

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Papers in Entomology

Museum, University of Nebraska State

---

November 2007

## New South American taxa of Odontolochini Stebnicka and Howden (Coleoptera: Scarabaeidae: Aphodiinae)

Paul E. Skelley

*Florida State Collection of Arthropods, Florida Department of Agriculture and Consumer Services*

Follow this and additional works at: <https://digitalcommons.unl.edu/entomologypapers>



Part of the [Entomology Commons](#)

---

Skelley, Paul E., "New South American taxa of Odontolochini Stebnicka and Howden (Coleoptera: Scarabaeidae: Aphodiinae)" (2007). *Papers in Entomology*. 118.  
<https://digitalcommons.unl.edu/entomologypapers/118>

This Article is brought to you for free and open access by the Museum, University of Nebraska State at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Papers in Entomology by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# INSECTA MUNDI

A Journal of World Insect Systematics

---

**0022**

New South American taxa of Odontolochini Stebnicka and Howden  
(Coleoptera: Scarabaeidae: Aphodiinae)

Paul E. Skelley  
Florida State Collection of Arthropods  
Florida Department of Agriculture and Consumer Services  
P.O.Box 147100  
Gainesville FL 32614-7100

Date of Issue: 2 November 2007

Paul E. Skelley  
New South American taxa of Odontolochini Stebnicka and Howden (Coleoptera:  
Scarabaeidae: Aphodiinae)  
Insecta Mundi 0022: 1-15

**Published in 2007 by**

Center for Systematic Entomology, Inc.  
P. O. Box 147100  
Gainesville, FL 32614-7100 U. S. A.  
<http://www.centerforsystematicentomology.org/>

**Insecta Mundi** is a journal primarily devoted to insect systematics, but articles can be published on any non-marine arthropod taxon. Manuscripts considered for publication include, but are not limited to, systematic or taxonomic studies, revisions, nomenclatural changes, faunal studies, book reviews, phylogenetic analyses, biological or behavioral studies, etc. **Insecta Mundi** is widely distributed, and referenced or abstracted by several sources including the Zoological Record, CAB Abstracts, etc.

As of 2007, **Insecta Mundi** is published irregularly throughout the year, not as a quarterly issues. As manuscripts are completed they are published and given an individual number. Manuscripts must be peer reviewed prior to submission, after which they are again reviewed by the editorial board to insure quality. One author of each submitted manuscript must be a current member of the Center for Systematic Entomology.

**Managing editor:** Paul E. Skelley, e-mail: [skellep@doacs.state.fl.us](mailto:skellep@doacs.state.fl.us)

**Production editor:** Michael C. Thomas, e-mail: [thomasm@doacs.state.fl.us](mailto:thomasm@doacs.state.fl.us)

**Editorial Board:** J. H. Frank and R. E. Woodruff

**Printed copies deposited in libraries of:**

CSIRO, Canberra, ACT, Australia  
Museu de Zoologia, São Paulo, Brazil  
Agriculture and Agrifood Canada, Ottawa, Ontario, Canada  
The Natural History Museum, London, England  
Muzeum I Instytut Zoologii Pan, Warsaw, Poland  
National Taiwan University, Taipei, Taiwan  
California Academy of Sciences, San Francisco, CA, USA  
Florida Department of Agriculture and Consumer Services, Gainesville, FL, USA  
Field Museum of Natural History, Chicago, IL, USA  
National Museum of Natural History, Smithsonian Institution, Washington, DC, USA

**Electronic copies in PDF format:**

Printed CD mailed to all members at end of year.  
Florida Center for Library Automation: [purl.fcla.edu/fcla/insectamundi](http://purl.fcla.edu/fcla/insectamundi)

**Author instructions** available on the Insecta Mundi page at:

<http://www.centerforsystematicentomology.org/insectamundi/>

ISSN 0749-6737

---

## New South American taxa of Odontolochini Stebnicka and Howden (Coleoptera: Scarabaeidae: Aphodiinae)

Paul E. Skelley

Florida State Collection of Arthropods

Florida Department of Agriculture and Consumer Services

P.O.Box 147100

Gainesville FL 32614-7100

**Abstract.** Recently discovered Neotropical taxa belonging in the tribe Odontolochini Stebnicka and Howden (Coleoptera: Scarabaeidae: Aphodiinae) are described. New genera are: *Amerilochus*, type species *Amerilochus cinereus*, new species; and *Stebnickiella*, type species *Stebnickiella zosterixys*, new species. Three additional new species are: *Saprolochus lobatus*, *Saprolochus tridentatus*, and *Saprositellus kenodontus*. Updated keys are presented to the New World genera of Odontolochini as well as keys to species in the genera *Saprolochus* Stebnicka and Galante and *Saprositellus* Balthasar. New country records are presented for *Saprositellus ariquemes* Stebnicka.

### Introduction

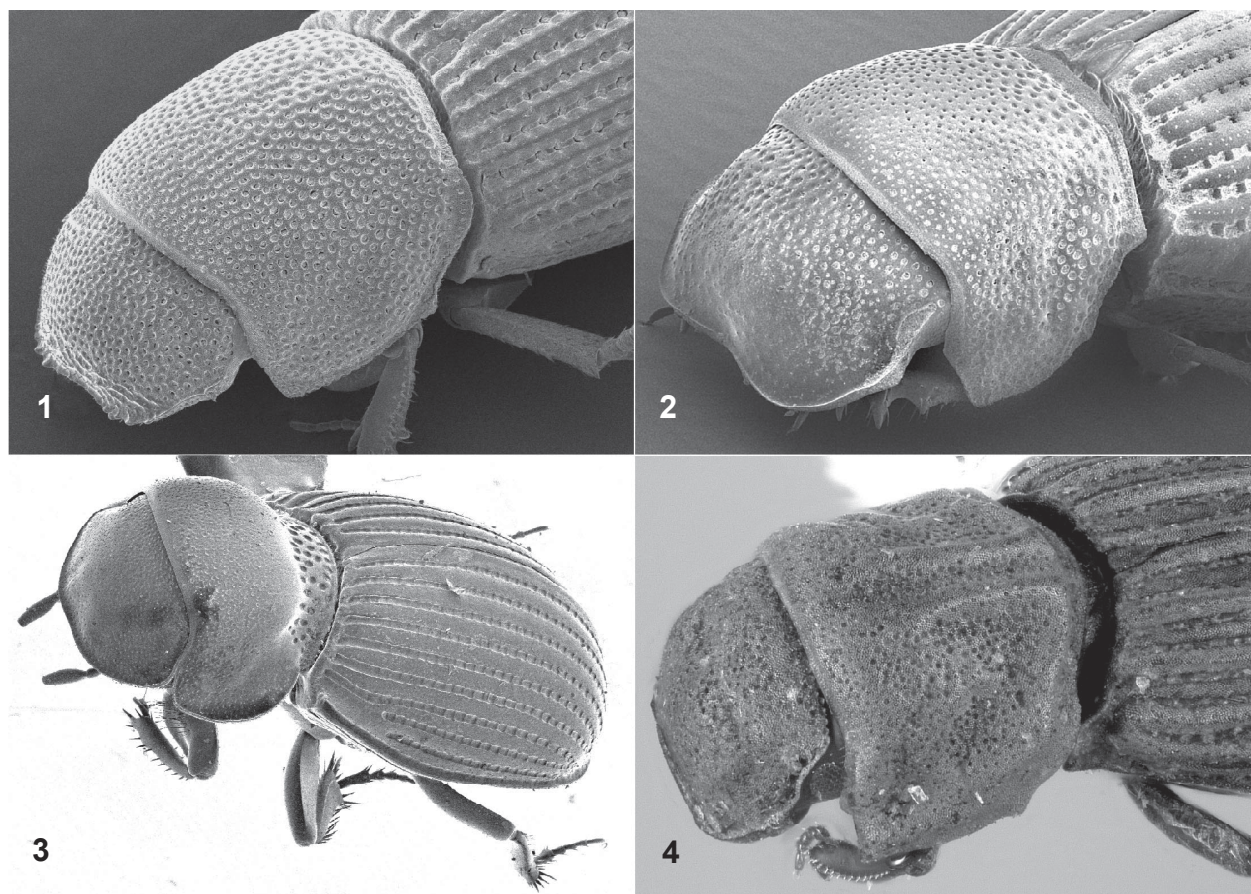
The tribe Odontolochini (Stebnicka and Howden 1996) is an unusual group of rarely collected aphodiines, whose defining characters are variably shared between members. Some of these defining characters are: anterior clypeal edge flattened, broadly margined (double edged) from frontal lobe to frontal lobe, many with a distinct inwardly projecting spine or tooth at middle; pronotum somewhat swollen anteriorly (tumid); head able to be deflexed at nearly 90° to pronotal surface; when head deflexed, clypeus and anterior pronotal lobes form cavity for fore leg; posterior lateral margins of pronotum (usually) emarginate with denticles; mesocoxae widely separated, nearly parallel to each other; meso-metasternal suture straight and mesosternum flat; protibial teeth of many close and anteriorly placed, teeth occasionally small.

