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New taxa and new records of Oemini Lacordaire, 1868 and Ectenessini Martins, 1998 from French Guiana (Coleoptera, Cerambycidae, Cerambycinae)

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Abstract. Four new species and one new genus of Cerambycinae are described from French Guiana: Sphagoeme premarginata sp. nov. and Atenizus apicalis sp. nov. (Oemini); Paraniophis signatipes gen. nov., sp. nov., and Niophis brusteli sp. nov. (Ectenessini). Three new country records for French Guiana are provided: Sphagoeme paraensis Martins, 1977, Atenizus simplex Bates, 1884, and Macroeme vittipennis (Melzer, 1934). All taxa are illustrated.

Résumé. Quatre nouvelles espèces et un nouveau genre de Cerambycinae sont décrits de Guyane: *Sphagoeme premarginata* sp. nov. et *Atenizus apicalis* sp. nov. (Oemini); *Paraniophis signatipes* gen. nov., sp. nov. et *Niophis brusteli* sp. nov. (Ectenessini). Trois nouvelles signalisations pour le département sont présentées: *Sphagoeme paraensis* Martins, 1977, *Atenizus simplex* Bates, 1884 et *Macroeme vittipennis* (Melzer, 1934). Tous ces taxons sont illustrés.

Key words: distribution records, longhorn beetles, Oemina, taxonomy.

Introduction

Specimens of Oemini Lacordaire, 1868 and Ectenessini Martins, 1998 were studied together because they were mixed in our collections as well as in the IRD collection. Despite similarities between the two tribes, they have not been compared to each other by Martins (1998). After recent papers on Ectenessini (Dalens and Touroult 2011; Dalens and Giuglaris 2012) and Oemini (Touroult et al. 2010), this work is a new step towards the faunistic and taxonomic review of these tribes in French Guiana.

Material and Methods

Many recently collected specimens from French Guiana have been studied, which are deposited in public institutions and in numerous private collections in French Guiana and France. Material studied is deposited in the following collections:

FRC	Frédéric Robin private Collection, Matoury, French Guiana
IRD	Institut pour la Recherche et le Développement, Marseille, France
JLGC	Jean-Louis Giuglaris private Collection, Matoury, French Guiana
JTC	Julien Touroult private Collection, Soyaux, France
MNHN	Muséum National d'Histoire Naturelle, Paris, France
PHDC	Pierre-Henri Dalens private Collection, Rémire-Montjoly, French Guiana
TRC	Thibaut Rosant private Collection, Saint-Jean, French Guiana

Other acronyms, abbreviations and symbols used in the text are as follows:

FIT	Flight Interception Trap
pk	kilometric point, as used on the roads and tracks of French Guiana
SEAG	Société entomologique Antilles Guyane, Rémire-Montjoly, French Guiana
®	Registered trademark

The specimens of the two tribes were collected by various field methods: emergence chambers filled with dead pieces of wood, light traps, and interception traps like artificial spider web (Cryldé®) and window traps (FIT).

Some new kinds of light traps were particularly efficient for some of the new species, seldom seen otherwise. Those traps are automatic light traps using low intensity light of unusual spectrums powered by car batteries (Gemlight® with one UV LED and one green LED, lamp fixtures Lumivie® with blue LED 20000K) or sun light (Swing® bollards). Those light sources were fixed on Polytrap® frames to collect automatically samples in conservative solution. Energy sources (car batteries) and conservative solution were changed every week.

New records for French Guiana are based on the known distribution as given by the global species database Titan (Tavakilian and Chevillotte 2013) and by Bezark (2013).

Distribution maps of the species in French Guiana are provided for species with more than three collecting sites. For these distribution maps, we used broad landscapes ecozones as defined by Guitet et al. (2013). Histograms of seasonal occurrence are provided for species with more than five data points. They are slightly biased by the increased collecting effort made during the month of August, which is both a well-known productive period for collecting, and the main holiday season in France. However this bias is minimal with these species because they were mostly collected with sets of trap that ran all year long with the same sampling intensity.

Oemini Lacordaire, 1868

Sphagoeme premarginata sp. nov.

