



Revision of the Afrotropical species of the genus *Afrorabigus* (Coleoptera: Staphylinidae: Philonthina)

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Abstract. The Afrotropical species of the genus *Afrorabigus* Levasseur, 1965 are revised. Nine species are recognized, two are described as new (*Afrorabigus tropheus* sp. nov. and *A. uromastyx* sp. nov., both from Ethiopia) and seven are redescribed: *A. basilewskyi* (Tottenham, 1962) (Uganda, Democratic Republic of the Congo), *A. belingaensis* Levasseur, 1965 (Gabon), *A. kolweziensis* Levasseur, 1965 (Democratic Republic of the Congo), *A. manikaensis* Levasseur, 1967 (Democratic Republic of the Congo), *A. muscicola* Levasseur, 1965 (Democratic Republic of the Congo), *A. robusticornis* (Bernhauer, 1915) (Sudan, Democratic Republic of the Congo, Kenya, Tanzania), and *A. toumodiensis* Levasseur, 1967 (Ivory Coast). All species are keyed and body details of selected species as well as the aedeagi of all species with known males are illustrated.

Key words. Coleoptera, Staphylinidae, Philonthina, *Afrorabigus*, taxonomy, new species, redescription, new synonym, identification key, Afrotropical region.

INTRODUCTION

The endemic Afrotropical philonthine genus *Afrorabigus* was erected by Levasseur (1965) for *Philonthus robusticornis* Bernhauer, 1915 and four additional species. Two years later, Levasseur (1967) included two additional species to the genus, increasing the number of known species to seven. In addition, two new species are described in this paper.

The representatives of the genus *Afrorabigus* are similar in general habitus to those of *Rabigus* Mulsant et Rey, 1876, but differ from them by the relative lengths of maxillary palpomeres: palpomere 3 is longer than palpomere 2 (Figs. 1, 4).

The species of *Afrorabidius* are characterized by rounded head, densely punctate temporal area bearing setiferous punctures with long black bristles arranged in direction to the front, highly convex pronotum, its sides bearing one or two long black bristles, metatarsomere 1 as long as metatarsomeres 2-4 combined but longer than metatarsomere 5, metatarsomere 5 it is shorter than metatarsomeres 3-4 combined. The male protarsomeres 1-3 are dilated and sub-bilobed, the female protarsomeres 1-3 are much less dilated and sub-bilobed than those of the male.

MATERIAL AND METHODS

Specimens examined during this study are deposited in the following institutions and private collection.

- BMNH – The Natural History Museum, London, United Kingdom (Maxwell Barclay, Roger Booth).
FMNH – Field Museum of Natural History, Chicago, USA (James Boone).
LHPC – Lubomír Hromádka private collection, Praha (Czech Republic).
MNHN – Muséum national d'Histoire naturelle, Paris, France (Thierry Deuve, Azadeh Taghavian).
MRAC – Musée Royal de l'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 divided in the text by a double slash (//). All measurements were taken with the abdomen stretched. Ratios mentioned in the descriptions may be converted to lengths by the formula: 20 units = 1 mm.

SPECIES LIST OF *AFRORABIGUS* LEVASSEUR, 1965

<i>Afrorabigus basilewskyi</i> (Tottenham, 1962)	Uganda, DR Congo
<i>Afrorabigus belingaensis</i> Levasseur, 1965	Gabon
<i>Afrorabigus kolweziensis</i> Levasseur, 1965	DR Congo
<i>Afrorabigus manikaensis</i> Levasseur, 1967	DR Congo
<i>Afrorabigus muscicola</i> Levasseur, 1965	DR Congo
<i>Afrorabigus robusticornis</i> (Bernhauer, 1915)	Sudan, DR Congo, Ethiopia, Kenya, Republic of South Africa, Tanzania
<i>Afrorabigus toumodiensis</i> Levasseur, 1967	Ivory Coast
<i>Afrorabigus tropheus</i> sp. nov.	Ethiopia
<i>Afrorabigus uromastyx</i> sp. nov.	Ethiopia

***Afrorabigus basilewskyi* (Tottenham, 1962)**

Philonthus basilewskyi Tottenham, 1962: 195.

Afrorabigus basilewskyi: Levasseur, 1965: 59.
(Figs. 5-6, 27)

TYPE LOCALITY. Uganda, Bugiri, 1400 m a.s.l.

TYPE MATERIAL EXAMINED. HOLOTYPE: ♂, 'Uganda: Bugiri 1400m, 5.-8.viii.1957 // *Philonthus basilewskyi* Tottenham TYPE, [ochre oblong label, handwritten] // vestige forêt ombrophile, Mission Zoolog., I.R.S.A.C. en Afrique orientale (P. Basilewskyi et N. Leleup. Récolte dans l'humus)' (MRAC).

REDESCRIPTION. Body length 6.5 mm, length of fore body (to end of elytra) 3.0 mm.

Coloration. Head black, with slight dark greenish iridescence. Pronotum, scutellum, elytra and abdomen black-brown. Maxillary and labial palpi, and mandibles brown-yellow, antennomeres 1-2 brown, antennomere 9 brown-yellow, antennomeres 10-11 pale yellow, remaining antennomeres black. Femora and tibiae dark brown, tarsi pale reddish, first tarsomere of all tarsi brownish.

