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Taxonomic review of Drilini (Elateridae: Agrypninae) in Cameroon reveals high morphological diversity, including the discovery of five new genera

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Abstract
The first comprehensive survey of the Cameroonian Drilini fauna is presented. High diversity was identified in the zone of tropical rain forest and five genera are proposed: *Flabelloselasia* gen. n., *Kupeselasia* gen. n., *Lolosia* gen. n., *Microselasia* gen. n., and *Wittmerselasia* gen. n. with the subgenus *Latoselasia* subgen. n. The following species are described: *Flabelloselasia oculata* sp. n., *Kupeselasia minuta* sp. n., *Lolosia transversalis* sp. n., *Microselasia barombi* sp. n., *M. elongata* sp. n., *M. gracilis* sp. n., *M. grandis* sp. n., *M. kupensis* sp. n., *M. lolodorfensis* sp. n., *M. macrocephala* sp. n., *M. obscura* sp. n., *M. pseudograndis* sp. n., *Wittmerselasia camerooniana* sp. n., *W. davidsoni* sp. n., *W. geiseri* sp. n., *W. variabilis* sp. n., and *W.* (*Latoselasia*) *similis* sp. n. *Selasia maculata* Wittmer, 1989 is redescribed and transferred to *Wittmerselasia* gen. n. as *W. maculata* (Wittmer, 1989), comb. n. Taxonomically important characters are illustrated for all genera and species and an identification key for Drilini from Cameroon is provided.

Keywords
Elateroidea; *Selasia*; Africa; diversity hot-spot; distribution

Introduction

Drilini is a small morphologically distinct beetle lineage with the soft-bodied, fully winged males and larviform apterous females (Crowson 1972; Bocak et al. 2010). Due to their "cantharoid" appearance they had been long classified in their own family Drilidae (Lawrence et al. 2011). In contrast with morphology-based phylogenies, numerous molecular studies on Elateroidea confirmed their relationships within the click-beetle subfamily Agrypninae (Kundrata & Bocak 2011a; Kundrata et al. 2016; Timmermans et al. 2016) or with other elaterids (McKenna et al. 2015). Historically, Drilini contained many only superficially similar elateroid genera from different regions of the world (e.g., Wittmer 1944; Kundrata & Bocak 2011a,b; Janisova &

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Bocakova 2013). Crowson (1972) substantially reduced the concept of the lineage and after further studies only six genera remained in Drilini (Bocak et al. 2010), three of them later being transferred to Omalisidae based on the DNA analyses (Kundrata & Bocak 2011a; Kundrata et al. 2015b). The current concept of Drilini is limited to genera *Drilus* Olivier (45 spp.), *Malacogaster* Bassi (11 spp.) and *Selasia* Laporte (65 spp.), which are distributed in the Afrotropical, Palaearctic and Oriental Regions (e.g., Bocak 2007; Bocak et al. 2010). Recently, several taxonomic studies on Palaearctic Drilini were published (e.g., Kundrata et al. 2014, 2015a; Petrzelkova & Kundrata 2015; Trllova & Kundrata 2015), but the African lineages have remained underinvestigated. Most species from the tropical Africa were briefly and insufficiently described by Maurice Pic (e.g., Pic 1914, 1918, 1931, 1946). Recently, only Wittmer (1989) and Geisthardt (2007a,b) studied the African fauna and described a number of new species mainly from the southern Africa. The diversity and classification of the Drilini from rain forests in the Gulf of Guinea has not yet been studied, primarily because of the unavailability of samples from this region. The recent expedition to Cameroon specifically targeted the neotenic lineages in Cameroon and yielded a quite high number of previously unknown Drilini and these are used for a taxonomic study here. We describe new genus- and species-group taxa of Drilini from Cameroon which represents one of the World biodiversity hotspots (Stuart & Adams 1990; Myers 2000). Hitherto, only *Selasia maculata* Wittmer, 1989 has been reported from Cameroon, but new samples from several localities revealed much higher diversity. Using morphology, five new genera are delimited, and 17 new species are described.

Material and methods

We studied the morphology of adult males; the females and larvae of the examined species are unavailable. The genitalia were dissected after 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, measured from the fore margin of head to the apex of elytra; WHe–head width including eyes; EL, elytral length; WHum, width at humeri; PL, pronotal length at midline; PW, pronotal width at widest part; Edist, minimum interocular distance in the frontal part of cranium; Ediam, maximum eye diameter in the lateral view. The locality labels are cited verbatim. Morphological terminology follows Bocak et al. (2010) and Kundrata et al. (2014, 2015a). The types are deposited in the Natural History Museum, London, United Kingdom (BMNH), Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA (CMNH), Muséum national d'Histoire naturelle, Paris, France (MHNP), and the voucher collection of the Department of Zoology, Palacky University, Olomouc, Czech Republic (UPOL).

Systematics

Order Coleoptera Linnaeus, 1758
Suborder Polyphaga Emery, 1886

Superfamily Elateroidea Leach, 1815
Family Elateridae Leach, 1815
Subfamily Agrypninae Candèze, 1857
Tribe Drilini Blanchard, 1845

All Drilini representatives from Cameroon known to the authors are herein accommodated to the newly established genera. The genus *Selasia*, which is the most speciose Drilini lineage in Africa, differs from *Flabelloselasia* gen. n., *Kupeselasia* gen. n., *Microselasia* gen. n., and *Wittmerselasia* gen. n. in having much shorter and wider fronto-clypeal region between antennal insertions, gradually declined to the base of labrum, and from *Lolosia* gen. n. in having strongly serrate to flabellate antennae, ultimate maxillary and labial palpomeres never subacute apically, and U-shaped phallobase. The occurrence of *Selasia* in Cameroon is highly probable as 14 species of this genus are known from the surrounding regions (Nigeria, Republic of the Congo, Democratic Republic of the Congo; Wittmer 1944, Pic 1946, Barker 1969). We have studied all described species whose types are deposited in major European museums. None of them is conspecific with the here presented species from Cameroon.

Genus *Flabelloselasia* gen. n.

Type species

Flabelloselasia oculata sp. n.

Diagnosis

Flabelloselasia gen. n. is recognizable by the flabellate antennae with the branches about 20 times longer than the stems of the corresponding antennomeres VI–X (Fig. 28), the rather narrow, high fronto-clypeal region (Fig. 19), large, prominent eyes (Figs 19, 25), maxillary and labial palpi elongate, apically slightly widened and obliquely cut (Fig. 27), pronotum with the sublateral carinae almost reaching frontal margin (Fig. 25), sternite IV deeply notched basally (Fig. 33), phallobase V-shaped, and the parameres short, almost rectangular (Fig. 107).

Description

Male. Body 2.80 times longer than width at humeri; reddish brown to brown, mesoventrite, coxae and apical abdominal segments lighter, legs and mouthparts yellowish; body surface covered with yellow pubescence (Fig. 1).

Head including eyes 0.90 times as wide as pronotum; surface smooth, with wide, shallow median depression, sparsely punctured, covered with sparse, long, semi-erect pubescence; frons slightly convex, narrowed apically; antennal sockets narrowly separated, supra-antennal carinae indistinct; fronto-clypeal region narrow, high, with two weakly developed, divergent, smooth carinae; its surface sparsely punctate, basally covered with sparse, long, erect pubescence (Fig. 19). Eyes large, prominent, their frontal distance 1.00–1.05 times eye diameter (Fig. 25). Labrum transverse, sclerotized,

with frontal margin widely concave, sparsely punctate. Mandibles robust, moderately long, sickle-shaped, with apical oblique tooth and another tooth located in middle part of incisor; base of mandible with long setae, apical part bare, shiny (Fig. 26). Maxillary palpi tetramerous, slender, palpomere I short, wide, palpomere II less than twice longer than wide, palpomere III short, about as long as wide, ultimate palpomere elongate, more than 3 times as long as palpomere III, apically slightly widened, flattened, obliquely cut (Fig. 27). Labium short, wide; labial palpi trimerous, tiny, apical palpomere pointed apically. Antennae 11-segmeneted, flabellate, scapus robust, widened apically, pedicel short, small, antennomere III long, more than 3 times longer than pedicel, with robust branch, which is longer than body of antennomere III but less than half as long as branch of antennomere IV, antennomeres IV–X minute, short, subequal in length, basally with very long, flattened lamellae of about the same lengths, apical antennomere simple, longest, about as long as lamella of penultimate antennomere; all antennomeres covered with moderately dense pubescence (Fig. 28).

Pronotum slightly convex, transverse, widest at posterior angles, 1.75 times wider than length at midline. Anterior margin almost straight, slightly emarginate medially, lateral margins diverging posteriorly, posterior margin simple, widely convex. Anterior angles inconspicuous; posterior angles obtuse. Disc with narrow, transverse carina near anterior margin, and with distinct sublateral carinae almost reaching anterior margin (Fig. 25). Lateral carina separating pronotum from hypomeron distinct, incomplete anteriorly. Surface of disc sparsely shallowly punctured, with sparse semi-erect pubescence. Hypomeron carinate sublaterally, moderately densely punctate; prosternal suture very short. Prosternum transverse, prosternal lobe short, with frontal margin widely convex, with long semi-erect setae; prosternal process short, sledner, gradually narrowed toward apex, constricted subapically, rounded apically. Scutellum flat, triangular, long, about 1.4 times as long as wide, with anterior margin gradually declivitous (Fig. 29). Mesoventrite widely V-shaped, with frontal margin widely concave; mesoventral cavity shallow, with poorly defined walls. Mesocoxal cavity open to both mesepimeron and mesepisternum. Metaventrite large, subtrapezoidal, sparsely covered with shallow punctures. Elytra subparallel-sided, 0.75 times as long as body; basally wrinkled, indistinctly striate, with longitudinal, weakly developed stria running from humeri towards apex, remaining striae indistinct, more developed basally (Fig. 1). Each elytron with apices separately rounded, very sparsely punctate, covered with long, semi-erect pubescence, sparser basally, denser laterally and apically; elytral suture distinct, wide, depressed. Hind wing venation as in Fig. 31. Legs slender, slightly compressed, with sparse, long, semi-erect setae, coxae robust, trochanters slender, elongate, widened apically, obliquely attached to femora; tarsomeres I–II subequal in length, tarsomere III slightly shorter than preceding ones, about 1.5 times longer than tarsomere IV; tarsomere IV shortest, minute, extended ventrally, apical tarsomere slender, long, about 2.5 times longer than tarsomere IV (Fig. 30); claws simple, slender, slightly curved, each with long seta basally.

Abdomen soft, slender, ventrites with very sparse, shallow punctures, sparsely covered with semi-erect pubescence; penultimate ventrite slightly emarginate medially. Tergites IX and X weakly connected by membrane; tergite IX basally with two

sublateral processes (Fig. 32). Sternite IX 1.6 times as long as wide, deeply notched basally, rounded apically, with apex finely punctate and sparsely setose (Fig. 33); sternite X small, wider than long, partly membranous, with basal margin emarginate, apically rounded, connected by membrane to sternite IX.

Male genitalia trilobate, 1.6 times as long as wide; median lobe robust, longer than parameres, slightly longer than phallobase, moderately curved in lateral view, basally with two short, divergent struts, dorsally with robust, long, subapical hook; parameres short, subrectangular, about as long as wide, setose apically; phallobase robust, slightly wider than long, basally narrowed, V-shaped (Fig. 107).

Females and immature stages unknown.

Distribution

This genus is known from the Southwest Region in Cameroon (Fig. 125).

Etymology

The name is derived from the long antennal branches and the general similarity of this genus to *Selasia* Laporte, 1836. Gender: feminine.

***Flabelloselasia oculata* sp. n.**

(Figs 1, 19, 25–33, 107)

Type material

Holotype, male, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt." (UPOL); paratype, male, "Cameroon: SW Prov., Fako dist., Bakingili, 25 km W Limbe, VII. 11.–20.1984, coll. R. Davidson" (CMNH).

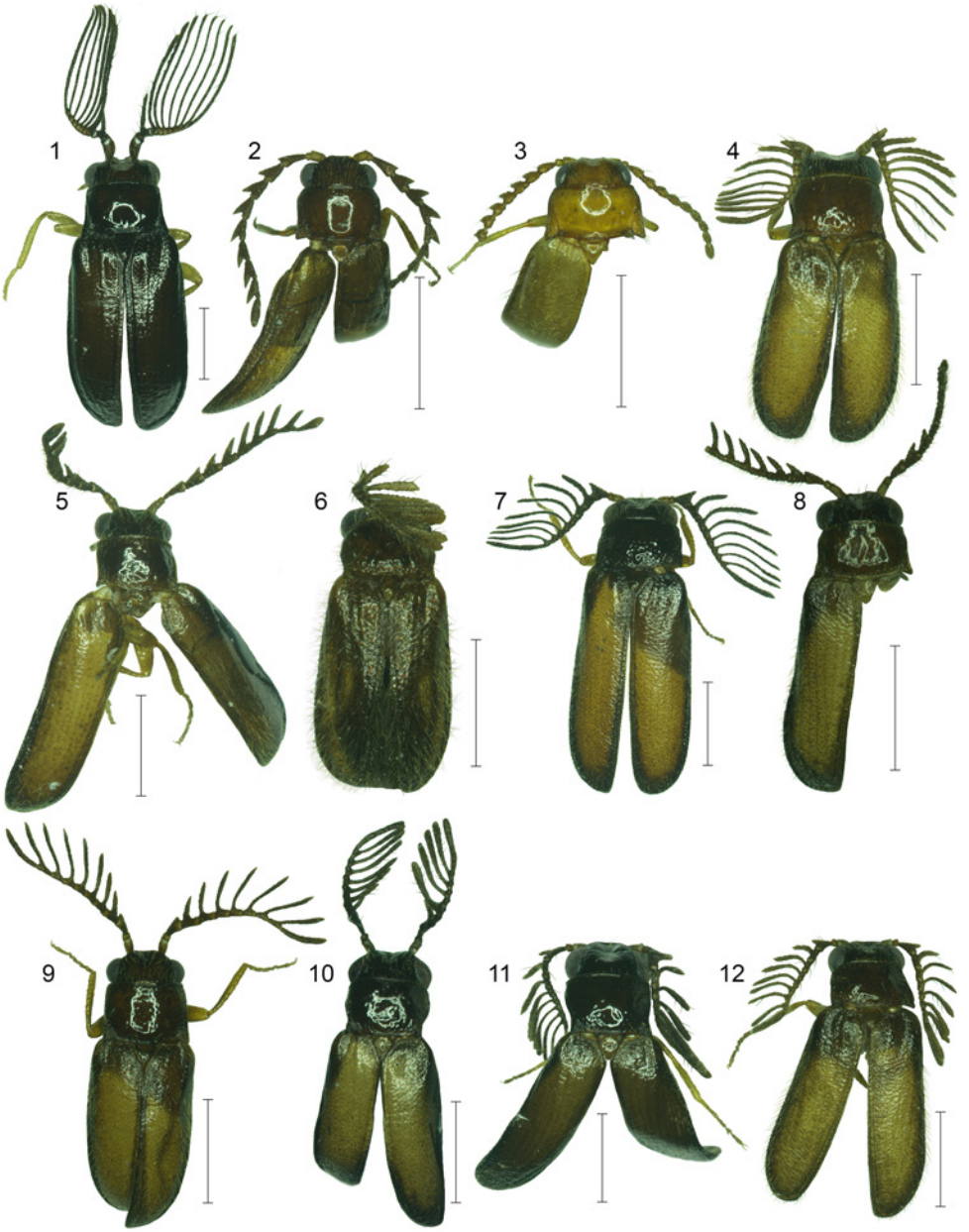
Diagnosis

Flabelloselasia oculata sp. n. is easily recognizable by the strongly flabellate antennae with the branches about 20 times longer than their respective stems in antennomeres VI–X (Fig. 28) and the male genitalia with V-shaped phallobase and short, subrectangular parameres (Fig. 107). Other Drilini in the region have antennal branches maximally 12 times longer than their stems, their male genitalia mostly have U-shaped phallobases (except for *Lolosia* gen. n.), and their parameres are never subrectangular.

