

## **Notes on the Genus *Somoplatus* Dejean, 1829 (Coleoptera: Carabidae), with Descriptions of Five New Species**

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## Notes on the genus *Somoplatus* Dejean, 1829 (Coleoptera: Carabidae), with descriptions of five new species

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### ABSTRACT

Five new *Somoplatus* species, *Somoplatus depilis* sp. n., *S. pilicollis* sp. n., *S. morettoii* sp. n., *S. ivoirensis* sp. n. and *S. genierorum* sp. n. from Ivory Coast and Burkina Faso are described and illustrated. *Paralophidius septentrionalis* (Burgeon, 1936) is reinstated in the genus *Somoplatus* Dejean, 1829, and the new synonymy *Paralophidius* Basilewsky, 1986 = *Somoplatus* Dejean, 1829 is proposed. All specimens from the Ivory Coast were collected in abandoned termite hills in savannah habitats. One specimen of *S. pilicollis* sp. n. and the specimens of *S. genierorum* sp. n. were collected using light traps and flight interception traps in Burkina Faso. Basilewsky's key of the genus *Somoplatus* Dejean (Basilewsky, 1986) is updated to include the new species.

**KEY WORDS:** Coleoptera, Carabidae, Lebiinae, Masoreina, *Somoplatus*, Afrotropical, Ivory Coast, Burkina Faso, taxonomy, new species, new synonymy.

### INTRODUCTION

Four new species belonging to the genus *Somoplatus* Dejean, 1829 were found among ground beetles collected in abandoned hills of cathedral termites in the northern parts of Ivory Coast by the entomologist and dung beetle specialist Philippe Moretto. One additional specimen of *S. pilicollis* sp. n. and a fifth new species, *S. genierorum* sp. n., were collected by François and Simon Génier in a wooded savannah habitat in Burkina Faso.

The genus *Somoplatus*, as revised by Basilewsky (1986), comprised eight African and one Indian species. Most collecting data of the genus indicate an association of the taxon with termite hills. However, Basilewsky reports finding some specimens in cave litter, suggesting that some species might not be strictly termitophile but rather saprophilous and hygrophilous.

In his revision Basilewsky (1986) separated a new genus, *Paralophidius*, which included the single species *P. septentrionalis*, originally described by Burgeon (1936) as *Somoplatus fusciceps* ssp. *septentrionalis*. Characters used to distinguish the new genus were the different proportions of antennomeres, the shape of the female's stylomere 2 and the shape of the elytral apex (Figs 5, 13, 27).

Some of the new species described below demonstrate intermediate configuration in characters of both the genera *Somoplatus* and *Paralophidius*, particularly in the proportions of the antennomeres. Stylomere 2, used by Basilewsky as an important generic character, proved to be unsuitable for separating the new genus *Paralophidius*: the number and position of the lateral setae is similar to *Somoplatus*, while the apical portion is more arcuate in *Paralophidius* and is proportionally shorter. Thus the genus *Paralophidius*, with the monotypic species *Paralophidius septentrionalis*, is herein regarded as a junior synonym of *Somoplatus*.

With the species described below, the number of species in the genus *Somoplatus* is now increased to 14.

## MATERIAL AND METHODS

Measurements were taken and drawings were produced using a camera lucida attached to a stereomicroscope. Length was measured from the apex of the clypeus to the apex of the elytra. Width was measured at the broadest part of the elytra. The length of the pronotum was measured along the midline, the width at the broadest part of the pronotum. The genitalia were set in a transparent medium according to Lompe (1986) for drawings, and were afterwards mounted on the paper card of the related specimen with cellulose glue.

The material is deposited in the following collections: FGC – François Génier collection, Gatineau, Canada; MNHN – Muséum National d'Histoire Naturelle, Paris, France; MRAC – Musée Royal d'Afrique Centrale, Tervuren, Belgium; PMC – Philippe Moretto collection, Lyon, France; PSC – P. Schüle collection, Herrenberg, Germany; SMNH – Stuttgart Museum of Natural History, Germany; TMSA – Transvaal Museum, Pretoria, South Africa.

## TAXONOMY

Key to genera close to *Somoplatus* (*Masoreina* partim: genera with mentum tooth present and prosternal apophyse bearing 4–12 long, distant setae)

- 1 (2) Lateral margin of pronotum with 6–10 stiff setae. Stylomere 2 basally very broad, with one spiniform seta on outer side. Surface of body glabrous ..... **Somoplatodes** Basilewsky
- 2 (1) Lateral margin of pronotum with 2 setae. Stylomere 2 basally narrow, with one spiniform seta on inner side or without seta. Surface of body setose or glabrous.
- 3 (4) Surface of body glabrous. Hind margin of elytra sinuous. Suture ending in sharp pointed spine. Tooth of mentum fairly short, tip rounded. Stylomere 2 without lateral setae, outer margin with angular extension ..... **Lophidius** Dejean
- 4 (3) Surface of body pubescent, partly pubescent or glabrous. Hind margin of elytra rounded, straight or slightly sinuous but without sutural spine. Stylomere 2 with 1 lateral seta on inner side ..... **Somoplatus** Dejean (incl. *Paralophidius* Basilewsky, syn. n.)

