Revision of the genus *Afrosyleter* Basilewsky, 1959 (Coleoptera: Carabidae: Scaritinae: Clivinini) with description of three new species

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Abstract. Six species of the genus *Afrosyleter* Basilewsky, 1959 were studied and redescribed, another three species have been described as new: *A. szeli* sp. nov. from Congo, *A. angolensis* sp. nov. from Angola and *A. rossii* sp. nov. from Sierra Leone. All species of the genus have been keyed.

INTRODUCTION

According to Lorenz (2005) and authors database, to date the genus *Afrosyleter* Basilewsky, 1959 comprises six species distributed exclusively in the Afrotropical region. First species was described by Burgeon (1935) as *Psilus congoensis*, later in Basilewsky (1946) were the Afrotropical species of the genus *Psilus* Putzeys 1877 (nec Panzer, 1806, nec Fischer von Waldheim, 1813) transferred to the genus *Syleter* Andrewes, 1941. Basilewsky (1959) established the genus *Afrosyleter* and differentiated it of the genus *Syleter* and Basilewsky (1959, 1962) described another five species of this genus. All descriptions, especially those in Basilewsky (1959), are very short and/or incomplete. The target of this article is the redescription of the existing species and description of another three new species.

MATERIAL AND METODS

The specimens were dry-mounted and studied, including measurements and examination of the microsculpture, at a magnification of 56×. All specimens of the new taxa and all type specimens loaned from MRAC were studied and measured. Length of body is given with 0.05 mm accuracy; other measurements including ratios and means are down to two decimal places. Aedeagi and stylomeres were slide-mounted in Euparal. All photographs of new species were prepared with a Nikon D1 digital camera mounted on a Nikon Labophot II binocular microscope equipped with lenses containing diaphragms. Label locality data of all specimens are quoted verbatim except standardized dates.

The following abbreviations are used to indicate the depository of specimens:

ADVA collection of Alexander Dostal (incl. coll. K. Kult), Vienna, Austria;

HNHM Hungarian Natural History Museum (Magyar Természettudományi Múzeum), Budapest, Hungary;

MRAC Royal Museum of Central Africa, Tervuren, Belgium;

PBPC collection of Petr Bulirsch, Praha; Czech Republic.

Other abbreviations:

HT: Holotype(s); PT: Paratype(s); BSP: basal (prescutellar) setiferous puncture(s); DSP: dorsal setiferous puncture(s); SP: setiferous puncture(s); L.: length of body; spec.: unsexed specimens; /, // by locality labels: end of line, label.

RESULTS

Genus Afrosyleter Basilewsky, 1959 (Clivinini Rafinesque, 1815)

Type species: Psilus congoensis Burgeon, 1935.

Basilewsky (1959) well described this genus and differentiated it from the most similar genus *Syleter* Andrewes, 1941, represented in Africa by a single species, *S. andrewesi* (Basilewsky, 1931). The genus *Afrosyleter* can be differentiated especially by the body being much smaller and slender; by the pronotum having the (sub)parallel outline and more or less distinct posterior teeth (in *S. andrewesi* is the pronotum strongly converging anteriorly and has rounded posterior angles); by the elytra having four DSP (none in *S. andrewesi*), and finally, by the very different shape of the median lobe of the aedeagus and the parameres (as in Figs. 4a-c versus Fig. 2 in Basilewsky, 1959).

Short redescription. Body usually rusty ferruginous, legs, mouthparts and antennae yellowish; front femora slightly darker. L. 2.60-3.15 mm.

Head. Mandibles long, almost directly narrowed to gently curved tip; maxillary palpi with long-aciculate apex; anterior margin of clypeus distinctly margined anteriorly, its anterior margin more protruded anteriorly than broadly rounded lateral lobes; clypeofrontal impression transverse, from deep and broad to rather fine. Supraantennal plates very long, laterally slightly convex, distinctly narrowed anteriorly. Facial carinae very broad and deep, interval between them roundly narrowed from anterior border of clypeal wings to transverse clypeal furrow then equally broadened posteriorly to mid-eye level and then subparallel, slightly divergent posteriorly; with distinct keel along its interior margin, running below posterior margin of eyes; bottom of facial carinae dull, roughly reticulated. Vertex with narrow and mostly fine transverse furrow. Antennae moderately long, with antennomere 2 distinctly longer than 3, antennomeres 6-10 just longer than broad.

Pronotum. Outline (sub)parallel. Reflexed lateral margin extended from mostly obtuse anterior angles to lateral edges of flange, connected in very obtuse angle with basal margin; latter medially moderately strongly curved anteriorly to apical tip of median line, forming there obtuse angle; lateral channel broad between anterior and posterior SP and above flange, gently narrowed latero-basally and distinctly narrowed above anterior SP. Anterior

transverse impression and median line deeply and rather broadly impressed, more or less densely punctuate. Basal foveae distinct, narrowly deepened. Basal part (flange) gently produced posteriorly, divided from disc by moderately deep transverse furrow. Proepisterna not visible from above.