The tribe Odontolochini is nearly pantropical, but is apparently absent from tropical Asia and Indonesia. Old World genera presently placed in the Odontolochini are *Gongrolophus* Stebnicka and Howden (Australia), *Odontolochus* Schmidt (Africa and Australia), and *Odontolytes* Koschantschikov (Andaman Islands). Stebnicka and Galante (2007) reviewed the tribe Odontolochini for the New World, moving some taxa to the Eupariini, and presented a key to genera for the world. Regional species accounts and keys can be found in Stebnicka and Howden (1996; Australian taxa), Endrödi (1960, 1964; African *Odontolochus*), and Stebnicka (2003; South American *Saprositellus* Balthasar).

All taxa in this tribe are based on scant material as specimens are rarely collected. While identifying materials for various museums, after Stebnicka and Galante (2007) went to press, I discovered additional materials which represent undescribed genera and new species in the genera *Saprolochus* Stebnicka and Galante and *Saprositellus*. Given the rarity of odontolochines in collections and the unique morphologies of these taxa, it is appropriate to describe these taxa now and not to wait for additional materials to be discovered.

### Materials and Methods

Materials cited in this study are deposited in the following collections: **FMNH** - Field Museum of Natural History, Chicago, IL, USA; **FSCA** - Florida State Collection of Arthropods, Gainesville, FL, USA; **MNKN** - Museo de Historia Natural 'Noel Kempff Mercado', Santa Cruz de la Sierra, Bolivia; **PESC** - P. E. Skelley collection, Gainesville, FL, USA; **SEMC** - Snow Entomological Museum, University of Lawrence, KS, USA.



**Figure 1-4.** Key characters. 1) *Saprostitellus ariquemmes* Stebnicka, head and pronotum. 2) *Saprolochus tambopatae* Stebnicka and Galante, head and pronotum. 3) *Stebnickiella zosterixys*, n. gen., n. sp., lateral habitus. 4) *Amerilochus cinereus*, n. gen., n. sp., head and pronotum.

### Key to New World Genera of Odontolochini

(modified from Stebnicka and Galante 2007)

1. Clypeal margin not distinctly thickened, with 5-7 denticles on each side of weak median emargination (Fig. 1); clypeal surface anteriorly flattened at middle; exposed disc of pygidium not eroded; South America ..... ***Saprostitellus* Balthasar**
- Clypeal margin distinctly thickened, lacking denticles on each side of strong median emargination, margin smooth (Fig. 2-4); exposed disc of pygidium eroded; South America and elsewhere ... **2**
- 2(1). Pronotum with coarse punctures restricted to broad transverse depression along basal third, anterior 2/3 swollen and finely punctate (Fig. 3); protibial teeth widely separated, apical tooth longer than middle tooth; Peru ..... ***Stebnickiella*, n. gen.**
- Pronotum with punctures evenly distributed, base lacking broad transverse depression (Fig. 2, 4); most with protibial teeth close, restricted to apical third, apical tooth same size or smaller than middle tooth; widespread ..... **3**
- 3(2). Body elongate, surface argillaceous; head with punctures evenly distributed, obscured by argillaceous coating (Fig. 4); pronotum with 2 medial longitudinal ridges; alternate elytral intervals weakly carinate; Peru ..... ***Amerilochus*, n. gen.**
- Body stout, surface not argillaceous, can be somewhat dulled (alutaceous) or glossy; head with band of large punctures at base, extremely fine punctures anteriorly (Fig. 2); pronotum evenly



convex, lacking longitudinal ridges; elytral intervals similarly developed; widespread in South America ..... *Saprolochus* Stebnicka and Galante

### *Amerilochus* Skelley, new genus

**Type species.** *Amerilochus cinereus* Skelley, n. sp., here designated.

**Diagnosis.** Body with dorsal surface entirely argillaceous (with grey, clay-colored covering); head with clypeal margin thick, flattened, double edged; pronotum with medial longitudinal groove, bounded each side by small ridge, basal edge with broad transverse groove; elytra with alternating intervals distinctly higher than intervening intervals.

**Description.** Body elongate, somewhat parallel-sided, dorsally argillaceous. Head moderately gibbose, strongly deflexed at middle; clypeal margin moderately thickened, flattened in front, double edged from frontal lobe to frontal lobe; anterior clypeal margin thickest at middle, medially with small spiniform tooth projecting inwardly on inner edge. Pronotum slightly wider than long, rectangular, sides decline sharply, sides nearly invisible from above; clypeus and anterior lateral portion of pronotum forming cavity for reception of fore legs; disc with medial longitudinal groove bounded by small ridges, lateral surface with weak irregular depression from small pit near anterior angles toward median base; lateral pronotal margin nearly straight in dorsal view, not explanate, in lateral view emarginate, bearing a small subapical tooth; pronotal base sinuate with broad marginal groove. Scutellum small, narrow, triangular. Elytra weakly oval, surface argillaceous; odd intervals raised, carinate, even intervals flattened; striae impressed, sharply defined, punctures moderate; elytral base with distinct marginal bead and humeral lobe that projects anteriorly, humerus rounded. Prosternum broad and flat behind procoxae. Meso- and metasternal juncture straight, flat. Mesosternum with setose callosity. Metasternum with distinct medial longitudinal groove, laterally distinctly, coarsely punctured. Abdominal sternites 2-4 with broad transverse basal groove, distinctly fluted. Pygidium with longitudinal groove in basal half, apical half distinctly eroded posterior of transverse carina. Profemur very broad, with protrochanter rectangular width to length = 1:1.5; surface smooth, argillaceous. Protibia with teeth restricted to apex, 2 small lateral teeth and a single tooth on the inner angle beneath insertion of protarsus; protibial spur not seen. Mesocoxae widely separated, elongate, nearly parallel with body axis. Meso- and metafemur elongate, narrow, flattened, posterior edge with fine marginal line. Meso- and metatibia somewhat flattened, triangular in cross-section, gradually widening to apex; apical fringe of spinules short, indistinct; apical spurs stout, short; ventral surface covered with dense pubescence. Meso- and metatarsi not as long as tibia, ventrally covered with dense pubescence; basal tarsomere broad, 3 times longer than second tarsomere.