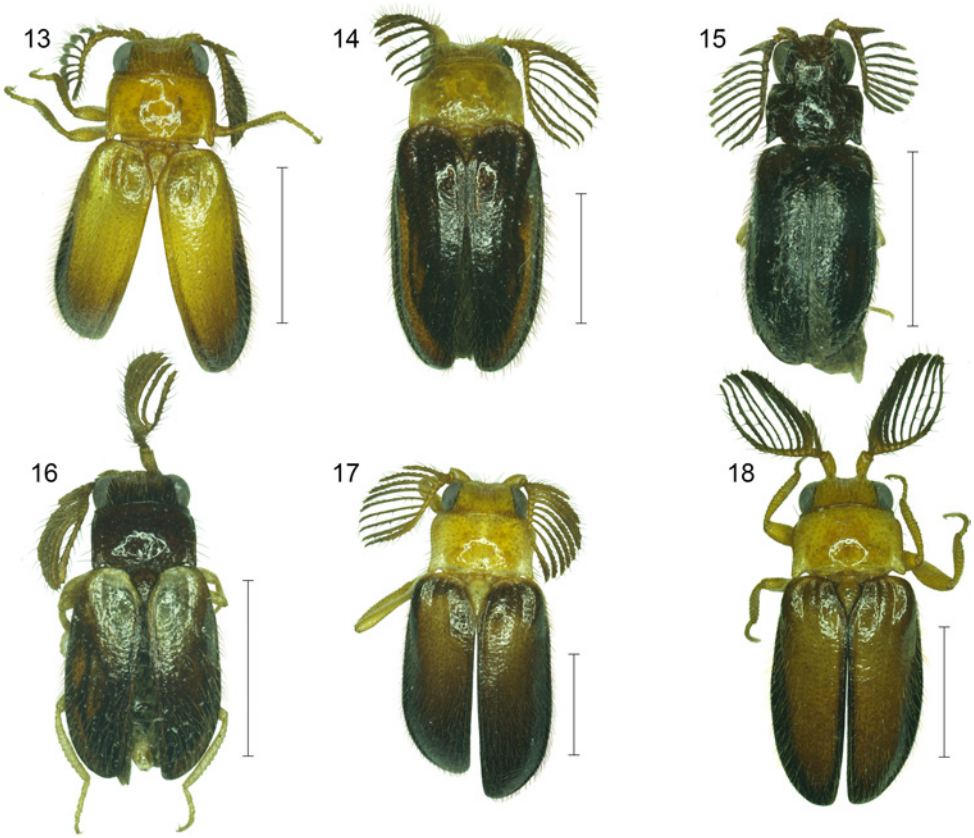
Description

Body mostly brown, only pronotum lighter in a single paratype, mesoventrite; coxae and abdominal apical segments lighter, legs and mouthparts yellowish; body surface covered with yellow pubescence (Fig. 1).

Head slightly narrower than pronotum. Eyes large, their frontal distance same as eye diameter (Fig. 25). Antennae flabellate, pedicel short, antennomere III long, with



Figs 1–12. Habitus images of Drilini from Cameroon. (1) *Flabelloselasia oculata* sp. n.; (2) *Kupeselasia minuta* sp. n.; (3) *Lolosia transversalis* sp. n.; (4) *Microselasia barombi* sp. n.; (5) *M. elongata* sp. n.; (6) *M. gracilis* sp. n.; (7) *M. grandis* sp. n.; (8) *M. kupensis* sp. n.; (9) *M. lolodorfensis* sp. n.; (10) *M. macrocephala* sp. n.; (11) *M. obscura* sp. n.; (12) *M. pseudograndis* sp. n. Scale bars = 1.0 mm.



Figs 13–18. Habitus images of *Wittmerselasia* gen. n. (13) *W. camerooniana* sp. n.; (14) *W. davidsoni* sp. n.; (15) *W. geiseri* sp. n.; (16) *W. maculata* (Wittmer 1989); (17) *W. variabilis* sp. n.; (18) *W.* (*Latoselasia*) *similis* sp. n. Scale bars = 2.0 mm.

robust branch, antennomeres IV–X short, with long, flattened branches, apical antennomere simple, about as long as lamella of preceding antennomere (Fig. 28).

Pronotum widest at posterior angles, 1.7 times wider than length at midline, with transverse carina near anterior margin, and with distinct sublateral carinae almost reaching anterior margin (Fig. 25). Elytra 0.75 times as long as body, 2.05 times as long as wide at humeri (Fig. 1).

Abdominal terminal segments as in Figs 32–33. Male genitalia with median lobe longer than parameres; parameres short, subrectangular, about as long as wide; phallobase slightly wider than long, V-shaped (Fig. 107).

Measurements

Holotype. BL 3.90 mm, WHum 1.40 mm, EL 2.85 mm, WHe 1.00 mm, PL 0.65 mm, PW 1.15 mm, Edist 0.45 mm, Ediam 0.45 mm. Paratype. BL 4.10 mm, EL 3.00

Figs 19–24. Frontoclypeal regions of Drilini from Cameroon. (19) *Flabelloselasia oculata* sp. n.; (20) *Kupeselasia minuta* sp. n.; (21) *Lolosia transversalis* sp. n.; (22) *Microselasia obscura* sp. n.; (23) *Wittmerselasia variabilis* sp. n.; (24) *Wittmerselasia* (*Latoselasia*) *similis* sp. n. Scale bars = 0.5 mm.

mm, WHe 1.10 mm, WHum 1.45 mm, PL 0.70 mm, PW 1.25 mm, Edist 0.45 mm, Ediam 0.45 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The specific name refers to the large eyes.

Genus *Kupeselasia* gen. n.

Type species

Kupeselasia minuta sp. n.

Diagnosis

This genus is superficially similar to *Microselasia* gen. n. in the body coloration, general appearance, complete frontal carina, subacute apices of palpi, the shape of the frontoclypeal region and the U-shaped phallobase, which is as long as or longer than wide (Figs 2, 4–12, 20, 22, 36, 54, 108, 110–118). However, *Kupeselasia* gen. n. has acutely serrate antennae unlike the flabellate antennae of *Microselasia* gen. n.; Figs 37, 71–79), slender mandibles (Figs 35, 53), sternite IX not emarginate basally (more or less emarginate in *Microselasia* gen. n.; Figs 42, 60–61), and parameres characteristically slender and elongate (Fig. 108).

Description

Male. Body 3.05 times longer than width at humeri; brown, head, pronotum, antennomeres III–XI, and ventral parts darker; body surface covered with yellow pubescence (Fig. 2).

Head including eyes 0.9 times as wide as pronotum; surface smooth, with shallow median depression, sparsely punctured, covered with sparse, semi-erect pubescence; frons slightly produced and narrowed apically, slightly surpassing fronto-clypeal region; antennal sockets rather narrowly separated, supra-antennal carinae form distinct, sinuate frontal carina; fronto-clypeal region high, narrow, abruptly declined between antennal insertions, sloping to base of labrum, sparsely punctate, basally covered with sparse, semi-erect setae (Fig. 20). Eyes moderately large, prominent, their frontal distance 1.45 times eye diameter (Fig. 34). Labrum sclerotized, transverse, short, with frontal margin widely concave. Mandibles rather long, sickle-shaped, bidentate, with long apical oblique tooth and another tooth located in middle part of incisor; mandibles basally setose, apically bare, shiny (Fig. 35). Maxillary palpi tetramerous, slender, palpomere I short, wide, palpomere II less than twice longer than wide, about 1.5 longer than palpomere III, palpomere III short, about as long as wide, palpomere IV elongate, about 3 times as long as palpomere III, apically slightly constricted, pointed (Fig. 36). Labium short, wide; labial palpi trimerous, tiny, palpomeres I–II short, apical palpomere elongate, wide basally, apically narrowed, pointed. Antennae 11-segmeneted, strongly serrate, scapus robust, widened apically, pedicel short, small, antennomere III long, weakly serrate, more than 3 times longer than antennomere II, antennomeres IV–X strongly serrate, slightly shorter than antennomere III, subequal in length, apical antennomere simple, elongate, slightly longer than penultimate antennomere (Fig. 37); all antennomeres covered with moderately dense pubescence.

Pronotum slightly convex, transverse, widest at posterior angles, 1.55 times wider than length at midline. Anterior margin almost straight, lateral margins sinuate, diverging posteriorly, posterior margin simple, widely convex. Anterior angles inconspicuous; posterior angles obtuse, slightly produced postero-laterally, with wrinkled surface. Disc with transverse carina near anterior margin, distinct sinuate sublateral carinae almost reaching anterior margin, and transverse carina near posterior margin (Fig. 34); its surface smooth, very sparsely covered with shallow punctures, denser at lateral margins, with sparse semi-erect pubescence, denser at lateral margins and posterior angles. Lateral carina separating pronotum from hypomeron distinct, almost reaching pronotal frontal margin. Hypomeron smooth, with indistinct, short sublateral carina near prosternal suture, sparsely punctate, with short semi-erect setae near lateral carina; prosternal suture very short. Prosternum transverse, prosternal lobe short, with frontal margin widely convex, with long semi-erect setae; prosternal process short, narrowly rounded apically. Scutellum flat, triangular, smooth, about as long as wide, narrowly rounded posteriorly (Fig. 40). Mesoventrite widely V-shaped, with frontal margin widely concave; mesoventral cavity shallow, with poorly defined walls. Mesocoxal cavity open to both mesepimeron and mesepisternum. Metaventrite large, subtrapezoidal, smooth, very sparsely covered with shallow punctures. Elytra

subparallel-sided, 0.70 times as long as body, with narrow epipleura; basally wrinkled, with traces of indistinct striae in humeral part (Fig. 2). Each elytron with apices separately rounded, very sparsely punctate, covered with moderately long, semi-erect pubescence, sparser basally, denser laterally and apically; elytral suture distinct, wide, depressed. Hind wing venation as in Fig. 38. Legs slender, slightly compressed, with sparse, long, semi-erect setae, coxae robust, trochanters slender, elongate, widened apically, obliquely attached to femora; tarsomeres I–III subequal in length, about twice longer than tarsomere IV; tarsomere IV shortest, minute, extended ventrally, apical tarsomere slender, long, about 3 times longer than tarsomere IV (Fig. 39); claws simple, slender, slightly curved, setose basally.

Abdomen soft, slender, ventrites with very sparse, shallow punctures, sparsely covered with semi-erect pubescence, denser laterally; tergite and sternite I reduced, sternite II formed only by two separate sclerites; tergites IX and X weakly connected by membrane; tergite IX basally with two sublateral processes; tergite X partly membranous apically (Fig. 41). Sternite IX elongate, 1.9 times as long as wide, apex rounded, punctate, with sparse short setae; sternite X almost rounded, partly membranous, connected by membrane to sternite IX (Fig. 42).

Male genitalia trilobate, 1.9 times as long as wide; median lobe robust, more than twice longer than parameres, slightly longer than phallobase, moderately curved in lateral view, basally with two long struts, dorsally with short subapical hook; parameres slender, elongate, about twice as long as wide, truncate apically; phallobase robust, U-shaped, longer than wide (Fig. 108).

Females and immature stages unknown.

Distribution

This genus is known only from the Southwest Region in Cameroon (Fig. 125).

Etymology

The generic name combines "Kupé", the name of the type locality, and "*Selasia*" Laporte, 1836, a genus in Drilini. Gender: feminine.

***Kupeselasia minuta* sp. n.**

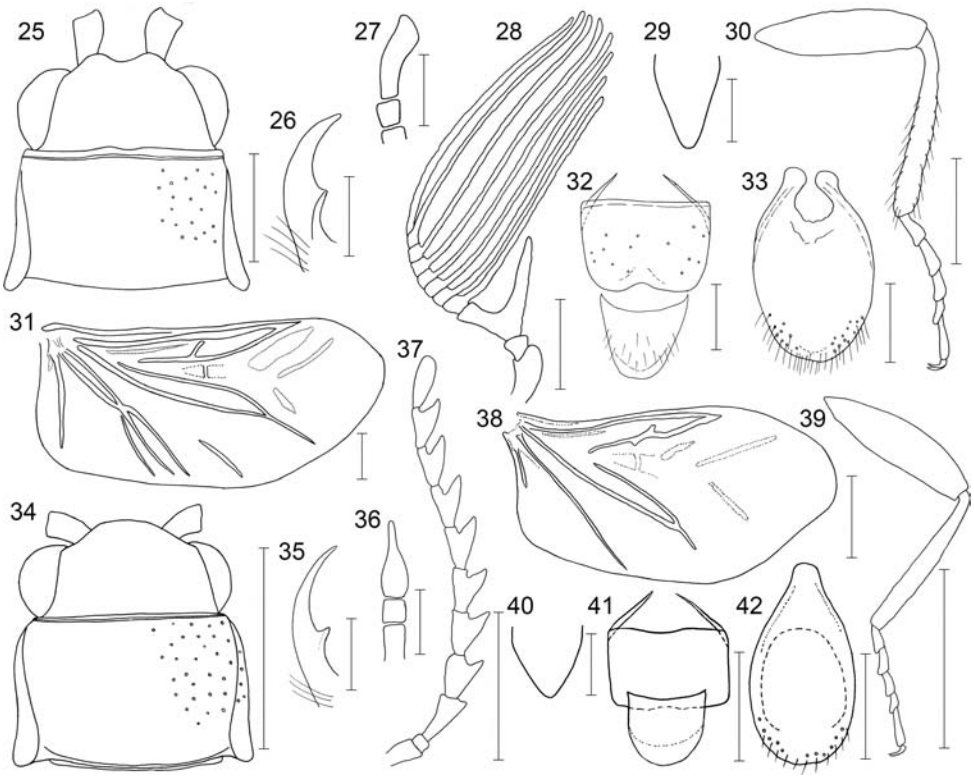
(Figs 2, 20, 34–42, 108)

Type material

Holotype, male, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

Kupeselasia minuta sp. n. can be easily recognized due to its complete frontal carina, narrow and high fronto-clypeal region (Fig. 20), strongly serrate antennae (Fig. 37),



Figs 25–42. Body parts of *Flabelloselasia* gen. n. and *Kupeselasia* gen. n. *Flabelloselasia oculata* sp. n. (25) head and pronotum; (26) mandible; (27) last maxillary palpomeres; (28) antenna; (29) scutellum; (30) leg; (31) hind wing; (32) abdominal tergites IX–X; (33) abdominal sternite IX. *Kupeselasia minuta* sp. n. (34) head and pronotum; (35) mandible; (36) last maxillary palpomeres; (37) antenna; (38) hind wing; (39) leg; (40) scutellum; (41) abdominal tergites IX–X; (42) abdominal sternite IX. Scale bars = 0.1 mm (Figs 35–36, 40), 0.2 mm (Figs 26–27, 29, 32–33, 41–42), 0.5 mm (Figs 25, 28, 30–31, 34, 37–39).

distinct sublateral pronotal carinae almost reaching frontal margin (Fig. 34), U-shaped, elongate phallobase, and the distinctly narrowed and elongate parameres (Fig. 108).

Description

Body brown, head, pronotum, antennomeres III–XI, and ventral parts darker; body surface covered with yellow pubescence (Fig. 2).

Head including eyes slightly narrower than pronotum. Eyes moderately large, their frontal distance 1.45 times eye diameter (Fig. 34). Antennae serrate, antennomere III weakly serrate, more than 3 times longer than antennomere II, antennomeres IV–X serrate, shorter, subequal in length, apical antennomere simple, slightly longer than penultimate antennomere (Fig. 37).

Pronotum widest at posterior angles, 1.55 times wider than length at midline, with transverse carina near anterior margin, distinct sinuate sublateral carinae almost

reaching anterior margin, and transverse carina near posterior margin (Fig. 34). Elytra 0.70 times as long as body, 2.15 times as long as wide at humeri (Fig. 2).

Abdominal terminal segments as in Figs 41–42. Male genitalia with median lobe more than twice longer than parameres; parameres slender, elongate, about twice as long as wide; phallobase longer than wide, U-shaped (Fig. 108).

Measurements

BL 2.10 mm, WHum 0.70 mm, EL 1.50 mm, WHe 0.55 mm, PL 0.40 mm, PW 0.60 mm, Edist 0.30 mm, Ediam 0.21 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The specific epithet refers to the small body of this species.

Genus *Lolosia* gen. n.

Type species

Lolosia transversalis sp. n.

Diagnosis

Lolosia gen. n. can be recognized by using the following combination of characters: the incomplete frontal carina, wide fronto-clypeal region (Fig. 21), ultimate maxillary and labial palpomeres narrowed, subacute apically (Fig. 46), serrate antennae (Fig. 43), pronotum 1.85 times wider than long, with distinct, sinuate sublateral carinae (Fig. 44), scutellum about as long as wide (Fig. 48), sternite IX elongate, 2.1 times longer than wide (Fig. 50), V-shaped phallobase, and relatively long, apically rounded parameres (Fig. 109).

Description

Male. Body 2.25 times longer than width at humeri. Body yellowish to light brown, pronotum, antennomeres I–II and legs lighter, abdomen darker; body surface covered with yellow pubescence (Fig. 3).

Head including eyes 0.75 times as wide as pronotum; surface smooth, very shallowly depressed medially, sparsely punctured, covered with sparse, long semi-erect pubescence; antennal sockets moderately widely separated, supra-antennal carinae distinct, short, not meeting medially; fronto-clypeal region slightly wider than long, convex; its surface rough, sparsely punctate, basally covered with sparse, semi-erect setae (Fig. 21). Eyes large, prominent, their frontal distance 1.20 times eye diameter (Fig. 44). Labrum sclerotized, transverse, short, produced forwards, with frontal margin slightly concave.

Mandibles robust, moderately long, sickle-shaped, bidentate, with long apical oblique tooth and another, robust tooth located in middle part of incisor; mandibles basally setose, apical part bare, shiny (Fig. 45). Maxillary palpi tetramerous, slender, palpomere I short, wide, palpomere II more than 1.5 times longer than wide, slightly more than 1.5 longer than palpomere III, palpomere III short, slightly wider than long, palpomere IV elongate, apically slightly constricted, pointed, about 3.5 times as long as palpomere III (Fig. 46). Labium short, wide; labial palpi trimerous, tiny, palpomeres I–II short, apical palpomere elongate, pointed apically. Antennae 11-segmeneted, serrate, scapus robust, widened apically, pedicel short, small, antennomeres III–X serrate, rugose, antennomere III long, more than twice longer than antennomere II, antennomeres IV–X slightly shorter than antennomere III, subequal in length, apical antennomere simple, longest, about 1.5 times as long as penultimate antennomere (Fig. 43); all antennomeres covered with moderately dense pubescence.