Head nearly rounded, slightly wider than long (18 : 17), posterior angles markedly rounded, bearing one long black bristle. Area between eyes with four punctures, distance between median punctures four times as large as distance between median and lateral puncture, median punctures slightly shifted anteriorly. Eyes flat, as long as temples. Whole temporal area densely and extensively covered with small, mostly silver setiferous bristles, bristles leaning anteriorly; punctured area narrowly extending along base of head and distinctly duller than rest of head. Surface with patches of extreme fine and dense transverse microsculpture.

Antennae moderately stout, gradually widened distally, reaching posterior margin of pronotum when reclined. Antennomere 2 slightly shorter than antennomere 1, antennomere 2 as long as antennomere 3, antennomere 4 slightly longer than wide, antennomere 5 as long as wide, antennomeres 6-10 wider than long, transverse, antennomere 11 twice as long as antennomere 10.

Pronotum highly convex, slightly wider than long (ratio 24 : 23), narrowed anteriorly and bearing one long black bristle in anterior third of each lateral margin. Anterior angles obtusely rounded, bearing several short bristles, posterior angles markedly rounded. Each dorsal row with five small approximately equidistant punctures, each sublateral row with two very small punctures situated in a row parallel to dorsal row, and lying half way between dorsal row and lateral margin. Surface with extremely fine and dense microsculpture consisting of transverse waves.

Scutellum coarsely and densely punctured, diameter of punctures approximately as large as eye-facets, distance between punctures very small.

Elytra wider than long (ratio 30 : 28), slightly widened posteriorly, very finely and densely punctured, sculpture appearing as small pimples rather than punctures; setation greyish.

Legs. Metatibia as long as metatarsus, metatarsomere 1 as long as metatarsomeres 1-3 combined and about half as long as metatarsomere 5.

Abdomen very gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation of tergites very dense, all punctures drop-shape and contiguous.

Male. Protarsomeres 1-3 slightly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus (Figs. 5, 5a, 6).

Female. Unknown to the author.

DIFFERENTIAL DIAGNOSIS. *Afrorabigus basilewskyi* is very similar in habitus to *A. muscicola*, from which it may be distinguished by the head with dark green shine and by denser punctuation of elytra; it differs from *A. kolweziensis* by the head and pronotum without meshed microsculpture; it differs both from *A. muscicola* and *A. kolweziensis* by the shape of the aedeagus.

DISTRIBUTION. Uganda, Democratic Republic of the Congo (Herman 2001).

