

Revision of the *Philonthus discoideus* – *P. xanthoraphis* species group (Coleoptera: Staphylinidae: Philonthina)

Lubomír HROMÁDKA

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

Received 8 February 2012; accepted 16 April 2012

Published 15 August 2012

Abstract. The *Philonthus discoideus* – *P. xanthoraphis* species group of genus *Philonthus* Stephens, 1829 is revised. Twenty two species are recognized, four species are described as new: *Philonthus hyperolius* sp. nov. (Kenya), *P. sylvisorex* sp. nov. (Burundi), *P. treron* sp. nov. (Tanzania) and *P. uraeginthus* spec. nov. (Zimbabwe). The eighteen remaining species are redescribed: *P. coffaiti* Levasseur, 1962, *P. curvabilis* Herman, 2001, *P. discoideus* (Gravenhorst, 1802), *P. flavocinctus* Motschulsky, 1858, *P. lineolatus* Tottenham, 1962, *P. luenensis* Levasseur, 1962, *P. marcescens* Tottenham, 1949, *P. mivutatus* Tottenham, 1962, *P. nairobiensis* Fauvel, 1907, *P. negligens* Tottenham, 1962, *P. neuter* Tottenham, 1962, *P. senegalensis* Bernhauer, 1937, *P. stercorosus* Tottenham, 1962, *P. taterae* Scheerpeltz, 1951, *P. testaceocinctus* Bernhauer, 1915, *P. uhligi* Hromádka, 2005, *P. xanthoraphis* Eppesheim, 1895, *P. ventralis* (Gravenhorst, 1802). *P. clambus* Tottenham, 1949 is synonymized with *P. nairobiensis* Fauvel, 1907. An identification key to all species of the species group is provided and male genitalia and significant morphological characters are illustrated.

Key words. Taxonomy, revision, redescrptions, new species, new synonymy, key, Coleoptera, Staphylinidae, Staphylininae, Philonthina, *Philonthus discoideus* – *P. xanthoraphis* species group, distribution, Afrotropical region.

INTRODUCTION

The *Philonthus discoideus* – *P. xanthoraphis* species group was described and characterized by Tottenham (1962: 214): “There are several species occurring in Africa which could be included in this group; they resemble species of the *P. circumcinctus* group but are smaller, on an average the size of the common European *P. discoideus* (Gravenhorst), which also occurs in parts in Africa, and most of them a little smaller than *P. ventralis* (Gravenhorst), another European species which is widely distributed in Africa. The suture is red or yellow, usually the apical margins of the elytra are paler, in many the deflexed margins of the elytra are also pale colour sometimes extending on to the upper surface; they all have 5-punctate discal series on the pronotum; the general form of the head and pronotum is similar in most of them. The external differences between the species are usually slight and require careful comparison: The aedeagus of the male, however, affords good species characters”.

The following twenty two species are included in this group (Herman 2001).

Philonthus coffaiti Levasseur, 1962
Philonthus curvabilis Herman, 2001
Philonthus discoideus (Gravenhorst, 1802)
Philonthus flavocinctus Motschulsky, 1858

Democratic Republic of the Congo
Zambia
cosmopolitan
India, Indonesia, Japan, Mascarene Islands (Réunion),
Myanmar, New Caledonia, Singapore, Sri Lanka, Sudan,
Taiwan, Vietnam
Kenya
Mauritius

Philonthus hyperolius sp. nov.
Philonthus lineolatus Tottenham, 1962

<i>Philonthus luenaensis</i> Levasseur, 1962	Democratic Republic of the Congo
<i>Philonthus marcescens</i> Tottenham, 1949	Sudan, Mauretania, Senegal
<i>Philonthus mivutanus</i> Tottenham, 1962	Cape Verde Islands, Chad, Kenya, Liberia, Oman
<i>Philonthus nairobiensis</i> Fauvel, 1907	Kenya
<i>Philonthus negligens</i> Tottenham, 1962	Tanzania
<i>Philonthus neuter</i> Tottenham, 1962	Namibia, South Africa
<i>Philonthus senegalensis</i> Bernhauer, 1937	Senegal
<i>Philonthus stercorosus</i> Tottenham, 1962	Liberia, Namibia, Zimbabwe
<i>Philonthus sylviosex</i> sp. nov.	Burundi
<i>Philonthus taterae</i> Scheerpeltz, 1951	Democratic Republic of the Congo, Namibia, South Africa
<i>Philonthus testaceocinctus</i> Bernhauer, 1915	Tanzania, Uganda
<i>Philonthus treron</i> sp. nov.	Tanzania
<i>Philonthus uhligi</i> Hromádka, 2005	South Africa
<i>Philonthus uraeginthus</i> sp. nov.	Zimbabwe
<i>Philonthus ventralis</i> (Gravenhorst, 1802)	cosmopolitan
<i>Philonthus xanthoraphis</i> Eppelsheim, 1895	Congo, Democratic Republic of the Congo, Ethiopia, Kenya, South Africa, Somalia

MATERIAL AND METHODS

The specimens studied are deposited in the following collections:

BMNH Natural History Museum, London, United Kingdom (Maxwell V. L. Barclay, Roger Booth and Martin Brendell);
 FMNH Field Museum of Natural History, Chicago, USA (James H. Boone);
 LHPC Lubomír Hromádka collection, Praha, Czech Republic;
 JJRC Jiří Janák collection, Rtyně nad Bilinou, Czech Republic;
 MNHN Muséum national d'Histoire naturelle, Paris, France (Thierry Deuve, Taghavian Azedah);
 MRAT Musée Royal de l'Afrique centrale, Tervuren, Belgium (Marc de Meyer);
 MZLU Museum of Zoology, Lund University, Lund, Sweden (Roy Danielsson);
 NMHW Naturhistorisches Museum, Wien, Austria (Harald Schillhammer);
 NMPC National Museum, Praha, Czech Republic (Jiří Hájek);
 ZMNB Museum für Naturkunde der Humboldt-Universität, Berlin, Germany (Manfred Uhlig).

A double slash [/] is used to divide the separate labels of each type specimen. All measurements are beetles with stretched abdomens. All ratios mentioned in the descriptions are dimensionless but can be converted to length in millimetres.

TAXONOMIC PART

Philonthus coiffaiti Levasseur, 1962

(Figs 4–6)

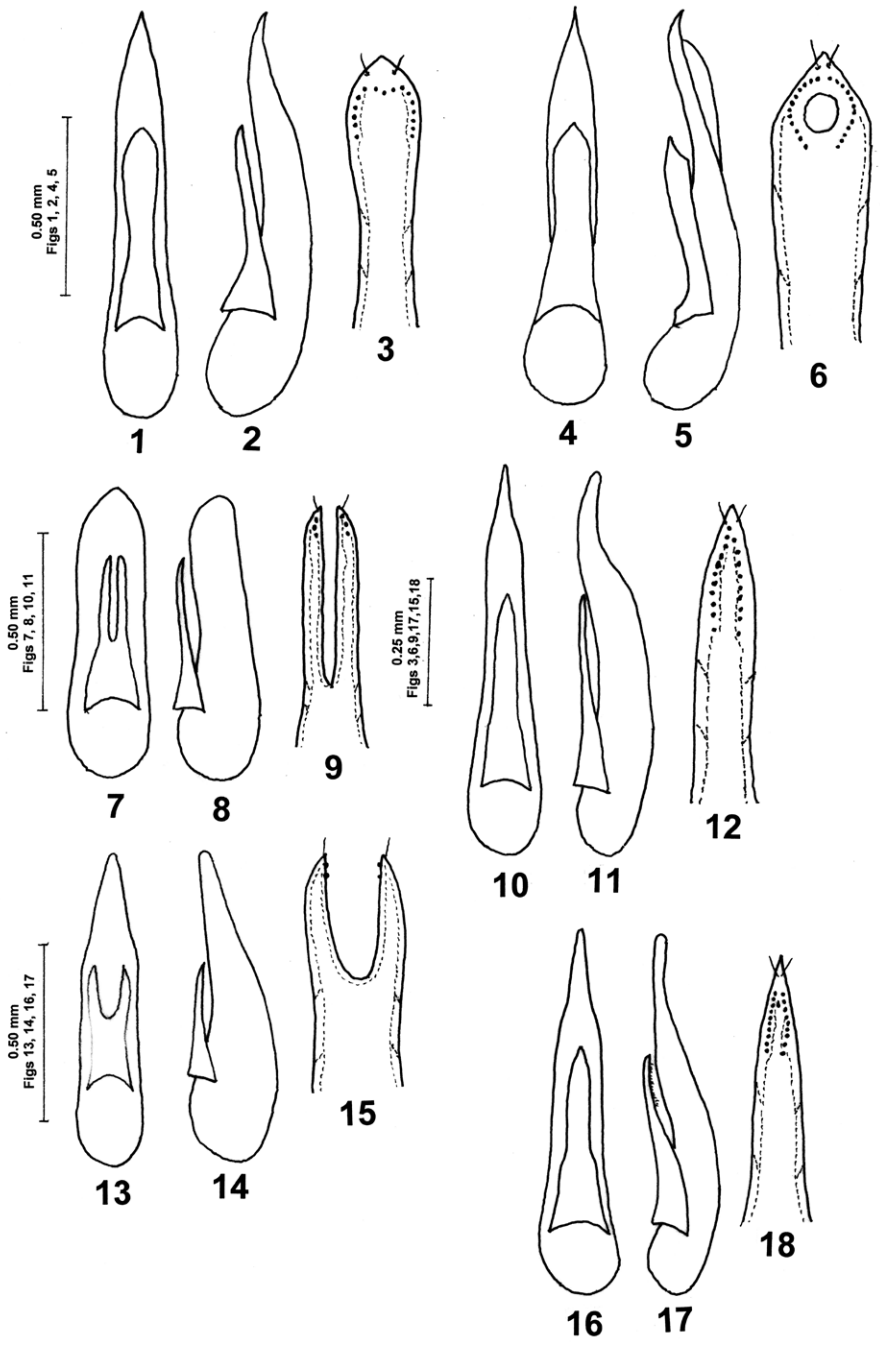
Philonthus coiffaiti Levasseur, 1962: 56.

MATERIAL STUDIED. **Democratic Republic of the Congo.** Holotype: ♂: “Congo Belge, Kolwezi: H. Katanga, vii.1954, pesidu de marais, coll. Levasseur // *Philonthus coiffaiti* sp. n. TYPE [white oblong label, handwritten]” (MNHM).

TYPE LOCALITY. “Congo Belge [= Democratic Republic of the Congo], Kolwezi, Katanga”.

→

Figs 1–18. 1–3. *Philonthus curvabilis* Herman, 2011. 1 – aedeagus, ventral view, 2 – aedeagus, lateral view, 3 – apex of paramere with sensory peg setae, ventral view. 4–6. *Philonthus coiffaiti* Levasseur, 1962. 4 – aedeagus, ventral view, 5 – aedeagus, lateral view, 6 – apex of paramere with sensory peg setae, ventral view. 7–9. *Philonthus discoideus* (Gravenhorst, 1802). 7 – aedeagus, ventral view, 8 – aedeagus – lateral view, 9 – apex of paramere with sensory peg setae, ventral view. 10–12. *Philonthus flavocinctus* Motschulsky, 1858. 10 – aedeagus, ventral view, 11 – aedeagus, lateral view, 12 – apex of paramere with sensory peg setae, ventral view. 13–15. *Philonthus hyperolius* sp. nov. 13 – aedeagus, ventral view, 14 – aedeagus, lateral view, 15 – apex of paramere with sensory peg setae, ventral view. 16–18. *Philonthus lineolatus* Tottenham, 1962. 16 – aedeagus, ventral view, 17 – aedeagus, lateral view, 18 – apex of paramere with sensory peg setae, ventral view.



REDESCRIPTION. Body length 5.2 mm, length of fore body (from clypeus to end of elytra) 2.8 mm. Head black, pronotum, scutellum, elytra and abdomen dark brown, posterior margin and elytral epipleura narrowly yellow-brown, posterior margin of all tergites wider brown-yellow. Maxillary and labial palpi, mandibles and antennomeres 1 and 11 yellow-brown, remaining antennomeres brown. Legs yellow-brown, tibiae darker.

Head rounded, wider than long (ratio 18 : 14), from posterior margin of eyes conspicuously narrowed towards neck, posterior angles almost unclear, bearing two long black bristles. Between eyes four coarse punctures arranged in a straight line, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes flat, as long as temples, posterior margin with one puncture, temporal area impunctate. Surface with very fine and irregular microsculpture, clypeus with very fine microsculpture, more distinct than that on clypeus.

Antennae short and stout, 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.

Pronotum almost as long as wide, hardly narrowed anteriorly. Each dorsal row with five punctures, punctures 1–4 equidistant, distance between punctures 4–5 larger. Each sublateral row with two punctures arranged in a row parallel to the dorsal row and half way between it and side. Puncture one situated behind level between of punctures two and three in dorsal row. Microsculpture similar to that on head.

Scutellum very densely and coarsely punctured, punctures mostly contiguous, diameter of punctures larger than eye-facets.

Elytra wider than long (ratio 26 : 20), vaguely wider posteriorly. Anterior angles bearing one long bristle. Punctuation dense and coarse, diameter of punctures as large as eye-facets, separated mostly smaller than puncture diameter in transverse direction. Surface without microsculpture; setation yellowish.