(Figures 1-2)

Type material. Holotype female, French Guiana: Piste de Kaw pk 38 (n°1430 from IRD collection; light trapping), 20.VIII.1995, E. Giesbert leg. (MNHN). Allotype male, French Guiana: **Saül** (Montagne Pelée; light trap), 09.IX.2010, SEAG *leg.* (PHDC). Paratypes- French Guiana: **Roura** (Montagne des Chevaux; Lumivie®), male, 10.VIII.2013, SEAG *leg.* (PHDC); (Lumivie®), male, 24.VIII.2013, SEAG *leg.* (PHDC); (automatic solar trap), female, 07.IX.2013, SEAG *leg.* (PHDC).

Diagnosis. This new species belongs to the group I (*sahlbergi*) according to Martins' key (1997). It can be distinguished by the "U" shape elytral pattern, and the well-marked median lateral tubercle of the pronotum, without lateral tubercle at anterior part.

Description. Female (Fig. 1). General aspect testaceous with brown parts: palpi, apex of mandibles, most part of antennomeres II-IV, IX-XI, apex of VIII, "U" shaped mark and apex of elytra, apical quarter of femora and apical part of each tarsomere.

Head nearly glabrous, with few setae on anterior part of frons; integument microsculptured with sparse punctures; maxillary palpi slightly longer than labial ones; labium short; clypeus transverse; submentum with sparse setae; gula smooth; frons depressed and transverse, with frontoclypeal suture straight, frontal suture deep, coronal suture visible towards upper interocular space; antennal tubercles barely prominent; upper ocular lobes with 4 rows of ommatidia; dorsal interocular space about 3.5 times wider than one upper lobe; antennae surpassing elytral apex at antennomere VIII, with sparse setae on inner side, more abundant on antennomeres III to V; scape subcylindrical, slightly enlarged on dorsal side, with sparse punctures; antennomeres with shallower punctuation than scape. Antennal formula reported to scape: I=1.0; II=0.3; III=1.9; IV=1.9; V=2,0; VI=1.8; VII=1.8; VIII=1.5; IX=1.5; X=1.4; XI=1.4.

Prothorax subquadrate, with distinct lateral tubercle at middle. Pronotum microscultured; disc with four weak gibbosities, sparse punctures, nearly glabrous. Prosternal process narrow, ending at level of posterior margin of procoxae.

Scutellum subquadrate with rounded apex. Elytra elongate, 2.8 times longer than humeral width; sides subparallel, narrowing at apex; apex broadly rounded; integument microsculptured among larger punctures, denser on disc; five longitudinal rows of long erect setae extending from large punctures, converging towards apex. Mesosternal process broad, wider than half of mesocoxa, notched at apex. Metasternum with long golden setae; metasternal suture totally visible. Ventrites with double golden setation: one long, sparse, and another shorter, dense recumbent; first ventrite triangular between metacoxae.

Legs long and slender; femora barely flattened, fusiform, prolegs nearly glabrous, mesolegs with few golden semi-erect setae and metalegs with more setae; tibiae straight, increasingly setose towards apex; metatarsomere I equal to II and II together.

Male (Fig. 2). Aspect more slender; antennae longer: antennomere VII surpassing elytral apex. Antennal formula reported to scape: I=1.0; II=0.2; III=1.7; IV=1.7; V=1.7; VI=1.6; VII=1.5; VIII=1.4; IX=1.3; X=1.3; XI=1.5. Anterior area of prosternum with dimorphic sexual punctation, not reaching anterior margin and laterally developed to first third. Forelegs elongate.



Figures 1–7. Habitus of Oemini species from French Guiana. 1) Sphagoeme premarginata sp. nov., female holotype (IRD/MNHN). 2) Sphagoeme premarginata sp. nov., male, allotype (PHDC). 3) Sphagoeme paraensis Martins, 1977, female. 4) Atenizus apicalis sp. nov., male paratype. 5) Atenizus apicalis sp. nov., female paratype. 6) Atenizus simplex Bates, 1884, male. 7) Atenizus simplex Bates, 1884, female.

Dimensions. In mm (male/female): total length, 8.8/9.2, humeral width, 2.0/2.2

Etymology. Allusive to the elytral pattern, with the "U" shaped black mark parallel to margins.

