

## A CONTRIBUTION TO THE KNOWLEDGE OF SPECIES OF THE TRIBE ACRATINI FROM PANAMA AND FRENCH GUIANA (BRENTIDAE: TRACHELIZINAE)\*

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### Abstract

This paper lists the species belonging to the tribe Acratini (Alonso-Zaragoza, Lyal, Bartolozzi & Sforzi, 1999) (Brentidae: Trachelizinae) in Panama and French Guiana; some of them are reported for first time in Panama: *Acratus diringshofeni* Soares, 1970; *Acratus bellus* Soares, 1970; *Acratus mendax*, Soares, 1970; *Nemobrenthus helmreichii* (Redtenbacher, 1868) Comb. Nov., and *Proteramocerus disparilis* Soares & Dias, 1971; likewise *Acratus pohli* Soares, 1970 and *Teramocerus punctirostris* are recorded for first time in French Guiana, also I made mention of species recently recorded in both countries by Mantilleri (2015). Meanwhile, nomenclatural position of each one species is updated. Their taxonomy, diagnosis, type depositories, geographical distribution, material examined, and other relevant details are presented for each species.

**Key words:** primitive weevils, taxonomy, Acratini, Panama, French Guiana.

## CONTRIBUCIÓN AL CONOCIMIENTO DE LAS ESPECIES DE LA TRIBU ACRATINI DE PANAMÁ Y GUYANA FRANCESA (BRENTIDAE: TRACHELIZINAE)

### Resumen

Este artículo enlista las especies de la tribu Acratini (Alonso-Zaragoza, Lyal, Bartolozzi & Sforzi, 1999) (Brentidae: Trachelizinae) presentes en Panamá y Guyana Francesa, siendo nuevos reportes para Panamá: *Acratus diringshofeni* Soares, 1970; *Acratus bellus* Soares, 1970; *Acratus mendax* Soares, 1970, *Nemobrenthus helmreichii* (Redtenbacher, 1868) Comb. Nov. y *Proteramocerus disparilis* Soares & Dias, 1971; de igual manera *Acratus pohli* Soares, 1970 y *Teramocerus punctirostris* se reportan por primera vez en Guyana Francesa, haciéndose mención además de algunas especies reportadas recientemente en ambos países por Mantilleri (2015). De igual forma la nomenclatura de cada una de las especies mencionadas es actualizada. La taxonomía, diagnosis, ubicación de los materiales tipo, distribución geográfica, ubicación del material revisado y otros elementos relevantes de cada una de las especies ha sido compendiada y catalogada.

**Palabras clave:** gorgojos picudos, taxonomía, Acratini, Panamá, Guyana Francesa.

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## INTRODUCTION

The Acratini Alonso-Zarazaga, Lyal, Sforzi and Bartolozzi, 1999 is a tribe of neotropical Brentidae comprising 11 genera (MANTILLERI *et al.*, 2014) and more than 100 species. Several taxonomical works treating the Acratini have been published since the XIXth (SHARP, 1895; KLEINE, 1921, 1927, 1938; BOHEMAN in SCHOENHERR 1840) and XXth century (SOARES, 1970; SOARES & DIAS, 1971; SOARES & SCIVITARO, 1972), making great advances in our knowledge. However, examination of material from many neotropical regions has revealed numerous undescribed taxa (MANTILLERI, 2014a; MANTILLERI *et al.*, 2014) indicating that this tribe is in need of further revision at the generic as well as the specific level.

This tribe, mostly from South America and finds its greatest diversity in Brazil. According SFORZI & BARTOLOZZI (2004), four genera are represented in Panama: Neacratus Alonso-Zaragoza, Lyal, Sforzi and Bartolozzi, 1999; *Nemocoryna* Sharp, 1895; *Nemobrenthus* Sharp, 1895 and *Proteramocerus* Kleine, 1921, while in French Guyana there are five: [*Neacratus*, *Proteramocerus*] *Acratus* Lacordaire, 1866, *Nemocephalinus* Kleine, 1927 and *Teramocerus* Schoenherr, 1840; nevertheless, MANTILLERI (2015 a,b,c) has made important contributions about knowledge of tribe Acratini in Central and South America.

From among the unidentified material stored in museums and insect collections in Panamá and French Guiana, I report seven new records of Acratini in both countries. A complete diagnosis to identify the species and distribution maps are presented.

