

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

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Abstract. The *Philonthus caffer* species group of the genus *Philonthus* Stephens, 1829 is revised. Sixteen species are recognized, three species are described as new: *Philonthus aonyx* sp. nov. (Ethiopia), *Philonthus bucorvus* sp. nov. (Malawi), and *P. falco* sp. nov. (Madagascar). The remaining 13 species are redescribed: *P. aminius* Tottenham, 1955, *P. biguttulus* Fauvel, 1907, *P. caffer* Boheman, 1848, *P. cliens* Eppelsheim, 1890, *P. combustus* Fauvel, 1907, *P. gabonensis* Levasseur, 1966, *P. iridicollis* Bernhauer, 1932, *P. kenyanus* Bernhauer, 1939, *P. leptophilus* Hromádka, 2006, *P. limbipennis* Fauvel, 1905, *P. maridadus* Tottenham, 1962, *P. sequens* Bernhauer & Schubert, 1914, and *P. tomicus* Tottenham, 1962. The lectotype of *P. limbipennis* Fauvel, 1905 is designated. An identification key to all species of the species group is provided, and male genitalia and significant morphological characters are illustrated.

Key words. Coleoptera, Staphylinidae, Philonthina, *Philonthus caffer* species group, taxonomy, new species, key, Afrotropical Region

Introduction

The genus *Philonthus* Stephens, 1829 is represented in Afrotropical Region by approximately 300 known species divided in six species groups defined by TOTTENHAM (1949) and HROMÁDKA (2008a). The *P. abyssinus* and *P. peripateticus* species groups were recently revised by HROMÁDKA (2008a,b). The present study follows these previous studies by providing the revision of the species belonging to the *P. caffer* species group. Until present, thirteen species have been described within this species group. All species are distributed in the Afrotropical Region and in Madagascar, with the only species, *P. cliens* Eppelsheim, 1890, reaching the Oriental Region (India). Three new species from Ethiopia, Malawi and Madagascar are described within this paper.

Materials and methods

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

ABFC	Arnaldo Bordini collection, Firenze, Italy;
BMNH	The Natural History Museum, London, United Kingdom (Martin Brendell and Max Barclay);
FMNH	Field Museum of Natural History, Chicago, USA (James Boone);
JJRC	Jiří Janák collection, Rtyně nad Bílinou, Czech Republic;
LHPC	Lubomír Hromádka collection, Praha, Czech Republic;
MNHN	Muséum national d'Histoire Naturelle, Paris, France (Thierry Deuve);
MRAC	Musée Royal de l'Afrique Centrale, Tervuren, Belgium (Marc de Meyer);
MSBC	Michael Schülke collection, Berlin, Germany;
MZLU	Museum of Zoology Lund University, Lund, Sweden (Roy Danielsson);
NHMW	Naturhistorisches Museum, Wien, Austria (Harald Schillhammer);
NMPC	National Museum, Praha, Czech Republic (Jiří Hájek);
ZMHB	Museum der Alexander Humboldt Universität, Berlin, Germany (Manfred Uhlig).

A double slash (//) is used to divide separate labels of type specimens. All measurements were taken in beetles with a stretched abdomen. All ratios mentioned in the descriptions are dimensionless but can be converted to lengths as 20 units = 1 mm. When indicating the relative lengths of antennal and tarsal segments, equal lengths of subsequent segments are abbreviated (e.g., 2–4 = 5 means that each of segments 2, 3 and 4 is of the same length of 5 units).

Philonthus caffer species group

Representatives of the *Philonthus caffer* species group are characterized by the combination of the following characters:

Body small to middle-sized (6.2–10.2 mm). Head black, iridescent in some species; temporal area with variable number of punctures; four coarse punctures situated between eyes; surface of head without microsculpture or with very fine, irregular microsculpture here and there. Antennae slender and very long, mostly reaching posterior margin of pronotum when reclined. Pronotum from black to brown, highly convex, slightly narrowed anteriorly, each dorsal row with 5 (or rarely 4) punctures, each sublateral row with 2 punctures; surface of pronotum mostly with microsculpture. Scutellum variably punctate. Elytra slightly widened posteriorly, uniformly red or black, or black with red patches posteriorly, sometimes only posterior margin narrowly red. Abdomen black to brown, sometimes with violet-green or blue-greenish metallic reflection; first three visible tergites with two basal lines, elevated area between basal lines variably punctate or impunctate. Protarsomeres 1–3 of male dilated, sub-bilobed, each covered with modified pale setae ventrally. Protarsomeres 1–3 of female much less dilated than in male. Aedeagus narrow and more or less pointed at apex in most species, paramere nearly, or quite, as broad as median lobe in its apical region. In two species, *P. biguttulus* (Figs. 8–13) and *P. tomicus* (Figs. 62–63), paramere much narrower than median lobe, being very broad at apex.

The following species are included in the group:

<i>Philonthus aminius</i> Tottenham, 1955	Kenya
<i>Philonthus aonyx</i> sp. nov.	Ethiopia

<i>Philonthus biguttulus</i> Fauvel, 1907	Angola, Côte d'Ivoire, Ethiopia, Kenya, Rwanda, Sierra Leone
<i>Philonthus bucorvus</i> sp. nov.	Malawi
<i>Philonthus caffer</i> Boheman, 1848	Botswana, Cameroon, Ethiopia, Kenya, Lesotho, Namibia, Republic of South Africa
<i>Philonthus cliens</i> Eppelsheim, 1890	India, Nepal, Botswana, Nigeria, Senegal, 'Tanganyika'
<i>Philonthus combustus</i> Fauvel, 1907	Angola, Democratic Republic of the Congo, Sierra Leone, Zambia
<i>Philonthus falco</i> sp. nov.	Botswana, Madagascar, Zambia, Zimbabwe
<i>Philonthus gabonensis</i> Levasseur, 1966	Gabon, Central African Republic, Democratic Republic of the Congo
<i>Philonthus iridicollis</i> Bernhauer, 1932	Democratic Republic of the Congo, Ethiopia, Zimbabwe
<i>Philonthus kenyanus</i> Bernhauer, 1939	Kenya, Chad
<i>Philonthus leptophilus</i> Hromádka, 2006	Sierra Leone
<i>Philonthus limbipennis</i> Fauvel, 1905	Madagascar
<i>Philonthus maridadus</i> Tottenham, 1962	Kenya, 'Tanganyika', Tanzania
<i>Philonthus sequens</i> Bernhauer & Schubert, 1914	Ethiopia, Kenya, ?Republic of South Africa
<i>Philonthus tomicus</i> Tottenham, 1962	Cameroon, Senegal

Philonthus aminius Tottenham, 1955

(Figs. 1–2)

Philonthus aminius Tottenham, 1955: 173.

Type locality. Kenya: Muguga.

Type material. HOLOTYPE: ♂, 'Muguga, i.1953, V. R. Eastop // *Philonthus aminius*, Tottenham, TYPE // C.E. Tottenham collection, B.M. 1974-587 [ochre oblong label, handwritten]' (BMNH).

Redescription. Body length 8.8 mm, length of fore body (to end of elytra) 4.1 mm.

Colouration. Head, pronotum, elytra and abdomen black, maxillary and labial palpi and mandibles brown, maxillary palpomere 3 somewhat paler, antennae black, antennomere 1 and base of antennomere 2 black-brown, all femora and entire protarsomeres brown-yellow, tibiae dark brown, meso- and metatarsomeres dark brown, slightly paler distally.

Head quadrate, slightly wider than long (ratio 24 : 22). Posterior angles of head slightly rounded, each with one long black bristle. Eyes flat, somewhat longer than temples (ratio 10.0 : 8.5). Distance between medial interocular punctures about 4 times as long as distance between medial and lateral interocular punctures. Temporal area each with numerous punctures of variable size. Dorsal surface with very fine microsculpture here and there.

Antennae long, reaching posterior margin of pronotum when reclined. Antennomeres 1–8 and 11 longer than wide, antennomeres 9–10 as long as wide. Relative length of antennomeres: 1 = 7; 2 = 5; 3 = 6; 4–8 = 4; 9–10 = 3.5; 11 = 5.

Pronotum vaguely longer than wide (ratio 33 : 30), parallel-sided, anterior angles almost rectangular, bluntly rounded, posterior angles obtusely rounded. Each dorsal row with 5

coarse punctures, distances between punctures variable. Each sublateral row with 2 very fine punctures, puncture 2 slightly shifted to lateral margin. Surface without microsculpture.

Entire scutellum very densely and coarsely punctured. Punctures somewhat larger than those on elytra, separated in transverse direction by distance much smaller than puncture diameter.

Elytra combined wider than long (ratio 38 : 34), very slightly widened posteriad. Anterior angles with one long black bristle. Punctuation somewhat sparser than that on scutellum, punctures somewhat larger than eye-facets. Surface between punctures without microsculpture; setation greyish.

Legs. Metatibia somewhat longer than metatarsus (ratio 27 : 25). Metatarsomere 1 as long as metatarsomere 5, metatarsomere 2 somewhat longer than metatarsomere 3. Relative length of metatarsomeres: 1 = 7; 2 = 4.5; 3 = 4; 4 = 3.5; 5 = 7.

Abdomen narrowing posteriad. First three visible abdominal tergites with two basal lines, elevated area between basal lines densely punctate. Punctuation of all visible tergites very fine and dense. Punctures smaller than eye-facets, separated by puncture diameter in transverse direction, punctures of raindrop shape, contiguous here and there. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 markedly dilated, sub-bilobed, covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Male sternite IX (Fig. 2), aedeagus (Fig. 1).

Female. Unknown.

Differential diagnosis. This species is very similar to *P. leptophilus*, from which it differs by longer eyes and denser punctuation of the scutellum and abdomen. The species differs from all species of *P. caffer* species group by the shape of the aedeagus.

Bionomics. Unknown.

Distribution. Kenya.

Philonthus aonyx sp. nov.

(Figs. 3–7)

Type locality. Ethiopia, Bahr-Dar.

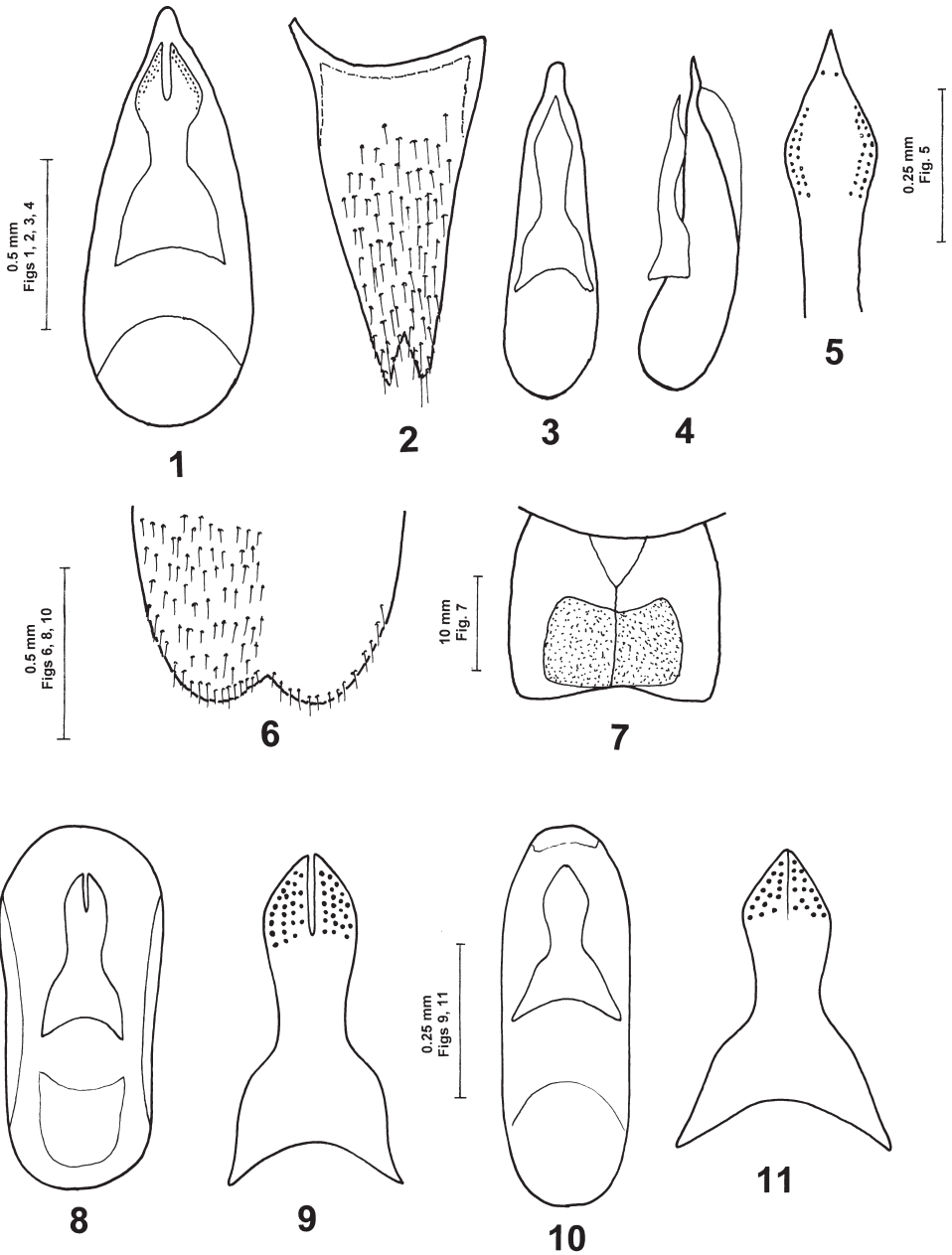
Type material. HOLOTYPE: ♂, 'Ethiopia, Bahr-Dar, 4.vi.1967, P. Štys leg., // HOLOTYPE, *Philonthus aonyx* sp. nov. Hromádka det.2008 [red oblong printed label]' (NMPC). PARATYPES: 1 ♂ 1 ♀, same label data as in holotype [both specimens with red oblong printed type-labels] (LHPC).

