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# New species of genus *Philonthus* from the Afrotropical region (Coleoptera: Staphylinidae: Philonthina)

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#### Taxonomy, new species, key, Coleoptera, Staphylinidae, Philonthina, Philonthus, Afrotropical Region

Abstract. Ten new species of the genus *Philonthus* Stephens, 1829 (Coleoptera: Staphylinidae) are described as follows: *Philonthus alessmetanai* sp. nov. (Sierra Leone), *Philonthus alesi* sp. nov. (Ethiopia), *Philonthus emberiza* sp. nov. (Democratic Republic of the Congo), *Philonthus haliaeetus* sp. nov. (Rwanda, Tanzania), *Philonthus haliophis* sp. nov. (Kenya), *Philonthus indicator* sp. nov. (Ethiopia), *Philonthus lutjanus* sp. nov. (Kenya), *Philonthus melaenornis* sp. nov. (Zimbabwe), *Philonthus polemaetus* sp. nov. (Tanzania), *Philonthus procavia* sp. nov. (Burundi). All the species are described, illustrated and compared with related species.

## INTRODUCTION

The genus *Philonthus* Stephens, 1829 is represented by about 350 species in the Afrotropical region. Six species groups were defined for Afrotropical species by Tottenham (1962). I have revised the *Philonthus turbidus*, *P. peripateticus*, *P. abyssinus*, *P. nigriceps*, *P. arrowianus*, *P. bicoloripennis*, *P. quisquiliarius*, *P. marginipennis* and *P. aemulus* species groups (Hromádka 2008 a, b, c, 2009 a, b, c, d, 2010 a, b, c,).

In the study presented here, ten new species of Afrotropical *Philonthus* are described. Based on external characters and morphology of genitalia, it is not possible to affiliate any of these new species to the species groups mentioned above.

## MATERIAL AND METHODS

The following acronyms are used to refer to the collections mentioned: LHPC Lubomír Hromádka, private collection, Praha, Czech Republic; MRAT Musée Royal d'Afrique centrale, Tervuren, Belgium (Marc de Meyer); NHMW Naturhistorisches Museum, Wien, Austria (Harald Schillhammer); NMPC National Museum, Praha, Czech Republic (Jiří Hájek).

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

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#### RESULTS

## *Philonthus alessmetanai* sp. nov. (Figs 1-4)

Type locality. Sierra Leone, Wester Area, Base Picket Hill.

**Type material.** Holotype (♂): 'SIERRA LEONE, Western Area, Base Picket Hill, 9.i.1997, W. Rossi, //HOLOTYPE *Philonthus alessmetanai* sp. nov. Hromádka det., 2011, [red oblong printed label]', (LHPC).

Description. Body length 8.6 mm, length of fore body 4.2 mm.

Colouration. Entire body black-brown, posterior margin of all tergites narrowly brownred. Maxillary and labial palpi, antennomeres 1-3 and legs yellow-brown, mandibles brownyellow. Head and pronotum slightly blue iridescent here and there, abdomen more distinctly blue iridescent than on head and pronotum.

Head rounded, slightly wider than long (ratio 30:28), posterior angles markedly rounded, bearing several short bristles. With 4 coarse punctures between eyes, approximately in a straight line. Distance between medial interocular punctures 4 times as long as distance between medial and lateral interocular puncture. Eyes flat, as long as temples, posterior margin with two small punctures. Temporal area with several punctures. Surface without microsculpture.

Antennae long, reaching posterior fifth of pronotum when reclined. Antennomeres 1-4 and 11 distinctly longer than wide, antennomeres 5-7 slightly longer than wide, antennomere 8-10 as long as wide. Antennomere 1 twice longer than antennomere 11, antennomere 2 slightly shorter than antennomere 3.

Pronotum highly convex, distinctly narrowed anteriad, anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Each dorsal row with four approximately equidistant punctures, each sublateral row with two punctures, puncture 2 conspicuously shifted towards lateral margin. Sides bearing one long black bristle in anterior third. Surface without microsculpture.

Scutellum very densely and finely punctate, punctures approximately as large as eyefacets, separated by distance smaller than one puncture diameter in transverse direction.

Elytra wider than long (ratio 43 : 39), slightly widened posteriad. Punctation very fine and dense, diameter of punctures equal to those of scutellum, separated mostly smaller than one puncture diameter. Surface without microsculpture; setation brown-yellow.

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

Abdomen parallel-sided, from visible tergite IV very slightly narrowed posteriad. First three tergites with two basal lines, elevated area between lines, finely and densely punctate. Punctation at base of all visible tergites coarser than on elytra, gradually becoming sparser and finer towards posterior margin of each tergite, some of them of raindrop shape. Surface without microsculpture; setation similar to that on elytra.

