral view; 11, 15 – apical portion of sternite VIII, ventral view; 12 – tergite X, dorsal view; 16 – sternite IX, ventral view.

Differential diagnosis. *Philonthus elgonensis* seems to be a sister species of *P. brendelli* sp. nov.; it differs by the apical portion of the median lobe of the aedeagus in ventral view almost gradually narrowed towards rather sharply pointed apex (Fig. 6).

Distribution. Uganda, Rwanda (HERMAN 2001).

***Philonthus pseudoabyssinus* Tottenham, 1940**

(Figs. 13-16)

Philonthus pseudoabyssinus Tottenham 1940: 148.

Type locality. South Africa, Delagoa Bay.

Type material. HOLOTYPE: ♂, 'SOUTH AFRICA, Delagoa Bay, C.E. Tottenham collection, B. M. 1974-587 // [white round label with red margin]' (BMNH).

Additional material examined. **ANGOLA:** 2 ♂♂, (A 35) 12 mls. SW. Luimbale, c. 5500 ft., 20.-21.iii.1972, Southern African Expedition, Exp. B. M. 1972-1 (BMNH); 1 ♂, (A 40) Tundavala, 8-10 mls. NW Sa de Bandeira, 27.-29.iii.1972, dog dung, Southern African Exp. B. M. 1971-2 (BMNH). **DEMOCRATIC REPUBLIC OF THE CONGO** ('Congo Belge'): 1 ♂, Kaniama, 8.iv.1939, H. J. Brédo, Café arabica (LHPC). **ETHIOPIA:** 1 ♂, Arussa, 2 km E of Dighelli, 0744 N 39/SE, 2850 m a.s.l., under stone, R. O. S. Clark, B. M. 1973-450 (BMNH). **KENYA:** 16 exs., Muguga, 5.viii.1960, Berlese: cow manure, Coll. D. H. & A. C. Kistner, R. Banfill Field No. 507 (FMNH, LHPC). **ZIMBABWE:** 1 ♂, Ntondwa, 28.viii.1939, H. J. Brédo (LHPC).

Redescription. Body length: 9.8-10.3 mm, length of fore body (to the end of elytra) 5.0-5.4 mm.

Colouration. Head and pronotum black, clypeus along anterior margin and antennal sockets narrowly brown-yellow; antennomeres 1-3 black-brown, antennomeres 4-9 dark brown, antennomeres 10-11 somewhat paler, elytra, scutellum and abdomen anthracite black and strongly shiny; legs black.

Head transverse (ratio 32 : 26), slightly narrowed behind eyes; posterior angles obtuse, but well marked, with one long black bristle. Clypeus with a small depression medially. Eyes as long as temples, approximate distance separating medial interocular punctures about twice as long as that separating medial punctures from lateral interocular punctures. Two coarse punctures at posterior margin of eyes. Temporal area impunctate. Surface without microsculpture.

Antennae rather long, reaching posterior third of pronotum when reclined, antennomeres 1-3 longer than wide, antennomeres 4-10 as wide as long. Antennomere 1 somewhat shorter than antennomeres 2-3 combined, antennomere 11 half as long as antennomere 1.

Pronotum wider than long (ratio 34 : 30), slightly narrowed anteriorly; posterior angles markedly rounded. Each dorsal row with 4 coarse punctures; each sublateral row with 2 finer punctures. Pronotal margins with several dark bristles of unequal length. Surface with traces of fine, transverse undulated microsculpture here and there.

Scutellum densely and coarsely punctate, punctures somewhat larger than eye-facets, surface without microsculpture.

Elytra wider than long (ratio 43 : 40), slightly widened posteriorly. Punctuation fine and sparse, punctures smaller than those on scutellum, separated by two or three diameters of punctures. Surface without microsculpture; setation brown.

Legs. Metatarsus shorter than metatibia (ratio 22 : 26). Metatarsomere 1 as long as metatarsomeres 2-3 combined, metatarsomere 5 somewhat shorter than metatarsomere 1.

