

SHORT COMMUNICATION

## New minute Drilini species significantly extend the distributions of *Lolosia* and *Microselasia* (Coleoptera: Elateridae: Agrypninae) in tropical Africa

Robin KUNDRATA

Department of Zoology, Faculty of Science, Palacky University, 17. listopadu 50, 771 46, Olomouc, Czech Republic  
& Senckenberg Deutsches Entomologisches Institut, Eberswalder Strasse 90, 15374 Müncheberg, Germany; e-mail: robin.kundrata@upol.cz

Accepted:  
11<sup>th</sup> November 2018

Published online:  
23<sup>rd</sup> November

**Abstract.** *Lolosia* Kundrata & Bocak, 2017 and *Microselasia* Kundrata & Bocak, 2017 (Elateridae: Agrypninae: Drilini) were described based on species endemic to the Cameroonian rainforest zone. Here, I describe *Lolosia gajduskovae* sp. nov. (Democratic Republic of the Congo), *Lolosia smetkovae* sp. nov. (Central African Republic), and *Microselasia sormovae* sp. nov. (Democratic Republic of the Congo). Additionally, I redescribe *Selasia burgeoni* Pic, 1930 (Democratic Republic of the Congo) and transfer it to *Microselasia* as *M. burgeoni* (Pic, 1930) comb. nov. The main diagnostic characters including male genitalia are figured, and an identification key to the males of *Lolosia* species is provided. The generic diagnoses of *Lolosia* and *Microselasia* are updated based on the here studied species. The newly described species increase our knowledge on the distribution of *Lolosia* and *Microselasia* in the Afrotropical Region.

**Key words.** Coleoptera, Elateroidea, Elateridae, Drilini, taxonomy, new species, new combination, diversity, distribution, hotspot, Afrotropical Region

**Zoobank:** <http://zoobank.org/urn:lsid:zoobank.org:pub:05DA2C7E-8B92-46BF-A01B-726E6F7F7BC5>

© 2018 The Authors. This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Licence.

### Introduction

The fauna of the soft-bodied click-beetle tribe Drilini in tropical central Africa has been insufficiently known (KUNDRATA & BOCAK 2017). Historically, the vast majority of the sub-Saharan Drilini were classified under *Selasia* Laporte, 1838, a few species were assigned to *Drilus* Olivier, 1790, and all were usually only briefly described (e.g., PIC 1914, 1930, 1934; WITTMER 1989). KUNDRATA & BOCAK (2017) were the first who studied the diversity of Drilini in tropical Africa in more detail. They focused on the fauna of the Cameroonian rainforest zone and identified five new genera among the available material, including *Lolosia* Kundrata & Bocak, 2017 (monotypic) and *Microselasia* Kundrata & Bocak, 2017 (nine species). These genera share the minute body, subacute apices of ultimate maxillary palpomeres, and the first abdominal ventrite divided into two lateral sclerites.

During recent taxonomic investigation of the Afrotropical Drilini deposited in the Royal Museum for Central

Africa, Tervuren, Belgium and Národní muzeum, Prague, Czech Republic, I found two additional *Microselasia* species from the Democratic Republic of the Congo (one of them previously described under *Selasia*), and two new *Lolosia* species from the Democratic Republic of the Congo and the Central African Republic, respectively. The purpose of this paper is to (re)describe these species, compare them with their congeners, and figure their main diagnostic characters.

### Material and methods

The morphological study is based on the adult males. The genitalia were dissected after a short treatment in hot 10% KOH. Diagnostic characters were photographed using a digital camera attached to a stereoscopic microscope. The following measurements were taken with a scale bar in an eyepiece: BL – body length; WHe – head width including eyes; EL – elytral length; WHum – width at humeri; PL – pronotal length at midline; PW – pronotal width in the



widest part; Edist – minimum interocular distance in the frontal part of cranium; Ediam – maximum eye diameter in lateral view. Body length was measured from the fore margin of head to the apex of elytra. Morphological terminology and generic concepts of *Lolosia* and *Microselasia* follow KUNDRATA (2017) and KUNDRATA & BOCAK (2017). Label data for the examined material are cited verbatim, individual labels are indicated by a double slash (/). Additional information is given in square brackets. The examined type material is deposited in the Royal Museum for Central Africa, Tervuren, Belgium (RMCA) and Národní muzeum, Prague, Czech Republic (NMPC).

## Systematics

### Genus *Lolosia* Kunderata & Bocak, 2017

*Lolosia* Kunderata & Bocak, 2017: 452.

**Type species.** *Lolosia transversalis* Kunderata & Bocak, 2017; by original designation.

**Diagnosis.** *Lolosia* species share the minute body, incomplete frontal carina, relatively wide fronto-clypeal region, large eyes (their frontal distance 1.20–1.35 times eye diameter), ultimate maxillary and labial palpomeres narrowed and subacute apically, serrate antennae with uneven surface (Figs 1, 3, 5–6), pronotum transverse, 1.85–1.90 times wider than long, with distinct, sinuate sublateral carinae (Figs 1, 3, 7, 11), scutellar shield about as long as wide, and sternite IX elongate, about twice as long as wide (Figs 8, 12).