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

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Female. Unknown to the author.

**Differential diagnosis.** *Philonthus alessmetanai* sp. nov. may be distinguished from the similar *P. lutjanus* sp. nov. (Figs 25-27), by its narrower head, paler antennae, maxillary and labial palpi and legs, denser punctation of all the scutellum and by the different shape of the aedeagus.

Distribution. Sierra Leone.

**Etymology.** I dedicate this new species to my friend Aleš Smetana, well-known specialist in the family Staphylinidae, on the occasion of his 80<sup>th</sup> birthday

## *Philonthus alesi* sp. nov. (Figs 5-8)

Type locality. Ethiopia, Bahr - Dar.

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**Type material.** Holotype (♂): 'ETHIOPIA, Bahr - Dar, 4.vi.1967, P. Štys lgt. //HOLOTYPE *Philonthus alesi* sp. nov. Hromádka det., 2011, [red oblong printed label]', (LHPC).

Description. Body length 9.1 mm, length of fore body 3.8 mm.

Colouration. Head black, pronotum dark brown, elytra brown, suture and posterior margin narrowly brown-yellow, abdomen dark brown, posterior margin of all tergites narrowly paler. Maxillary and labial palpi, antennae and legs yellow-brown, middle and posterior tibiae darker.

Head wider than long (ratio 34 : 26), parallel-sided, posterior angles obtusely rounded, bearing 1 long and several short black bristles. Clypeus with shallow, round depression medially. With four coarse punctures between eyes, distance between medial interocular punctures approximately 3 times as long as distance between medial and lateral interocular puncture. Eyes flat, longer than temples (ratio 10 : 8), posterior margin of eyes with two coarse punctures, from this towards to the middle of base several coarse punctures. Temporal area each with several varying large punctures. Surface with distinct isodiametrical microsculpture.

Antennae slender and 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, antennomere 2 shorter than antennomere 3.

Pronotum highly convex, wider than long (ratio 40 : 33), slightly narrowed anteriad. Anterior angles rectangularly rounded, posterior angles markedly rounded. Each dorsal row with six punctures, punctures 2-6 approximately equidistant, distance between punctures 1-2 much larger than between previous punctures. Each sublateral row with 3 punctures. Sides bearing several varying long bristles in anterior third. Surface with microsculpture similar to that on head.

Scutellum with several coarse punctures of varying size. Surface with fine microsculpture.

Elytra short, wider than long (ratio 50 : 35), distinctly widened posteriad. "Punctation coarse and dense, diameter of punctures distinctly larger than eye-facets, separated by distance smaller than 1 puncture diameter, mostly of punctures contiguous. Surface without microsculpture; setation brown-yellow.

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

Abdomen wide, from visible tergite III very gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctation at base of all tergites finer than on elytra, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1-3 distinctly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Sternite IX (Fig. 8), aedeagus (Figs 5-7).

Female. Unknown to the author.

**Differential diagnosis.** *Philonthus alesi* sp. nov. may be distinguished from the similar *P. ubadalius* Tottenham, 1956 (Figs 39-41) by its wider head and pronotum, paler antennae, larger number of punctures in dorsal rows, shorter elytra, densely punctation of abdomen and by the different shape of the aedeagus.

## Distribution. Ethiopia.

Etymology. Dedicated to Aleš Smetana as well; see the previous species.

# *Philonthus emberiza* sp. nov.

(Figs 9-14)

Type locality. Kivu: Terr. Kabare, Nyakaslba, 1800 m (vestige forêt).

**Type material.** Holotype ( $\mathcal{E}$ ): 'DEMOCRATIC REPUBLIC OF THE CONGO, Kivu: Terr. Kabare, Nyakaslba, 1800 m, (vestige forêt) vi.1951, N. Leleup // HOLOTYPE *Philonthus emberiza* sp nov. Hromádka det., 2011, [red oblong printed label]', (MRAT), Paratype: 1 spec., same label data as in holotype, (LHPC).

Description. Body length 7.9 mm, length of fore body 3.5 mm.

Colouration. Head black, pronotum and scutellum black-brown, elytra red, abdomen brown, posterior margin of all tergites narrowly brown-red. Base of antennomere 2 brownyellow, remaining antennomeres and maxillary and labial palpi dark brown. Femora yellowbrown, tibiae darker, tarsi brown, slightly paler distally.