## METHODS

Several dry pinned species of brentids were studied and illustrated from the institutions listed below. Their abbreviations are used throughout the paper: **MIUP** - Museo de Invertebrados G.B. Fairchild, Universidad de Panamá; Colección Entomológica, **PCMENT** - Programa Centroamericano de Maestría en Entomología, Universidad de Panamá, **STRI** - Smithsonian Tropical Research Institute Insect Collection in Panama; specimens from French Guiana are present in the private collection of Jean Louis Giuglaris - **CJLG**. I didn't have access to the type material of each species mentioned on this paper; nevertheless it's important to mention their current location in the following collections: **IPEACS** - Instituto de Pesquisas e Experimentação Agropecuárias do Centro-Sul, Manicoré, Amazonas, Brazil; **IBSP** - Instituto Biológico São Paulo, Brazil; **IOC** - Instituto Oswaldo Cruz , Rio de Janeiro, Brazil; **MZSP** - Museu de Zoologia da Universidade de São Paulo, Brazil; **MNRJ** - Museu Nacional, Universidade Federal do Rio de Janeiro, Brazil; **MNHN** - Muséum National d' Histoire Naturelle, Paris, France; **NHM** - The Natural History Museum, London, United Kingdom; **NHRS** - Naturhistoriska Riksmuseet, Estockholm, Sweden; **NMW** - Naturhistorisches

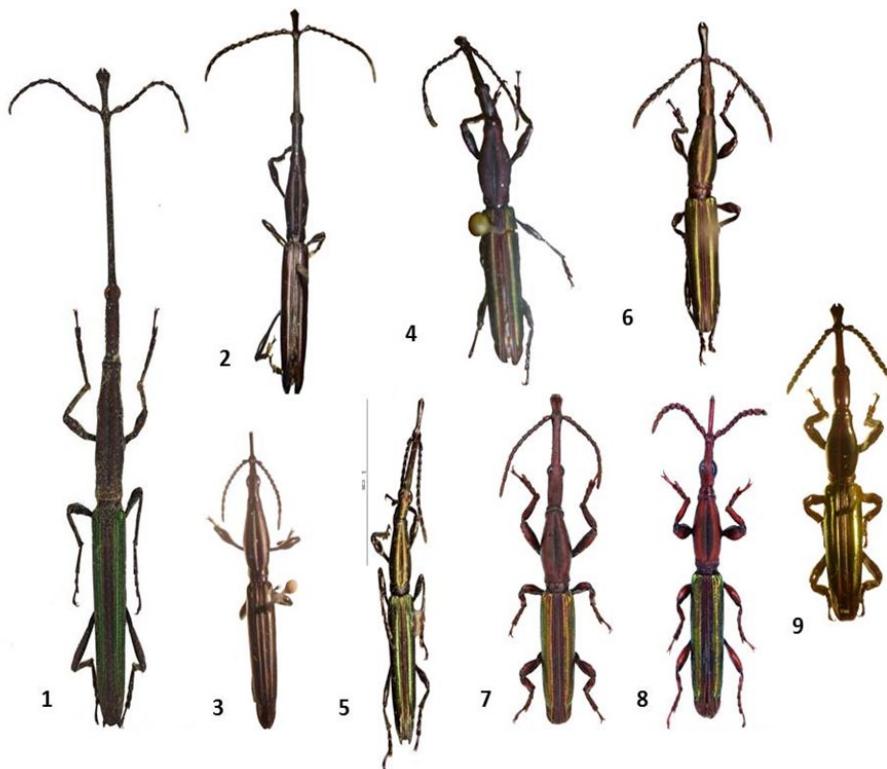
Museum Wien, Austria; **ZMUC** - Zoological Museum, University of Copenhagen, Denmark. Type's abbreviations: **AT**: Allotype, **HT**: Holotype, **LT**: Leptotype, **PLT**: Paralectotype, **PT**: Paratype, **ST**: Syntype; synonyms and unintentional spelling errors [lapsus] are listed.

All species examined for this paper were collected from 1969 to 1993 in Panamá, and 2001 to 2012 in Commune La Regina and Cacao, French Guiana; specimens and external structures were examined using a Leica GZ-6 stereomicroscope. Panamanian specimens were photographed using a Canon SX-500 camera and the Visionary Digital Passport optical equipment; photographs of French Guiana specimen are courtesy of Jean-Louis Giuglaris, each of them was edited using GIMP (GNU Image Manipulation Program) (KIMBAL *et al.*, 2008). For brentid species, determinations were made using the published descriptions of SHARP (1895), KLEINE (1927), SOARES (1970), SOARES & DIAS (1971), SOARES & SCIVITARO (1972) and MANTILLERI (2015a). Indeed, taxonomical classification of tribe Acratini is controversial; many authors (SHARP, 1895; KLEINE, 1927, 1938; SOARES & DIAS, 1971; SOARES & SCIVITTARO, 1972) established the genera *Proteramocerus*, *Teramocerus*, *Acratus* and *Nemobrenthus*; according MANTILLERI (2015) based in misinterpretations and wrong descriptions; a thorough examinations of sclerites and internal sac of aedeagus and phylogenetical analyses can establish that *Proteramocerus* and *Acratus* are artificial taxa and moving as synonyms of *Teramocerus*; some *Proteramocerus* and *Teramocerus* species recently have been moved to new genera *Rugosacratus* and *Teramoceroides* respectively; thus, for species taxonomy and new combinations I followed the proposal of MANTILLERI (2015a,b,c), but keeping traditional taxonomy of Acratini at genera level (other *Acratus* and *Proteramocerus* which haven't been accommodate yet in a new taxon are remarked with a \* in the key) described on this paper and make some comments about taxonomic position changes (remarks). Distributional data were imported into Map Creator 2 (PRIMAP SOFTWARE, 2007) for mapping based on published information by SHARP (1895); SOARES & DIAS (1971); WOLDA *et al.* (1998), and SFORZI & BARTOLOZZI (2004).