#### *Lolosia gajduskovae* sp. nov.

(Figs 1–2, 5, 7–10)

**Type material.** HOLOTYPE: ♂, '[DEMOCRATIC REPUBLIC OF THE CONGO, [South] Kivu, S of Kahuzi Mt., Biega-Kahuzi N.P., 2200 m, III. 1993 [collector not mentioned]' (NMPC, ex. coll. R. Kunderata).

**Description of holotype.** Body (Figs 1–2) 2.80 times longer than width at humeri. Body brown, antennomeres I–II, dorsal surface of head, basal part of elytra, and ventral parts lighter, mouthparts, legs and apex of abdomen yellowish brown; body surface covered with yellow pubescence.

Head (Fig. 7) including eyes 0.80 times as wide as pronotum; surface rather flat, smooth, slightly depressed medially, sparsely and shallowly punctured, covered with sparse, long semi-erect pubescence; fronto-clypeal region wider than long, its surface rough. Eyes large, prominent, their frontal distance 1.35 times eye diameter. Labrum transverse, short, with frontal margin slightly concave. Mandible moderately long, bidentate, with robust tooth located in middle part of incisor, basally with long setae, apically shiny. Maxillary palpus slender, palpomere III short, slightly wider than long, palpomere IV elongate, fusiform, apically flattened, obliquely narrowed. Antenna (Fig. 5) with 11 antennomeres; scape robust, widened apically, pedicel short, small, antennomeres III–X serrate, their surface rugose, antennomere III long, about twice as long as antennomere II, antennomeres IV–X slightly shorter than antennomere III, subequal in length, apical antennomere simple, longest, about 1.3 times longer than

penultimate antennomere; all antennomeres covered with moderately dense semi-erect pubescence.

Pronotum (Figs 1, 7) slightly convex, transverse, widest at posterior angles, 1.85 times wider than length at midline. Anterior margin almost straight, lateral margins diverging posteriorly, sinuate from lateral view, posterior margin widely convex, slightly emarginate medially. Anterior angles inconspicuous; posterior angles obtuse, with wrinkled surface. Disc with distinct sinuate sublateral carinae almost reaching anterior margin, and transverse carina near posterior margin. Lateral carina incomplete anteriorly. Surface of disc smooth, very sparsely covered with small shallow punctures, with sparse semi-erect pubescence, denser and longer at posterior angles. Prosternum strongly transverse, with frontal margin almost straight, oriented ventrally, with long semi-erect setae; prosternal process reduced to relatively short, slender, subparallel-sided spine, pointed apically.

Scutellar shield flat, triangular, smooth, about as long as wide, narrowly rounded posteriorly. Mesoventrite v-shaped, with frontal margin widely concave; mesoventral cavity shallow, with poorly defined walls. Elytra (Fig. 1) subparallel-sided, 0.70 times as long as body, combined twice as long as wide, basally wrinkled, with indistinct striae, very sparsely punctate, covered with moderately long, semi-erect pubescence.

Legs moderately long, slender, slightly compressed, with sparse, long, semi-erect setae; tarsomeres I–II subequal in length, tarsomere III slightly shorter but longer than tarsomere IV; tarsomere IV shortest, extended ventrally, apical tarsomere slender, elongate; claws simple, slender, slightly curved, each with long seta basally.

Abdomen with ventrites sparsely and finely punctate, covered with sparse semi-erect pubescence. Tergites IX and X weakly connected by membrane; tergite IX transverse, tergite X about 1.4 times as long as wide, widely rounded apically. Sternite IX (Fig. 8) elongate, about twice as long as wide, emarginate basally, apex narrowed, with sparse short setae.

Aedeagus (Figs 9–10) 1.80 times as long as wide; median lobe narrow, short, only slightly surpassing apices of parameres, about as long as phallobase, moderately curved in lateral view, basally with two short struts, dorsally with short subapical hook; parameres elongate, with almost straight sides, subacute apically, sparsely setose; phallobase robust, slightly longer than wide, u-shaped, basally narrowed and produced dorsally.

Female and immature stages unknown.

Measurements. BL 3.35 mm, WHum 1.20 mm, EL 2.40 mm, WHe 0.80 mm, PL 0.55 mm, PW 1.05 mm, Edist 0.45 mm, Ediam 0.35 mm.

**Differential diagnosis.** *Lolosia gajduskovae* sp. nov. differs from *L. transversalis* in larger body (3.35 mm; 2.10 mm in *L. transversalis*), darker brown body coloration (Figs 1–2; yellowish to light brown in *L. transversalis*), apex of median lobe only slightly surpassing apices of parameres (distinctly surpassing apices of parameres in *L. transversalis*), and relatively wide parameres (Figs 9–10; relatively slender and more elongate in *L. transversalis*).