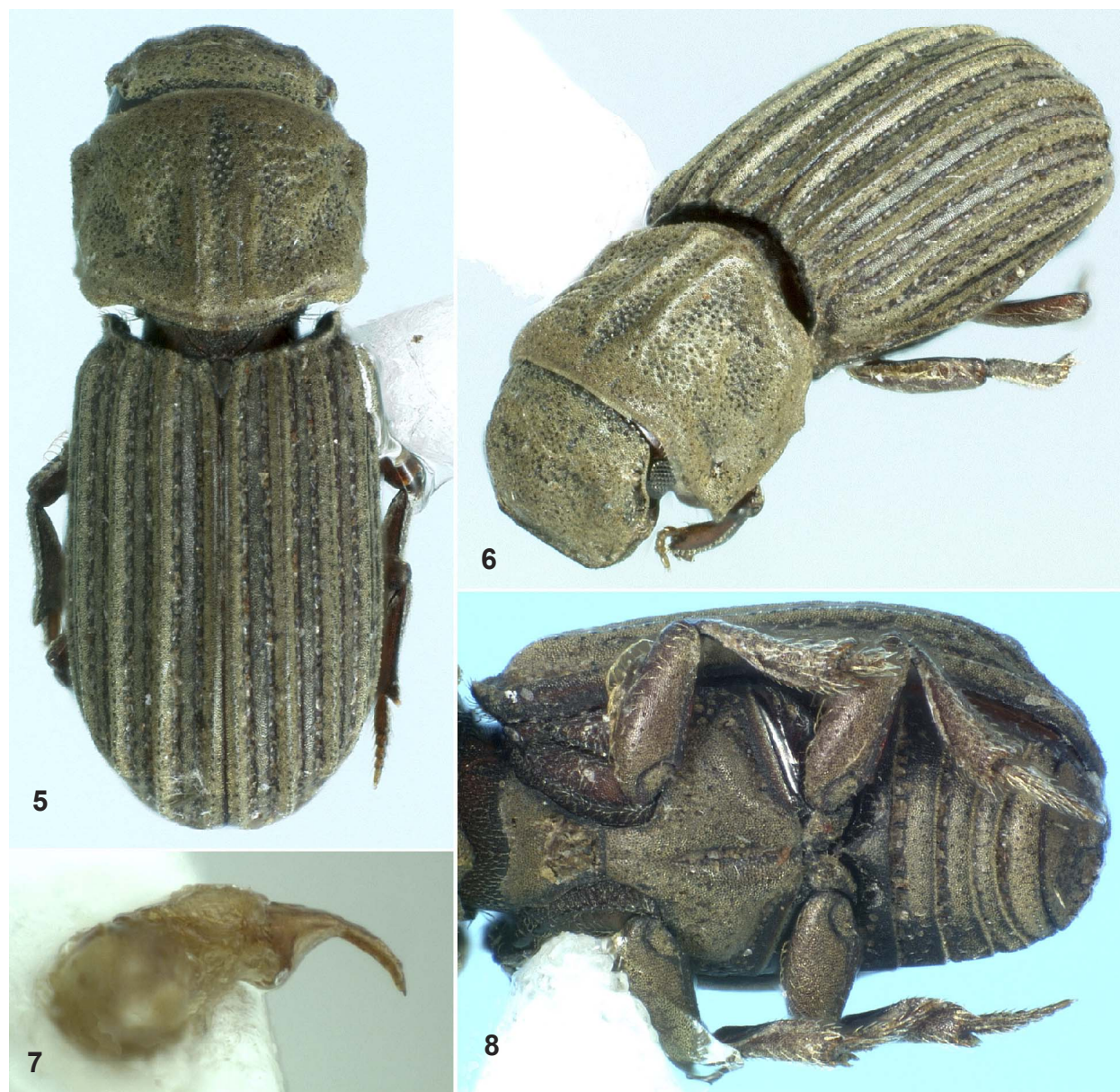
**Etymology.** The generic name is derived from “American *Odontolochus*” combining the prefix and suffix to form “*Ameri-lochus*” (gender masculine).

### *Amerilochus cinereus* Skelley, new species (Figure 4-8)

**Type material.** Holotype male, label data: “Peru: Loreto Prov., Iquitos, 90m, 7 May 1992, J. Danoff-Berg, ex: general/ [red paper] **HOLOTYPE** *Amerilochus cinereus* P. E. Skelley 2007” [SEMC].

**Description.** Male body length 2.4 mm, width 0.9 mm; elongate, nearly parallel-sided, dorsally argillaceous gray (Fig. 5). Head and pronotal surface coarsely punctate, separated by 1-2 diameters, obscured by argillaceous covering (Fig. 6). Elytral intervals appear to be impunctate; striae punctures separated by 2-3 diameters. Mesofemur with distinct fringe of long setae on anterior margin, fringe lacking on metafemur (Fig. 8). Male genitalia with parameres as long as basal piece; parameres greatly narrowing from base to midpoint, then curved downward in gradual arch to acute apex (Fig. 7).

**Comments.** The unique holotype shows some characters which may be sexual dimorphisms, and not generic characters: the inner apical protibial tooth, and the fringe of long setae on the anterior margin of



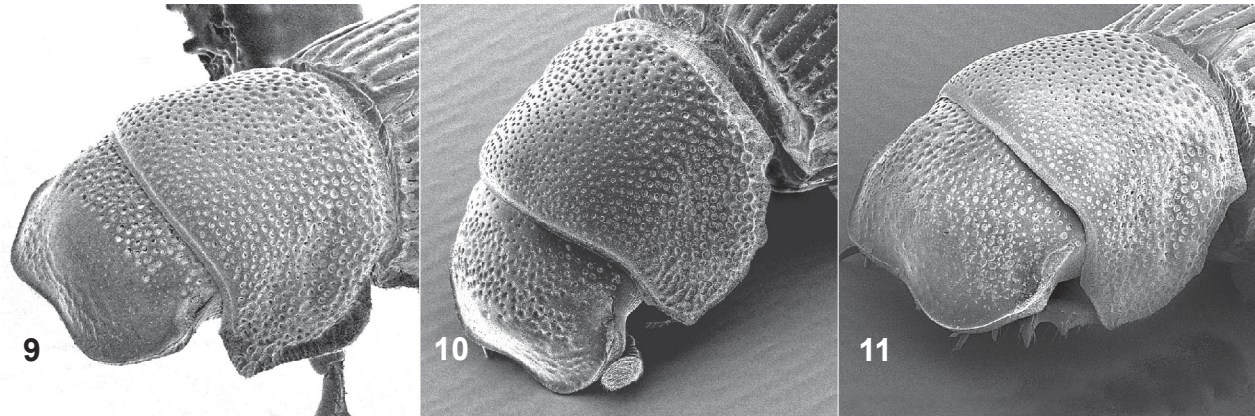
**Figure 5-8.** *Amerilochus cinereus*, n. gen., n. sp., holotype. 5) Dorsal habitus. 6) Lateral habitus. 7) Genitalia. 8) Ventral mesothorax to abdomen.

the mesofemur. However, the combination of all other characters distinguishes *Amerilochus* from all other aphodiine genera.