Abdomen from fifth visible tergite slightly narrowed both towards apex and base. Elevated area between basal lines on first two visible tergites almost impunctate, those on third and fourth tergites sparsely punctate. Punctuation of tergites finer than that on elytra, becoming distinctly sparser towards apex of each tergite. Surface between punctures without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1-3 not strongly dilated and bilobed, each densely covered with modified pale setae ventrally; protarsomere 4 distinctly narrower than preceding ones; sternite VIII (Fig. 15), sternite IX (Fig. 16), aedeagus (Figs. 13-14).

Female. Unknown to the author.

Differential diagnosis. *Philonthus pseudoabyssinus* may be distinguished from the most similar species *P. abyssinus* and *P. varanus* sp. nov. by the apical portion of the median lobe of the aedeagus short in ventral view, with very sharply pointed apex (Fig. 23).

Bionomics. Collected under stone, on cow and dog excrements, as well as in *Coffea arabica* plantation.

Distribution. Angola, Democratic Republic of the Congo (former Zaire), Ethiopia, Kenya, Rwanda, South Africa, Zimbabwe (TOTTENHAM 1940, HERMAN 2001, this paper).

Philonthus tottenhami Last, 1953

(Figs. 17-22)

Philonthus tottenhami Last, 1953: 114.

Type locality. South Africa, Natal, Qudeni Forest.

Type material. Not examined.

Additional material examined. SOUTH AFRICA: NATAL, 1 ♂ 1 ♀, '75km WSW Estcourt, Cathedral Parks For. Sta, Forestry Sta. 9.-12.xii.1979, veld pasture, 1400 m a.s.l., S. + J. Peck, mega-dung traps' (FMNH, LHPC).

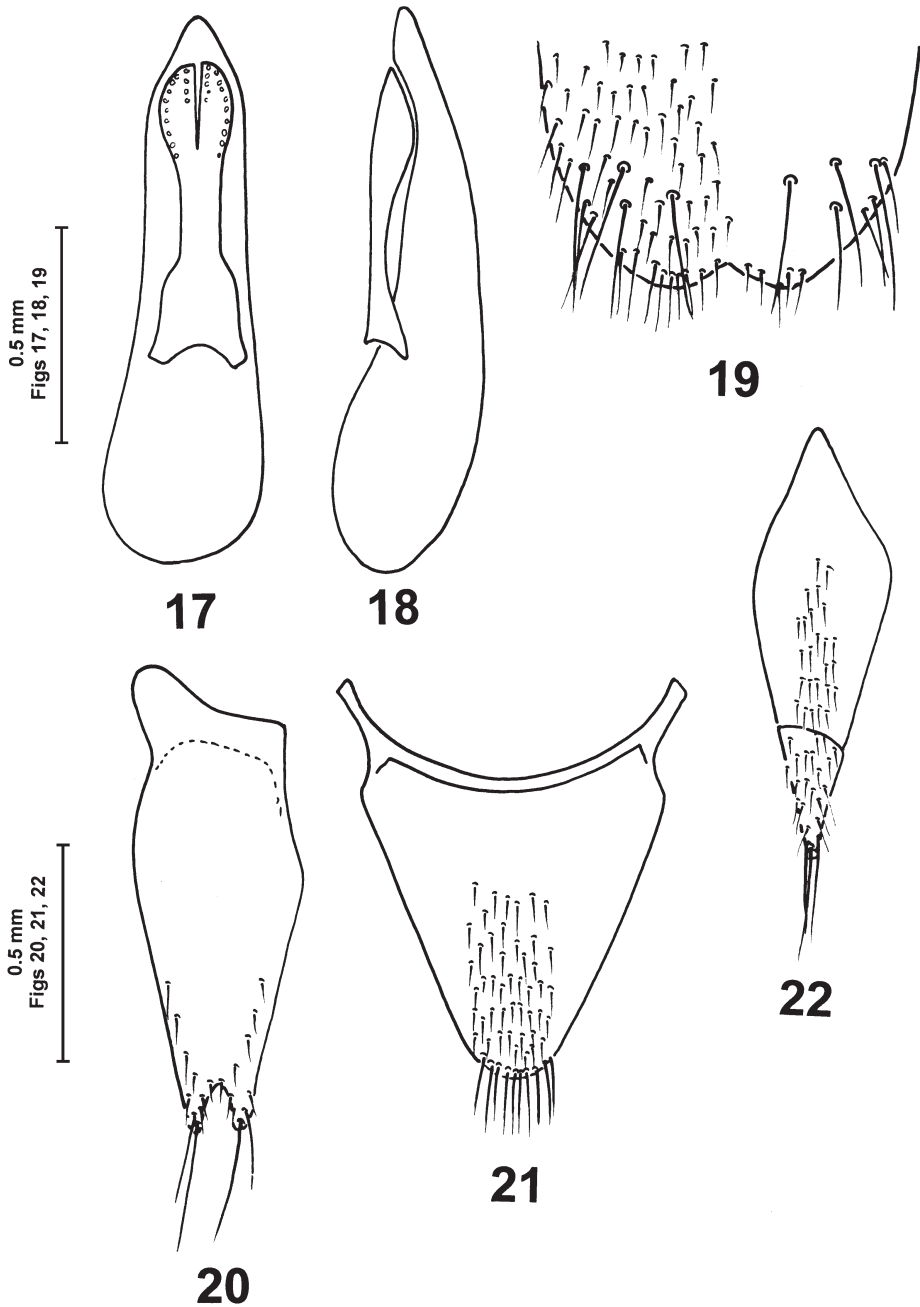
Redescription. Body length 11.8 mm, length of fore body (to the end of elytra) 5.2 mm.