Legs. Metatibia slightly longer than metatarsus (ratio 14 : 13). Metatarsomere 1 twice longer than metatarsomere 5, as long as metatarsomeres 2–3 combined.

Abdomen from visible tergite three slightly narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation 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.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus with simple paramere (Figs 4–6).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus coiffaiti* is similar in habitus to *P. marcescens* from which it may be distinguished by the paler colouring of antennomere 1, wider elytra and by the different shape of the aedeagus.

DISTRIBUTION. Democratic Republic of the Congo.

***Philonthus curvabilis* Herman, 2001**

(Figs 1–3)

Philonthus curvabilis Herman, 2001: 2796, replacement name for *P. sinuatus* Tottenham, 1949.

Philonthus sinuatus Tottenham, 1949: 341, preoccupied.

TYPE MATERIAL STUDIED. **Zambia**. Holotype: ♂, “N. W. Rhodesia, Kasitu, N. of Broken Hill, 26.iii.1915, H. C. Dollman, // Holotype *Philonthus sinuatus* Tottenham, 1949, det. R. G. Booth 2010 [white oblong label handwritten] H. C. Dollman Coll. 1919-79” (BMNH).

TYPE LOCALITY. “N. W. Rhodesia [= Zambia], Kasitu, N. of Broken Hill”.

REDESCRIPTION. Body length 5.8 mm, length of fore body (from clypeus to end of elytra) 3.5 mm. Head black, pronotum, scutellum and elytra brown, suture, posterior margin and elytral epipleura narrowly yellow-brown, abdomen dark brown, posterior margin of all tergites narrowly yellow-brown. Maxillary and labial palpi and antennomere 1 yellow-brown, remaining antennomeres brown. Legs yellow-brown.

Head rounded, slightly wider than long (19 : 15), posterior angles markedly rounded, bearing one long and several short bristles. Between eyes four punctures, arranged in a straight line, distance between medial punctures three times as large as distance between lateral and medial puncture. Eyes flat, as long as temples, posterior margin with two punctures, temporal area with scattered punctures. Surface with very fine irregular microsculpture.

Antennae reaching posterior fourth of pronotum when reclined. Antennomeres 1–3 and 11 longer than wide, antennomere 4 as long as wide, antennomeres 5–10 vaguely wider than long.

Pronotum highly convex, as long as wide, very slightly narrowed anteriorly, anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Each dorsal row with five equidistant punctures, each sublateral row with two punctures, puncture two slightly 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, distance between punctures much smaller than their diameter.

Elytra wider than long (ratio 28 : 25), very slightly widened posteriorly. Punctures as large as that on scutellum, separated by puncture diameter or slightly smaller. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia as long as metatarsus, metatarsomere 1 vaguely longer than metatarsomere 5, as long as metatarsomeres 2–3 combined.

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

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrowly heart-shaped. Aedeagus with simple paramere (Figs 1–3).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus curvabilis* may be distinguished from the similar *P. marcescens* by the narrower head and elytra and by the different shape of the aedeagus.

DISTRIBUTION. Zambia (Herman 2001).

***Philonthus discoideus* (Gravenhorst, 1802)**

(Figs 7–9)

Staphylinus discoideus Gravenhorst, 1802: 38.

Philonthus discoideus: Nordman, 1837: 97.

Staphylinus suturalis Marsham, 1902: 509, synonymized by Germar (1827: 4).

Quedius lepidus Stephens, 1832: 253, synonymized by G. Waterhouse (1858: 25).

Staphylinus conformis Lacordaire, 1835: 398, synonymized by Erichson (1839: 469).

Philonthus ruficornis Malsheimer, 1844: 38, synonymized by Fauvel (1891: 115).

Philonthus rufipennis Gerhardt, 1910: 555, synonymized by Blackwelder (1943: 407).

Philonthus gerhardianus Scheerpeltz, 1933: 1340, synonymized by Smetana (1995: 185).

TYPE MATERIAL. Not studied.

ADDITIONAL MATERIAL STUDIED. **Chad.** 1 spec., Iles du lac, xi.–xii.1957, P. Renaud (LHPC); **Madagascar.** 1 spec., Kap Diego, 1916, Friderichs S. G. (ZMNB); **Zimbabwe.** 1 spec., Save-Fluss, ca 1000m S Mutare 770m, 19°53'S/32°22'E, 8.iii.2000, leg. U. Heinig (LHPC).

TYPE LOCALITY. Not cited, but presumably Brunsvigae (Herman 2001).

REDESCRIPTION. Body length 5.9–6.3 mm, length of fore body (from clypeus to end of elytra) 2.7 mm. Head black, pronotum and scutellum brown, elytra brown, suture, posterior margin and elytral epipleura dirty yellow, abdomen brown, posterior margin of all tergites narrowly yellow-brown. Maxillary and labial palpi and mandibles brown, antennomere one and base of antennomere two brown-yellow, remaining antennomeres brown, legs testaceous.

Head square, wider than long (ratio 22 : 18), parallel-sided, posterior angles distinct, obtusely rounded, bearing one long black bristle. Between eyes four punctures, medial punctures slightly shifted anteriorly, distance between medial punctures 3.5 times as large as distance between medial and lateral puncture. Eyes large, moderately convex, longer than temples (ratio 9 : 6), posterior margin with two coarse punctures, temporal area with a few fine punctures. Surface with dense microsculpture, consisting of transverse waves.

Antennae short and stout, reaching midlength of pronotum when reclined. Antennomeres 1 as long as antennomeres 10–11 combined, antennomere 2 as long as antennomere 3, antennomere 4 vaguely longer than wide, antennomeres 5–6 as long as wide, antennomeres 7–11 wider than long.

Pronotum about as long as wide, parallel-sided or indistinctly narrowed anteriorly, each dorsal row with 5 punctures, punctures 2–4 approximately equidistant, distance between punctures 1–2 and 4–5 vaguely larger, each sublateral row with 2 punctures, punctures 2 slightly shifted to the lateral margin. Surface with microsculpture similar to that on head.

Scutellum very densely and relatively finely punctate, punctures as large as eye-facets, distance between punctures very small, setation dark.

Elytra as long as wide, somewhat widened posteriorly. Punctuation moderately fine and dense, diameter of punctures vaguely larger than that on scutellum, separated by puncture diameter or slightly larger. Surface without microsculpture; setation pale testaceous.

Legs. Metatibia longer than metatarsus (ratio 17 : 15), metatarsomere 1 approximately as long as metatarsomere 5, moderately shorter than metatarsomeres 2–4 combined.

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

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 much narrower than preceding ones, not sub-bilobed. Aedeagus, paramere furcate (Figs 7–9).

Female. Protarsomeres 1–3 feebly dilated, not sub-bilobed, each with sparse modified pale setae ventrally.

DIFFERENTIAL DIAGNOSIS. *Philonthus discoideus* may be distinguished from *P. negligens* by the longer eyes, shorter antennae and by the different shape of the aedeagus.

DISTRIBUTION. Cosmopolitan (Herman 2001).

Philonthus flavocinctus Motschulsky, 1858 (Figs 10–12)

Philonthus flavocinctus Motschulsky, 1858: 663.

Philonthus rufomarginatus Kraatz, 1859: 90, synonymized by Fauvel 1904: 58.

TYPE MATERIAL. Not studied.

ADDITIONAL MATERIAL STUDIED. **Réunion**. 1 spec., Revine de St. Gilles Bassi des Aigrettes 13.–14.i.1992, J. Janák lgt., and det. (JJRC).

TYPE LOCALITY. “Indes orientalis”.

REDESCRIPTION. Body length 5.7 mm, length of fore body (from clypeus to end of elytra) 3.8 mm. Head black, pronotum, scutellum elytra and abdomen chestnut brown, posterior half of pronotum golden iridescence, suture, elytral epipleura and posterior margin of elytra and posterior margin of all visible tergites narrowly dirty yellow. Maxillary and labial palpi brown-yellow, apex of palpomere 3 paler. Antennomeres 1–2 yellow-brown, remaining antennomeres dark brown. Legs yellow-brown, tibiae darker.

Head wider than long (ratio 21 : 18), very hardly narrowed posteriorly, posterior angles markedly rounded, bearing two long black bristles. Between eyes four coarse punctures arranged in a straight line, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes slightly convex, shorter than temples (ratio 6 : 7), posterior margin with two coarse punctures, temporal area almost impunctate. Surface with very fine irregular microsculpture.

Antennae long and stout, slightly widened distally, reaching posterior fifth of pronotum when reclined. Antennomeres 1–4 and 11 longer than wide, antennomere 5 as long as wide, antennomeres 6–10 wider than long. Antennomere 1 almost twice longer than antennomere 11.

Pronotum highly convex, as long as wide, slightly narrowed anteriorly. Anterior angles rounded, bearing several variably long bristles, posterior angles markedly rounded. Sides bearing several long black bristles. Each dorsal row with five coarse, approximately equidistant punctures, each sublateral row with two punctures, puncture two distinctly shifted to the lateral margin. Surface with microsculpture consisting of transverse waves.

Scutellum very densely and coarsely punctate, diameter of punctures larger than eye-facets, distance between punctures smaller than puncture diameter in transverse direction.

Elytra as long as wide, very slightly widened posteriorly. Punctuation fine and relatively sparse, diameter of punctures vaguely smaller than on scutellum, separated by one and half or two puncture diameters. Surface without microsculpture; setation yellow-brown.

Legs. Metatibia as long as metatarsus, metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2–3 combined.

Abdomen wide, from visible tergite three slightly narrowed anteriorly and posteriorly. First three visible tergites with two basal lines, elevated area between lines punctate. Punctuation 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.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus with simple paramere simple (Figs 10–12).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus flavocinctus* may be distinguished from the similar *P. lineolatus* by the shorter eyes, narrower and denser punctuation of elytra and by the different shape of the aedeagus.

DISTRIBUTION. India, Indonesia, Java, Mascarene Islands (Réunion), Myanmar, New Caledonia, Singapore, Sri Lanka, Sudan, Taiwan, Vietnam (Herman 2001).

Philonthus hyperolius sp. nov.

(Figs 13–15)

TYPE MATERIAL. **Kenya.** Holotype: ♂, “Kenya, Ngulia Lodge, 10.iii.1970, // *Philonthus hyperolius* sp. nov. Hromádka det., 2009 [red oblong printed label]” (NMPC); paratypes: 10 spec., “Shimba For. 17.iii.1970” (LHPC, NMPC).

TYPE LOCALITY. Kenya, Ngulia Lodge.

DESCRIPTION. Body length 5.8–6.3 mm, length of fore body (from clypeus to end of elytra) 3.2–3.5 mm. Head black, pronotum and scutellum brown, elytra brown-yellow, suture, posterior margin and elytral epipleura yellow-brown, abdomen brown, posterior margin of all tergites narrowly brown-yellow. Maxillary, labial palpi, legs and antennomeres 1–2 yellow-brown, remaining antennomeres brown. Pronotum slightly golden iridescent.

Head slightly wider than long (ratio 21 : 19), parallel-sided, posterior margin rounded bearing one long black bristle. Between eyes four punctures arranged in a straight line, distance between medial punctures four times greater than that between medial and lateral puncture. Eyes as long as temples, posterior margin with two coarse punctures, temporal area impunctate. Surface with very fine, irregular microsculpture.

Antennae reaching posterior third of pronotum when reclined. Antennomeres 1–6 and 11 longer than wide, antennomeres 7–10 as long as wide. Antennomere 1 twice longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum as long as wide, slightly narrowed anteriorly, anterior angles obtusely rounded, bearing several variably long bristles, posterior angles markedly rounded. Each dorsal row with five equidistant coarse punctures, each sublateral row with two punctures, puncture two slightly shifted laterally. Surface with microsculpture more distinct than that on head.

Whole scutellum densely and coarsely punctate, diameter of punctures as large as eye-facets, separated much smaller than puncture diameter in transverse direction.

Elytra wider than long (ratio 30 : 28), widened posteriorly. Punctuation coarse and sparse, diameter of punctures larger than that on scutellum, separated by one or one and half puncture diameters. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia as long as metatarsus, metatarsomere 1 as long as metatarsomere 5 and metatarsomeres 2–3 combined.

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

Male. Protarsomeres 1–3 simple, moderately dilated, each covered with modified pale setae ventrally, protarsomere 4 very small. Aedeagus with furcate paramere (Figs 13–15).

Female. Protarsomeres 1–3 slightly dilated, each covered with modified pale setae ventrally, protarsomere 4 small.

DIFFERENTIAL DIAGNOSIS. *Philonthus hyperolius* sp. nov. is similar to *P. testaceocintus* from which it may be differentiated by the shorter antennae, longer paramere 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 marbled reed frog *Hyperolius marmoratus* Rapp, 1842.

Philonthus lineolatus Tottenham, 1962

(Figs 16–18)

Philonthus lineolatus Tottenham, 1962: 214.

TYPE MATERIAL EXAMINED. **Mauritius**. Syntype: ♂, “Mauritius, M. Cameron Bequest, Dobrus, B. M. 1955-147, // Syntype *Philonthus lineolatus* Tottenham [ochre oblong label, handwritten]”.

TYPE LOCALITY. “Mauritius”.