*Lolosia smetkovae* sp. nov. differs in having head and pronotum distinctly darker than elytra (lighter than most of elytra in *L. gajduskovae*; Figs 1–4), sternite IX gradually rounded apically (narrowed apically in *L. gajduskovae*; Figs 8, 12), paramere laterally rounded (almost straight in *L. gajduskovae*), and phallobase v-shaped (u-shaped in *L. gajduskovae*; Figs 9, 13).

**Etymology.** This species is named in honor of Miss Leona Gajdušková (Mosty u Jablunkova, Czech Republic).

**Distribution.** The Democratic Republic of the Congo: South Kivu Province.

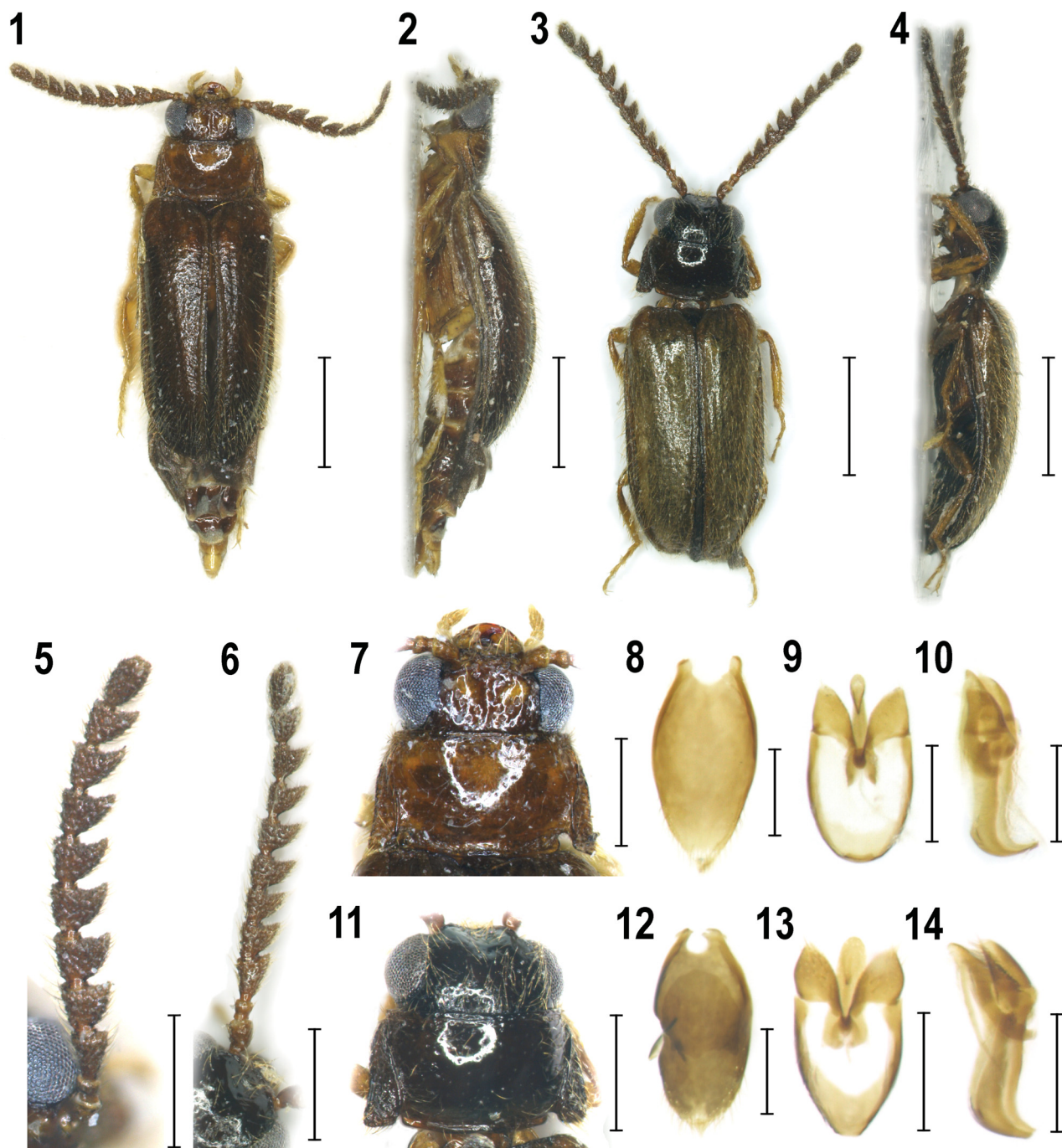
***Lolosia smetkovae* sp. nov.**

(Figs 3–4, 6, 11–14)

**Type material.** HOLOTYPE: ♂, 'CENTRAL AFRICAN REPUBLIC, Bamingui-Bangoran prov. [Prefecture], 75 km SSW Ndele, 450 m, 08.–12.7.2011, A. Kudrna JR. lgt.' (NMPC).