Colouration. Black, clypeus along anterior margin and antennal sockets narrowly brown; mandibles, maxillary and labial palpi black-brown; antennae and legs black; terminal tarsomeres of all tarsi somewhat paler.

Head transverse (ratio 44 : 30), parallel-sided. Eyes small, shorter than temples (ratio 12 : 17). Clypeus with wide and deep depression medially. Posterior angles of head capsule obtusely rounded, with one long black bristle. Medial interocular punctures widely separated, distance between medial interocular punctures almost three times as long as distance between medial and lateral interocular punctures, two coarse punctures at posterior margin of eyes. Temporal area impunctate. Surface with very fine microsculpture of transverse waves; sides with several black bristles of unequal length.

Antennae reaching posterior half of pronotum when reclined, antennomeres 1-3 and 11 longer than wide, antennomeres 4-6 as long as wide, antennomeres 7-10 a little wider than long. Antennomere 1 distinctly shorter than antennomeres 2-3 combined, antennomere 2 shorter than antennomere 3, antennomere 5 a little shorter than antennomere 2.

Pronotum parallel-sided, longer than wide (ratio 47 : 43); anterior angles rectangular, with many dark bristles of unequal length; posterior angles strongly rounded. Each dorsal row with 4 coarse punctures; each sublateral row with 2 punctures. Pronotal margins with several black bristles of unequal length. Surface with microsculpture similar to that on head.



Figs. 17-22. *Philonthus tottenhami* Last, 1953. 17 – aedeagus, ventral view; 18 – aedeagus, lateral view; 19 – apical portion of sternite VIII, ventral view; 20 – sternite IX, ventral view; 21 – female tergite X, dorsal view; 22 – gonocoxites of female genital segment.

Scutellum very coarsely and densely punctate, diameters of punctures almost twice as large as eye-facets. Distance between punctures much smaller than diameters of punctures. Surface with traces of fine microsculpture.

Elytra wider than long (ratio 57 : 53), slightly widened posteriad. Punctuation dense and coarse, punctures a little smaller than those on scutellum, separated in transverse direction mostly by one puncture diameter. Anterior pronotal angles with one long bristle; pronotal margins with many long bristles of unequal length. Surface without microsculpture; setation brown-yellow.