Additional material examined. ETHIOPIA: 5 spec., Ethiopia, Arsi, Zasela, 7.xii.1988, 2400m, cow dung, leg. S. Persson (LHPC, MZLU).

Description. Body length 9.9–10.2 mm, length of fore body (to end of elytra) 4.6–5.0 mm.

Colouration. Head black, antennal sockets and clypeus along anterior margin narrowly yellow-brown, mandibles and pronotum black, maxillary and labial palpi brown-yellow, antennae dark brown, scutellum black, sides in anterior half very narrowly red, elytra black, each with red spot (Fig. 7), abdomen black with violet-green reflex, femora yellow-brown, tibiae and tarsi black-brown.

Head rounded quadrangular, wider than long (ratio 35 : 25), parallel-sided. Posterior angles obtusely rounded, each with several short bristles. Eyes flat, conspicuously shorter than temples (ratio 10 : 13). Punctures between eyes arranged in straight line, distance between



Figs. 1–11. 1–2 – *Philonthus aminius* Tottenham, 1955; 3–7 – *P. aonyx* sp. nov.; 8–11 – *P. biguttulus* Fauvel, 1907 (8–9: Angola; 10–11: Ethiopia). 1, 3, 8, 10 – aedeagus, ventral view; 2 – male sternite VIII, ventral view; 4 – aedeagus, lateral view; 5 – apex of paramere with sensory peg setae, ventral view; 6 – apical portion of male sternite VIII, ventral view; 7 – elytra; 9, 11 – paramere with sensory peg setae, ventral view.

medial interocular punctures about 4 times as long as distance between medial and lateral interocular punctures. Temporal area and area along posterior margin of head with many punctures of variable size. Dorsal surface without microsculpture.

Antennae reaching posterior third of pronotum when reclined. Antennomere 1 somewhat shorter than antennomeres 2–3 combined, antennomere 11 as long as antennomere 2. Relative length of antennomeres: 1 = 9; 2 = 5; 3 = 6; 4–7 = 4.5; 8–10 = 4; 11 = 5.

Pronotum highly convex, slightly transverse (ratio 42 : 40), distinctly narrowed anteriorly. Anterior angles bluntly rounded, with several short bristles, posterior angles markedly rounded. Each dorsal row with 4 equidistant punctures. Each sublateral row with 2 punctures, puncture 2 distinctly shifted to lateral margin. Surface without microsculpture.

Entire scutellum finely and sparsely punctate, punctures smaller than eye-facets, separated by 2 puncture diameters in transverse direction. Setation longer, black.

Elytra combined (Fig. 7) distinctly wider than long (ratio 50 : 42), parallel-sided. Punctuation very fine and sparse, punctures somewhat larger than those on scutellum, separated by 2 puncture diameters in transverse direction; setation brown-yellow.

Legs. Metatibia somewhat shorter than metatarsus (ratio 27 : 30). Metatarsomere 1 as long as metatarsomeres 4–5 combined. Relative length of metatarsomeres: 1 = 10; 2 = 4.4; 3 = 4; 4 = 3.5; 5 = 6.5.

Abdomen wide, punctuation of tergites finer and denser than that on elytra, becoming sparser and finer towards posterior margin of each tergite. Elevated area between two basal lines on first three visible tergites relatively densely punctate. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 dilated and sub-bilobed, densely covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Sternite VIII (Fig. 6), aedeagus (Figs. 3–5).

Female. Unknown.

Differential diagnosis. The new species is similar to *P. iridicollis* but it differs by the red spot on each elytron, by the yellow-brown femora and black-brown tibiae and tarsi. It differs from *P. gabonensis* by the red spot on each elytron, the wider head, the differently coloured antennomere 1 and by the coarser punctuation of the abdomen. It differs from both above species by the shape of the aedeagus.

Etymology. The name of this species, a noun in apposition, is the Latin generic name of the African otter *Aonyx capensis* (Schinz, 1821).

Bionomics. Unknown.

Distribution. Ethiopia.

Philonthus biguttulus Fauvel, 1907

(Figs. 8–13)

Philonthus biguttulus Fauvel, 1907: 44.

Type locality. Abyssinie, Escarpment.

Type material. Not studied.

Additional material examined. ANGOLA: 1 ♂, 'Rives du lac Calundo lumiere, Aug. 1.1955, A. de Barros Machado, coll. Mus. Tervuren // *Philonthus biguttulus* Fauv. det. C. E. Tottenham i.1961' (MRAC); 1 ♀, 'Marco de Canavezes

(distr. Benguela) iii. 1956, E. Luna de Carvalho // *Philonthus biguttulus* Fauv. det. C. E. Tottenham, ii. 1961' (MRAC); **CÔTE d'IVOIRE**: 1 ♂, 'Komoe NP, 27.iv.1998, lux, 3°48'48"W/8°44'54"N' (LHPC); **ETHIOPIA**: 1 ♂, 'Bahr-Dar, 4.vi.1967, P. Štys leg.' (LHPC), **SIERRA LEONE**: 62 spec., Makeni, 12°03'W, 8°53'N, 27.xi.1993, loc., 9, light trap 18-21, Lund University Sierra Leone Expedition 1993, leg., L. Cederholm – R. Danielsson (MYLU, LHPC).

Redescription. Body length 7.8–8.0 mm, length of fore body (to end of elytra) 3.7–3.9 mm.

Colouration. Head, pronotum, scutellum, elytra and abdomen black, only posterior fourth of elytra red, maxillary and labial palpi, antennomere 1 and base of antennomere 2 brown-yellow, remaining antennomeres black-brown, legs yellow-brown.

Head longer than wide (ratio 24 : 21), posterior angles obtusely rounded, with one long, black bristle. Eyes slightly projecting, vaguely shorter than temples (ratio 9 : 10.5). Distance between medial interocular punctures about 4 times as long as distance between medial and lateral interocular punctures. Lateral interocular punctures slightly shifted anteriorly. Temporal area with many punctures of variable size. Surface without microsculpture.

Antennae reaching posterior fourth of pronotum when reclined. Antennomere 1 somewhat longer than antennomere 11, antennomere 2 shorter than antennomere 3. Relative length of antennomeres: 1 = 6; 2 = 4; 3 = 5; 4–10 = 3; 11 = 5.

Pronotum highly convex, distinctly longer than wide (ratio 30 : 24), parallel-sided. Anterior angles and lateral margins each with several short bristles. Posterior angles markedly rounded. Each dorsal row with 5 punctures, punctures 1–4 equidistant, interval between punctures 4 and 5 about 1.5 times as large as distance between punctures 1 and 2. Each sublateral row with 2 punctures, puncture 1 situated behind level of punctures 2–3 of dorsal rows, puncture 2 distinctly shifted laterad. Surface without microsculpture.

Scutellum very densely and coarsely punctate, punctures somewhat larger than eye-facets, distance between punctures much smaller than their diameter.

Elytra combined as long as wide, very slightly widened posteriorly. Punctuation similar to that on scutellum. Setation fine, brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 26 : 21). Metatarsomere 1 somewhat longer than metatarsomeres 2–3 combined, metatarsomere 5 as long as metatarsomeres 3–4 combined. Relative length of metatarsomeres: 1 = 7; 2 = 3.5; 3 = 3; 4 = 3; 5 = 6.

Abdomen parallel-sided, slightly narrowed from tergite V posteriorly. Elevated area between two basal lines on first four visible tergites almost impunctate. Entire visible tergites very densely and coarsely punctate, most punctures of raindrop shape. Distance between punctures much smaller than their diameters.

Male. Protarsomeres 1–3 strongly dilated, each densely covered with modified pale setae ventrally, protarsomere 4 narrow and small. Aedeagus (Figs. 8–13).

Female. Unknown.

Differential diagnosis. *Philonthus biguttulus* may be distinguished from the habitually similar *P. tomicus* by longer eyes, shorter antennae, elytra without red spot, yellow-brown legs and by the different shape of the aedeagus.

Bionomics. Unknown.

Distribution. Angola, Côte d'Ivoire, Ethiopia, Sierra Leone (this paper); Kenya, Rwanda (HERMAN 2001).

***Philonthus bucorvus* sp. nov.**

(Figs. 14–16)

Type locality. Malawi, Mulanoë Mts. env.**Type material.** HOLOTYPE: ♂, 'Malawi S, Mulanoë Mts. Env., 22.vii.2001, J. Bezděk lgt., // HOLOTYPUS, *Philonthus bucorvus* sp. nov. Hromádka det. 2008 [red oblong printed label]' (NMPC). PARATYPES: 7 ♀♀, same label data as holotype [red oblong printed labels] (LHPC).**Description.** Body length 7.4–7.6 mm, length of fore body (to end of elytra) 3.8–4.0 mm.

Colouration. Head and scutellum black, antennal sockets and clypeus along anterior margin narrowly yellow-brown, pronotum and abdomen black, elytra red, shoulders, around scutellum and suture very narrowly black, maxillary and labial palpi and legs yellow-brown, antennomere 1 and base of antennomere 2 yellow-brown, remaining antennomeres black.

Head rounded quadrangular, almost as long as wide. Eyes flat, as long as temples. Posterior angles distinctly rounded. Four coarse punctures between eyes, distance between medial interocular punctures about 4 times as large as distance between medial and lateral interocular puncture. Medial punctures distinctly shifted anteriorly. Posterior angle of each eye with three small punctures. Temporal area each with numerous punctures of unequal size. Dorsal surface with very fine irregular microsculpture.

Antennae long and slender, reaching posterior fourth of pronotum when reclined. All antennomeres longer than wide. Relative length of antennomeres: 1 = 11; 2 = 7.5; 3 = 7; 4–8 = 5; 9–10 = 4.5; 11 = 7.

Pronotum highly convex, distinctly longer than wide (ratio 43 : 38), slightly narrowed anteriorly. Anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with 5 coarse punctures, punctures 2–4 almost equidistant, distance between punctures 1–2 and 4–5 somewhat larger than distance between punctures 2–4. Each sublateral row with 2 fine punctures. Surface with very fine irregular microsculpture.

Scutellum very densely and finely punctate. Punctures somewhat larger than eye-facets. Distance between punctures much smaller than their diameter.

Elytra combined wider than long (ratio 50 : 46), very slightly widened posteriorly. Punctuation fine and dense, punctures similar to that on scutellum, separated by 1.5 puncture diameters in transverse direction. Dorsal surface without microsculpture; setation grey.