REDESCRIPTION. Body length 6.5 mm, length of fore body (from clypeus to end of elytra) 2.8 mm. Head black, mandibles brown, pronotum, scutellum and elytra chestnut-coloured, suture, posterior margin and elytral epipleura narrowly yellow-brown, abdomen chestnut-coloured, posterior margin of all tergites narrowly brown-yellow. Maxillary and labial palpi yellow-brown, antennomeres 1–2 and base of antennomere 3 yellow-brown, remaining antennomeres and legs brown-yellow, inner side of all tibiae darker.

Head rounded, vaguely wider than long (ratio 19.5 : 17), very slightly narrowed posteriorly, posterior angles rounded, bearing one long black bristle. Between eyes four coarse punctures, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes flat, longer than temples (ratio 7 : 6), posterior margin with two punctures, temporal area with scattered punctures. Surface with fine microsculpture consisting of transverse waves.

Antennae stout, slightly widened distally, reaching posterior fourth of pronotum when reclined. Antennomeres 1–3 and 11 longer than wide, antennomere 4 as long as wide, antennomeres 5–10 markedly transverse. Antennomere 1 longer than antennomere 11, antennomere 2 longer than antennomere 3.

Pronotum highly convex, almost as long as wide, parallel-sided, anterior angles rectangular, conspicuously deflexed very obtusely rounded. Each dorsal row with five punctures, punctures 2–4 equidistant, separated between punctures 1–2 and 4–5 larger than distance between previous punctures. Each sublateral row with two punctures arranged in a row parallel to the dorsal row and half way between it and side. Puncture one situated behind level of punctures two and three in dorsal row. Surface with microsculpture similar to that on head.

Whole scutellum regularly, very densely and coarsely punctured, diameter of punctures slightly larger than eye-facets, separated smaller than puncture diameter in transverse direction.

Elytra wider than long (ratio 29 : 25), very hardly widened posteriorly. Punctuation fine and sparse, diameter of punctures smaller than that on scutellum, separated mostly twice larger than diameter of punctures. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia slightly longer than metatarsus (ratio 17.5 : 16), metatarsomere 1 slightly longer than metatarsomere 5, as long as metatarsomeres 2–3 combined.

Abdomen very gradually narrowed posteriorly. First three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation at base of all tergites denser and finer than that on elytra, becoming finer and sparser towards posterior margin of each tergite. Surface without microsculpture; setation of the same colouring as that on elytra.

Male. Protarsomeres 1–3 markedly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones, heart-shaped. Aedeagus with dimple paramere (Figs 16–18).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus lineolatus* may be distinguished from similar *P. flavocinctus* by the longer eyes, wider and sparser punctuation of elytra and by the different shape of the aedeagus.

DISTRIBUTION. Mauritius (Herman 2001).

Philonthus luenaensis Levasseur, 1962 (Figs 19–21)

Philonthus luenaensis Levasseur, 1962: 58.

TYPE MATERIAL STUDIED. **Democratic Republic of the Congo.** Holotype: ♂, “Congo Belge, Luena, Haut Lomani, Katanga, viii.1954, Dr. D. V. Allard, crottin d’Elephant, coll., Levasseur, Paris” (MNHN).

TYPE LOCALITY. "Congo Belge [= Democratic Republic of the Congo], Luena, Haut Lomani, Katanga".

REDESCRIPTION. Body length 6.1 mm, length of fore body (from clypeus to end of elytra) 3.2

Head black, pronotum and abdomen pitchy brown, elytra and scutellum black-brown, maxillary and labial palpi, mandibles, ventral side of antennomere 1 and base of antennomere 2 brown-yellow, dorsal side of antennomere 1 and remaining antennomeres brown, femora yellow-brown, tibiae and tarsi slightly darker. Pronotum golden iridescent.

Head rounded, wider than long (ratio 16 : 14), from posterior margin of eyes distinctly narrowed posteriad. Between eyes four punctures arranged in a straight line, distance between medial punctures three times larger than distance between lateral and medial puncture. Eyes shorter than temples (ratio 6 : 10), posterior margin with two punctures. Temporal area impunctate. Surface with distinct fine microsculpture, consisting of transverse waves.

Antennae stout, reaching posterior fourth 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 highly convex, as long as wide, markedly narrowed anteriorly. Anterior angles obtusely rounded, posterior angles markedly rounded. Anterior angles bearing several short bristles. Each dorsal row with five punctures, punctures 2–4 approximately equidistant, distance between punctures 1–2 and 4–5 larger than distance between previous punctures. Each sublateral row with two punctures, arranged in a row parallel to the dorsal row and half way between it and side. Puncture one situated behind level of puncture three of dorsal row, puncture two situated behind level of puncture four of dorsal row. One long black bristle situated in anterior third of sides. Surface with unusual, dense microsculpture arranged in oblique rows.

Scutellum very densely and coarsely punctured, diameter of punctures larger than eye-facets, distance between punctures small. Surface with fine and distinct microsculpture.

Elytra wider than long (ratio 37 : 30), slightly widened posteriad. Punctuation coarse and dense, diameter of punctures as large as those on scutellum, separated smaller than puncture diameter in transverse direction. Surface without microsculpture, very shine; setation yellow-brown and longer.

Legs. Metatibia slightly longer than metatarsus (ratio 15 : 13), metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2–4 combined.

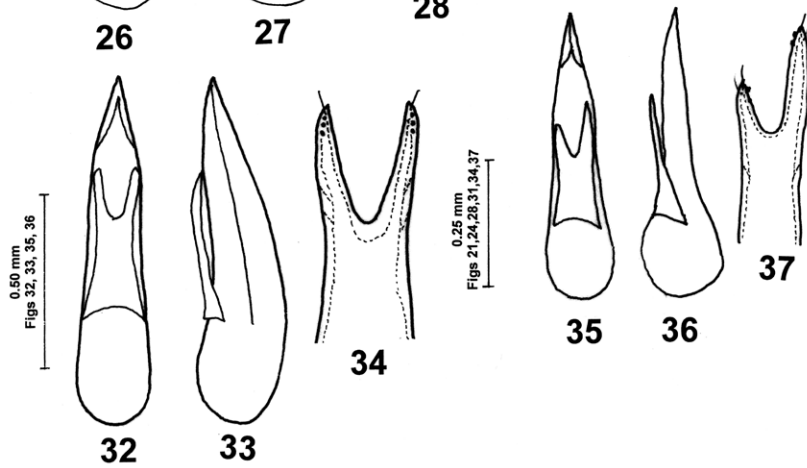
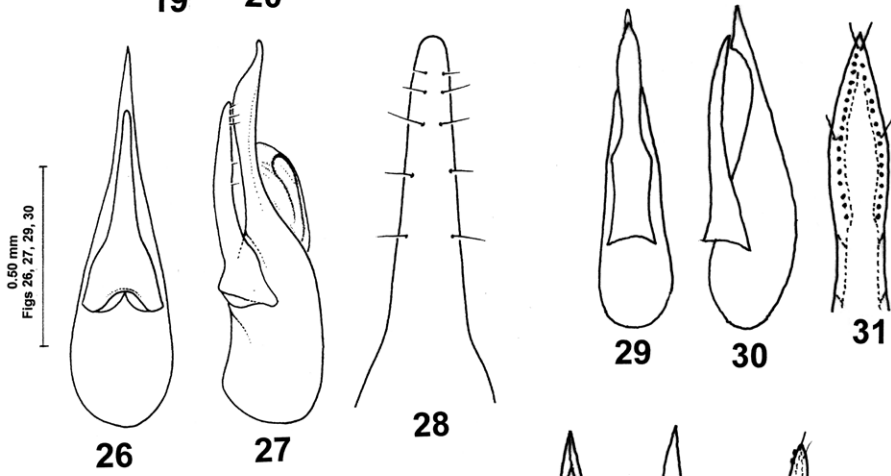
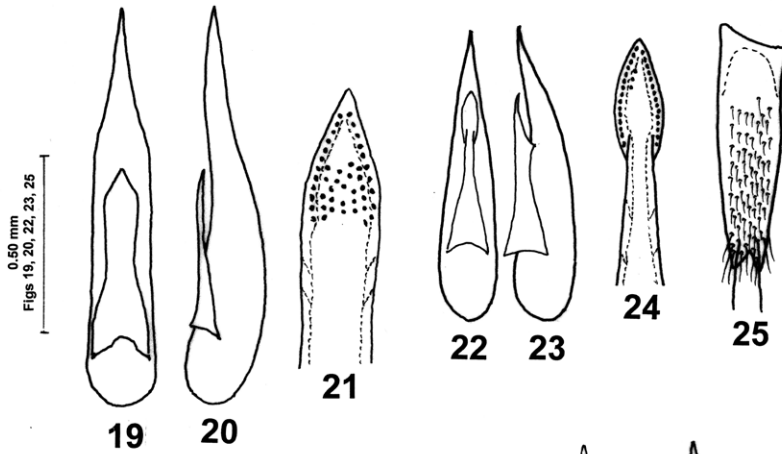
Abdomen wide, from visible tergite three distinctly narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines densely punctate. Punctuation at base of all tergites slightly denser than that on elytra, becoming sparser and finer towards posterior margin of each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

Male. Protarsomeres 1–3 slightly dilated, each covered with modified pale setae ventrally, protarsomere 4 very small. Aedeagus with simple paramere (Figs 19–21).

Female. Unknown.

→

Figs 19–37. 19–21. *Philonthus luenaensis* Lavesseur, 1962. 19 – aedeagus, ventral view, 20 – aedeagus, lateral view, 21 – apex of paramere with sensory peg setae, ventral view. 22–25. *Philonthus mercescens* Tottenham, 1949. 22 – aedeagus, ventral view, 23 – aedeagus, lateral view, 24 – apex of paramere with sensory peg setae, ventral view, 25 – male sternite IX, ventral view. 26–28. *Philonthus mivutanus* Tottenham, 1962. 26 – aedeagus, ventral view, 27 – aedeagus, lateral view, 28 – apex of paramere with sensory peg setae, ventral view. 29–31. *Philonthus nairobiensis* Fauvel, 1907. 29 – aedeagus, ventral view, 30 – aedeagus, lateral view, 31 – apex of paramere with sensory peg setae, ventral view. 32–34. *Philonthus negligens* Tottenham, 1962. 32 – aedeagus, ventral view, 33 – aedeagus, lateral view, 34 – apex of paramere with sensory peg setae, ventral view. 35–37. *Philonthus neuter* Tottenham, 1962. 35 – aedeagus, ventral view, 36 – aedeagus, lateral view, 37 – apex of paramere with sensory peg setae, dorsal view.



DIFFERENTIAL DIAGNOSIS. *Philonthus luenaensis* may be distinguished from the similar *P. neuter* by the shorter eyes, darker and wider elytra and by the different shape of the aedeagus.
DISTRIBUTION. Democratic Republic of the Congo (Herman 2001).

***Philonthus marcescens* Tottenham, 1949**
(Figs 22–25)

Philonthus marcescens Tottenham, 1949: 342.

Philonthus sudanensis Cameron, 1952: 824, synonymized by Tottenham (1962: 201).

TYPE MATERIAL STUDIED. **Sudan.** Holotype: ♂, “Sudan Govt., Jebel Haina, R. C. Darling, 29.i.1930, dung, Pres. By Imp. Ind. Ent. Brit. Mus. 1930-247. // HOLOTYPE, *Philonthus marcescens*, Tottenham, 1949, det., R. G. Booth, 2010 [white oblong label, handwritten]” (BMNH).

TYPE LOCALITY. “Sudan, Jebel Haina”.

REDESCRIPTION. Body length 5.4 mm, length of fore body (from clypeus to end of elytra) 2.5 mm. Head black, pronotum pitchy brown, elytra testaceous, around scutellum and suture narrowly black, abdomen brown, posterior margin of all tergites narrowly brown-yellow. Maxillary and labial palpi and mandibles brown, antennomere 1 and base of antennomere 2 yellow-brown, remaining antennomeres and legs testaceous.

Head rounded, as long as wide, between eyes four coarse punctures arranged in a straight line, distance between medial punctures four times larger than distance between lateral and medial puncture. Eyes flat, much longer than temples (ratio 9 : 4), posterior margin with one coarse puncture, temporal area with several variably large punctures. Surface with microsculpture consisting of transverse waves.

Antennae long, reaching almost posterior margin of pronotum when reclined. Antennomeres 1–3 and 11 longer than wide, antennomeres 4–10 as long as wide.

Pronotum highly convex, anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with five 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 very finely and very densely punctate, diameter of punctures as large as eye-facets, separated by puncture diameter in transverse direction, setation yellow-brown.

Elytra as long as wide, slightly widened posteriad, punctuation fine and dense, diameter of punctures slightly larger than that on scutellum, separated by puncture diameter in transverse direction. Surface without microsculpture; setation of the same colouring as that on scutellum.

Legs. Metatibia as long as metatarsus, metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2–4 combined.

Abdomen wide, very gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation whole tergites finer and denser than that on elytra. Surface without microsculpture; 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 IX (Fig. 25). Aedeagus with simple paramere (Figs 22–24).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus marcescens* may be distinguished from the similar *P. coiffaiti* by the darker colouring of antennomere 1, narrower head, from *P. curvabilis* by the wider head and pronotum and from both by the different shape of the aedeagus.

DISTRIBUTION. Mauretania, Senegal, Sudan (Herman 2001).

***Philonthus mivutanus* Tottenham, 1962**
(Figs 26–28)

Philonthus mivutanus Tottenham, 1962: 184.