**Description of holotype.** Body (Figs 3–4) 2.70 times longer than width at humeri. Head, thorax and abdomen dark brown, antennomeres III–XI lighter, antennomeres I–II and elytra light brown, mouthparts and legs yellowish brown; body surface covered with yellow pubescence.

Head (Fig. 11) including eyes 0.80 times as wide as pro-



Figs 1–14. Morphology of *Lolosia* species. 1–2 – *L. gajduskovae* sp. nov.: 1 – habitus, dorsal view; 2 – habitus, lateral view. 3–4 – *L. smetkovae* sp. nov.: 3 – habitus, dorsal view; 4 – habitus, lateral view. 5–6 – antenna, dorsal view: 5 – *L. gajduskovae* sp. nov.; 6 – *L. smetkovae* sp. nov. 7–10 – *L. gajduskovae* sp. nov.: 7 – head and pronotum, dorsal view; 8 – abdominal sternite IX, ventral view; 9 – aedeagus, dorsal view; 10 – aedeagus, lateral view. 11–14 – *L. smetkovae* sp. nov.: 11 – head and pronotum, dorsal view; 12 – abdominal sternite IX, ventral view; 13 – aedeagus, dorsal view; 14 – aedeagus, lateral view. Scale bars = 1.0 mm (Figs 1–4), 0.5 mm (Figs 5–7, 11), 0.2 mm (Figs 8–10, 12–14).

notum; surface slightly convex, smooth, slightly depressed medially, sparsely and shallowly punctured, covered with sparse, long semi-erect pubescence; fronto-clypeal region wider than long, its surface rough. Eyes large, their frontal distance 1.30 times eye diameter. Labrum transverse, short, with frontal margin slightly concave. Mandible moderately long, bidentate, with robust tooth located in middle part of incisor, basally with long setae, apically shiny. Maxillary palpus slender, palpomere III short, wider than long, palpomere IV elongate, fusiform, apically subacute. Antenna (Fig. 6) with 11 antennomeres, serrate; scape robust, widened apically, pedicel short, small, antennomeres III–X serrate, their surface rugose, antennomere III long, about twice as long as antennomere II, antennomeres IV–X slightly shorter than antennomere III, subequal in length, apical antennomere simple, longest, about 1.3 times longer than penultimate antennomere; all antennomeres covered with moderately dense semi-erect pubescence.

Pronotum (Fig. 11) slightly convex, transverse, widest at posterior angles, 1.90 times wider than length at midline. Anterior margin almost straight, lateral margins diverging posteriorly, sinuate from lateral view, posterior margin widely convex, slightly emarginate medially. Anterior angles inconspicuous; posterior angles obtuse, with wrinkled surface. Disc with distinct sinuate sublateral carinae almost reaching anterior margin, and transverse carina near posterior margin. Lateral carina incomplete anteriorly. Surface of disc smooth, very sparsely covered with small shallow punctures, with sparse semi-erect pubescence, denser at posterior angles. Prosternum strongly transverse, with frontal margin widely convex, oriented ventrally, with long semi-erect setae; prosternal process reduced to very short, slender, subparallel-sided spine, pointed apically.

Scutellar shield flat, triangular, smooth, about as long as wide, narrowly rounded posteriorly. Mesoventrite v-shaped, with frontal margin widely concave; mesoventral cavity shallow, with poorly defined walls. Elytra (Fig. 3) subparallel-sided, 0.70 times as long as body, combined 1.90 times as long as wide, basally wrinkled, indistinctly striate, sparsely punctate, covered with moderately long, semi-erect pubescence.

Legs moderately long, slender, slightly compressed, with sparse, long, semi-erect setae; tarsi relatively long, tarsomeres I–II subequal in length, tarsomere III slightly shorter but longer than tarsomere IV; tarsomere IV shortest, extended ventrally, apical tarsomere slender, elongate; claws simple, slender, slightly curved, each with long seta basally.

Abdomen with ventrites sparsely and finely punctate, covered with sparse semi-erect pubescence. Tergites IX and X weakly connected by membrane; tergite IX transverse, tergite X slightly longer than wide, rounded apically. Sternite IX (Fig. 12) elongate, about twice as long as wide, notched basally, apex rounded, with sparse short setae.

Aedeagus (Figs 13–14) 1.80 times as long as wide; median lobe stout, short, only slightly surpassing apices of parameres, slightly shorter than phallobase, moderately curved in lateral view, basally with two short struts, dorsally with short subapical hook; parameres elongate,

with rounded sides, subacute apically, sparsely setose; phallobase robust, slightly longer than wide, v-shaped, basally narrowed and produced dorsally.

Female and immature stages unknown.