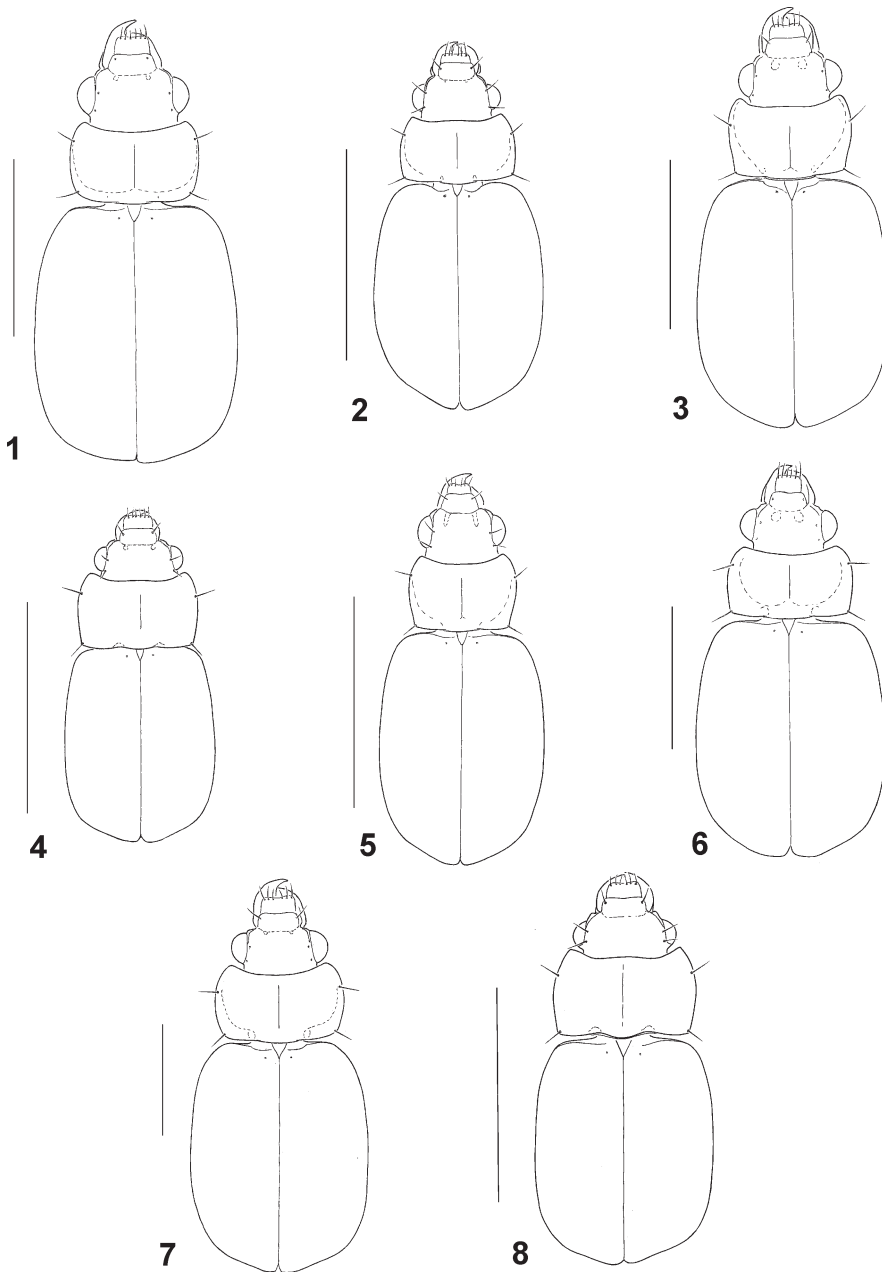
Genus *Somoplatus* Dejean, 1829

*Somoplatus*: Dejean 1829: 3, 15 (Type species: *Somoplatus substriatus* Dejean, 1829, by monotypy).

*Paralophidius*: Basilewsky 1986: 252. **Syn. n.**

The genus *Somoplatus* belongs to the tribe *Cyclosomini* Castelnau, 1834 and subtribe *Masoreina* Chaudoir, 1870. All known species are fairly small (2.9–8 mm), coloured reddish brown to yellowish.

Head with large protruding eyes, two supraorbital setae; labrum transversal, bearing six setae, apical margin straight or sinuous. Proportions of antennomeres vary within the genus: short (as long as wide) to long (2.5× longer than wide). Scape glabrous with one long and a few smaller subapical setae; antennomeres 2 and 3 glabrous except a few subapical setae; antennomeres 4–11 pubescent, more or less filiform with median glabrous, glossy band on inner and outer side. Mentum with distinct tooth, bisetose. Palpi glabrous, except penultimate palpomere of labial palpi with 2 subapical setae. Terminal palpomeres fusiform, outer margin slightly more curved than inner margin.



Figs 1–8. Habitus of *Somoplatus* spp.: (1) *S. depilis* sp. n., ♂ holotype; (2) *S. pilicollis* sp. n., ♀ paratype, Ivory Coast, Comoé National Park (PSC); (3) *S. morettoii* sp. n., ♂ holotype; (4) *S. fulvus* ♀, Ivory Coast, Comoé National Park (PSC); (5) *S. septentrionalis*, ♀, Ivory Coast, Comoé National Park (PSC); (6) *S. ivoirensis* sp. n., ♂ holotype; (7) *S. girardi*, ♂; (8) *S. genierorum* sp. n., ♂ holotype. Scale bars = 2 mm.

Pronotum short and wide, lateral impression inconsistent: missing, indistinct, visible in basal portions only or distinct and widened from apex to base. Lateral marginal furrow narrow; lateral margins rounded or slightly sinuate in basal half, bisetose; anterior marginal seta on anterior third, posterior marginal seta on basal angle; apex concave, apical angles protruding but rounded. Base undulate, with middle part slightly convex. Basal angles fairly distinct to completely rounded. Median line distinct. Surface of pronotum with fine microreticulation consisting of pattern of dense transversal meshes, glabrous, with extremely fine microsetae or with fine regularly seta-bearing punctation.