Legs. Metatibia longer than metatarsus (ratio 34 : 32). Metatarsomere 1 as long as metatarsomere 5, metatarsomere 2 somewhat shorter than metatarsomeres 3–4 combined. Relative length of metatarsomeres: 1 = 10; 2 = 6; 3 = 4; 4 = 3; 5 = 10.

Abdomen wide, parallel-sided. First three visible tergites with two basal lines, elevated area between basal lines with scattered fine punctures. Punctuation of tergites very fine and dense. Punctures much smaller than those on elytra, distance between punctures much smaller than their diameter, punctuation becoming sparser toward posterior margin of each tergite. Surface without microsculpture; setation similar as on elytra.

Male. Protarsomeres 1–3 strongly dilated and sub-bilobed, covered with modified pale setae ventrally. Protarsomere 4 distinctly narrower than preceding ones. Sternite IX (Fig. 16), aedeagus (Figs. 14–15).

Female. Protarsomeres 1–3 much less dilated than those in male, protarsomere 4 small, all protarsomeres bearing modified pale setae ventrally.

Differential diagnosis. *Philonthus bucorvus* sp. nov. is quite similar to *P. maridadus* in all characters, but differs as follows: antennae shorter, elytra red, only shoulders and area around scutellum narrowly black, aedeagus of different shape.

Etymology. The name of this species, a noun in apposition, is the Latin generic name of the African ground hornbill *Bucorvus abyssinicus* (Boddaert, 1783).

Bionomics. Unknown.

Distribution. Malawi.

Philonthus caffer Boheman, 1848

(Figs. 17–20)

Philonthus caffer Boheman, 1848: 280.

Philonthus caffer Sachse, 1852: 142 (preoccupied).

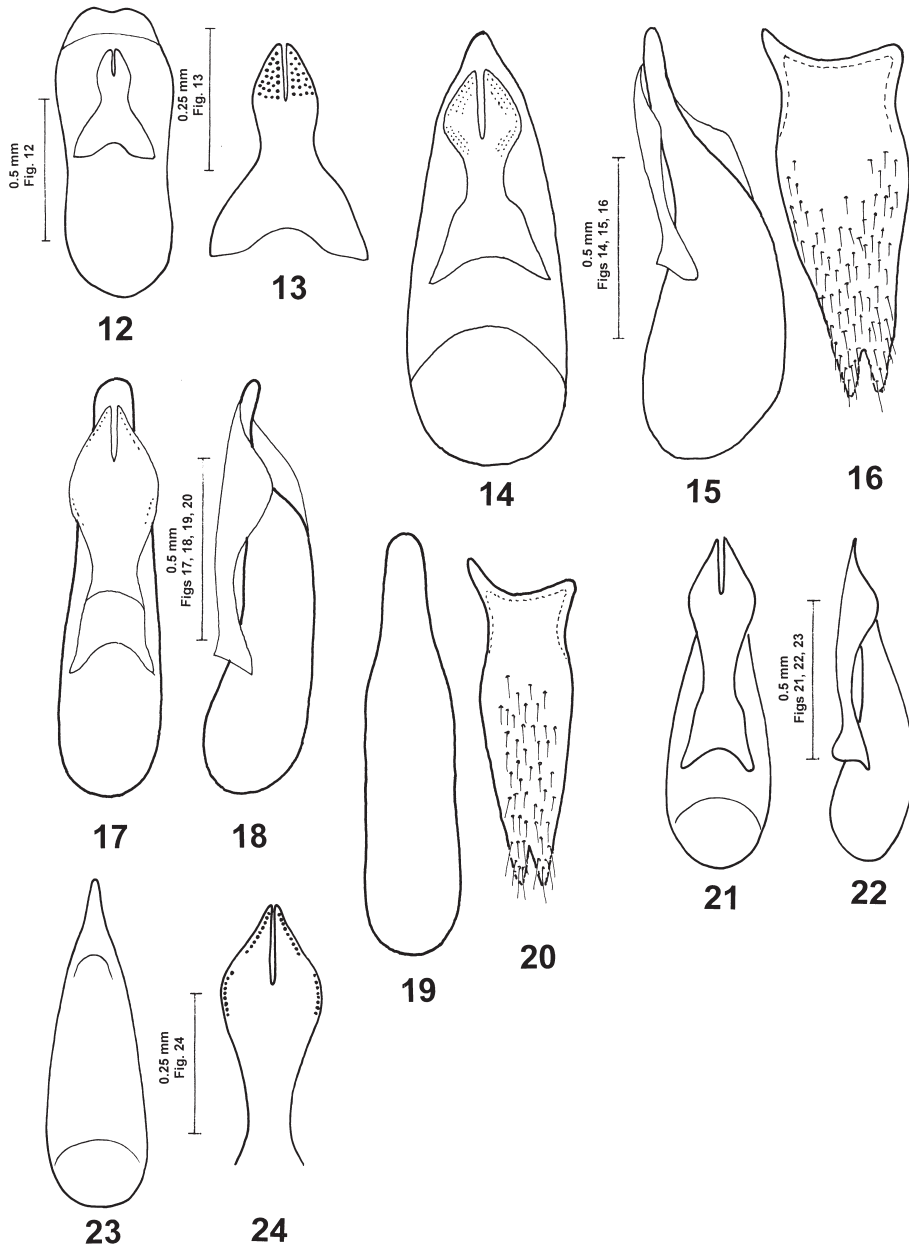
Philonthus capensis Gemminger & Harold, 1868: 586 (replacement name for *P. caffer* Sachse).

Type locality. Caffraria orientalis.

Type material. not studied.

Additional material studied. **BOTSWANA:** 5 spec., '6 km, E Kalkfontein, 6.iii.1993, 20°04'24"/2050'05"E, lux, leg. M. Uhlig' (ZMHB); 2 spec., 'Nxai Pan N. P. 5.iv.1998, 20°13'S 24°38'E, J. + M. Deckert' (ZMHB); 6 spec., 'Tsau Umg., 925m, 19°53'00"S/22°14'15", 26.x.2006, Licht Fang [= at light], leg. U. Heinig' (LHPC, MSBC). **ETHIOPIA:** 1 spec., 'S. W. A. Etosha Park, Okaukuejo, 25.xii.1974, zebra dung, leg. Endrödy-Younga' (LHPC); 1 spec., 'S Yavello Sidano, 29.v.1998, leg. Werner' (ZMHB). **KENYA:** 2 spec., 'Eastern Nwingi env., 4.xii.1997, leg. M. Snížek' (ZMHB). **NAMIBIA:** 24 spec., 'Grootfontein: Askavolt-Farm, 20km E Otavi, 19°40'S/17°33'E, 18.ii.1992, Exp. ZMB, 1992, leg. M. Uhlig' (ZMHB); 5 spec., 'Busmanland: Klein Dobe, 19°25'S/20°21'E, 19-21.ii.1992, Exp. ZMB 1992, lux, leg. M. Uhlig' (ZMHB); 5 spec., 'Grootfontein: Askarott-Farm, 20 km E Otavi, 14°40'S/17°33'E, Exp. ZMB 1992, leg. M. Uhlig' (ZMHB); 2 spec., 'Kavango Papa Falls, 18°07'S/21°35'E, 26.ii-3.iii.1992, Exp. ZMB, lux, leg. M. Uhlig' (ZMHB); 109 spec., 'Etosha N.P., Okavkuejo, 19°10'S/15°SSE, 17.-18.xii.1993, lux, leg. M. Uhlig' (LHPC, ZMHB); 35 spec., 'Etosha N.P., Namutoni, 18°48'S/16°56'E, 14.-15.xii.1993, lux, leg. M. Uhlig' (ZMHB); 5 spec., 'Etosha N. P. Okaukuejo, 19°10'S/15°55'E, 17.-18.iii.1994, lux, leg. M. Uhlig' (ZMHB); 38 spec., 'Messum Valley, 21°13.3'S/14°30.9', leg., 13.-14.iv.2000, leg. M. Uhlig' (ZMHB); 57 spec., '7 km S Messum, 21°15'7"/14°28'E, 13.iv.2000, lux valley, B. + M. Uhlig' (ZMHB); 5 spec., 'Nessun Valley, 21°13.3'S/14°30.9'E, 13.-14.iv.2000, leg. B. + M. Uhlig' (ZMHB); 1 spec., 'Farm Omandumba 50-60 km vom Omaruru, 22.-26.ii.2001, leg. V. Göllner' (ZMHB); 23 spec., 'Okahandja Distr. Toggekry 250 (Omatoko Ranch), 55 km NNW Okahandja, 21°30' 43"S/16°43'00"E, 7.02.2001, leg. M. Uhlig' (LHPC, ZMHB); 1 spec., 'Okawango, Distr.Mutompo 60 km S Rundu, 18°18' 38.7"S 19°15'29.4"E, 1180m NN, 13.iii.2003, hand light trap: Biota 1555, leg. J. Frisch & K. Vohlard' (ZMHB); 31 spec., 'Otjozondjupa, Distr. Otjiamongombe west 44 21°35'44.7"S 16°56'17.4"E, 1498m NN: 28.ii.2003, hand light trap: Biota 1529, leg. J. Frisch & K. Vohlard' (ZMHB). **REPUBLIC OF SOUTH AFRICA:** 8 spec., 'Transvaal, 15 km Klaeserie, Guernsey farm, 18.-30.xii.1985, S. & J. Peck' (FMNH); 1 spec., 'E Transvaal, Kruger Pk. Skukuza, 12.-14.xii.1985' (FMNH); 1 spec., 'Cape Province: Karoo N. P., 32°19'S/22°30'E, 13.xi.1993, leg. M. Uhlig' (ZMHB); 1 spec., 'Cape Province, Swellendam, Bontebon Nat. P., 2.-3.i.1993, leg. F. Koch' (LHPC); 2 spec., 'Natal: Itala Game Reserve, 27°30'S/31°20'E, 27.-29.i.1994, leg. M. Uhlig' (ZMHB); 2 spec., 'Transvaal, Lekgalameetse Nat. Res., 24°05'S/30°15'E, 21.xii.1995, leg. F. Koch' (ZMHB); 24 spec., 'Transvaal: Tshipise, 22°37'S/30°10'E, 24.-25.xi.1996, E. Arndt' (LHPC, ZMHB); 3 spec., 'Cape Province-Mountain, 32°14'S/25°27'E, 23.-24.xi.1996, zebra dung, leg. M. Uhlig' (ZMHB); 36 spec., 'East Cape, Clainwillian, 32°11'S/18°53'E, 7.-8.xii.1996, lux, leg. E. Arndt' (ZMHB); 20 exs., 'Prov. Karoo N. P., 32°19.5'S/22°26', leg. M. Uhlig' (ZMHB). 1 spec., 'Natal: Drakensberg: Dragon Peaks Park, 29°02'S/29°26'E, 10.xi.1993, 1200m river banks, leaf litter + flood refuse – sievings, leg. M. Uhlig' (ZMHB).

Redescription. Body length 8.7–9.1 mm, length of fore body (to end of elytra) 3.4–3.7 mm.



Figs. 12–24. 12–13 – *Philonthus biguttulus* Fauvel, 1907 (Côte d’Ivoire); 14–16 – *P. bucorvus* sp. nov.; 17–20 – *P. caffer* Boheman, 1848; 21–24 – *Philonthus cliens* Eppelsheim, 1890. 12, 14, 17, 21 – aedeagus, ventral view; 13 – paramere with sensory peg setae, ventral view; 15, 18, 22 – aedeagus, lateral view; 16, 20 – male sternite IX, ventral view; 19, 23 – aedeagus without paramere, ventral view; 24 – apex of paramere with sensory peg setae, ventral view.

Colouration. Head black, antennal sockets and clypeus along anterior margin narrowly brown-yellow, maxillary and labial palpi brown, antennae black, base of antennomere 2 brown-yellow. Pronotum and scutellum black, elytra red, anterior third of elytra, suture and anterior third of epipleura black, posterior two thirds of epipleura red, abdomen black, posterior margins of all tergites very narrowly brown-red, legs yellow-brown, medial faces of tibiae somewhat darker.

Head somewhat longer than wide (ratio 24.5 : 23), parallel-sided, posterior angles rounded, each with several bristles of unequal length. Eyes shorter than temples (ratio 9.5 : 10.5), distance between medial interocular punctures about 4 times as large as distance between medial and lateral punctures. Temporal area each with several punctures of unequal size. Dorsal surface without microsculpture.