TYPE MATERIAL STUDIED. **Kenya**. Holotype: ♂: “Kenya, Mac Artur Statt, Kanzeko, // *Philonthus mivutanus* Tottenham TYPE [ochre oblong label, handwritten], 1-42, Press by Imp. Indy. Ent. B.M. 1952-515” (BMNH); paratypes: 4 spec., same label data as in holotype (BMNH).

ADDITIONAL MATERIAL STUDIED. **Gambia**. 3 spec, Bakau, 6.–26.1984, leg. T. Palm (LHPC, MZLU).

TYPE LOCALITY. “Kenya: Kanzeko”.

REDESCRIPTION. Body length 6.2 mm, length of fore body (from clypeus to end of elytra) 2.8 mm. Head black, pronotum red-brown, elytra blackish, suture broadly reddish-yellow, elytral epipleura yellow or reddish-yellow, the pale colour extending on the upper surface so that it is distinctly visible from above, more extensive at the postero-external angles. Abdomen dark brown, paratergites and posterior margin of all tergites brown-yellow. Maxillary and labial palpi dark brown. Antennae reddish-yellow, legs pale yellow-brown, tibiae infuscate.

Head as long as wide, parallel-sided, posterior angles bearing one long black bristle. Between eyes four coarse punctures arranged in a straight line, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes longer than temples (ratio 8 : 5), inner margin of each eye with three punctures, posterior margin with two punctures, temporal area with scattered punctures. Surface with very fine microsculpture consisting of transverse waves.

Antennae long, slightly widened distally, reaching posterior fourth of pronotum when reclined. Antennomeres 1–4 and 11 longer than wide, antennomeres 5–6 as long as wide, antennomeres 7–10 slightly wider than long. Antennomere 1 twice longer than antennomere 11, antennomere 2 as long as antennomere 3.

Pronotum highly convex, as long as wide, distinctly narrowed anteriorly, anterior angles conspicuously deflexed, vaguely obtusely rounded, bearing several variably long bristles, posterior angles markedly rounded. Each dorsal row with four coarse approximately equidistant punctures, each sublateral row with two punctures, puncture two slightly shifted to the lateral margin. Sides with several variably long bristles. Surface with microsculpture more distinct than that on head.

Scutellum densely and coarsely punctate. Diameter of punctures as large as eye-facets, separated by puncture diameter in transverse direction. Surface with very fine microsculpture; setation dark.

Elytra slightly longer than wide (ratio 28 : 26), slightly widened posteriorly, punctuation fine and dense, punctures as large as punctures on scutellum, separated smaller than puncture diameter in transverse direction. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus, metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2–3 combined.

Abdomen wide, very gradually narrowed posteriorly. First three visible tergites with two basal lines, elevated area between lines punctate. Punctuation of whole tergites much finer and much denser than that on elytra. Setation similar to that on elytra.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus, paramere simple (Figs 26–28).

Female. Protarsomeres 1–3 slightly dilated and sub-bilobed, each covered with modified pale setae ventrally, paratarsomere 4 small.

DIFFERENTIAL DIAGNOSIS. *Philonthus mivutanus* may be distinguished from the *P. nairobiensis* by the longer body length (6.2 mm), shorter antennae and by the different shape of the aedeagus.

DISTRIBUTION. Cape Verde Islands, Chad, Kenya (Herman 2001).

***Philonthus nairobiensis* Fauvel, 1907**
(Figs 29–31)

Philonthus nairobiensis Fauvel, 1907: 41.

Philonthus clambus Tottenham, 1949, **syn. nov.**

TYPE MATERIAL STUDIED. **Kenya.** Paratype: ♂, “Afrique orient., Angl., Nairobi: steppe Masai pres Nairobi, 5500 feet, CH. Alluard, 1904. // *Philonthus nairobiensis*, coll. Et. Det. A: Fauvel, R.I.Sc., N.B. 17.470 [ochre oblong label handwritten]” (IRSB).

ADDITIONAL MATERIAL STUDIED. **Botswana.** 4 spec., Moremi reserve, 10°23'S 23°33'E, 18.–20.1972 (LHPC).

TYPE LOCALITY. “Nairobi [Kenya]: steppe Masai pres Nairobi, 5500 feet”.

REDESCRIPTION. Body length 4.3 mm, length of fore body (from clypeus to end of elytra) 2.3 mm. Head black, pronotum, scutellum and abdomen brown, elytra brown-yellow, dark translucent here and there, elytral epipleura narrowly dirty yellow, maxillary, labial palpi and mandibles dark brown, antennomere one and legs yellow, remaining antennomeres brown.

Head quadrate, slightly wider than long (ratio 14 : 12), parallel-sided, posterior angles bluntly rounded, bearing two long black bristles. Between eyes four coarse punctures, distance between medial punctures four times as large as distance between medial and lateral puncture. Medial punctures distinctly shifted anteriorly. Eyes flat, as long as temples, posterior margin with two coarse punctures, temporal area impunctate. Surface with very fine microsculpture consisting of transverse waves.

Antennae long, reaching posterior fifth of pronotum when reclined. Antennomeres 1–4 and 11 longer than wide, antennomeres 5–10 as long as wide.

Pronotum highly convex, anterior angles conspicuously deflexed, slightly rounded, bearing several variably long bristles. Posterior angles markedly rounded. Sides bearing several long bristles. Each dorsal row with four coarse punctures, punctures 1–3 equidistant, distance between punctures 3–4 vaguely smaller than distance between previous punctures. Each sublateral row with two punctures, puncture two shifted laterally. Surface with microsculpture similar to that on head.

Scutellum densely and coarsely punctate. Punctures larger than eye-facets, separated much smaller than puncture diameter.

Elytra wider than long (ratio 26 : 23), slightly widened posteriorly. Punctuation coarse and dense, punctures slightly larger than that on scutellum, separated by puncture diameter in transverse direction. Surface between punctures without microsculpture; setation yellow-brown.

Legs. Metatibia as long as metatarsus, metatarsomere 1 shorter than metatarsomere 5.

Abdomen wide, very gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines densely punctate. Punctuation of tergites much finer and denser than that on elytra. Diameter of punctures as large as eye-facets, separated between punctures smaller than puncture diameter in transverse direction. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 markedly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus with simple paramere (Figs 29–31).

Female. Protarsomeres 1–3 much less dilated than those of male, each covered with modified pale setae ventrally, protarsomere 4 small.

DIFFERENTIAL DIAGNOSIS. *Philonthus nairobiensis* may be distinguished from the similar *P. mivutanus* by the smaller body length (4.3 mm), longer antennae and by the different shape of the aedeagus.

DISTRIBUTION. Kenya (Herman 2001).

***Philonthus negligens* Tottenham, 1962**
(Figs 32–34)

Philonthus negligens Tottenham, 1962: 218.

TYPE MATERIAL. Not studied.

ADDITIONAL MATERIAL STUDIED. **Tanzania**. 1 spec., Ussure in Kuhmist, 3.vii.1911 (ZMHB).

TYPE LOCALITY. “D. Ostafrika [= Tanzania]: Ussure”.

REDESCRIPTION. Body length 5.6 mm, length of fore body (from clypeus to the end of elytra) 2.6 mm. Head black, pronotum and scutellum black-brown, elytra brown-black, suture, posterior margin and elytral epipleura narrowly dark yellow, abdomen black-brown, posterior margin of all tergites narrowly yellow-red, maxillary and labial palpi and mandibles dark brown, antennomere 1 and base of antennomeres 2–3 yellow-brown, remaining antennomeres black-brown. Legs brown-yellow.

Head quadrate, very slightly wider than long (ratio 15 : 14), parallel-sided, posterior angles obtusely rounded bearing one long black bristle. Four coarse punctures between eyes arranged in a straight line, distance between medial punctures about four times as large as distance between medial and lateral puncture. Eyes flat, slightly longer than temples (ratio 6.5 : 5). Temporal area with several punctures. Surface with very fine microsculpture.

Antennae long, reaching posterior sixth of pronotum when reclined. Antennomeres 1–3 and 11 longer than wide, remaining antennomeres as long as wide. Antennomere 1 longer than antennomere 11, antennomere 2 as long as antennomere 3.

Pronotum highly convex, almost as long as wide, very slightly narrowed anteriorly. Anterior angles obtusely rounded, posterior angles markedly rounded, each dorsal row with five punctures, punctures 1–4 equidistant, distance between puncture 4 and 5 slightly longer than distance between previous punctures, distance between puncture 5 and posterior margin of pronotum as long as the length of antennomeres 1–2 combined, each sublateral row with two 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 very densely and coarsely punctate, somewhat larger than eye-facets, distance between punctures very small.

Elytra distinctly wider than long (ratio 36 : 27), slightly widened posteriorly. Punctuation very fine and dense, punctures larger than that on scutellum, separated by puncture diameter or slightly smaller. Surface between punctures without microsculpture; setation yellowish.

Legs. Metatibia as long as metatarsus, metatarsomere 1 longer than metatarsomere 5.

Abdomen wide, from visible tergite three slightly narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation at base of each visible tergite much finer and denser than that on elytra, becoming finer and sparser towards posterior margin of each tergite. Surface without microsculpture; setation yellowish.

Male. Protarsomeres 1–3 distinctly dilated and sub-bilobed, densely covered with modified pale setae ventrally, protarsomere 4 smaller than preceding ones. Aedeagus with furcate paramere (Figs 32–34).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus negligens* may be distinguished from *P. discoideus* by the shorter eyes, longer antennae and by the different shape of the aedeagus.

DISTRIBUTION. Tanzania (Herman 2001).

***Philonthus neuter* Tottenham, 1962**
(Figs 35–37)

Philonthus neuter Tottenham, 1962: 219.

TYPE MATERIAL. Not studied.

ADDITIONAL MATERIAL STUDIED. **Namibia**. 23 spec., Südwestafrika, Otjitambi 1150 m, 8.1866, Dr. Königsbauer (LHPC, NMHW).

TYPE LOCALITY. “Capeland [= South Africa]: Willowmore”.

REDESCRIPTION. Body length 6.8 mm, length of fore body (from clypeus to end of elytra) 2.8 mm.

Colouration. Head black, pronotum and scutellum black-brown, elytra dark brown-red, suture, posterior margin narrowly and whole elytral epipleura yellow-brown, abdomen dark brown, maxillary and labial palpi, mandibles, ventral side of antennomere 1 and legs yellow-brown, dorsal side of antennomere 1 and remaining antennomeres brown.

Head wider than long (ratio 19 : 16), very slightly narrowed posteriad, posterior angles obtusely rounded, bearing two long and several short black bristles. Between eyes four coarse punctures, distance between lateral and medial puncture very small, distance between medial punctures five times as large as distance between medial and lateral puncture. Eyes large, distinctly longer than temples (ratio 9 : 5), posterior margin with two punctures, temporal area with several variably large punctures. Surface with microsculpture consisting of transverse waves.

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

Pronotum highly convex, wider than long (ratio 23 : 21), slightly narrowed anteriorly. Anterior angles conspicuously deflexed, vaguely obtusely rounded, bearing several short bristles, posterior angles markedly rounded. Each dorsal row with five approximately equidistant punctures, each sublateral row with two punctures, puncture two shifted to the lateral margin. Sides bearing one long black bristle in anterior third of sides. Surface with microsculpture similar to that on head.

Whole scutellum densely and coarsely punctured, diameter of punctures as large as eye-facets, distance between punctures mostly puncture diameter, surface with microsculpture.