Sphagoeme paraensis Martins, 1977

(Figure 3)

Material examined. French Guiana, **Saint-Laurent du Maroni**, route d'Apatou pk 25.5+2+4.5, female, 1.XI.2011, light trap, Thibaut Rosant *leg.* (TRC); **Kourou**, Montagne des Singes, pk 2, female, 15.VII.1990, cryldé®, Michel Duranton *leg.* (IRD); **Maripasoula**, New St-Laurent, light trap, 26.X.2010, Pierre-Henri Dalens *leg.* (PHDC). New country record.

Remarks. This species is rare but widespread in French Guiana (Map 1); it has been collected only during the dry season from July to November.

Atenizus apicalis sp. nov.

(Figures 4–5)

Type material. Holotype male, French Guiana, **Rémire-Montjoly**, Cabassou (n°358 IRD collection, light trap), XI.1978, Nicolas Degallier leg. (MNHN). Paratypes (33) - all material obtained with emergence chambers otherwise stated: French Guiana, Saint-Laurent-du-Maroni (Crique Margot), male, 10.II.2007, Pierre-Henri Dalens leg. (PHDC); (Espérance, light trap), male, IX.2008, Thibaut Rosant leg. (TRC); Macouria, (Matiti ZA Wayabo), female, 20.XII.2007, Jean-Louis Giuglaris leg. (JLGC); 2 males, 23.XII.2007, Jean-Louis Giuglaris leg. (JLGC); 2 females, 9.I.2008, Jean-Louis Giuglaris leg. (JLGC); 2 males, 3 females, 10.I.2008, Jean-Louis Giuglaris leg. (JLGC); Montsinéry, (Galion, RD06, pk 3), male, 08.II.2010, SEAG leg. (PHDC); Roura (Montagne des Chevaux), female, 28.III.2008, SEAG leg. (PHDC); (FIT), female, 31.V.2009, SEAG leg. (PHDC); (Gemlight®), female, 11.II.2013, SEAG leg. (PHDC); female, 6.IV.2013, SEAG leg. (PHDC); (Gemlight®), female, 22-V-2013, SEAG leg. (JTC); (Lumivie®), female, 10.VIII.2013, SEAG leg. (PHDC); (Lumivie®), female, 16.XI.2013, SEAG leg. (PHDC); (Lumivie®), female, 23.XI.2013, SEAG leg. (PHDC); (Lumivie®), female, 14.XII.2013, SEAG leg. (PHDC); (Lumivie®), couple, 28.XII.2013, SEAG leg. (PHDC); (Lumivie®) male, 15.II.2014, SEAG leg. (PHDC); Matoury (Mont Grand Matoury, FIT), couple, 5.XI.2011, Stéphane Brûlé leg. (PHDC); Rémire-Montjoly (Chemin Vidal, beating), female, 18.XI.1982, Gérard Tavakilian leg. (IRD); male, 19-VII-2007, Pierre-Henri Dalens leg. (PHDC); (Cabassou), male, II.1979, Pierre Charles-Dominique leg. (IRD); Régina (Bélizon forest trail), female, 20.VI.2007, Jean-Louis Giuglaris leg. (JLGC); couple, 25.VI.2007, Jean-Louis Giuglaris leg. (JLGC); Camopi (Légion Etrangère), male, 6.IX.2008, P.-H. Dalens leg. (PHDC).

Diagnosis. The species resembles *Atenizus taunayi* Melzer, 1920 in Martins' key (1997) because of the color pattern. However, it differs by the much shorter body (ratio elytra/pronotum of 3.8 vs. 4.4-4.8 according to Martins for *A. taunayi*) and by the relative length of antennomere III (ratio III/II near 3.0 for *A. taunayi*, 2.3 for *A. apicalis* sp. nov.).

Description, male (Fig. 4). General aspect relatively robust, elytra 3.8 times longer than pronotum. Integument testaceous; head and prothorax castaneus; antennomeres II and III totally black, IV with apical 3/4 black, this black proportion decreasing toward antennomere XI; apical 1/6 of elytra black.