Antennae long, reaching posterior sixth of pronotum when reclined. Antennomeres 1–7 and 11 longer than wide, antennomeres 8–10 as long as wide. Relative length of antennomeres: 1 = 8; 2–3 = 5; 4–7 = 3; 8–10 = 2.5; 11 = 4.

Pronotum highly convex, somewhat longer than wide (ratio 29.5 : 27), slightly narrowed anteriorly. Each dorsal row with 5 coarse punctures, punctures 2–5 equidistant, interval between punctures 1–2 and 4–5 somewhat larger than distance between punctures 2–4. Each sublateral row with 2 punctures, puncture 1 situated behind level of puncture 3 of dorsal row. Surface without microsculpture.

Scutellum very finely and densely punctate, diameter of punctures smaller than eye-facets, separated mostly by a puncture diameter in transverse direction; setation black.

Elytra combined as long as wide, slightly widened posteriorly. Anterior angles each with one long black bristle. Punctuation coarser and sparser than on abdomen, diameters of punctures inconspicuously larger than eye-facets, separated by 1–1.5 puncture diameters in transverse direction. Surface between punctures without microsculpture; setation greyish.

Legs. Metatibia as long as metatarsus. Metatarsomere 1 somewhat shorter than metatarsomeres 2–3 combined, metatarsomere 5 longer than metatarsomere 1. Relative length of metatarsomeres: 1 = 5; 2–3 = 3; 4 = 2.5; 5 = 6.5.

Abdomen slightly narrowed from visible tergite V towards apex. Elevated area between basal lines on first three visible tergites punctate. Punctuation of visible tergites finer and denser than that on elytra, distinctly sparser towards apex of each tergite. Surface between punctures without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 markedly dilated, densely covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Sternite IX (Fig. 20) aedeagus (Figs. 17–19).

Female. Protarsomeres 1–3 moderately dilated.

Differential diagnosis. *Philonthus caffer* is similar to *P. falco* sp. nov., but may be distinguished by the shorter antennae, longer pronotum, darker tibiae, by the different colouration of the elytra and by the different shape of the aedeagus.

Bionomics. Some specimens examined were collected in zebra dung and on river banks.

Distribution. Botswana, Ethiopia, Kenya, Namibia, Republic of South Africa (this paper); Cameroon, Lesotho (HERMAN 2001).

***Philonthus cliens* Eppelsheim, 1890**

(Figs 21–24)

Philonthus cliens Eppelsheim, 1890: 277 (resurrected from synonymy by SCHILLHAMMER (2004: 322)).*Philonthus aeneipennis* var. *cliens*: FAUVEL (1903: 159).*Philonthus aeneipennis* var. *lindemanni* Scheerpeltz, 1960: 5.**Type locality.** India, Nagpore.**Type material examined.** HOLOTYPE: ♂, 'Nagpore, India centr., Dr. D. Bomford [white oblong printed label] // *cliens* Eppel. spec. propria. det Gridelli [white oblong label, handwritten] // *aeneipennis* Boh. var. [white oblong label handwritten] // *quisquiliarius* v. *inquinatus* [white oblonglabel] // *Philonthus cliens*, Eppelsheim, HOLOTYPUS [red oblong label, handwritten]' (NHMW).**Additional material examined.** BOTSWANA: 6 spec., '6 km E Kakfontein, 6.iii.1993, 20°04'24"S/20°50'05"E, lux, M. Uhlig, leg.' (ZMHB). INDIA: 1 ♂, 'Nagpore, // *Philonthus* n. sp. Epp. // *Philonthus cliens*, Epp.', det. Schillhammer (ZMHB).**Redescription.** Body length 7.5 mm, length of fore body (to end of elytra 3.5 mm).

Colouration. Head black, pronotum, scutellum and abdomen black-brown, elytra red, shoulders narrowly smoky black, maxillary and labial palpi yellow-brown, antennomeres 1–2 and anterior half of antennomere 3 yellow-brown, remaining antennomeres brown-black, legs yellow-brown.

Head as wide as long, narrowed posteriad from posterior margin of eyes, posterior angles each with one long and several short black bristles. Eyes as long as temples, slightly convex. Four punctures between eyes, distance between medial interocular punctures about 4 times as large as distance between medial and lateral interocular punctures. Posterior margin of eyes with 4 coarse punctures. Temporal areal almost impunctate. Dorsal surface with very fine irregular microsculpture here and there.

Antennae long and slender, reaching posterior fifth of pronotum when reclined. Antennomere 1 longer than antennomere 11, antennomere 2 shorter than antennomere 3. Relative length of antennomeres: 1 = 7.5; 2 = 4; 3 = 5; 4–6 = 3.5; 7–8 = 3; 9–10 = 2.5; 11 = 4.5.

Pronotum highly convex, somewhat longer than wide (ratio 28 : 25), slightly narrowed anteriorly, posterior angles markedly rounded. Each dorsal row with 5 fine punctures, punctures 1–4 equidistant, distance between punctures 4–5 somewhat larger than distance between punctures 1–4. Each sublateral row with 2 punctures, puncture 1 situated approximately behind level of puncture 3 of dorsal row. Microsculpture similar to that on head.

Scutellum very coarsely and densely punctate, punctures larger than eye-facets, slightly contiguous here and there.

Elytra combined as wide as long, slightly widened posteriad. Punctuation somewhat coarser and sparser than that on scutellum, separated by a puncture diameter, or somewhat smaller here and there; setation yellow-brown.

Legs. Metatibia as long as metatarsus. Metatarsomere 1 as long as metatarsomere 5. Relative length of metatarsomeres: 1 = 6; 2 = 2.5; 3–4 = 2; 5 = 6.

Abdomen parallel-sided anteriorly, very gradually narrowed from visible tergite III towards apex. Elevated area between two basal lines on first three visible tergites impunctate. Punctuation at base of all tergites finer and denser than that on elytra, gradually becoming finer and much sparser towards apex of each tergite. Setation similar to that on elytra.

Male. Protarsomeres 1–3 markedly dilated, sub-bilobed, covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones, triangular. Aedeagus (Figs 21–24).

Female. Unknown.

Differential diagnosis. *Philonthus cliens* is similar to *P. kenyanus* in most characters, but differs as follows: head from posterior margin of eyes distinctly narrowed posteriorly, pronotum longer, punctation of elytra coarser and somewhat sparser. Both species also differ by the shape of the aedeagus.

Bionomics. Unknown.

Distribution. Botswana, India (this paper); Nepal, Nigeria, Senegal, ‘Tanganyika’ (HERMAN 2001).

Philonthus combustus Fauvel, 1907

(Figs. 25–29)

Philonthus combustus Fauvel, 1907: 44.

Type locality. Angola, Stepe de Barta.

Type material. not studied.

Additional material examined. **ANGOLA:** 2 ♀♀, ‘Angola, Marco de Canavezes (distr. Benguela), 2.iii.1956, E. Luna de Carvalho, coll. Museum Tervuren // *Philonthus combustus* Fauv., det. C. E. Tottenham ii. 1961 [white oblong printed label]’ (MRAC, LHPC). **DEMOCRATIC REPUBLIC OF THE CONGO:** 3 spec., ‘Congo, Lualaba: Ruwe, (plège Lumineux) i./ii.1960, Dr. V. Allard’ (MRAC). **KENYA:** 1 ♂, ‘Kenya: Naivasha, 2000 m, 13.-14.iv.1957, Mission Zoolog. I. R. S. A. C. en Afrique orientale (C. Basilewsky et N. Lelerup), coll. Mus. Congo // *Philonthus combustus* Fauv., det., C. E. Tottenham ii.1961 [white oblong printed label]’ (MRAC). **SIERRA LEONE:** 1 spec., ‘Sierra Leone, Northern Prov. Sumbrya, leg. W. Rossi’ (LHPC). **ZAMBIA:** 1 spec., ‘Zambia, Rimo – Marine Hotel, 15°49’07”S/28°12’03”E, 17.iii.1993, leg. M. Uhlig’ (ZMHB); 1 spec., ‘NC, 185 km S Mwinilunga, 6.xii.2004, Snížek & Tichý (LHPC)’.

Redescription. Body length 7.8–8.3 mm, length of fore body (to end of elytra) 3.6–3.8 mm.

Colouration. Head and scutellum black, antennal sockets and clypeus along anterior margin narrowly yellow-brown, pronotum and abdomen black-brown, anterior half of elytra black-brown, posterior half of elytra red, maxillary and labial palpi, mandibles and antennomere 1 brown-yellow, remaining antennomeres black-brown, legs yellow-brown.

Head as wide as long, vaguely narrowed in straight line towards neck, posterior angles markedly rounded, each with one long black bristle. Eyes flat, as long as temples. Four punctures between eyes, distance between medial interocular punctures about 4 times as large as distance between medial and lateral interocular punctures. Dorsal surface with very irregular, almost indistinct microsculpture here and there.

Antennae long, reaching posterior margin of pronotum when reclined, antennomeres 1–8 and 11 longer than wide, antennomeres 9–10 as long as wide. Antennomere 1 vaguely longer than antennomere 11, antennomere 2 shorter than antennomere 3. Relative length of antennomeres: 1 = 6; 2 = 4.5; 3 = 5; 4–7 = 3; 8–10 = 2.5; 11 = 5.

Pronotum almost as long as wide, narrowed in almost straight line toward base. Posterior angles markedly rounded. Each dorsal row with 5 punctures, punctures 2–4 equidistant,

distance between punctures 1–2 and 4–5 somewhat larger than distance between punctures 2–4. Each sublateral row with 2 punctures, puncture 1 situated approximately behind level of puncture 3 of dorsal row. Microsculpture similar to that on head.

Entire scutellum coarsely and densely punctate, punctures somewhat larger than eye-facets, distance between punctures much smaller than their diameter.

Elytra combined as long as wide, slightly widened posteriad. Punctuation fine and relatively dense. Punctures somewhat smaller than those on scutellum, separated by 1 or 1.5 puncture diameters in transverse direction. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia as long as metatarsus. Metatarsomere 1 almost as long as metatarsomeres 2–3 combined, metatarsomere 5 somewhat shorter than metatarsomere 1. Relative length of metatarsomeres: 1 = 7; 2 = 3.5; 3–4 = 3; 5 = 6.

Abdomen slightly, gradually narrowed towards apex. Elevated area between two basal lines on first three visible tergites densely punctate. Punctuation of visible tergites much finer and denser than that on elytra, distinctly sparser towards posterior margin of each tergite. Surface between punctures without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 markedly dilated, covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Aedeagus (Figs. 25–27).

Female. Protarsomeres 1–3 slightly dilated, each moderately covered with modified pale setae ventrally, protarsomere 4 small. Tergite X (Fig. 28), gonocoxites of female genital segment (Fig. 29).

Differential diagnosis. *Philonthus combustus* may be distinguished from the very similar *P. sequens* by longer eyes, shorter pronotum, paler tibiae and by the different shape of the aedeagus.

Bionomics. Unknown.

Distribution. Angola, Democratic Republic of the Congo, Kenya, Sierra Leone, Zambia.

Philonthus falco sp. nov.