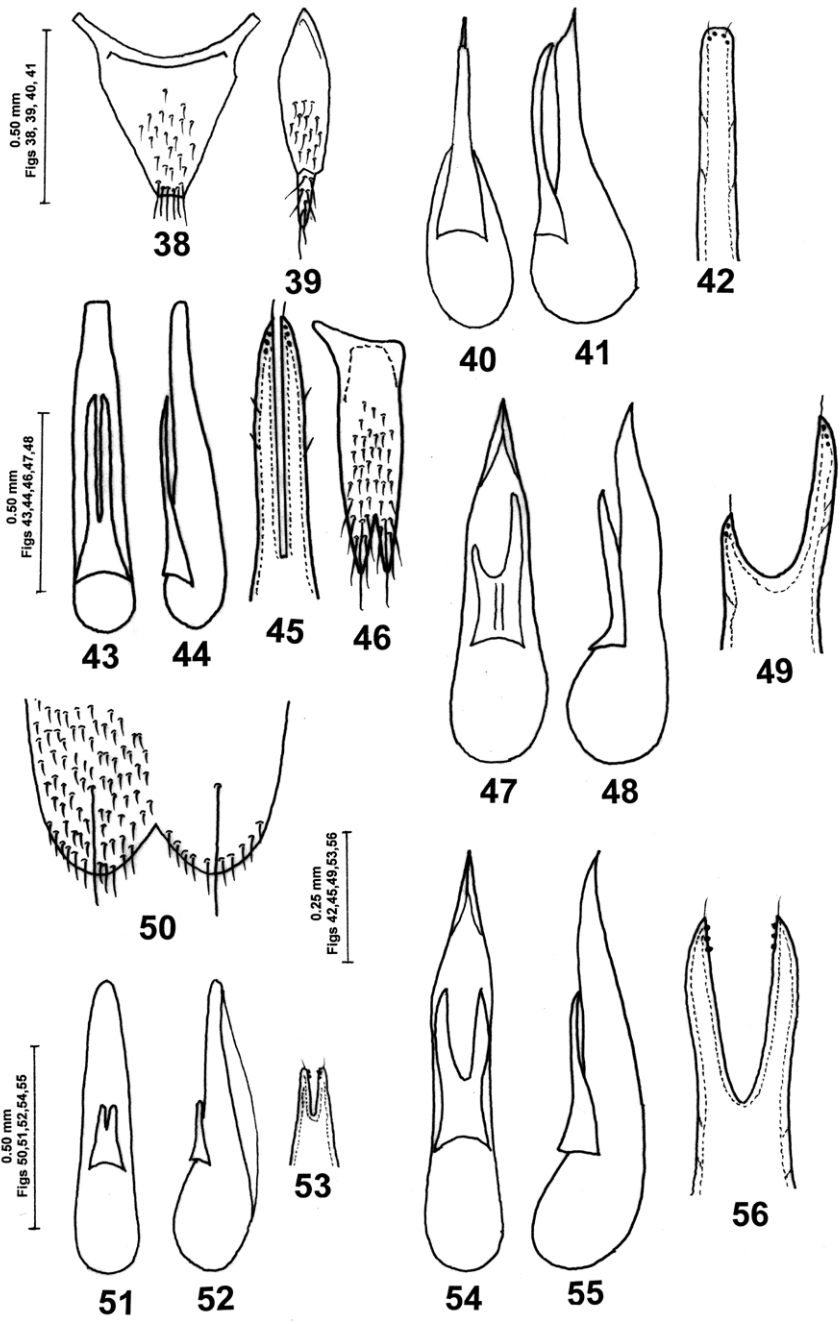
Elytra wider than long (ratio 32 : 30, slightly wider posteriorly). Punctuation coarser than that on scutellum, distance between punctures mostly puncture diameter or smaller. Surface without microsculpture; setation yellow-brown.

Legs. Metatibia as long as metatarsus, metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2–3 combined.

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

→

Figs 38–56. 38–39. *Philonthus senegalensis* Bernhauer, 1937. female tergite, X, ventral view, 39 – gonocoxites of female genital segment. 40–42. *Philonthus stercorosus* Tottenham, 1962. 40 – aedeagus, ventral view, 41 – aedeagus, lateral view, 42 – apex of paramere with sensory peg setae, ventral view. 43–46. *Philonthus sylvisorex* sp. nov. 43 – aedeagus, ventral view, 44 – aedeagus, lateral view, 45 – apex of paramere with sensory peg setae, ventral view, 46 – male sternite IX, ventral view. 47–50. *Philonthus taterae* Scheerpeltz, 1951. 47 – aedeagus, ventral view, 48 – aedeagus, lateral view, 49 – apex of paramere with sensory peg setae, dorsal view, 50 – apical portion of male sternite VIII, ventral view. 51–53. *Philonthus testaceocinctus* Bernhauer, 1915. 51 – aedeagus, ventral view, 52 – aedeagus, lateral view, 53 – apex of paramere with sensory peg setae, ventral view. 54–56. *Philonthus treron* sp. nov. 54 – aedeagus, ventral view, 55 – aedeagus, lateral view, 56 – apex of paramere with sensory peg setae, ventral view.



Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 much narrower than preceding ones. Aedeagus, paramere furcate (Figs 35–37).

Female. Protarsomeres 1–3 less dilated than those of male, each covered with modified pale setae ventrally, protarsomere four small.

DIFFERENTIAL DIAGNOSIS. *Philonthus neuter* is similar in habitus to *P. luenaensis* from which it may be distinguished by the longer eyes, paler and narrower elytra and by the different shape of the aedeagus.

DISTRIBUTION. Namibia, South Africa (Herman 2001).

***Philonthus senegalensis* Bernhauer, 1937**
(Figs 38–39)

Philonthus senegalensis Bernhauer, 1937: 300.

TYPE MATERIAL STUDIED. **Mali.** Holotype: ♀, “Haut Senegal, Bodoumbé, Dr. Nodier, i.–v.1882, Musée du Congo, coll. Clermont //senegalensis Bernhauer, TYPUS [ochre oblong label, handwritten]” (CNHM).

TYPE LOCALITY. “Haut Senegal, Bodoumbe”.

REDESCRIPTION. Body length 4.4 mm, length of fore body (from clypeus to end of elytra) 2.3 mm. Head black, pronotum, scutellum and abdomen black-brown, paratergites and posterior margin of tergites brown-red, elytra red-brown, suture wide paler. Maxillary, labial palpi, antennae and legs yellow-brown.

Head quadrate, wider than long (ratio 17 : 15), from posterior margin of eyes sinuately narrowed posteriad. Posterior angles obtusely rounded, bearing one long black bristle. Eyes slightly convex, longer than temples (ratio 7 : 6), between eyes four punctures, distance between medial punctures four times larger than distance between medial and lateral puncture, temporal area with scattered punctures. Surface with microsculpture consisting of transverse waves.

Antennae paler distally, reaching midlength of pronotum when reclined. Antennomere 1 longer than antennomere 11, antennomere 2 slightly longer than antennomere 3.

Pronotum highly convex, slightly longer than wide (ratio 20 : 18), anterior angles conspicuously deflexed, vaguely obtusely rounded, bearing several variably long bristles, posterior angles markedly rounded. Each dorsal row with five equidistant punctures, each sublateral row with two punctures, puncture two slightly shifted to the lateral margin. Sides with several bristles. Surface with microsculpture consisting of transverse waves.

Scutellum very densely and coarsely punctured, diameter of punctures larger than eye-facets, distance between punctures much smaller than puncture diameter.

Elytra wider than long (ratio 26 : 23), slightly widened posteriad. Punctuation sparser than that on scutellum, separated by one or one and half puncture diameters. Surface without microsculpture; setation yellowish.

Legs. Metatibia as long as metatarsus. Metatarsomere 1 slightly shorter than metatarsomere 5.

Abdomen wide, from visible tergite 3 gradually narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation at base of all tergites denser than that on elytra, becoming sparser and finer towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Unknown to the author.

Female. Protarsomeres 1–3 moderately dilated, each covered with modified pale setae ventrally, protarsomere 4 small. Tergite X (Fig. 38); gonocoxite of female genital segment (Fig. 39).

DIFFERENTIAL DIAGNOSIS. *Philonthus senegalensis* may be distinguished from all species in having in dorsal rows of pronotum 5 punctures by the small body length 4.3 mm.
DISTRIBUTION. Mali (Herman 2001).

***Philonthus stercorosus* Tottenham, 1962**
(Figs 40–42)

Philonthus stercorosus Tottenham, 1962: 186.

TYPE MATERIAL STUDIED. **Zimbabwe**. Holotype: ♂, “S. Rhodesia, Wankie Game Reserve, 10.i.1959, in elephant dung // *Philonthus stercorosus* Tottenham, TYPE [ochre oblong label, handwritten]” (BMNH).

ADDITIONAL MATERIAL STUDIED. **Liberia**. 2 spec., Mt. Nimba, Grassfield, 16.–25.ix.1979 (LHPC). **Namibia**. 2 spec., Etosha NP. 25 km NWN Namutoni, elephant dung, leg., B + M. Uhlig (LHPC, ZMHB).

TYPE LOCALITY. “S. Rhodesia [= Zimbabwe], Wankie Game Reserve”.

REDESCRIPTION. Body length 5.8 mm, length of fore-body (to end of elytra) 2.9 mm.

Head black, pronotum brown-black, elytra brown-yellow, suture and posterior margin narrowly brown-yellow, abdomen black-brown, posterior margin of all tergites narrowly paler. Maxillary and labial palpi black-brown, antennomere 1, base of antennomere 2 and legs yellow-brown, remaining antennomeres black-brown, inner side of tibiae infuscate.

Head subcircular, wider than long (ratio 18.5 : 17.5), posterior angles bearing two long black bristles. Between eyes four punctures, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes as long as temples. Surface with very fine microsculpture consisting of transverse waves.

Antennae long and slender, reaching posterior fifth of pronotum when reclined. Antennomeres 1–6 and 11 longer than wide, antennomeres 7–10 as long as wide. Antennomere 1 longer than antennomere 11, antennomere 2 vaguely shorter than antennomere 3.

Pronotum approximately as long as wide, slightly narrowed anteriorly. Each dorsal with four coarse equidistant punctures, each sublateral row with two punctures, puncture two slightly shifted to the lateral margin. Surface with microsculpture more distinct than that on head.

Scutellum very coarsely punctured, surface with distinct microsculpture; setation long and dark.

Elytra wider than long (ratio 36 : 31.5), vaguely widened posteriorly. Punctuation coarse and regular, diameter of punctures as large as eye-facets, separated slightly larger than puncture diameter. Surface without microsculpture; setation longer and dark.

Legs. Metatibia as long as metatarsus, metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 3–4 combined.

Abdomen wide, gradually narrowed posteriorly. First three visible tergites with two basal lines, elevated area between lines punctate. Punctuation at base of all tergites finer and denser than that on elytra, becoming finer and sparser towards posterior margin of all tergites. Surface without microsculpture; setation long and brown-yellow.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus with simple paramere (Figs 40–42).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus stercorosus* may be separated from *P. uhligi* by the smaller body length (5.8 mm), darker antennae, paler elytra and by the different shape of the aedeagus.
DISTRIBUTION. Zimbabwe (Herman 2001). First records from Liberia and Namibia.

Philonthus sylvisorex sp. nov.

(Figs 43–46)

TYPE MATERIAL. **Burundi**. Holotype: ♂, “Burundi, Kaninya, vii.1940, A. J. Bréda leg. // HOLOTYPE *Philonthus sylvisorex* Hromádka det., 2010 [red oblong label, printed]” (NMPC); paratype: ♂, same label data as in holotype (LHPC).

TYPE LOCALITY. Burundi, Kaninya.

DESCRIPTION. Body length 6.1 mm, length of fore body (from clypeus to end of elytra) 3.2 mm. Head black, pronotum dark brown, scutellum and elytra chestnut-coloured, suture, posterior margin and elytral epipleura narrowly yellow-brown, abdomen dark brown, posterior margin of all tergites narrowly brown-yellow. Maxillary and labial palpi, mandibles and antennomere 1 brown-yellow, remaining antennomeres dark brown. Femora yellow-brown, tibiae and tarsi brown-black.

Head rounded, wider than long (22 : 19) slightly narrowed posteriad. Posterior angles bearing one long black bristle. Between eyes 4 coarse punctures arranged in a straight line, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes large, slightly convex, longer than temples (ratio 10 : 7), posterior margin with two punctures, temporal area with scattered punctures. Surface without microsculpture.

Antennae long, exceeding posterior margin of pronotum by the length of antennomere 11 when reclined, all antennomeres longer than wide. Antennomere 1 almost twice longer than antennomere 11, as long as antennomeres 9–10 combined, antennomere 2 shorter than antennomere 3.

Pronotum parallel-sided, longer than wide (ratio 38 : 34), anterior angles obtusely rounded bearing several variably long bristles, posterior angles markedly rounded. Each dorsal row with five punctures, punctures 2–4 approximately equidistant, distance between punctures 1–2 and 4–5 larger than distance between previous punctures. Each sublateral row with two punctures arranged in a row parallel to the dorsal row and placed nearer to the side. Surface without microsculpture.

Scutellum very finely and very sparsely punctate, diameter of punctures smaller than eye-facets, separated by two or three puncture diameters, surface without microsculpture

Elytra as long as wide, markedly narrowed posteriad. Punctuation coarse and sparse, diameter of punctures larger than eye-facets, separated by one or one and half puncture diameters. Surface without microsculpture; setation scarceness, brown.

Legs. Metatibia as long as metatarsus, metatarsomere 1 longer 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. Punctuation at base of all tergites much finer and sparser than that on elytra, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 hardly dilated and subbilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones, heart-shaped. Sternite IX (Fig. 46), aedeagus with furcate paramere (Figs 43–45).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus sylvisorex* sp. nov. may be distinguished from the similar *P. taterae* by the longer antennae, wider and longer elytra, sparser punctuation of elytra and by the 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 climbing shrew *Sylvisorex morio* (Gray, 1862).

***Philonthus taterae* Scheerpeltz, 1951**
(Figs 47–50)

Philonthus taterae Scheerpeltz, 1951: 27.

Philonthus discoideisimilis Scheerpeltz, 1974: 149, synonymized by Hromádka (2010d: 513).

TYPE MATERIAL STUDIED. **South Africa.** Holotype: ♂, “Vredefort, 19.viii.1949, Orange Free-State, Locus 2627 AD, leg. W. D. Oliff. in nest *Tatera Brandsii* (Rodentia Muridae) ex coll. Scheerpeltz // *Philonthus taterae* Scheerpeltz Type [red oblong label]” (NHMW).

TYPE LOCALITY. “South Africa, Vredefort”.

REDESCRIPTION. Body length 6.7 mm, length of fore body (to end of elytra) 3.2 mm. Head black, pronotum and scutellum black-brown, elytra brown-black, suture (in posterior half wider), posterior margin and elytral epipleura narrowly yellow-brown, abdomen brown-black, posterior margin of all tergites narrowly brown-red, maxillary, labial palpi and mandibles brown-yellow. Antennomeres 1–2 and base of antennomere 3 brown-yellow, remaining antennomeres black-brown. Femora and tarsi brown-yellow, tibiae darker.