Initial examinations of this species posed many questions regarding its relationships, generic placement, and identity. It superficially seems similar to *Cartwrightia* Islas (Eupariini) in clypeal structure, argillaceous body, and alternately elevated elytral intervals. However, these could all be parallel or convergent characters. Closer examination shows *Amerilochus* to be a member of the Odontolochini, sharing all tribal characters, yet very distinct from any other described genus.

**Etymology.** The name “*cinereus*” is Latin for ash-colored, gray, and was selected because of the distinctive body covering of this species.





**Figure 9-11.** *Saprolochus* spp., head and pronotum. **9)** *Saprolochus lobatus*, n. sp. **10)** *Saprolochus tridentatus*, n. sp. **11)** *Saprolochus tambopatae* Stebnicka and Galante, paratype.

### *Saprolochus* Stebnicka and Galante 2007

**Type species.** *Saprolochus tambopatae* Stebnicka and Galante 2007 by original designation.

**Diagnosis.** In addition to the description and diagnosis of Stebnicka and Galante (2007), distinguishing characters are: head coarsely punctate at base only, abruptly differentiated from the glossy, finely punctate clypeal surface, clypeal surface weakly granulate at sides; clypeal margin thickened, flattened in front, double edged, smoothly rounded each side of median emargination, inner edge of margin with distinct inwardly pointing spine at middle; abdominal sternites with punctation and fluting very coarse (almost foveate), sternites 2-4 with single transverse row of punctures in addition to basal fluting, sternite 6 finely punctate.

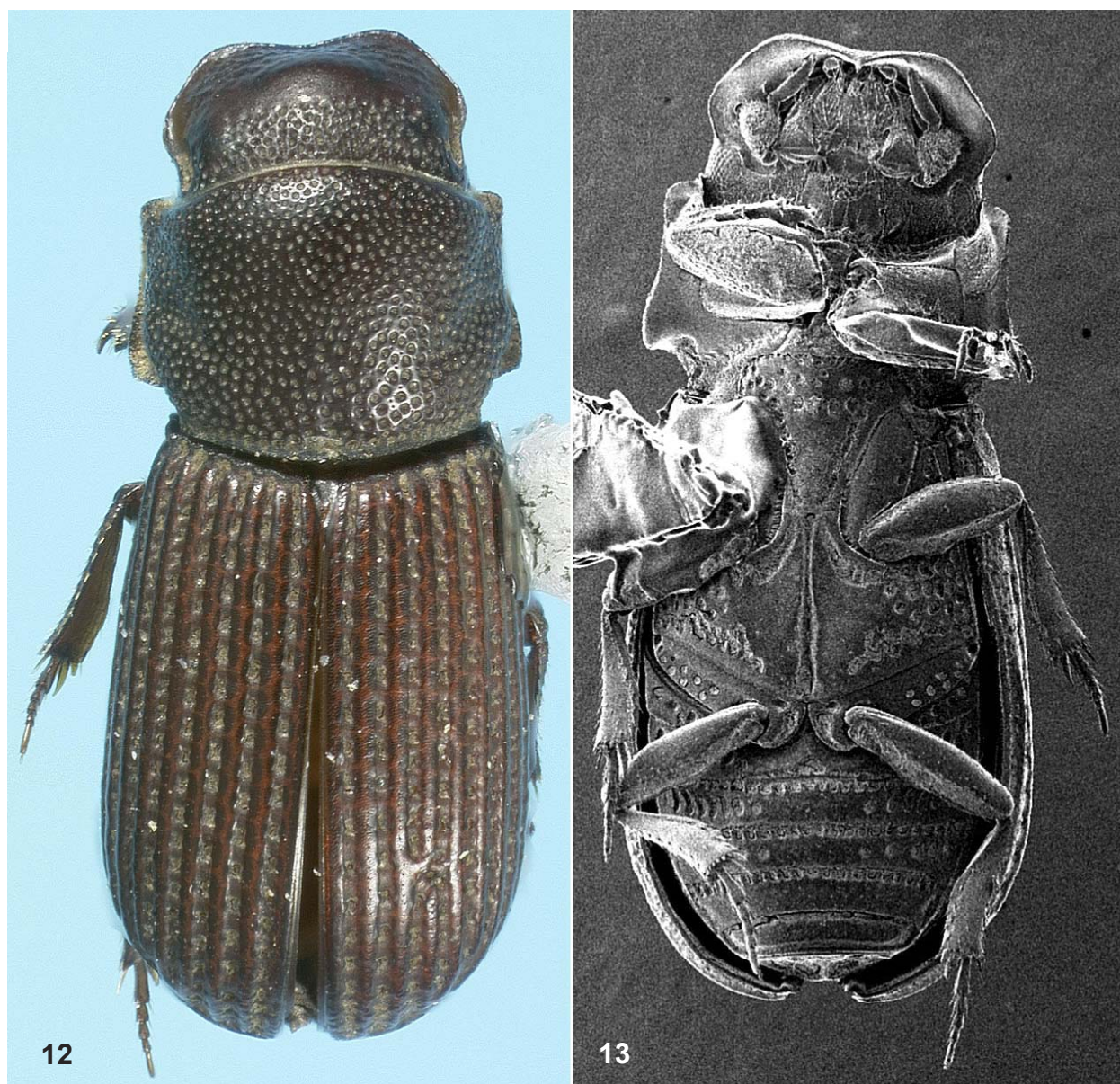
### Key to species of *Saprolochus* Stebnicka and Galante

1. Pronotum with lateral margin distinct and explanate posteriorly, lobe-like (Fig. 9) ..... *S. lobatus*, n. sp.
- Pronotum with lateral margin reduced posteriorly, emarginate with small teeth ..... 2
- 2(1). Lateral pronotal margin with 2 lateral and one basal denticle (Fig. 10) .. *S. tridentatus*, n. sp.
- Lateral pronotal margin with 1-2 denticles (Fig. 11) ..... 3
- 3(2). Length 2.3-2.4 mm; lateral pronotal margin with tooth anterior to basal emargination in addition to basal tooth (Fig. 11); elytral striae not increasingly wider and deeper toward sides ..... *S. tambopatae* Stebnicka and Galante
- Length 3.5-4.0 mm; lateral pronotal margin evenly rounded to basal tooth; elytral striae increasingly wider and deeper toward sides ..... *S. bolivarensis* Stebnicka and Galante

### *Saprolochus lobatus* Skelley, new species (Figure 9, 12-14)

**Type material.** Holotype male, label data: "GUYANA: Region 8, Iwokrama Forest, Pakatau hills, 220 m, 4°43'55"N, 59°1'31"W, 26-29 MAY 2001, R. Brooks, Z. Falin, GUY1BF01 062, ex: flight intercept trap/[bar code] SMO552702, KUNHM-ENT/ [red paper] **HOLOTYPE** *Saprolochus lobatus* P. E. Skelley 2007" [SEMC].

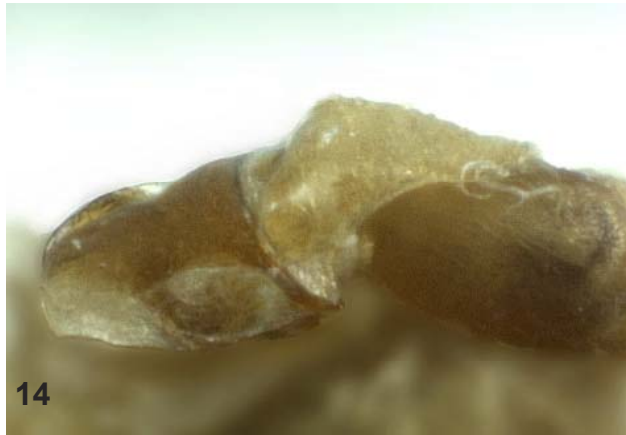




**Figure 12-13.** *Saprolochus lobatus*, n. sp. **12)** Dorsal habitus. **13)** Ventral habitus.

**Diagnosis.** A distinct member of *Saprolochus*, readily distinguished by the lobed posterior portion of the lateral pronotal margin.