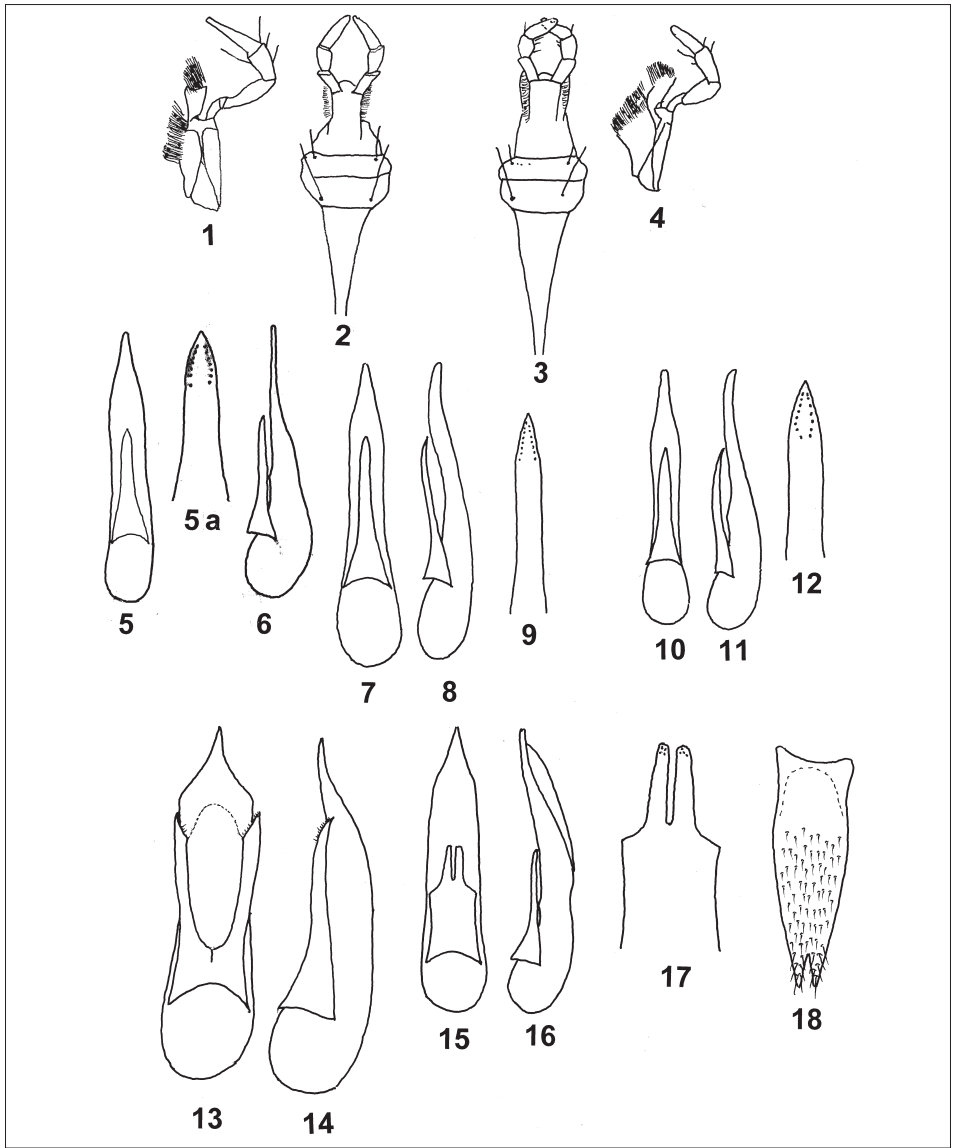


Fig. 1-2 *Afrorabigus basilewskyi* Tottenham, 1962 (original drawings after Levasseur 1965): 1 – labrum, 2 – maxillary palpi; 3-4 *Rabigus pullus* Nordmann, 1837 (original drawings after Levasseur 1965): labrum (3), maxillary palpi (4); 5-6 *Afrorabigus basilewskyi* (Tottenham, 1962): 5 – aedeagus, ventral view, 5a – apex of paramere with sensory peg setae, 6 – aedeagus, lateral view; 7-9 *Afrorabigus belingaensis* Levasseur, 1965: 7 – aedeagus, ventral view, 8 – aedeagus, lateral view, 9 – apex of paramere with sensory peg setae; 10-12 *Afrorabigus kolwenziensis* Levasseur, 1965: 10 – aedeagus, ventral view, 11 – aedeagus, lateral view, 12 – apex of paramere with sensory peg setae; 13-14 *Afrorabigus manikaensis* Levasseur, 1967: 13 – aedeagus, ventral view, 14 – aedeagus, lateral view; 15-18: *Afrorabigus robusticornis* (Bernhauer, 1915), 15 – aedeagus, ventral view, 16 – aedeagus, lateral view, 17 – apex of paramere with sensory peg setae, 18 – male sternite IX, ventral view.

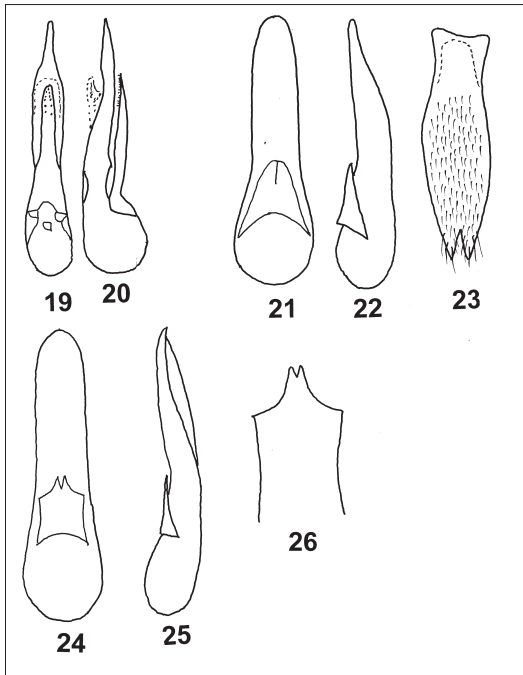


Fig. 19-20 *Afrorabigus toumodiensis* Laverseur, 1965 (original drawings after Laverseur 1965): 19 – aedeagus, ventral view, 20 – aedeagus, lateral view; 21-23 *Afrorabigus tropheus* sp. nov.: 21 – aedeagus, ventral view, 22 – aedeagus lateral view, 23 – male sternite IX, ventral view; 24-26: *Afrorabigus uromastyx* sp. nov. 24 – aedeagus, ventral view, 25 – aedeagus, lateral view, 26 – apex of paramere with sensory peg seta.

Afrorabigus belingaensis Laverseur, 1965

Afrorabigus belingaensis Laverseur, 1965: 61.

(Figs. 7-9, 27)

TYPE LOCALITY. Gabon, Belinga.

TYPE MATERIAL EXAMINED. PARATYPE: ♂, 'Belinga, 5.ii.1963, H., Mission biologique au Gabon, Grosse directeur // *Afrorabigus belingaensis* n. sp. L Laverseur PARATYPE [white oblong label, handwritten]? (MNHN).

REDESCRIPTION. Body length 5.5 mm, length of fore body (to end of elytra) 2.6 mm.

Coloration. Head, pronotum, elytra and abdomen pitchy-brown, maxillary and labial palpi, and mandibles dark brown, antennae black-brown. Femora blackish, tibiae yellow, tarsi dark red.

Head wider than long (ratio 19 : 16), very slightly narrowed posteriad, posterior angles markedly rounded. Area between eyes with four coarse, setiferous punctures, distance between median punctures four times as large as distance between median and lateral punctures, median punctures distinctly shifted anteriad. Eyes flat, approximately as long as temples, temporal area with many small yellow setiferous, bristles leaning anteriad. Surface without microsculpture.

Antennae stout, distinctly widened distally, reaching almost posterior margin of pronotum when reclined. Antennomeres 1-3 longer than wide, antennomeres 4-5 as long as wide, antennomeres 6-11 wider than long,

Pronotum highly convex, wider than long (23 : 21), slightly narrowed anteriorly from the midth. Anterior angles rectangular, posterior angles markedly rounded. Each dorsal row with five approximately equidistant punctures, each sublateral row with two punctures arranged in a row parallel to dorsal row and lying half way between dorsal row and lateral margin. Surface without microsculpture.

Scutellum very densely and coarsely punctured, diameter of punctures slightly larger than eye-facets, punctures separated by distance much smaller than a puncture diameter, some punctures contiguous in parts.