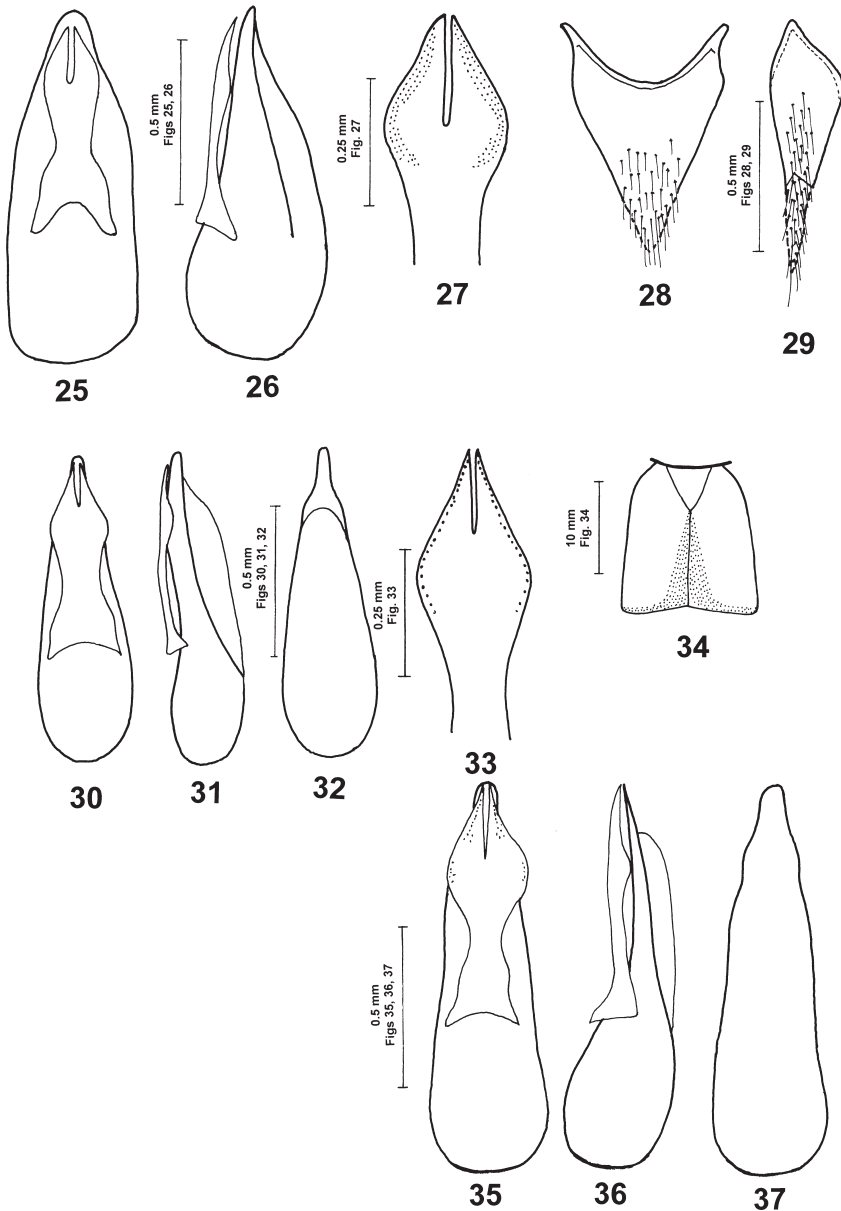
(Figs. 30–34)

Type locality. NW Madagascar, Morondava district, Kirindy Forest.

Type material. HOLOTYPE: ♂, 'NW Madagascar, Morondava distr., Kirindy Forest, 4.-8. 1. 2002, J. Rolčik lgt.// HOLOTYPE *Philonthus falco* sp. nov. Hromádka det. 2008 [red oblong printed label]' (NMPC). PARATYPES: **BOTSWANA:** 4 spec., 'Botswana: Muchenje Umg. bei Ngoma, 950m, 17°56'52'' S/24°41'26'' 0, 31.x.2006, leg. U. Heinig, Lichtfang' (LHPC). **MADAGASCAR:** 4 spec., same label data as holotype (JJRC); 5 spec., 'SW Madagascar, 5.- 8.i.2002, Morondava distr., Kirindy Forest, D. Hauck lgt.' (LHPC, JJRC); 1 spec., 'Madagascar, 80 km N Morondava, Kirindy 100m, 5.-7.1. 2001, S. Murzin & A. Shamaev lgt.' (JJRC); 3 spec., '20km N Tulear, Ifaty 30 km, 10.-27.xii.2003, S. Murzin & A. Shamaev' (LHPC, JJRC); 1 spec., '5.-7.i.2001, N Morondava, Kirindy 100m, S. Murzin & A. Shamaev lgt.' (JJRC). **ZAMBIA:** 1 spec., 'Zambia, Livingstone, Victoria falls, 26.-31.xii.1993, M. Snížek, lgt.' (LHPC); 1 spec., 'South Luangwa NP, Mfuwe Crocodile Farm 450m, 13°06'03''S/31°47'32''E, lux, leg. M. Uhlig' (ZMHB). **ZIMBABWE:** 1 spec., '11.-12.xii.1993, 17°53'S/25°49'E, Victoria Falls: Zambezi, NP –Camp, lux, leg. M. Uhlig.' (LHPC); 2 spec., 'Save-Fluss, cca 100 km, S Mutare 770 m, 19°53'S/32°22'E, 8.iii.2000, leg. U. Heinig, Lichtfang' (LHPC) [all paratypes with red oblong labels, printed].

Description. Body length 7.3–7.8 mm, length of fore body (to end of elytra) 3.5–3.8 mm.

Colouration. Head, pronotum and abdomen black, elytral disc black, elytra around suture and posterior margin narrowly red-orange, maxillary and labial palpi brown-yellow, man-



Figs. 25–37. 25–29 – *Philonthus combustus* Fauvel, 1907; 30–34 – *P. falco* sp. nov.; 35–37 – *P. gabonensis* Levasseur, 1966. 25, 30, 35 – aedeagus, ventral view; 26, 31, 36 – aedeagus, lateral view; 27, 33 – apex of paramere with sensory peg setae, ventral view; 28 – female tergite X, ventral view; 29 – gonocoxite of female genital segment; 32, 37 – aedeagus without paramere, ventral view; 34 – elytra.

dibles black-brown, antennomeres 1–2 and base of antennomere 3 brown-yellow, remaining antennomeres black, antennal sockets and clypeus along anterior margin narrowly brown-yellow, legs yellow-brown.

Head rounded, as wide as long. Temples slightly longer than eyes (ratio 8 : 7), evenly rounded. Posterior angles of head each with one long and several shorter bristles. Distance between medial interocular punctures about 4 times as large as distance between medial and lateral interocular puncture. Medial punctures somewhat shifted anteriorly. Temporal area each with several smaller punctures. Surface without microsculpture.

Antennae reaching posterior margin of pronotum when reclined, antennomeres 1–8 and 11, longer than wide, antennomeres 9–10 as long as wide. Relative length of antennomeres: 1 = 8; 2 = 5; 3 = 5.5; 4 : 6 = 3; 7–10 = 2.5; 11 = 5.

Pronotum highly convex, longer than wide (ratio 30 : 27), very slightly narrowed anteriorly. Each dorsal row with 5 punctures, punctures 1–4 equidistant, distance between punctures 4–5 somewhat larger than distance between punctures 1–4. Each sublateral row with 2 punctures, puncture 1 situated between levels of punctures 2 and 3 of dorsal rows, puncture 2 at midwidth between puncture 4 of dorsal row and lateral margin. Anterior angles each with several short bristles. Surface without microsculpture.

Scutellum very coarsely and densely punctate, punctures somewhat larger than eye-facets, distance between punctures much smaller than their diameter, punctures coalescent here and there.

Elytra combined (Fig. 34) somewhat longer than wide (ratio 38 : 35), slightly widened posteriorly. Punctuation coarser and sparser, punctures larger than those on scutellum, separated by 1.5 puncture diameters in transverse direction. Surface without microsculpture; setation grey-yellow.

Legs. Metatibia somewhat longer than metatarsus (ratio 22 : 20). Relative length of metatarsomeres: 1 = 7; 2 = 3; 3–4 = 2.5; 5 = 6.

Abdomen wide, slightly narrowed from tergite V towards apex. Elevated area between basal lines on first three visible tergites densely punctate. Punctuation of visible tergites finer and denser than that on elytra, becoming distinctly sparser towards apex of each tergite. Surface between punctures without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 dilated and sub-bilobed, densely covered with modified pale setae ventrally, protarsomere 4 narrow and small. Aedeagus (Figs. 30–33).

Female. Protarsomeres 1–3 slightly dilated, scarcely sub-bilobed, each with some modified pale setae ventrally, protarsomere 4 scarcely dilated, narrower than preceding ones, lacking modified pale setae ventrally.

Differential diagnosis. *Philonthus falco* sp. nov. may be distinguished from the similar *P. caffer* by longer antennae, shorter pronotum, paler tibiae, different colouration of elytra and by the different shape of the aedeagus.

Bionomics. Unknown.

Etymology. The name of this species, a noun in apposition, is the Latin generic name of the African Eleonora's falcon *Falco eleonorae* Gené, 1839.

Distribution. Madagascar, Botswana, Zambia, Zimbabwe.

***Philonthus gabonensis* Levasseur, 1966**

(Figs 35–37)

Philonthus gabonensis Levasseur, 1966: 1211.**Type locality.** Gabon, Belinga.**Type material examined.** PARATYPES: 2 ♂♂, 'Gabon, Belinga, 12.iii.1963, (199 L), Mission biologique au Gabon, H. Coiffait leg., Coll. I. R. Sc. N. B. // Paratype, *Philonthus gabonensis*, Levasseur det. [ochre oblong labels, handwritten]' (MNHN).**Redescription.** Body length 7.1–8.1 mm, length of forebody (to end of elytra) 3.6–4.1 mm.

Colouration. Head and pronotum black with blue-violet metallic reflex, scutellum black, elytra red, elytral shoulders smoky black, abdomen black with blue-greenish metallic reflex, clypeus along anterior margin, antennal sockets and maxillary and labial palpi narrowly yellow-brown, mandibles somewhat darker, medial face black, ventral side of antennomere 1 brown-yellow, dorsal side and remaining antennomeres black, femora and tarsi yellow-brown, tibiae somewhat darker.

Head of rounded shape, as long as wide, slightly narrowed posteriad. Eyes slightly projecting, longer than temples (ratio 12.5 : 9). Posterior angles of head each with one long and several short bristles. Four coarse punctures between eyes, distance between medial interocular punctures 3 times as large as distance between medial and lateral interocular punctures. Temporal area densely punctate; surface without microsculpture.

Antennae long, reaching posterior margin of pronotum when reclined, all antennomeres longer than wide. Relative length of antennomeres: 1 = 10; 2 = 5.5; 3 = 6; 4–7 = 4; 8–10 = 2.5; 11 = 5.

Pronotum somewhat longer than wide (ratio 30 : 28), slightly narrowed posteriad in straight line. Each dorsal row with 5 coarse punctures. Each sublateral row with 2 punctures, puncture 1 situated behind level of puncture 3 of dorsal row. Surface without microsculpture.

Scutellum densely and coarsely punctate, punctures as large as eye-facets, separated in transverse direction by distance smaller than a puncture diameters.

Elytra combined vaguely wider than long (ratio 40 : 38), slightly widened posteriad, densely and finely punctate, punctures somewhat larger than eye-facets, separated in transverse direction by about a puncture diameter. Anterior angles and lateral margins each with several dark bristles of variable length. Setation dark; surface without microsculpture.

Legs. Metatibia shorter than metatarsus (ratio 21 : 26), relative length of metatarsomeres: 1 = 9; 2 = 3.5; 3–4 = 3; 5 = 7.

Abdomen parallel-sided, slightly narrowed from tergite V towards apex. Elevated area between two basal lines on first three visible tergites densely punctate, punctation of visible tergites finer and denser than that on elytra, becoming slightly sparser towards posterior margin of each tergite. Surface between punctures without microsculpture; setation similar as on elytra.

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

Female. Unknown.

Differential diagnosis. *Philonthus gabonensis* may be distinguished from the similar *P. aonyx* sp. nov. by unicoloured elytra, narrower head, differently coloured antennomere 1, finer punctuation of abdomen and different shape of the aedeagus.

Bionomics. Unknown.

Distribution. Gabon (this paper); Central African Republic, 'Congo' (HERMAN 2001).

Philonthus iridicollis Bernhauer, 1932

(Figs. 38–44)

Philonthus iridicollis Bernhauer, 1932: 152.

Type locality. Democratic Republic of the Congo, Moreo, Kiambi, Niunzu.

Type material. HOLOTYPE: ♂, 'Moreo, Kiambi, vi.-vii.1930, Dr. P. Gérard, Chicago NHMus. M. Bernhauer Collection, // Type, *Philonthus iridicollis* M. Bernhauer [ochre oblong label, handwritten]' (FMNH).

Additional material examined. ETHIOPIA: 4 ♂♂ 5 ♀♀, 'Jimma Kaffä, Ft. 1971, grass cuttings, R.O.S. Clark B.M. 1973-450' (BMNH, LHPC); 1 ♀, 'Bamenda, V.F. Easrop, 15.i.1957, C.E. Tottenham collection, B.M. 1974-587' (BMNH). ZIMBABWE: 1 ♀, 'loc., Kutsaga near Harare airport, 18.iv.1997, W. Rossi leg.' (LHPC).