Measurements. BL 3.05 mm, WHum 1.10 mm, EL 2.10 mm, WHe 0.80 mm, PL 0.50 mm, PW 0.95 mm, Edist 0.40 mm, Ediam 0.30 mm.

**Differential diagnosis.** *Lolosia smetkovae* sp. nov. is similar to *L. gajduskovae* sp. nov. in habitus, body size, dark body coloration, apex of median lobe only slightly surpassing apices of parameres, and relatively wide parameres. These species differ in the coloration of head and pronotum (distinctly darker than elytra in *L. smetkovae*, lighter than most of elytra in *L. gajduskovae*; Figs 1–4), the apical portion of sternite IX (gradually rounded in *L. smetkovae*, narrowed in *L. gajduskovae*; Figs 8, 12), the lateral side of paramere (rounded in *L. smetkovae*, almost straight in *L. gajduskovae*), and the shape of phallobase (v-shaped in *L. smetkovae*, u-shaped in *L. gajduskovae*; Figs 9, 13).

**Etymology.** This species is named in honor of Miss Milada Smetková (Praha, Czech Republic).

**Distribution.** Central African Republic.

#### An identification key to the males of *Lolosia* species

- 1 Body 2.10 mm long, yellowish to light brown; apex of median lobe distinctly surpassing apices of parameres; Cameroon. .... *L. transversalis* Kundrata & Bocak, 2017
- Body 3.05–3.35 mm long, brown to dark brown, with only mouthparts and legs distinctly lighter; apex of median lobe only slightly surpassing apices of parameres (Figs 1–4, 9–10, 13–14). .... 2
- 2 Head and pronotum light brown to brown, lighter than most of elytra (Fig. 1); sternite IX distinctly narrowed apically (Fig. 8); paramere laterally almost straight; phallobase u-shaped (Fig. 9); DR Congo. .... *L. gajduskovae* sp. nov.
- Head and pronotum dark brown, distinctly darker than elytra (Fig. 3); sternite IX gradually rounded apically (Fig. 12); paramere laterally rounded; phallobase v-shaped (Fig. 13); Central African Republic. .... *L. smetkovae* sp. nov.

#### Genus *Microselasia* Kundrata & Bocak, 2017

*Microselasia* Kundrata & Bocak, 2017: 455.

**Type species.** *Microselasia obscura* Kundrata & Bocak, 2017; by original designation.

**Diagnosis.** *Microselasia* species share minute body, complete frontal carina, high and carinate fronto-clypeal region, apically narrowed and subacute ultimate maxillary and labial palpomeres, flabellate antennae (Figs 19–21), and relatively short parameres (Figs 24, 27).

#### *Microselasia burgeoni* (Pic, 1930) comb. nov.

(Figs 15–16, 19–20, 22–24)

*Selasia burgeoni* Pic, 1930: 307; WITTMER (1944: 208).

**Type material.** HOLOTYPE: ♂, [DEMOCRATIC REPUBLIC OF THE CONGO], Haut-Uele: Yebo Moto, IV. 1926, L. Burgeon, Musée du

Congo // R. dét. 1616 M; *Selasia burgeoni* n. sp.; Holotypus' (RMCA).

**Redescription of holotype.** Body (Figs 15–16) 3.05 times longer than width at humeri. Body brown to dark brown, mouthparts and legs lighter, pro- and mesothorax yellowish brown; surface covered with yellow pubescence.

Head (Fig. 22) including eyes almost as wide as pronotum; surface smooth, shallowly depressed medially, very

sparsely punctate, covered with sparse, long, semi-erect setae; frons slightly produced forwards to surpass fronto-clypeal region; frontal carina complete; fronto-clypeal region high, narrow, with distinct longitudinal carina. Eyes large, their frontal distance 1.15 times eye diameter. Labrum transverse, sparsely punctate, with frontal margin widely concave. Mandible relatively long, bidentate, with



Figs 15–27. Morphology of *Microselasia* species. 15–16 – *M. burgeoni* (Pic, 1930): 15 – habitus, dorsal view; 16 – habitus, lateral view. 17–18 – *M. sormovae* sp. nov.: 17 – habitus, dorsal view; 18 – habitus, lateral view. 19–20 – *M. burgeoni* (Pic, 1930): 19 – apical antennomeres, ventral view, 20 – basal antennomeres, ventral view. 21 – *M. sormovae* sp. nov., antenna, dorsal view. 22–24 – *M. burgeoni* (Pic, 1930): 22 – head and pronotum, dorsal view; 23 – abdominal sternite IX, ventral view; 24 – aedeagus, dorsal view. 25–27 – *M. sormovae* sp. nov.: 25 – head and pronotum, dorsal view; 26 – abdominal sternite IX, ventral view; 27 – aedeagus, dorsal view. Scale bars = 1.0 mm (Figs 15–19), 0.5 mm (Figs 22, 25), 0.2 mm (Figs 20–21, 23–24, 26–27).