Elytra wider than long (ratio 31 : 27), parallel-sided. Punctuation coarse and dense, diameter of punctures slightly larger than those on scutellum, separated by distance much smaller than puncture diameter in transverse direction. Surface without microsculpture; setation yellowish.

Legs. Morphology unknown (metatarsus missing in the paratype examined).

Abdomen gradually narrowed posteriorly. First three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation of whole tergites slightly finer than that on elytra. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1-3 slightly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus (Figs. 7-9).

Female. Unknown to the author.

DIFFERENTIAL DIAGNOSIS. *Afrorabigus belingaensis* is similar to *A. toumodiensis* and may be distinguished from it by the unicoloured antennae, wider pronotum and elytra, darker legs and by the different shape of the aedeagus.

DISTRIBUTION. Gabon (Herman 2001).

***Afrorabigus kolweziensis* Levasseur, 1965**

Afrorabigus kolweziensis Levasseur, 1965: 60.

(Figs. 10-12, 27)

TYPE LOCALITY. Democratic Republic of the Congo, Katanga, Kolwezi, Musonoie.

TYPE MATERIAL EXAMINED. HOLOTYPE: ♂, 'Democratic Republic of Congo, Katanga: Kolwezi, Musonoie, 9.ix.1960, Marais, Dr. V. Allard Réc., coll. Levasseur. // Holotype *Afrorabigus kolweziensis* n. sp. L. Levasseur, det. [white oblong label, handwritten]' (MNHM).

REDESCRIPTION. Body length 6.1 mm, length of fore body (to end of elytra) 2.6 mm.

Coloration. Whole body chocolate-brown, posterior margin of all tergites narrowly red-brown, matt; maxillary and labial palpi, and mandibles brown-yellow; antennomeres 9-11 yellow, remaining antennomeres, femora and tibiae brown, tarsi brown-yellow.

Head rounded, approximately as long as wide, posterior angles markedly rounded, bearing one long bristle. Area between eyes with four fine punctures arranged

in straight line, distance between median punctures four times as large as distance between median and lateral punctures. Eyes flat, shorter than temples (ratio 6.5 : 8). Temporal area with many small silver setiferous punctures, bristles leaning anteriorly. Whole surface with meshed microsculpture.

Antennae long, distinctly widened distally, reaching posterior margin of pronotum when reclined. Antennomeres 1-3 and 11 longer than wide, antennomere 4 as long as wide, antennomeres 5-10 wider than long. Antennomere 1 longer than antennomere 11, antennomere 2 as long as antennomere 3.

Pronotum highly convex, as long as wide, slightly narrowed anteriorly. Anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with five fine punctures, punctures 2-4 equidistant, distance between punctures 1-2 and 4-5 slightly larger than distance between punctures 2-4. Each sublateral row with two fine punctures arranged in a row parallel to dorsal row and lying half way between dorsal row and lateral margin. Whole surface with meshed microsculpture.

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

Elytra as long as wide, slightly widened posteriorly, punctation similar to that on scutellum; setation yellow-brown.

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

Abdomen very gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines impunctate. Punctation of whole tergites very dense and fine. Punctures drop-shaped and contiguous. 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. Aedeagus (Figs. 10-12).

Female. Unknown to the author.

DIFFERENTIAL DIAGNOSIS. *Afrorabigus kolweziensis* is similar to *A. basilewskyi*, from which it may be distinguished by the head and pronotum with meshed microsculpture and by the different shape of the aedeagus.

DISTRIBUTION. Democratic Republic of the Congo (Herman 2001).

***Afrorabigus manikaensis* Levasseur, 1967**

Afrorabigus manikaensis Levasseur, 1967: 1628.

(Figs. 13-14, 27)

TYPE LOCALITY. Democratic Republic of the Congo, Kolwezi region, Katanga, Manika.

TYPE MATERIAL EXAMINED. HOLOTYPE: ♂, 'Democratic Republic of the Congo, Manika, Rég., Kolwezi: Katanga, 28.x.1962 // HOLOTYPE *Afrorabigus manikaensis* n. sp. L. Levasseur det. [white oblong label, handwritten] // humus, Dr. V. Allard rec., coll L. Levasseur' (MNHN).

REDESCRIPTION. Body length 7.2 mm, length of fore body (to end of elytra) 3.2 mm.

Coloration. Whole body chocolate-brown, abdomen with distinct violet iridescence, maxillary and labial palpi, mandibles and legs brown, antennomeres 1 and 11 and base of antennomere 2 brown-yellow, remaining antennomeres dark brown.

Head rounded, as long as wide, posterior angles markedly rounded, bearing one long and several short bristles. Area between eyes with four fine punctures, distance between median punctures five times as large as distance between median and lateral punctures. Median punctures slightly shifted anteriorly. Eyes shorter than temples (ratio 8 : 10). Temporal area with many small silver setiferous punctures, bristles leaning anteriorly. Whole surface with meshed microsculpture.

Antennae long, reaching posterior margin of pronotum when reclined, distinctly widened distally. Antennomeres 1-4 and 11 longer than wide, antennomeres 5-6 as long as wide, antennomeres 7-10 wider than long.

Pronotum highly convex, parallel-sided, anterior angles and sides with many very small punctures. Each dorsal row with four equidistant punctures, each sublateral row with two fine punctures, posterior puncture slightly shifted laterally. Surface with dense meshed microsculpture.

Scutellum very densely and finely punctate, diameter of punctures as large as eye facets, separated by distance smaller than puncture diameter in transverse direction; setation dark.