## RESULTS

Seven species of Acratini are recorded in this paper; five of them are new records for Panamá and two for French Guiana. The new records extend the distribution of *Proteramocerus disparilis* Soares y Dias, 1972, *Acratus pohli* Soares, 1970; *Acratus diringshofeni* Soares, 1970, *Acratus bellus* Soares, 1970, *Acratus mendax* Soares, 1970, *Nemobrenthus helmenreichii* (Redtenbacher, 1868) and *Teramocerus punctirostris* Boheman, 1840. Meanwhile, I made mention of several Acratini species has been recorded recently in both countries: *Rugosacratus eximius* Mantilleri, 2015, *Teramoceroides belti* Sharp, 1895 and *Teramocerus rileyi* Mantilleri, 2015. Identification of specimens of Acratini based solely of external morphological characters or without

a taxonomical key may sometimes be tricky particularly in males, nevertheless isolate females are very difficult to identify if not impossible, for this reason, I present an identification key for separating Acratini genera treated here.



**Figures 1-9.** Species of Acratini; *Rugosacratus* spp. Habitus of adults: **1.** *R. eximus* (Mantilleri, 2015) male; **2-3** *Proteramocerus* spp. Habitus of adults: **2.** *P. disparilis* Soares & Dias, 1971 male; **3.** *P. disparilis* Soares & Dias, 1971 female; **4-8** *Acratus* spp. Habitus of adults: **4.** *A. diringshofeni* Soares, 1970 male; **5.** *A. mendax* Soares, 1970 male; **6.** *A. bellus* Soares, 1970 male; **7.** *A. pohli* Soares, 1970 male; **8.** *A. pohli* Soares, 1970 female; *Nemobrenthus* Habitus of Adults. **9.** *N. helmenreichii* (Redtenbacher, 1868) male

## Taxonomy

### Key to separate Genera of Acratini (Coleoptera: Brentidae)

- 1a. Antennae long, last antenonomere acuminate, elongate, first tarsal segment very long or as long as the length of 2nd and 3rd together..... 2
- 1b. Antennae longer or shorter, last antenomere acuminate or normal, first tarsal segment when it is long not as above..... 3

- 2a. Antennae longer, extending beyond the neck, first tarsal segment at most as long as the length of 2nd and 3rd together, elytra apical tooth without dense pubescence..... *Teramocerus* Schoenherr, 1840
- 2b. Antennae long, slender, extending beyond the neck, first tarsal segment very long, at least one a half times the 2nd and 3rd together, elytra apical tooth provided dense pubescence..... *Teramoceroides* Mantilleri, 2015
- 3a. Antennae long, reaching the base of metarostrum (except *T. punctirostris*), head weakly puncturate with numerous transverse wrinkles, first tarsal segment at most as long as the length of 2nd and 3rd together..... *Rugosacratus* Mantilleri 2015
- 3b. Antennae reaching the neck of prothorax..... 4
- 4a. Antennae extending to the prothorax, first tarsal segment longer or shorter than length of 2nd and 3rd together, sturdy body..... 5
- 4b. Antennae shorter, at least just reaching the neck, first tarsal segment at most as long as the length of 2nd and 3rd together, slender body..... *Proteramocerus* Kleine, 1821\*
- 5a. Antennae extending to the medial side of the prothorax, first tarsal segment almost as long as the length of 2nd and 3rd together..... *Acratus* Lacordaire, 1866\*
- 5b. Antennae extending to the apical side of the prothorax, first tarsal segment shorter than length of 2nd and 3rd together..... *Nemobrenthus* Sharp, 1895

*Acratus* Lacordaire, 1866

*Acratus* Lacordaire, 1866: *Brentides*: in *Histoire Naturelle des Insectes. Genera des Coléoptères.* VII: 166. Type specie: *Brenthus suturalis* by original designation.

*Acratus* is considered a genus between the Ithystenini and the Nemocephalini (SOARES, 1970); it differs from slender *Proteramocerus* and *Teramocerus* by the sturdy body (except *Acratus apicalis*); the head and rostrum are shorter than either *Proteramocerus* or *Teramocerus*; the prothorax is pyriform or cylindrical, sulcate; the elytral apex is rounded; the first tarsal segment is almost as long as the length of 2nd and 3rd together.

*Acratus diringshofeni* Soares, 1970 (Figure 4)

***diringshofeni* Soares, 1970:** *Studia Entomologica*, 13 (1-4): 206; Type depository: MZSP (Diringshofen Coll.) (HT).

**Diagnosis:** *A. diringshofeni* is recognized by the following set of features: head longer than broad, rostrum ventrally without dense pubescence, prothorax reddish-brown, opaque, pyriform, with three longitudinal black bands, one in the median groove and one on each side; elytra green with golden highlights, elytral suture, I-II striae and I-II interstriae reddish-brown; elytral apex reddish-brown, rounded; pro and mesofemora clubbed, metafemora not laminate at base.

