

Four new *Philonthina* species (Coleoptera: Staphylinidae: Philonthina) from the Afrotropical region

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Abstract. *Belonochus oceanites* sp. nov. from Namibia, *Cafius nycticorax* sp. nov. from Somalia, *Philonthus turnix* sp. nov. and *Philonthus xena* sp. nov., both from Democratic Republic of the Congo are described and male characters are illustrated. *Philonthus botaurus* nom. nov. is proposed for *P. cricetomys* Hromádka, 2014 and *Philonthus mesophoxyx* nom. nov. is proposed for *P. zosterops* Hromádka, 2011.

Key words. Taxonomy, new species, Coleoptera, Staphylinidae, Philonthina, *Belonochus*, *Cafius*, *Philonthus*, Afrotropical region.

INTRODUCTION

The genus *Cafius* Curtis, 1829, currently contains 45 species, which occur in all zoogeographical regions, is represented in the Afrotropical region only by the one species *C. nauticus* Fairmaire (1849) from Somalia. This genus was exhaustively characterized by Smetana (1995): “Both maxillary and labial palpus short, segment 3 of maxillary palpus about 1.3 as long as wide. Mesosternum acute apically”.

The genus *Belonochus* Nordmann, 1837 containing 196 species, is distributed in all major zoogeographical regions. The genus includes 16 species in the Afrotropical region. Smetana (1995) characterized this genus: “Lateral puncture of pronotum bearing long setae, situated away from superior line of pronotal hypomeron, separated from it by distance at least three times as large as diameter of puncture”.

Philonthus Stephens, 1829 is the largest genus of the subtribe Philonthina, currently containing more than 1500 species, which occur in all zoogeographical regions, in the Afrotropical region by approximately 500 known species. Smetana (1995) characterized this genus. “Dorsal surface of all tarsal segments glabrous except for scattered, long marginal setae. All tarsi moderately long, front tarsus shorter than front tibiae, first segment distinctly shorter than segments 2 and 3 combined”.

MATERIAL AND METHODS

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

LHPC – Lubomír Hromádka collection, Praha, Czech Republic;

MSNF – Museo di Storia Naturale Firenze, Italy (Luigi Bartolozzi);

TMNP – Transvaal Museum of Natural History, Pretoria, Republic of South Africa (Ruth Muller).

A double slash (//) is used to divide the separate labels of each type specimens. All measurements were taken from the beetles with stretched abdomen. Ratios mentioned in the descriptions can be converted to length using the following formula: 20 units = 1 mm. The morphological studies were conducted using a SMZ 168 Zoom (Italy) stereoscopic microscope.

TAXONOMIC PART

Belonochus oceanites sp. nov.
(Figs 4–7)

TYPE LOCALITY. Namibia, Kuzikus, 14° 17.2' 17.2" S, 18° 23' 28.8" E.

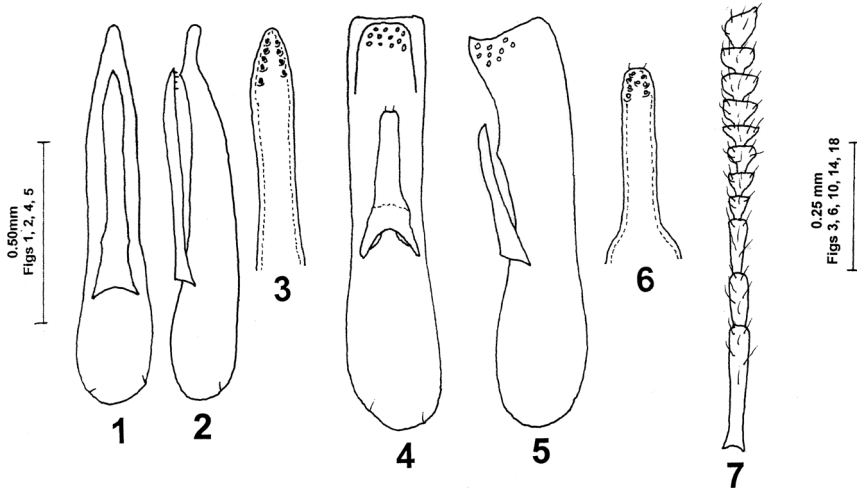
TYPE MATERIAL. **Holotype** (♂): Namibia, "Kuzikus W. R. 23 / 14° 17.2' 17.2" S, 18° 23' 28.8" E / Pitfall, 29.iii–03.iv.2011 / leg. J. Konstant [red oblong printed label]" (LHPC).