sharp tooth located in middle part of incisor, basally with long setae, apical part shiny. Maxillary palpus tetramerous, slender, palpomere III short, slightly longer than wide, ultimate palpomere elongate, fusiform, subacute apically. Labial palpus tiny, apical palpomere fusiform, subacute apically. Antenna (Figs 19–20) with 11 antennomeres, flabellate; scape robust, slightly widened apically, pedicel short, small; antennomere III slightly serrate, long, about 1.3 times as long as antennomere IV, its branch shorter than stem; antennomere IV with elongate branch about as long as its stem; antennomeres V–VII gradually shorter, with gradually longer branches, antennomeres VII–X short, subequal in length, with branches about four times longer than stems; antennomere XI simple, longest, slightly shorter than branch of penultimate antennomere, about 3.5 times longer than stem of penultimate antennomere; all antennomeres covered with moderately dense pubescence.

Pronotum (Fig. 22) slightly convex, rather transverse, widest in anterior two fifths, 1.55 times wider than length at midline. Anterior margin almost straight, lateral margins sinuate, slightly diverging posteriorly, posterior margin simple, widely rounded. Anterior angles inconspicuous; posterior angles produced postero-laterally, slightly rounded. Disc with narrow, transverse carina near anterior margin, and with short sublateral carinae near posterior angles reaching first quarter of pronotum. Lateral carina incomplete anteriorly; hypomeron rather smooth, slightly depressed posteriorly. Surface of disc very sparsely covered with shallow punctures, with sparse semi-erect pubescence. Prosternum transverse, with frontal margin almost straight, oriented ventrally, with long semi-erect setae; prosternal process reduced, short, subacute.

Scutellar shield flat, triangular, about as long as wide, posteriorly narrowly rounded. Mesoventrite widely v-shaped, with frontal margin widely concave; mesoventral cavity reduced. Elytra (Fig. 15) subparallel-sided, 0.75 times as long as body, combined 2.20 times as long as wide; basally wrinkled, with surface uneven, sparsely covered with shallow punctures; relatively densely covered with long, semi-erect to erect pubescence.

Legs slightly compressed, with sparse, long, semi-erect setae; tarsomeres I–II subequal in length, tarsomere III slightly shorter, tarsomere IV shortest, minute, extended ventrally, apical tarsomere long, slender; claws simple, slightly curved, each with long seta basally.

Abdomen with ventrites moderately densely covered with shallow punctures and with semi-erect pubescence. Tergites IX and X weakly connected by membrane; tergite IX transverse, tergite X slightly longer than wide. Sternite IX (Fig. 26) 1.9 times as long as wide, deeply notched basally, rounded apically, with apex finely punctate and sparsely setose.

Aedeagus (Fig. 27) 1.8 times as long as wide, with median lobe stout, relatively short, shorter than phallobase, surpassing apices of parameres, moderately curved in lateral view, basally with two relatively long struts, dorsally with rather short and sharp subapical hook; parameres minute, short, subacute apically; phallobase robust, long, u-shaped, about 1.2 times longer than wide.

Female and immature stages unknown.

Measurements. BL 3.15 mm, WHum 1.05 mm, EL 2.30 mm, WHe 0.80 mm, PL 0.55 mm, PW 0.85 mm, Edist 0.40 mm, Ediam 0.35 mm.

**Differential diagnosis.** *Microselasia burgeoni* comb. nov. is superficially similar to *M. barombi* Kundrata & Bocak, 2017, *M. gracilis* Kundrata & Bocak, 2017, *M. macrocephala* Kundrata & Bocak, 2017, and *M. obscura*. These species share strongly flabellate antennae and pronotum with distinctly sinuate sides and postero-laterally projected posterior angles (Figs 19, 22). *Microselasia burgeoni* comb. nov. differs from all these species in its yellowish brown pronotum which is distinctly lighter than head and elytra (Figs 15–16, 22; usually brown to dark brown in other species). *Microselasia obscura*, which is similar to *M. burgeoni* comb. nov. in the body size (3.10–3.50 mm), large eyes (their frontal distance 1.15 times eye diameter), and pronotum widest in the anterior two fifths, differs additionally in less transverse pronotum (1.40 times wider than long; 1.55 times in *M. burgeoni*; Fig. 22) and robust, relatively longer and wider subapical hook on median lobe (minute and short in *M. burgeoni*; Fig. 24).

**Distribution.** The Democratic Republic of the Congo: Haut-Uele Province.

#### *Microselasia sormovae* sp. nov.

(Figs 16–17, 21, 25–27)

**Type material.** HOLOTYPE: ♂, '[DEMOCRATIC REPUBLIC OF THE CONGO], Eala, VI. 1936, J. Ghesquière, Coll. Mus. Congo // R. det. M 5629; *Selasia* [further data unreadable]' (RMCA).