Elytra short and wide, oviform, subparallel-sided in the middle. Striae very shallow or absent, surface with traces of microsetae or fairly long pubescence. Microsculpture consisting of transversal, very narrow meshes. Apical truncation very indistinct: apical margin rounded to very indistinctly sinuate, sutural angle rounded. Umbilicate series of marginal setae consisting of 6 subhumeral, 3 intercalar, 4 subapical setae and one apical seta.

Lower surface finely pubescent or partly pubescent, pubescence short to fairly long. Prosternal process bearing long distant setae (4–12).

Legs short, outer margin of tibiae with a row of long, straight thorns. Hind tibiae with two thorns apically, inner thorn longer than half of first tarsomere. Upper side of tarsi glabrous or with sparse pubescence.

#### Key to species of the genus *Somoplatus*

- 1 (26) Surface of head plain or with macrosculpture of head shallow consisting of indistinct wrinkles on lateral portions of vertex. Frontal sulci indistinct, sub-circular or elongate, dimple-shaped.
- 2 (5) Dorsal surface of pronotum glabrous or with traces of extremely fine microsetae (readily obvious under 100× magnification). Elytra dorsally glabrous or with extremely fine microsetae and longer pubescence restricted to lateral portions.
- 3 (4) Body smaller (3.5–3.8 mm), hind angles of pronotum blunt but not rounded ..... **S. genierorum** sp. n.
- 4 (3) Body larger (4.5–5.1 mm), hind angles of pronotum rounded ..... **S. depilis** sp. n.
- 5 (2) Pronotal surface pubescent, pubescence composed of fairly long semidistant setae.
- 6 (7) Elytral surface glabrous except for extremely fine pubescence composed of microsetae, pronotal surface pubescent with pubescence composed of fairly long setae ..... **S. pilicollis** sp. n.
- 7 (6) Elytral surface with dense pubescence, pronotum pubescent or partly pubescent.
- 8 (19) Body smaller than 5.5 mm.
- 13 (14) Median portions of two basal tarsomeres of hind tarsi dorsally pubescent ..... **S. morettoii** sp. n.
- 14 (13) Tarsomeres of hind tarsi dorsally lacking pubescence except a few apical setae.
- 15 (16) Antennae moniliform (antennomeres max. 1.2× longer than wide), body small (2.9–4.0 mm) ..... **S. fulvus** Mulsant & Godart

- 16 (15) Antennomeres not moniliform, at least 1.5× longer than wide, body small to medium sized (4.0–5.1 mm).
- 17 (18) Stylomere 2 short, apically hook-like arcuate (Fig. 27), apex of aedeagus short ..... **S. septentrionalis** Burgeon
- 18 (17) Stylomere 2 long, regularly arcuate (Fig. 28), apex of aedeagus long (Fig. 21) ..... **S. ivoirensis** sp. n.
- 19 (8) Body longer than 6.0 mm.
- 20 (21) Antennae longer, 3 apical antennomeres projecting over the base of pronotum ..... **S. girardi** Basilewsky  
[Specimens from Ivory Coast with reduced macrosculpture of head consisting of indistinct, oblique wrinkles on anterior portions of head.]
- 21 (20) Antennae shorter, maximum 1 or 2 apical antennomeres projecting over base of pronotum.
- 22 (25) Body broader, less elongate. Pronotum proportionally wider (1.60–1.85× wider than long) with lateral margins convex, widest in the middle or in basal half, not sinuate towards blunt or rounded hind angles. Antennae longer, 1 or 2 apical antennomeres projecting over base of pronotum.
- 23 (24) Pronotum more transverse (1.65–1.85× wider than long), widest near base, base wider than apical margin. Elytra short, more convex, lateral margins arcuate (1.36–1.40× longer than wide). Apex of aedeagus straight .....  
..... **S. amplipollis** Basilewsky
- 24 (23) Pronotum less transverse (1.60–1.70× wider than long), widest in the middle, base not wider than apical margin. Elytra longer, lateral margins subparallel (1.50–1.63× longer than wide). Apex of aedeagus bent upwards .....  
..... **S. substriatus** (Dejean)
- 25 (22) Body narrower, more elongate. Pronotum proportionally narrower (1.42–1.47× wider than long). Lateral margins subparallel, not arcuate, not widened near the middle or in basal half, slightly sinuate towards rectangular hind angles. Antennae short, not reaching base of pronotum. Surface of pronotum glabrous .....  
..... **S. elongatus** Burgeon
- 26 (1) Macrosculpture of head surface in anterior portions consists of distinct wrinkles or carinae between frons and inner margins of eyes. Frontal sulci distinct as arcuate grooves.
- 27 (30) Position of lateral seta of stylomere 2 (terminal sclerite of the ovipositor) near middle.
- 28 (29) Antennae short, moniliform, maximum 2 apical antennomeres projecting over base of pronotum, central antennomeres slightly longer than wide. Pronotum more transverse (1.90–2.0× wider than long), lateral margins less regularly convex, pronotal base wider than apex. Surface of elytra glossy .....  
..... **S. brevicollis** (Dejean)
- 29 (28) Antennae longer, more filiform, nearly 3 apical antennomeres projecting over base of pronotum, central antennomeres distinctly longer than wide. Pronotum less transverse (1.80–1.90× wider than long), lateral margins regularly convex,