Head with sparse, coarse punctures; labial palpi shorter than maxillary; frons convex, longer than wide, glabrous except a fringe bordering lower ocular lobes; vertex with few sparse setae; coronal suture visible towards vertex, crossing median tubercle; lower ocular lobes large, upper lobes very reduced; antennae surpassing elytral apex by more than one segment, setiferous punctures on whole surface with semi-erect golden setae; scape with dorso-external scar, bilobate, each lobe with similar length;

antennal formula reported to scape: I=1.0; II=0.3; III=0.9; IV=2.0; V=1.8; VI=1.7; VII=1.7; VIII=1.5; IX=1.5; X=1.4; XI=1.5. Presence of vestigial antennomere XII.

Anterior part of prothorax depressed and nearly glabrous. Prothorax 1.2 times longer than wide, laterally rounded. Pronotal disc flattened with only sparse setae; setae more abundant laterally. Absence of pro- and mesosternal process. Scutellum triangular. Mesothorax short; mesosternum bearing long golden setae. Metasternal suture visible on its posterior half. Elytra slightly expanding towards apex, 3.9 times longer than humeral width, with rounded apex; integument with dense punctures bearing semi-erect golden setae of medium length.

Ventrites with short golden setae; apex of last ventrite emarginate. Legs covered with rather long golden setae; femora flattened, profemora twice as wide as meso- and metafemora; tibiae cylindrical and straight; protibiae enlarged towards apex; protarsomeri I = II+III; mesotarsomeri I = $2 \times (II+III)$, metatarsomeri I = $3 \times (II+III)$.

Female (Fig. 5). Sensibly larger and more robust; antennae shorter, reaching elytral apex at antennomere XI, antennomere XI shortened; thorax wider, more rounded laterally; elytra 3.7 times longer than humeral width; last ventrite truncate at apex.



Figures 8–15. Habitus of Oemini and Ectenessini species from French Guiana. 8) Macroeme vittipennis (Melzer, 1934), female. 9) Macroeme vittipennis (Melzer, 1934), male. 10) Paraniophis signatipes sp. nov., male paratype.
11) Paraniophis signatipes sp. nov., female paratype. 12) Niophis brusteli sp. nov., male holotype (MNHN).
13) Niophis brusteli sp. nov., female allotype (PHDC). 14) Niophis coptorhina Bates, 1867, female. 15) Niophis coptorhina Bates, 1867, male.

Dimensions. In mm (male/female): total length, 3.8-5.9/5.2-6.8; width at humeri, 0.8-1.0/1.0-1.3

Etymology. Allusive to distinctive apical part of the elytra.

Remarks. The distribution of the records shows no particular pattern (Map 2). It is relatively well represented in the sublittoral forests of French Guiana. It has been collected all year round (Graph 1), but seems to be more abundant during the wet season and avoids the beginning of the dry season, with only one record in August, the month with the maximum abundance of longhorns in French Guiana (Dalens and Touroult 2010).

Atenizus simplex Bates, 1884

(Figures 6–7)

Material examined (34 specimens, from emergence chamber, otherwise stated.). French Guiana, Saint-Laurent-du-Maroni, female, 25.II.2007, P.-H. Dalens *leg.* (PHDC); Macouria (Matiti ZA Wayabo), female, 10.VI.2008, Jean-Louis Giuglaris *leg.* (JLGC); **Régina** (Bélizon forest trail), male, 5.VIII.2006, Jean-Louis Giuglaris *leg.* (JLGC); (Kapiri forest trail), female, 15.VIII.2007, Jean-Louis Giuglaris *leg.* (JLGC); couple, 5.IX.2007, Jean-Louis Giuglaris *leg.* (JLGC); Maripasoula (Antécume Pata), male, 3 females, II.2007, Pierre-Henri Dalens *leg.* (PHDC); 8 males, 11 females, III.2007, Pierre-Henri Dalens *leg.* (PHDC); 6 male, 3.II.2008, Pierre-Henri Dalens *leg.* (PHDC); (New-Saint-Laurent), male, 3.XI.2010, Pierre-Henri Dalens *leg.* (PHDC). New country record.

Remarks. This tiny species has been rarely collected, but is widely distributed (Map 3). It has been observed mainly during the wet season, especially February and March (Graph 1).

Macroeme vittipennis (Melzer, 1934)

(Figures 8–9)

Material examined (2 specimens). French Guiana, **Saint-Laurent-du-Maroni** (route de Saint-Jean, pk 7.5, light trap), female, 30.XI.1994, Thibaut Rosant *leg.* (TRC); **Sinnamary**, (Savane-roche de la Haute-Koursibo, light trap), male, 27.X.2013, SEAG *leg.* (PHDC). New country record.