**Description of holotype.** Body (Figs 17–18) 3.00 times longer than width at humeri, dorsally weakly convex. Body brown, antennomeres I–II, pronotum and basal part of elytra lighter, mouthparts, ventral parts of thorax and legs yellowish brown to light brown; surface covered with yellow pubescence.

Head (Fig. 25) including eyes 0.8 times as wide as pronotum; surface smooth, slightly depressed medially, very sparsely punctate, covered with sparse, long, semi-erect setae; frons produced forwards to surpass fronto-clypeal region; frontal carina complete; fronto-clypeal region high, narrow, with longitudinal carina. Eyes large, their frontal distance 1.05 times eye diameter. Labrum transverse, sparsely punctate, with frontal margin widely concave. Mandible relatively long, bidentate, with tooth located in middle part of incisor, basally with long setae, apical part shiny. Maxillary palpus tetramerous, slender, palpomere III short, slightly longer than wide, ultimate palpomere elongate, fusiform, subacute apically. Labial palpus tiny, apical palpomere fusiform, subacute apically. Antenna (Fig. 21) with 11 antennomeres [four apical antennomeres missing in left antenna, and part of the apical antennomere in right antenna], flabellate; scape robust, slightly widened apically, pedicel short, small; antennomere III slightly serrate, long, only slightly longer than antennomere IV, its branch shorter than stem; antennomere IV with branch slightly shorter than stem; antennomere V slightly shorter than antennomere IV, with elongate branch about 1.3 times as long as its stem; antennomeres VI–X subequal in length,

with branches about 2.3 times longer than stems; antennomere XI simple, elongate.

Pronotum (Fig. 25) slightly convex, transverse, widest at posterior angles, 1.80 times wider than length at midline. Anterior margin almost straight, lateral sides almost straight, gradually diverging posteriorly, posterior margin simple, widely rounded. Anterior angles inconspicuous; posterior angles subrectangular, widely rounded. Disc with narrow, transverse carina near anterior margin, and with distinct sublateral carinae almost reaching anterior margin. Lateral carina incomplete anteriorly; hypomeron smooth. Surface of disc covered with very sparse shallow punctures, with sparse semi-erect pubescence. Prosternum transverse, with frontal margin almost straight, oriented ventrally, with long semi-erect setae; prosternal process reduced to form short, sharply defined, subparallel-sided, subacute spine.

Scutellar shield flat, triangular, about as long as wide, posteriorly narrowly rounded. Mesoventrite widely v-shaped, with frontal margin widely concave; mesoventral cavity inconspicuous. Elytra (Fig. 17) subparallel-sided, 0.75 times as long as body, combined 2.20 times as long as wide; indistinctly striate, basally slightly wrinkled, sparsely covered with shallow punctures; surface uneven, covered with long, semi-erect pubescence.

Legs slightly compressed, with sparse, long, semi-erect setae; tarsomeres I–II subequal in length, tarsomere III slightly shorter, tarsomere IV shortest, minute, extended ventrally, apical tarsomere long, slender; claws simple, slightly curved, each with long seta basally.

Abdomen with ventrites moderately densely covered with shallow punctures and with semi-erect pubescence. Tergites IX and X weakly connected by membrane; tergite IX transverse, tergite X slightly longer than wide. Sternite IX (Fig. 26) 1.9 times as long as wide, deeply notched basally, rounded apically, with apex finely punctate and sparsely setose.

Aedeagus (Fig. 27) 1.7 times as long as wide, with median lobe robust, about 1.2 times as long as phallobase, widened apically, curved in lateral view, basally with two moderately long struts, dorsally with distinct, robust subapical hook; parameres rather elongate, apically rounded; phallobase robust, u-shaped, as long as wide.

Female and immature stages unknown.

Measurements. BL 3.35 mm, WHum 1.10 mm, EL 2.45 mm, WHe 0.80 mm, PL 0.55 mm, PW 1.00 mm, Edist 0.40 mm, Ediam 0.35 mm.

**Differential diagnosis.** *Microselasia sormovae* sp. nov. shares the body size (2.95–3.15 mm), large eyes (their frontal distance 1.15–1.20 times eye diameter), flabellate antennae, transverse pronotum (1.55–1.65 times wider than long) which is widest at posterior angles and has long distinct sublateral carinae with *M. pseudograndis* Kundrata & Bocak, 2017. These species differ in the relative length of the branches of antennomeres VI–X (about 2.3 times longer than stems of respective antennomeres in *M. sormovae*; 5.0 times longer in *M. pseudograndis*), the shape of the paramere (rounded apex in *M. sormovae*, subacute apex in *M. pseudograndis*), and the subapical hook on median lobe (robust and wide in *M. sormovae*, very short and minute in *M. pseudograndis*). *Microselasia sormovae*

shares the apically widened median lobe with a robust subapical hook with *M. obscura* but the latter species has a uniformly brown body, pronotum less transverse (1.40 times wider than long), widest in anterior two fifths, and short parameres (Fig. 27).