Redescription. Body length 8.9–9.1 mm, length of fore body (to end of elytra) 4.0–4.2 mm.

Colouration. Head and abdomen black, with very slight greenish-violet hue around eyes, antennal sockets and clypeus along anterior margin very narrowly yellow-brown, maxillary and labial palpi yellow-brown, antennae black, base of antennomere 2 dark brown, pronotum black with distinct green-violet hue, scutellum and elytra black, legs black-brown, protarsomeres 1–5 yellow-brown, middle and posterior tarsi somewhat paler.

Head quadrangular, slightly wider than long (ratio 31 : 27), slightly widened posteriad. Posterior angles obtusely rounded, each with one long and several short bristles. Distance between medial interocular punctures about 3.5 times as large as distance between medial and lateral interocular puncture. Eyes flat, somewhat shorter than temples (ratio 10 : 12). Posterior margin of each eye with three coarse punctures. Temporal area with several coarse punctures. Dorsal surface without microsculpture, only with micropunctuation.

Antennae long, almost reaching posterior margin of pronotum when reclined. Antennomeres 1–8 and 11 longer than wide, antennomeres 9–10 as long as wide. Relative length of antennomeres: 1 = 8; 2 = 4; 3 = 5; 4–8 = 3.5; 9–10 = 3; 11 = 5.

Pronotum markedly highly convex, as long as wide, distinctly narrowed anteriorly. Anterior angles each with several short bristles. Posterior angles markedly rounded. Lateral margins each with one long black bristle in anterior half. Each dorsal row with 4 equidistant punctures, each sublateral row with 2 punctures.

Posterior two thirds of scutellum finely and sparsely punctate, punctures somewhat smaller than eye-facets, separated by 2 puncture diameters in transverse direction. Anterior third impunctate.

Elytra wider than long (ratio 46 : 42), parallel-sided. Anterior angles each with one long black bristle. Punctuation dense and fine, punctures somewhat larger than those on scutellum, separated by distance somewhat larger than puncture diameters in transverse direction. Surface without microsculpture; setation longer, greyish.

Legs. Metatibia somewhat longer than metatarsus (ratio 29.5 : 28). Metatarsomere 1 almost as long as metatarsomeres 2–4 combined, metatarsomere 5 somewhat longer than metatarsomeres 3 and 4 combined. Relative length of metatarsomeres: 1 = 11; 2 = 4.5; 3–4 = 3; 5 = 6.5.

Male. Protarsomeres 1–3 strongly dilated and sub-bilobed, covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Sternite VIII (Fig. 41), sternite IX (Fig. 42), aedeagus (Figs. 38–40).

Female. Protarsomeres 1–3 less dilated than in male, covered with modified pale setae ventrally, protarsomere 4 small. Tergite X (Fig. 43), gonocoxites of female genital segment (Fig. 44).

Differential diagnosis. *Philonthus iridicollis* may be distinguished from the similar *P. aonyx* sp. nov. by unicoloured elytra and legs and by the different shape of the aedeagus.

Bionomic. Some specimens were collected in grass cuttings.

Distribution. Democratic Republic of the Congo, Ethiopia, Zimbabwe.

Philonthus kenyanus Bernhauer, 1939

(Figs 45–48)

Philonthus kenyanus Bernhauer, 1939: 86.

Type locality. Kenya, Lokitang, Turkana Nord, 750 m a.s.l.

Type material examined. HOLOTYPE: ♂, 'Kenya, Lokitang TURKANA Nord, 750 m, C. Arambourg, P.A. Chappuis & R. Jeannel, 1932–33. Muséum de Paris, Mission de l'OMO, Chicago NHMus., M. Bernhauer, Collection. // Type *Philonthus kenyanus* M. Bernhauer [ochre oblong label, handwritten]' (FMNH). PARATYPE: ♂, same label data as in holotype, second label as follows: 'Cotype *Philonthus kenyanus* M. Bernhauer [ochre oblong label, handwritten]' (FMNH).

Redescription. Body length 6.2–6.4 mm, length of fore body (to end of elytra) 3.1–3.2 mm.

Colouration. Head black, antennal sockets and clypeus along anterior margin narrowly dirty yellow, maxillary and labial palpi, antennomeres 1–2 and base of antennomere 3 yellow-brown, remaining antennomeres black-brown, mandibles brown, pronotum and scutellum black, elytra red, abdomen black, posterior half of visible tergite VII red-brown, legs yellow-brown.

Head of rounded shape, as long as wide, slightly narrowed toward neck behind posterior margin of eyes. Posterior angles entirely obliterated, each with one long and several short bristles. Eyes vaguely longer than temples (ratio 9 : 8). Four coarse punctures between eyes, distance between medial interocular punctures about 5 times as large as distance between medial and lateral interocular punctures. Temporal area each with many punctures of variable size. Dorsal surface with remnants of very irregular, fine microsculpture.

Antennae long, reaching posterior fifth of pronotum when reclined, antennomeres 1–7 and 11 longer than wide, antennomeres 8–10 as long as wide. Relative length of antennomeres: 1 = 6; 2 = 4; 3 = 5; 4–8 = 3; 9–10 = 2.5; 11 = 5.

Pronotum convex, vaguely longer than wide (ratio 26 : 25). Lateral margins narrowed anteriorly in almost straight line. Each dorsal row with 5 punctures, punctures 1–4 equidistant, distance between punctures 4 and 5 hardly larger than interval between punctures 1 and 2.

Each sublateral row with 2 punctures, puncture 1 situated behind level of puncture 3 of dorsal row. Surface with microsculpture similar to that on head.

Scutellum coarsely and very densely punctate, punctures inconspicuously larger than eye-facets, separated by distance much smaller than a puncture diameter.

Elytra hardly longer than wide (ratio 35 : 34), inconspicuously widened posteriad. Punctuation vaguely sparser than that on scutellum. Surface between punctures without microsculpture; setation brown-yellow.

Legs. Metatibia as long as metatarsus, metatarsomere 1 slightly longer than metatarsomere 5, metatarsomere 2 longer than metatarsomere 3. Relative length of metatarsomeres: 1 = 6; 2 = 3; 3–4 = 2.5; 5 = 5.

Abdomen wide and parallel-sided, elevated area between basal lines on first and second visible tergites with scattered punctures, elevated area on tergite III impunctate. Visible tergites densely, coarsely and uniformly punctate; setation similar to that on elytra.

Male. Protarsomeres 1–3 strongly dilated and sub-bilobed, densely covered with modified pale setae ventrally. Sternite IX (Fig. 48), aedeagus (Figs. 45–47).

Female. Unknown.

Differential diagnosis. *Philonthus kenyanus* is similar to *P. cliens* in most characters, but differs by the rounded head, shorter pronotum, finer elytral punctuation and by the different shape of the aedeagus.

Bionomics. Unknown.

Distribution. Kenya (this paper); Chad (HERMAN 2001).

Philonthus leptophilus Hromádka, 2006

(Figs. 49–53)

Philonthus leptophilus Hromádka, 2006: 65

Type locality. Sierra Leone, Western area, Freetown Faurah Bay.

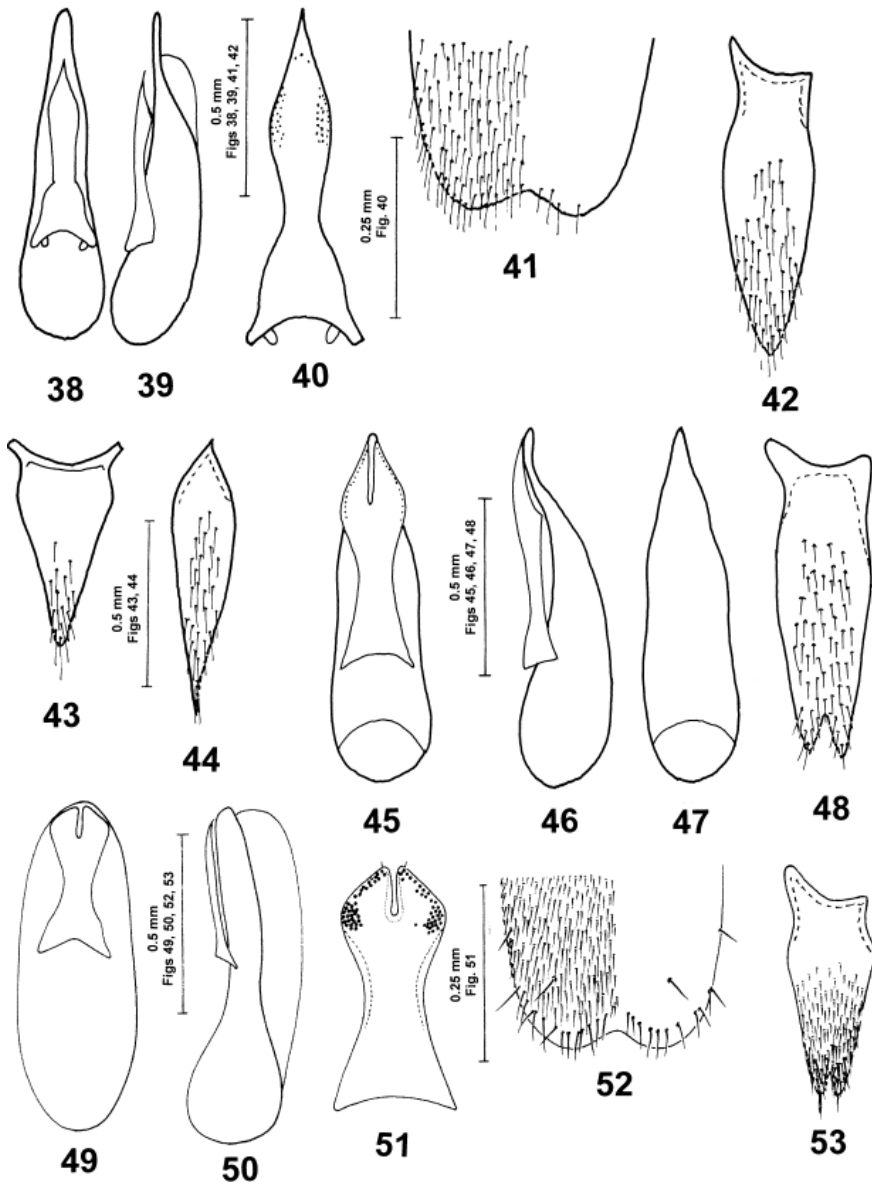
Type material examined. HOLOTYPE: ♂, 'Sierra Leone, Western area, Freetown Faurah Bay, College Botanical reserve, 9.xii.1992, W. Rossi leg. // HOLOTYPUS *Philonthus leptophilus* sp. nov. Hromádka det., 2006 [red oblong printed label]'. (ABFC). PARATYPES: 1 ♂ 2 ♀♀, same label data as in holotype [all specimens with red oblong printed type label] (ABFC, LHPC).

Redescription. Length: 8.4–8.6 mm, length of fore body (to end of elytra) 3.8–3.9 mm.

Colouration. Black, maxillary palpomere 3 and labial palpomere 3 yellow, remaining palpomeres brown-yellow, antennae black, legs brown-yellow, medial face of all tibiae infuscate.

Head hardly longer than wide (ratio 23 : 21), slightly narrowed behind eyes, posterior angles obtusely rounded, each with one long black bristle, eyes flat, shorter than temples (ratio 10 : 15). Distance between medial and lateral interocular punctures about 3 times as large as distance between medial and lateral interocular puncture. Four punctures at posterior margin of each eye, postocular seta situated at half distance between posterior margin of eye and base of head, several fine punctures between postocular seta and base of head, surface with very irregular, almost indistinct microsculpture.

Antennae long, reaching posterior margin of pronotum when reclined. Antennomere 1 distinctly longer than antennomere 11, antennomere 2 vaguely shorter than antennomere 3.



Figs. 38–53. 38–44 – *Philonthus iridicollis* Bernhauer, 1932; 45–48 – *P. kenyanus* Bernhauer, 1939; 49–53 – *P. leptophilus* Hromádka, 2006. 38, 45, 49 – aedeagus, ventral view; 39, 46, 50 – aedeagus, lateral view; 40, 51 – paramere with sensory peg setae, ventral view; 41, 52 – apical portion of male sternite VIII, ventral view; 42, 48, 53 – male sternite IX, ventral view; 43 – female tergite X, ventral view; 44 – gonocoxite of female genital segment; 47 – aedeagus without paramere, ventral view.