Remarks. This species has been heretofore recorded from Brazil: Amazonas, Pará, Mato Grosso and Amapá. We illustrate the male (Fig. 9), showing a clear thoracic sexual dimorphism.

Ectenessini Martins, 1998

Paraniophis gen. nov.

Type-species: Paraniophis signatipes sp. nov.

Description. Slender habitus. Mandibles short, dorsally carinate. Frons transverse and flat. Maxillary palpi slightly longer than labials. Upper interocular space wide, more than twice wider than one upper lobe. Antennae with 12 articles in both sexes; antennal tubercles barely projected and acuminate; antennomere IV longest, more than twice as long as scape.

Prothorax subcylindrical, surface homogeneous, without tubercle. Prosternal process laminiform, interrupted before posterior margin of procoxa. Mesosternal process broad, about half wide as a mesocoxa, with rounded apex and without notch, interrupted just before posterior margin of mesocoxae. Mesosternum without sulcus; mesepimera reduced, triangular. Elytra without carina. Legs slender; femora flattened dorso-ventrally, not pedunculate; metatarsi shorter than metatibiae; metatarsomere I clearly longer than II+III. First urosternite without postcoxal carina.

Sexual dimorphism discreet: antennae shorter, prothorax and elytra wider (female); sexual punctation weakly visible laterally on prosternum (male); last ventrite triangular in male, largely truncated in female.

Diagnosis. In the key by Martins (1998), this new genus is closer to *Niophis* Bates, 1867 of which it is close by the antennae with 12 segments. However, it can be distinguished by the following characters: maxillary palpi just longer than the labial ones; shape of the prothorax, subcylindrical, mesosternal process half wide as a mesocoxa and without any notch.

Remarks. Parameters of tegmen of *Niophis coptorhina* Bates, 1867 and *Niophis brusteli* sp. nov. were examined (respectively, Fig. 18, 17) and compared with parameters of *Paraniophis signatipes* sp. nov (Fig. 16). *Paraniophis signatipes* shows very short, totally fused parameters, with two thin brushes of relatively short setae at apex, whereas in the genus *Niophis* parameters are quite long, partially fused in *N. brusteli* sp. nov. (with a deep notch reaching half-length of tubercles and 3 long divergent setae on each side), or nearly totally fused in species *N. coptorhina* (with a short notch at apex, with 3 long straight setae on each side).

Etymology. The name of the genus *Paraniophis* refers to the similarity with the genus *Niophis* Bates, 1867, from the Greek "para", close to. Masculine genus.

Paraniophis signatipes sp. nov.

(Figures 10–11; 16)

Type material. Holotype male, French Guiana, route de Kaw, pk 35, (n°414 from IRD collection, light trap) 4.VIII.1983, D. Dauthuille *leg.* (MNHN). Paratypes (74 specimens): **Roura** (route de Kaw, pk 34, light trap), female, 11.XII.1982, Gérard Tavakilian *leg.* (IRD); (Montagne des Chevaux, emergence chamber), male, 14.XI.2008, Pierre-Henri Dalens *leg.* (PHDC); (FIT), female, 18.XI.2008, Pierre-Henri Dalens *leg.* (PHDC); (FIT), female, 18.XI.2008, Pierre-Henri Dalens *leg.* (PHDC); male, 3.V.2010, SEAG *leg.* (PHDC); female, 5.XII.2010, SEAG *leg.* (PHDC); (Gemlight®), female, 20.V.2012, SEAG *leg.* (PHDC); (Lumivie®), female, 3.VI.2012, SEAG *leg.* (PHDC); 3 males, 13.IV.2013, SEAG *leg.* (PHDC); female, 20.IV.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 3 females, 20.IV.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 4.V.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 5 females, 4.V.2013, SEAG *leg.* (JTC); (Lumivie®), female, 4.V.2013, SEAG *leg.* (PHDC); (FIT), female, 19.V.2013, SEAG *leg.* (PHDC); (Swing®), male, 19.V.2013, SEAG *leg.* (PHDC); (Gemlight®), male, 19.V.2013, SEAG *leg.* (PHDC); (Gemlight®), male, 19.V.2013, SEAG *leg.* (PHDC); (Gemlight®), male, 19.V.2013, SEAG *leg.* (PHDC); (Lumivie®), female, 25.V.2013, SEAG *leg.* (PHDC); (Lumivie®), female, 25.V.2013, SEAG *leg.* (PHDC); (Gemlight®), male, 25.V.2013, SEAG *leg.* (PHDC); (FIT), couple, 8.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 1.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 1.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 1.VI.2013, SEAG *leg.* (PHDC); (Lumivie®), female, 1.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), male, 25.V.2013, SEAG *leg.* (PHDC); (Lumivie®), female, 1.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 1.VI.2013, SEAG *leg.* (PHDC); (FIT), couple, 8.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 1.VI.2013, SEAG *leg.* (PHDC); (FIT), couple, 8.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), 2 males, 1.VI.2013, SEAG *leg.* (PHDC); (FIT), couple, 8.VI.2013, SEAG *leg.* (PHDC); (FIT), couple, 8