- pronotal base wider than apex. Surface of elytra dull .....  
 ..... **S. girardi** Basilewsky
- 30 (27) Position of lateral seta of stylomere 2 (terminal sclerite of the ovipositor) near base.
- 31 (32) Antennae longer, more filiform, 3 apical antennomeres projecting over base of pronotum. Pronotum more transverse ( $1.73\text{--}1.83\times$  wider than long). Elytra narrower and more elongated ( $1.28\text{--}1.36\times$  longer than wide), lateral margins subparallel ..... **S. simillimus** Basilewsky
- 32 (31) Antennae shorter, less filiform, less than 3 apical antennomeres projecting over base of pronotum. Pronotum less transverse ( $1.67\text{--}1.70\times$  wider than long). Elytra proportionally broader and more stout ( $1.22\text{--}1.27\times$  longer than wide), lateral margins more arcuate ..... **S. guineensis** Basilewsky

### **Somoplatus depilis** sp. n.

Figs 1, 9, 17, 24

Etymology: From Latin *depilis* (without hair, bald), referring to the glabrous body surface.

Diagnosis: *S. depilis* is the only species of the genus presenting a completely glabrous body surface except for extremely fine microsetae.

Description:

*Measurements* ( $n = 16\sigma/\varphi$ ): Length 4.5–5.1 mm, width 2.3–2.6 mm, width/length of pronotum 1.69–1.81.

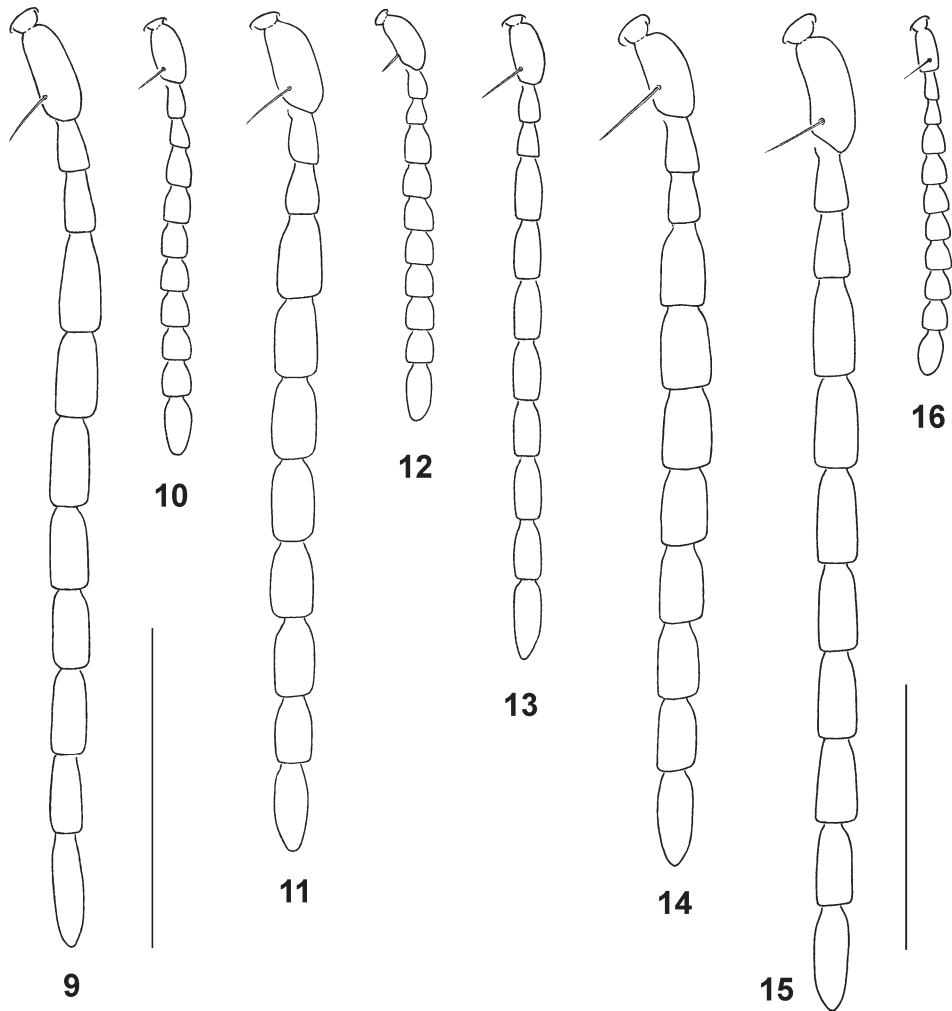
*Colour*: Uniform light reddish brown. Elytral surface dull.

*Head*: Wide, with large, protruding eyes; surface almost plain, frontal sulci shallow, subcircular, dimple-like. Surface of head with superficial fine microreticulation consisting of dense meshes and traces of highly superficial punctation. Meshes isodiametric in central portions of vertex, longitudinal and narrow along lateral portions near inner margin of eyes. Antennae long, antennomeres more than  $2\times$  longer than wide (Fig. 9).

*Pronotum*: Short and wide, base as wide as apex; lateral margin convex in apical half, slightly more curved, widest in front of the middle; apical angles protruding, rounded off; apical margin concave; basal angles completely rounded off; base undulate, middle of base convex. Surface of pronotum with fine microreticulation of dense transversal meshes, and with very fine regularly sparse punctation. Punctation microsetose. Base and lateral apex indistinctly margined, base more distinctly margined. Marginal impression distinct, narrow near apical angle, broadly widened to the basal angles. Near basal outer margin a very small, shallow comma-shaped basal impression on either side. Middle of base slightly concave. Hind margin glabrous.