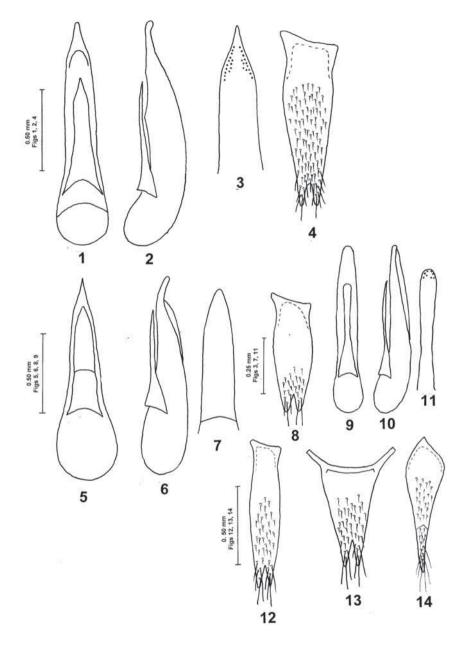
Head rounded, slightly wider than long (ratio 21 : 20). Posterior angles rounded, bearing one long black bristle. Four coarse punctures between eyes arranged in a straight line. Distance between medial interocular punctures, approximately three times as large as distance between medial and lateral interocular puncture. Eyes flat, as long as temples, posterior angles with one coarse puncture, temporal area in posterior half with several punctures, anterior half impunctate. Surface without microsculpture.

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

Pronotum highly convex, as long as wide, slightly narrowed anteriad in straight line. Anterior angles rectangularly obtusely rounded, bearing several short bristles, posterior angles markedly rounded. Each dorsal row with four 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 without microsculpture.

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Figs 1-14. *P. alesi* sp. nov.: 1- aedeagus, ventral view; 2- aedeagus, lateral view; 3- apex of paramere with sensory peg setae, ventral view; 4- male sternite IX, ventral view. *P. alessmetanaii* sp. nov.: 5- aedeagus, ventral view; 6- aedeagus, lateral view; 7- apex of paramere, ventral view; 8- male sternite IX, ventral view; *P. emberiza* sp. nov.: 9- aedeagus, ventral view; 10- aedeagus, lateral view; 11- apex of paramere with sensory peg setae, ventral view; 12- male sternite IX, ventral view; 13- female tergite X, ventral view; 14- gonocoxite of female genital segment.

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Scutellum densely and finely punctured, punctures as large as eye-facets, separated by one puncture diameter in transverse direction.

Elytra wider than long (ratio 35 : 33) very slightly widened posteriad. Punctation slightly coarser than on scutellum, separated by one puncture diameter or slightly larger here and there. Surface without microsculpture; setation brown-yellow.

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

Abdomen wide, from visible tergite III slightly narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctation at base of all tergites finer and denser than on elytra, becoming sparser towards posterior margin of each tergite. 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 narrower than preceding ones. Sternite IX (Fig. 12) and aedeagus (Figs 9-11).

Female Protarsomeres 1-3 less dilated than those of male, each covered with modified pale setae ventrally, protarsomere four small. Tergite X (Fig. 13), gonocoxite of female genital segment (Fig. 14).

**Differential diagnosis.** This new species is very similar to *P. ziloanus* Levasseur, 1962 (Figs 45-47), but it differs from it by its longer and darker antennae, wider and slightly sparser punctation of elytra, sparser punctation of abdomen, from *Philonthus haliaeetus* sp. nov. by its wider head, narrower elytra, and from both by the different shape of the aedeagus.

Distribution. Democratic Republic of the Congo.

**Etomology.** The name of this species, a noun in apposition, is the Latin generic name of the African golden breasted bunting *Emberiza flaviventris* Stephens, 1815.

# Philonthus haliaeetus sp. nov. (Figs 15-18)

Type locality. Rwanda, Lake Kiwu.

**Type material.** Holotype ( $\mathcal{E}$ ): 'RWANDA, Lake Kiwu, iii.1980, Rataj, //HOLOTYPE *Philonthus haliaeetus* sp. nov. Hromádka det, 2011, [red oblong label printed], (LHPC), Paratype: (1 spec): TANZANIA, Mwanza, 1969, P. Ardo', (LHPC).

Description. Body length 7.4 mm, length of fore body 3.5 mm.

Colouration. Head black, pronotum, scutellum and abdomen black-brown, elytra red, shoulders and suture narrowly black, maxillary and labial palpi brown, base of antennomere 2 brown-yellow, remaining antennomeres black-brown, legs brown, tarsi paler distally, abdomen bluish iridescent.

Head narrow, as wide as long, slightly narrowed posteriad, posterior angles indistinct. Four coarse punctures between eyes, distance between medial interocular punctures four times as large as distance between medial and lateral interocular puncture. Medial punctures distinctly shifted towards clypeus. Eyes as long as temples, posterior margin of eyes with two coarse punctures. Temporal area with several varying large punctures. Surface with very fine microsculpture consisting of transverse waves.

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Antennae slender and 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.