Elytra as long as wide, slightly widened posteriorly. Punctuation coarse and dense, diameter of punctures larger than of those on scutellum. Surface with patches of irregular and fine microsculpture; setation brown-yellow.

Legs. Metatarsus shorter than metatibia (ratio 22 : 25), metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2-3 combined.

Abdomen wide, very gradually narrowed posteriorly, first three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation of whole tergites finer than that on elytra, consisting mostly of drop-shaped punctures; 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. Aedeagus (Figs. 13-14).

Female. Unknown to the author.

DIFFERENTIAL DIAGNOSIS. *Afrorabigus manikaensis* may be distinguished from the similar *A. robusticornis* by the head and pronotum with meshed microsculpture and by the very long branches of the paramere.

DISTRIBUTION. Democratic Republic of the Congo (Herman 2001).

***Afrorabigus muscicola* Levasseur, 1965**

Afrorabigus muscicola Levasseur, 1965: 60.

(Fig. 27)

TYPE LOCALITY. Democratic Republic of the Congo, Katanga, Kolwezi.

TYPE MATERIAL EXAMINED. HOLOTYPE: ♀, 'Kolwezi: Katanga, Berlese // *Afrorabigus muscicola* n. sp. L. Levasseur det., v.1961 [white oblong label, handwritten] // Dr. V. Allard réc., coll. Levasseur.' (MNHN).

REDESCRIPTION. Body length 6.1 mm, length of fore body (to end of elytra) 3.1 mm.

Coloration. Head and pronotum black, elytra and abdomen dark pitchy brown, maxillary and labial palpi and mandibles chestnut brown, base of antennomere 2 and antennomere 11 paler brown, remaining antennomeres black-brown, legs yellow-brown, external side of tibiae darker.

Head as long as wide, very slightly narrowed posteriorly, posterior angles markedly rounded, bearing 2 long black bristles. Area between eyes with 4 punctures arranged in straight line. Distance between median punctures 4 times as large as distance between median and lateral punctures. Eyes flat, shorter than temples (ratio 8 : 9), two coarse punctures situated near posterior margin of eyes; whole temporal area with many silver setiferous punctures of variable size, bristles leaning anteriorly. Surface with microsculpture consisting of transverse waves.

Antennae shorter and stout, distinctly widened distally, reaching posterior fourth of pronotum when reclined. Antennomeres 1-3 and 11 longer than wide, antennomere 4 as long as wide, antennomeres 4-10 wider than long.

Pronotum highly convex, as long as wide, slightly narrowed anteriorly. Anterior angles rectangular, obtusely rounded, posterior angles markedly rounded. Each dorsal row with 5 fine punctures, punctures 3-5 equidistant, distance between punctures 1-2 and 2-3 slightly smaller than distances between punctures 3-5. Each sublateral row with 2 punctures, back puncture slightly shifted laterally. Surface with microsculpture similar to that on head.

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

Elytra as long as wide, parallel-sided. Punctuation distinctly finer than that on scutellum, separated by distance smaller than puncture diameter in transverse direction. Surface without microsculpture; setation yellow-brown.

Legs. Metatibia longer than metatarsus (ratio 22 : 18), metatarsomere 1 longer than metatarsomere 5, as long as metatarsomeres 2-4 combined.

Abdomen wide, narrowed anteriorly and posteriorly from visible tergite III, first three visible tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation of all tergites fine and dense, punctures drop-shaped, distance between punctures smaller than puncture diameter. Surface without microsculpture; setation similar to that on elytra.

Male. Unknown to the author

Female. Protarsomeres 1-3 slightly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones.

DIFFERENTIAL DIAGNOSIS. *Afrorabidus muscicola* may be distinguished from the similar *A. basilewskyi* by the head without dark green shine and by the sparser punctation of elytra.

DISTRIBUTION. Democratic Republic of the Congo (Herman 2001).

***Afrorabigus robusticornis* (Bernhauer, 1915)**

Philonthus robusticornis Bernhauer, 1915: 137.

Afrorabigus robusticornis: Levasseur 1965: 62.

(Figs. 15-18, 27)

TYPE LOCALITY. Deutsch-Ostafrika, Arusha-Ju, Moshi.

TYPE MATERIAL. Not studied.

EXAMINED MATERIAL STUDIED. Ethiopia: BALE: 1 spec., Sabsebe Washa N, 07°03'N 39°39'E, 3600 m, 1971 (LHPC). Kenya: 4 spec., Mt. Elgon, Afr. centr. or. A. Holm (NHMW). Republic of South Africa: 2 spec., Natal, Cathedral Peaks For – Sta , 75km WSW Estcourt 7-31.xii.1979 S. & J. Peck (FMNH, LHPC).

REDESCRIPTION. Body length 7.1 mm, length of fore body (to end of elytra) 3.4 mm.

Coloration. Head black, rest of body chocolate brown, maxillary and labial palpi, antennomere 1 and base of antennomere 2 yellow-brown, remaining antennomeres dark brown, femora yellow-brown, tibiae black-brown, tarsi brown, paler distally.

Head rounded, as long as wide, posterior angles markedly rounded, bearing 1 long black bristle. Area between eyes with 4 coarse punctures, distance between medial punctures 5 times as large as distance between medial and lateral puncture. Medial punctures distinctly shifted anteriad. Eyes as long as temples. Temporal area with many small silver setiferous punctures, bristles leaning anteriad. Surface without microsculpture.