*Elytra*: Short and wide, gently widened to the apical third, laterally subparallel. Humeri widely rounded, basal margin indistinct, almost reaching scutellum. Apical truncature indistinct, apex obliquely rounded, outer angles widely rounded off. Surface of elytra glabrous, with fine microreticulation consisting of dense transversal. Fully winged.

*Median lobe of aedeagus*: Median portion subparallel, tapering to apex, simply curved, apex ending in a short simply rounded tip, orifice large on central-left side of apical



Figs 9–16. Antennae of *Somoplatus* spp.: (9) *S. depilis* sp. n., ♂ holotype; (10) *S. pilicollis* sp. n., ♀ paratype, Ivory Coast, Comoé National Park (PSC); (11) *S. morettoii* sp. n., ♂ holotype; (12) *S. fulvus*, ♀, Ivory Coast, Comoé National Park (PSC); (13) *S. septentrionalis*, ♀, Ivory Coast, Comoé National Park (PSC); (14) *S. ivoirensis* sp. n., ♂ holotype; (15) *S. girardi*, ♂; (16) *S. genierorum* sp. n., ♂ holotype. Scale bars = 1 mm.

fourth (Fig. 17), inner sac with a ring of 20–25 thorns in apical third, partly with microserrulation and folds in relaxed position.

*Stylomere 2*: Elongate, curved, outer margin with one long nematiform seta on inner margin, which is bent near the middle; one small seta on outer margin near apical fourth (Fig. 24).

*Lower surface*: Glabrous, except for abdominal sternites with microsetae. Prosternal apophyse with 8–10 distant setae.

*Legs*: As in generic diagnosis.



Holotype: ♂ 'IVORY COAST, NE, Comoé National Park, v. 2000, Philippe Moretto leg., inside termite hill' (PSC).

Paratypes: 5♂ 10♀ same data as holotype (PSC, PMC, TMSA, MRAC); 1♂ 4♀ 'IVORY COAST, NE, Comoé National Park, ix. 1998, Philippe Moretto leg., inside termite hill' (PSC).

### **Somoplatus pilicollis** sp. n.

Figs 2, 10, 18, 25

**Etymology:** From Latin *pilus* (a hair) and *collum* (the neck), referring to the pubescent pronotum.

**Diagnosis:** The only species of the genus with pubescent pronotum and glabrous elytra with extremely fine microsetae.

**Description:**

**Measurements** (n = 9; 3♂ 6♀): Length 3.10–3.55 mm, width 1.60–1.80 mm, width/length of pronotum 1.74–1.82.

**Colour:** Uniform light reddish brown, pubescence yellowish. Elytral surface dull.

**Head:** Wide, with large, nearly hemispherical eyes; surface plain, frontal sulci missing. Surface with superficial fine microreticulation of dense meshes and very fine sparse punctation. Meshes isodiametric in central portions of vertex, elongate and narrow along lateral portions near inner margin of eyes. Antennae short, antennomeres approximately 1.2× longer than wide (Fig. 10).

**Pronotum:** Short and wide, basally wider than apically, widest near middle; lateral margin regularly convex; apical angles slightly protruding, fairly distinct; apical margin concave; basal angles blunt. Surface of pronotum with fine microreticulation of dense transversal meshes and with very fine sparse setae-bearing punctation. Base, lateral margins and apex margined. Marginal impression shallow, narrow near apical angle, broadly widened to basal angles. Hind margin glabrous. Near basal outer margin a small basal impression on either side. Base undulate, middle of base slightly convex.

**Elytra:** Short and wide, gently widened to the apical third, laterally subparallel. Humeri widely rounded, basal margin indistinct, almost reaching scutellum. Apical truncature indistinct, apex oblique very gently sinuated, outer angles widely rounded off. Surface glabrous with highly superficial microreticulation, much finer than pronotal microreticulation, consisting of dense transverse meshes.