Pronotum highly convex, as long as wide, slightly narrowed anteriad, anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with five fine punctures, punctures 1-4 equidistant, distance between punctures 4-5 larger than 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 similar to that on elytra.

Scutellum very densely and finely punctate, punctures as large as eye-facets, separated by distance smaller than diameter of punctures.

Elytra wider than long (ratio 37 : 34), slightly widened posteriad. Punctation fine and dense, punctures larger than on scutellum, separated by one puncture diameter in transverse direction. Surface without microsculpture; setation brown.

Legs. Metatarsus longer than metatibia (ratio 24 : 21) metatarsomere 1 almost twice longer than metatarsomere 5, as long as metatarsomeres 2-4 combined.

Abdomen wide, gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines densely and finely punctate. Punctation at base of all tergites finer and denser than 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 moderately dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Sternite IX (Fig. 18), aedeagus (Figs 15-17).

Female. Unknown to the author

**Differential diagnosis.** This new species is very similar to *P. ziloanus* Levasseur, 1962 (Figs 45-47), from which it differs by its longer antennae, much narrower head, longer, wider and sparser punctation of elytra, from *P. emberiza* sp. nov. (Figs 9-11) by its narrower head, wider elytra and from both by the different shape of the aedeagus.

Distribution. Rwanda, Tanzania.

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**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African white tailed eagle *Haliaeetus vocifor* Baudin, 1800.

#### Philonthus haliophis sp. nov.

Type locality. Afrique or., anglaise, Mt. Kenya vers' ouest.

**Type material.** Holotype ( $\mathcal{O}$ ): 'Kenya, Afrique or., anglaise, Mt. Kenya vers ouest, zone des forêt. //HOLOTYPE *Philonthus haliophis* sp. nov. Hromádka det., 2011, [red oblong printed label]', (NMPC).

Description. Body length 7.5 mm, length of fore body 3.7 mm.

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

Head rounded, slightly wider than long (ratio 25 : 23), posterior angles markedly rounded, bearing two long black bristles. Between eyes four coarse punctures, arranged in a straight line, distance between medial interocular punctures three times as large as distance between medial and lateral interocular puncture. Eyes large and flat, longer than temples (ratio 10 : 8), posterior margin of eyes with two coarse punctures, temporal area with several varying large punctures. Surface without microsculpture.

Antennae long, exceeding posterior margin of pronotum by the length of antennomere 11. Antennomeres 1-6 and 11 distinctly longer than wide, antennomeres 7-10 slightly longer than wide. Antennomere 1 twice longer than antennomere 11, antennomere 2 as long as antennomere 3.

Pronotum highly convex, anterior angles conspicuously deflexed, vaguely rectangularly rounded, bearing several short bristles, posterior angles markedly rounded. Each dorsal row with 5 punctures, distance between punctures 1 - 3 and 4 - 5 equidistant, distance between punctures 3 - 4 smaller than 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 without microsculpture.

Scutellum densely and finely punctured, diameter of punctures as large as eye-facets. Punctures separated by one puncture diameter in transverse direction. Surface with fine microsculpture.

Elytra wider than long (ratio 40 : 36), slightly widened posteriad. Punctation coarse and sparse, diameter of punctures larger than on scutellum, separated by one and half or two puncture diameters. Surface without microsculpture; setation brown.

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

Abdomen wide, very slightly gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctation at base of all tergites much finer and denser than on elytra, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation of the same colour as 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, heart-shaped. Aedeagus (Figs 19-21).

Female. Unknown to the author.

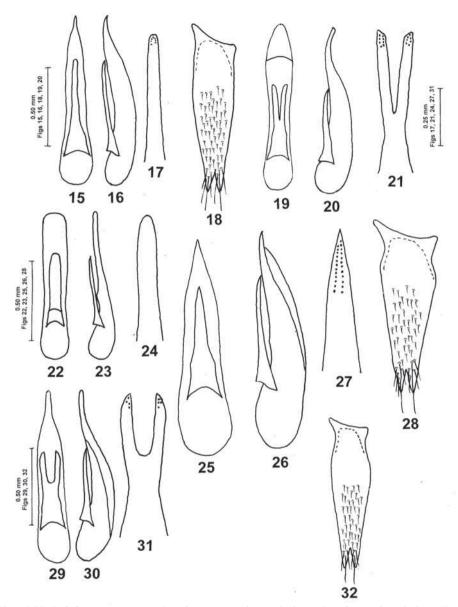
**Differential diagnosis.** This new species is similar to *P. cailleuxi* Levasseur, 1980 (Figs 36-38) but it differs by its wider head, shorter eyes, darker suture and epipleura of elytra, sparser punctation of elytra and abdomen and by the different shape of the aedeagus.