**Distribution map:** Figure 10: Brazil (SOARES, 1970; SFORZI & BARTOLOZZI, 2004); Panama (first record).

**Examined material:** lago Alajuela, área del Canal de Panamá, 1 (♂) (MIUP).

*Acratus pohli* Soares, 1970 (Figure 7 & 8)

**pohli Soares, 1970:** *Studia Entomologica*, 13 (1-4): 229; **Type depository:** MZSP (Diringshofen Coll.) (HT).

**Diagnosis:** Head longer than broad, rostrum ventrally densely pubescence; prothorax pyriform-shaped, evenly green without bands; elytra green with bronze highlights according the light incident, elytral suture, I-II striae and I-II interstriae reddish-brown, post-median black blotch; elytral apex rounded, elytral declivity reddish-brown; pro and mesofemora clubbed, metafemora laminate at base.

**Distribution map:** Figure 11: Brazil to Paraguay (SOARES, 1970; SFORZI & BARTOLOZZI, 2004); French Guiana (first record).

**Examined material:** French Guiana, Track Kapiri, RN2 PK 125 commune de Regina, Nov. 15, 2010, Jean-Louis Giuglaris, interception trap (trap glass), 1 (♀) (CJLG); Track Kapiri, RN2 PK 125 commune de Regina, Nov. 29, 2012, Jean-Louis Giuglaris, interception trap (trap glass), 1 (♂) (CJLG).

*Acratus mendax* Soares, 1970 (Figure 5)

**mendax Soares, 1970:** *Studia Entomologica*, 13 (1-4): 225; **Type depository:** MNRJ (Campos Seabra Coll.) (HT).

**Diagnosis:** *A. mendax* is recognized by the following combination of characters: head wider than long, prorostrum slender, barely dilated at apex; antennae reach the middle of prothorax, 1-8 antennomeres are conical, 9-11 cylindrical, last antennomere acuminate; prothorax pyriform, dorsally green-purple; elytra green without golden highlights, elytral declivity and caudal appendices purple. The species can be distinguished from *A. gracillipes* by the size of the rostrum; all tarsal segments are the

same length (*A. gracillipes* first tarsal segment as long as 2nd and 3th tarsal segment together).

**Distribution map:** Figure 10: Panama (first record); Brazil (SOARES, 1970; SFORZI & BARTOLOZZI, 2004)

**Examined material:** Panamá, Barro Colorado Island, May 22, 1973, H. Wolda, Light Trap, 1 (♂) (STRI).

*Acratus bellus* Soares, 1970 (Figure 6)

***bellus* Soares, 1970:** *Studia Entomologica*, 13 (1-4): 203; **Type depository:** MZSP (Campos Seabra Coll.) (HT, AT, PT).

**Diagnosis:** *A. bellus* can be confused with *A. bechynei*. It can be distinguished from *A. bechynei* by the following characters: *A. bechynei*: head slightly longer than proorostrum (*A. bellus* head shorter than proorostrum); prothorax in *A. bechynei* elongated and strongly angulate (*A. bellus* prothorax pyriform-shaped); Hind femora laminated, base of the femora angulate (*A. bellus* without angulate structure).

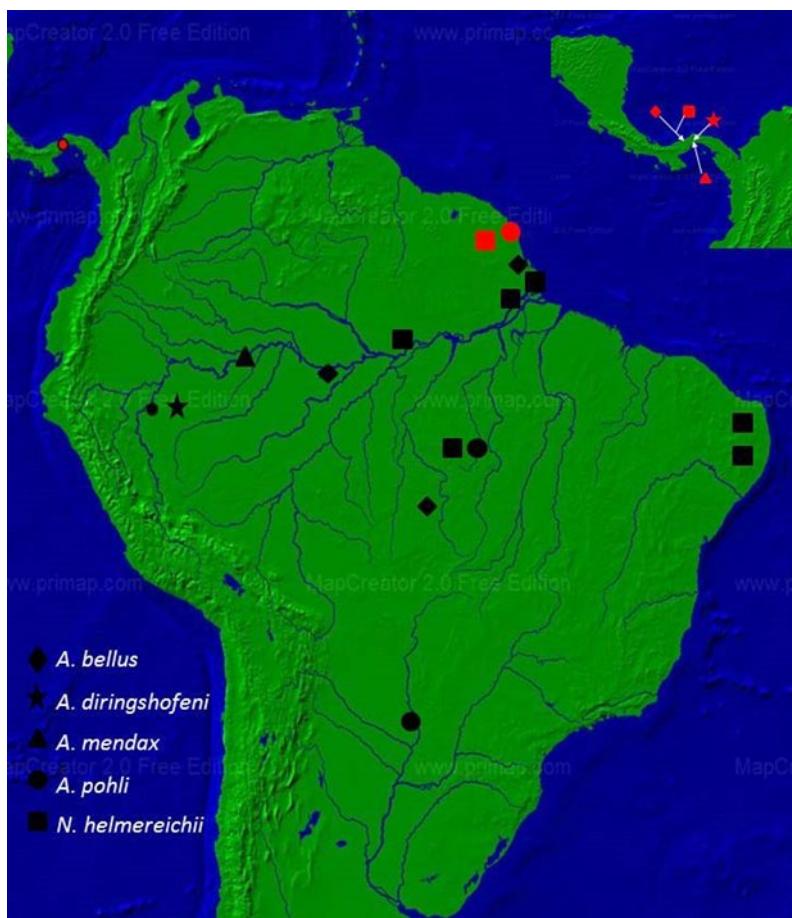
**Distribution map:** Figure 10: Brazil (SOARES, 1970; SFORZI & BARTOLOZZI, 2004); Panama (first record).