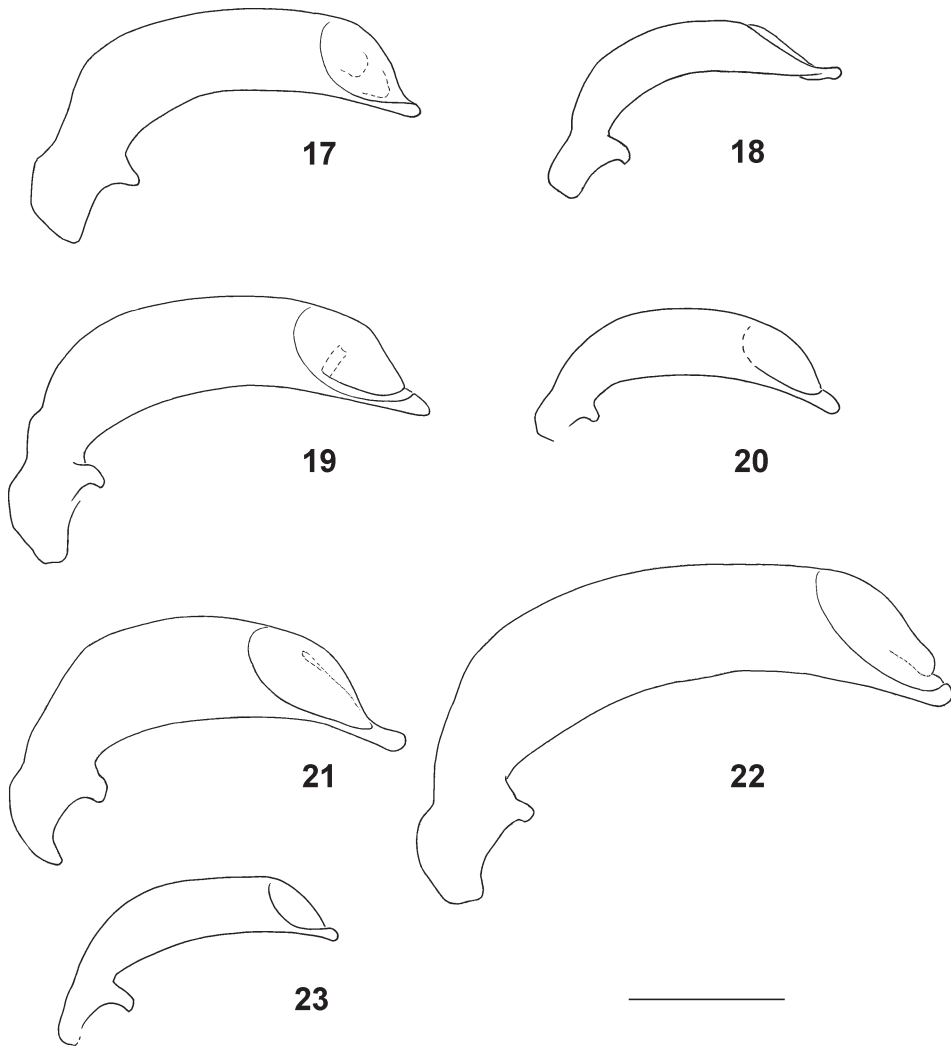
**Median lobe of aedeagus:** Median portion subparallel, tapering to apex, simply curved, apex ending in a long acuminate tip. Apex with keel-like extension on lower side, outer tip rounded; orifice large on dorsal side (Fig. 18), inner sac without rectangular sclerotised elements.

**Stylomere 2:** Elongate but short, outer margin almost straight in middle portions, inner side with triangular extension bearing one foliform, apically acuminate seta, without subapical seta on outer margin (Fig. 25).

**Lower surface:** Very finely pubescent. Prosternal apophyse with 4 distant setae.

**Legs:** As in generic diagnosis.

Holotype: ♂ 'IVORY COAST, NE, Comoé National Park, v. 2000, Philippe Moretto leg., inside termite hill' (PSC).



Figs 17–23. Aedeagi of *Somoplatus* spp.: (17) *S. depilis* sp. n., holotype; (18) *S. pilicollis* sp. n., holotype; (19) *S. morettoii* sp. n., holotype; (20) *S. fulvus* (after Basilewsky 1986); (21) *S. ivoirensis* sp. n., holotype; (22) *S. girardi*, Ivory Coast, Comoé National Park (MRAC); (23) *S. genierorum* sp. n., holotype. Scale bar = 0.5 mm.

Paratypes: 1♂ 6♀ same data as holotype (PSC, MRAC, TMSA); 1♂ 'BURKINA FASO: NAHOURI, Forêt de Nazinga, Akwazena, 275 m, 11°09'24"N:1°36'44"E, 26.vii.2006, zone soudanienne savane boisée, piège lumineux, F. & S. Génier, 2006-76' (FGC).

### ***Somoplatus morettoii* sp. n.**

Figs 3, 11, 19

**Etymology:** Dedicated to Philippe Moretto, French specialist in African Scarabaeidae and collector of the holotype.

**Diagnosis:** Distinguished by the presence of dorsal pubescence on basal tarsomeres of hind tarsi, which is unique within the genus.

**Description:**

**Measurements:** Length 4.0 mm, width 2.3 mm, width/length of pronotum 1.69.

**Colour:** Uniform light reddish brown.

**Head:** Wide, with large, protruding eyes; surface almost plain, frontal sulci shallow, subcircular, dimple-like. Vertex laterally along inner margin of eyes with some weak furrows. Surface of head with superficial fine microreticulation consisting of dense meshes and highly superficial punctation. Meshes isodiametric in central portions of vertex, longitudinal and narrow along lateral portions near inner margin of eyes. Antennae long, antennomeres approximately 2× longer than wide (Fig. 11).

**Pronotum:** Short and wide, base slightly wider than apex; lateral margin convex in apical half, slightly sinuate in basal portions, widest in front of the middle; apical angles protruding, rounded off; apical margin concave; basal angles distinct but blunt; base undulate, middle of base convex. Surface of pronotum with fine microreticulation consisting of dense transversal meshes, with distinct, fine regularly seta-bearing punctation. Base and apex on lateral portions indistinctly margined. Margin in middle portions of apex and base broadened. Marginal impression distinct, narrow near apical angle, broadly widened to the basal angles, ending in fairly deep dimple-like, basal impression which is situated near hind margin. Hind margin glabrous.

**Elytra:** Short and wide, gently widened to the apical third, laterally subparallel. Humeri widely rounded, basal margin indistinct, almost reaching scutellum. Apical truncature indistinct, apex oblique very gently sinuated, outer angles widely rounded off. Pubescence semidistant, long. Surface of elytra with fine microreticulation consisting of dense transversal meshes with distinct, fine, regularly seta-bearing punctation. Fully winged.

**Median lobe of aedeagus:** Median portion subparallel, tapering to apex, simply curved, apex ending in fairly long acuminate tip, orifice large on central-left side of apical fourth, inner sac with rectangular sclerotised element in orifice, partly with microserrulation and folds in relaxed position (Fig. 19).