Antennae long and stout, widened distally, reaching posterior margin of pronotum when reclined. Antennomeres 1-3 and 11 longer than wide, antennomeres 4-5 as long as wide, antennomeres 6-10 wider than long. Antennomere 1 longer than antennomere 11, antennomere 2 slightly shorter than antennomere 3.

Pronotum longer than wide (ratio 27 : 25), slightly narrowed anteriad. Anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with 4 fine equidistant punctures, each sublateral row with 2 fine punctures, back puncture slightly shifted laterally. One long black bristle in anterior third of lateral margins. Surface without microsculpture.

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

Elytra wider than long (ratio 36 : 32), slightly widened posteriad. Punctation very dense and fine, diameter of punctures smaller than that on scutellum, punctures separated by distance smaller than puncture diameter, in most cases contiguous. Surface without microsculpture; setation brown-yellow.

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

Abdomen very gradually narrowed posteriad from visible tergite III. First three tergites with 2 basal lines, elevated area between lines with scattered punctures. Punctuation of all tergites similar to that on elytra, most punctures drop-shaped. Surface without microsculpture; setation of the same colour as that on elytra.

Male. Protarsomeres 1-3 distinctly dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 very small and very slender. Sternite IX (Fig. 18), aedeagus (Figs. 15-17).

Female. Protarsomeres 1-3 much less dilated and sub-bilobed than those in male.

DIFFERENTIAL DIAGNOSIS. *Afrorabidus robusticornis* may be distinguished from the similar *A. manikaensis* by the head and pronotum without microsculpture and by the shorter parameres; it differs from *Afrorabidus uromastyx* sp. nov. by the slightly shorter antennae, slightly denser punctation of elytra and from both by the different shape of the aedeagus.

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

***Afrorabidus toumodiensis* Levasseur, 1967**

Afrorabidus toumodiensis Levasseur, 1967: 1629.

(Figs. 19-20, 27)

TYPE LOCALITY. Ivory Coast, Lamto, Toumodi.

TYPE MATERIAL EXAMINED. PARATYPE: ♂, 'Ivory Coast, Cite d'Ivoire, Lamto (Toumodi) // PARATYPE *Afrorabidus toumodiensis* n. sp. L. Levasseur det. [ochre oblong label, handwritten]' (MNHN).

REDESCRIPTION. Body length 5.5 mm, length of fore body (to end of elytra) 2.6 mm.

Coloration. Head black, pronotum, scutellum, elytra and abdomen dark chocolate brown. Maxillary and labial palpi, mandibles and legs brown-yellow, antennomeres 1-8 dark brown, antennomeres 9-10 paler brown, antennomere 11 yellow-brown.

Head wider than long (ratio 17 : 15), posterior angles markedly rounded, bearing 1 long black bristle. Area between eyes with 4 punctures, distance between medial punctures 4 times as large as distance between lateral and medial punctures. Eyes longer than temples (ratio 7 : 6), posterior margin with 2 punctures, temporal area with several setiferous punctures of variable size, bristles arranged in the direction to the front. Surface without microsculpture.

Antennae stout and long, reaching posterior sixth of pronotum when reclined, antennomeres 1-3 and 11 longer than wide, antennomeres 4-5 as long as wide, antennomeres 6-10 wider than long. Antennomere 1 longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum highly convex, as long as wide, distinctly narrowed anteriad. Anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with 5 punc-

tures, punctures 1-4 equidistant, distance between punctures 4-5 slightly larger than distance between punctures 1-4. Each sublateral row with 2 punctures, back puncture slightly shifted laterally. Surface without microsculpture.

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

Elytra as long as wide, parallel-sided, punctuation sparser than that on scutellum. Surface without microsculpture; setation brown-yellow.

Legs. Metatibia longer than metatarsus (ratio 19 : 16), 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 with scattered punctures. Punctuation at base of all tergites slightly denser than that on elytra, becoming sparser and slightly finer towards posterior margin of each tergite. Surface without microsculpture; setation similar to that on elytra.

Male. Protarsomeres 1-3 simple, moderately dilated, each covered with modified pale setae ventrally, protarsomere 4 narrower than preceding ones. Aedeagus (Figs. 19-20).

Female. Unknown to the author.

DIFFERENTIAL DIAGNOSIS. *Afrorabidus toumodiensis* may be distinguished from similar *A. belingaensis* by the bicoloured antennae, narrower pronotum and elytra, paler legs and by the different shape of the aedeagus.

DISTRIBUTION. Ivory Coast (Herman 2001).

***Afrorabigus tropheus* sp. nov.**

(Figs. 21-23, 27)

TYPE LOCALITY. Ethiopia, Bale, S of Omar, 07.07°N, 40.60°E, 1200 m a.s.l.

TYPE MATERIAL EXAMINED. HOLOTYPE: ♂, 'ETHIOPIA : Bale, S of Omar 1.200 m, 0704N 4036E, xii.1971 // HOLOTYPE *Afrorabigus tropheus* spec. nov. Hromádka det., 2010 [red oblong prited label]' (BMNH). PARATYPES: 1 spec., same label data as in holotype (LHPC), 1 spec., Bale 8 km W of Dinshu, 0706N. 3944E, 3050m, xii.1971 (LHPC).

DESCRIPTION. Body length 6.8 mm, length of fore body (to end of elytra) 2.9 mm.

Coloration. Head black, pronotum chocolate brown, scutellum, elytra and abdomen dark brown; maxillary and labial palpi and mandibles brown, antennomere 1 and base of antennomere 2 brown-yellow, remaining antennomeres brown, becoming slightly paler from antennomere 9 distad. All femora, tibiae and tarsi of front legs yellow, tibiae and tarsi of middle and hind legs darker. Abdomen with slightly bluish iridescence.