Elytra. Moderately convex, more or less long inverse-ovate; base with about 3-4 tubercles above small BSP and on prolongation of intervals 2-3(4). Striae 1-7 deep to very deep and rather broad throughout, in basal half punctuate, apically punctures more or less vanishing; stria 8 irregular, almost as deep as others; intervals moderately to rather strongly vaulted, 7-8 apically and 5-8 basally mostly narrowed, forming often keels; latero-basally elytra not to roughly reticulated. Third interval with four DSP.

Protibiae. Apical tooth very long and distinctly curved, apical spine much shorter and less curved; lower lateral tooth very long, parallel, with narrowly rounded apex, median lateral tooth moderately to very long, third tooth small, blunt to rather sharp.

Lower surface. Proepisterna densely and moderately to roughly punctuate, with more or less rough wrinkles and more or less regular reticulation, abdominal sterna with reticulation and sparsely punctuate latero-apically.

Afrosyleter congoensis (Burgeon, 1935)

Psilus congoensis Burgeon, 1935: 155. Basilewsky (1959): p. 10.

Type material. 4 PT: (3 spec.) Paratypus // Musée du Congo / Equateur: Flandria / 2.ii.1932 / 147.; R.P. Hulstaert // Psilus / congoensis / n. sp. / L. Burgeon det., (1 spec.) with the same locality label, except: 6.ii.1932 / 181, (all in MRAC).

Next material examined: (1 \circlearrowleft , 1 spec.): Coll. Mus. Congo / Tshuapa, Flandria / v.1946, Rév. P. Hulstaert; (2 ex.): Musée du Congo / Equateur: Bokuma / 1938 / R.P. Hulstaert; (25 spec.): Coll. Mus. Congo / Tshuapa: Bamania / xii.1952, R.P. Hulstaert; (1 ex.) with the same locality label, except: 1943; (14 spec.) with the same locality label, except: ii.1952; (1 spec.) with the same locality label, except: x.1954; (6 spec.) with the same locality label, except: ii.1945; (41 spec.): Coll. Mus. Congo / Equateur: Bamania / 14.ix.1936 / 207, R.P. Hulstaert; (6 spec.): Coll. Mus. Congo / Equateur: Bokuma / i.1952 / R.P. Lootens; (2 spec.) with the same locality label, except: ix.1952; (1 spec.) with the same locality label, except: x.1952; (1 spec.) with the same locality label, except: ii-iii.1954; (1 spec.) with the same locality label, except:1953; (2 spec): Coll. Mus. Congo / Tsuapa: Bokuma / ix.1952 / R.P. Lootens; (13 spec.) with the same locality label, except: 1953; (1 spec.) with the same locality label, except: v.1952, (all in MRAC, PBPC); (1 spec.): Musée du Congo /Eala / i.1935 / J.Ghesquière (damaged, blackish); (1 spec): Musée du Congo /150 km en amont de /Coquilhatville, 2.v.1949 / sur le fleure / N. Leleup // A la lumière; (1 spec.): I.R.S.A.C.-Mus. Congo / Tshuapa: Mabali, terr. Bi- /koro, Lac Tumba / xi.1955 / N. Leleup // dans terre / argileuse, / rive du lac; (1 spec): I.R.S.A.C.-Mus. Congo / Tshuapa, Lac Tumba, Ma- / bali, 850 m, (a la lumière) / x.1955 / N. Leleup // forêt .i.de / terre ferme; (2 spec.): Coll. Mus. Congo / L. Léopold II, Kwamouth / 5.ii.1952 / P. Basilewsky, (all in MRAC); (1 spec.): Kinchassa / Waelbroek / 18.i.1900 // Museum / Bruxelles // Compared with / Type / K. Kult 1946 // P. congoensis Burg. / det. K. Kult. 1946 // Afrosyleter / concoensis Burg. / det. Dr. A. Dostal 200 (ADVA); (1 spec): B. Congo / Equateur, Bamania // Type // Psilus n. sp. / det. K. Kult 1948, (ADVA).

Redescription (based especially on studied type specimens). Body rusty ferruginous, legs, mouthparts and antennae yellowish, front femora slightly darker. L. 2.75-3.05 mm (n=4).

Head. Genae indistinct; eyes not reduced, distinctly convex laterally, about as long as

antennomeres 3 and 4 combined. Clypeus below anterior margin moderately broadly, rather roughly reticulated, rest of surface shiny, with indistinct reticulation, with irregular and small median fovea, in some specimens with few punctures or irregularly corrugated.

Pronotum. Laterally moderately convex, surface rather shiny, with irregular, moderately deep reticulation, with rather sparse irregular and fine transverse wrinkles and punctures, moderately elongate; 1.04-1.06 times as long as wide, 1.22-1.25 times as wide as head, widest slightly above posterior teeth. Outline (sub)parallel, not to barely convergent anteriorly, not to very gently concave in midlength and very slightly convex above small and obtuse to moderately sharp posterior angles. Anterior transverse impression and median line deep, anterior impression moderately broad, median line very broad, both densely, and median line roughly punctuate.