DESCRIPTION. Body length 14.9 mm, length of fore body (to end of elytra) 6.8 mm. Head, pronotum, scutellum and abdomen black, elytra orange-brown, suture narrowly darker, maxillary, labial palpi and femora yellow-brown, tibiae and tarsi slightly darker.

Head wider than long (ratio 50 : 40), parallel-sided, posterior angles obtusely rounded, bearing one long black bristle. Clypeus with a shallow depression in the middle and with a short midline, two coarse punctures arranged in an oblique row on each side. Middle of head impunctate, sides and temporal area with many differently large punctures. Eyes flat, shorter than temples (ratio 11 : 23), surface with fine microsculpture consisting of transverse waves.

Antennae stout, (Fig. 7) reaching posterior third of pronotum when reclined. Antennomeres 1–3 and 11 distinctly longer than wide, antennomere 4 slightly longer than wide, antennomere 5 as long as wide, antennomeres 6–10 wider than long. Antennomere 1 three times longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum as long as wide, distinctly narrowed posteriad, anterior angles obtusely rounded, bearing many varying long black bristles, posterior angles markedly rounded. Each dorsal row with 12 irregularly spaced punctures, with wide impunctate midline, each side in anterior half



Figs 1–7. 1–3 – *Cafius nictycorax* sp. nov. 1 – aedeagus, ventral view; 2 – aedeagus, lateral view; 3 – apex of paramere with sensory peg setae, ventral view. 4–7 – *Belonochus oceanites* sp. nov. 4 – aedeagus, ventral view; 5 – aedeagus, lateral view; 6 – apex of paramere with sensory peg setae, ventral view, 7 – antenna.

with many irregular punctures of varying size and with one puncture in the posterior half. Surface with microsculpture similar to that on head.

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

Elytra approximately as long as wide, very slightly arcuately widened posteriad. Punctuation much finer and slightly sparser than that on scutellum, diameter of punctures smaller than that on scutellum, separated by one puncture diameter in transverse direction. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 30 : 28) metatarsomere 1 shorter than metatarsomere 5, slightly shorter than metatarsomeres 2–3 combined.

Abdomen from visible tergite III slightly narrowed posteriad, first three visible tergites with two basal lines, elevated area between lines densely and coarsely punctured. Punctuation at base of all tergites slightly coarser and denser than that on elytra, mostly of punctures drop-shaped. Surface without microsculpture; setation similar to that on elytra.

DIFFERENTIAL DIAGNOSIS. *Belonochus oceanites* sp. nov., is similar to *B. bafutensis* Levasseur, 1968 (Figs 8–11), may be distinguished by the wider antennomeres 5–10 and pronotum, different colouring of elytra (by *B. bafutensis* are elytra black) and by the different shape of the aedeagus.

DISTRIBUTION. Namibia.

ETYMOLOGY. The name of this species, a noun in apposition, is the Latin generic name of the Wilson's storm-petrel *Oceanites* Keyserling et Blasius, 1840.

Cafius nycticorax sp. nov.

(Figs 1–3)

TYPE LOCALITY. Somalia, Giohar.

TYPE MATERIAL. **Holotype** (♂): Somalia, "Giohar / 22.iv.1968, leg. S. B. S. // Holotype *Cafius nycticorax* sp. nov. Hromádka det. 2015. [orange oblong printed label]" (MSNF).

DESCRIPTION. Body length 6.9 mm, length of fore body (to end of elytra) 3.4 mm.

Head black-brown, pronotum, scutellum, elytra and abdomen brown. Maxillary, labial palpi, and antennae brown, legs brown-yellow.