### Distribution. Kenya.

**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of African eel blenny *Haliophis guttatus* (Forsskäl, 1775).

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Figs 15-32. *P. haliaeetus* sp. nov.: 15- aedeagus, ventral ventral view, 16- aedeagus, lateral view, 17- apex of paramere with sensory peg setae, 18- male sternite IX, ventral view. *P. haliophis* sp. nov.: 19- aedeagus, ventral view; 20- aedeagus, lateral view; 21- apex of paramere with sensory peg setae, ventral view. *P. indicator* sp. nov.: 22- aedeagus, ventral view; 23- aedeagus, lateral view; 24- apex of paramere, ventral view. *P. lutjanus* sp. nov.: 25- aedeagus, ventral view; 26- aedeagus, lateral view; 27- apex of paramere with sensory peg setae, ventral view; 28- male sternite IX, ventral view; 29- aedeagus, ventral view; 30- aedeagus, lateral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 31- apex of paramere with sensory peg setae, ventral view; 32- male sternite IX, ventral view.

## *Philonthus indicator* sp. nov. (Figs 22-24)

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Type locality. Abessinien.

**Type material.** Holotype ( $\mathcal{C}$ ): 'ABESSINIEN, Kristensen, //HOLOTYPE *Philonthus indicator* sp. nov. Hromádka det. 2011), [red oblong printed label]', (NMPC).

## Description. Body length 8.5 mm, length of fore body 3.8 mm.

Colouration. Head black, pronotum orange-red, scutellum and elytra slightly darker, abdomen brown, posterior margin of all tergites narrowly brown-red. Maxillary and labial palpi, legs and antennomeres 1-2 and 11 yellow-brown, remaining antennomeres brown.

Head as long as wide, from posterior margin of eyes distinctly narrowed posteriad. Posterior angles unclear, between eyes four punctures, arranged in a straight line, distance between medial interocular punctures three times as long as distance between medial and lateral interocular puncture. Eyes small, distinctly shorter than temples (ratio 8 : 11), posterior margin of eyes with two coarse punctures, temporal area almost impunctate. Surface without microsculpture.

Antennae slender and long, reaching posterior margin of pronotum when reclined. All antennomeres longer than wide, antennomere 1 almost twice longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum highly convex, longer than wide (31 : 29) distinctly narrowed anteriad. Anterior angles conspicuously deflexed, vaguely obtusely rounded, bearing several varying large bristles, posterior angles markedly rounded. Each dorsal row with six fine, equidistant punctures, each sublateral row with two fine punctures, puncture two slightly shifted to the lateral margin. Surface without microsculpture.

Scutellum very densely and coarsely punctured, punctures slightly larger than eye-facets, punctures separated by one puncture diameter, or slightly smaller.

Elytra wider than long (ratio 40 : 34) widened posteriad. Punctation sparser and slightly coarser than on scutellum. Diameter of punctures larger than on scutellum, separated by one puncture diameter, mostly smaller. Surface without microsculpture; setation brown-yellow.

Legs. Metatarsus shorter than metatibia (ratio 22 : 25), metatarsomere 1 as long as metatarsomeres 2-3 combined.

Abdomen from visible tergite III slightly narrowed anteriad and distinctly narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines densely and finely punctate. Punctation at base of all tergites finer and denser than on elytra, becoming sparser 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 narrower than preceding ones. Aedeagus (Figs 22-24).

Female. Unknown to the author.

**Differential diagnosis.** *Philonthus indicator* sp. nov. may be distinguished from the similar *P. belesis* Tottenham, 1956 (Figs 33-35) by its paler antennae and elytra, darker head, denser and finer punctation of elytra and abdomen and by the different shape of the aedeagus.

Distribution. Ethiopia.

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**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of the African turn and bank indicator *Indicator indicator* Sparrman, 1777.

# Philonthus lutjanus sp. nov. (Figs 25-28)

Type locality. Kenya, Mt. Elgon, Afr. centr. or.

**Type material.** Holotype ( $\mathcal{C}$ ): 'KENYA, Mt. Elgon, Afr. centr. or. A. Holm //HOLOTYPE *Philonthus lutjanus* sp. nov Hromádka det., 2011. [red oblong printed label]', (NHMW).

Description. Body length 9.1 mm, length of fore body 4.2 mm.

Colouration. Whole body black, anterior angles of pronotum slightly bluish iridescent from lateral view, abdomen distinctly bluish iridescent. Maxillary and labial palpi blackbrown, ventral side of antennomere one brown-yellow, dorsal side and entire remaining antennomeres black-brown, legs black.