Elytra. Long inverse-ovate, surface on disc shiny, without reticulation, base moderately broadly and rather roughly reticulated; disc flattened in lateral view, barely concave below humeri, 1.87-1.95 times as long as wide, 1.27-1.29 times as wide as pronotum, 2.31-2.36 times as long as pronotum; base rather broad, very slightly sloping to strongly protruded humeri with very small and sharp tooth; outline below humeri with several very small to moderately large, narrow and sharp teeth, posteriorly denticulation strongly weakened, mostly disappeared before or on apex; outline slightly broadened below humeri then almost directly, very slightly broadened to posterior third, apical third broadly rounded, lateral channel very broad and deep; before apex deepened and broadened, with distinctly elevated, narrow keel on apex along its inner margin. Base with tubercle above moderately large BSP and very irregular line of few tubercles. Striae 1-7 deep and rather broad throughout, rather roughly punctuate; stria 8 irregular, almost as deep as others; intervals strongly vaulted, (6)7-8 apically and (4)5-8 basally moderately to strongly narrowed, forming often sharp keel; intervals latero-basally with more or less rough, rarely indistinct reticulation.

Protibiae. Lower lateral tooth long, median lateral tooth moderately long, third tooth small, rather blunt.

Aedeagus. As in Basilewsky (1959): Fig. 4a.

Afrosyleter serrulatus Basilewsky, 1959

Afrosyleter serrulatus Basilewsky, 1959: 11.

Type material. Holotype: Holotypus // Dans humus / en forêt // I.R.S.A.C.-Mus. Congo / Kivu: Terr. Masisi, 800 m / Mutakato, ix.1953 / N Leleup // Afrosyleter / serrulatus n.sp. / P. Basilewsky det. 19 // RMCA ENT / 000019844, (MRAC).

Redescription. Body dark rusty ferruginous, legs rusty ferruginous, mouthparts and antennae dark yellowish. L. 3.10 mm (n=1).

Head. Genae very distinct, slightly longer than eyes length; eyes strongly reduced and flattened, shorter than antennomere 3. Clypeus below anterior margin narrowly reticulated; rest of surface shiny, with indistinct reticulation, with irregularly bordered median fovea.

Pronotum. Laterally flattened, surface moderately shiny, with regular, moderately deep reticulation, with sparse, irregular and very fine transverse wrinkles and punctures; 1.04

times as long as wide, 1.41 times as wide as head, widest slightly above posterior teeth. Outline parallel, not convergent anteriorly, gently concave in midlength and moderately convex above large, rather sharp posterior angles. Anterior angles narrowly rounded, gently protruded anteriorly. Anterior transverse impression and median line deep, anterior impression moderately broad, median line broad, both sparsely, and median line roughly punctuate.

Elytra. Moderately convex, moderately long inverse-ovate, surface on disc shiny, without reticulation, base and partially lateral intervals roughly reticulated; in lateral view slightly vaulted, not concave below humeri, 1.79 times as long as wide, 1.25 times as wide as pronotum, 2.16 times as long as pronotum; base slightly sloping to moderately strongly protruded humeri with very large, sharp humeral tooth; outline with several long and sharp teeth below humeri, near to equally sharp almost to apex; slightly, convexly broadened below humeri to posterior third, apical third broadly rounded, lateral channel very broad and deep; before apex deepened and broadened, with very distinctly elevated, broad keel on apex along its inner margin. Base with 3-4 shortly longitudinal tubercles, inner one above small BSP and others on prolongation of intervals 2-3(4). Striae 1-7 very deep and broad throughout, in basal half very roughly punctuate, apically punctures finer; stria 8 shortened basally, almost as deep as others; intervals strongly vaulted, more strongly vaulted lateroapically; 5-8 more strongly vaulted and narrowed basally, forming blunt to rather sharp keels; intervals 5-6 below humeri and 7-8 in basal two thirds roughly reticulated.

Protibiae. Lower lateral tooth long, median lateral tooth moderately long, third tooth small, rather blunt.

Aedeagus. As in Basilewsky (1959): Fig. 4c.

Afrosyleter pauliani Basilewsky, 1959

Afrosyleter ituricus Basilewsky, 1959: 11.

Material examined: (1 ♀): Côte d'Ivoire / Parc du Banco / 12.iii.1977 / I. Löbl leg., (PBPC).

Redescription (based on Topotype specimen). Body rusty ferruginous, legs, mouthparts and antennae yellowish; front femora slightly darker. L. 3.00 mm (n=1).

Head. Genae very distinct, indistinctly longer than eyes length; eyes strongly reduced and flattened, distinctly shorter than antennomeres 3. Clypeus below anterior margin very broadly reticulated, rest of surface shiny, with indistinct reticulation, with irregular and small median fovea.

Pronotum. Laterally rather strongly flattened, surface moderately shiny, with distinct, rather regular reticulation, with few irregular and fine transverse wrinkles, rather elongate; 1.06 times as long as wide, 1.37 times as wide as head, widest slightly above posterior teeth. Outline parallel, very indistinctly concave in midlength and very slightly convex above small and rather sharp posterior angles. Anterior transverse impression and median line deep and broad, both sparsely, and median line roughly punctuate.