Pronotum slightly convex, transverse, widest at posterior angles, 1.85 times wider than length at midline. Anterior margin almost straight, lateral margins diverging posteriorly, posterior margin widely convex, slightly bent upwards, slightly emarginate medially. Anterior angles inconspicuous; posterior angles obtuse, with wrinkled surface. Disc smooth, with indistinct transverse carina near anterior margin, distinct sinuate sublateral carinae almost reaching anterior margin, and transverse carina near posterior margin (Fig. 44). Lateral carina separating pronotum from hypomeron distinct, incomplete anteriorly. Surface of disc very sparsely covered with shallow punctures, with sparse semi-erect pubescence, denser at posterior angles. Hypomeron with sublateral carina near prosternal suture, moderately densely punctate; prosternal suture very short. Prosternum transverse, prosternal lobe short, with frontal margin widely convex, with long semi-erect setae; prosternal process short, slender, subparallel-sided, pointed apically. Scutellum flat, triangular, smooth, about as long as wide, narrowly rounded posteriorly (Fig. 48). Mesoventrite V-shaped, with frontal margin widely concave; mesoventral cavity shallow, with poorly defined walls. Metaventrite large, subtrapezoidal, smooth, very sparsely covered with shallow punctures. Elytra subparallel-sided, 0.75 times as long as body, with narrow epipleura; basally wrinkled, with longitudinal, weakly developed stria running from humeri towards apex, but inconspicous at apical half (Fig. 3). Each elytron with apices separately rounded, very sparsely punctate, covered with moderately long, semi-erect pubescence, sparser basally, denser laterally and apically; elytral suture distinct, wide, depressed. Hind wing venation as in Fig. 47. Legs slender, slightly compressed, with sparse, long, semi-erect setae, coxae robust, trochanters slender, elongate, widened apically, obliquely attached to femora; tarsomeres I–II subequal in length, tarsomere III slightly shorter, about 1.5 times longer than tarsomere IV; tarsomere IV shortest, minute, extended ventrally, apical tarsomere slender, long, about 3 times longer than tarsomere IV (Fig. 49); claws simple, slender, slightly curved, each with long seta basally.

Abdomen soft, slender, ventrites with very sparse, shallow punctures, sparsely covered with semi-erect pubescence, denser laterally. Tergites IX and X weakly connected by membrane; tergite IX basally with two sublateral processes (Fig. 51). Sternite IX elongate, 2.1 times as long as wide, notched basally, apex rounded, with sparse short

setae (Fig. 50); sternite X almost rounded, partly membranous, connected by membrane to sternite IX.

Male genitalia trilobate, 1.9 times as long as wide; median lobe robust, longer than parameres, about as long as phallobase, moderately curved in lateral view, basally with two short struts, dorsally with robust subapical hook; parameres elongate, rounded apically, apex sparsely setose; phallobase robust, slightly wider than long, basally narrowed, V-shaped (Fig. 109).

Females and immature stages unknown.

Distribution

This genus is known only from the South Region in Cameroon (Fig. 125).

Etymology

The name *Lolosia* gen. n. is a combination of words Lolodorf (type locality) and *Selasia* Laporte, 1836 (genus in Elateridae: Drilini). Gender: feminine.

***Lolosia transversalis* sp. n.**

(Figs 3, 21, 43–51, 109)

Type material

Holotype, male, "Cameroon, South Prov., Lolodorf, 550 m, 3°14.06' N 10°43.52', 31 E. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

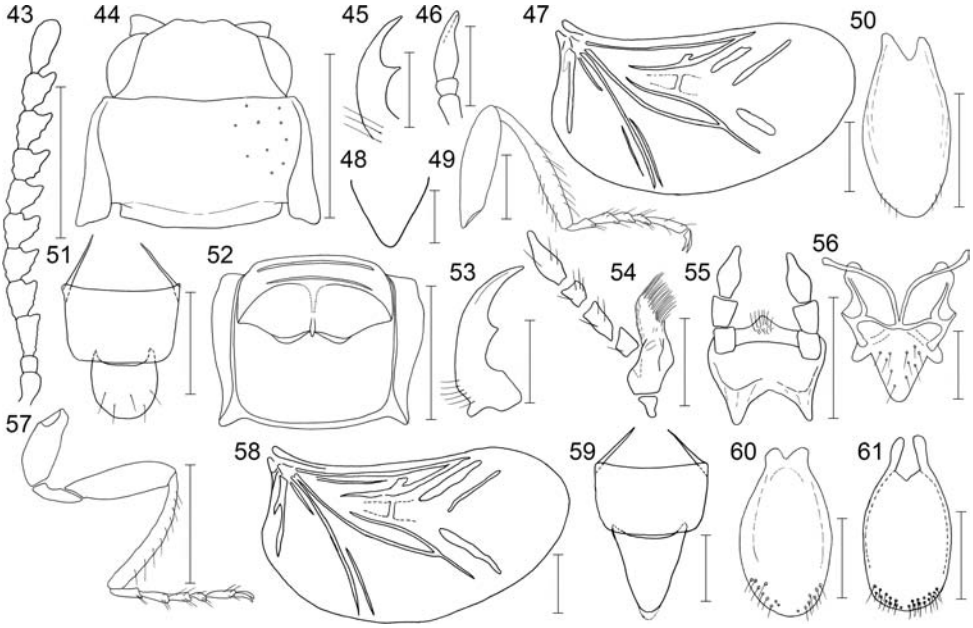
Lolosia transversalis sp. n. is characteristic by the incomplete frontal carina (Fig. 21), maxillary and labial palpi with ultimate palpomeres subacute apically (Fig. 46), serrate antennae (Fig. 43), and male genitalia with V-shaped phallobase (Fig. 109).

Description

Body yellowish to light brown, pronotum, antennomeres I–II and legs lighter, abdomen darker; body surface covered with yellow pubescence (Fig. 3).

Head including eyes slightly narrower than pronotum. Eyes large, their frontal distance 1.20 times eye diameter (Fig. 44). Antennae serrate, pedicel short, antennomere III more than twice longer than antennomere II, antennomeres IV–X shorter, subequal in length, apical antennomere simple, about 1.5 times as long as penultimate antennomere (Fig. 43).

Pronotum widest at posterior angles, 1.85 times wider than length at midline, with indistinct transverse carina near anterior margin, distinct sinuate sublateral carinae almost reaching anterior margin, and transverse carina near posterior margin (Fig. 44). Elytra 0.75 times as long as body, 1.60 times as long as wide at humeri (Fig. 3).



Figs 43–61. Body parts of *Lolosia* gen. n. and *Microselasia* gen. n. *Lolosia transversalis* sp. n.: (43) antenna; (44) head and pronotum; (45) mandible; (46) last maxillary palpomeres; (47) hind wing; (48) scutellum; (49) leg; (50) abdominal sternite IX; (51) abdominal tergites IX–X. *Microselasia obscura* sp. n.: (52) prosternum; (53) mandible; (54) maxilla; (55) labium; (56) scutellum; (57) leg; (58) hind wing; (59) abdominal tergites IX–X; (60) abdominal sternite IX. *Microselasia barombi* sp. n.: (61) abdominal sternite IX. Scale bars = 0.1 mm (Figs 45–46, 48), 0.2 mm (Figs 49–51, 53–56, 59–61), 0.5 mm (Figs 43–44, 47, 52, 57–58).

Abdominal terminal segments as in Figs 50–51. Male genitalia with median lobe longer than parameres, parameres elongate, rounded apically; phallobase slightly wider than long, V-shaped (Fig. 109).

Measurements

BL 2.10 mm, WHum 0.95 mm, EL 1.50 mm, WHe 0.55 mm, PL 0.40 mm, PW 0.70 mm, Edist 0.30 mm, Ediam 0.25 mm.

Distribution

Cameroon: South Region (Fig. 125).

Etymology

The name "transversalis" refers to the transverse pronotum of this species.

Genus *Microselasia* gen. n.

Type species

Microselasia obscura sp. n.

Diagnosis

Microselasia gen. n. shares the minute body and apically narrowed, subacute ultimate maxillary and labial palpomeres with *Lolosia* gen. n. and *Kupeselasia* gen. n. *Lolosia* gen. n. differs from *Microselasia* gen. n. in having an incomplete frontal carina, wide fronto-clypeal region (Figs 21–22), more transverse pronotum (1.85 times wider than long in *Lolosia* gen. n.; 1.40–1.75 in *Microselasia* gen. n.; Figs 44, 62–70), and the V-shaped phallobase (Figs 109–118). *Kupeselasia*, which is superficially similar to *Microselasia* gen. n., differs in the strongly serrate antennae (flabellate in *Microselasia* gen. n.; Figs 37, 71–79), more slender mandibles (Figs 35, 53), sternite IX not emarginate basally (more or less emarginate in *Microselasia* gen. n.; Figs 42, 60–61), and distinctly elongate parameres (Fig. 108).

Description

Male. Body slender, 2.35–3.60 mm long, 2.65–3.15 times longer than width at humeri, dorsally weakly convex; moderately sclerotized, with cuticle of elytra and abdomen soft. Body light brown to dark brown, legs and mouthparts usually lighter; surface covered with yellow to light brown pubescence (Figs 4–12).

Head including eyes slightly narrower than width of pronotum in most species, only in *M. macrocephala* sp. n. and *M. obscura* sp. n. slightly wider, and in *M. gracilis* sp. n. of about the same width (Figs 62–70); surface smooth, shallowly depressed medially, very sparsely punctate, covered with sparse, long, semi-erect pubescence; frons slightly produced and narrowed apically, slightly surpassing fronto-clypeal region; antennal sockets rather narrowly separated, supra-antennal carinae meet medially, forming distinct, sinuate frontal carina (less distinct in *M. grandis* sp. n. and *M. pseudograndis* sp. n.); fronto-clypeal region high, narrow, abruptly declined between antennal insertions, sloping to base of labrum, with more or less sharply defined longitudinal carina running from frontal carina, divergent anteriorly; its surface sparsely punctate, basally covered with sparse, semi-erect setae (Fig. 22). Eyes medium-sized to large, hemispherically prominent, their frontal distance 1.10–1.60 times eye diameter (Figs 62–70). Labrum sclerotized, transverse, sparsely punctate, with frontal margin more or less widely concave. Mandibles relatively long, falcate, bidentate, with apical oblique tooth and another tooth located in middle part of incisor; mandibles basally more robust, with long setae, apical part slender, bare, shiny (Fig. 53). Maxilla with small cardo, stipes plate-like, galea and lacinia fused, setose, partly membranous, maxillary palpi tetramerous, slender, palpomeres I short, wide, obliquely cut apically, palpomere II about two times as long as wide, obliquely cut basally, palpomere III short, slightly longer than wide, ultimate palpomere elongate, about 3 times as long as wide, fusiform, subacute apically (Fig. 54). Labium small, wide, plate-like, moderately well-sclerotized, medio-anteriorly slightly produced, subacute, basally deeply emarginate; labial palpi trimerous, tiny, palpomeres I–II short, about as long as wide, apical palpomere longer than wide, fusiform, subacute apically (Fig. 55). Antennae 11-segmeneted, flabellate; scapus robust, slightly widened apically, pedicel short, small; antennomere III serrate, long, more than 2.5 times longer than pedicel, either subequal in legth with antennomeres IV–X (in species with weakly

flabellate antennomeres IV–X, i.e., *M. elongata* sp. n. and *M. kupensis* sp. n.) or 1.1–1.7 times longer than antennomere IV; antennomere IV 1.1–1.5 times longer than antennomere V, antennomere V 1.2–1.6 times longer than antennomere VI, antennomeres VI–X short, subequal in legth (in species with strongly flabellate antennomeres IV–X); branches of antennomeres IV–X either about 1.5–2.0 times longer than stems of respective antennomeres (in species with weakly flabellate antennae) or about 3–9 times longer than stems of respective antennomeres (in species with strongly flabellate antennae); antennomere XI simple, longest, about same length as branch of penultimate antennomere, about 1.5 times longer than stem of penultimate antennomere in *M. elongata* sp. n., about 3–7 times longer than penultimate antennomere in remaining species; all antennomeres covered with moderately dense pubescence (Figs 71–79).

Pronotum slightly convex, more or less transverse, widest at posterior angles in most species (at anterior two fifths in *M. gracilis* sp. n., *M. macrocephala* sp. n. and *M. obscura* sp. n.), 1.40–1.75 times wider than length at midline. Anterior margin almost straight, lateral margins from concave to convex, diverging posteriorly, posterior margin simple, widely convex. Anterior angles inconspicuous; posterior angles variable, from acute, produced postero-laterally to obtuse, rectangular, and rounded. Disc with narrow, transverse carina near anterior margin, and with or without distinct sublateral carinae; if present, sublateral carinae short, often inconspicuous, only in *M. pseudograndis* sp. n. almost reaching anterior margin (Figs 62–70). Lateral carina separating pronotum from hypomeron distinct, incomplete anteriorly; hypomeron smooth; prosternal suture very short. Surface of disc sparsely covered with shallow punctures, with sparse semi-erect pubescence. Prosternum transverse, produced forward, surpassing pronotum at lateral view, with two transverse carinae medially; prosternal lobe very short, with frontal margin almost straight, with row of long semi-erect setae; posterior margin produced medially to form narrow ridge, apically with short, sharply defined, subparallel-sided, subacute prosternal process (Fig. 52).

Scutellum flat, triangular, about as long as wide, posteriorly widely rounded (Fig. 56). Mesoventrite widely V-shaped, with frontal margin widely concave; mesoventral cavity shallow, with poorly defined walls. Mesocoxal cavity open to both mesepimeron and mesepisternum. Metaventrite large, subtrapezoidal, sparsely covered with shallow punctures. Elytra subparallel-sided, 0.65–0.75 times as long as body, 1.90–2.30 times as long as wide, with narrow, closed epipleura (Figs 4–12). Each elytron more or less basally wrinkled, with apices separately rounded, sparsely covered with shallow punctures, arranged irregularly in indistinct rows; covered with long, semi-erect pubescence, sparser basally, denser laterally and apically; elytral suture distinct, wide, depressed. Hind wing venation reduced, as in Fig. 58. Legs slender, slightly compressed, with sparse, long, semi-erect setae, coxae robust, trochanters slender, elongate, widened apically, obliquely attached to femora; tibia and tarsi relatively long; tarsi almost as long as tibia, tarsomeres I–II subequal in length, tarsomere III slightly shorter, tarsomere IV shortest, minute, extended ventrally, apical tarsomere long, slender (Fig. 57); claws simple, slender, slightly curved, each with long seta basally.

Abdomen soft, slender, ventrites with very sparse, shallow punctures, sparsely covered with semi-erect pubescence; tergite and sternite I reduced, sternite II formed only by two

separate sclerites; penultimate ventrite slightly emarginate medially. Tergites IX and X weakly connected by membrane; tergite IX basally with two sublateral processes (Fig. 59). Sternite IX 1.7–2.0 times as long as wide, more or less deeply notched basally, rounded apically, with apex finely punctate and sparsely setose, especially at lateral portions (Figs 60–61); sternite X partly membranous, connected by membrane to sternite IX.

Male genitalia trilobate, 1.5–1.9 times as long as wide, with median lobe slender to stout, shorter to longer than phallobase, longer than parameres, moderately curved in lateral view, basally with two short to relatively long struts, dorsally with more or less robust, short or long subapical hook; parameres minute, short, variously shaped, more or less setose apically; phallobase robust, U-shaped, about as long as wide to 1.3 times longer than wide (Figs 110–118).

Females and immature stages unknown.

Distribution

All known species of *Microselasia* gen. n. are distributed in the Southwest and South Regions in Cameroon (Fig. 125).

Etymology

The generic name refers to the small size of the included species and their similarity to genus *Selasia* Laporte, 1836. Gender: feminine.