Legs. Metatarsus longer than metatibia (ratio 31 : 27), all tibiae with many bristles of different length. Metatarsomere 1 distinctly longer than metatarsomeres 2-3 combined, metatarsomere 5 approximately as long as metatarsomere 1.

Abdomen from fifth visible tergite slightly narrowed towards both base and apex. First four visible tergites with two basal lines, elevated area between basal lines on first three tergites almost impunctate, that on fourth tergite sparsely punctate. Punctuation of visible tergites very sparse and fine. Surface without microsculpture, very shiny; setation dark.

Male. Protarsomeres 1-3 moderately dilated, each densely covered with modified pale setae ventrally, protarsomere 4 narrow and small; sternite VIII (Fig. 19), sternite IX (Fig. 20), aedeagus (Figs. 17-18).

Female. Tergite X (Fig. 21), gonocoxites of female genital segment (Fig. 22).

Differential diagnosis. *Philonthus tottenhami* may be distinguished from all species of this group by denser punctuation of elytra.

Bionomics. Collected in mega dung trap on veld pasture.

Distribution. South Africa (LAST 1953, HERMAN 2001).

Philonthus varanus sp. nov.

(Figs. 23-27)

Type locality. Kenya, Muguga.

Type material. HOLOTYPE: ♂, 'KENYA, Muguga, 26.viii.1954, V. F. Eastop, B.M. 1966-139 [red oblong printed label]' (BMNH).

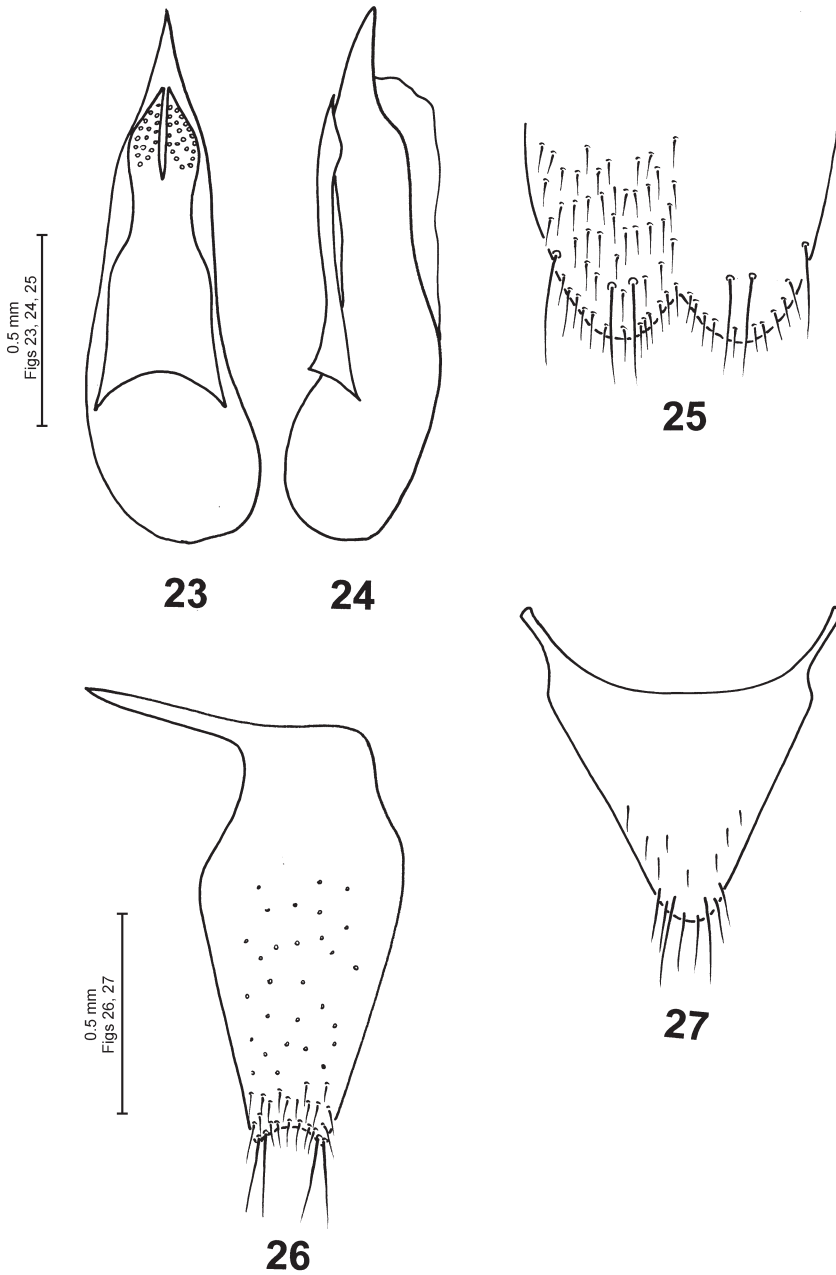
Description. Body length: 9.1 mm, length of fore body (to the end of elytra) 4.9 mm.