Elytra. Slightly convex, long inverse-ovate, surface on disc shiny, without reticulation, base finely reticulated; disc distinctly flattened, in lateral view indistinctly and very broadly

concave below humeri, 1.67 times as long as wide, 1.33 times as wide as pronotum, 2.08 times as long as pronotum; base narrow, slightly sloping to strongly protruded humeri with large and sharp tooth; outline below humeri with several small and long and blunt teeth, posteriorly finely denticulate almost to apex; outline rather strongly, convexly broadened below humeri to posterior third, apical third very broadly rounded, lateral channel very broad and deep; before apex deepened and broadened, with distinctly elevated, very narrow and rather fine keel on apex along inner margin of channel. Base with distinct tubercles above small BSP and on prolongation of intervals 2-3(4). Striae 1-7 rather very deep and rather broad throughout, in basal half rather roughly punctuate, apically punctures finer; stria 8 irregular, almost as deep as others; intervals moderately vaulted, 7-8 more vaulted apically and rather narrow basally, neither forming keels nor reticulated.

Protibiae. Lower lateral tooth very long, median lateral tooth long, third tooth moderately small, sharp.

Aedeagus. Unknown.

Afrosyleter ituricus Basilewsky, 1959

Afrosyleter ituricus Basilewsky, 1959: 11.

Type material. Holotype: Holotypus // Récolté dans / l'humus // I.R.S.A.C.-Mus. Congo / Kibali-Ituri: t. Epulu, Mam- / basa-Mungbere, 900 m / ii.1954, N. Leleup //Afrosyleter / ituricus n.sp. / P. Basilewsky det. 19 // RMCA ENT / 000019846. Paratype: (1 spec.) with the same locality labels, (MRAC).

Redescription. Body dark rusty ferruginous, legs rusty ferrugineous, mouthparts and antennae yellowish; slightly darker. L. in HT 2.95 mm, in PT 3.05 mm (n=2).

Head. Genae distinct, gently longer than half of eyes length; eyes distinctly reduced and flattened, slightly longer than antennomeres 3. Clypeus below anterior margin narrowly and roughly reticulated, rest of surface shiny, with indistinct reticulation, with irregular and small median fovea.

Pronotum. Laterally flattened, surface moderately shiny, with regular, moderately deep reticulation, with sparse, irregular and very fine transverse wrinkles and punctures; in HT 1.03, in PT 1.02 times as long as wide, in HT 1.37, in PT 1.39 times as wide as head, widest slightly above posterior teeth. Outline subparallel, indistinctly convergent anteriorly, not concave in midlength and broadly, slightly convex above moderately large, rather sharp posterior angles. Anterior angles obtuse; anterior transverse impression and median line rather deep broad, dense and moderately roughly punctuate.

Elytra. Moderately convex, long inverse-ovate; disc without reticulation, slightly flattened in lateral view, not concave below humeri, in HT 1.81, in PT 1.83 times as long as wide, in HT 1.25, in PT 1.23 times as wide as pronotum, in HT 2.21, in PT 2.18 times as long as pronotum; base narrow, slightly sloping to rather strongly protruded humeri with small and rather obtuse tooth; outline with about eight small and rather sharp teeth below humeri, then with finer and moderately sharp teeth almost to apex; moderately, convexly broadened below humeri to posterior third, apical third broadly rounded, lateral channel very broad and deep; before apex deepened and broadened, with very distinctly elevated, narrow keel on

apex along its inner margin. Base with 3-4 distinct tubercles, inner one above small BSP and others on prolongation of intervals 2-3(4). Striae 1-7 very deep and rather broad throughout, in medio-basal part rather roughly punctuate, latero-apically punctures finer; stria 8 irregular, almost as deep as others; intervals rather strongly vaulted, 7-8 apically and 5-8 basally forming blunt keels; 5-6 below humeri and 7-8 in basal two thirds roughly reticulated.

Protibiae. Lower lateral tooth long, median lateral tooth moderately long, third tooth small, very blunt.

Aedeagus. As in Basilewsky (1959): Fig. 4b.

Afrosyleter leleupi Basilewsky, 1959

Afrosyleter leleupi Basilewsky, 1959: 12.

Type material. Holotype (\mathbb{Q}): Holotypus // Récolté dans / bananeraie // I.R.S.A.C.-Mus. Congo / Kivu: Uvira, 800 m / (Riv. Mulongue, v.1951 / N Leleup // Afrosyleter / Leleupi n.sp. / P. Basilewsky det. 19 // RMCA ENT / 000019845. Paratypes: ($2\mbox{ }\mbox{ }\mbo$

Redescription. Body rusty ferruginous, legs, mouthparts and antennae yellowish; front femora slightly darker. L. in HT 2.60 mm, in PT 2.65 mm (n=2, one damaged PT without head not measured).

Head. Genae distinct, indistinctly longer than half of eyes length; eyes distinctly reduced and moderately flattened, just longer than antennomere 3. Clypeus below anterior margin very narrowly reticulated; rest of surface shiny, with indistinct reticulation.

Pronotum. Laterally flattened, surface moderately shiny, with irregular rests of reticulation, with dense irregular and rather fine transverse wrinkles and punctures, rather elongate in HT 1.10, in PT 1.08 times as long as wide, in HT 1.27, in PT 1.27 times as wide as head, widest slightly above anterior SP. Outline subparallel, gently convergent posteriorly, indistinctly concave in midlength and very slightly convex above small and rather obtuse posterior angles. Anterior angles narrowly rounded, not protruded anteriorly. Anterior transverse impression and median line deep, anterior impression moderately broad, median line broad, both densely, and median line roughly punctuate.