**Examined material:** Canal Zone, Fort Kobbe, Nov. 12, 1984, H. Stockwell, 1 (♂) (STRI); El Valle, Altos de Campana National Park, May 22, 1998, Bryan K. Eya, 1 (♂) (MIUP)

*Nemobrenthus* Sharp, 1895

*Nemobrenthus* Sharp, 1895 *Biologia Centrali Americana* 4(6): 71. *Neobrenthus*, Kleine, 1937 *Entomologisches Nachrichtenblatt* 11(2): 102 [lapsus]; Type specie: *Nemobrenthus aeneipennis* Sharp, by original designation.

*Nemobrenthus* is a small group of medium size brentids that resemble *Acratus* by the sturdy body, head and rostrum are shorter, collar constriction well marked; prothorax pyriform longer than broad, longitudinally grooved, not punctate; elytral apex rounded without apical tooth; femora not pedunculate; at base, dorsal part of femora slightly flattened and grooved. Differs them by first tarsal segment broader than long; shorter than 2-3 together, looking sub-equals; tarsomeres 2-3 impressed on upper side; tarsomere 2 broader than long.



**Figure 10. Distribution map of *Acratus* spp. and *Nemobrentus* spp. in Central America and South America:** *A. diringshofeni* (stars), *N. helmenreichii* (square), *A. mendax* (triangle), *A. bellus* (rhombs) and *A. pohli* (dot). Red spots = new localities; Black spots = previously known distribution confirmed by the author.

*Nemobrenthus helmenreichii* (Redtenbacher, 1868) Comb. Nov. (Figure 9)

**helmenreichii** Redtenbacher, 1868 (*Trachelizus*); *Syn. Kleine, Coleopterum Catalogus* 1927:74; *helmenreichi*: Schoenfelt, 1908: *Genera Insectorum*: 22 (*Trachelizus*) [lapsus]; Type depository: ZMUC (*B. suturalis*) (HT); NMW (*T. helmenreichii*) (HT).

**Diagnosis:** *N. helmenreichii* can be recognized by the following combination of characters: body reddish brown, elytra strongly metallic green, dark post-median elytral blotch hardly distinct; head not punctate, interocular fovea weak but distinct. antennae short, antennomeres 2-8 broader than long, 9-10 longer than broad, 11 two times as long as 10.

**Distribution map:** Figure 10: Brazil (SOARES, 1970; SFORZI & BARTOLOZZI, 2004); Panama (first record).

**Examined material:** Cerro Campana, Aug. 13, 1974, H.P. Stockwell, 1 (♂), 5 (♀) (STRI); Cerro Campana, Aug. 17, 1974, H.P. Stockwell, 2 (♀) (STRI)

**Remarks:** *N. helmenreichii* was described on the one female specimen by Lund (1800) as *Trachelizus helmenreichii*, nevertheless, Kleine and Soares place *T. helmenreichii* as a synonym of *Teramocerus suturalis* (*Acratus*); this concept as understood erroneously by them and referring completely different species according MANTILLERI (2015b). For this reason he propose remove it from synonymy.

*Proteramocerus* Kleine, 1921

*Proteramocerus* Kleine, 1921, *Brentidenstudien-Entomologische Blätter* 17(7/9): 129; Type specie: *Brenthus acutipennis* by original designation.

*Proteramocerus* is a group of slender brentids that differs from *Acratus* by the head very long, longer than broad, antennae longer or shorter at least just reaching the neck, prothorax slender, elytra with thorn-shaped caudal appendices present in both sexes or at least in males, or rarely absent, legs slender, femora clubbed, first tarsal segment at most as long as the length of 2nd and 3rd together.