***Microselasia barombi* sp. n.**

(Figs 4, 61–62, 71, 110)

Type material

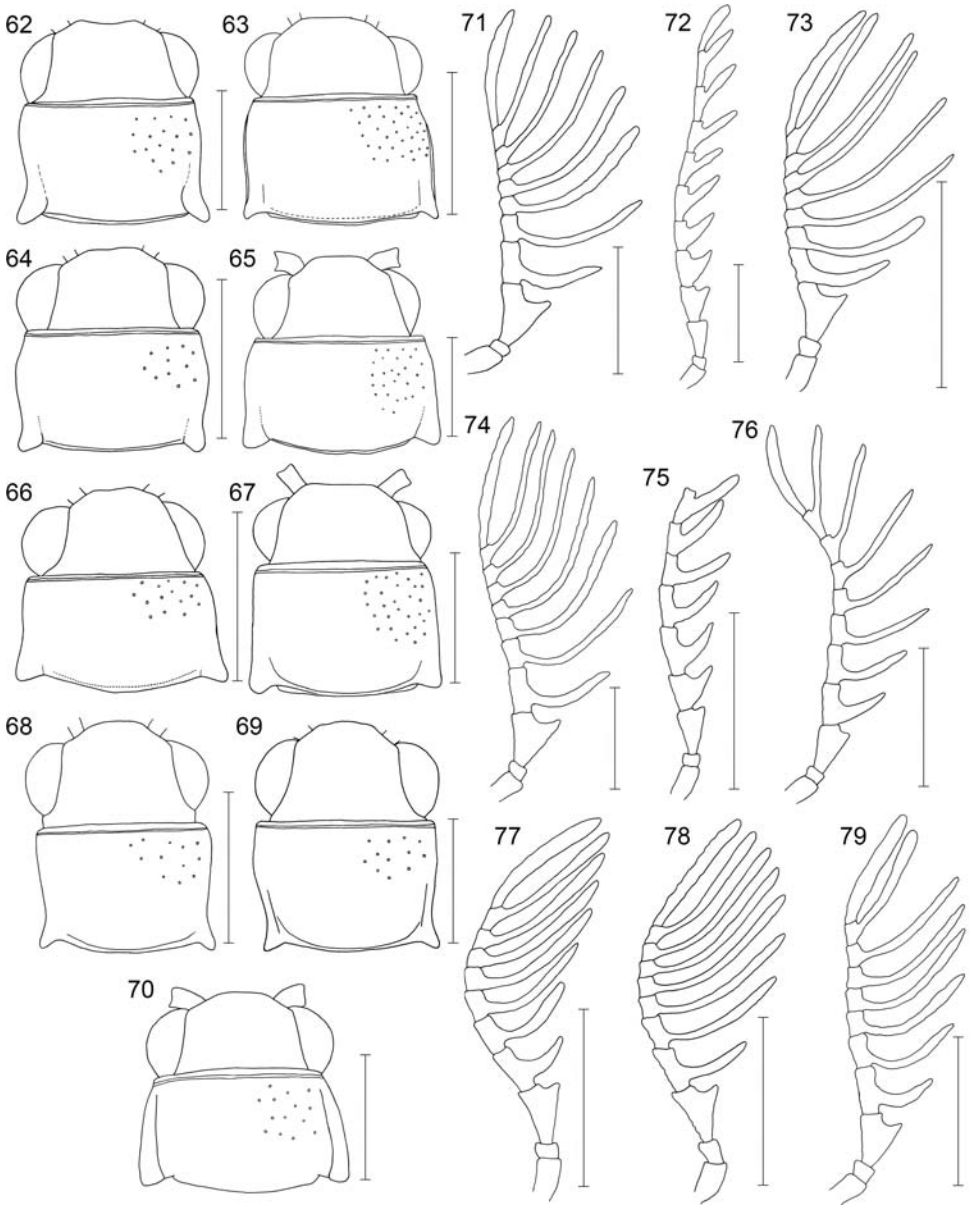
Holotype, male, "Cameroon, SW Prov., Kumba env., Barombi Mbo, 4°38.53' N 9°24.51' E, 280 m, 8. Mar 2008, Bolm lgt." (UPOL); paratypes, 2 males, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, N4°49.59' E9°40.54', 9.–11. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

Microselasia barombi sp. n. is superficially similar to *M. gracilis* sp. n., *M. macrocephala* sp. n. and *M. obscura* sp. n. These species share strongly flabellate antennae (Figs 71, 73, 77–78) and the pronotum with distinctly sinuate lateral margins and posterior angles postero-laterally projected (Figs 62, 64, 68–69). It differs from all above mentioned species in the relatively smaller eyes (Edist/Ediam = 1.30–1.35), the head including eyes slightly narrower than pronotum, and the pronotum widest at posterior angles (Fig. 62).

Description

Body 2.65–2.80 times longer than width at humeri. Body light brown to brown (one paratype generally darker), head darker, mouthparts and legs yellowish to light brown; body covered with yellow pubescence (Fig. 4).



Figs 62–79. Body parts of *Microselasia* gen. n. Head and pronotum. (62) *M. barombi* sp. n.; (63) *M. elongata* sp. n.; (64) *M. gracilis* sp. n.; (65) *M. grandis* sp. n.; (66) *M. kupensis* sp. n.; (67) *M. lolodorfensis* sp. n.; (68) *M. macrocephala* sp. n.; (69) *M. obscura* sp. n.; (70) *M. pseudograndis* sp. n. Antenna. (71) *M. barombi* sp. n.; (72) *M. elongata* sp. n.; (73) *M. gracilis* sp. n.; (74) *M. grandis* sp. n.; (75) *M. kupensis* sp. n.; (76) *M. lolodorfensis* sp. n.; (77) *M. macrocephala* sp. n.; (78) *M. obscura* sp. n.; (79) *M. pseudograndis* sp. n. Scale bars = 0.5 mm.

Head including eyes 0.95 times as wide as pronotum. Eyes medium-sized, their frontal distance 1.30–1.35 times eye diameter (Fig. 62). Antennae flabellate; antennomere III strongly serrate, long, about 1.4 times longer than antennomere IV; antennomere IV 1.5 times longer than antennomere V, antennomere V 1.5 times longer than antennomere VI, antennomeres VI–X short, subequal in legth, branches of antennomeres VI–X about 8 times longer than stems of respective antennomeres; antennomere XI simple, longest, about same length as branch of penultimate antennomere, about 7 times longer than penultimate antennomere (Fig. 71).

Pronotum transverse, widest at posterior angles, 1.50–1.55 times wider than length at midline, with lateral margins sinuate, posterior angles slightly rounded, produced postero-laterally; disc with short sublateral carinae near posterior angles (Fig. 62). Elytra moderately long, 0.70 times as long as body, 1.90–2.00 times longer than wide.

Abdominal sternite IX 1.9 times as long as wide, moderately deeply notched basally (Fig. 61). Male genitalia 1.7 times as long as wide, with median lobe stout, shorter than phallobase, curved in lateral view, basally with two moderately long struts, dorsally with moderately long, robust subapical hook; parameres minute, short, almost rounded apically; phallobase robust, relatively long, 1.2 times longer than wide (Fig. 110).

Measurements

Holotype. BL 2.65 mm, WHum 1.00 mm, EL 1.90 mm, WHe 0.80 mm, PL 0.50 mm, PW 0.80 mm, Edist 0.45 mm, Ediam 0.35 mm. Paratypes. BL 3.30 mm, WHum 1.15 mm, EL 2.30 mm, WHe 0.80–0.90 mm, PL 0.60 mm, PW 0.90 mm, Edist 0.47–0.50 mm, Ediam 0.36 mm.

Distribution

Cameroon: Southwest Region. Two localities from where the species has been recorded are only about 35 km far from each other (Fig. 125).

Etymology

The specific epithet refers to Barombi Mbo where the holotype was collected.

***Microselasia elongata* sp. n.**

(Figs 5, 63, 72, 111)

Type material

Holotype, male, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

This species shares the weakly flabellate antennae with *M. kupensis* sp. n. (Figs 72, 75), but differs in the relatively smaller eyes (Edist/Ediam 1.40; in *M. kupensis* sp. n. 1.10),

less transverse pronotum (1.45 times wider than long; in *M. kupensis* sp. n. 1.75 times wider than long; Figs 63, 66), relatively longer male genitalia including phallobase, and more slender median lobe (Figs 111, 114).

Description

Body 2.95 times longer than width at humeri. Body brown to dark brown, mouthparts, antennomeres I–II and legs lighter; body covered with yellow pubescence (Fig. 5).

Head including eyes 0.95 times as wide as pronotum. Eyes medium-sized, their frontal distance 1.40 times eye diameter (Fig. 63). Antennae flabellate, antennomere III long, slightly serrate, subequal in length with antennomeres IV–X, antennomeres IV–X shortly flabellate, with branches as long as or slightly longer than respective stems, antennomere XI simple, longest, about 1.5 times longer than penultimate antennomere (Fig. 72).

Pronotum transverse, widest at posterior angles, 1.45 times wider than length at midline, with lateral margins slightly sinuate, posterior angles acute; disc with short, inconspicuous sublateral carinae near posterior angles (Fig. 63). Elytra moderately long, 0.65 times as long as body, 1.95 times longer than wide.

Abdominal sternite IX 1.8 times as long as wide, moderately deeply notched basally. Male genitalia 1.8 times as long as wide, with median lobe slender, shorter than phallobase, curved in lateral view, basally with two short struts, dorsally with short subapical hook; parameres short, subacute apically; phallobase robust, relatively long, 1.3 times longer than wide (Fig. 111).

Measurements

BL 3.10 mm, WHum 1.05 mm, EL 2.05 mm, WHe 0.65 mm, PL 0.45 mm, PW 0.70 mm, Edist 0.39 mm, Ediam 0.28 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The species name “elongata” is derived from the Latin word “elongatus” and refers to its long phallobase (Fig. 111).

***Microselasia gracilis* sp. n.**

(Figs 6, 64, 73, 112)

Type material

Holotype, male, “Cameroon, Southwest Prov., 2 km N Bakingili, 200 m, 28.–30. July 1984, J. Rawlins, J. DiGiulio, Holotypus [red printed label], *Selasia gracilis* Wittm. [handwritten], det. W. Wittmer” (CMNH).

Diagnosis

Microselasia gracilis sp. n. shares relatively large eyes, strongly flabellate antennae and pronotum widest at anterior half with *M. macrocephala* sp. n. and *M. obscura* sp. n. (Figs 64, 68–69, 73, 77–78). *Microselasia gracilis* sp. n. differs from the above mentioned species in having more transverse pronotum (1.65 times wider than long; versus 1.40–1.45; Figs 64, 68–69), antennomere III about 1.7 times longer than antennomere IV (versus 1.2–1.3), and phallobase about as long as wide (versus longer than wide; Figs 112, 116–117).

Description

Body 2.95 times longer than width at humeri. Body brown, palpi and legs yellowish to light brown; body covered with yellow pubescence (Fig. 6).

Head including eyes as wide as pronotum. Eyes large, their frontal distance 1.10 times eye diameter (Fig. 64). Antennae flabellate; antennomere III strongly serrate, long, about 1.7 times longer than antennomere IV; antennomere IV 1.5 times longer than antennomere V, antennomere V 1.2 times longer than antennomere VI, antennomeres VI–X short, subequal in legth, branches of antennomeres VI–X about 9 times longer than stems of respective antennomeres; antennomere XI simple, longest, about 7 times longer than penultimate antennomere (Fig. 73).

Pronotum transverse, widest at anterior two fifths, 1.65 times wider than length at midline, with lateral margins convex, posterior angles short, produced postero-laterally; disc without distinct sublateral carinae (Fig. 64). Elytra moderately long, 0.70 times as long as body, 2.05 times longer than wide.

Abdominal sternite IX 1.8 times as long as wide, moderately deeply notched basally. Male genitalia 1.6 times as long as wide, with median lobe short, stout, slightly shorter than phallobase, curved in lateral view, basally with two short struts, dorsally with short subapical hook; parameres short, subacute apically; phallobase robust, about as long as wide (Fig. 112).

Measurements

BL 2.30 mm, WHum 0.80 mm, EL 1.60 mm, WHe 0.65 mm, PL 0.40 mm, PW 0.65 mm, Edist 0.30 mm, Ediam 0.28 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

There is a label "*Selasia gracilis* Wittm., det. W. Wittmer" pinned under the beetle, and because this name have not been formally published by W. Wittmer, we decided to use a species name *gracilis* for this species, following the Wittmer's label. The name "gracilis" is a Latin adjective meaning slender or gracile.

***Microselasia grandis* sp. n.**

(Figs 7, 65, 74, 113)

Type material

Holotype, male, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

This species shares the strongly flabellate antennae, rather transverse pronotum (1.62–1.64 times wider than long), and the shape of male genitalia with *M. pseudograndis* sp. n. (Figs 65, 70, 74, 79, 113, 118). However, *M. grandis* sp. n. has larger body (3.60 mm; 2.95 mm in *M. pseudograndis* sp. n.), relatively smaller eyes, missing long sublateral carina on pronotum (Figs 65, 70), and the relatively longer phallobase and shorter median lobe (Figs 113, 118).

Description

Body 3.15 times longer than width at humeri. Body dark brown, mouthparts, antennomeres I–II and legs light brown; body covered with light brown pubescence (Fig. 7).

Head including eyes 0.85 times as wide as pronotum, with moderately sharply defined frontal carina. Eyes medium-sized, their frontal distance 1.30 times eye diameter (Fig. 65). Antennae flabellate; antennomere III strongly serrate, long, about 1.2 times longer than antennomere IV; antennomere IV 1.5 times longer than antennomere V, antennomere V 1.3 times longer than antennomere VI, antennomeres VI–X short, subequal in legth, branches of antennomeres VI–X about 8 times longer than stems of respective antennomeres; antennomere XI simple, longest, about 7 times longer than penultimate antennomere (Fig. 74).

Pronotum transverse, widest at posterior angles, 1.60 times wider than length at midline, with lateral margins slightly sinuate, posterior angles subrectangular, rounded; disc with indistinct, short sublateral carinae (Fig. 65). Elytra relatively long, 0.75 times as long as body, 2.30 times longer than wide.

Abdominal sternite IX 1.9 times as long as wide, moderately deeply notched basally. Male genitalia 1.7 times as long as wide, with median lobe elongate, about as long as phallobase, slightly constricted subapically, curved in lateral view, basally with two short struts, dorsally with short subapical hook; parameres short, subacute apically; phallobase robust, relatively long, 1.2 times longer than wide (Fig. 113).

Measurements

BL 3.60 mm, WHum 1.15 mm, EL 2.65 mm, WHe 0.80 mm, PL 0.60 mm, PW 0.95 mm, Edist 0.45 mm, Ediam 0.34 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The specific epithet refers to the relatively large body of this species.

***Microselasia kupensis* sp. n.**

(Figs 8, 66, 75, 114)

Type material

Holotype, male, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

Microselasia kupensis sp. n. and *M. elongata* sp. n. are the only two known species of *Microselasia* gen. n. which have the weakly flabellate antennae with branches less than twice as long as their stems (Figs 72, 75). They differ in the relative eye size (Edist/Ediam 1.10 in *M. kupensis* sp. n., 1.40 in *M. elongata* sp. n.), the shape of pronotum (1.75 times wider than long in *M. kupensis* sp. n., 1.45 in *M. elongata* sp. n.; Figs 63, 66), and male genitalia (1.5 times longer than wide, phallobase about as long as wide, and median lobe robust in *M. kupensis* sp. n.; 1.8 times longer than wide, phallobase 1.3 times longer than wide, and median lobe slender in *M. elongata* sp. n.; Figs 111, 114).

Description

Body 3.00 times longer than width at humeri. Body brown to dark brown, mouthparts, antennomeres I–II, scutellum and legs lighter; body covered with yellow pubescence (Fig. 8).

Head including eyes 0.85 times as wide as pronotum. Eyes large, their frontal distance 1.09 times eye diameter (Fig. 66). Antennae flabellate, antennomere III long, slightly serrate, subequal in length with antennomeres IV–IX; antennomeres IV–IX shortly flabellate, with branches from about as long as to 1.5 times longer than respective stems (antennomeres X–XI missing; Fig. 75).

Pronotum transverse, widest at posterior angles, 1.75 times wider than length at midline, with lateral margins slightly sinuate, diverged posteriorly, posterior angles subacute, rounded, slightly produced postero-laterally; disc without distinct sublateral carinae (Fig. 66). Elytra relatively long, 0.75 times as long as body 2.30 times longer than wide.

Abdominal sternite IX 1.9 times as long as wide, moderately deeply notched basally. Male genitalia 1.5 times as long as wide, with median lobe stout, slightly shorter than phallobase, curved in lateral view, basally with two moderately long struts, dorsally with short robust subapical hook; parameres short, subacute apically; phallobase robust, about as long as wide (Fig. 114).

Measurements

BL 2.45 mm, WHum 0.80 mm, EL 1.85 mm, WHe 0.55 mm, PL 0.35 mm, PW 0.65 mm, Edist 0.27 mm, Ediam 0.25 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The specific epithet refers to the type locality of this species, i.e., Mt. Kupé.

***Microselasia lolodorfensis* sp. n.**

(Figs 9, 67, 76, 115)

Type material

Holotype, male, "Cameroon, South Prov., Lolodorf, 550 m, 3°14.06' N 10°43.52', 31 E. Mar 2008, Bolm lgt." (UPOL); paratype, male, the same data as for the holotype; paratype, male, "Cameroon, South Prov., Lolodorf, 550 m, N3°14.06' E10°43.52', 1.–5. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

Microselasia lolodorfensis sp. n. is characteristic by the relatively small eyes (Edist/Ediam 1.50–1.60), all antennomeres with branches less than 4 times as long as their respective stems, antennomere XI more than 3 times longer than penultimate antennomere (Fig. 76), male genitalia elongate, 1.8 times longer than wide, and median lobe with very long subapical hook (Fig. 115).

Description

Body 2.85–3.00 times longer than width at humeri. Body brown to dark brown, elytra, and antennomeres I–II lighter, mouthparts and legs yellowish to light brown; body covered with yellow pubescence (Fig. 9).