Elytra. Very gently long inverse-ovate, almost long-oval, surface on disc shiny, without reticulation, base moderately roughly reticulated; disc flattened in lateral view, indistinctly and very broadly concave below humeri, in HT 1.94, in PT 1.93 times as long as wide, in HT 1.17, in PT 1.20 times as wide as pronotum, in HT 2.08, in PT 2.15 times as long as pronotum; base rather narrow, moderately sloping to moderately protruded humeri with very small and blunt humeral tooth; outline with 5-6 fine denticles below humeri, denticulation strongly weakened posteriorly, diminish before apex. Outline slightly, convexly broadened from humeri to posterior three fifths, apex rather narrowly rounded; lateral channel broad and deep; before apex strongly deepened and broadened, with moderately distinctly elevated, narrow and rather sharp keel along inner margin of lateral channel. Base with irregular, rather fine tubercles above small BSP and on prolongation of intervals 2-3. Striae 1-7 deep and broad throughout, in basal half roughly punctuate, apically punctures finer; stria 8 shortened basally, almost as deep as others; intervals rather strongly vaulted, more

strongly vaulted latero-apically; 7-8 more vaulted apically and narrow basally, forming blunt, not reticulated keels.

Protibiae. Lower lateral tooth very long, median lateral tooth moderately long, third tooth small, rather sharp.

Aedeagus. Unknown.

Afrosyleter reticulatus Basilewsky, 1962

Afrosyleter reticulatus Basilewsky, 1962: 151.

Type material. Paratypes: (1 ♂, 1 ex.): Paratypus // Biot. Nº 67 / Humus dans gale- / rie forestière // I.R.S.A.C.-Mus. Congo / Kwango: Kabanga, terr. de Feshi, r. Lutshina, ii.1959 / B-67, Mme J. Leleup// Genit. ♂ /61.305.1 // Afrosyleter / reticulatus n.sp. / P. Basilewsky det. 1961; (3 ex.): Paratypus // Biot. Nº 69 / Humus dans résidu / forestier // I.R.S.A.C.-Mus. Congo / Kwango: de Feshi / rive dr. Kwenge, iii.1959 / B-69, Mme J. Leleup // Afrosyleter / reticulatus n.sp. / P. Basilewsky det. 1961, (1 ex.): Paratypus // Biot. Nº 66 / Ilôt de forêt / marécag. inondée // I.R.S.A.C.-Mus. Congo / Kwango: de Feshi / rive G. Kwenge, ii.1959 / B-69, Mme J. Leleup // Afrosyleter / reticulatus n. sp. / P. Basilewsky det. 1961, (MRAC).

Redescription. Body rusty ferruginous, legs, mouthparts and antennae yellowish; front femora slightly darker. L. 2.95-3.15 mm (n=4).

Head. Genae distinct, slightly longer than half of eyes length. Eyes rather distinctly reduced and moderately flattened, about as long as antennomeres 3. Clypeus below anterior margin moderately broadly reticulated, rest of surface shiny, with indistinct reticulation, with irregular and small median fovea, in some specimens with few punctures or irregularly corrugated.

Pronotum. Laterally slightly flattened, surface moderately shiny, with regular, moderately fine reticulation, with very sparse, irregular and very fine transverse wrinkles and punctures; 1.04-1.06 times as long as wide, 1.28-1.35 times as wide as head, widest slightly above posterior teeth. Outline (sub)parallel, not to very slightly convergent anteriorly, not concave in midlength, rather slightly convex above small, rather blunt to moderately sharp posterior angles. Anterior angles obtuse, indistinctly protruded; anterior transverse impression and median line deep, anterior impression moderately broad, median line broad, both sparsely, and median line roughly punctuate.

Elytra. Moderately convex, long inverse-ovate; inner intervals dense and rough punctured, in two PT punctures medially more or less diminish, slightly flattened in lateral view, not concave below humeri; 1.77-1.81 times as long as wide, 1.24-1.30 times as wide as pronotum, 2.14-2.17 times as long as pronotum; base moderately broad, very slightly sloping to rather strongly protruded humeri with small and blunt to moderately sharp humeral tooth; outline below humeri with several very small to small, long and moderately sharp teeth, denticulation distinctly weakened posteriorly, diminish before apex; outline slightly, convexly broadened below humeri to posterior third, apical third broadly rounded, lateral channel broad and deep; before apex deepened and broadened, with distinctly elevated, narrow keel on apex along its inner margin. Base with 3(-4) tubercles, inner one above small BSP, others on prolongation of intervals 2-3(4). Striae 1-7 very deep and rather broad throughout, in basal half rather roughly punctuate, apically punctures vanishing; stria 8

irregular, almost as deep as others; intervals rather strongly vaulted, 7-8 apically and (5)6-8 basally moderately narrowed, forming blunt keels.

Protibiae. Lower lateral tooth very long, median lateral tooth moderately long, third tooth small, moderately sharp.