**Lower surface:** Finely pubescent, pubescence fairly long. Prosternal process with 4 long distant setae.

**Legs:** As in generic diagnosis, hind tarsi with sparse pubescence on upper side.

**Holotype:** ♂ 'IVORY COAST, NE, Comoé National Park, v. 2000, Philippe Moretto leg., inside termite hill' (PSC).

### *Somoplatus fulvus* Mulsant & Godart, 1867

Figs 4, 12, 20, 26

*Somoplatus fulvus*: Mulsant & Godart 1867: 411; Gangelbauer 1892: 396; Burgeon 1936: 307; Jeannel 1942: 1016; Basilevsky 1953: 1032; 1967: 1749; 1969: 342; 1984: 32; 1986: 245. (Type possibly lost.)

*Somoplatus marseuli* Chaudoir, 1876: 7 (type in MNHN). Synonymy established by Gangelbauer (1892).

New country records: 3 ♀ 'IVORY COAST, NE, Comoé National Park, v. 2000, Philippe Moretto leg., inside termite hill' (PSC); 2 ♀ 'MALAWI centr., Luwawa (30 km S Mzimba), 30.-31.xii.2001, J. Bezdek leg' (SMNH, PSC); 1 ♂ 1 ♀ 'BURKINA FASO: NAHOURI, Forêt de Nazinga, Akwazena, 275m, 11°09'24"N: 1°36'44"E, 26.vii.2006, zone soudanienne savane boisée, piège lumineux, F. & S. Génier, 2006-76' (FGC);

1♂ SOUTH AFRICA: 'RSA: Northern Province [= Limpopo], Thabaphaswa Farm, 1400 m N, Potgietersrus, 13.-14.xii.2003, leg. W. Schawaller' (SMNH).

Distribution: West, Central and South Africa.

***Somoplatus ivoirensis* sp. n.**

Figs 6, 14, 21, 28

Etymology: From Côte d'Ivoire [= Ivory Coast].

Diagnosis: *S. ivoirensis* is distinguished within the genus *Somoplatus* by the absence of wrinkles or carinae on lateral portions of vertex, fairly long antennae, transverse pronotum and small body size. The marginal impression of pronotum is conspicuously broad. From the closely related *S. septentrionalis* Burgeon, 1936 the new species differs by the shape of the aedeagus (Fig. 21) and stylomere 2 (Fig. 28).

Description:

*Measurements* (n = 2; 1♂ 1♀): Length 5.0–5.1 mm, width 2.6–2.7 mm, width/length of pronotum 1.86–1.96.

*Colour*: Uniform light reddish brown except head dark reddish brown to piceous, pubescence yellowish.

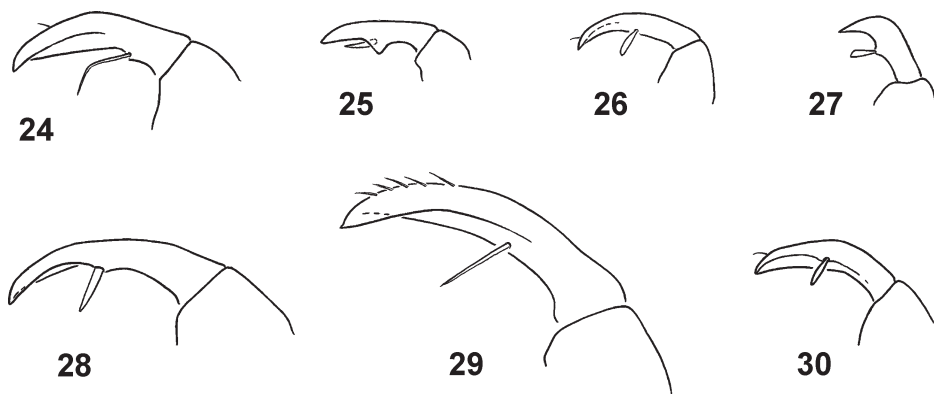
*Head*: Wide, with large, nearly hemispheric eyes; surface almost plain, frontal sulci shallow, subcircular, dimple-like. Surface with superficial fine microreticulation consisting of dense meshes, superficial fine sparse punctation and irregular wrinkles. Meshes isodiametric in central portions of vertex, longitudinal and narrow along lateral portions near inner margin of eyes. Antennae fairly long, antennomeres approx. 1.5× longer than wide (Fig. 14).

*Pronotum*: Short and wide, basally slightly wider than apically, widest in front of the middle; lateral margin convex, in apical half slightly more curved; apical angles slightly protruding, rounded off; apical margin concave; basal angles blunt. Surface of pronotum with fine microreticulation consisting of dense transversal meshes, which are twice as wide as long, and distinct, fine regularly seta-bearing sparse punctation. Distance between punctures twice as wide as distance between punctures on elytra. Base and lateral apex indistinctly margined, base more distinctly margined. Hind margin bearing long pubescence. Marginal impression distinct, broad near apical angle, broadly widened to the hind angles. Near basal outer margin a shallow dimple-like basal impression on either side. Base undulate, middle of base slightly convex. Pubescence distant, long.

*Elytra*: Short and wide, gently widened to the apical third, laterally subparallel. Humeri widely rounded, basal margin indistinct, almost reaching scutellum. Apical truncature indistinct, apex obliquely rounded, outer angles widely rounded off. Surface with fine microreticulation consisting of dense transversal meshes with distinct, fine regularly seta-bearing punctation. Pubescence distant, long. Fully winged.