**Description.** Male body length 3.0 mm, width 1.2 mm; elongate, robust, somewhat parallel-sided (Fig. 12); weakly glossy, dark reddish brown. Head broad, convex, surface coarsely punctate across basal half, punctures slightly smaller than those on pronotal base; anterior half of head (clypeus) smooth, widely glossy along anterior margin, minutely punctate, granulate area on each side; clypeal edge smooth, lacking teeth, rounded each side of median emargination. Pronotum widest at posterior lobe, almost quadrate in dorsal view; surface coarsely punctate, interspersed with minute punctures, coarse punctures largest at base, becoming smaller anteriorly; coarse anterior punctures half diameter of basal punctures, all coarse punctures separated by 0.5-1 diameters on disc, nearly coalescing near anterior lateral angle; lateral edge weakly explanate anteriorly, broadly, abruptly explanate from anterior 1/4 to end of posterior lobe; in dorsal view lateral margin concave, abruptly constricted at base; in lateral view, lateral edge straight, broadly rounded anteriorly and at basal lobe; pronotal basal edge evenly convex,



**Figure 14.** *Saprolochus lobatus*, n. sp. 14) Genitalia.

nearly straight; with complete, broad basal groove. Scutellum small, elongate, narrow, triangular. Elytra with basal marginal bead and weak humeral denticle; glossy, minutely alutaceous; intervals evenly convex at base, becoming strongly convex at declivity; finely, irregularly punctate along midline; striae deep, sharply defined, punctures longitudinally elongate, separated by less than their length. Prosternum broad, flat behind procoxa. Meso- and metasternal juncture straight, flat. Mesosternum with shallow acutely V-shaped depression from base, depression weakly punctate, depression leading to small group of coarse punctures in anterior 1/3 of mesocoxae. Metasternum foveately punctate laterally, medially minutely punctate either side of distinct longitudinal medial groove;

coarse lateral punctures forming transverse lines near meso- and metacoxae which are not present medially. Abdominal sternites 1-5 with large basal punctures forming fluting (Fig. 13); sternites 2-4 with medial transverse row of large punctures laterally, not connecting along midline; apical half of sternite 5 and sternite 6 minutely punctate. Pygidium eroded on apical half, eroded area divided by fine longitudinal medial carina; apical margin on each side of middle with a single seta. Profemur ventral surface moderately, deeply punctate. Protibia with 3 distinct lateral teeth, evenly spaced, apical tooth largest; protibial spur prominent. Meso- and metafemur with complete posterior marginal line; surface finely punctate; posterior margin of metafemur very weakly lobed at middle. Meso- and metatibia narrow, gradually widened to apex, with 2 distinct apical spurs, lacking lateral apical accessory spine; apical fringe of setae short. Meso- and metatarsi elongate, not as long as tibia; basal tarsomere slightly longer than long tibial spur, 3 times longer than second tarsomere. Genitalia with parameres short, as long as basal piece, apex broadly rounded in lateral view (Fig. 14).

**Etymology.** The species name was selected for the distinctly lobed pronotal margin of this species. Other species are simply dentate.

***Saprolochus tambopatae* Stebnicka and Galante 2007  
(Figure 11)**

**Diagnosis.** A smaller *Saprolochus* species with a single mid-lateral tooth on the pronotal margin.

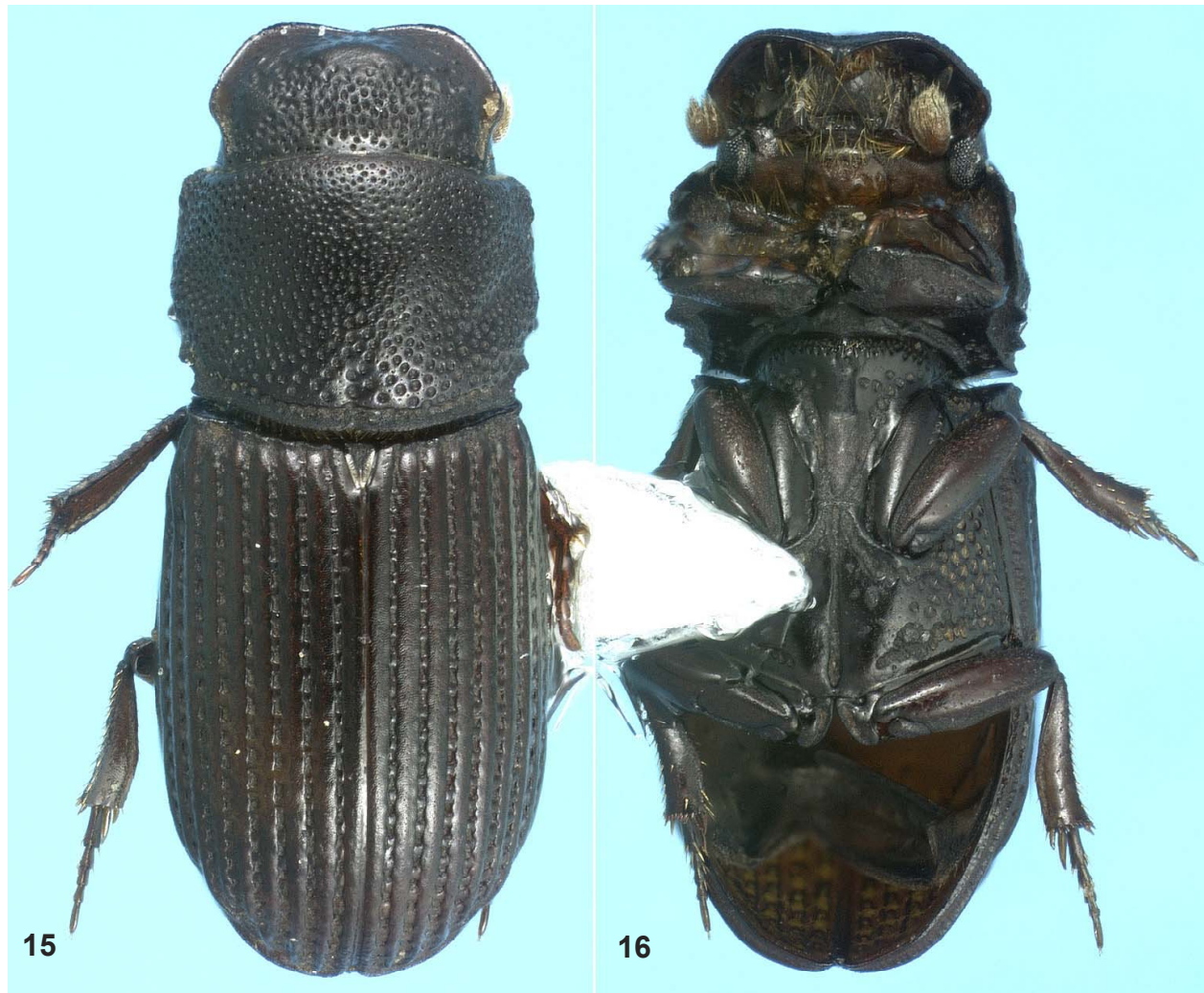
**Comments.** Described from 5 specimens, from Peru (Madre de Dios, Tambopata) and Bolivia (Cochabamba, 67.5 km NE. Ext. Biol. Valle del Sajita, Univ. de San Simon). One additional specimen from the Bolivian locality has been studied, with the following new data: 9-13 FEB 1999, F. Genier, BOL1G99 069, ex. flight intercept trap/ [barcode] SM0173 178, KUNHM-ENT [1-SEMC].