Head including eyes 0.90–0.95 times as wide as pronotum. Eyes medium-sized, their frontal distance 1.50–1.60 times eye diameter (Fig. 67). Antennae flabellate; antennomere III serrate, only slightly longer than antennomere IV; antennomere IV almost as long as antennomere V, antennomere V 1.3 times longer than antennomere VI, antennomeres VI–X short, subequal in legth, branches of antennomeres VI–X 3–4 times longer than stems of respective antennomeres; antennomere XI simple, longest, more than 3 times longer than penultimate antennomere (Fig. 76).

Pronotum transverse, widest at posterior angles, 1.40–1.45 times wider than length at midline, with lateral margins almost straight, slightly diverged posteriorly, posterior angles rounded; disc without sublateral carinae (Fig. 67). Elytra moderately long, 0.70–0.75 times as long as body, 2.00–2.15 times longer than wide.

Abdominal sternite IX 2.0 times as long as wide, moderately deeply notched basally. Male genitalia 1.8 times as long as wide, with median lobe elongate, slender, longer than phallobase, curved in lateral view, basally with two moderately long struts, dorsally with long, distinct subapical hook; parameres short, subacute apically; phallobase robust, slightly longer than wide (Fig. 115).

Measurements

Holotype. BL 2.75 mm, WHum 0.95 mm, EL 2.05 mm, WHe 0.70 mm, PL 0.55 mm, PW 0.80 mm, Edist 0.44 mm, Ediam 0.28 mm. Paratypes. BL 2.60–2.75 mm, WHum 0.85–0.95 mm, EL 1.80–1.90 mm, WHe 0.65–0.70 mm, PL 0.45–0.50 mm, PW 0.65–0.75 mm, Edist 0.39 mm, Ediam 0.25 mm.

Distribution

Cameroon: South Region (Fig. 125).

Etymology

The specific epithet refers to the type locality of this species, i.e., Lolodorf.

***Microselasia macrocephala* sp. n.**

(Figs 10, 68, 77, 116)

Type material

Holotype, male, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt." (UPOL); paratype, male, the same data as for the holotype (UPOL).

Diagnosis

Microselasia macrocephala sp. n. is superficially similar to *M. gracilis* sp. n. and *M. obscura* sp. n. due to the large eyes, strongly flabellate antennae, and the pronotum widest at anterior half (Figs 64, 68–69, 73, 77–78). *Microselasia gracilis* sp. n. has more transverse pronotum (1.65 times wider than long; 1.40–1.45 in *M. macrocephala* sp. n.; Figs 64, 68), antennomere III about 1.7 times longer than antennomere IV (1.2 in *M. macrocephala* sp. n.; Figs 73, 77), and phallobase about as long as wide (1.3 times longer than wide in *M. macrocephala* sp. n.; Figs 112, 116). *Microselasia obscura* sp. n. is larger (3.10–3.50 mm long; 2.35–2.75 mm in *M. macrocephala* sp. n.), has branches of antennomeres VI–X about 8 times longer than their respective stems (6 times in *M. macrocephala* sp. n.; Figs 77–78), smaller, apically almost rounded parameres (larger, subacute apically in *M. macrocephala* sp. n.), and subapical hook on median lobe robust, widened (slender, short hook in *M. macrocephala* sp. n.; Figs 116–117).

Description

Body 2.75 times longer than width at humeri. Body brown to dark brown, antennomeres I–II slightly lighter, legs yellowish to light brown; body covered with yellow pubescence (Fig. 10).

Head including eyes as wide as pronotum. Eyes large, their frontal distance 1.15 times eye diameter (Fig. 68). Antennae flabellate; antennomere III strongly serrate, long, about 1.2 times longer than antennomere IV; antennomere IV 1.3 times longer than antennomere V, antennomere V 1.3 times longer than antennomere VI, antennomere VI 1.3 times longer than antennomere VII, antennomeres VII–X short, subequal in legth, branches of antennomeres VI–X about 6 times longer than stems of respective antennomeres; antennomere XI simple, longest, about 6 times longer than penultimate antennomere (Fig. 77).

Pronotum transverse, widest just behind anterior margin, 1.40–1.45 times wider than length at midline, with lateral margins sinuate, posterior angles slightly rounded, produced postero-laterally; disc without sublateral carinae (Fig. 68). Elytra moderately long, 0.70 times as long as body, 1.90 times longer than wide.

Abdominal sternite IX 1.9 times as long as wide, moderately deeply notched basally. Male genitalia 1.8 times as long as wide, with median lobe robust, slightly shorter than phallobase, curved in lateral view, basally with two long struts, dorsally with short subapical hook; parameres short, subacute apically; phallobase robust, relatively long, 1.3 times longer than wide (Fig. 116).

Measurements

Holotype. BL 2.75 mm, WHum 1.00 mm, EL 1.90 mm, WHe 0.70 mm, PL 0.50 mm, PW 0.70 mm, Edist 0.34 mm, Ediam 0.30 mm. Paratype. BL 2.35 mm, WHum 0.85 mm, EL 1.60 mm, WHe 0.65 mm, PL 0.45 mm, PW 0.65 mm, Edist 0.32 mm, Ediam 0.28 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The name “macrocephala” comes from the Latin expression for the “large head”.

***Microselasia obscura* sp. n.**

(Figs 11, 22, 52–60, 69, 78, 117)

Type material

Holotype, male, “Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt.” (UPOL); 3 paratypes, males, same data as for the holotype (UPOL).

Diagnosis

Microselasia obscura sp. n. is very similar to *M. macrocephala* sp. n. Both species share large head and eyes, strongly flabellate antennae and the shape of pronotum (Figs 68–69, 77–78), but they differ in the body length (3.10–3.50 mm for *M. obscura* sp. n.; 2.34–2.74 mm for *M. macrocephala* sp. n.), relative length of antennal branches (longer in *M. obscura* sp. n.; Figs 77–78), and the shape of male genitalia (parameres smaller, apically almost rounded, median lobe more robust, widened apically, with subapical hook robust in *M. obscura* sp. n.; parameres larger, subacute apically, median lobe more slender, with subapical hook short in *M. macrocephala* sp. n.; Figs 116–117).

Description

Body 2.90–2.95 times longer than width at humeri. Body dark brown, head darker, antennomeres I–II and scutellum light brown, mouthparts and legs yellowish to light brown; body covered with yellow pubescence (Fig. 11).

Head including eyes as wide as pronotum. Eyes large, their frontal distance 1.15 times eye diameter (Figs 22, 69). Antennae flabellate; antennomere III strongly serrate, long, 1.2–1.4 times longer than antennomere IV; antennomere IV 1.4 times longer than antennomere V, antennomere V 1.7 times longer than antennomere VI, antennomeres VI–X short, subequal in legth, branches of antennomeres VI–X about 8 times longer than stems of respective antennomeres; antennomere XI simple, longest, about 7 times longer than penultimate antennomere (Fig. 78).

Pronotum transverse, widest at anterior two fifths, 1.40 times wider than length at midline, with lateral margins sinuate, posterior angles slightly rounded, produced postero-laterally; disc without sublateral carinae (Fig. 69). Elytra moderately long, 0.65–0.70 times as long as body, 1.95–2.00 times longer than wide.

Abdominal sternite IX 1.9 times as long as wide, very slightly notched basally. Male genitalia 1.9 times as long as wide, with median lobe robust, about as long as phallobase, widened apically, curved in lateral view, basally with two moderately long struts, dorsally with distinct, robust subapical hook; parameres minute, short, apically almost rounded; phallobase robust, relatively long, 1.2 longer than wide (Fig. 117).

Intraspecific variability

One paratype has lighter disc of pronotum and dark brown to black elytra. There are slight differences in the lengths of branch of antennomere III among the studied specimens.

Measurements

Holotype. BL 3.10 mm, WHum 1.05 mm, EL 2.10 mm, WHe 0.75 mm, PL 0.55 mm, PW 0.75 mm, Edist 0.39 mm, Ediam 0.33 mm. Paratypes. BL 3.10–3.50 mm, WHum 1.05–1.20 mm, EL 2.10–2.35 mm, WHe 0.75–0.95 mm, PL 0.55–0.65 mm, PW 0.75–0.95 mm, Edist 0.38–0.47 mm, Ediam 0.33–0.41 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The specific epithet means "dark" in Latin and refers to the body coloration of this species.

***Microselasia pseudograndis* sp. n.**

(Figs 12, 70, 79, 118)

Type material

Holotype, male, "Cameroon, South Prov., Lolodorf, 550 m, N3°14.06' E10°43.52', 31. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

Microselasia pseudograndis sp. n. is similar to *M. grandis* sp. n. in having the strongly flabellate antennae, pronotum 1.60–1.65 times wider than long, and the median lobe of male genitalia slightly constricted subapically, with typically very short subapical hook (Figs 65, 70, 74, 79, 113, 118). These species differ in the body size (body 2.95 mm long in *M. pseudograndis* sp. n.; 3.60 mm in *M. grandis* sp. n.), relative size of eyes (Edist/Ediam 1.20 in *M. pseudograndis* sp. n.; 1.30 in *M. grandis* sp. n.), sublateral carina on pronotum (distinct, almost reaching anterior margin in *M. pseudograndis* sp. n.; short, indistinct in *M. grandis* sp. n.; Figs 65, 70), and the shape of male genitalia (phallobase relatively shorter and median lobe longer in *M. pseudograndis* sp. n.; Figs 113, 118).

Description

Body 2.95 times longer than width at humeri. Body brown, mouthparts, antennomeres I–II and legs lighter; body covered with yellowish pubescence (Fig. 12).

Head including eyes 0.90 times as wide as pronotum; frontal carina moderately sharply defined. Eyes relatively large, their frontal distance 1.20 times eye diameter (Fig. 70). Antennae flabellate; antennomere III strongly serrate, long, about 1.1 times longer than antennomere IV; antennomere IV 1.4 times longer than antennomere V, antennomere V 1.4 times longer than antennomere VI, antennomeres VI–X short, subequal in legth, branches of antennomeres VI–X about 5 times longer than stems of respective antennomeres; antennomere XI simple, longest, about 5 times longer than penultimate antennomere (Fig. 79).

Pronotum transverse, widest at posterior angles, 1.65 times wider than length at midline, with lateral margins convex, posterior angles subrectangular, widely rounded; disc with distinct sublateral carinae almost reaching anterior margin (Fig. 70). Elytra relatively long, 0.75 times as long as body, 2.25 times longer than wide.

Abdominal sternite IX 1.7 times as long as wide, moderately deeply notched basally. Male genitalia 1.7 times as long as wide, with median lobe elongate, longer than phallobase, slightly constricted subapically, curved in lateral view, basally with two short struts, dorsally with short subapical hook; parameres short, subacute apically; phallobase robust, slightly longer than wide (Fig. 118).

Measurements

BL 2.95 mm, WHum 0.95 mm, EL 2.15 mm, WHe 0.75 mm, PL 0.50 mm, PW 0.80 mm, Edist 0.41 mm, Ediam 0.34 mm.

Distribution

Cameroon: South Region (Fig. 125).

Etymology

The specific epithet refers to the morphological similarity of this species to *M. grandis* sp. n.

Genus *Wittmerselasia* gen. n.

Type species

Wittmerselasia camerooniana sp. n.

Diagnosis

This genus can be recognized by using the following combination of characters: body moderately large, 3.15–6.60 mm long, fronto-clypeal region high, narrow, abruptly declined between antennal insertions, with characteristic two rows of long setae laterally (Figs 23–24), terminal maxillary palpomere hatchet-like (Figs 82, 90), eyes large, their frontal distance 1.00–1.15 times eye diameter, antennae strongly flabellate (Figs 101–106), pronotum subrectangular, very sparsely punctured, its posterior margin with a distinct angular emargination (Figs 95–100), prosternal process long, slender (Fig. 80), scutellum triangular, slightly longer than wide (Fig. 85), abdominal sternite IX about 1.4–1.7 times as long as wide, rounded apically (Fig. 88), and male genitalia robust, with basal struts of median lobe relatively short, and parameres distinctly setose (Figs 119–124).

The genus *Selasia* differs from *Wittmerselasia* gen. n. in having much wider fronto-clypeal region, gradually declined to the base of labrum, and male genitalia with differently shaped parameres and longer basal struts of median lobe, *Flabelloselasia* gen. n. in much longer antennal branches (Fig. 28), pronotum with distinct sublateral carinae almost reaching frontal margin (never reaching first half of pronotum in *Wittmerselasia* gen. n.; Figs 25, 95–100), and male genitalia with V-shaped phallobase and subrectangular parameres (Fig. 107), and *Lolosia* gen. n., *Kupeselasia* gen. n. and *Microselasia* gen. n. in having apically narrowed and subacute ultimate maxillary and labial palpomeres (Figs 36, 46, 54).

Distribution

All known species of this genus occur in the Southwest, Centre and South Regions in Cameroon (Fig. 125).

Etymology

The generic name is dedicated to late W. Wittmer (Basel, Switzerland) and refers to the similarity of this genus to *Selasia* Laporte, 1836. Gender: feminine.

Subgenus *Wittmerselasia* subgen. n.

Type species

Wittmerselasia camerooniana sp. n.

Diagnosis

The genus *Wittmerselasia* gen. n. contains two subgenera, the nominotypical *Wittmerselasia* subgen. n. and *Latoselasia* subgen. n. (Figs 13–18). They differ in the shape of labrum (larger and only partly sclerotized in *Wittmerselasia* subgen. n.; sclerotized, subpentagonal, widely rounded apically in *Latoselasia* subgen. n.; Figs 23–24), the length and shape of apical maxillary palpomere (longer, constricted subapically in *Wittmerselasia* subgen. n.; shorter and wider in *Latoselasia* subgen. n.; Figs 82, 90), and the shape of male genitalia (phallobase never longer than wide, median lobe longer than phallobase, parameres larger, more pointed apically in *Wittmerselasia* subgen. n.; phallobase slightly longer than wide, median lobe shorter than phallobase, parameres smaller, rounded apically in *Latoselasia* subgen. n.; Figs 119–124).

Description

Male. Body 3.15–6.60 mm long, 2.50–2.80 times longer than width at humeri. Body yellowish to dark brown, antennal branches often darker, elytra either uniformly colored or with basal parts lighter or with apical and partly lateral portions darker, dark brown to black, legs lighter, body surface covered with yellowish to light brown pubescence (Figs 13–17).

Head including eyes 0.75–0.95 times as wide as pronotum; surface smooth, very shallowly depressed medially, sparsely punctate, covered with sparse, long, semi-erect pubescence; antennal sockets moderately widely separated, frons narrowed apically, slightly surpassing fronto-clypeal region; fronto-clypeal region high, narrow, partly membranous, abruptly declined between antennal insertions, sloping toward base of labrum; its surface smooth medially, rough laterally, basally with two lateral rows of punctures with long erected setae (Fig. 23). Eyes large, prominent, their frontal distance 1.05–1.15 times eye diameter (Figs 95–100). Labrum transverse, basally sclerotized, with transverse row of long setae, apically partly membranous. Mandibles robust, moderately long, falcate, bidentate, with long apical oblique tooth and another, robust tooth located in middle part of incisor; mandibles basally setose, apical part

bare, shiny (Fig. 81). Maxillary palpi tetramerous, slender, palpomere I short, palpomere II elogate, about twice longer than wide, slightly more than twice longer than palpomere III, palpomere III short, about as long as wide, palpomere IV more than 3 times longer than palpomere III, about 2.5 times as long as wide, hatchet-like, slightly constricted subapically, flattened, widened and slightly rounded apically (Fig. 82). Labium short, wide, partly membranous; labial palpi trimerous, tiny, palpomeres I–II short, wide, apical palpomere elongate, fusiform, subacute apically (Fig. 83). Antennae 11-segmeneted, flabellate; scapus robust, slightly widened apically, pedicel short, small; antennomere III long, 2.5–3.3 times longer than following antennomeres, its branch from about the same legth as stem to more than twice longer than stem; antennomeres IV–X short, subequal in length, with branches distinctly flattened, branch of antennomere IV slightly shorter than branches of antennomeres V–X, which are about 8–12 times longer than their stems; antennomere XI simple, longest, of about same length as branches of preceding antennomeres; all antennomeres with surface uneven, rough, sparsely covered with long setae, arising from the edges of branches (Figs 101–106).

Pronotum slightly convex, transverse, widest at half or posterior angles, 1.60–1.80 times wider than length at midline. Anterior margin more or less straight; lateral margins almost straight to convex (slightly converged posteriorly in *W. variabilis* sp. n.), bent upwards; posterior margin with wide angular emargination medially. Anterior angles inconspicuous; posterior angles short, widely rounded. Disc smooth, without or with short sublateral carinae near posterior angles, never reaching first half of pronotum (Figs 95–100). Lateral carina separating pronotum from hypomeron distinct, almost reaching pronotal frontal margin. Surface of disc very sparsely covered with shallow punctures, with sparse semi-erect, long pubescence, both punctures and setae equally distributed. Hypomeron smooth, with indistinct sublateral carina, slightly wrinkled near edges; prosternal suture very short. Prosternum transverse, prosternal lobe short, with frontal margin widely rounded, with long semi-erect setae; prosternal process moderately long, slender, subparallel-sided, subacute apically (Fig. 80). Scutellum flat, triangular, slightly longer than wide, subacute apically, sparsely covered with shallow punctures and semi-erect setae (Fig. 85). Mesoventrite widely V-shaped, with frontal margin widely emarginate, posterior margin produced medially to form narrow, shallow mesoventral cavity. Mesocoxal cavity open to both mesepimeron and mesepisternum. Metaventrite large, subtrapezoidal, smooth, very sparsely covered with shallow punctures. Elytra subparallel-sided to ovoid, combined 0.65–0.70 times as long as body; basally wrinkled (Figs 13–17). Each elytron with apex separately rounded, sparsely punctate, covered with long, semi-erect pubescence; elytral suture distinct, wide, depressed. Hind wing venation as in Fig. 86. Legs slightly compressed, with surface rough, covered with sparse, long, semi-erect pubescence; coxae robust, trochanters slender, elongate, widened apically, obliquely attached to femora; tarsomeres I–II subequal in length, tarsomere III slightly shorter, tarsomere IV shortest, minute, extended ventrally, apical tarsomere elongate, slender, about 3 times longer than tarsomere IV (Fig. 84); claws simple, slender, slightly curved; each claw basally with long seta.