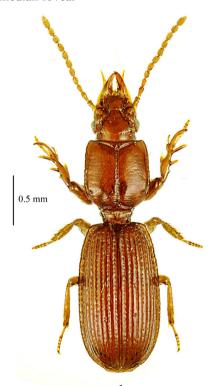
Aedeagus. As in Basilewsky (1962, p.152): Fig. 1a.

Afrosyleter szeli sp. nov. (Figs. 1, 1a-d)

Type material. Holotype (③): [Congo, ca 3°54′S; 13°45′E] Soil-Zoological Exp. / Congo-Brazzaville / Bouenza / cataract // 30.xi.1963, No 308 / sifted / in float / leg. Endrödy-Younga, (HNHM). Paratypes: (2 ③③) with the same locality labels, (HNHM, PBPC).

Description. Habitus as in Fig.1. Body rusty ferruginous, legs, mouthparts and antennae yellowish; front femora very slightly darker. L. 2.75-3.00 mm (HT 3.00 mm, n=3).

Head. Genae distinct, as long to slightly longer than half of eyes length; eyes moderately reduced and flattened, about as long as antennomere 3. Clypeus below anterior margin narrowly reticulated; rest of surface shiny, with indistinct rests of reticulation, with irregular median fovea.



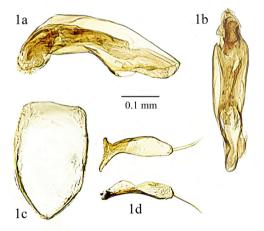


Fig. 1. Afrosyleter szeli sp. nov. Habitus (HT).

Figs. 1a-d. *Afrosyleter szeli* sp. nov. (HT): 1a- aedeagus in left lateral view; 1b- aedeagus in ventral view; 1c- urite; 1d- parameres.

Pronotum. Laterally flattened, surface moderately shiny, with moderately deep reticulation, with few irregular and fine transverse wrinkles and punctures, moderately elongate; 1.07-1.11 (HT 1.09) times as long as wide, 1.31-1.35 (HT 1.32) times as wide as head. Outline almost parallel, indistinctly convergent posteriorly, not concave in midlength, slightly convex above moderately large and very obtuse tooth in posterior angles. Anterior angles narrowly rounded, almost not protruded anteriorly. Anterior transverse impression and median line deep, anterior impression moderately broad, median line very broad, both densely, and median line roughly punctuate.

Elytra. Long inverse-ovate, surface on disc shiny, without reticulation, base and very apex moderately roughly reticulated; disc flattened in lateral view, indistinctly and very broadly concave below humeri, 1.84-1.86 (HT 1.84) times as long as wide, 1.24-1.29 (HT 1.24) times as wide as pronotum, 2.11-2.17 (HT 2.12) times as long as pronotum; base rather broad, slightly sloping to strongly protruded humeri with large and sharp humeral tooth (in one PT tooth finer); outline with several rather sharp denticles below humeri, denticulation weakened posteriorly, recognizable up to apex. Outline rather slightly, convexly broadened from humeri to posterior third, apex broadly rounded, lateral channel broad and deep; before apex strongly deepened and broadened, with moderately distinctly elevated, narrow and rather sharp keel along inner margin of lateral channel. Base with irregular, distinct tubercles above small BSP and on prolongation of intervals 2-4. Striae 1-7 moderately deep and broad throughout, in basal half roughly punctuate, apically punctures finer; stria 8 shortened basally, almost as deep as others; intervals rather strongly vaulted, more strongly vaulted laterally; 7-8 not (in HT) to weakly (in both PT) reticulated, forming very blunt keels below humeri.

Protibiae. Apical spine thin and relatively short; apical tooth very long, strongly curved; median and especially lower lateral teeth very long, third lateral tooth small, rather sharp.

Aedeagus. Median lobe as in Figs. 1a,b, apex very broadly rounded, strongly bent down, length in HT 0.43 mm. Parameres as in Fig. 1d, with 1/2 setae on broadly rounded apex; urite as in Fig.1c.

Differential diagnosis. Afrosyleter szeli sp. nov. is characterized by the eyes being strongly reduced and by the elytra being moderately narrow, only slightly broadened apically and having the outer intervals only moderately vaulted basally and the outline roughly dentate only in basal third.

A. leleupi, the most similar species among to date known taxa, can be differentiated by the body being smaller; the elytra being distinctly narrower and less broadened laterally, having the intervals 7-8 much narrower below the base, and by the pronotum being barely narrower and slightly divergent anteriorly. The next differences among all taxa including newly described ones are figured by the following species and in the key below.

Name derivation. Named in honour of Győző Szél (HNHM, Budapest) for his significant help in my study of Afrotropical Scaritinae.

Afrosyleter angolensis sp. nov.

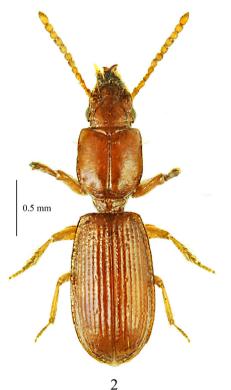
(Figs. 2, 2a-d)

Type material. Holotype (♂): Angola: Riv. Tshikapa / 50 km S.O. de Dundo / vii.1948 / A. de Barros Machado // 880.2.13, (MRAC).