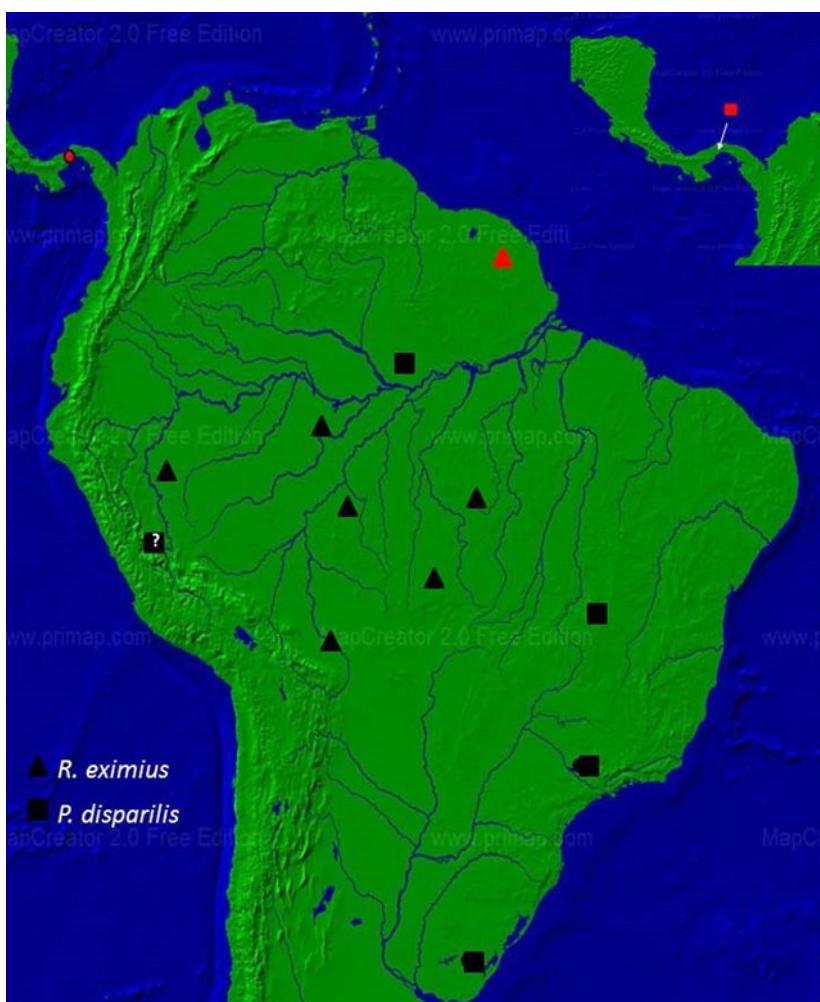
*Proteramocerus disparilis* Soares y Dias, 1971(Figures 2 and 3)

***disparilis* Soares y Dias, 1971.** *Rev. Brasil. Entomol.* Vol. 15 (7): 56. **Type Depository:** MNRJ (Campos Seabra Coll.) (HT, AT, PT), IBSP (PT), IOC (PT), MNRJ (PT), MZSP (Diringshofen Coll.) (PT).

**Diagnosis:** *P. disparilis* is recognized by the following set of features: body dark-brown, slender; head very long, dorsally glabrous with transversal striae, antennae with third antenomere longer than others; prothorax strongly longer, than broad, smooth, rhomboid-like appearance, apically with transversal striae, longitudinally grooved; elytra without obvious puncturation, elytral apex rounded without an evident declivity; femora clubbed; first tarsal segment as long as the length of 2nd and 3rd together.

**Distribution map:** Figure 11: Panama (first record); Brazil and Peru (SOARES & DIAS, 1971; SFORZI & BARTOLOZZI, 2004).

**Examined material:** Chepo, Altos del Majé, May 17, 1975, Stockwell & Engelman, Light Trap, 1 (♂) (STRI); Barro Colorado Island, Aug. 15, 1984, H. Wolda, 1 (♂) (MIUP); Panama, Interamericana Highway, E. Ipetí, May 3, 1993; H. Stockwell, 2 (♂), 1 (♀) (STRI).



**Figure 11.** Distribution map of *Rugosacratus* and *Proteramocerus* ssp. in Central America and South America: *R. eximius* (triangles), *P. disparilis* (squares). Red spots=new localities; Black spots=previously known distribution confirmed by the author.

**Remarks:** according SOARES & DIAS (1971), *P. disparilis* belongs to a *Proteramocerus* restricted group without elytral thorn-shaped caudal appendices, taxonomically close to *Proteramocerus fidus* (KLEINE, 1927). The distribution from Peru (Paratype) cited by SOARES & DIAS isn't mentioned by SFORZI & BARTOLOZZI (2004), but is very doubtful. See remarks on the map [Figure 12. Squares (?)]

*Rugosacratus* Mantilleri, 2015

*Rugosacratus* Mantilleri 2015c, *Bulletin de la Société Entomologique de France*, 120(3): 268; Type specie: *Proteramocerus chontalensis* by original designation.

*Rugosacratus* is new genera proposed by Mantilleri 2015, differs from *Proteramocerus* by the following set of characters: Head weakly punctuated with numerous transverse wrinkles clearly visible (especially in males). Head without or with only a few sensory pores. Below the suture head gular fairly marked without sensory pores behind the median post-ocular fovéole. Antennae longer reaching the metarostrum, antennomeres much longer than wide, segments 2-8 significantly widened at the apex; 9-10 subcylindrical to ovoid slightly narrowed at the base. First tarsal segment much longer than wide, longer the following two together; Abdomen elongated sternites III-IV non-depressed or furrowed, punctuated on sides.