Colouration. Head black; clypeus along anterior margin and antennal sockets very narrowly yellow-brown; maxillary and labial palpi brown, all palpomeres with lighter apex; mandibles and antennae dark brown, only base of second and third antennomeres yellow-brown; pronotum and elytra black-brown; abdomen brown-black.

Head quadrangular, distinctly wider than long (ratio 36 : 30). Clypeus with triangular shallow depression medially. Temples longer than eyes (ratio 13 : 9), parallel-sided. Distance between medial interocular punctures about three times as long as distance between medial and lateral interocular punctures. Temporal area impunctate. Surface with fine microsculpture of mostly transverse waves.

Antennae short, reaching to middle of pronotum when reclined, antennomeres 1-3 and 11 longer than wide, antennomeres 4-10 approximately as long as wide. Antennomere 1 half as long as antennomere 11, antennomere 2 a little shorter than antennomere 3.

Pronotum as wide as long, widest around middle, slightly sinuately narrowed towards both apex and base. Anterior pronotal angles with several short bristles; posterior angles markedly



Figs. 23-27. *Philonthus varanus* sp. nov. 23 – aedeagus, ventral view; 24 – aedeagus, lateral view; 25 – apical portion of sternite VIII, ventral view; 26 – sternite IX, ventral view; 27 – tergite X, dorsal view.

rounded. Each dorsal row with four coarse punctures; left sublateral row with two slightly finer punctures; right sublateral row with one puncture. Microsculpture similar to that on head.

Scutellum very coarsely and densely punctate, diameters of punctures somewhat smaller than those of punctures of sublateral rows. Distance between punctures quite short, punctures slightly coalescent here and there.

Elytra slightly wider than long (ratio 45 : 42); lateral margins somewhat widened posteriorly. Punctuation very fine and sparse, punctures somewhat larger than eye-facets, separated in transverse direction by two or three puncture diameters, in places scattered, slightly larger punctures. Surface without microsculpture. Anterior pronotal angles and lateral margins with several dark bristles of unequal length; setation brown.

Legs. Metatibia longer than metatarsus (ratio 27 : 25). Metatarsomere 1 longer than metatarsomeres 2-3 combined, metatarsomere 5 as long as metatarsomeres 3-4 combined.

Abdomen wider, tergites slightly more densely punctured than elytra. Punctures separated in transverse direction by 1-2 of puncture diameters, bases of all visible tergites denser punctured. Elevated area between two basal lines on second and third visible tergites variably punctured, punctuation on second tergite reduced to a few punctures. Surface without microsculpture; setation long, brown.

Male. Protarsomeres 1-3 strongly dilated and sub-bilobed, each densely covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than the preceding ones; sternite VIII (Fig. 25), sternite IX (Fig. 26), tergite X (Fig. 27), aedeagus (Figs. 23-24).

Female. Unknown.

Differential diagnosis. *Philonthus varanus* sp. nov. may be distinguished from the similar *P. abyssinus* and *P. pseudoabyssinus* by the apical portion of the median lobe of the aedeagus in ventral view short, with very sharply pointed apex (Fig. 23).