Head rounded, slightly wider than long (ratio 19.5 : 17), slightly narrowed posteriorly. Posterior angles obtusely rounded, bearing one long and several short black bristles. Between eyes four coarse punctures, distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes longer than temples (ratio 8 : 6). Temporal area with several coarse punctures. Surface with microsculpture consisting of transverse waves.

Antennae long, reaching posterior fifth of pronotum when reclined. Antennomere 1 slightly longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum highly convex, as long as wide, narrowed anteriorly. Anterior angles and sides bearing several variably long black bristles. Posterior angles markedly rounded. Each dorsal row with five approximately equidistant punctures, each sublateral row with two punctures. Surface with microsculpture similar to that on head.

Scutellum finely and sparsely punctured, punctures slightly smaller than eye-facets, separated between punctures larger than puncture diameter in transverse direction. Surface with distinct and fine microsculpture. Elytra as long as wide, very slightly widened posteriorly. Anterior angles bearing one long black bristle. Punctuation coarse, contiguous here and there, diameter of punctures as large as eye-facets, separated between punctures mostly by puncture diameter. Surface without microsculpture; setation brown-yellow, separately longer on sides.

Legs. Metatarsus as long as metatibia, metatarsomere 1 longer than metatarsomere 5, slightly longer than metatarsomeres 2–3 combined.

Abdomen gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines densely punctate. Punctuation of visible tergites fine and very dense. Diameter of punctures smaller than eye-facets, separated between punctures smaller than puncture diameter. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 smaller than preceding ones. Sternite VIII (Fig. 50), aedeagus with furcate paramere (Figs 47–49).

Female. Unknown..

DIFFERENTIAL DIAGNOSIS. *Philonthus taterae* may be distinguished from the similar *P. testaceocinctus* by the different shape of the paramere, from *P. sylvisorex* sp. nov. by the shorter antennae, narrower and shorter elytra, denser punctuation of elytra and by the different shape of the aedeagus.

DISTRIBUTION. South Africa (Herman 2001).

***Philonthus testaceocinctus* Bernhauer, 1915**
(Figs 51–53)

Philonthus testaceocinctus Bernhauer, 1915: 140.

TYPE MATERIAL STUDIED. **Tanzania**. Holotype: ♂, “Deutsch-Ostafrika, Unjanjembe, Juni 11, Methner // testaceocinctus, Bernhauer, TYPUS [ochre oblong label, handwritten] Chicago NHMus M. Bernhauer Collection” (FMNH); Syntype: ♂, same label data as in holotype (FMNH).

TYPE LOCALITY. “Deutsch-Ostafrika [= Tanzania]: Unjanjembe”.

REDESCRIPTION. Body length 4.8 mm, length of fore body (from clypeus to end of elytra) 2.4 mm. Head black, pronotum and scutellum brown, elytra brown-black, suture, posterior margin and elytral epipleura narrowly brown-yellow. Abdomen brown-black, posterior margin of all tergites narrowly yellow-brown, maxillary and labial palpi brown, antennomeres 1–2 yellow, remaining antennomeres dark brown, legs yellow-brown, tibiae darker.

Head square, slightly wider than long (ratio 16.5 : 15), parallel-sided, posterior angles very slightly rounded bearing one long black bristle. Between eyes four punctures, distance between medial and lateral punctures about four times as large as distance between medial and lateral puncture. Eyes almost as long as temples. Temporal area sparsely punctured. Surface with very fine microsculpture consisting of transverse waves.

Antennae slender and long, reaching almost posterior margin of pronotum when reclined. Antennomeres 1–3 and 11 longer than wide, antennomere 1 longer than antennomere 11.

Pronotum highly convex, as long as wide, narrowed anteriorly. Posterior angles markedly rounded. Each dorsal row with five approximately equidistant punctures, each sublateral row with two punctures, puncture two markedly shifted laterally. Microsculpture similar to that on head.

Scutellum densely and coarsely punctate, diameter of punctures equal in size as eye-facets, separated between punctures much smaller than puncture diameter.

Elytra wider than long (ratio 28 : 25), slightly narrowed posteriorly, punctation coarse and relatively sparse, diameter of punctures larger than eye-facets, separated by one or one and half puncture diameters. Surface without microsculpture; setation yellowish.

Legs. Metatibia longer than metatarsus (ratio 15.5 : 13), metatarsomere 1 slightly longer than metatarsomere 5, as long as metatarsomeres 2–3 combined.

Abdomen wide, from visible tergite 3 gradually narrowed posteriorly, 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 finer and sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 simple, moderately dilated, each covered with modified pale setae ventrally, protarsomere 4 very small. Aedeagus with furcate paramere (Figs 51–53).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus testaceocinctus* may be distinguished from similar *P. hyperolius* sp. nov. by the longer antennae, shorter paramere, from *P. taterae* by the different shape of the paramere.

DISTRIBUTION. Tanzania, Uganda (Herman 2001).

***Philonthus treron* sp. nov.**
(Figs 54–56)

TYPE MATERIAL. **Tanzania**. Holotype: ♂, “Tanzania, Mwanza, 11.x.1969, Ardö leg., // HOLOTYPE *Philonthus treron* sp. nov. Hromádka det., 2012 [red oblong label, printed]” (NMPC).

TYPE LOCALITY. Tanzania, Mwanza.

DESCRIPTION. Body length 7.1 mm, length of fore body (from clypeus to end of elytra) 3.2 mm. Head black, pronotum and scutellum black-brown, elytra dark brown, suture and posterior margin narrowly and whole elytral epipleura yellow-brown, abdomen dark brown, posterior margin of all tergites narrowly yellow-brown. Maxillary, labial palpi, mandibles and antennae brown, legs yellow-brown.

Head rounded, slightly wider than long (ratio 17 : 15), posterior margin bearing one long black bristle, between eyes four coarse punctures arranged in a straight line. Distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes flat, longer than temples (ratio 7 : 5). Posterior margin with two coarse punctures, temporal area with scattered punctures. Surface with tracks of very fine microsculpture here and there.

Antennae reaching posterior margin of pronotum when reclined. Antennomeres 1–4 and 11 longer than wide, antennomeres 5–10 as long as wide.

Pronotum highly convex, as long as wide, anterior angles from dorsal view almost rectangular, from lateral view conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Each dorsal row with five coarse punctures, punctures 1–4 equidistant, distance between punctures 4–5 slightly larger than distance between previous punctures. Each sublateral row with two punctures, puncture two distinctly shifted laterally. Surface with microsculpture similar to that on head.

Scutellum in posterior two thirds densely and finely punctured, diameter of punctures slightly larger than eye-facets, distance between punctures smaller than puncture diameter, surface with dense black setation. Anterior third impunctate, smooth.

Elytra quadrate, almost as long as wide, very slightly widened posteriad. Punctuation very slightly coarser than that on scutellum, distance between punctures mostly puncture diameter, smaller here and there. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia as long as metatarsus, metatarsomere 1 as long as metatarsomeres 5, slightly shorter than antennomeres 2–4 combined.

Abdomen very gradually narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines finely and densely punctate. Punctuation of all tergites exceptionally finely and uniformly punctured. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 strongly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 much narrower than preceding ones. Aedeagus with furcate paramere (Figs 54–56).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus treron* sp. nov. is similar to *P. ventralis* but differs from it by the different colouring of elytra, denser punctuation of abdomen and by the 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 green pidgeon *Treron calvus* (Temminck, 1808).

***Philonthus uhligi* Hromádka, 2005**

(Figs 57–59)

Philonthus uhligi Hromádka, 2005: 112.

TYPE MATERIAL STUDIED.: **South Africa**. Holotype: ♂, “Republic of South Africa, Kruger N.P. Skukuza, i.1999, elephant dung, ex Hampl No. 2., leg. C. Paetel // *Philonthus uhligi* sp. nov. Hromádka det., 2005, [red oblong printed label]” (ZMHB); paratypes: 3 spec., same label data as in holotype (LHPC, ZMHB).

TYPE LOCALITY. "Republic of South Africa, Kruger N.P., Skukuza".

REDESCRIPTION. Body length 6.9–7.3 mm, length of fore body (from clypeus to end of elytra) 2.9–3.1 mm. Head black, pronotum dark brown, elytra brown-black, suture, posterior margin, elytral epipleura and angles yellow-brown, maxillary and labial palpi brown-black, antennae yellow-brown, antennomeres 1–2 yellow, legs testaceous, inner side of all tibiae infuscate.

Head rounded, slightly wider than long (ratio 23.5 : 22.5), posterior angles obtusely rounded, bearing three long black bristles. Between eyes four punctures, distance between medial punctures three times as large as distance between medial and lateral puncture. Eyes as long as temples. Temporal area with several fine punctures. Surface with microsculpture consisting of transverse waves.

Antennae slender and long, reaching posterior fourth of pronotum when reclined. Antennomere 1 slightly shorter than antennomeres 1–2 combined, longer than antennomere 11, antennomere 2 longer than antennomere 3, antennomere 11 shorter than antennomeres 9–10 combined.

Pronotum highly convex, as long as wide, narrowed anteriorly, anterior angles conspicuously deflexed, vaguely obtusely rounded. Each dorsal row with four coarse equidistant punctures, each sublateral row with two punctures, puncture two slightly shifted to the lateral margin. Surface with microsculpture, similar to that on head.

Scutellum densely punctured, diameter of punctures larger than eye-facets, separated between punctures smaller than puncture diameter. Microsculpture very fine, setation dark brown.

Elytra wider than long (ratio 45 : 40.5), very slightly widened posteriorly. Punctuation fine and dense, diameter of punctures equal in size as eye-facets, separated by one or one and half puncture diameters. Surface without microsculpture; setation testaceous.

Legs. Metatibia as long as metatarsus, metatarsomere 1 slightly longer than metatarsomeres 2–3 combined, metatarsomere 5 shorter than metatarsomeres 3–4 combined.

Abdomen gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines densely punctate. Punctuation at base of all tergites finer and denser than that on elytra, becoming very slightly sparser towards posterior margin of each tergite. All tergites bearing with short bristles on each side. Surface without microsculpture; setation brown-yellow.

Male. Protarsomeres 1–3 strongly dilated and sub-bilobed, each densely covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus with simple paramere (Figs 57–59).

Female. Protarsomeres 1–3 only slightly dilated and sub-bilobed, with less numerous pale setae ventrally.

DIFFERENTIAL DIAGNOSIS. *Philonthus uhligi* may be distinguished from the habitually similar *P. mivutanus* by the darker colouration of antennae, shorter head and pronotum, from *P. stercorosus* by the larger body length (6.9–7.3 mm), darker elytra and from both by the different shape of the aedeagus.

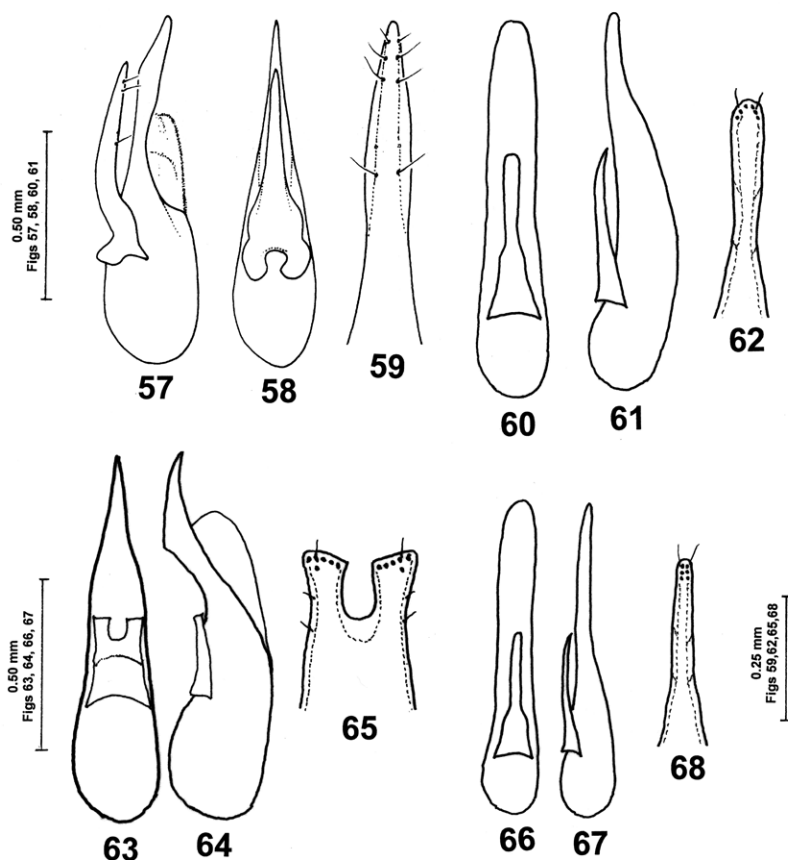
DISTRIBUTION. Republic of South Africa.

***Philonthus uraeginthus* sp. nov.**
(Figs 60–62)

TYPE MATERIAL. **Zimbabwe.** Holotype: ♂, "Zimbabwe, loc. Kutsaga near Harare airport, 18.vi. 1997, W. Rossi leg. [red oblong printed label]" (NMPC); paratype: ♂, same data as in holotype (LHPC).