*Rugosacratus eximius* Mantilleri, 2015 (Figure 1)

***eximius* Mantilleri 2015c:** *Bulletin de la Société Entomologique de France* 120 (3): 273. **Type depository:** MNHN (HT).

**Diagnosis:** this species is recognized by the following set of features: body dark-brown, elytra metallic green, slender, head and prothorax dorsally with transversal striae, rostrum longer, strongly sulcate dorsally from metarostrum to prorostrum, antennae long, third antennal segment longer than other antennal segments; prothorax laterally with irregular outline, elytra with regular punctures, elytral suture blackish.

**Distribution map:** Figure 11: Nicaragua, Costa Rica; Peru, Bolivia, Brazil (SOARES & DIAS, 1971; SFORZI & BARTOLOZZI, 2004) and French Guiana (MANTILLERI, 2015c)

**Examined material:** French Guiana, Road of the Kaw (RD06) PK 48 commune de Cacao, May 15, 2001, Jean-Louis Giuglaris, trap light uv, 1 (♂) (CJLG).

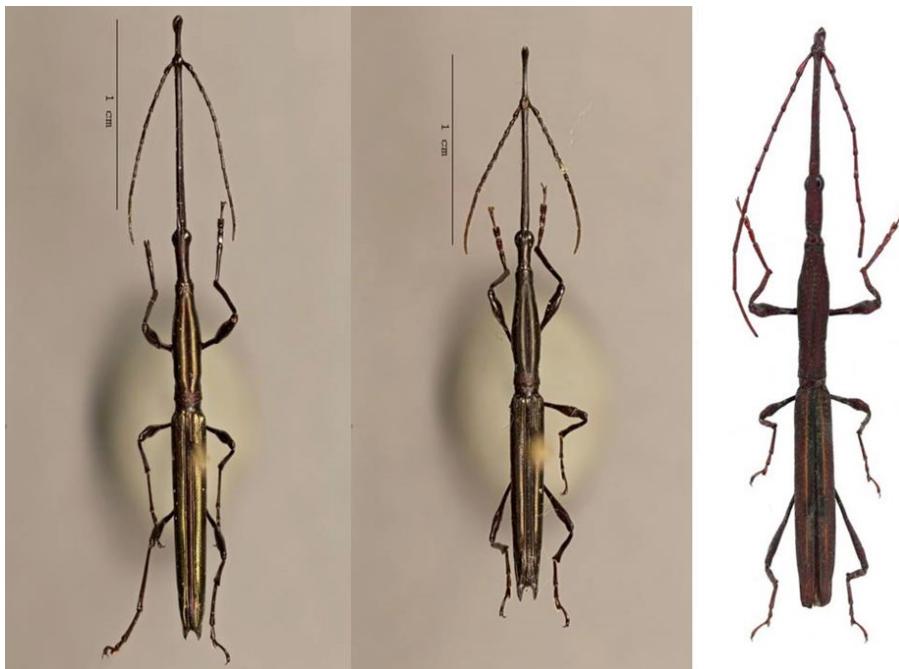
**Remarks:** prothorax on females' aren't wavy laterally; both males and females of *R. eximius* have spiny structures on elytral apex, however are short in females or absent.

*Teramoceroides* Mantilleri, 2015

*Teramoceroides* Mantilleri 2015c, *Bulletin de la Société Entomologique de France*, 120(3): 279. Type specie: *Belorhynchus gracilis* by original designation.

The genus *Teramoceroides* proposed by MANTILLERI (2015c) differs from its brother group *Teramocerus* by the following set of characters: below rostrum male with very long bristles, sensory pores well above the base of the proorostrum forward. Antennomeres 9-10 longer than wide, cylindrical. Pronotum furrowed, not punctuated. First tarsal segment more long as wide, the first article of the metatarsal longer than males following two together.

*Teramoceroides beltii* (Sharp, 1895) (Figure 12)



**Figures 12.-14** Species of Acratini: *Teramoceroides* spp. Habitus of adults: **12.** *T. beltii* Sharp, 1895 male; **13-14.** *Teramocerus* spp. Habitus of adults. **13.** *T. rileyi* Mantilleri, 2015 male; **14.** *T. punctirostris* Boheman, 1840 male

**beltii Sharp, 1895:** *Biologia Centrali Americana*, Vol. 4 (6): 78 (*Teramocerus*); Mantilleri, 2015. *Bulletin de la Société Entomologique de France*, 120 (3):283); **Type depository:** NHM (LT, PLT)

**Diagnosis:** According Sharp (1895), *T. beltii* can be recognized by the following set of features: rostrum of male densely covered with setae beneath, its upper surface is remarkable in being raised along the middle, making it bisulcate; head beneath is wrinkled and the sides of the prosternum are granulate; elytra are of a beautiful silky metallic-green color with the suture purplish red.