Abdomen soft, slender, ventrites with very sparse, shallow punctures, sparsely covered with semi-erect pubescence, denser laterally. Tergites I–II reduced; tergites IX and

X connected by membrane; tergite IX more than 0.5 times as long as wide, basally with two sublateral processes; tergite X longer than wide, rounded apically (Fig. 87). Sternite IX 1.4–1.7 times as long as wide, deeply emarginate basally, apex rounded, punctate, with sparse short setae (Fig. 88); sternite X connected by membrane to sternite IX, partly membranous.

Male genitalia trilobate, 1.7–1.8 times as long as wide; median lobe strong, slightly longer than phallobase, moderately curved in lateral view, basally with two short, robust struts, dorsally with short to long subapical hook; parameres robust, subacute or slightly rounded apically, covered with moderately long setae, mainly on inner margin and apical portion; phallobase robust, about as wide as long or slightly wider than long, U-shaped (Figs 119–123).

Females and immature stages unknown.

Wittmerselasia camerooniana **sp. n.**

(Figs 13, 80–88, 95, 101, 119)

Type material

Holotype, male, "Cameroon, South Prov., Lolodorf, 550 m, 3°14.06' N 10°43.52' E, 31. Mar 2008, Bolm lgt." (UPOL); 2 paratypes, males, "Cameroon, South Prov., Lolodorf, 550 m, 3°14.06' N 10°43.52' E, 1.–5. Mar 2008, Bolm lgt." (UPOL); paratype, male, "Cameroun, Batanga, Museum Paris, Collection Léon Fairmaire, 1906" (MHNP).

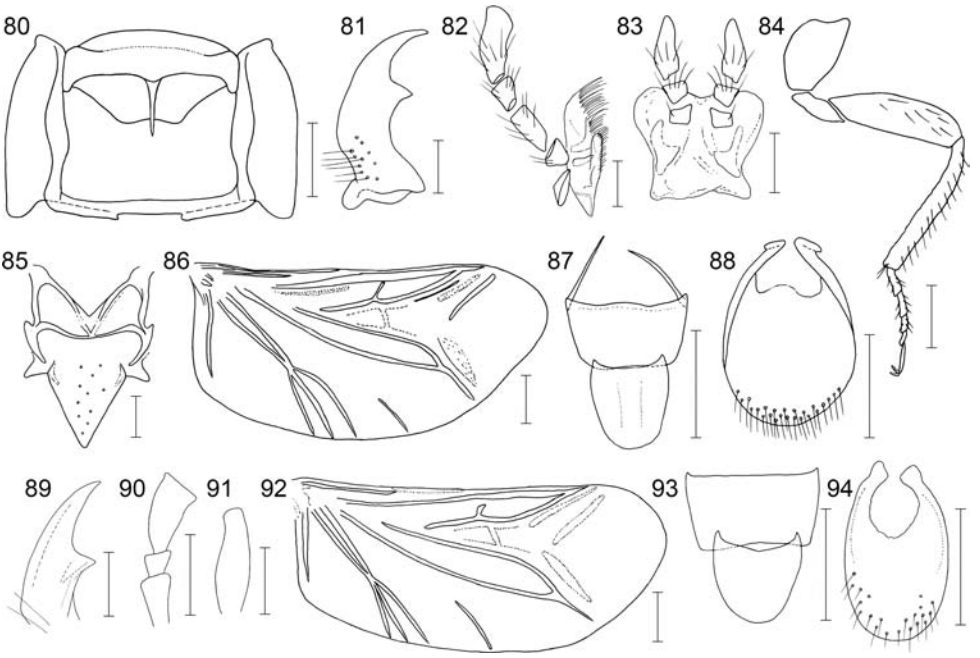
Diagnosis

Wittmerselasia camerooniana sp. n. is similar by the body size and light body coloration with yellowish to light brown pronotum to *W. davidsoni* sp. n. and *W. variabilis* sp. n., but it can be recognized by the relatively shorter branch of antennomere III, which is about as long as stem (almost or more than twice longer than respective stems in two other species; Figs 101–102, 105). Additionally, *Wittmerselasia variabilis* sp. n. differs in the more transverse pronotum with more distinctly produced posterior angles (Figs 95–96, 99), and in the shorter hook of median lobe (Figs 119–120, 123).

Description

Body 2.55–2.65 times longer than width at humeri. Body yellowish to light brown, antennal branches darker, apex and lateral portions of elytra dark brown to black; body covered with yellow pubescence (Fig. 13).

Head including eyes 0.75–0.85 times as wide as pronotum. Eyes large, their frontal distance 1.10 times eye diameter (Fig. 95). Antennae flabellate, with antennomere III about 2.5 times longer than following antennomeres, its branch about the same length as stem; antennomeres V–X with branches about 9 times longer than their stems (Fig. 101).



Figs 80–94. Body parts of *Wittmerselasia* gen. n. *Wittmerselasia camerooniana* sp. n. (80) prosternum; (81) mandible; (82) maxilla; (83) labium; (84) leg; (85) scutellum; (86) hind wing; (87) abdominal tergites IX–X; (88) abdominal sternite IX. *Wittmerselasia* (*Latoselasia*) *similis* sp. n.: (89) mandible; (90) last maxillary palpomeres; (91) terminal labial palpomere; (92) hind wing; (93) abdominal tergites IX–X; (94) abdominal sternite IX. Scale bars = 0.1 mm (Fig. 91), 0.2 mm (Figs 81–83, 85, 89–90), 0.5 mm (Figs 80, 84, 86–88, 92–94).

Pronotum transverse, widest at half, 1.65–1.75 times wider than length at midline, with lateral margins slightly convex, bent upwards; posterior margin with wide angular emargination medially; posterior angles short, widely rounded, produced backward; disc with short sublateral carinae near posterior angles (Fig. 95). Elytra 0.70 times as long as body, 1.70–1.85 times as long as wide at humeri.

Abdominal sternite IX 1.4 times as long as wide. Male genitalia with median lobe dorsally with robust, long subapical hook, parameres robust, subacute apically; phallobase about as wide as long (Fig. 119).

Measurements

Holotype. BL 4.40 mm, WHum 1.70 mm, EL 3.00 mm, WHe 1.15 mm, PL 0.80 mm, PW 1.35 mm, Edist 0.52 mm, Ediam 0.47 mm. Paratypes. BL 4.35–5.60 mm, WHum 1.70–2.20 mm, EL 3.10–3.80 mm, WHe 1.20–1.40 mm, PL 0.85–1.05 mm, PW 1.45–1.85 mm, Edist 0.53–0.72 mm, Ediam 0.48–0.66 mm.

Distribution

Cameroon: South Region (Fig. 125).

Etymology

The specific epithet refers to the geographic origin of this species.

***Wittmerselasia davidsoni* sp. n.**

(Figs 14, 96, 102, 120)

Type material

Holotype, male, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, 1–10 July 1984, 10 m, J. Rawlins, R. Davidson" (CMNH); paratype, male, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, intercept trap, 4 August 1984, James A. DiGiulio" (CMNH).

Diagnosis

This species shares the similar body size and lightly colored body with yellowish to light brown pronotum with *W. camerooniana* sp. n. and *W. variabilis* sp. n. (Figs 13–14, 17). *Wittmerselasia davidsoni* sp. n. differs from *W. camerooniana* sp. n. in the darker elytra (Figs 13–14) and relatively longer branch of antennomere III (Figs 101–102), and from *W. variabilis* sp. n. in the relatively less transverse pronotum with shorter and less produced posterior angles (Figs 96, 99), relatively shorter branch of antennomere III (Figs 102, 105), and the longer hook of median lobe (Figs 120, 123).

Description

Body 2.60–2.70 times longer than width at humeri. Body yellowish to light brown, antennal branches darker, elytra dark brown; body covered with yellowish to light brown pubescence (Fig. 14).

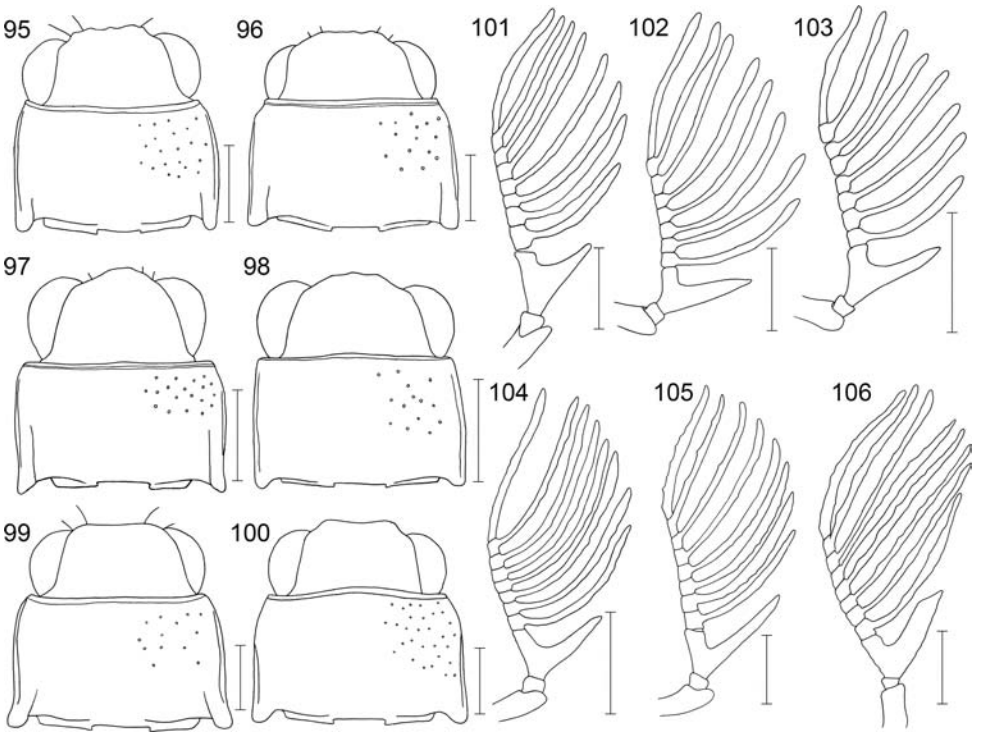
Head including eyes 0.80–0.85 times as wide as pronotum. Eyes large, their frontal distance 1.10–1.15 times eye diameter (Fig. 96). Antennae flabellate, with antennomere III about 3 times longer than following antennomeres, its branch about twice longer than stem; antennomeres V–X with branches about 9 times longer than their stems (Fig. 102).

Pronotum transverse, widest at half, 1.60–1.65 times wider than length at midline, with lateral margins almost straight, bent upwards; posterior margin with wide angular emargination medially; posterior angles short, widely rounded; disc with short sublateral carinae near posterior angles (Fig. 96). Elytra 0.70 times as long as body, 1.80–1.85 times longer than width at humeri.

Abdominal sternite IX 1.5 times as long as wide. Male genitalia with median lobe dorsally with robust, long subapical hook, parameres robust, subacute apically; phallobase slightly wider than long (Fig. 120).

Measurements

Holotype. BL 5.10 mm, WHum 2.00 mm, EL 3.55 mm, WHe 1.30 mm, PL 1.00 mm, PW 1.60 mm, Edist 0.64 mm, Ediam 0.56 mm. Paratype. BL 6.20 mm, WHum



Figs 95–106. Body parts of *Wittmerselasia* gen. n. Head and pronotum. (95) *W. camerooniana* sp. n.; (96) *W. davidsoni* sp. n.; (97) *W. geiseri* sp. n.; (98) *W. maculata* (Wittmer, 1989); (99) *W. variabilis* sp. n.; (100) *W.* (*Latoselasia*) *similis* sp. n. Antenna. (101) *W. camerooniana* sp. n.; (102) *W. davidsoni* sp. n.; (103) *W. geiseri* sp. n.; (104) *W. maculata* (Wittmer, 1989); (105) *W. variabilis* sp. n.; (106) *W.* (*Latoselasia*) *similis* sp. n. Scale bars = 0.5 mm.

2.30 mm, EL 4.30 mm, WHe 1.50 mm, PL 1.10 mm, PW 1.80 mm, Edist 0.66 mm, Ediam 0.61 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Etymology

The specific epithet is a patronym in honor of R. Davidson (CMNH).

***Wittmerselasia geiseri* sp. n.**

(Figs 15, 97, 103, 121)

Type material

Holotype, male, "Cameroon: Mbalmayo F. Res., TIGER Survey, BM 1994–148, Ebogo, (?).vii.1993, FITrap 1, 722 [white/yellow], n. genus, det. M. A. Ivie, 2010"

(BMNH); 2 paratypes, males, with the same data as for the holotype (BMNH); paratype, male, "Cameroon: Mbalmayo F. Res., TIGER Survey, BM 1994–148, Eboufek, 28.vii.1993, FITrap 1, 721 [white/green]", 351 [yellow]" (BMNH); paratype, male, "Cameroon, SW Prov., Fako Dist., Bakingili, 25 km W Limbe, VII. 21.–31. 1984, Coll. R. Davidson, *Selasia* spec., longer series needed [handwritten]" (CMNH).

Diagnosis

Wittmerselasia geiseri sp. n. shares the body size and dark body coloration with *W. maculata* (Wittmer, 1989) (Figs 15–16). They differ in the sublateral carina on the pronotum (distinct, reaching almost half of pronotum in *W. geiseri* sp. nov; absent in *W. maculata*; Figs 97–98), the relative lengths of branches of antennomeres IV–X (Figs 103–104), and in the shape of male genitalia (median lobe with short hook, parameres slightly rounded apically in *W. geiseri* sp. n.; median lobe with long hook, parameres subacute apically in *W. maculata*; Figs 121–122).

Description

Body 2.50–2.80 times longer than width at humeri. Body dark brown, in some cases elytra basally slightly lighter, antennomeres I–II lighter, mouthparts and legs yellowish to light brown; body covered with yellowish to light brown pubescence (Fig. 15).

Head including eyes 0.80–0. 90 times as wide as pronotum. Eyes large, their frontal distance 1.05–1.10 times eye diameter (Fig. 97). Antennae flabellate, with antennomere III more than 3 times longer than following antennomeres, its branch about twice longer than stem; antennomeres V–X with branches about 8 times longer than their stems (Fig. 103).

Pronotum transverse, widest at half, 1.65–1.70 times wider than length at midline, with lateral margins almost straight, bent upwards; posterior margin with wide angular emargination medially; posterior angles short, widely rounded, produced backward; disc with sublateral carinae near posterior angles, reaching about half of pronotum (Fig. 97). Elytra 0.65–0.70 times as long as body, 1.70–1.95 times as long as wide at humeri.

Abdominal sternite IX 1.7 times as long as wide. Male genitalia with median lobe dorsally with short subapical hook, parameres robust, slightly rounded apically; phallobase slightly wider than long (Fig. 121).

Measurements

Holotype. BL 3.80 mm, WHum 1.35 mm, EL 2.45 mm, WHe 0.95 mm, PL 0.65 mm, PW 1.10 mm, Edist 0.40 mm, Ediam 0.38 mm. Paratypes. BL 3.95–4.80 mm, WHum 1.45–1.95 mm, EL 2.75–3.35 mm, WHe 1.05–1.30 mm, PL 0.70–0.90 mm, PW 1.20–1.60 mm, Edist 0.46–0.55 mm, Ediam 0.44–0.51 mm.

Intraspecific variability

The specimen from Eboufek has slightly less transverse pronotum (PW/PL = 1.65) than remaining specimens of *W. geiseri* sp. n. (PW/PL = 1.70). The specimen from

Bakingili is larger and relatively shorter (BL 4.80 mm, BL/Whum 2.50) than specimens from the Centre Region (BL 3.80–4.65 mm, BL/Whum 2.70–2.80).

Distribution

Cameroon: Centre Region, Southwest Region (Fig. 125).

Etymology

The name of this species is a patronym in honor of M. Geiser (BMNH).

***Wittmerselasia maculata* (Wittmer, 1989) comb. n.**

(Figs 16, 98, 104, 122)

Selasia maculata Wittmer, 1989: 202.