Etymology. The name of this species, noun in apposition, is a generic name of African monitor lizard *Varanus niloticus* (Linnaeus, 1758).

Distribution. Kenya.

Key to males of the *Philonthus abyssinus* species group

The males of this group are easily distinguished by the shape of the aedeagus. On the other hand, I was not able to find any reliable characters for distinguishing the females (except for *P. tottenhami*). The identification of the females is therefore to some extent possible only by the association with the males.

- 1 Punctuation of elytra denser, punctures separated in transverse direction mostly by distance equal to one diameter of punctures. *P. tottenhami* Last, 1953
- Punctuation of elytra sparser, punctures separated in transverse direction by distance equal to two or three puncture diameters. 2
- 2 Apical portion of median lobe of aedeagus hardly curved in lateral view (Figs. 2, 14, 24). 3
- Apical portion of median lobe of aedeagus markedly, hook-like curved in lateral view (Figs. 7, 10). 4

- 3 Apical portion of median lobe of aedeagus in ventral view short, with rather obtusely pointed apex (Fig. 1). *P. abyssinus* Fauvel, 1880
- Apical portion of median lobe of aedeagus in ventral view short, with very sharply pointed apex (Fig. 23). *P. varanus* sp. nov.
- Apical portion of median lobe of aedeagus in ventral view long and slender, sinuately narrowed towards apex (Fig. 13). *P. pseudoabyssinus* Tottenham, 1940
- 4 Apical portion of median lobe of aedeagus in ventral view almost gradually narrowed towards rather sharply pointed apex (Fig. 6). *P. brendelli* sp. nov.
- Apical portion of median lobe of aedeagus in ventral view almost parallel-sided with truncate apex (Fig. 9). *P. elgonensis* Tottenham, 1940

Acknowledgements

My particular thanks are due to James Boone (Field Museum of Natural History, Chicago, USA), for the loan of the African material for identification and to Martin Brendell and Roger Booth (The Natural History Museum, London, United Kingdom), for the loan of the African material and types from Tottenham's collection; to Josef Jelínek (National Museum, Praha, Czech Republic), Harald Schillhammer (Naturhistorisches Museum, Wien, Austria), Aleš Smetana (Agriculture and Agri-Food Canada, Ottawa, Canada), for the critical review of the manuscript, Jasmine Hirsch (Amsterdam, Netherlands) for her help with English, and Pavel Krásenský (Chomutov, Czech Republic) for careful finishing the line drawings.

References

- FAUVELA. 1881: [New species]. In: GESTRO R. (ed.): Spedizione italiana nell'Africa equatoriale. Risultati zoologici. Diagnosi di nuove specie di coleotteri. *Annali del Museo di Storia Naturale di Genova* **16** (1880): 200-204.
- HERMAN L. H. 2001: Catalog of the Staphylinidae (Insecta, Coleoptera). 1758 to the end of the second millennium. V. Staphylinine group (Part 2). Staphylininae: Diochini, Maorothiini, Othiini, Platyprosopini, Staphylinini (Amblyopinina, Anisolinina, Hyptiomina, Philonthina). *Bulletin of the American Museum of Natural History* **265**: 2441-3020.
- LAST H. R. 1953: Two new species of African *Philonthus* (Coleoptera, Staphylinidae). *Entomologist's Monthly Magazine* **91**: 251-252.
- TOTTENHAM C. E. 1940: *Philonthus abyssinus* Fauvel and its allies (Coleoptera, Staphylinidae). *Entomologist's Monthly Magazine* **76**: 147-149.
- TOTTENHAM C. E. 1949: Studies in the genus *Philonthus* Stephens (Coleoptera). *Transactions of the Royal Entomological Society of London* **100**: 291-362.
- TOTTENHAM C. E. 1962: Mission zoologique de l'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, Sciences Zoologiques, Ser. 8°* **110**: 132-258.