Figures 16–18. Parameres of tegmen of Ectenessini. **16**) *Paraniophis signatipes* sp. nov. **17**) *Niophis brusteli* sp. nov. **18**) *Niophis coptorhina* Bates, 1867.

(PHDC); (Gemlight®), 2 couples, 8.VI.2013, SEAG *leg.* (PHDC); (Lumivie®), 3 males, 1 female, 8.VI.2013, SEAG *leg.* (PHDC); (FIT), male, 15.VI.2013, SEAG *leg.* (PHDC); (Lumivie®), 2 couples, 15.VI.2013, SEAG *leg.* (PHDC); (Gemlight®), 4 males, 1 female, 15.VI.2013, SEAG *leg.* (PHDC); 5 males, 1 female, 13.VII.2013, SEAG *leg.* (PHDC); (Lumivie®), couple, 20.VII.2013, SEAG *leg.* (JLGC); male, 3.VIII.2013, SEAG *leg.* (PHDC); (Gemlight®), couple, 7.IX.2013, SEAG *leg.* (PHDC); (Lumivie®), 2 females, 14.IX.2013, SEAG *leg.* (PHDC).

The complete samples include 203 specimens of this fragile species, of which only one third of them have been listed as paratypes. Remaining specimens were taken into account for seasonality (Graph. 2).

Description. Male (Fig. 10). General aspect slender; integument testaceous with dark areas on femora; posterior edge of profemora, apex of mesofemora, and metafemora (except posterior edge) mostly dark.

Head finely punctate, with very short recumbent setae. Mandibles short, black at inner face and apex. Labrum trapezoidal, depressed at anterior margin. Clypeus very narrow. Frons triangular and transverse, slightly depressed. Antennal tubercles barely elevated. Coronal suture visible towards superior interocular space. Eyes with inferior lobe nearly reaching the inferior side of head; upper lobe reduced, joined to lower margin by five rows of ommatidia; upper interocular space 3 times wider than one upper lobe. Antennae surpassing elytral apex at antennomere VII, covered with long setae, more numerous on inner side; scape slightly enlarged dorsally, coarsely punctate; antennomeres more finely punctate, cylindrical, barely enlarged apically; antennal formula reported to scape: I=1.0; II=0.3; III=2.5; IV=2.7; V=2.5; VI=2.1; VII=1.8; VIII=1.6; IX=1.4; X=1.3; XII=1.3; XII=1.1.

Prothorax 1.4 times longer than wide; base slightly constricted, covered with homogeneous punctures (except anterior half of prosternum), and short, sparse yellowish setae, with only a few long erect setae in central area of disc and laterally; disc with two small depressions and two longitudinal darker stripes (integument more sclerotized), not reaching apex nor base; basal margin emarginate in front of scutellum. Procoxae rounded and prominent. Prosternum transversally sulcate, distinctly depressed at anterior half. Prosternal process basally triangular, then laminiform, reaching 3/4 length of procoxae.

Scutellum small, sub-quadrangular with rounded apex. Elytra long, 3.8 times longer than humeral width; sides parallel on basal half, then regularly narrowing towards apex; apex emarginate and barely dehiscent; integument covered with thin, golden recumbent setae emerging from thin and dense punctures, sparse long erect setae from deeper punctures. Metasternal sulcus visible on posterior 2/3.