Type material

Holotype, male, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, Malaise Trap, 12 July 1984, James DiGiulio" (CMNH); 2 paratypes, males, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, Malaise Trap, 16 July 1984, James DiGiulio" (CMNH); 2 paratypes, males, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, Malaise Trap, 23 July 1984, James DiGiulio" (CMNH); 2 paratypes, males, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, 10 m, Malaise Trap, July 13, 1984, J. DiGiulio" (CMNH); 2 paratypes, males, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, 16 July 1984, J. DiGiulio" (CMNH).

Other material examined

Male, "Cameroon: Southwest Province, Bakingili, 10 m, 11.–12. Jun 1984, James A. DiGiulio" (erroneously designated as paratype) (CMNH); male, "Cameroon: Southwest Province, Bakingili, 10 m, 21 July 1984, John E. Rawlins" [erroneously designated as paratype] (CMNH); male, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, Malaise Trap, 30 June 1984, James A. DiGiulio" (CMNH); male, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, intercept trap, 14 July 1984, James A. DiGiulio" (CMNH); male, "Cameroon: Southwest Prov., 25 km W Limbe, Bakingili, intercept trap, 29 July 1984, James A. DiGiulio" (CMNH); male, "Cameroon, SW Prov., Fako Dist., Bakingili, 25 km W Limbe, VII. 1.–10. 1984, Coll. R. Davidson" (CMNH); male, "Cameroon, SW Prov., Fako Dist., Bakingili, 25 km W Limbe, VII. 11.–20. 1984, Coll. R. Davidson" (CMNH).

Diagnosis

This species is superficially similar to *W. geiseri* sp. n. by the small body size and dark coloration (Figs 15–16), but it differs from the latter in absence of sublateral pronotal carina (Figs 97–98), relatively longer branches of antennomeres IV–X (Figs 103–104), longer hook of median lobe, and parameres subacute apically (Figs 121–122).

Redescription

Body 2.50–2.65 times longer than width at humeri. Body brown to dark brown, head and pronotum reddish dark brown (in some cases edges of pronotum and head lighter), basal portion of elytra lighter, legs yellowish to light brown; body covered with yellowish to light brown pubescence (Fig. 16).

Head including eyes 0.85–0.95 times as wide as pronotum. Eyes large, their frontal distance 1.05–1.10 times eye diameter (Fig. 98). Antennae flabellate, with antennomere III more than 3 times longer than following antennomeres, its branch about 1.5 times as long as stem; antennomeres V–X with branches about 12 times longer than their stems (Fig. 104).

Pronotum widest at half, 1.65–1.70 times wider than length at midline, with lateral margins slightly convex, bent upwards; posterior margin with wide angular emargination medially; posterior angles short, widely rounded; disc without distinct sublateral carinae near posterior angles (Fig. 98). Elytra 0.65–0.70 times as long as body, 1.70–1.85 times as long as wide at humeri.

Abdominal sternite IX 1.5 times as long as wide. Male genitalia with median lobe dorsally with robust, long subapical hook, parameres robust, subacute apically; phallobase slightly wider than long (Fig. 122).

Measurements

Holotype. BL 3.60 mm, WHum 1.40 mm, EL 2.40 mm, WHe 1.00 mm, PL 0.65 mm, PW 1.10 mm, Edist 0.45 mm, Ediam 0.41 mm. Paratypes and non-type material. BL 3.15–4.65 mm, WHum 1.25–1.80 mm, EL 2.20–3.20 mm, WHe 0.95–1.25 mm, PL 0.60–0.90 mm, PW 1.05–1.50 mm, Edist 0.42–0.56 mm, Ediam 0.39–0.53 mm.

Distribution

Cameroon: Southwest Region (Fig. 125).

Remark

Wittmer (1989) designated the holotype and eight paratypes in the original description. He stated, that the holotype and four paratypes should be deposited in the CMNH and the remaining four paratypes in the Naturhistorisches Museum in Basel, Switzerland. However, there are no specimens of *W. maculata* deposited in Basel (M. Geiser, E. Sprecher, pers. commun.) and there are 10 specimens labelled as "paratypus" in the CMNH. Based on the original description, the type series should include specimens with the following data: "Cameroon: Southwest Prov., 25 km W Limbe Bakingili, 12.–23.VII.1984, Malaise trap, James DiGiulio". Therefore, two other specimens designated as paratypes, but with different data, are herein removed from the type series.

***Wittmerselasia variabilis* sp. n.**

(Figs 17, 23, 99, 105, 123)

Type material

Holotype, male, "Cameroon, South Prov., Lolodorf, 550 m, 3°14.06' N 10°43.52' E, 31. Mar 2008, Bolm lgt." (UPOL); paratype, male, "Cameroon, SW Prov., Nyassoso, Mt. Kupé, 900 m, 4°49.59' N 9°40.54' E, 9.–11. Mar 2008, Bolm lgt." (UPOL).

Diagnosis

Wittmerselasia variabilis sp. n. is the only species within the subgenus *Wittmerselasia* subgen. n. with the branch of antennomere III more than twice longer than its stem (Fig. 105) and the pronotum widest at posterior angles, with posterior angles distinctly produced postero-laterally (Fig. 99).

Description

Body 2.50–2.65 times longer than width at humeri. Body yellowish to light brown, antennal branches darker, elytra either completely dark brown (holotype) or only apical portion dark brown to black; body covered with yellowish to light brown pubescence (Fig. 17).

Head including eyes 0.80–0.85 times as wide as pronotum. Eyes large, their frontal distance 1.05 times eye diameter (Fig. 99). Antennae flabellate, with antennomere III about 2.5 times longer than following antennomeres, its branch slightly more than twice longer than stem; antennomeres V–X with branches about 9 times longer than their stems (Fig. 105).

Pronotum widest at posterior angles, 1.75–1.80 times wider than length at midline, with lateral margins slightly sinuate, bent upwards, diverged posteriorly; posterior margin with wide angular emargination medially; posterior angles widely rounded, produced postero-laterally; disc with short sublateral carinae near posterior angles (Fig. 99). Elytra 0.70 times as long as body, 1.80–1.90 times as long as wide at humeri.

Abdominal sternite IX 1.6 times as long as wide. Male genitalia with median lobe dorsally with robust, short subapical hook, parameres robust, subacute apically; phallobase about as long as wide (Fig. 123).

Intraspecific variability

The holotype has antennal branches brown and elytra completely dark brown, whereas the paratype has antennal branches dark brown to black and elytra yellowish-brown with apical portion dark brown to black.

Measurements

Holotype. BL 6.60 mm, WHum 2.50 mm, EL 4.70 mm, WHe 1.65 mm, PL 1.15 mm, PW 2.00 mm, Edist 0.72 mm, Ediam 0.68 mm. Paratype. BL 6.00 mm, WHum 2.40 mm, EL 4.25 mm, WHe 1.45 mm, PL 1.00 mm, PW 1.85 mm, Edist 0.67 mm, Ediam 0.63 mm.

Distribution

Cameroon: South Region, Southwest Region (Fig. 125).

Etymology

The specific epithet refers to the variable coloration of elytra in this species.

Subgenus *Latoselasia* subgen. n.

Type species

Latoselasia similis sp. n.

Diagnosis

Latoselasia subgen. n. differs from the nominotypical *Wittmerselasia* subgen. n. in the sclerotized, subpentagonal, apically widely rounded labrum (larger and only partly sclerotized in *Wittmerselasia* subgen. n.; Figs 23–24), shorter and wider apical maxillary palpomere (longer, constricted subapically in *Wittmerselasia* subgen. n.; Figs 82, 90), phallobase slightly longer than wide, median lobe shorter than phallobase, and parameres smaller, rounded apically (phallobase never longer than wide, median lobe longer than phallobase, and parameres larger, more pointed apically in *Wittmerselasia* subgen. nov; Figs 119–124).

Description

Male. Body 4.80–5.30 mm long, 2.60–2.80 times longer than width at humeri. Body yellowish, yellowish-brown or brown, elytra either uniformly brown or yellowish to brown with lateral and apical parts dark brown, antennomeres III–XI brown to dark brown, branches darker; body surface covered with yellowish to light brown pubescence (Fig. 18).

Head including eyes 0.80–0.85 times as wide as pronotum; surface smooth, very shallowly depressed medially, sparsely punctate, covered with sparse, long, semi-erect pubescence; antennal sockets moderately widely separated, frons narrowed apically, slightly surpassing fronto-clypeal region; fronto-clypeal region high, narrow, partly membranous, abruptly declined between antennal insertions, sloping toward base of labrum; its surface smooth medially, rough laterally, basally with two lateral rows of punctures with long erected setae (Fig. 24). Eyes large, prominent, their frontal distance 1.00–1.05 times eye diameter. Labrum sclerotized, subpentagonal, short, produced forwards, with frontal margin widely rounded. Mandibles robust, moderately long, falcate, bidentate, with long apical oblique tooth and another, robust tooth located in middle part of incisor; mandibles basally setose, apical part bare, shiny (Fig. 89). Maxillary palpi tetramerous, slender, palpomere I short, palpomere II elogate, about twice longer than wide, more than twice longer than palpomere III, palpomere III short, about as long as wide, palpomere IV more than 3 times longer than palpomere III, less than twice as long as wide, hatchet-like, apically distinctly flattened and

widened (Fig. 90). Labium short, wide; labial palpi trimerous, tiny, palpomeres I–II short, wide, apical palpomere elongate, fusiform (Fig. 91). Antennae 11-segmeneted, flabellate, scapus robust, widened apically, pedicel short, small, antennomere III long, more than 2.5 times longer than antennomeres IV–X, with robust, wide branch, longer than stem; antennomeres IV–X short, subequal in length, strongly flabellate, with branches distinctly flattened, about 12 times longer than respective stems, apical antennomere simple, elongate, about as long as branch of penultimate antennomere (Fig. 106); all antennomeres with surface uneven, sparsely covered with long setae, arising from the edges of branches.

Pronotum slightly convex, transverse, widest at posterior angles, 1.55–1.70 times wider than length at midline. Anterior margin slightly convex, slightly bent upwards, lateral margins almost straight, bent upwards, posterior margin with wide angular emargination medially. Anterior angles inconspicuous; posterior angles short, widely rounded. Disc smooth, without or with slightly developed short sublateral carinae (Fig. 100). Lateral carina separating pronotum from hypomeron distinct, almost reaching pronotal frontal margin. Surface of disc very sparsely covered with shallow punctures, with sparse semi-erect, long pubescence, both punctures and setae equally distributed. Hypomeron almost smooth; prosternal suture very short. Prosternum transverse, prosternal lobe short, with frontal margin almost straight, with long semi-erect setae; prosternal process moderately long, slender, subparallel-sided, subacute apically. Scutellum flat, triangular, slightly longer than wide, subacute apically, sparsely covered with shallow punctures and semi-erect setae. Mesoventrite widely V-shaped, with frontal margin widely emarginate, posterior margin produced medially to form narrow mesoventral cavity. Mesocoxal cavity open to both mesepimeron and mesepisternum. Metaventrite large, subtrapezoidal, smooth, very sparsely covered with shallow punctures. Elytra subparallel-sided, 0.70 times as long as body; basally wrinkled (Fig. 18). Each elytron with apices separately rounded, sparsely punctate, covered with long, semi-erect pubescence; elytral suture distinct, wide, depressed. Hind wing venation as in Fig. 92. Legs slender, slightly compressed, with sparse, long, semi-erect setae, coxae robust, trochanters slender, elongate, widened apically, obliquely attached to femora; tarsomeres I–III subequal in length, tarsomere 4 shortest, minute, extended ventrally, apical tarsomere long, slender; claws simple, slender, slightly curved, each basally with long seta.

Abdomen soft, slender, ventrites with very sparse, shallow punctures, sparsely covered with semi-erect pubescence, denser laterally. Tergites IX and X connected by membrane; tergite IX about 0.5 times as long as wide; tergite X rounded apically (Fig. 93). Sternite IX elongate, 1.8 times as long as wide, deeply emarginate basally, apex rounded, punctate, with sparse short setae; sternite X connected by membrane to sternite IX, transverse, partly membranous (Fig. 94).

Male genitalia trilobate, 1.6 times as long as wide; median lobe robust, short, less than twice longer than parameres, shorter than phallobase, moderately curved in lateral view, basally with two short, robust struts, dorsally with rather short subapical hook; parameres small, elongate, more or less rounded apically, inner margin and apex covered with moderately long setae; phallobase robust, slightly longer than wide, U-shaped (Fig. 124).

Females and immature stages unknown.

Etymology

The generic name is a combination of words "latus" (Latin), which means wide and refers to the typically widened apex of the apical maxillary palpomere, and *Selasia* Laporte, 1836. Gender: feminine.

***Latoselasia similis* sp. n.**

(Figs 18, 24, 89–94, 100, 106, 124)

Type material

Holotype, male: "Cameroon, SW Prov., Kumba env., Barombi Mbo, 4°38.53' N 9°24.51' E, 280 m, 8. Mar 2008, Bolm lgt." (UPOL); paratype, male, same data as for the holotype (UPOL); paratype, male, "Cameroon, Lolodorf, A. I. Good, Acc. 7789, June 1925" (CMNH); paratype, male, "Cameroon, SW Prov., Fako Dist., Bakingili 25 km W Limbe, VI. 11.–20. 1984, Coll. R. Davidson" (CMNH).

Diagnosis

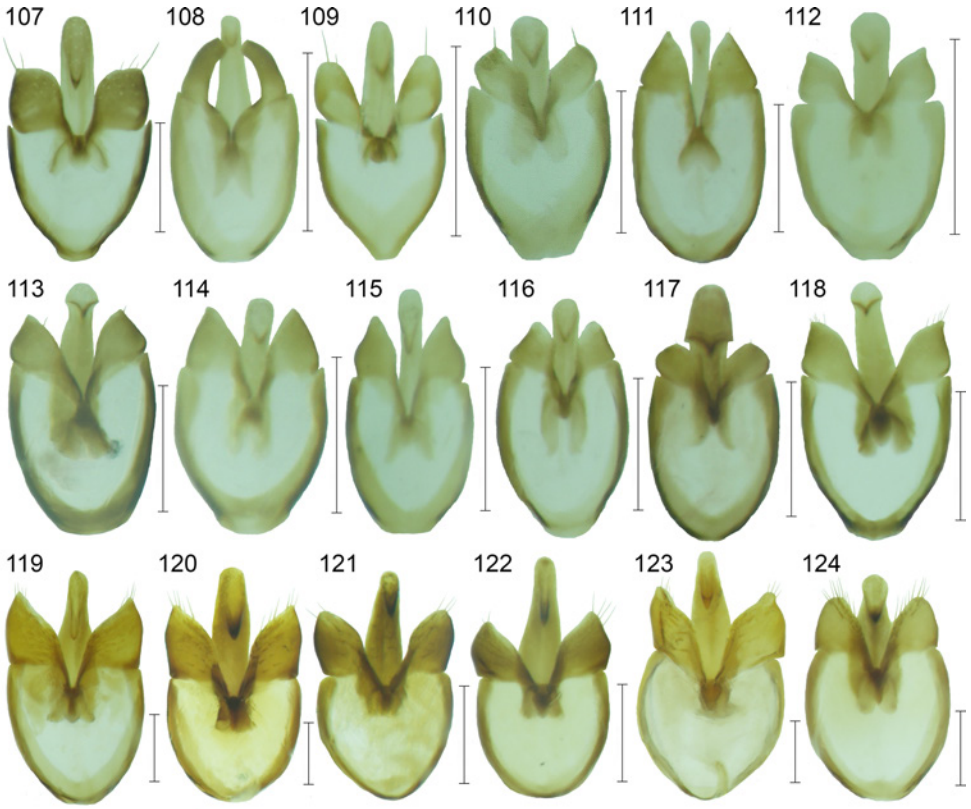
Latoselasia similis sp. n. is by general appearance and the light body coloration with yellowish to light brown pronotum similar to *Wittmerselasia camerooniana* sp. n., *W. davidsoni* sp. n. and *W. variabilis* sp. n. (Figs 13–14, 17–18). These species differ from *L. similis* sp. n. in the subgeneric characters (i.e., shape of labrum, maxillary palpi and genitalia; Figs 23–24, 82, 91, 119–124; see the subgeneric diagnoses above), and additionally, *W. camerooniana* sp. n. and *W. davidsoni* sp. n. have all antennal branches relatively shorter (Figs 101–102), and *W. variabilis* sp. n. has pronotum more transverse, with more distinctly produced posterior angles (Fig. 99), relatively longer branch of antennomere III, and all subsequent branches shorter (Fig. 105).

Description

Body 2.60 times longer than width at humeri. Body yellowish to brown, antennal branches dark brown, elytra either uniformly brown or yellowish to brown with lateral and apical parts dark brown (incl. holotype); body surface covered with yellowish pubescence (Fig. 18).

Head including eyes 0.80 times as wide as pronotum. Eyes large, their frontal distance 1.00 times eye diameter (Fig. 100). Antennae flabellate, with antennomere III more than 2.5 times longer than following antennomeres, its branch less than twice longer than stem; antennomeres V–X with branches about 12 times longer than their stems (Fig. 106).