Head wider than long (ratio 22 : 18), posterior angles obtusely rounded. Eyes large and convex, twice longer than temples. Whole head densely and finely punctate, diameter of punctures as large as eye-facets, separated by one puncture diameter. Surface with eye like microsculpture. Posterior half with narrow and shine midline.

Antennae reaching posterior fourth of pronotum when reclined. Antennomeres 1–3 and 11 distinctly longer than wide, antennomere 4 slightly longer than wide, antennomeres 5–10 slightly wider than long. Antennomere 1 longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum as long as wide, very slightly narrowed posteriad. Anterior and posterior angles markedly rounded. Surface finely and densely punctate, diameter of punctures smaller than eye-facets, separated by two puncture diameters or smaller, surface with eye like microsculpture.

Scutellum very densely and finely punctate. Surface with very dense eye like microsculpture.

Elytra longer than wide (ratio 33 : 28) parallel-sided. Very densely and very finely punctured, diameter of punctures smaller than eye-facets. Surface by one puncture diameter or smaller, mostly of punctures contiguous; setation yellow-brown.

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

Abdomen from visible tergite III slightly narrowed anterior and posterior. First three visible tergites with two basal lines, elevated area between lines finely punctate. Punctuation of all tergites finer and sparser than that on elytra. Surface without microsculpture; setation yellow-brown.

DIFFERENTIAL DIAGNOSIS. *Cafius nycticorax* sp. nov. may be distinguished from the similar *C. nauticus* Fairmaire, 1849 by the shorter antennae, more distinct microsculpture on head and pronotum, denser punctuation of abdomen and by the different shape of the aedeagus.

DISTRIBUTION. Somalia.

ETYMOLOGY. The name of this species, a noun in apposition, is the Latin generic name of the black-crowned night-heron *Nycticorax* Steinerger, 1887.

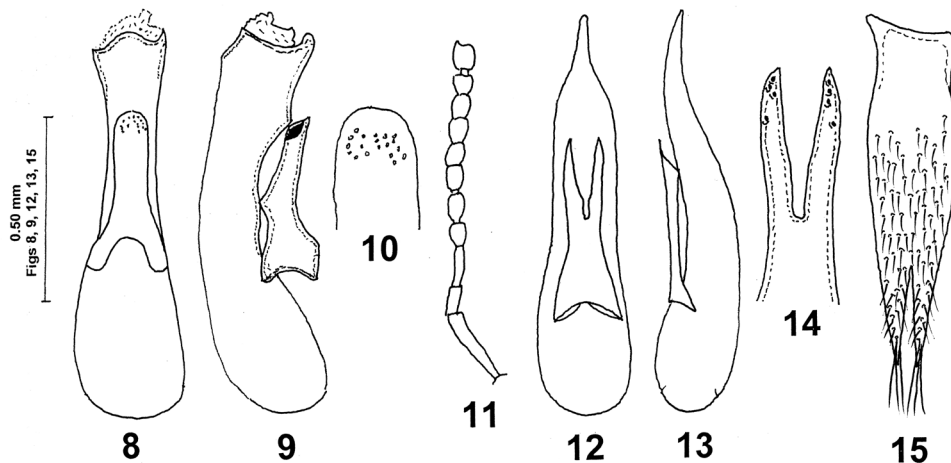
***Philonthus turnix* sp. nov.**
(Figs 16–19)

TYPE LOCALITY. Democratic Republic of the Congo, Tsingidi.

TYPE MATERIAL STUDIED. **Holotype** (♂): D. R. Congo, “Tsingidi, 2.24. 15.6S, 12.58.11.0E, November 2013, leg. L. J. Niemand. // Holotype *Philonthus turnix* sp. nov. Hromádka, 2015 det., [red oblong printed label]”, (TMNP). **Paratype** (♂): same label data as holotype (LHPC).

DESCRIPTION. Body length 8.7 mm, length of fore body (to end of elytra) 4.0 mm. Head, scutellum, elytra and abdomen black, pronotum black-brown. Palpomeres 1–2 of both palpi black-brown, palpomere 1 slightly paler, antennae black. Femora brown-yellow, tibiae dark brown, from tarsi towards knees paler, tarsi brown paler distally. Abdomen slightly bluish iridescent.