TYPE LOCALITY. Zimbabwe, loc. Kutsaga near Harare airport.

DESCRIPTION. Body length 6.7 mm, length of fore body (from clypeus to end of elytra) 3.8 mm. Head, pronotum, scutellum, elytra and abdomen black, maxillary and labial palpi black brown,



Figs 57–68. 57–59. *Philonthus uhligi* Hromádka, 2005. 57 – aedeagus, ventral view, 58 – aedeagus, lateral view, 59 – apex of paramere with sensory peg setae, ventral view. 60–62. *Philonthus uraeginthus* sp. nov. 60 – aedeagus, ventral view, 61 – aedeagus, lateral view, 62 – apex of paramere with sensory peg setae, ventral view. 63–65. *Philonthus ventralis* (Gravenhorst, 1802). 63 – aedeagus, ventral view, 64 – aedeagus, lateral view, 65 – apex of paramere with sensory peg setae, ventral view. 66–68. *Philonthus xanthoraphis* Eppelsheim, 1895. 66 – aedeagus, ventral view, 67 – aedeagus, lateral view, 68 – apex of paramere with sensory peg setae, ventral view.

base of antennomere 2 paler, remaining antennomeres black, femora brown-yellow, tibiae slightly darker, tarsi brown, paler distally.

Head wider than long (ratio 23 : 21), very slightly narrowed anteriorly, posterior angles obtusely rounded, bearing two long and several short black bristles. Between eyes four punctures, lateral punctures slightly shifted anteriorly. Distance between medial punctures four times as large as distance between medial and lateral puncture. Eyes flat, slightly shorter than temples (ratio 8 : 9), posterior margin with one coarse puncture, anterior half of temples impunctate, posterior half with scattered punctures. Surface without microsculpture.

Antennae slender and long, reaching almost posterior margin of pronotum when reclined. Antennomeres 1–8 and 11 distinctly longer than wide, antennomeres 9–10 slightly longer than wide.

Scutellum highly convex, as long as wide, distinctly narrowed anteriorly. Anterior angles obtusely and posterior angles markedly rounded. Each dorsal row with five approximately equidistant punctures, distance between puncture five and posterior margin of pronotum as long as the length of antennomere 1. Each sublateral row with two punctures, distance between punctures very small, as long as the length of antennomere 10. Surface without microsculpture.

Scutellum finely and relatively sparsely punctured. Diameter of punctures slightly smaller than eye-facets, separated by one and half or two puncture diameters. Surface without microsculpture.

Elytra slightly wider than long (ratio 35.5 : 34), widened posteriorly. Punctuation coarser than that on scutellum, diameter of punctures larger than eye-facets, separated by one or one and half puncture diameters. Surface without microsculpture; setation blackish.

Legs. Metatibia longer than metatarsus (ratio 21 : 19), metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2–4 combined.

Abdomen wide, very gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation at base of all tergites finer and denser than that on elytra, diameter of punctures smaller than eye-facets, separated by puncture diameter or slightly larger, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus with simple paramere (Figs 60–62).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus uraeginthus* sp. nov. is similar to *P. xanthoraphis*, but differs by the darker and longer antennae, shorter eyes, sparser punctuation of abdomen and by the different shape of the aedeagus.

DISTRIBUTION. Zimbabwe.

ETYMOLOGY. The name of this species, a noun in apposition, is the Latin generic name of the African blue waxbill *Uraeginthus angolensis* (Linnaeus, 1758).

***Philonthus ventralis* (Gravenhorst, 1802)** (Figs 63–65)

Staphylinus ventralis Gravenhorst, 1802: 174.

Staphylinus antrax Gravenhorst, 1802: 175, synonymized by Nordmann (1837: 97).

Staphylinus immundus Gravenhorst, 1806: 66, synonymized by Erichson (1839: 468).

Staphylinus celer Gravenhorst, 1806: 66, synonymized by Nordmann (1837: 94).

Quedius picicollis Stephens, 1832: 224, synonymized by G. Waterhouse (1858: 25).

Bisnius simplex Stephens, 1833: 248, synonymized by G. Waterhouse (1858: 25).

Bisnius fulvipes Stephens, 1833: 249, synonymized by G. Waterhouse (1858: 25).

Bisnius rotundiceps Stephens, 1833: 248, synonymized by G. Waterhouse (1858: 25).

Philonthus proximus Wollaston, 1857: 189, synonymized by Wollaston (1867: 238).

Philonthus fortunatus Wollaston, 1865: 493, synonymized by Fauvel (1902: 110).

TYPE MATERIAL. Not studied.

ADDITIONAL MATERIAL STUDIED. **Ethiopia.** 1 spec. Bale 8 km W. of Dinshu, 0706 N. 3944 E, 3050m, xii.1971 (LHPC).

TYPE LOCALITY. “Lusitania”.

REDESCRIPTION. Body length 6.7mm, length of fore body (to end of elytra) 3.1 mm.

Head black, pronotum chestnut-coloured, scutellum and elytra dark brown, suture, posterior margin and elytral epipleura narrowly yellow-brown, abdomen dark brown, antennae brown, maxillary and labial palpi brown, femora yellow-brown, tibiae and tarsi darker.

Head quadrate, as long as wide, parallel-sided, posterior angles distinctive, bearing two long black bristles. Between eyes four coarse punctures arranged in a straight line, distance between medial punctures, four times as large as distance between medial and lateral puncture. Eyes as long as temples, posterior margin with two coarse punctures, temporal area with scattered punctures. Surface with distinctive microsculpture consisting of transverse waves.

Antennae short, reaching midlength of pronotum when reclined. Antennomere 1 as long as antennomeres 2–3 combined, twice longer than antennomere 11, antennomere 2 as long as antennomere 3, antennomere 4 slightly longer than wide, antennomeres 5–7 as long as wide, antennomeres 8–10 slightly wider than long.

Pronotum highly convex, slightly longer than wide (ratio 27 : 25), parallel-sided. Anterior angles bearing several variably long bristles, posterior margin markedly rounded. Several variably long bristles in anterior third of sides. Each dorsal row with five coarse punctures, punctures 2–4 equidistant, distance between punctures 1–2 and 4–5 larger than distance between previous punctures, each sublateral row with two punctures, arranged in a row parallel to the dorsal row and half way between it and side. Surface with microsculpture more distinctive than that on head.

Scutellum very densely and coarsely punctured, diameter of punctures larger than eye-facets, separated between punctures much smaller than puncture diameter.

Elytra wider than long (ratio 35 : 32), slightly widened posteriad. Punctuation coarse and relatively sparse. Diameter of punctures larger than that on scutellum, separated by one and half or two puncture diameters. Surface without microsculpture; setation testaceous.

Legs. Metatibia slightly longer than metatarsus (ratio 16 : 18), metatarsomere 1 slightly shorter than metatarsomere 5, as long as metatarsomeres 2–3 combined.

Abdomen wide, from visible tergite 3 slightly narrowed anteriorly and posteriorly. Punctuation at base of each tergite finer and denser than that on elytra, becoming finer and sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 not strongly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus, paramere furcate (Figs 63–65).

Female. Protarsomeres 1–4 not appreciably different from those of male.

DIFFERENTIAL DIAGNOSIS. *Philonthus ventralis* may be distinguished from the similar *P. treron* sp. nov. by the different colouring of elytra, sparsely punctuation of abdomen and by the different shape of the aedeagus.

DISTRIBUTION. Cosmopolitan (Herman 2001).

Philonthus xanthoraphis Eppelsheim, 1895 (Figs 66–68)

Philonthus xanthoraphis Eppelsheim, 1895: 205.

Philonthus marginellus Schubert, 1902: 406, synonymized by Scheerpeltz (1933: 1368).

Philonthus niziensis Cameron 1933: 217, synonymized by Tottenham (1962: 217).

Philonthus opaciventris Fauvel, 1907: 42, synonymized by Tottenham (1962: 217).

TYPE MATERIAL. Not studied.

ADDITIONAL MATERIAL STUDIED. **Kenya.** 1 ♀, Muguga 31.vii.1960, coll., D. H. Kistner (FMNH); 2 spec., Eastern Cape Fort Fordce NR, 32°40'S, 26°29'E, zebra+wildebeest dung, 1.xii.2009, J. Janák lgt (JJRC); **South Africa.** 1 spec., Cape Prov., Kysna, Diepwalle, 12.xii.1981, elephant dung, S. Peck (LHPC).

TYPE LOCALITY. "Ganale Gudda, Arussi Galla [Ethiopia]".

REDESCRIPTION. Body length 6.2 mm, length of fore body (from clypeus to end of elytra) 3.0 mm. Head black, pronotum and scutellum black-brown, elytra dark brown, suture narrowly red-brown, abdomen brown, posterior margin of all tergites narrowly red-brown. Maxillary, labial palpi and mandibles dark brown, antennomeres 1–2 brown-yellow, remaining antennomeres black-brown. Femora yellow-brown, tibiae black-brown, tarsi brown, paler distally.

Head rounded, slightly wider than long (ratio 28 : 23), posterior angles bearing one long black bristle. Between eyes four punctures, arranged in a straight line. Eyes flat, longer than temples (ratio 10 : 8), posterior margin bearing two bristles, temporal area with scattered punctures. Surface with very fine, irregular microsculpture.

Antennae slender and long, reaching posterior fifth of pronotum when reclined. Antennomeres 1–8 and 11 longer than wide, antennomeres 9–10 as long as wide. Antennomere 1 twice longer than antennomere 11 and as long as antennomeres 9–10 combined, antennomere 2 shorter than antennomere 3.

Pronotum slightly longer than wide (ratio 34 : 32), convex, parallel-sided, anterior angles conspicuously deflexed, vaguely 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 arranged in a row parallel to the dorsal row and half way between it and side. Surface with very fine microsculpture consisting of transverse waves.

Scutellum very densely and coarsely punctured, diameter of punctures as large as eye-facets, separated much smaller than puncture diameter; setation dark.

Elytra wider than long (ratio 41 : 39), very slightly widened posteriad. Punctuation dense and fine. Diameter of punctures slightly larger than that on scutellum, separated by one or one and half puncture diameters. Surface without microsculpture; setation brown.

Legs. Metatibia longer than metatarsus (ratio 22 : 19), metatarsomere 1 longer than metatarsomere 5, almost as long as metatarsomeres 2–4 combined.

Abdomen wide, very gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines densely punctate. Punctuation of whole tergites exceptionally finely and densely uniformly punctured. Diameter of punctures much smaller than eye-facets. Setation similar to that on elytra.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 distinctly smaller than preceding ones, heart-shaped. Aedeagus, paramere simple (Figs 66–68).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus xanthoraphis* is quite similar to *P. uraeginthus* sp. nov., but differs from the latter by the paler and shorter antennae, longer eyes, much denser punctuation of abdomen and by the different shape of the aedeagus.

DISTRIBUTION. Democratic Republic of the Congo, Ethiopia, Kenya, Somalia, South Africa (Herman 2001).

NOTE. About this species Tottenham 1962: 217 writes: I have seen the types of the three species mentioned in the above synonymy and am convinced as to their specific identity. Unfortunately the unique type of *P. xanthoraphis*, which is a male, has the aedeagus missing, and the unique type of *P. opaciventris* is a female.

Key to species of the *Philonthus discoideus* group

- 1 Each dorsal row of pronotum with four punctures 2
– Each dorsal row of pronotum with five punctures 5