**Distribution map:** Figure 15: Costa Rica, Nicaragua, (SHARP, 1895; KLEINE, 1927; SFORZI & BARTOLOZZI, 2004) and Panama (MANTILLERI, 2015c)

**Examined material:** Panama, Chepo, Maje Station, May 18, 1974, H. Stockwell and D. Engelman (STRI); Panama, Canal Zone, Fort Kobbe, July 26, 1974; H. Stockwell (STRI); Panama, Chepo, Maje Station, May 17, 1975, H. Stockwell and D. Engelman (STRI); Fort Kobbe, May 20, 1983, H. Stockwell, 1 (♂) (STRI); Panama, Colon, Canal Zone, Pipeline Road, May 7, 1984; H. Stockwell (STRI); Fort Kobbe, Aug. 4, 1985, H. Stockwell, 4 (♂) 3(♀), (STRI); Panama, Canal Zone, Fort Kobbe, Aug. 24, 1985; H. Stockwell 2 esp. (STRI), Fort Kobbe, Jun. 15, 1992; Tobin, 2 (♂) (STRI); Colon, Galeta Island, May 17-18, 2003, R. Cambra and A. Santos; 1 (♂) (MIUP).

**Remarks:** WOLDA *et al.* (1998) refers to 52 specimens of *T. belti* from Barro Colorado Island, stored in the Charles W. O'Brien Collection (CWOB); nevertheless they aren't cited previously by SFORZI & BARTOLOZZI (2004) for the country.

*Teramocerus* Schoenherr, 1840

*Teramocerus* Schoenherr, 1840, *Genera et species Curculionidum*, Vol. 5(2): 556; *Teramozerus*; Kleine, 1920: *Der Breithidenflügel*, 85 (A8): 13 [lapsus]. Type species: *Teramocerus janthinus* by original designation.

This group differs from *Acratus* and *Proteramocerus* by the great elongation of the first tarsal segment and the length of the antennae, which extend beyond the prothorax and body much slender.

*Teramocerus punctirostris* Boheman, 1840 (Figure 14)

**punctirostris** Boheman (in Schoenherr, 1840: *Genera et Species Curculionidum*: 566).  
**Type depository:** MNRI (Campos Seabra Coll.) (HT).

**Diagnosis:** *Teramocerus punctirostris* is distinct among the species of *Teramocerus* by possessing the following set of features: body brown, slender, prothorax laterally with soft irregular outlines; elytra with one yellow band on each side, elytral suture and post-medial blotch blackish, elytral apex not spiny.

**Distribution map:** Figure 15: Brazil (SFORZI & BARTOLOZZI, 2004), French Guiana (first record).



**Figure 15.** Distribution map of *Teramocerus* and *Teramoceroides* spp. in Central America and South America: *T. belti* (rhombs), *T. punctirostris* (inverted triangles) and *T. rileyi* (square). Red spot=new localities; Black spot= previously known distributions confirmed by the author.

**Examined material:** French Guiana, Track Kapiri, RN2 PK 125 commune de Regina, Nov. 25, 2010, Jean-Louis Giuglaris, interception trap (trap glass), 1 (♀) (CJLG).

**Remarks:** Recently MANTILLERI (2015b) propose that *T. punctirostris* should be moved to the genus *Rugosacratus*, based in the peculiar set of characters who differs from other *Teramocerus*. Nevertheless, I prefer maintain the original name.

*Teramocerus rileyi* Mantilleri, 2015 (Figure 13)

**rileyi** Mantilleri, 2015. *Bulletin de la Société Entomologique de France*, 120 (3): 289.  
**Type depository:** TAMU (HT); MNHN (PT)

**Diagnosis:** *T. rileyi* can be distinguished from *T. belti* by the following set of features: body brownish, not metallic; elytra caudal appendices ventrally covered by coarse setae.

**Distribution map:** Figure 15: Panama (MANTILLERI, 2015c)

**Examined Material:** Paraiso, Canal Zone, Oct. 4, 1969, H. Stockwell, 1 (♂) (STRI); Gamboa, Panamá, Jun. 20, 1970, Colon, Canal Zone, Coco Solo Hospital, February 01, 1974, H. Stockwell, 1 (♂) (STRI); Parque Nacional Soberania, May 5, 1981, J.C. Chang, 1 (♂) (MIUP); Barro Colorado Island, Light trap, June 28, 1984, H. Wolda, 1 (♂) (MIUP); Panamá, Canal Zone, Pipeline Road, Jul. 2, 1984, H. Stockwell, 1 (♂) (STRI); H. Stockwell, 1 (♂) (STRI); Fort Kobbe, Aug. 24, 1985, H. P. Stockwell, 1 (♂), (STRI).

**Remarks:** According MANTILLERI (2015) *T. rileyi* is only known in Panama, however, it's may be more widespread in Central America.

In conclusion identification of Acratini species without study of the genitalia, it will be very difficult to properly identify most of Acratini as descriptions and keys given by Soares and Scivittaro are not reliable at moment. Indeed, they often based their conclusions on observations by Lacordaire or Schoenherr (especially for type species of the different genera) and those observations are almost always outdated now. Moreover, as their studies focused only on external features, they were blurred by the extraordinary variability inside a same species, leading to descriptions of several synonyms. A comprehensive study of the genitalia will understand this group and other groups of Brentidae, their phylogeny and taxonomy relations in the future.

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