Head as long as wide, slightly narrowed posteriad, sides straight behind eyes. Area between eyes with 4 punctures arranged in straight line, distance between medial punctures four times as large as distance between medial and lateral punctures. Posterior angles almost unclear, bearing 1 long black bristle. Eyes as long as temples,

one coarse puncture situated near posterior margin of eyes. Temporal area with many mostly silver setiferous punctures of variable size, bristles leaning anteriorly. Surface without microsculpture.

Antennae long, slightly widened distally, 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 slightly longer than wide (ratio 26 : 23), parallel-sided. Anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with 4 fine approximately equidistant punctures, each sublateral row with 2 very fine punctures arranged in a row parallel to dorsal row and lying half way between dorsal and lateral margin. Sides bearing 1 long black bristle in anterior fourth.

Scutellum very densely and coarsely punctured, diameter of punctures as large as eye facets, separated by distance as large as puncture diameter or slightly smaller; setation black.

Elytra as long as wide, slightly widened posteriorly. Punctuation coarse and dense. Diameter of punctures slightly larger than of those on scutellum, separated by distance smaller than puncture diameter, most punctures contiguous. Surface without microsculpture; setation grey-brown.

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

Abdomen wide, distinctly narrowed posteriorly from visible tergite III. First three visible tergites with two basal lines, elevated area between lines impunctate. Punctuation at base of all visible tergites finer and denser than that on elytra, becoming sparser and finer towards posterior margin of each tergite. Most punctures drop-shaped. Surface without microsculpture; setation of the same colour as that on elytra.

Male. Protarsomeres 1-3 dilated and sub-bilobed, protarsomere 4 narrower than preceding ones. Sternite IX (Fig. 23), aedeagus (Figs. 21-22).

Female. Unknown to the author.

DIFFERENTIAL DIAGNOSIS. *Afrorabigus tropheus* sp. nov. may be distinguished from the very similar *Afrorabigus uromastix* sp. nov. by the abdomen with slight bluish shine and by the different shape of the parameres.

ETYMOLOGY. The name of this species, a noun in apposition, is the Latin generic name of the African blunthead cichlid *Tropheus moorii* (Boulenger, 1898).

DISTRIBUTION. Ethiopia.

***Afrorabigus uromastix* sp. nov.**

(Figs. 24-26, 27)

TYPE LOCALITY. Ethiopia, Bale, 8 km W. of Dinshu, 07.10°N. 39.73°E, 3.050 m a.s.l.

TYPE MATERIAL EXAMINED. HOLOTYPE: ♂, 'Ethiopia: Bale, 8 km W. of Dinshu, 0706 N. 3944 E, 3.050m, xii.1971// *Afrorabigus uromastyx* spec. nov. Hromádka det., 2010, [red oblong printed label]' (BMNH).

DESCRIPTION. Body length 5.6 mm, length of fore body (to end of elytra) 2.7 mm.

Coloration. Head black, pronotum, scutellum and elytra dark brown, maxillary, labial palpi and mandibles brown, antennomeres 1-2 and 11 brown-yellow, remaining



Fig. 27. Distribution of *Afrorabigus* species: *Afrorabigus basilewskyi* (●), *Afrorabigus robusticornis* (◆), *Afrorabigus belingaensis* (○), *Afrorabigus toumodiensis* (□), *Afrorabigus kolweziensis* (♣), *Afrorabigus tropheus* (+), *Afrorabigus manikaensis* (▲), *Afrorabigus uromastyx* (×), *Afrorabigus muscicola* (♥).

antennomeres dark brown, fore legs yellow, femora of hind legs yellow, tibiae and tarsi darker.

Head as long as wide, slightly narrowed posteriad, area between eyes with 4 coarse punctures, distance between medial punctures 5 times as large as distance between medial and lateral puncture, medial punctures distinctly shifted anteriorly. Sides behind eyes slightly straight narrower to neck. Eyes slightly longer than temples (ratio 8 : 7), temporal area with number of mostly silver setiferous punctures, bristles leaning anteriorly. Posterior angles markedly rounded. Surface without microsculpture.

Antennae long, slightly widened distally, exceeding posterior margin of pronotum by the length of antennomere 10 when reclined. Antennomeres 1-6 and 11 longer than wide, antennomere 4 as long as wide, antennomeres 7-10 slightly wider than long. Antennomere 1 longer than antennomere 11, antennomere 2 shorter than antennomere 3.

Pronotum highly convex, parallel-sided, anterior angles obtusely rounded, posterior angles markedly rounded. Each dorsal row with 4 fine punctures, punctures 2-4 equidistant, distance between punctures 1-2 smaller than distance between punctures 2-4. Each sublateral row with 2 fine punctures, back puncture shifted laterally, anterior third of sides with 1 long black bristle. Surface without microsculpture.

Scutellum very densely and coarsely punctate, diameter of punctures slightly larger than eye facets, separated smaller than puncture diameter; setation longer and black.

Elytra as long as wide, slightly widened posteriad. Punctuation coarse and dense, diameter of punctures as large as of those on scutellum, separated distance equal to puncture diameter or slightly smaller. Surface without microsculpture; setation brown.

Legs. Metatarsus as long as metatibia, metatarsomere 1 as long as metatarsomeres 2-3 combined.