2	Smaller species, body length 4.3 mm, antennae longer, reaching posterior fifth of pronotum when reclined.	<i>P. nairobiensis</i> Fauvel, 1907	
–	Larger species, body length 5.8–7.3 mm.		3
3	Eyes longer than temples (ratio 8 : 5), antennae red-yellow, pronotum red-brown.	<i>P. mivutanus</i> Tottenham, 1962	
–	Eyes as long as temples.		4
4	Smaller species, body length 5.8 mm, antennomere 1 yellow-brown, remaining antennomeres black-brown, elytra brown-yellow.	<i>P. stercorosus</i> Tottenham, 1962	
–	Larger species 6.9 – 7.3 mm, antennomeres 1–2 yellow, remaining antennomeres yellow-brown, elytra brown-red. ...	<i>P. uhligi</i> Hromádka, 2005	
5	Smaller species, body length 4.3 mm, antennae shorter, yellow-brown, reaching midlength of pronotum when reclined, elytra red-brown.	<i>P. senegalensis</i> Bernhauer, 1937	
–	Larger species, body length at least 5.2 mm.		6
6	Abdomen exceptionally finely and uniformly punctured, elytra dark brown, suture reddish.	<i>P. xanthoraphis</i> Eppelsheim, 1895	
–	Abdomen normally punctured, basal regions of tergites more closely punctured, than in their apical regions.		7
7	Antennae uniformly punctured.		8
–	Antennomeres 1 or 1–2 paler than remaining antennomeres.		10
8	Antennae and whole body black, antennae long, reaching posterior margin of pronotum when reclined.	<i>P. uraeginthus</i> sp. nov.	
–	Antennae brown.		9
9	Elytra uniformly brown, abdomen sparsely punctured.	<i>P. ventralis</i> (Gravenhorst, 1802)	
–	Elytra brown, suture and posterior margin and whole elytral epipleura yellow-brown, abdomen exceptionally finely and uniformly punctured.	<i>P. treron</i> sp. nov.	
10	Ventral side of antennomere 1 yellow, dorsal side and remaining antennomeres darker.		11
–	Antennomeres 1 or 1–2 uniformly paler.		12
11	Eyes longer than temples (ratio 9:5), elytra brown-red, slightly wider than long (ratio 23 : 21), paramere furcate, right branche longer than left branche (Fig. 37).	<i>P. neuter</i> Tottenham, 1962	
–	Eyes longer than temples (ratio 9 : 5), elytra brown-red, distinctly wider than long (ratio 37 : 30), paramere simple (Fig. 21).	<i>P. luenaensis</i> Lavasseur, 1962	
12	Antennomere 1 from yellow to brown-yellow.		13
–	Antennomeres 1–2 from yellow to brown-yellow.		18
13	Antennomere 1 brown-yellow, remaining antennomeres dark brown, antennae long, reaching posterior margin of pronotum when reclined, eyes longer than temples (ratio 10 : 7). Paramere simple, distance between apex of paramere and the apex of median lobe by half shorter than length of whole paramere.	<i>P. sylvisorex</i> sp. nov.	
–	Antennomere 1 yellow-brown.		14
14	Eyes longer than temples.		15
–	Eyes as long as temples.		16
15	Eyes distinctly longer than temples (ratio 9 : 6), antennae short, reaching midlength of pronotum when reclined.	<i>P. discoideus</i> (Gravenhorst, 1802)	
–	Eyes slightly longer than temples (ratio 6.5 : 5), antennae long , reaching posterior sixth of pronotum when reclined.	<i>P. negligens</i> Tottenham, 1962	
16	Head wider than long (ratio 19 : 15), elytra wider than long (ratio 28 : 25).	<i>P. curvabilis</i> Herman, 2001	
–	Head as long as wide.		17
17	Elytra as long as wide, antennae reaching posterior fourth of pronotum when reclined.	<i>P. marcescens</i> Tottenham, 1969	
–	Antennomere 11 yellow, antennae reaching midlength of pronotum when reclined, elytra wider than long (ratio 26 : 20).	<i>P. coiffaiti</i> Lavasseur, 1962	
18	Paramere simple.		19
–	Paramere furcate.		20
19	Eyes shorter than temples (ratio 6 : 7), antennae long, reaching posterior fifth of pronotum when reclined, elytra as long as wide, punctuation dense and fine, separated by one or one and half puncture diameter.	<i>P. flavocinctus</i> Motschulsky, 1858	
–	Eyes longer than temples (ratio 7 : 5.5), antennae reaching posterior fourth of pronotum when reclined, elytra wider than long (ratio 29 : 25), punctuation sparse, separated by two puncture diameters in transverse direction.	<i>P. lineolatus</i> Tottenham, 1962	
20	Paramere with left branche (dorsal face) considerable shorter that right branch (Fig. 49).	<i>P. tatarae</i> Scheerpeltz, 1951	

- Paramere with both branches to equal length. 21
- 21 Antennae long, reaching posterior margin of pronotum when reclined, paramere extremely short, its length equal to half distance between its apex and that of median lobe (Fig. 51). *P. testaceopictus* Bernhauer, 1915
- Antennae short, reaching posterior third of pronotum when reclined, paramere longer than distance between its apex and that of the median lobe (Fig. 13). *P. hyperolius* sp. nov.

A c k n o w l e d g e m e n t s

I would like to thank to all colleagues mentioned in the Material and methods chapter for the loan of material under their care. I am obliged to Jaroslav Boháč (České Budějovice, Czech Republic) for his help with preparing of this manuscript.

R E F E R E N C E S

- BERNHAEUER M. 1915: Neue Staphyliniden des tropischen Afrika. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien* **65**: 287–321.
- BERNHAEUER M. 1937: Beitrag zur afrikanischen Staphylinidenfauna. *The Annals and Magazine of Natural History* (Series 10) **20**: 289–315.
- BLACKWELDER R. E. 1943: Monograph of the West Indian Beetles of the family Staphylinidae. *United States National Museum Bulletin* **182**: i–vii + 1–658.
- CAMERON M. 1933: New species of Staphylinidae (Col.) from the Belgian Congo. *Bulletin et Annales de la Société Entomologique de Belgique* **73**: 35–53.
- EPPELSHEIM E. 1895: Beitrag zur Staphylinidenfauna West-Afrika's. Zweites Stück. *Deutsche Entomologische Zeitschrift* **1895**: 385–408.
- ERICHSON W. F. 1834: *Die Käfer der Mark Brandenburg*. 1(2). Berlin: F. H. Morin, 740 pp.
- FAUVEL A. 1891: Voyage de M. E. Simon au Venezuela (Décembre 1887–Avril 1888). 11e Mémoire. *Revue d'Entomologie* **10**: 87–127.
- FAUVEL A. 1902: Catalogue des Staphylinides de la Barbarie de la Basse-Égypte et des Iles Açores, Madères, Salvages et Canaries. *Revue d'Entomologie* **21**: 45–189.
- FAUVEL A. 1907: Voyage de M. CH. Alluaud dans l'Afrique Orientale, Staphylinidae. *Revue d'Entomologie* **26**: 10–70.
- GERHARDT J. 1910: Neuheiten der schlesischen Käferfauna aus dem Jahre 1909. *Deutsche Entomologische Zeitschrift* **1910**: 554–557.
- GERMAR E. F. 1827: *Fauna insectotum Europae*. 13. Halae: Kuemmeli, 25 pp.
- GRAVENHORST J. L. C. 1802: *Coleoptera microptera Brunsvicensia nec non exoticorum quotquot exstant in collectionibus entomologorum brunsvicensium in genera familias et species distribuit*. Brunsvigae: Carolus Richard, 200 pp.
- GRAVENHORST J. L. C. 1806: *Monographia Coleopterum Micropteriorum*. Gottingae: Henricus Dieterich, 248 pp.
- HERMAN L. H. 2001: Catalog of the Staphylinidae (Insecta, Coleoptera); 1758 to the end of the second millennium. V. Staphylininae group (Part 2); Diocchini, Maorothini, Othiini, Platyprosopini, Staphylinini, Amblyopinina, Anisolinina, Hyptiomina, Philonthina). *Bulletin of the American Museum of the Natural History* **265**: 2441–3020.
- HROMÁDKA L. 2005: New species of the Genus Philonthus Stephens, 1829 from Afrotropical region. *Coleoptera* **9**: 109–116.
- HROMÁDKA L. 2008a: A revision of the Afrotropical species of Philonthus (s. str.) turbidus species group (Coleoptera: Staphylinidae: Philonthina). *Klapalekiana* **44**: 207–232.
- HROMÁDKA L. 2008b: Revision of Afrotropical species of the Philonthus peripateticus species group (Coleoptera: Staphylinidae: Philonthina). *Acta Entomologica Musei Nationalis Pragae* **48**: 51–65.
- HROMÁDKA L. 2008c: Revision of Afrotropical species of the Philonthus abyssinus species group (Coleoptera: Staphylinidae: Philonthina). *Acta Entomologica Musei Nationali Pragae* **48**: 37–50.
- HROMÁDKA L. 2009a: Revision of the Afrotropical species of the Philonthus caffer species group (Coleoptera: Staphylinidae: Philonthina). *Acta Entomologica Musei Nationalis Pragae* **49**: 161–190.
- HROMÁDKA L. 2009b: Revision of the Afrotropical species of the genus Mentophilonthus (Coleoptera: Staphylinidae: Philonthina). *Acta Entomologica Musei Nationalis Pragae* **49**: 119–160.
- HROMÁDKA L. 2009c: Revision of the Afrotropical species of the Philonthus nigriceps species group (Coleoptera: Staphylinidae: Philonthina). *Studies and Reports of District Museum Prague-East, Taxonomical Series* **5**: 115–126.
- HROMÁDKA L. 2009d: Revision of Afrotropical species of the Philonthus aemulus species group (Coleoptera: Staphylinidae: Philonthina). *Acta Societatis Zoologicae Bohemicae* **73**: 27–31.
- HROMÁDKA L. 2009e: Revision of Afrotropical species of the Philonthus marginipennis species group (Coleoptera: Staphylinidae: Philonthina). *Acta Societatis Zoologicae Bohemicae* **73**: 53–64.
- HROMÁDKA L. 2010a: A revision of the Afrotropical species of the Philonthus arrowianus species group (Coleoptera: Staphylinidae: Philonthina). *Acta Entomologica Musei Nationalis Pragae* **50**: 131–144.

- HROMÁDKA L. 2010b: A revision the Afrotropical species of the *Philonthus* (*Philonthus*) *bicoloripennis* species group (Coleoptera: Staphylinidae: Philonthina). *Klapalekiana* **46**: 3–68.
- HROMÁDKA L. 2010c: Revision of Afrotropical species of the *Philonthus quisquiliarius* species group (Coleoptera: Staphylinidae: Philonthina). *Studies and Reports, Taxonomical Series* **6**: 95–113.
- HROMÁDKA L. 2010d: Revision of the Afrotropical species of the genus *Pseudohesperus*, with taxonomic notes on other Afrotropical species of the subtribe Philonthina (Coleoptera: Staphylinidae). *Acta Entomologica Musei Nationalis Pragae* **50**: 495–516.
- KRAATZ G. 1859: Die Staphyliniden-Fauna von Ostindien, insbesondere der Insel Ceylon. *Archiv für Naturgeschichte* **25**(1): 1–196.
- LACORDAIRE J. T. 1835: In: BOISDUVAL J. & LACORDAIRE T. (eds.): *Faune entomologique des environs de Paris; ou species général des insectes qui se trouvent dans un rayon à vingt lieues aux alentours de Paris. Vol. I.* Paris: Méquignon-Marvis, 696 pp.
- LEVASSEUR L. 1962: Contribution à la connaissance des Coléoptères Staphylinides de l'Afrique Noire (1^{me} note). *Bulletin de la Société Entomologique de France* **66** [1961]: 233–243.
- MARSHAM T. 1802: *Coleoptera Britannica, sistens Insecta Coleoptera Britanniae indigena, secundum Methodum Linnaeanam deposita. In two volumes.* xxxi + 547 pp.
- MELSHEIMER F. E. 1844: Descriptions of new species of Coleoptera of the United States. *Proceedings of the Academy of Natural Science of Philadelphia* **2**: 26–43.
- MOTSCHULSKY V. 1858: Énumération des nouvelles espèces de Coléoptères rapportés de ses voyages. *Bulletin de la Société Impériale des Naturalistes de Moscou* **31**: 634–670.
- NORDMANN A. 1837: Symbole ad monographian staphylinorum. *Ex Academiae Caesareae Scientiarum 4.* Metropoli: Academiae Caesareae Scientiarum, 167 pp.
- SCHERPELTZ O. 1933: Staphylinidae VII. In: SCHENKLING S. (ed.): *Coleopterorum Catalogus 6(129)*. Berlin: Junk, pp. 989–1500.
- SCHERPELTZ O. 1951: A new staphylinid beetle (Col. Staphylinidae) found in the nest of *Tatera brandtii* (Rodentia, Muridae). *Journal of the Entomological Society of South Africa* **14**: 27–29.
- SCHERPELTZ O. 1974: Coleoptera aus Nordostafrika, Staphylinidae. *Acta Entomologica Fennica* **31**: 3–49.
- SCHUBERT K. 1902: Neue Staphyliniden aus Natal. *Deutsche Entomologische Zeitschrift* **1902**: 405–409.
- SMETANA A. 1995: Rove Beetles of the subtribe Philonthina of America north of Mexico (Coleoptera, Staphylinidae). Classification; phylogeny and taxonomic revision. *Memoirs on Entomology International* **3**: 1–946.
- STEPHENS J. F. 1832: *Illustrations of British Entomology; or, A Synopsis of Indigenous Insects, Containing the Generic and Specific Distinctions; with an Account of Their Metamorphoses, Times of Appearance, Localities, Food, and Economy, as Far as Practicable. Mandibulata. 5.* 1–240. London: Baldwin and Cradock, 240 pp.
- STEPHENS J. F. 1833: *Illustrations of British Entomology; or, A Synopsis of Indigenous Insects, Containing the Generic and Specific Distinctions; with an Account of Their Metamorphoses, Times of Appearance, Localities, Food, and Economy, as Far as Practicable. Mandibulata. 5.* London: Baldwin and Cradock, pp. 241–304.
- TOTTENHAM C. E. 1962: Mission zoologique de I.R.S.A.C en Afrique orientale (P. Basilewsky et N. Leleup 1957). LXXXVI, Coleoptera Staphylinidae Staphylininae. *Annales du Musée de L'Afrique Centrale, Tervuren, Science Zoologiques* (8°) **110**: 132.
- WATERHOUSE G. R. 1858: *Catalog of British Coleoptera*. London: Taylor and Francis, iv + 117 pp.
- WOLLASTON V. 1857: *Catalogue of the Coleopterous Insects of Madeira in the Collection of the British Museum*. London: British Museum, 234 pp.
- WOLLASTON T. V. 1865: *Coleoptera Atlantidium, Being an Enumeration of the Coleopterous Insects of the Madeira, Salvages, and Canaries*. London: John van Voorst, xlvii + 285 + 140 [appendix] pp.
- WOLLASTON T. V. 1867: *Coleoptera Hesperidum, Being an Enumeration of the Coleopterous Insects of the Cape Verde Archipelago*. London: John van Voorst, xxxix+285 pp.