*Median lobe of aedeagus*: Median portion subparallel, tapering to apex, simply curved, apex ending in a long simply rounded tip, orifice large on central-left side of apical third, no well defined inner sclerites visible, inner sac partly with microserrulation and folds in relaxed position (Fig. 21).

*Stylomere 2*: Elongate, regularly curved, with one long straight, acute, ensiform seta on inner side, no seta on outer margin (Fig. 28).



Figs 24–30. Stylomere 2 of *Somoplatus* spp. ♀: (24) *S. depilis* sp. n., paratype, Ivory Coast, Comoé National Park (PSC); (25) *S. pilicollis* sp. n., paratype, Ivory Coast, Comoé National Park (PSC); (26) *S. fulvus*, Ivory Coast, Comoé National Park (PSC); (27) *S. septentrionalis*, Ivory Coast, Comoé National Park (PSC); (28) *S. ivoirensis* sp. n., paratype; (29) *S. girardi*, Ivory Coast, Comoé National Park (PSC); (30) *S. genierorum* sp. n., paratype, Burkina Faso, Forêt de Nazinga. Scale bar = 0.5 mm in Figs 24, 25, 28–30; 2 mm in Figs 26, 27.

**Lower surface:** Finely pubescent, pubescence fairly long. Prosternal apophyse with no distant setae but at least 4 insertion pores visible; so it is probable that the setae are broken off in both specimens.

**Legs:** As in generic diagnosis.

**Holotype:** ♂ 'IVORY COAST, NE, Comoé National Park, v. 2000, Philippe Moretto leg., inside termite hill' (PSC).

**Paratype:** 1 ♀ same data as holotype (PSC).

### *Somoplatus girardi* Basilewsky, 1986

Figs 7, 15, 22, 29

*Somoplatus girardi*: Basilewsky 1986: 243.

New country record: 1♂ 2♀ 'IVORY COAST, NE, Comoé National Park, v. 2000, Philippe Moretto leg., inside termite hill' (PSC).

**Distribution:** Guinée, Mt Nimba; Ivory Coast; Nigeria, Zaria; Democratic Republic of Congo, Garamba National Park.

**Remarks:** The specimens from Ivory Coast have been compared to two specimens of the type series from Nigeria and the Democratic Republic of Congo. The median lobe of the aedeagus with the characteristic tongue-shaped extension covering the apical orifice and the shape of stylomere 2 of the female ovipositor were found to be similar. The only difference is in the macrosculpture of the head surface: the wrinkles between frons and orbital plates are shallow, subcircular, dimple-like in the specimens from Ivory Coast instead of deep and arcuate in the type specimens.

### *Somoplatus genierorum* sp. n.

Figs 8, 16, 23, 30

**Etymology:** Dedicated to Francois Génier and his son Simon, Canadian specialists in Scarabaeidae and collectors of the type series of this species.

**Diagnosis:** A small species closely related to *S. fulvus*, but distinguished by its glabrous pronotum and the missing long setae on dorsal portions of the elytra.

**Description:**

**Measurements** (n = 5; 2♂ 3♀): Length 3.5–3.8 mm, width 1.7–1.9 mm, width/length of pronotum 1.82–1.90.

**Colour:** Uniform light reddish brown, microsetae pale yellowish. Elytral surface dull.

**Head:** Wide, with large, hemispheric eyes; surface plain, frontal sulci missing. Surface of head with superficial fine microreticulation consisting of dense meshes and very fine sparse punctation. Microsculpture isodiametric in central portions of vertex, elongate and narrow along lateral portions near inner margin of eyes. Antennae short, central antennomeres approximately as long as wide (Fig. 16).

**Pronotum:** Short and wide, basally wider than apically, widest near the middle; lateral margin regularly convex; apical angles protruding, fairly distinct; apical margin concave; basal angles blunt. Surface of pronotum with fine microreticulation consisting of dense transversal meshes and extremely fine sparse punctation, glabrous. Base, lateral margins and apex finely marginate, with faint lateromarginal impression in basal portions. Hind margin glabrous. Near basal outer margin a small basal impression on either side. Base distinctly undulate, middle of basal margin distinctly convex.

**Elytra:** Short and wide, gently widened to the apical third, laterally subparallel. Without striae. Humeri widely rounded, basal margin indistinct, almost reaching scutellum. Apical truncature indistinct, apex oblique very gently sinuated, outer angles widely rounded off. Dorsal surface with extremely fine punctation and traces of microsetae, laterally and apically with sparse pelage of very fine setae; microsculpture consisting of highly superficial transversal microreticulation.

**Median lobe of aedeagus:** Median portion subparallel, tapering to apex, simply curved, a short simply rounded tip, orifice large on central-left side of apex (Fig. 23).

**Stylomere 2:** Elongate, regularly curved, inner side with one foliform, apically acuminate seta, with subapical seta on outer margin (Fig. 30).

**Lower surface:** Very finely pubescent. Prosternal apophyse with 6 distant setae.

**Legs:** As in generic diagnosis.

**Holotype:** ♂ 'Burkina Faso, Nahouri, Forêt de Nazinga, Akwazena, 275m, 11°09'24"N:1°36'44"E, 21.vii.2006, zone soudanienne, savane boisée, piège lumineux, F. & S. Génier, 2006-53' (FGC).

**Paratypes:** 1♂ 2♀ same data as holotype (FGC, PSC); 1♀ 'Burkina Faso, Nahouri, Forêt de Nazinga, Barka, 265m, 11°08'30"N:1°36'35"E, 25.vii.2006, zone soudanienne, savane boisée, piège malaise, F. & S. Génier, 2006-71' (FGC).

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