Relative lengths of antennomeres: 1 = 8; 2 = 5; 3 = 6; 4–6 = 4; 7–8 = 3.5; 9–10 = 3; 11 = 5.

Pronotum longer than wide (ratio 30 : 27), hardly narrowed anteriorly, posterior angles markedly rounded, each dorsal row with 5 punctures, each sublateral row with 2 punctures; surface with very irregular, almost indistinct microsculpture here and there.

Scutellum finely and coarsely punctate, punctures hardly larger than eye-facets, distance between punctures smaller than their diameter, surface without microsculpture; setation black.

Elytra as long as wide, slightly widened posteriorly. Punctuation relatively coarse, punctures hardly larger than eye-facets, separated mostly by 2 puncture diameters in transverse direction, surface between punctures without microsculpture; anterior angles each with several, variably long, dark bristles; setation brown-yellow.

Legs. Metatibia a little shorter than metatarsus (ratio 22 : 25), metatarsomere 1 distinctly longer than metatarsomere 5. Relative length of metatarsomeres: 1 = 9; 2 = 4; 3 = 3.5; 4 = 2; 5 = 6.

Abdomen parallel-sided anteriorly, from tergite VI slightly narrowed toward apex, first three visible abdominal tergites with two basal lines, elevated area between basal lines densely and irregularly punctate, base of all tergites with punctuation finer and denser than that on elytra, becoming gradually finer and sparser towards posterior margin of each tergite; surface between punctures without microsculpture, shiny; setation brown-yellow.

Male. Protarsomeres 1–3 strongly dilated, sub-bilobed, densely covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Sternite VIII (Fig. 52), sternite IX (Fig. 53), aedeagus (Figs. 49–51).

Female. Protarsomeres 1–3 similar to those of male, but less dilated, protarsomere 4 narrower than preceding ones.

Differential diagnosis. This new species is very similar to *P. aminius*, from which it differs by shorter eyes and somewhat sparser punctuation of scutellum and abdomen. The species differs from all species of the *P. caffer* species group by the different shape of the aedeagus.

Bionomics. Unknown.

Distribution. Sierra Leone.

Philonthus limbipennis Fauvel, 1905

(Figs. 54–56)

Philonthus limbipennis Fauvel, 1905:175.

Type locality. Diego-Suarez; forêt Audroy; Ambovombe.

Type material examined. LECTOTYPE (here designated): 'Madagascar, Ex-Typus ♂: 'Forêt Audroy, R.I.Sc.N.B. 17. 479, coll. et det. A. Fauvel' [white oblong label, handwritten] // LECTOTYPE C.E. Tottenham' (MRAC).

Note. The designation of the lectotype indicated by a label attached to the specimen examined by Tottenham was never published. For this reason, I am designating the specimen as the lectotype here.

Redescription. Body length 6.7 mm, length of fore body (to end of elytra) 4.5 mm.

Colouration. Head and abdomen black, pronotum, scutellum and elytra black-brown, epipleura and posterior margin of elytra narrowly yellow-brown, maxillary and labial palpi

brown-yellow, terminal palpomeres yellow-brown, mandibles brown, antennae dark brown, base of antennomere 2 yellow-brown. Femora and tibiae brown, medial face of all tibiae vaguely darker, tarsi yellow-brown. Head and pronotum with slight purple iridescence.

Head quadrangular, slightly wider than long (ratio 25 : 21.5), parallel-sided, posterior angles conspicuously rounded, each bearing two long black bristles. Eyes small, temples much longer than eyes (ratio 12 : 6). Distance between medial interocular punctures 4 times as large as distance between medial and lateral interocular punctures. Lateral interocular punctures slightly shifted anteriorly. Temporal area with several punctures. Surface with very fine microsculpture consisting of transverse waves.

Antennae stout, reaching posterior fourth of pronotum when reclined. Antennomeres 1–3 and 11 longer than wide, antennomeres 4–10 as long as wide. Relative length of antennomeres: 1 = 7; 2–3 = 4.5; 4–10 = 2.5; 11 = 4.

Pronotum slightly wider than long (ratio 24.5 : 23), highly convex, parallel-sided, anterior angles almost rectangular, each with several short black bristles, sides with one long black bristle in anterior third. Left dorsal row with 4 punctures, right dorsal row with 5 punctures, punctures 2–5 equidistant, distance between punctures 1 and 2 twice as large as distance between remaining punctures of row. Each sublateral row with 2 punctures. Surface with very fine microsculpture consisting of transverse waves.

Scutellum punctate only in posterior two thirds, punctation fine and sparse, punctures somewhat larger than eye-facets, separated by a puncture diameter in transverse direction. Anterior third impunctate.

Elytra wider than long (ratio 31 : 28), vaguely widened posteriorly, anterior angles of elytra each with one long black bristle. Punctation coarser and sparser, punctures somewhat larger than those of scutellum, separated by 1.5–2 puncture diameters in transverse direction. Surface without microsculpture; setation dark and short.

Legs. Metatibia longer than metatarsus (ratio 17 : 14). Metatarsomere 1 as long as metatarsomere 5. Relative length of metatarsomeres: 1 = 4; 2 = 2; 3–4 = 1.5; 5 = 4.

Abdomen wide, slightly narrowed from tergite III toward apex and base. Elevated area between two basal lines on first three visible tergites almost impunctate. Punctation of all tergites similar as on scutellum, gradually becoming finer and much sparser towards posterior margin of each tergite, separated by 2 or 3 puncture diameters in transverse direction. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 relatively slightly dilated, sub-bilobed, covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus (Figs. 54–56).

Female. Unknown.

Differential diagnosis. *Philonthus limbipennis* is in most characters similar to *P. tomicus*, but differs by the shorter eyes and antennae, slight purple iridescence of head and pronotum, uniformly black-brown elytra, and by the shape of the aedeagus.

Bionomics. Unknown.

Distribution. Madagascar.

Philonthus maridadus Tottenham, 1962

(Figs. 57–58)

Philonthus maridadus Tottenham, 1962: 223.**Type locality.** Kenya: Nairobi.**Type material examined.** HOLOTYPE: ♂, 'Nairobi, 27.xii.1954, V. F. Eastop. // *Philonthus maridadus*, Tottenham, TYPE [white oblong label handwritten] // C. E. Tottenham collection, B.M. 1974-587' (BMNH).**Redescription.** Body length 8.8 mm, length of fore body (to the end of elytra) 4.1 mm.

Colouration. Head black, pronotum and abdomen brown. Elytra yellowish brown, anterior part of each elytron dark, border between anterior dark and posterior pale colouration rather weak, going in a straight line from posterior apex of scutellum to posterior third of elytral length at lateral margin when observed from above; deflexed margins of elytra yellow. Maxillary and labial palpi brown, distal palpomeres slightly paler, mandibles brown, antennae brown, antennomere 1 and base of antennomere 2 of maxillary and labial palpi paler, legs yellow, all tibiae somewhat darker.

Head inconspicuously longer than wide (ratio 25 : 23), lateral margins behind eyes subparallel to posterior angles. Eyes slightly projecting, vaguely shorter than temples (ratio 10 : 12). Distance between medial interocular punctures about 4 times as large as distance between medial and lateral interocular punctures. Lateral interocular punctures slightly shifted anteriorly. Posterior margin of each eye with 3 coarse punctures. Surface with irregular, almost indistinct microsculpture here and there.

Antennae long, reaching posterior margin of pronotum when reclined, all antennomeres longer than wide. Relative length of antennomeres: 1 = 8; 2 = 4.5; 3 = 2.5; 4–5 = 4.5; 6–7 = 4; 8–10 = 3.5; 11 = 5.

Pronotum highly convex, hardly narrowed anteriorly, longer than wide (ratio 32 : 28). Each dorsal row with 5 coarse punctures, punctures 2–4 equidistant, distance between punctures 1–2 and 4–5 twice as long as distance between punctures 2–4. Each sublateral row with 2 punctures, puncture 2 slightly shifted toward lateral margin. Surface without microsculpture.

Entire scutellum very densely and coarsely punctate, punctures somewhat larger than eye-facets, separated by distance much smaller than their diameter.

Elytra combined slightly wider than long (ratio 42 : 40), parallel-sided, distinctly widened posteriorly. Punctuation fine and relatively sparse. Punctures hardly larger than eye-facets, separated by 1.5 or 2 puncture diameters in transverse direction. Surface between punctures without microsculpture; setation dark.

Legs. Metatibia vaguely longer than metatarsus (ratio 25.5 : 24), metatarsomere 1 almost as long as metatarsomere 5, metatarsomere 2 hardly longer than metatarsomere 3. Relative length of metatarsomeres: 1 = 7; 2 = 3; 3–4 = 2.5; 5 = 8.

Abdomen slightly narrowed toward apex. Elevated area between two basal lines on first three visible tergites densely punctate. Punctuation of visible tergites finer and denser than that on elytra, becoming somewhat sparser toward posterior margin of each tergite. Surface between punctures without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 strongly dilated, sub-bilobed, protarsomere 4 distinctly narrower than preceding ones. Aedeagus (Figs 57–58).

Female. Unknown.

Differential diagnosis. *Philonthus maridadus* is similar in most external characters to *P. bucorvus* sp. nov. It differs by shorter antennae, black elytra each with red triangular patch, and by the different shape of the aedeagus.

Bionomic. Unknown.

Distribution. Kenya (this paper); ‘Tanganyika’, Tanzania (HERMAN 2001).

Philonthus sequens Bernhauer & Schubert, 1914

(Figs 59–61)

Philonthus imitator Fauvel, 1907:44 (preoccupied, primary homonym of *Philonthus imitator* Fauvel, 1895, = *Gabrius imitator* (Fauvel, 1895))

Philonthus sequens Bernhauer & Schubert, 1914: 355 (replacement name).

Type locality. Kenya, Lake Victoria, gulf of Winam (‘Baie de Kavirondo’).

Type material. Not examined.

Additional material examined. KENYA: ♂, ‘AFRICA or. ANGL. (LAC VICTORIA), Baie de Kavirondo, Alluaud & Jeannel, Déc. 1911-1112. Chicago NHMus M. Bernhauer Collection. // Type *Philonthus sequens* M. Bernhauer [ochre oblong label, handwritten]’ (FMNH).

Redescription. Body length 7.4 mm, length of fore body (to end of elytra) 3.5 mm.

Colouration. Head, scutellum and abdomen black, pronotum black-brown, anterior half of elytra black, posterior half red, palpomeres 1–2 of maxillary and labial palpi brown, maxillary palpomere 3 and labial palpomere 3 yellow-brown, mandibles, antennomere 1 and base of antennomere 2 brown, remaining antennomeres black, femora and tarsi yellow-brown, tibiae somewhat darker.

Head rounded quadrangular, hardly wider than long (ratio 22 : 21), parallel-sided, posterior angles vaguely rounded, each with one long black bristle. Eyes flat, as long as temples. Distance between medial interocular punctures about 4 times as large as distance between medial and lateral interocular punctures. Posterior margin of each eye with four punctures arranged in shape of a square. Temporal area each with several punctures. Surface with very fine transverse waves.

Antennae long, reaching posterior margin of pronotum when reclined, antennomeres 1–7 and 11 longer than wide, antennomeres 8–10 as long as wide, antennomere 1 longer than antennomere 11, antennomere 2 shorter than antennomere 3. Relative length of antennomeres: 1 = 7; 2 = 5; 3 = 6; 4–7 = 3.5; 8–10 = 3; 11 = 5.

Pronotum convex, longer than wide (ratio 28 : 25.5), parallel-sided. Each dorsal row with 5 punctures, punctures 2–4 equidistant, distance between punctures 1–2 and 4–5 about half as large as between punctures 2–4. Each sublateral row with two punctures, puncture 1 situated behind level of puncture 3 of dorsal row. Microsculpture similar as on head.

Entire scutellum very finely punctate, punctures smaller than eye-facets, distance between punctures about equal to diameters of punctures.

Elytra as long as wide, parallel-sided, slightly widened posteriad. Punctuation fine, relatively dense, punctures as large as eye-facets, separated by distance larger than puncture diameter in transverse direction. Surface without microsculpture; setation greyish.