***Saprolochus tridentatus* Skelley, new species  
(Figure 10, 15-16)**

**Type material.** Holotype female, label data: "PERU: Madre de Dios, Dept. Tambopata, 28-X-1982, L. E. Watrous & G. Mazurek; ex rotten palm flowers, FMHD #82-401/ *Saprolochus* sp. Stebnicka, singleton [placed on specimen by Z. T. Stebnicka]/ [red paper] **HOLOTYPE** *Saprolochus tridentatus* P. E. Skelley 2007" [FMNH]. One paratype female, label data: "BOLIVIA: Cochabamba Dept., Villa Tunari, Hotel El Puerta, S16°59.02'-W65°24.50', 15-27-XII-2005, 357m, rainforest FIT, S. & J. Peck, 05-45/ [yellow paper] **PARATYPE** *Saprolochus tridentatus* P. E. Skelley 2007" [MNKN].

**Diagnosis.** This is the only known *Saprolochus* with 3 teeth on the lateral pronotal margin.





**Figure 15-16.** *Saprolochus tridentatus*, n. sp. **15)** Dorsal habitus. **16)** Ventral habitus.

**Description.** Female body length 3.5-3.7 mm, width 1.5-1.6 mm; elongate, robust, somewhat parallel-sided (Fig. 15); surface dulled, dark reddish brown, nearly black. Head broad, convex, surface coarsely punctate across basal half, punctures as large as those on pronotal base; anterior half of head (clypeus) smooth, widely glossy along anterior margin, minutely punctate, granulate area on each side; clypeal edge smooth, lacking teeth, rounded each side of median emargination. Pronotum widest at middle, almost quadrate in dorsal view in dorsal view; surface coarsely punctate, interspersed with minute punctures, coarse punctures largest at base, becoming smaller anteriorly, coarse anterior punctures half diameter of basal punctures, all coarse punctures separated by 0.5-1 diameters on disc, nearly coalescing near anterior lateral angle; in lateral view, lateral edge emarginate near base, emargination bounded by teeth with third tooth between; pronotal basal edge evenly convex, nearly straight; with complete, broad basal groove. Scutellum small, elongate, narrow, triangular. Elytra with basal marginal bead and humeral denticle; surface dulled, alutaceous; intervals evenly convex at base, becoming weakly tectiform on declivity; finely, irregularly punctate along midline; striae deep, sharply defined, punctures longitudinally elongate, separated by less than their length. Prosternum broad, flat behind procoxa. Meso- and metasternal juncture straight, flat. Mesosternum with shallow acutely V-shaped depression from base, leading to small group of coarse punctures on each side near anterior part of mesocoxae; anterior mesosternal margin with band of coarse punctures. Metasternum foveately punctate laterally, medially minutely punctate either side of distinct longitudinal medial groove (Fig. 16); coarse lateral punctures forming transverse lines near meso- and metacoxae which are not present medially. Abdominal sternites



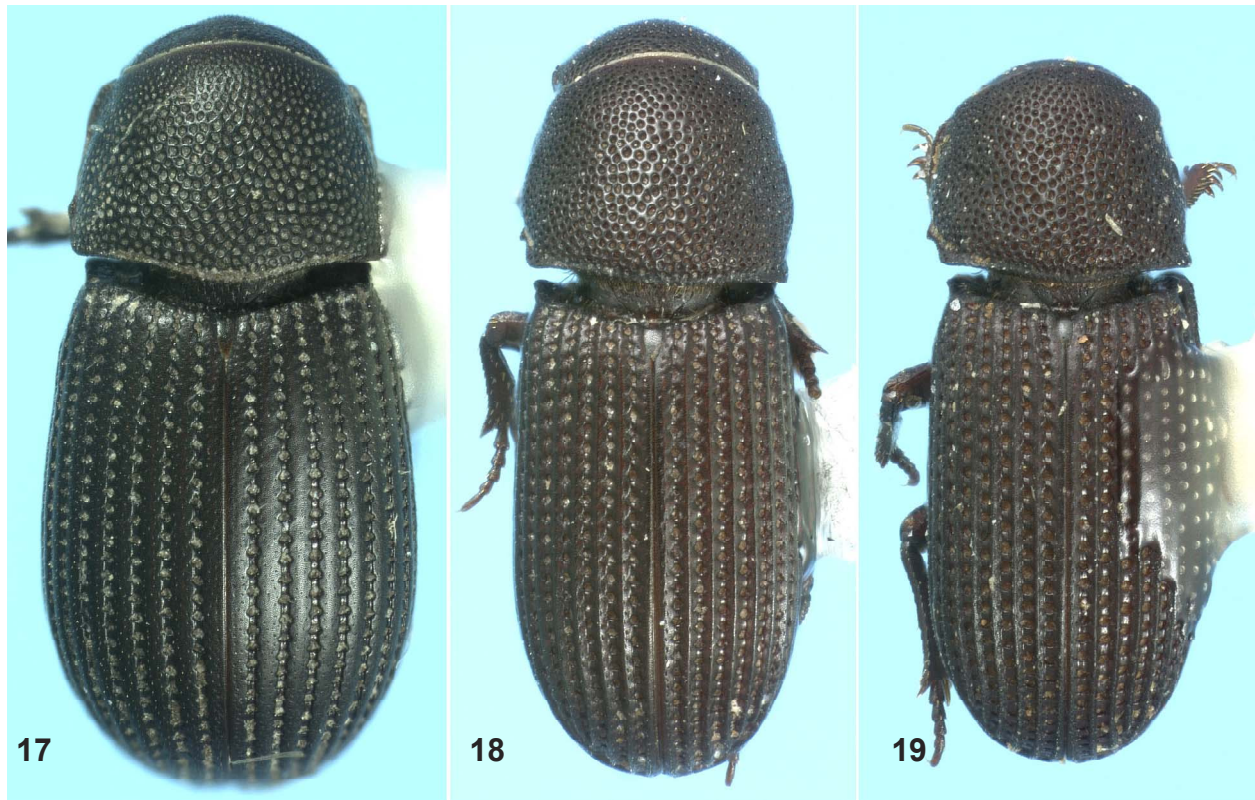
1-5 with large basal punctures forming fluting; sternites 2-4 with medial transverse row of large punctures laterally, not connecting along midline; apical half of sternite 5 and sternite 6 minutely punctate. Pygidium eroded on apical half, eroded area divided by fine longitudinal medial carina; apical margin on each side of middle with single seta. Profemur ventral surface finely, sparsely punctate. Protibia with 3 distinct lateral teeth, evenly spaced, apical tooth largest; protibial spur prominent. Meso- and metafemur with complete posterior marginal line; surface finely punctate; posterior margin of metafemur very weakly lobed at middle. Meso- and metatibia narrow, gradually widened to apex, with 2 distinct apical spurs, lacking lateral apical accessory spine; apical fringe of setae short. Meso- and metatarsi elongate, not as long as tibia; basal tarsomere same length as long tibial spur, 3 times longer than second tarsomere. Male unknown.