Head wider than long (ratio 32 : 27), parallel-sided, posterior angles obtusely rounded, bearing one long and several short black bristles. Between eyes four punctures arranged in a straight line, distance between medial interocular punctures, more than twice longer than distance between medial and lateral interocular puncture. Eyes flat, slightly shorter than temples (10 : 11), posterior margin of eyes with three punctures arranged in the shape of triangle. Anterior half of temporal area impunctate, posterior half with scattered punctures. Surface without microsculpture.

Antennae slender and long, reaching posterior fifth of pronotum when reclined. Antennomeres 1-3 and 11 distinctly longer than wide, antennomeres 4-6 slightly longer than wide, antennomeres 7-10 as long as wide. Antennomere 1 almost twice longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum highly convex, wider than long (39: 37), slightly narrowed anteriad. Anterior angles conspicuously deflexed, vaguely obtusely rounded, bearing several short bristles, posterior angles markedly rounded. Each dorsal row with four approximately equidistant punctures, each sublateral row with two punctures, puncture two distinctly shifted to the lateral margin. Sides bearing one long and several short bristles in anterior third. Surface without microsculpture.

Base and apex of scutellum narrowly impunctate, punctation of the middle dense and fine, punctures slightly smaller than eye-facets, separated by one or one and half puncture diameters.

Elytra wider than long (ratio 45 : 40), very slightly widened posteriad. Punctation slightly coarser than on scutellum. Punctures separated by one or one and half puncture diameters. Surface without microsculpture; setation brown greyish.

Legs. Metatarsus slightly shorter than metatibia (ratio 23 : 25), metatarsomere 1 longer than metatarsomere 5.

Abdomen from visible tergite III narrowed anteriad and posteriad. First three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctation

at base of all tergites finer than on elytra, becoming sparser towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1-3 distinctly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 smaller than preceding ones. Sternite IX (Fig. 28), aedeagus (Figs 25-27).

Female. Unknown to the author.

**Differential diagnosis.** This new species is very similar to *P. alessmetanai* sp. nov. (Fig. 1-4) but it differs by its wider head, darker antennae, maxillary and labial palpi and legs, sparser punctation of the whole scutellum 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 African red snapper *Lutjanus agennes* Bleker, 1863.

# Philonthus melaenornis sp. nov.

(Figs 29-32)

Type locality. Zimbabwe [N. Rhodesia], Abercorn, 1800 m.

**Type material.** Holotype (♂): 'ZIMBABWE [N. Rhodesia] Abercorn, 1800 m, vii.1960, N. Leleup, Galerie forestière be la Mwengo, cans l'humus, //HOLOTYPE *Philonthus melaenornis* sp. nov. Hromádka det., 2011, [red oblong label printed]', (MRAT). Paratype (1 spec.): Chipinge, 1200 à 1300 m, vii.1960, humus dans résidu, forêt ombrophile, (LHPC).

Description. Body length 7.2 mm, length of fore body 3.5 mm.

Colouration. Head black, pronotum and scutellum brown-black, elytra brown-red, suture narrowly paler, abdomen brown, posterior margin of all tergites narrowly red-brown. Maxillary and labial palpi and mandibles yellow-brown, antennomere 1 and base of antennomere 2 brown-yellow, antennomere 11 slightly paler, remaining antennomeres dark brown. Femora and tarsi brown-yellow, tibiae darker.

Head transverse, parallel-sided, wider than long (ratio 24 : 21), posterior angles obtusely rounded, bearing one long and several short bristles. Between eyes four coarse punctures arranged in a straight line. Distance between medial interocular punctures approximately three times as large as distance between medial and lateral interocular puncture. Eyes longer than temples (ratio 13 : 10), posterior margin of eyes with two punctures, temporal area with several varying large mostly setiferous punctures. Surface with traces of very fine irregular microsculpture here and there.

Antennae slender and long, reaching posterior margin of pronotum when reclined, antennomeres 1-3 and 11 distinctly longer than wide, antennomeres 4-6 slightly longer than wide, antennomeres 7-10 as long as wide, antennomere 1 longer than antennomere 11, antennomere 2 slightly shorter than antennomere 3.

Pronotum highly convex, anterior angles conspicuously deflexed, vaguely almost rectangularly rounded, bearing several varying long black bristles, posterior angles markedly rounded. Each dorsal row with six irregularly located punctures, each sublateral row with two punctures, puncture two slightly shifted to the lateral margin. Sides bearing two long bristles in anterior third. Surface with very fine microsculpture consisting of transverse waves.

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Scutellum very finely and densely punctate, punctures slightly larger than eye-facets, separated by one or one and half puncture diameters. Surface with very fine microsculpture, setation short and dark.

Elytra wider than long (ratio 40 : 37), parallel-sided. Punctation fine and dense, diameter of punctures approximately as large as eye-facets, separated by one or one and half puncture diameters. Surface without microsculpture; setation brown-yellow.