**Etymology.** This species is named in honor of Miss Eliška Šormová (Trutnov, Czech Republic).

**Distribution.** The Democratic Republic of the Congo: Équateur Province.

## Discussion

Although both *Lolosia* and *Microselasia* were originally described based on species collected exclusively in the Cameroonian forests (KUNDRATA & BOCAK 2017), findings of further species within the Afrotropical forest zone are not surprising. Taking into consideration the scarce general knowledge on the Drilini fauna in Africa due to the lack of taxonomic studies in this group as well as the rarity of available material, we can expect more new species discovered in near future. Although we have no information on the immature stages of *Lolosia* and *Microselasia*, they are hypothesized to prey upon land snails as all Drilini larvae known to date (e.g., BAALBERGEN et al. 2014, KOBIELUSZOVA & KUNDRATA 2015, KUNDRATA et al. 2015, SORMOVA et al. 2018). Because the tropical forests in Africa are enormously diverse in terrestrial snails (e.g. DE WINTER & GITTENBERGER 1998), this undoubtedly positively influences the Drilini diversity in the region.

The here described species significantly extend the known distribution ranges of both *Lolosia* and *Microselasia* about 2000 km to the east and so these genera most probably occur within the whole region of the Congolese forests. *Microselasia* is known also from the area north of the Sanaga river (KUNDRATA & BOCAK 2017) which belongs to the coastal Lower Guinean forests so it is probable that both genera occupy also a large part of the Guinean forests of West Africa further west.

## Acknowledgements

I am very obliged to M. de Meyer (RMCA, Belgium), J. Hájek and M. Fikáček (NMPC, Czech Republic) for the loan of material in their care, to M. L. Gimmel (Santa Barbara, USA) for the proofreading of the manuscript before the submission, and to E. Šormová and J. Kundratová for the technical assistance. This study was partially supported by the DAAD [German Academic Exchange Service] scholarship nr. 57378441.

## References

- BAALBERGEN E., HELWERDAR., SCHELFHORST R., CASTILLO CAJAS R. F., VAN MOORSEL C. H. M., KUNDRATA R., WELTER-SCHULTES F. W., GIOKAS S. & SCHILTHUIZEN M. 2014: Predator-prey interactions between shell-boring beetle larvae and rock-dwelling land snails. *PLoS ONE* **9**(6)(e100366): 1–6.
- DE WINTER A. J. & GITTENBERGER E. 1998: The land snail fauna of a square kilometer patch of rainforest in southwestern Cameroon: high species richness, low abundance and seasonal fluctuations. *Malacologia* **40**: 231–250.
- KOBIELUSZOVA L. & KUNDRATA R. 2015: Taxonomic review of Drilul Olivier, 1790 (Elateridae: Agrypninae: Drilini) from Asia Minor, with descriptions of seven new species and comments on the

- female antennal morphology in Drilini. *Zootaxa* **4012**: 78–96.
- KUNDRATA R. 2017: New species of *Selasia* Laporte, 1836 (Elateridae: Agrypninae: Drilini) from Nepal and Pakistan. *Zootaxa* **4344**: 380–386.
- KUNDRATA R., BAALBERGEN E., BOCAK L. & SCHILTHUIZEN M. 2015: The origin and diversity of *Drilus* Olivier, 1790 (Elateridae: Agrypninae: Drilini) in Crete based on mitochondrial phylogeny. *Systematics and Biodiversity* **13**: 52–75.
- KUNDRATA R. & BOCAK L. 2017: Taxonomic review of Drilini (Elateridae: Agrypninae) in Cameroon reveals high morphological diversity, including the discovery of five new genera. *Insect Systematics and Evolution* **48**: 441–492.
- PIC M. 1914: Nouveaux coléoptères de diverses familles. *Mélanges Exotico-Entomologiques* **10**: 7–20.
- PIC M. 1930: Nouveaux coléoptères du Musée du Congo. *Revue de Zoologie et de Botanique Africaines* **18**: 307–310.
- PIC M. 1934: Helodide et Malacodermes des récoltes de M. L. Burgeon au Congo. *Revue de Zoologie et de Botanique Africaines* **24**: 394–399.
- SORMOVA E., KRAMP K. & KUNDRATA R. 2018: Diversity and phylogenetic relationships of *Drilus* Olivier, 1790 (Elateridae: Agrypninae: Drilini) in Cyprus. *Zoologischer Anzeiger* **275**: 1–12.
- WITTMER W. 1944: Catalogue des Drilidae E. Oliv. (Coleoptera – Malacodermata). *Revista de la Sociedad Entomológica Argentina* **12**: 203–221.
- WITTMER W. 1989: Die Familie Drilidae (Coleoptera) in Südafrika, sowie Beschreibung von neuen Arten aus dem südlichen Afrika (30. Beitrag zur Kenntnis der Fauna Afrikas). *Entomologica Basiliensia* **13**: 187–205.