Pronotum widest at posterior angles, 1.70 times wider than length at midline, with anterior and lateral margins slightly bent upwards, without sublateral carinae, with transverse carina near posterior margin (Fig. 100). Lateral carina separating pronotum



Figs 107–124. Male genitalia of Drilini in Cameroon. (107) *Flabelloselasia oculata* sp. n.; (108) *Kupeselasia minuta* sp. n.; (109) *Lolosia transversalis* sp. n.; (110) *Microselasia barombi* sp. n.; (111) *M. elongata* sp. n.; (112) *M. gracilis* sp. n.; (113) *M. grandis* sp. n.; (114) *M. kupensis* sp. n.; (115) *M. lolodorfensis* sp. n.; (116) *M. macrocephala* sp. n.; (117) *M. obscura* sp. n.; (118) *M. pseudograndis* sp. n.; (119) *Wittmerselasia camerooniana* sp. n.; (120) *W. davidsoni* sp. n.; (121) *W. geiseri* sp. n.; (122) *W. maculata* (Wittmer, 1989); (123) *W. variabilis* sp. n.; (124) *W.* (*Latoselasia*) *similis* sp. n. Scale bars = 0.2 mm.

from hypomeron distinct, almost reaching pronotal frontal margin. Elytra subparallel-sided, 0.70 times as long as body, 1.80–1.85 times as long as wide at humeri.

Abdominal terminal segments as in Figs 93–94. Male genitalia with median lobe shorter than phallobase; parameres elongate, setose, more or less rounded apically; phallobase slightly longer than wide, U-shaped (Fig. 124).

Intraspecific variability

The specimens from Kumba, which include the holotype, have relatively wider pronota than those from Limbe and Lolodorf (1.65–1.70 versus 1.55–1.60, respectively). Even within a single population we identified some variability in coloration when a specimen from Kumba has yellowish base and the middle part of elytra and the other specimens are completely brown. The paratype from Lolodorf (South Region)

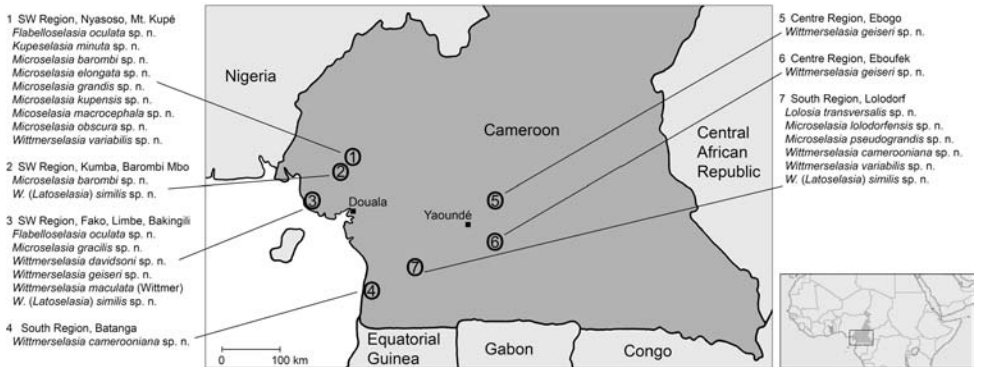


Fig. 125. The distribution of Drilini in Cameroon.

has uniformly brown elytra and scutellum, and distinct pronotal sublateral carinae on pronotum. The paratype from Limbe has slightly smaller eyes (Edist/Ediam ratio 1.05; 1.00 for the typical representatives). These subtle differences cannot be used for reliable definition of formal taxa and we prefer to merge all populations in a single species concept. Molecular data can potentially show the deeper divergence that morphology indicates as has been shown in other neotenic lineages of elateroid beetles (e.g., Bray & Bocak 2016).

Measurements

Holotype. BL 5.20 mm, WHum 2.00 mm, EL 3.60 mm, WHe 1.40 mm, PL 1.00 mm, PW 1.70 mm, Edist 0.55 mm, Ediam 0.55 mm. Paratypes. BL 4.80–5.30 mm, WHum 1.75–2.00 mm, EL 3.25–3.65 mm, WHe 1.20–1.30 mm, PL 0.85–1.00 mm, PW 1.45–1.55 mm, Edist 0.50–0.55 mm, Ediam 0.50–0.51 mm.

Distribution

Cameroon: Southwest Region, South Region (Fig. 125).

Etymology

The specific epithet refers to the external morphological similarity of this species to the representatives of the subgenus *Wittmerselasia* subgen. n. (Latin; similis = similar, resembling).

An identification key for the genera and species of Drilini in Cameroon (based on adult males)

1. Antennae strongly flabellate, antennomere III 2.5–3.5 times longer than antennomere IV, antennomeres IV–X subequal in length, not longer than wide (without branches); ultimate maxillary palpomere apically widened, never subacute or pointed..... 2

–. Antennae serrate, weakly or strongly flabellate, antennomere III 1.0–1.7 times as long as antennomere IV; antennomeres IV–X subequal in length or gradually shortened, longer than wide (without branches); ultimate maxillary palpomere apically subacute or pointed 8

2. Branches of antennomeres VI–X about 20 times longer than their stems (Fig. 28); pronotum with sublateral carina almost reaching anterior margin (Fig. 25); mandibles long, slender (Fig. 26); male genitalia with V-shaped phallobase and subrectangular parameres (Fig. 107) ..... (*Flabelloselasia* gen. n.) *F. oculata* sp. n.

–. Branches of antennomeres VI–X about 8–12 times longer than their stems (Figs 101–106); pronotum either without sublateral carina or with carina short, never reaching anterior half of pronotum (Figs 95–100); mandibles wider, robust (Figs 81, 89); male genitalia with U-shaped phallobase and parameres longer than wide (Figs 119–124)..... (*Wittmerselasia* gen. n.) 3

3. Apical maxillary palpomere less than twice as long as wide, apically cut, straight (Fig. 90); labrum sclerotized, subpentagonal, apically widely rounded; phallobase slightly longer than wide, median lobe shorter than phallobase, and parameres smaller, rounded apically (Fig. 124).....(*Latoselasia* subgen. n.) *L. similis* sp. n.

–. Apical maxillary palpomere about 2.5 times as long as wide, slightly constricted subapically, apically slightly rounded (Fig. 82); labrum transverse, large, only partly sclerotized; phallobase never longer than wide, median lobe longer than phallobase, and parameres larger, more or less pointed apically (Figs 119–123) ..... (*Wittmerselasia* subgen. n.) 4

4. Body including pronotum yellowish to light brown; mostly larger specimens (4.35–6.60 mm long) 5

–. Body brown to dark brown, pronotum reddish dark brown to dark brown; mostly smaller specimens (3.15–4.80 mm long) 7

5. Antennomere III with branch of about the same length as stem (Fig. 101)..... ..... *W. camerooniana* sp. n.

–. Antennomere III with branch distinctly longer than stem 6

6. Pronotum less transverse (1.60–1.65 times as wide as long), lateral margins almost straight, posterior angles short (Fig. 96); phallobase slightly wider than long; median lobe of male genitalia with robust long hook (Fig. 120)..... *W. davidsoni* sp. n.

–. Pronotum more transverse (1.75–1.80 times as wide as long), lateral margins sinuate, posterior angles prominent, produced postero-laterally (Fig. 99); phallobase about as long as wide; median lobe of male genitalia with short hook (Fig. 123).. ..... *W. variabilis* sp. n.

7. Pronotum with distinct sublateral carina (Fig. 97); branches of antennomeres V–X about 8 times longer than their stems (Fig. 103); median lobe of male genitalia with short hook; parameres slightly rounded apically (Fig. 121)..... *W. geiseri* sp. n.

–. Pronotum without sublateral carina (Fig. 98); branches of antennomeres V–X about 12 times longer than their stems (Fig. 104); median lobe of male genitalia with robust long hook; parameres subacute apically (Fig. 122)..... ..... *W. maculata* (Wittmer, 1989)

8. Frontal carina incomplete; fronto-clypeal region wide (Fig. 21); pronotum 1.85 times wider than long (Fig. 44); phallobase V-shaped (Fig. 109)..... ..... (*Lolosia* gen. n.) *L. transversalis* sp. n.
–. Frontal carina complete; fronto-clypeal region narrow (Figs 20, 22); pronotum 1.40–1.75 times wider than long (Figs 34, 62–70); phallobase U-shaped (Figs 108, 110–118)..... 9
9. Body 2.10 mm long; antennae strongly serrate (Fig. 37); mandibles more slender (Fig. 35); sternite IX not emarginate basally (Fig. 42); parameres distinctly elongate, slender (Fig. 108)..... (*Kupeselasia* gen. n.) *K. minuta* sp. n.
–. Body 2.30–3.60 mm long; antennae flabellate (Figs 71–79); mandibles more robust (Fig. 53); sternite IX emarginate basally (Figs 60–61); parameres not distinctly elongate (Figs 110–118).....(*Microselasia* gen. n.) 10
10. Head including eyes about same as or wider than maximal pronotal width; pronotum widest at anterior half..... 11
–. Head including eyes narrower than maximal pronotal width; pronotum widest at posterior angles..... 13
11. Pronotum more transverse, 1.65 times wider than long (Fig. 64); antennomere III about 1.7 times longer than antennomere IV (Fig. 73); phallobase about as long as wide (Fig. 112) ..... *M. gracilis* sp. n.
–. Pronotum less transverse, 1.40–1.45 times wider than long (Figs 68–69); antennomere III about 1.2–1.3 times longer than antennomere IV (Figs 77–78); phallobase 1.2–1.3 times longer than wide (Figs 116–117) 12
12. Body length 2.35–2.75 mm; branches of antennomeres VI–X about 6 times longer than their respective stems (Fig. 77); parameres subacute apically; subapical hook on median lobe slender, short (Fig. 116).....*M. macrocephala* sp. n.
–. Body length 3.10–3.50 mm; branches of antennomeres VI–X about 8 times longer than their respective stems (Fig. 78); parameres minute, almost rounded apically; subapical hook on median lobe robust, widened (Fig. 117)..... ..... *M. obscura* sp. n.
13. Eyes relatively larger (Edist/Ediam 1.10–1.20); pronotum more transverse, 1.65–1.75 times wider than long..... 14
–. Eyes medium-sized (Edist/Ediam 1.30–1.60); pronotum less transverse, 1.40–1.60 times wider than long..... 15
14. Body length 2.45 mm; antennae weakly flabellate (Fig. 75); pronotum 1.75 times wider than long, without distinct sublateral carina (Fig. 66); eyes relatively larger (Edist/Ediam 1.10); male genitalia 1.5 times as long as wide, median lobe slightly shorter than phallobase, with relatively longer subapical hook (Fig. 114)..... ..... *M. kupensis* sp. n.
–. Body length 2.95 mm; antennae strongly flabellate (Fig. 79); pronotum 1.65 times wider than long, with distinct sublateral carina almost reaching anterior margin (Fig. 70); eyes relatively smaller (Edist/Ediam 1.20); male genitalia 1.7 times as long as wide, median lobe longer than phallobase, with relatively shorter subapical hook (Fig. 118) ..... *M. pseudograndis* sp. n.

15. Antennae weakly flabellate, antennomere III slightly serrate, 1.0–1.1 times as long as antennomere IV, branches of antennomeres IV–X less than 4 times longer than stems of respective antennomeres, antennomere XI less than 4 times longer than penultimate antennomere; minimal frontal distance between eyes 1.40–1.60 times eye diameter; male genitalia relatively longer, 1.8 times longer than wide 16
–. Antennae strongly flabellate, antennomere III strongly serrate, 1.2–1.4 times as long as antennomere IV, branches of antennomeres IV–X about 8 times longer than stems of respective antennomeres, antennomere XI about 7 times longer than penultimate antennomere; minimal frontal distance between eyes 1.30–1.35 times eye diameter; male genitalia relatively shorter, 1.7 times longer than wide 17
16. Body length 3.10 mm; antennae only weakly flabellate, antennomeres III–VII subequal in length, branches of antennomeres IV–X less than 1.5 times longer than stems of respective antennomeres, antennomere XI less than twice longer than penultimate antennomere (Fig. 72); minimal frontal distance between eyes 1.40 times eye diameter; phallobase elongate, 1.3 times longer than wide, median lobe slightly shorter than phallobase, with subapical hook short (Fig. 111) ..... *M. elongata* sp. n.
–. Body length 2.60–2.75 mm; antennae more strongly flabellate, antennomeres III–VII gradually shortened, branches of antennomeres IV–X about 3–4 times longer than stems of respective antennomeres, antennomere XI more than 3 times longer than penultimate antennomere (Fig. 76); minimal frontal distance between eyes 1.50–1.60 times eye diameter; phallobase only slightly longer than wide, median lobe longer than phallobase, with subapical hook robust, long (Fig. 115) ..... *M. lolodorfensis* sp. n.
17. Head including eyes only slightly narrower than pronotum (Whe/PW 0.95); pronotum 1.50–1.55 times wider than long, with lateral sides distinctly sinuate, with posterior angles produced postero-laterally (Fig. 62); median lobe robust, short, shorter than phallobase, with apical hook robust, relatively longer (Fig. 110) ..... *M. barombi* sp. n.
–. Head including eyes distinctly narrower than pronotum (Whe/PW 0.85); pronotum 1.60 times wider than long, with lateral sides almost straight, with posterior angles only slightly produced posteriorly (Fig. 65); median lobe elongate, slender, about as long as phallobase, with apical hook short (Fig. 113).... ..... *M. grandis* sp. n.

Discussion

The tropical rain forests in the Gulf of Guinea are one of the biodiversity hotspots and host many endemic animal species (e.g., Stuart et al. 1990; Oates et al. 2004), including the neotenic elateroid beetles which are well known for their low dispersal propensity and the occurrence limited to the stable habitats, e.g., the Cameroonian

endemics in the net-winged beetles *Dexoris* Waterhouse and *Lolodorfus* Bocakova (Bocak & Bocakova 1990; Bocak et al. 2008, 2013; Bocakova 2014). The forest zone is limited to a few dozens of kilometres along the coast and is strongly affected by climatic fluctuation resulting in fragmentation during dry and cold periods, but even in the driest periods the refugia were available for animals with very low dispersal propensity like neotenic beetles. Two major Afrotropical forest ecoregions are represented in Cameroon. The western part of the country belongs to the coastal Lower Guinean forests and has been identified as the West African Forests biodiversity hotspot, while the region south of the Sanaga River belongs to the Congolian forests (Fjeldså & Lovett 1997; Myers 2000; Oates et al. 2004). The general stability of this area supports a high diversity of neotenic beetles which have very limited ranges and usually define regions with extreme phylogenetic diversity (Bocak et al. 2008).

The diversity of Drilini in the western and central Africa has never been systematically studied. Hitherto, only a few species have been reported from this area, from which only *Wittmerselasia maculata* was described from the Lower Guinean forests (Wittmer 1989). Our study is the first review of the Drilini fauna in Cameroonian rain forest zone which was possible when new highly diverse material from this region become available. We report 18 species from the whole region, eleven of them being endemic to the Southwest and four to the South Region. Only three species are known from large ranges. *Wittmerselasia variabilis* sp. n. and *W.* (*Latoselasia*) *similis* sp. n. are distributed across Southwest and South Regions, i.e., more than 200 km far from each other, and *W. geiseri* sp. n. occurs in localities in the Southwest and Central Regions, more than 300 km far from each other. Although Sanaga River serves as the natural barrier for many animal species (i.e., Mitchell et al. 2015), it seems that at least some Drilini species are distributed on both its banks. The geographic structure of populations and possibly the presence of partly isolated populations is suggested by a relatively high intraspecific morphological variability in *Wittmerselasia geiseri* sp. n. and *W.* (*Latoselasia*) *similis* sp. n. The limited ranges and a morphological divergence of populations and closely related species have been reported in other neotenic elateroid lineages such as Omalisidae (Bocak & Brlik 2008), Iberobaeniidae (Bocak et al. 2016), and Lycidae (Bray & Bocak 2016). The molecular data will be needed for validation of morphology-based delimitation of species, and we preferred the wider species concepts when morphology of geographically distant population is similar as in the cases of *Wittmerselasia geiseri* sp. n. and *W.* (*Latoselasia*) *similis* sp. n.

Besides high diversity in the whole area, we also found a high number of Drilini occurring sympatrically in a single locality. Nine species in four genera were recorded from Mt. Kupé, six species in three genera in the vicinity of Lolodorf and six species in three genera near Bakingili (Fig. 125). Similar high local diversity was reported for some Palaearctic Drilini and it was attributed to the prey specificity (Faucheux & Agnas 2011; Baalbergen et al. 2014, 2016; Kundrata et al. 2015a). Neither immature stages nor presumably larviform females of the Cameroonian Drilini were observed and we can only suppose the same biology and ecology as in other Drilini which are all predators of land snails (e.g., Barker 1969; Baalbergen et al. 2014; Kobieluszova & Kundrata 2015). De Winter & Gittenberger (1998) studied the diversity of the land

snails of a square kilometer plot in southern Cameroonian rainforest and identified 97 species, which has been the world's highest sympatric land snail diversity reported to date. Taking into consideration the enormous diversity of the prey in a single locality, the presence of several Drilini species in the same area is in agreement with previous observations. A plenitude of food, the presence of the long-term stable habitats (Fjeldså & Lovett 1997; Bocak et al. 2008) and the fact, that all 18 known Cameroonian species were collected only in a few localities, suggest probably the much higher real diversity of Drilini in this region than until now expected.

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