Description. Habitus as in Fig. 2. Body rusty ferruginous, legs, mouthparts and antennae yellowish; front femora indistinctly darker. L. 2.80 mm, (n=1).

Head. Genae distinct, almost as long as half of eyes length; eyes moderately reduced and moderately strongly flattened, barely longer than antennomeres 3. Clypeus below anterior margin moderately broadly reticulated; rest of surface shiny, with indistinct reticulation, with irregular and small median fovea.

Pronotum. Laterally rather gently convex, surface shiny, with irregular, moderately deep reticulation, with few irregular and fine transverse wrinkles and punctures, rather elongate; 1.08 times as long as wide, 1.30 times as wide as head. Outline almost parallel, not convergent posteriorly, indistinctly concave in midlength and very slightly convex above very small and obtuse tooth in posterior angles. Anterior angles blunt, almost not protruded anteriorly. Anterior transverse impression and median line deep, anterior impression moderately broad, median line very broad, both very finely punctuate.



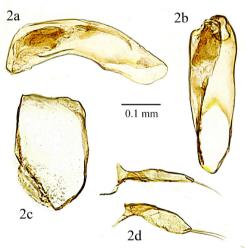


Fig. 2. Afrosyleter angolensis sp. nov. Habitus (HT).

Figs. 2a-d. *Afrosyleter angolensis* sp. nov. (HT): 2a-aedeagus in left lateral view; 2b- aedeagus in ventral view; 2c- urite; 2d- parameres.

Elytra. Long inverse-ovate, surface on disc shiny, without reticulation, base and apex finely reticulated; disc distinctly flattened in lateral view; in lateral view not concave below humeri, 1.85 times as long as wide, 1.25 times as wide as pronotum, 2.14 times as long as pronotum; base moderately broad, slightly sloping to strongly protruded humeri with moderately large, sharp humeral tooth; outline with about eight small and rather blunt denticles below humeri, denticulation strongly weakened posteriorly, apically almost diminish. Outline slightly, convexly broadened from humeri to posterior third, apex broadly rounded, lateral channel broad and deep; before apex deepened and broadened, with moderately distinctly elevated, narrow and rather sharp keel along inner margin of lateral channel. Base with irregular, fine tubercles above small BSP and on prolongation of intervals 2-3(4). Striae 1-7 deep and broad throughout, in basal half moderately roughly punctuate, apically punctures much finer; stria 8 shortened basally, almost as deep as others; intervals moderately convex, on apex slightly flattened, 7-8 slightly more vaulted apically and more narrowed basally, forming here short, blunt, not reticulated keels.

Protibiae. As in Fig. 2, strongly abraded.

Aedeagus. Median lobe as in Figs. 2a,b, apex moderately broadly rounded, slightly bent down, length in HT 0.41 mm. Parameres as in Fig. 2d, with 2/3 setae on narrowly rounded apex; urite as in Fig.2c.

Differential diagnosis. Afrosyleter angolensis sp. nov. is characterized by the eyes being slightly reduced and by the elytra being rather narrow, moderately broadened apically, having the outer intervals only narrowly vaulted basally, flattened on the apex, and having the outline roughly dentate only in basal third.

A. szeli sp. nov., the most similar species, can be differentiated by the eyes being smaller, by the elytra having the outline more strongly dentate apically and having the outer intervals below the base narrowly, strongly vaulted, not flattened on the apex. The next differences among all taxa including newly described ones are figured in the key below.

Name derivation. In accordance with the origin of the type specimen.

Afrosyleter rossii sp. nov. (Figs. 3, 3a)

Type material. Holotype (\updownarrow): Sierra Leone, Eastern / Pr.; Gola Rainforest N.P. / nr. Lalehun, 20-23.xi.2015 / W. Rossi leg., (PBPC).

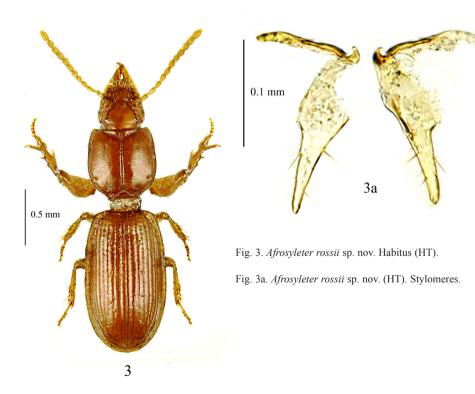
Description. Habitus as in Fig. 3. Body rusty ferruginous, legs, mouthparts and antennae yellowish; front femora slightly darker. L. 2.60 mm (n=1).

Head. Genae very distinct, slightly longer than eyes length; eyes strongly reduced and strongly flattened, just shorter than antennomere 3. Clypeus below anterior margin narrowly reticulated; rest of surface shiny, with indistinct reticulation, with irregular median fovea.

Pronotum. Laterally moderately convex, surface shiny, with irregular, moderately deep reticulation, with rather dense, irregular and fine transverse wrinkles and punctures, moderately elongate; 1.02 times as long as wide, 1.41 times as wide as head. Outline

almost parallel, indistinctly convergent anteriorly, not concave in midlength and broadly, moderately strongly convex above very small and very obtuse tooth in posterior angles. Anterior angles narrowly rounded, almost not protruded anteriorly. Anterior transverse impression and median line deep, anterior impression moderately broad, median line very broad, both densely, and median line roughly punctuate.