**Etymology.** The name was selected for the unique tridentate pronotal margin present on this species.

***Saprositellus* Balthasar 1967**

**Diagnosis.** In addition to the description and diagnosis of Stebnicka (2003) distinguishing characters are: head coarsely punctate from base nearly to clypeal margin, punctures gradually decreasing in size anteriorly; clypeal surface dulled, except for narrow band immediately behind margin, glossy, weakly granulate or sharply transversely rugose; clypeal margin narrow, with several small denticles each side of median emargination, inner edge of margin with triangular tooth pointing inwardly at middle; abdominal sternites with punctures moderate to coarse; basal fluting small to indistinct; surfaces of sternites 1-6 with irregularly arranged punctures across surface.

**Comments.** Descriptions and key for species of *Saprositellus* can be found in Stebnicka (2003). A new species and new records are detailed below.



**Figure 17-19.** *Saprositellus* spp., dorsal habitus images. 17) *Saprositellus peruanus* Stebnicka, holotype. 18) *Saprositellus ariqueemes* Stebnicka. 19) *Saprositellus santaritae* Stebnicka, holotype.



**Figure 20-23.** *Saproisitellus* spp., head to elytral bases. **20)** *Saproisitellus peruanus* Stebnicka, holotype. **21)** *Saproisitellus kenodontus*, n. sp. **22)** *Saproisitellus denticulatus* Balthasar. **23)** *Saproisitellus ariqueemes* Stebnicka.

#### Key to species of *Saproisitellus*

(modified from Stebnicka 2003)

1. Pronotum trapezoidal; elytra strongly widened in apical third (Fig. 17, 24), intervals weakly convex, striae punctures moderate in size, intervals twice as wide as striae ..... **2**
- Pronotum subquadrate; elytra slightly widened in apical third or parallel-sided (Fig. 18-19), intervals convex to carinate, striae punctures coarse, intervals slightly wider than striae or narrower ..... **3**
- 2(1). Pronotal lateral margin obtusely angled (Fig. 20); basal pronotal punctures larger than those on head; posterior edge of meso- and metafemora strongly lobed at middle; Peru ..... ***S. peruanus* Stebnicka**
- Pronotal lateral margin evenly rounded to base (Fig. 21); basal pronotal punctures same size as those on head; posterior edge of meso- and metafemora entire, very weakly lobed; Guyana ..... ***S. kenodontus*, n. sp.**
- 3(1). Pronotal punctures on disc separated by about one diameter, base lacking marginal line; elytral intervals slightly wider than striae, convex (Fig. 22); posterior edge of meso- and metafemora slightly lobed medially; Brazil, Peru ..... ***S. denticulatus* Balthasar**
- Pronotal punctures on disc separated by less than one diameter, base with marginal line; elytral intervals narrower than striae, carinate (Fig. 23); posterior edge of meso- and metafemora unlobed ..... **4**





**Figure 24-25.** *Saproisitellus kenodontus*, n. sp. 24) Dorsal habitus. 25) Ventral habitus.

- 4(3). Elytral humeral denticles large (Fig. 18); basal tarsomere of metatarsus equal in length to second tarsomere; tropical South America ..... ***S. ariqueмес* Stebnicka**  
 — Elytral humeral denticles small (Fig. 19); basal tarsomere of metatarsus longer than second tarsomere; Panama ..... ***S. santaritae* Stebnicka**

***Saproisitellus ariqueмес* Stebnicka 2003**  
**(Figure 18, 23)**

**Diagnosis.** A parallel-sided *Saproisitellus* with somewhat carinate elytral intervals, large humeral denticle on each elytron, and pronotal punctures separated by less than a diameter.

**Comments.** *Saproisitellus ariqueмес* was described from 3 specimens collected in Brazil and Bolivia. Additional specimens with the following data have been discovered: **BOLIVIA:** Santa Cruz, 3.7km SSE Buena Vista, Hotel Flora & Fauna, 430m, 5-15-XI-2001, M. C. Thomas and B. K. Dozier, tropical transition forest, BLT [1-FSCA]; **BOLIVIA:** Santa Cruz, Buena Vista, vic. Flora & Fauna Hotel, 27-31/X/02, Morris/Wappes [1-MNKN]; **FRENCH GUIANA:** Entomotech Lodge, 30 km SE Roura on Kaw Rd., 1-12-XII-2002, J. E. Eger, N04°33.570'-W052°12.433', 300m, BL Trap [1-PESC]; **GUYANA:** Region 8, Iwokrama Forest, Turtle Mt. base camp, 50m, 4°43'5"N, 58°43'5"W, 30 MAY 2001; R. Brooks, Z. Falin, GUY1BF01 069, ex under bark, [bar code] SM0567564, KUNHM-ENT [1-SEMC].





**Figure 26-28.** *Stebnickiella zosterixys*, n. gen., n. sp., holotype. 26) Dorsal habitus. 27) Ventral habitus. 28) Lateral habitus.

***Saprositellus kenodontus* Skelley, new species  
(Figure 21, 24-25)**

**Type material.** Holotype female, label data: "GUYANA: Region 8, Iwokrama Forest, 26 km SW Kurupukari, Iwokrama Mt., 400m, 4°20'2"N, 58°47'18"W, 23-25 MAY 2001, R. Brooks, Z. Falin, GUY1BF01 032, ex: flight intercept trap / [bar code] SMO570320, KUNHM-ENT / [red paper] **HOLOTYPE** *Saprositellus kenodontus* P. E. Skelley 2007" [SEMC].

**Diagnosis.** *Saprositellus kenodontus* is most similar to *Saprositellus peruanus* Stebnicka (2003) in having somewhat flattened elytral intervals, elytra widened at apical third, and pronotum widest near posterior angles. *Saprositellus kenodontus* differs notably in having finer pronotal punctures and pronotal lateral margin evenly rounded, lacking denticles.

**Description.** Female body length 3.5 mm, width 1.7 mm; elongate, widest at apical elytral 1/3 (Fig. 24); surface dulled, dark reddish brown, nearly black. Head weakly convex, surface coarsely punctate across entire surface, punctures smaller near clypeal margin, glossy area immediately behind clypeal margin weakly granulate; clypeal anterior margin narrow, with 3-4 small denticles each side of median emargination. Pronotum widest at base, somewhat trapezoidal in dorsal view; in lateral view, lateral edge with fine margin evenly curved to posterior angle, lacking denticles; basal pronotal edge evenly convex, very finely margined near middle, with transverse row of small punctures; pronotal surface evenly, coarsely punctate, separated by 1 diameter, becoming smaller near anterior margin. Scutellum small, elongate, narrow, triangular. Elytral surface not strongly dulled, intervals evenly convex, finely, irregularly punctate; striae deep, punctures large, separated by 1 diameter. Prosternum broad, flat behind procoxa. Meso- and metasternal juncture straight, flat. Mesosternum with row of coarse punctures on each side near mesocoxae, anterior half with scattered coarse punctures, medial surface of posterior half lacking punctures (other than lateral row). Metasternum with coarse punctures scattered across surface (Fig. 25), separated by 0.5-2 diameters. Abdominal sternites 1-5 with scattered moderate punctures, basal fluting reduced, indistinct; punctures on medial surface of sternites 2-4 separated by 3-4 diameters, punctures on sternite 6 separated by 1-2 diameters. Profemur ventral surface coarsely, densely punctate. Protibia with 3 distinct teeth on apical 1/3; protibial spur prominent. Meso- and metafemur with complete posterior marginal line; surface coarsely punctate, less distinct than on profemur; posterior margin of metafemur very weakly lobed at middle. Meso- and metatibia narrow, gradually widened to apex, with prominent lateral apical accessory spine and 2 distinct spurs; apical fringe of setae short, indistinct. Meso- and metatarsi elongate, not as long as tibia; basal tarsomere as long as large tibial spur, 2 times longer than second tarsomere. Male unknown.