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

Abdomen wide, very gradually narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines impunctate. Punctation at base of all tergites finer and denser than on elytra, becoming sparser towards posterior margin of each tergite. 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 narrower than preceding ones. Sternite IX (Fig. 32), aedeagus (Figs 29-31).

Female. Unknown to the author.

**Differential diagnosis.** *Philonthus melaenornis* sp. nov. may be distinguished from the similar *P. wittei* Bernhauer, 1932 (Figs 42-44) by its longer eyes, narrower and slightly sparser punctation of elytra, from *P. procavia* sp. nov., (Figs 51-54), by its shorter antennae, head and pronotum, less distinct microsculpture, different colouring of elytra and abdomen and from both by the different shape of the aedeagus.

#### Distribution. Zimbabwe.

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**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of African abyssinian slaty flycatcher *Melaenornis chocolatinus* (Rüppel, 1840).

Philonthus polemaetus sp. nov. (Figs 48-50)

Type locality. Tanzania, Mwanza.

**Type material.** Holotype ( $\mathcal{S}$ ): 'Tanzania Mwanza, 11.x.1969, Ardo, leg., //HOLOTYPE *Philonthus polemaetus* sp. nov. Hromádka det., 2011 [red oblong printed label]', (LHPC).

**Description.** Body length 4.7 mm, length of fore body 3.6 mm.

Colouration. Head black, pronotum, scutellum and abdomen brown, elytra brown-red, maxillary and labial palpi, antennomeres 1-2 and base of antennomere 3 brown-yellow, remaining antennomeres dark brown, femora and tarsi yellow-brown, tibiae darker.

Head rounded, slightly wider than long (ratio 23 : 21), posterior angles obtusely rounded, bearing one long black bristle. Between eyes four coarse punctures, arranged in a straight line. Distance between medial interocular punctures about five times as long as distance between medial and lateral interocular puncture. Eyes flat, longer than temples (ratio 6 : 5), posterior margin of eyes with two coarse punctures. Temporal area with several varying large punctures. Surface without microsculpture.

Antennae long, exceeding posterior margin of pronotum by the length of antennomere 11. Antennomeres 1-7 and 11 longer than wide, antennomeres 8-10 as long as wide, antennomere 1 longer than antennomere 11, antennomere 2 slightly shorter than antennomere 3.

Pronotum highly convex, slightly longer than wide (ratio 25 : 24), distinctly narrowed anteriad. Anterior angles conspicuously deflexed, distinctly rounded, posterior angles markedly rounded. Each dorsal row with four coarse, approximately equidistant punctures. Distance between posterior margin and puncture four, larger than distance between previous punctures. Each dorsal row with two fine punctures arranged in a row parallel to the dorsal row and half way between it and side. One long black bristle arranged in anterior third of sides. Surface without microsculpture.

Scutellum finely and sparsely punctate, punctures as large as eye-facets, separated by two puncture diameters in transverse direction.

Elytra wider than long (ratio 29 : 26), widened posteriad. Punctation coarse and sparse, diameter of punctures twice larger than on scutellum. Punctures separated by two or three puncture diameters. Surface without microsculpture; setation brown.

Legs. Metatibia slightly shorter than metatarsus (ratio 25 : 27), 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 with scattered punctures. Punctation at base of all tergites denser and coarser than on elytra, becoming sparser and finer towards posterior margin of each tergite. Surface without microsculpture; setation of the same colour as on elytra.

Male. Protarsomeres 1-3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere four smaller than preceding ones. Aedeagus (Figs 48-50).

Female. Unknown to the author.

**Differential diagnosis.** *Philonthus palemaetus* sp. nov. is similar to *P. ziloanus* Levasseur, 1962 (Figs 45-47) in most characters, but it differs by its longer antennae, sparser punctation of elytra and abdomen, longer elytra and by the different shape of the aedeagus.

## Distribution. Tanzania.

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**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of African Martial eagle *Polemaetus bellicosus* Baudin, 1800.

## Philonthus procavia sp. nov.

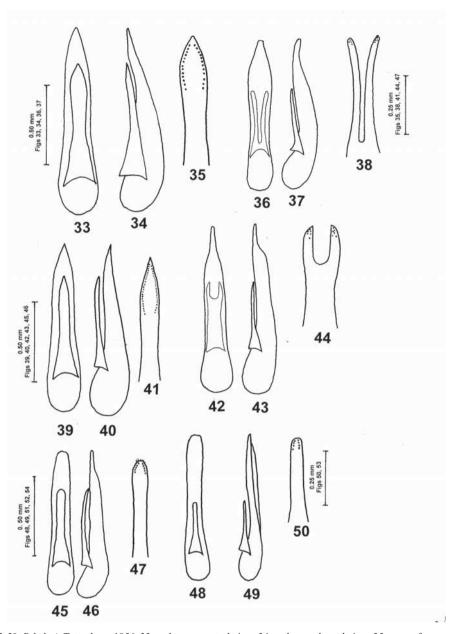
(Figs 51-54)

Type locality. Burundi, Kaninya.