Head wider than long (ratio 34 : 27), posterior angles markedly rounded, bearing several varying long bristles. Between eyes four coarse punctures, distance between punctures 1 and 2 very small, as large as diameter of one puncture, medial punctures shifted anterior, distance between



Figs 8–11. 8–11 – *Belonochus bafutensis* Levasseur. 8 – aedeagus, ventral view; 9 – aedeagus, lateral view; 10 – apex of paramere with sensory peg setae, ventral view; 11 – antenna. Original drawings from Levasseur (1968). 12–15 – *Philonthus xema* sp. nov. 12 – aedeagus, ventral view; 13 – aedeagus, lateral view; 14 – apex of paramere with sensory peg setae, ventral view; 15 – male sternite VIII, ventral view.

medial punctures six times larger than distance between medial and lateral puncture. Eyes large, distinctly longer than temples (ratio 15 : 8). Surface without microsculpture.

Antennae long, reaching almost 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 approximately as long as wide. Antennomere 1 longer than antennomere 11, antennomere 2 slightly shorter than antennomere 3.

Pronotum approximately as long as wide, slightly narrowed anteriorly. Anterior angles almost rectangular, obtusely rounded, posterior angles markedly rounded. Each dorsal row with four punctures, distance between punctures 2–4 equidistant, distance between punctures 1–2 smaller than distance between previous punctures. Each sublateral row with 2 punctures, puncture 2 distinctly shifted to the lateral margin. Surface without microsculpture.

Scutellum very finely and sparsely punctured. Diameter of punctures smaller than eye-facets, separated by distance twice or three times larger than one puncture diameter.

Elytra as long as wide, very slightly widened posteriorly. Punctuation much coarser than that on scutellum, diameter of punctures larger than eye-facets, separated by two punctures diameter or slightly larger. Surface without microsculpture; setation dark brown.

Legs. Metatibia longer than metatarsus (ratio 29 : 25), metatarsomere 1 longer than metatarsomere 5, as long as metatarsomere 2–3 combined.

Abdomen from visible tergite III slightly narrowed posteriorly. First three visible tergites with two basal lines, elevated area between basal lines with several small punctures, Punctuation of all tergites much sparser and finer than that on elytra. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 dilated and sub-bilobed, each covered with modified pale setae ventrally. Antennomere 4 smaller than preceding ones. Sternite VIII (Fig. 19), aedeagus (Figs 16–18).

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Philonthus turnix* sp. nov. belongs to the *Philonthus rudipennis* species group (Hromádka 2013) and here is similar to *P. iridescens* Tottenham, 1949, from which it differs by its shorter antennae, wider head, sparser punctuation of elytra and by the different shape of the aedeagus.

DISTRIBUTION. Democratic Republic of the Congo.

ETYMOLOGY. The name of this species, a noun in apposition is the Latin generic name of the small buttonquall *Turnix* Smith, 1836.

***Philonthus xema* sp. nov.**

(Figs 12–15)

TYPE LOCALITY. Democratic Republic of the Congo, Tsingidi.

TYPE MATERIAL STUDIED. **Holotype** (♂): D. R. Congo, “Tsingidi, 2.24.15.6S, 12.58.11.0E, November 2013, leg. J. Niemand // Holotype *Philonthus xema* sp. nov., Hromádka det., 2015, [red oblong printed label] (TMNP).

DESCRIPTION. Body length 11.1 mm, length of fore body (to end of elytra) 6.2 mm.

Head, pronotum, scutellum and abdomen black, elytra black, with slightly bronze reflex. Maxillary, labial palpi, antennae and legs black-brown.

Head distinctly wider than long (ratio 61 : 40), posterior angles obtusely rounded, four coarse punctures between eyes, medial punctures slightly shifted anteriorly, distance between medial and lateral punctures four times larger than distance between lateral and medial puncture. Eyes larger than temples (ratio 23 : 16), posterior margin with two punctures, temporal area with one coarse puncture in posterior half. Surface without microsculpture.