**Etymology.** The species name is based on the Greek word "*kenodontis*" meaning toothless, bare, in reference to the smooth lateral pronotal margin, lacking teeth.

***Stebnickiella* Skelley, new genus**

**Type species.** *Stebnickiella zosterixys* Skelley, n. sp., here designated.

**Diagnosis.** *Stebnickiella* is easily recognized by its broad head, flattened clypeal margin, and anteriorly tumid pronotum with explanate sides and basal constriction.

**Description.** Body elongate, oval, constricted at base of pronotum, reddish-brown, surface glossy. Head nearly as broad as pronotum, weakly deflexed at middle; clypeal margin thin laterally, thickening toward middle, flattened in front, double edged, thickest at middle, medially with small triangular tooth projecting inwardly on inner edge. Pronotum broad, wider than long, tumid anteriorly, sides explanate; lateral edge evenly rounded to basal constriction, lacking teeth, edge finely margined; clypeus and anterior lateral portion of pronotum forming cavity for reception of fore legs; pronotal base evenly arched, with broad transverse basal depression, edge with complete marginal line. Scutellum small, narrow, triangu-

lar. Elytra oval, surface glossy; intervals flat to weakly convex; striae impressed, sharply defined, punctures moderate; elytral base with marginal bead laterally, humeral tooth projects laterally. Prosternum broad and flat behind procoxa. Meso- and metasternal juncture straight, flat. Mesosternum with 3 longitudinally linear callosities at middle, 2 small circular callosities on each side, and anterior row of deep punctures; medial callosity not attaining meso-metasternal juncture, half length of submedial callosities which reach juncture. Metasternum with distinct medial longitudinal groove, each side with transverse groove anterior of metacoxa, weaker groove posterior of mesocoxae; surface smooth, laterally with large foveate punctures. Abdominal sternites 2-4 with basal transverse row of large foveate punctures; sternites 2-5 with narrow basal groove; sternites 5-6 minutely punctate. Pygidium with longitudinal groove in basal half, apical half distinctly eroded posterior of transverse carina, glossy. Profemur elongate, with protrochanter width to length = 1:2; surface smooth, glossy. Protibia with 3 large, laterally placed teeth, evenly distributed along margin, apical tooth largest; apical spur prominent. Mesocoxae widely separated, elongate, nearly parallel with body axis. Meso- and metafemur elongate, narrow, flattened, posterior edge lacking marginal line. Meso- and metatibia somewhat flattened, triangular in cross-section, gradually widening to apex; apical fringe of spinules long, distinct; apical spurs long, slender; ventral surface glabrous, lateral margin with 2 dense rows of setae. Meso- and metatarsi narrow, nearly as long as tibia; basal metatarsomere 3 times longer than second tarsomere; tarsomeres with few apically placed setae.

**Etymology.** It is with great pleasure that I am able to name this distinctive genus for Z. Teresa Stebnicka, eminent taxonomist of Aphodiinae, who has devoted much of her recent research to the New World's fauna (gender feminine).

***Stebnickiella zosterixys* Skelley, new species**  
(Figure 3, 26-28)

**Type material.** Holotype female, label data: "Peru: Dept. Loreto, 1.5 km. N. Teniente Lopez 2°35.66'S, 76°06.92'W, 26 July 1993, 210-240m, Richard Leschen #213, ex: flight intercept trap/ [red paper] **HOLOTYPE** *Stebnickiella zosterixys* P. E. Skelley 2007" (SEMC).

**Description.** Female body length 3.3 mm, width 1.5 mm; elongate, constricted at middle (Fig. 26). Head surface smooth, evenly distributed punctures small, shallow, dense, at base intermixed with slightly larger punctures. Pronotal surface smooth, evenly distributed punctures mixed, small to moderate, shallow, dense; pronotal base with broad transverse band of extremely large, deep punctures in a broad transverse depression (Fig. 28). Meso- and metatibia gradually widening to moderately broad apex (Fig. 27). Elytral intervals with irregular row of punctures on each side of middle; striae punctures slightly elongate, touching next puncture.

**Comments.** Probably more than any odontolochine, the morphology of *Stebnickiella* indicates it is potentially an inquiline with ants or termites. It is unique in its general appearance and can not be confused with any aphodiine presently known.

**Etymology.** The species name is based the distinctive pronotal surface which appears to have a belt of punctures around a constricted waist, in Greek belt = *zoster* and waist = *-ixys* (gender feminine).

**Acknowledgments**

I deeply appreciate the efforts of Z. T. Stebnicka, Institute of Systematics and Evolution of Animals, Krakow, Poland, to update all Eupariini for the New World. Without her assistance and publications, my studies would not have been possible. For loans of specimens I thank J. Boone and A. Newton, Field Museum of Natural History, Chicago, IL, and Z. Falin, Snow Entomological Museum, University of Lawrence, KS. For reviews of the manuscript I thank M. J. Paulsen, Florida State Collection of Arthropods, Gainesville, FL; H. F. Howden and A. B. T. Smith, Canadian Museum of Nature, Ottawa, Canada; M. C.



Thomas, Florida State Collection of Arthropods, Florida Department of Agriculture, Gainesville FL, and W. N. Dixon, Florida Department of Agriculture, Gainesville, FL. Partial support was provided through an NSF/PEET grant (DEB-0118669) to M. L. Jameson and B. C. Ratcliffe, University of Nebraska State Museum, Lincoln, NE. This is Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Entomology Contribution No. 1083.

### Literature Cited

- Balthasar, V. 1967.** Neue arten der Familie Aphodiidae (Coleoptera). 128. Beitrag zur Kenntnis der Scarabaeoidea. Acta Entomologica Bohemoslovaca 64: 122-139.
- Endrödi, S. 1960.** XLII. Coleoptera Scarabaeidae Aphodiinae. Die Aphodiinae von Ost-Afrika. Mission zoologique de l'I. R. S. A. C. en Afrique Orientale (P. Basilewsky et N. Leleup, 1957). Annales du Musée Royal du Congo Belge, Tervuren (Ser. 8°) Zoologiques 88: 67-249.
- Endrödi, S. 1964.** Die Aphodiinae des Congo-Gebietes in Rahmen der fauna von Zentral-Afrika (Coleoptera Scarabaeidae). Annales Musée Royal de l'Afrique Centrale, Tervuren, Belgique (Ser. 8°), Sciences Zoologiques 123: 415 p.
- Stebnicka, Z. T. 2003.** The genus *Saprositellus* Balthasar, with descriptions of three new Neotropical species (Coleoptera: Scarabaeidae: Odontolochini). Coleopterists Bulletin 57: 451-457.
- Stebnicka, Z. T., and E. Galante. 2007.** New Neotropical taxa, synonymical clarifications and phylogeny of Odontolochini on the world basis (Coleoptera: Scarabaeidae: Aphodiinae). Acta Zoologica Cracoviensia 50B(2): 129-138.
- Stebnicka, Z. T., and H. F. Howden. 1996.** Revision of Australian genera in the tribes Odontolochini, Psammodiini, Rhyparini, Stereomerini and Part of the Eupariini (Coleoptera: Scarabaeoidea: Aphodiinae). Commonwealth Scientific and Industrial Research Organisation (CSIRO), Invertebrate Taxonomy 10: 97-170.

Accepted October 10, 2007