First ventrite acuminate between metacoxae; ventrites with fine punctures and sparse semi-erect setae. Legs covered with long semi-erect setae; protibiae with short and fine setae on underside; tarsal formula: I > II+III; protibiae curved; mesotibiae and metatibiae slightly sinuate near base. Parameres of tegmen (Fig. 16). Totally fused small parameres with rounded apex and 2 thin brushes of setae at apex.

Female (Fig. 11). Habitus more robust; antennae shorter, antennomere IX surpassing elytral apex; prothorax wider, 1.2 times longer than wide; elytra wider, 3.7 times longer than humeral width.



Graph 1. Seasonal occurrence (wet season from January to June; dry season from July to December) for *Atenizus apicalis* sp. nov. and *Atenizus simplex* Bates, 1884.

Dimensions. In mm (male/female): total length, 6.8-9.0/7.2-10.3; humeral width, 1.3-1.5/1.4-2.0.

Etymology. Allusive to the color of the legs.

Remarks. All specimens of this new species have been collected on two close places located on the first hills after the coastal plain. It could be either a rather common species not well attracted to usual traps, as most specimens have been collected with a new kind of light trap described in material and methods, or a species associated with localized host tree. Another reason for its apparent scarcity in collections is that it shows a low peak (Graph 2) during the end of the wet season, a particularly unfavorable (and uncomfortable) period for longhorn collecting (Dalens and Touroult 2010).

Niophis brusteli sp. nov.

(Figures 12–13, 17)

Type material. Holotype male from French Guiana, **Roura** (Montagne des Chevaux, flight interception trap) 8.VIII.2010, SEAG *leg*. (MNHN). Paratypes (19 specimens, from flight interception traps otherwise stated): **Saint-Laurent du Maroni** (route d'Apatou pk 25, beating), male, 6.VIII.2013, Frédéric Robin *leg*. (FRC); **Macouria** (Matiti ZA Wayabo), female, 2.II.2011, Jean-Louis Giuglaris *leg*. (JLC); male, 2.VII.2011, Jean-Louis Giuglaris *leg*. (JLGC); **Roura** (Montagne des Chevaux), male, 17.VII.2009, SEAG *leg*. (PHDC); (emergence chamber), male, 22.V.2010, P.-H. Dalens *leg*. (PHDC); 2 females, 8.VIII.2010, SEAG *leg*. (PHDC); male, 15.VIII.2010, SEAG *leg*. (PHDC); male, 25.VI.2010, SEAG *leg*. (JTC); male, 26.VII.2010, SEAG *leg*. (JTC); male, 27.VII.2013, SEAG *leg*. (PHDC); (Swing®), male, 3.VIII.2013, SEAG *leg*. (PHDC); (SLAM®), male, 3.VIII.2013, SEAG *leg*. (PHDC); female, 24.VIII.2013, SEAG *leg*. (PHDC); female, 14.IX.2013, SEAG *leg*. (PHDC); (route de Kaw, pk 12), male, 18.VII.2008, Jean-Louis Giuglaris *leg*. (JLGC); (pk 21), male, 15.VII.2005, Jean-Louis Giuglaris *leg*. (JLGC); **Régina**, (Kapiri forest trail pk 125), female, 26.VII.2007, Jean-Louis Giuglaris *leg*. (JLGC).

Diagnosis. This new species belong to the genus *Niophis* Bates, 1867 according to the following diagnostic characters: maxillary palpi clearly longer than labials ones, antennae with 12 segments in both sexes, mesosternal process wide and notched, acuminate elytral apex (as in *Niophis bucki* Martins & Monné, 1973). It has some unique characters: rugose integument of the pronotum with three elevations; prosternal process wide and notched at apex. In French Guiana, the only known species of *Niophis* was *N. coptorhina* Bates, 1867 (Fig. 14–15; 18), type-species of the genus. The new species can be readily distinguished by the shape of the elytral apex, its darker body integument and the color of the legs.

Description. Male (Fig. 12). General aspect slender, integument of head and prothorax dark-brown; antennae, palpi, elytra and tibiae castaneous; femora yellowish.