Elytra. Barely inverse-ovate, surface on disc shiny, without reticulation, base narrowly and rather roughly reticulated; disc moderately flattened in lateral view, not concave below humeri, 1.78 times as long as wide, 1.20 times as wide as pronotum, 2.09 times as long as pronotum; base moderately broad, slightly sloping to moderately strongly protruded humeri with very small, moderately sharp humeral tooth; outline with about six long and moderately sharp denticles below humeri, denticulation strongly weakened posteriorly, apically almost diminish. Outline regularly, convexly broadened from humeri to posterior third, apex broadly rounded, lateral channel broad and deep; before apex deepened and broadened, with moderately distinctly elevated, narrow and rather sharp keel along inner margin of lateral channel. Base with irregular, fine tubercles above small BSP and on prolongation of intervals 2-3(4). Striae 1-7 moderately deep and broad throughout, in basal half moderately roughly punctuate, apically punctures finer; stria 8 shortened basally, almost as deep as others; intervals medio-basally moderately vaulted, more strongly vaulted apically; 7-8 neither reticulate nor forming keels below humeri.



Protibiae. Apical spine thin and short; apical tooth very long, moderately strongly curved; lower lateral tooth very long, median one rather long and very sharp, third lateral tooth small, moderately sharp.

Stylomeres as in Fig. 3a, apical parts directly narrowed to shortly rounded apex.

Differential diagnosis. *Afrosyleter rossii* sp. nov. is characterized by the eyes being strongly reduced and by the elytra being moderately narrow, slightly broadened apically and having the outer intervals moderately vaulted basally and the outline roughly dentate only in basal third.

A. serrulatus, the most similar species, can be differentiated especially by the elytra having the outline strongly dentate almost to the apex and having the outer intervals below the base reticulated and narrowly, strongly vaulted. The next differences among all taxa including newly described ones are figured in the key below.

Name derivation. Named in honour of Walter Rossi (Coppito, Italy), collector of the type specimen, well known specialist in Laboulbeniales (Ascomycota).

KEY TO SPECIES OF GENUS AFROSYLETER

Eyes not reduced, genae indistinctly developed, incomparable shorter than eyes length; winged species L. 2(1) Eves moderately to strongly reduced, genae distinctly developed. At least as long as half of eyes length; hind thoracical wings reduced. 3(4) Elytra with inner intervals densely and roughly punctured / reticulated. Genae about as long as half eye 4(3) Elytra on disc shiny, inner intervals not punctured / reticulated , at most reticulated latero-basally. 5(10) Eyes strongly reduced, genae about as long as eye length. Elytra broader, below 1.7 times as long as broad, outline rather strongly broadened apically; rather finely serrate below humeri; intervals 5-8 not roughly reticulated below humeri. L. 2.8-3.0 mm. Ivory Coast (Parc 7(6) Elytra narrower, about 1.8 times as long as broad, outline slightly broadened apically. Elytral outline roughly denticulate almost to apex; intervals 5-8 roughly reticulated below humeri. L. 3.1 8(9) 9(8) Elytral outline moderately roughly denticulate in basal third, serration almost diminish apically; intervals 10(5) Eyes moderately reduced, genae about as long to slightly longer than half eye length. 11(14) Intervals 5-8 below humeri roughly reticulated. Elytra about 1.8 times as long as broad, moderately broadened apically. 12(13) Genae slightly longer than half of eye length. Eyes more flattened, L. 2.9-3.1 mm, DR Congo (Ituri). 13(12) Genae slightly shorter than half of eye length. Eyes less flattened. L. 2.95-3.15 mm. DR Congo (Kwango). 14(11) Intervals 5-8 below humeri not roughly reticulated. 15(16) Elytra very long, over 1.9 times as long as broad, very slightly broadened apically. Pronotum about 1.1 times as long as broad, slightly divergent anteriorly. L. 2.6-2.8 mm. DR Congo (Kivu)

16(15) Elytra shorter, below 1.9 times as long as broad, more distinctly broadened apically.

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REFERENCES

- BASILEWSKY P. 1946: Etude de Coléoptères Carabidae africains des collections du Naturhistoriska Riksmuseum de Stockholm. *Arkiv för Zoologi* 38A (18): 1-20.
- BASILEWSKY P. 1959: Sur les Genres Syleter Andrewes, Psilidius Jeannel et Leleuporella Basilewsky (Col. Carabidae Scaritinae). Revue Française d'Entomologie 26: 5-16.
- BASILEWSKY P. 1962: Coléoptères Carabidae africains nouveaux XIII. Revue de Zoologie et de Botanique Africaines 65: 149-162.
- BURGEON L. 1935: Catalogues raisonées de la faune entomologique du Congo Belge. Coléoptères-Carabiques. Annales du Musée du Congo Belge (Zoologie) 2:131-257.
- LORENZ W. 2005: Systematic list of extant ground beetles of the world (Insecta Coleoptera "Geadephaga": Trachypachidae and Carabidae incl. Paussinae, Cicindelinae, Rhysodinae). Second Edition. Tutzing, Germany, 530 pp.

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