Antennae reaching posterior fourth of pronotum when reclined. Antennomeres 1–3 distinctly longer than wide, antennomeres 4–7 slightly longer than wide, antennomeres 8–11 as long as wide.

Pronotum slightly wider than long (ratio 35–32) parallel-sided. Anterior angles rectangular, posterior angles markedly rounded. Each dorsal row with four approximately equidistant punctures, each sublateral row with two punctures, posterior puncture slightly shifted to the lateral margin. Surface without microsculpture.

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

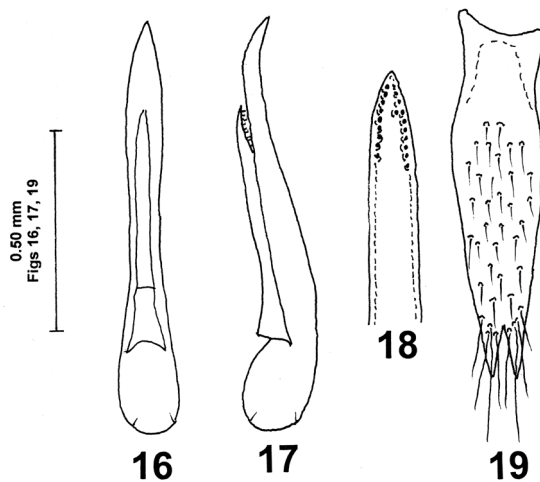
Elytra approximately as long as wide, slightly widened posteriad. Punctuation distinctly coarser than that on scutellum, diameter of punctures twice larger than that on scutellum, separated by one and half, mostly by two puncture diameters. Surface without microsculpture; setation brown-yellow.

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

Abdomen wide, from visible tergite III distinctly narrowed posteriad. First three visible tergites with two basal lines, elevated area between lines with several punctures. Punctuation at base of all tergites much finer than that on elytra, diameter of punctures as large as that on scutellum, separated by two puncture diameters in transverse direction. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1–3 simple, moderately dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Sternite VIII (Fig. 15), aedeagus (Figs 12–14).

Female. Protarsomeres less dilated than those in male, each with a few modified pale setae ventrally, protarsomere 4 small.



Figs 16–19. *Philonthus turnix* sp. nov. 16 – aedeagus, ventral view; 17 – aedeagus, lateral view; 18 – apex of paramere with sensory peg setae, ventral view; 19 – male sternite VIII, ventral view.

DIFFERENTIAL DIAGNOSIS. *Philonthus xena* sp. nov. is similar to *P. metheneri* Bernhauer, 1915, but it differs in having the wider head, longer eyes, sparser punctation of elytra, denser punctation of abdomen and by the different shape of the aedeagus.

DISTRIBUTION. Democratic Republic of the Congo.

ETYMOLOGY. The name of this species, a noun in apposition, is the Latin generic name of Sabine's gull *Xema* Leach, 1819.

APPENDIX – NEW REPLACED NAMES

Some time ago (Hromádka 2011, 2014), I described two new species of the genus *Philonthus* Stephens, 1809 under names *P. cricetomys* Hromádka, 2014 and *P. zosterops* Hromádka, 2011, that Herman (2001) in his catalog does not mention. Apparently not knows the work of Paulian (1952) in which the author describes two new species of the genus *Philonthus* under those names. I suppose the two following replaced names.

***Philonthus botaurus* nom. nov.**

Philonthus botaurus nom. nov. is proposed for *Philonthus cricetomys* Hromádka, 2014, which is a junior primary homonym of *Philonthus cricetomys* Paulian, 1952. (*Philonthus* incertae sedis – cf. Hromádka, 2014: 417). The replacement name is based on African Great Bittern *Botaurus stellaris* (Linnaeus, 1758).

***Philonthus mesophoyx* nom. nov.**

Philonthus mesophoyx nom. nov. is proposed for *Philonthus zosterops* Hromádka, 2011, which is a junior primary homonym of *Philonthus zosterops* Paulian, 1952. (*Philonthus* incertae sedis – cf. Hromádka 2011: 194). The replacement name is based on African Intermedia caret *Mesophoyx intermedia* (Wagler, 1829).

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