Abdomen gradually narrowed posteriad from visible tergite III. First three tergites with two basal lines, elevated area between lines with scattered punctures. Punctuation at base of all tergites finer and denser than that on elytra, becoming sparser towards posterior margin of each tergite. Most punctures drop-shaped. Surface without microsculpture; setation of same colour as that on elytra.

Male. Protarsomeres 1-3 dilated and sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 smaller than preceding ones. Aedeagus (Figs. 24-26).

Female. Unknown to the author.

DIFFERENTIAL DIAGNOSIS. *Afrorabigus uromastyx* sp. nov. may be distinguished from the most similar *A. tropheus* sp. nov. by the abdomen without bluish shine; it differs from *A. robusticornis* by slightly longer antennae, slightly sparser punctuation of elytra; from both latter species it may be distinguished by the different shape of the aedeagus.

DISTRIBUTION. Ethiopia.

ETYMOLOGY. The name of this species, a noun in apposition, is the Latin generic name of the African Bell's dabb lizard *Uromastix acanthinurus* (Bell, 1825).

KEY TO THE SPECIES OF THE GENUS *AFRORABIGUS*

- 1 Each dorsal row of pronotum with 4 punctures 2
 Each dorsal row of pronotum with 5 punctures 5
- 2 Apex of median lobe rounded 3
 Apex of median lobe pointed 4
- 3 Antennae exceeding posterior margin of pronotum by the length of antennomere 10 when reclined, eyes slightly longer than temples (ratio 8 : 7). Abdomen with slight bluish shine *A. tropheus* sp. nov.
 Antennae reaching posterior margin of pronotum when reclined, eyes as long as temples. Abdomen without bluish shine *A. uromastyx* spec. nov.
- 4 Head and pronotum with microsculpture, antennomeres 1 and 11 and base of antennomere 2 brown-yellow. Branches of paramere very long, with apex strongly divergent. *A. manikaensis* Levasseur, 1967
 Head and pronotum without microsculpture, antennomere 1 and base of antennomere 2 brown. Branches of paramere short, narrowly parallel
 *A. robusticornis* Bernhauer, 1915
- 5 Anterior part of body without microsculpture, smooth 6
 Anterior part of body with distinct microsculpture 7
- 6 Antennae black-brown, pronotum wider than long (ratio 23 : 21), elytra wider than long (ratio 31 : 27, femora darker, tibiae hell yellow-brown, tarsi blackish
 *A. belingaensis* Levasseur, 1965
 Antennomeres 9-10 pale brown, antennomere 11 yellow-brown, remaining antennomeres dark brown, pronotum and elytra as long as wide, legs brown-yellow
 *A. toumodiensis* Levasseur, 1967
- 7 Anterior part of body with eye-like microsculpture, antennomeres 9-11 pale yellow-brown, remaining antennomeres brown *A. kolweziensis* Levasseur, 1965
 Microsculpture of the head consisting of transverse waves 8
- 8 Punctuation of elytra sparser, base of antennomere 2 and antennomere 11 paler brown, remaining antennomeres black-brown, microsculpture consisting of transverse waves *A. muscicola* Levasseur, 1965
 Head and pronotum black, with dark green shine. Anterior part of body with extreme fine and dense microsculpture. Punctuation of elytra fine and dense, antennomere 1 pale brown, antennomeres 10-11 pale yellow, remaining antennomeres black
 *A. basilewskyi* Levasseur, 1965

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REFERENCES

- Bernhauer M., 1915: Zur Staphyliniden-Fauna des tropischen Afrika. – *Annales Musei Nationalis Hungarici* 13: 95-189.
- Cameron M., 1951 [1950]: New species of African Staphylinidae. Part II. – *Journal of the East Africa Natural History Society* 19: 398-407.
- Herman L.H., 2001: Catalog of the Staphylinidae (Insecta: Coleoptera). 1758 to the end of the Second Millenium. V. Staphylinidae group (Part 2). Staphylinidae: Diochini, Maorothiini, Othiini, Platyprosopini, Staphylinini (Amblyopinina, Anisolinina, Hyptiomina, Philonthina). – *Bulletin of the American Museum of Natural History* 265: 2441-3020.
- Levasseur L., 1965: *Afrorabigus*, gen. nov. descriptions d'espèces nouvelles du Katanga Gabon (Col., Staphylinidae, Philonthini). – *Annales de la Société Entomologique de France* (n. s.) 1(1): 57-62.
- Levasseur L., 1967: Nouvelles espèces de Staphylininae de Côte d'Ivoire, du Sudan et du Katanga. – *Bulletin de l'Institut Fondamental d'Afrique Noire* (A) 29: 1624-1644.
- Mulsant E. & Rey C., 1876 [1875]: Tribu des brévipennes [Staphyliniens]. – *Annales de la Société d'Agriculture, Histoire Naturele et Arts utiles de Lyon* (4) 8: 145-856.
- Stephens J.F., 1829: A systematic catalogue of British insects: being an attempt to arrange all the hitherto discovered indigenous insects in accordance with their natural affinities. Containing also the reference to every English writer on entomology, and to the principal foreign authors. With all the published British genera to the present time. – London: Baldwin & Cradock, xxxiv + 416 + 388 pp.
- Tottenham C.E., 1962: Mission zoologique de l'I.R.S.A.C. en Afrique orientale (P. Basilewsky et N. Leleup, 1957). LXXXVI. Coleoptera Staphylinidae, Staphylininae. – *Annales du Musée de l'Afrique Centrale, Sciences Zoologique* (8) 110: 132-258.