Graph 2. Seasonal occurrence (wet season from January to June; dry from July to December) for *Paraniophis* signatipes sp. nov. and *Niophis brusteli* sp. nov.



Maps 1–4. Distribution maps.**1**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Sphagoeme paraensis* Martins, 1977. **2**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Atenizus apicalis* sp. nov. **3**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Atenizus apicalis* sp. nov. **3**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Atenizus simplex* Bates, 1884. **4**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Atenizus simplex* Bates, 1884. **4**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Atenizus simplex* Bates, 1884. **4**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Atenizus simplex* Bates, 1884. **4**) Distribution maps of known records plotted on landscape ecozones defined by Guitet et al. (2013) for *Niophis brusteli* sp. nov.

Head with finely rugose integument covered with very short laying setae, except on antennal tubercles, microsculpted; clypeus glabrous. Mandibles short, laterally with long golden setae. Maxillary palpi longer than labial ones by more than one segment. Submentum with setiferous granulae, bearing long setae. Frons transverse and slightly depressed. Frontal suture deep. Coronal suture visible towards upper interocular space. Antennal tubercles moderately elevated, dorsally glabrous. Inferior ocular lobes nearly reaching inferior side of head; upper lobe reduce; upper interocular space about twice wider than one upper lobe. Antennae with antennomere IX surpassing elytral apex; antennomeres covered with long golden setae, more numerous on inner side; scape subcylindrical, dorsally slightly broad, with coarse punctures, not rugose; pedicel and antennomeres II-XII more finely punctate, cylindrical, apically barely widen; antennal formula reported to scape: I=1.0; II=0.3; III=1.8; IV=2.1; V=2.1; VI=1.9; VII=1.6; VIII=1.4; IX=1.5; X=1.3; XII=1.3; XII=1.1.

Prothorax 1.2 times longer than wide, sides rounded. Integument of pronotum rugose, with three weak longitudinal elevations at posterior half of disc (two lateral and one median); surface covered with uniformly fine, short, decumbent yellowish setation, laterally with golden long semi-erect setae; pronotal margins anteriorly bisinuous, straight posteriorly. Anterior part of prosternum distinctly transversally ridged; depressed. Procoxal cavities laterally slightly opened; procoxae globulous and prominent. Prosternal process triangular at base, wide and notched at end, reaching 3/4 length of procoxae.

Scutellum subquadrate, with rounded apex. Elytra elongate, 3.4 times longer than humeral width; humeri slightly projected; one longitudinal carina on each elytron; sides parallel at basal half, then regularly narrowing towards apex; apex acuminate and barely dehiscent. Integument microsculptured among coarse puncture becoming shallower towards apex, covered with very fine decumbent golden setae and sparse long erect brown setae, becoming denser towards apex. Mesosternum with small longitudinal elevation. Mesosternal process wider than half mesocoxa, depressed in middle, apex notched, reaching 3/4 of posterior edge of mesocoxae. Meso- and metasternum with greyish recumbent setae; metasternal sulcus visible on apical 4/5.

First ventrite triangular between metacoxae; ventrites with fine punctures and sparse semi-erect golden setae. Legs slender, covered with long semi-erect setae; femora flattened and progressively wider at middle; tibiae barely curved; protibiae with short and fine setae on underside; metatarsal formula: I=1.0; II=0.4; III=0.3. Parameres of tegmen (Fig. 17) partially fused with a deep notch reaching half-length of tubercles, short setae on apical quarter of tubercles and 3 long divergent setae on each apex.

Female (Fig. 13). Antennae shorter; antennomere X surpassing elytral apex; prothorax slightly transverse (length/width = 0.9), laterally more rounded; prosternum anteriorly less depressed; elytra less elongate, 2.9 times longer than humeral width; last ventrite emarginate.

Dimensions. In mm (male/female): total length, 11.5–17.2/12.4–18.0; humeral width, 2.3–3.4/2.8–4.1.

Etymology. Dedicated to Dr. Hervé Brustel, conservation biologist and coleopterist, whose work on traps for saproxylic beetles has been a source of inspiration for new trap designs in French Guiana.

Remarks. This species has been collected in forests just beyond the coastal plain (Map 4). The occurrence peaks at the beginning of the dry season, July and August (Graph 2).

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