**Type material.** Holotype (♂): 'Burundi, Kanynia, vii. 1940, A. J. Bréda lgt., //HOLOTYPE *Philonthus procavia* sp. nov. Hromádka det., 2011 [red oblong printed label]', (NMPC). Paratype (1 spec.): same label data as in holotype, (LHPC).

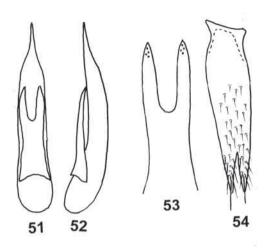
Description. Body length 9.2 mm, length of fore body 4.3 mm.

Colouration. Head black, pronotum, scutellum, elytra, abdomen, maxillary and labial palpi dark brown, base of antennomere 2 yellow-brown, remaining antennomeres black-brown, femora and tarsi brown-yellow, tibiae darker.



Figs 33-50. *P. belesis* Tottenham, 1956: 33- aedeagus, ventral view; 34- aedeagus, lateral view; 35- apex of paramere with sensory peg setae, ventral view. *P. cailleuxi* Levasseur, 1980: 36- aedeagus, ventral view; 37- aedeagus, lateral view; 38- apex of paramere with sensory peg setae, ventral view. *P. ubadalius* Tottenham, 1956: 39- aedeagus, ventral view; 40- aedeagus, lateral view; 41- apex of paramere with sensory peg setae, ventral view; 42- aedeagus, ventral view; 42- aedeagus, ventral view; 43- aedeagus, lateral view; 44- apex of paramere with sensory peg setae. *P. ziloanus* Levasseur, 1962: 45- aedeagus, ventral view; 46- aedeagus, lateral view; 47- apex of paramere with sensory peg setae, ventral view; 50- apex of paramere with sensory peg setae, ventral view; 50- apex of paramere with sensory peg setae, ventral view.





Figs 51-54. *P. procavia* sp. nov.: 51- aedeagus, ventral view; 52- aedeagus, lateral view; 53- apex of paramere with sensory peg setae, ventral view; 54- male sternite IX, ventral view.

Head approximately as long as wide, parallel-sided, posterior angles almost indistinct, bearing two long black bristles. Between eyes four punctures, distance between medial interocular punctures five times as large as distance between medial and lateral interocular puncture, lateral punctures slightly shifted towards clypeus. Eyes slightly shorter than temples (ratio 13 : 15), posterior angles bearing two coarse punctures. Temporal area with many varying large greyish setiferous punctures in posterior half. Surface with microsculpture consisting of transverse waves.

Antennae long, exceeding posterior margin of pronotum by the length of antennomere 11. All antennomeres longer than wide. Antennomere 1 about one third longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum highly convex, distinctly narrowed anteriad, anterior angles conspicuously deflexed, vaguely obtusely rounded, posterior angles markedly rounded. Each dorsal row with six punctures, distance between punctures 2-5 equidistant, distance between punctures 1-2 and 5-6 slightly larger than between previous punctures. Each sublateral row with two fine punctures, puncture two shifted to the lateral margin. Sides bearing with several varying long bristles. Surface with the same microsculpture as that on elytra.

Scutellum very finely and sparsely punctate, diameter of punctures as large as eye-facets, punctures separated by two puncture diameters in transverse direction.

Elytra wider than long (ratio 45 : 42), widened posteriad. Punctation fine and dense, diameter of punctures much larger than on scutellum, separated smaller than one puncture diameter, some of punctures contiguous here and there. Surface without microsculpture; setation dark.

Legs. Metatibia longer than metatarsus (ratio 29 : 26), metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2-4 combined.

Abdomen wide, gradually narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctation at base of all tergites finer and

denser than 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, protarsomere 4 narrower than preceding ones. Sternite IX (Fig. 54), aedeagus (Figs 51-53).

Female. Unknown to the author.

**Differential diagnosis.** This species is similar to *P. melaenornis* sp. nov. (Figs 29-32), but it differs by its longer antennae, head and pronotum with more distinct microsculpture, different colouring of elytra and abdomen, from *P. wittei* Bernhauer 1932 (Figs 42-44), by its longer antennae, wider head, slightly sparser punctation of abdomen and from both by the different shape of the aedeagus.

Distribution. Burundi.

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**Etymology.** The name of this species, a noun in apposition, is the Latin generic name of African Rock hyrax *Procavia capensis* (Pallas, 1766).

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