Legs. Metatibia longer than metatarsus (ratio 24 : 21.5), metatarsomere 1 as long as metatarsomere 5, relative length of metatarsomeres: 1 = 7; 2 = 3; 3–4 = 2.5; 5 = 7.

Abdomen parallel-sided anteriorly, slightly narrowed from tergite V towards apex. First three visible tergites with two basal lines, elevated area between basal lines finely punctate on tergite I and II, impunctate on tergite III. Anterior parts of all tergites very finely and densely punctate, punctation becoming somewhat sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on head.

Male. Protarsomeres 1–3 strongly dilated, sub-bilobed, densely covered with modified pale setae ventrally, protarsomere 4 very small. Aedeagus (Figs. 59–61).

Female. Unknown.

Differential diagnosis. This species is similar to *P. combustus*, but differs by shorter eyes, longer pronotum, darker tibiae, and by different shape of the aedeagus.

Bionomic. Unknown.

Distribution. Kenya (this paper); Ethiopia, ?Republic of South Africa (HERMAN 2001).

Philonthus tomicus Tottenham, 1962

(Figs. 62–63)

Philonthus tomicus Tottenham, 1962: 225.

Type locality. Cameroon: Bamenda.

Type material examined. HOLOTYPE: ♂, 'Cameroon: Bamenda, V. F. Eastop, 2.ii.1957, C. E. Tottenham collection, B. M. 1974-587 // *Philonthus tomicus* Tottenham, TYPE [white oblong label, handwritten]' (BMNH).

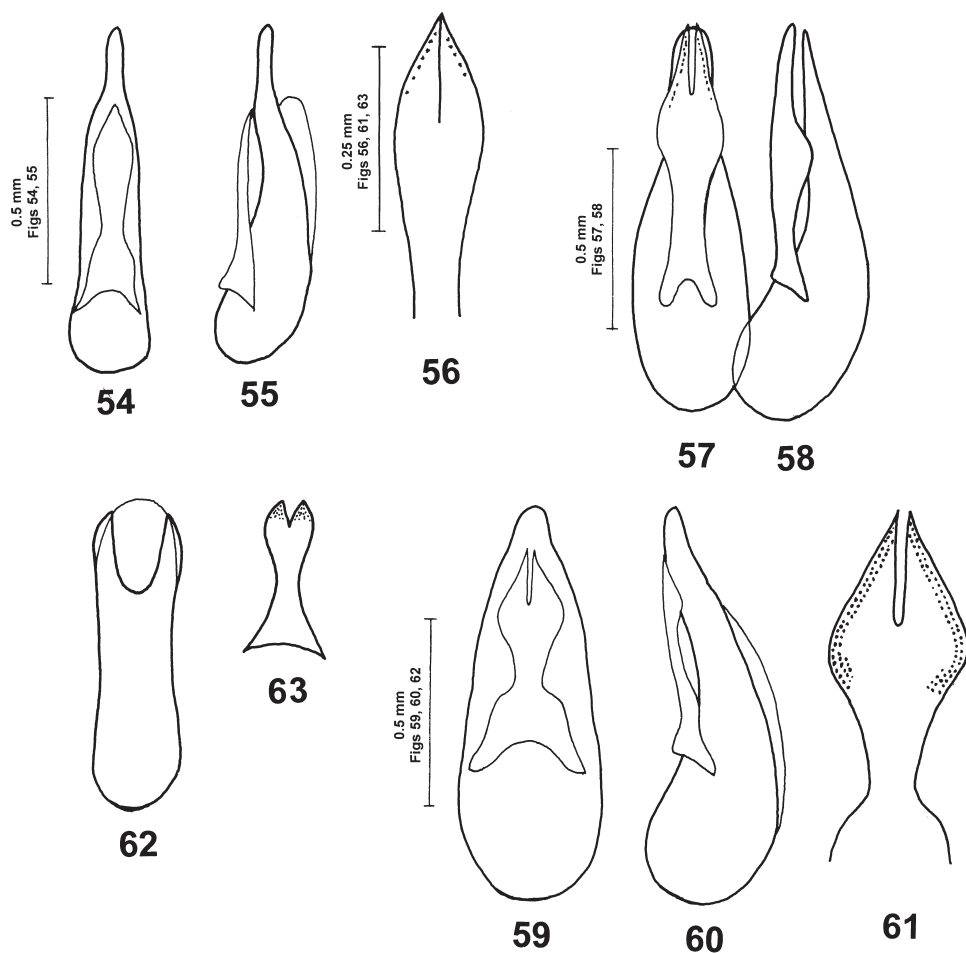
Redescription. Body length 7.1 mm, length of fore body (to end of elytra) 4.0 mm.

Colouration. Head, pronotum, scutellum and abdomen black, antennal sockets and clypeus along anterior margin narrowly yellow-brown, mandibles, maxillary and labial palpi black-brown, maxillary palpomere 3 and labial palpomere 3 somewhat paler, antennae black, antennomere 1 and base of antennomere 2 brown-yellow, elytra black, posterior half from suture to posterior margin with arcuate red spot, femora yellow-brown, tibiae and tarsomeres 1 of all tarsi brown-black, remaining tarsomeres gradually becoming paler distally.

Head oblong, vaguely narrowed posteriad, slightly longer than wide (ratio 21 : 19). Eyes flat, vaguely longer than temples (ratio 9 : 8). Distance between medial interocular punctures 3 times as large as distance between medial and lateral interocular punctures. Posterior margin of each eye with two coarse punctures. Temporal area almost each impunctate. Surface without microsculpture.

Antennae moderately long, almost reaching posterior margin of pronotum when reclined. Antennomere 1 as long as antennomeres 2–3 combined, antennomeres 4–5 somewhat longer than wide, antennomeres 6–10 as long as wide, antennomere 11 shorter than antennomeres 9–10 combined. Relative length of antennomeres: 1 = 8; 2–3 = 4; 4.5 = 3; 6–10 = 2.5; 11 = 4.5.

Pronotum distinctly longer than wide (ratio 25 : 21), vaguely narrowed towards anterior margin. Posterior angles markedly rounded, base of pronotum regularly convex. Right dorsal row with 5 punctures, left dorsal row with 7 punctures. Each sublateral row with 2 punctures. Surface without microsculpture.



Figs. 54–61. 54–56 – *Philonthus limbipennis* Fauvel, 1905. 57–58 – *P. maridadus* Tottenham, 1962; 59–61 – *P. sequens* Bernhauer & Schubert, 1914; 62–63 – *P. tomicus* Tottenham, 1962. 54, 57, 59 – aedeagus, ventral view; 55, 58, 60 – aedeagus, lateral view; 56, 61 – apex of paramere with sensory peg setae, ventral view; 62 – aedeagus, dorsal view; 63 – paramere, ventral view.

Scutellum very densely, coarsely punctate. Punctures hardly larger than eye-facets, slightly contiguous here and there; setation black.

Elytra as long as wide, hardly widened posteriad, hardly wider than pronotum basally. Punctuation in anterior half somewhat denser than that in posterior half. Punctures hardly larger than eye-facets, separated by distance inconspicuously smaller than a puncture diameter in anterior half, by about a puncture diameter in transverse direction in posterior half. Surface between punctures without microsculpture; setation greyish to golden.

Legs. Metatibia vaguely longer than metatarsus (ratio 22 : 21). Metatarsomere 1 vaguely

shorter than metatarsomeres 2–3 combined, metatarsomere 5 longer than metatarsomeres 3–4 combined. Relative length of metatarsomeres: 1 = 6; 2 = 3; 3 = 2.5; 4 = 2; 5 = 5.

Abdomen with first four visible tergites with two basal lines, elevated area between basal lines with scattered punctures. Punctuation of tergites finer and denser than that on elytra. Punctures of raindrop shape here and there. Setation similar to that on elytra.

Male. Protarsomeres 1–3 strongly dilated, sub-bilobed, protarsomere 4 narrower than preceding ones, triangular, protarsomeres 1–3 bearing modified pale setae ventrally. Aedeagus (Figs. 62–63).

Female. Unknown.

Differential diagnosis. This species is similar to *P. limbipennis*, but differs by the longer eyes and antennae, absence of purple iridescence on head and pronotum, black elytra bearing arcuate red spot on posterior half. It differs from *P. biguttulus* by shorter eyes, longer antennae, and by tibiae and first tarsomeres of all tarsi black. *Philonthus tomicus* differs from both above species by the shape of the aedeagus.

Bionomics. Unknown.

Distribution. Cameroon, Senegal (HERMAN 2001).

Key to the species of the *Philonthus caffer* group

- | | | |
|---|---|---------------------------------------|
| 1 | Each dorsal row of pronotum with 4 punctures. | 2 |
| – | Each dorsal row of pronotum with 5 punctures. | 3 |
| 2 | Each elytron with red patch (Fig. 7), femora yellow-brown, tibiae and tarsi black-brown. | <i>P. aonyx</i> sp. nov. |
| – | Elytra uniformly black, legs uniformly black-brown. ... | <i>P. iridicollis</i> Bernhauer, 1932 |
| 3 | Elytra uniformly black. | 4 |
| – | Elytra uniformly red, or black with red patches posteriorly (sometimes only posterior margin red). | 5 |
| 4 | Eyes longer than temples (ratio 10 : 8.5). | <i>P. aminius</i> Tottenham, 1955 |
| – | Eyes shorter than temples (ratio 10 : 15). | <i>P. leptophilus</i> Hromádka, 2006 |
| 5 | Elytra uniformly red. | 6 |
| – | Elytra bicoloured. | 7 |
| 6 | Larger species (body length 7.5 mm), pronotum hardly longer than wide (ratio 28 : 25), apex of paramere wide (Fig. 24). | <i>P. cliens</i> Eppelsheim, 1890 |
| – | Smaller species (body length 6.2–6.4 mm), pronotum as long as wide, apex of paramere narrower (Fig. 45). | <i>P. kenyanus</i> Bernhauer, 1939 |
| 7 | All antennomeres longer than wide. | 8 |
| – | Most antennomeres as long as wide. | 9 |
| 8 | Antennae long, reaching posterior margin of pronotum when reclined. Elytra pale, each elytron with dark triangular spot anteriorly. | <i>P. maridadus</i> Tottenham, 1962 |
| – | Antennae shorter, reaching posterior fourth of pronotum when reclined. Elytra pale, only shoulders and area around scutellum narrowly black. | <i>P. bucorvus</i> sp. nov. |
| 9 | Head and pronotum black, with blue metallic reflex. Abdomen black with blue-greenish reflection. | <i>P. gabonensis</i> Levasseur, 1966 |

- Body without metallic reflex. 10
- 10 Apex of median lobe very wide, paramere very short. 11
- Apex of median lobe narrow, bluntly or sharply pointed, paramere long. 12
- 11 Elytra black anteriorly, with posterior fourth red. Legs yellow-brown.
..... *P. biguttulus* Fauvel, 1907
- Elytra black, each elytron with red patch in posterior half. Femora yellow-brown, tibiae
and first tarsomere of all tarsi brown-black. *P. tomicus* Tottenham, 1962
- 12 Femora and tibiae brown, medial face of all tibiae vaguely darker, tarsi yellow-brown,
elytra black-brown, epipleura and posterior margin of elytra narrowly yellow-brown,
head and pronotum with slight purple iridescence. Median lobe narrowed subapically
(Fig. 54). *P. limbipennis* Fauvel, 1905
- Legs yellow-brown with darker tibiae. 13
- 13 Eyes as long as temples or longer. 14
- Eyes shorter than temples. 15
- 14 Pronotum longer than wide, femora and tarsi yellow-brown, tibiae darker. Paramere not
reaching apex of median lobe (Fig. 59). *P. sequens* Bernhauer & Schubert, 1914
- Pronotum as long as wide, legs yellow-brown. Paramere almost reaching apex of median
lobe (Fig. 25). *P. combustus* Fauvel, 1907
- 15 Antennae reaching posterior margin of pronotum when reclined, elytra black, narrowly
red-orange around suture and posterior margin, legs yellow-brown.
..... *P. falco* sp. nov.
- Antennae reaching posterior sixth of pronotum when reclined, almost entire elytra red,
femora and tarsi yellow-brown, tibiae darker. *P. caffer* Boheman, 1848

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