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Flat Bugs of French Guyana – a preliminary faunal list (Heteroptera, Aradidae)

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A b s t r a c t : The flat bug fauna of French Guyana is insufficiently known and has never been the subject of a particular study. In the present paper all available data from private or institutional collections including literature data are compiled and a preliminary overview of the present faunistical knowledge is given. To date 36 species from 19 genera, belonging to 5 subfamilies are recorded.

K e y w o r d s : Heteroptera, Aradidae, faunistic, Neotropical Region, French Guyana.

Introduction

The flat bug fauna of the Neotropical Region is one of the richest worldwide in terms of species diversity due to the presence of a large rainforest belt and a great variety of habitats. About 70 genera and 500 species are described so far (KORMILEV & FROESCHNER 1987), most of them from Brazil and the Amazon basin.

The knowledge of Aradidae from French Guyana (Cayenne) is still very poor and only through the recent collecting activities of some entomologists new records and additional faunistic data were available. Most of the specimens are by-catches and several interesting records were obtained using interception traps which were fixed between trees in forests (photo 1). These collection data are assembled and presented below together with literature records, the respective material is held in the following collections: CEHI (collection Ernst Heiss, Innsbruck Austria); CGMM (collection Gérard Moragues, Marseille France) unless otherwise stated.

As the collected Aradidae are partly represented by only one specimen, the identification to species level was often impossible and to prevent misidentification, only the generic assignment is given. The reason is that there are no actual and reliable keys for most species-rich genera such as *Mezira*, *Neuroctenus*, *Notapicinus*, *Notoplocoris* etc. as well as lack of comparative material, which would be necessary for a revision of these taxa.

To date 19 genera and 36 species belonging to 5 subfamilies are recorded. It can be expected that future collecting will considerably increase the number of species occurring in French Guyana.



Photo 1. Interception trap in a rainforest of French Guyana.

The species are listed alphabetically. Nomenclature follows KORMILEV & FROESCHNER (1987) or recent papers when taxonomic changes were involved.

List of species

Subfamily Aneurinae DOUGLAS & SCOTT 1865

***Iralunelus politus* (SAY 1832)**

L i t e r a t u r e d a t a : described from "United States".

M a t e r i a l e x a m i n e d : 1♂1♀ "Guyane Fr." Camopi, F. Geay 1900 (CEHI ex Mus. Paris det. Kormilev 1973); 1♂1♀ St. Laurent du Maroni, E. Le Moul't 1909 (CEHI); 1♂1♀ Bas Maroni, Nouveau Chantier VI and VII.1909, E. Le Moul't (CEHI).

D i s t r i b u t i o n : Southern USA, French Guyana.

N o t e : This species is closely related to *I. wygodzinskii* PICCHI, 1977 from Jamaica, sharing the same position of spiracles. The latter would be biogeographically closer, however the key given by PICCHI (1977) leads to *I. politus*.

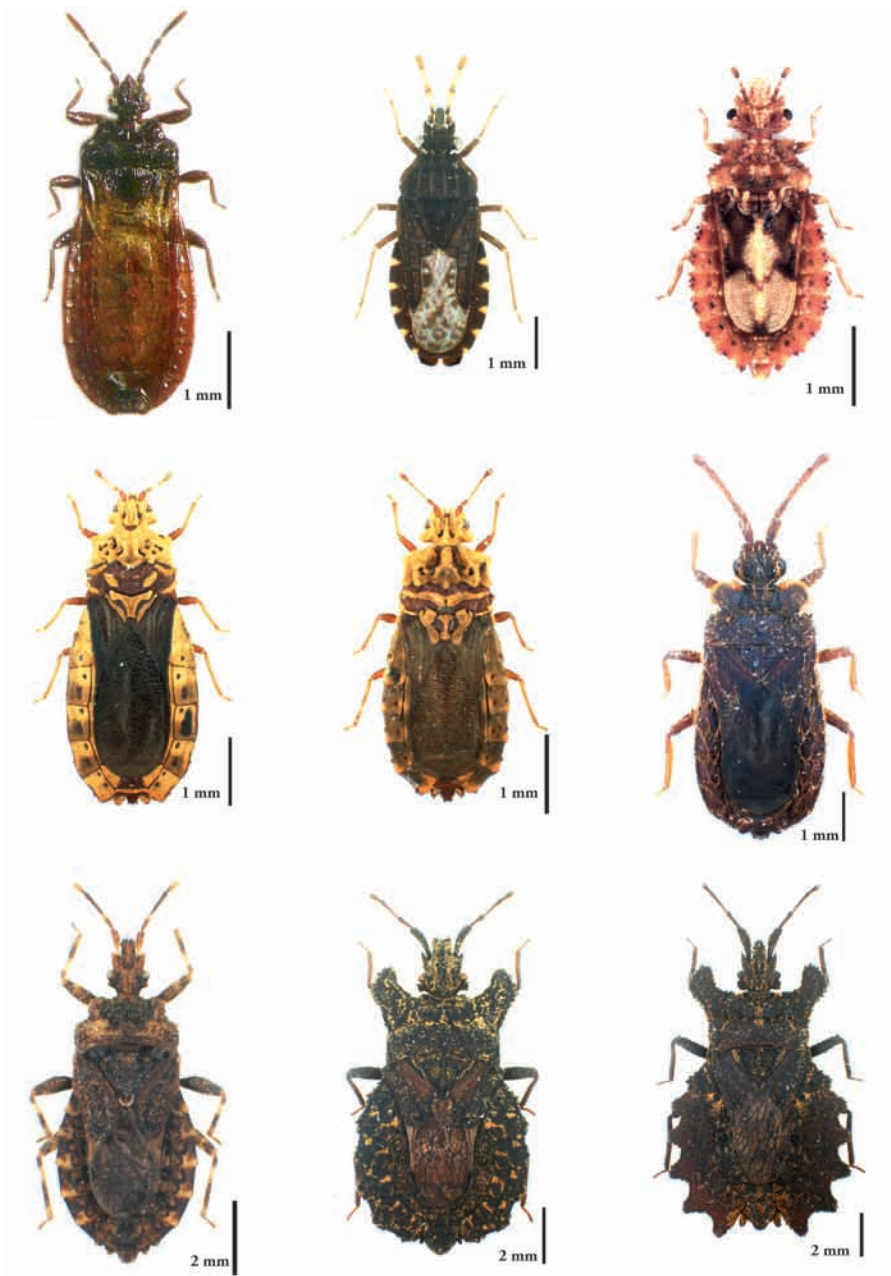


Photo 2. Aradidae of French Guyana 1:

1st line: *Iralunelus politus*, *Aradus pericarti*, *Calisius ferox*

2nd line: *Neoproxius gypsatus*, *Neoproxius sp.*, *Aphleboderrhis comata*

3rd line: *Cinyphus sp.*, *Dysodius equatorianus*, *Dysodius lunatus*

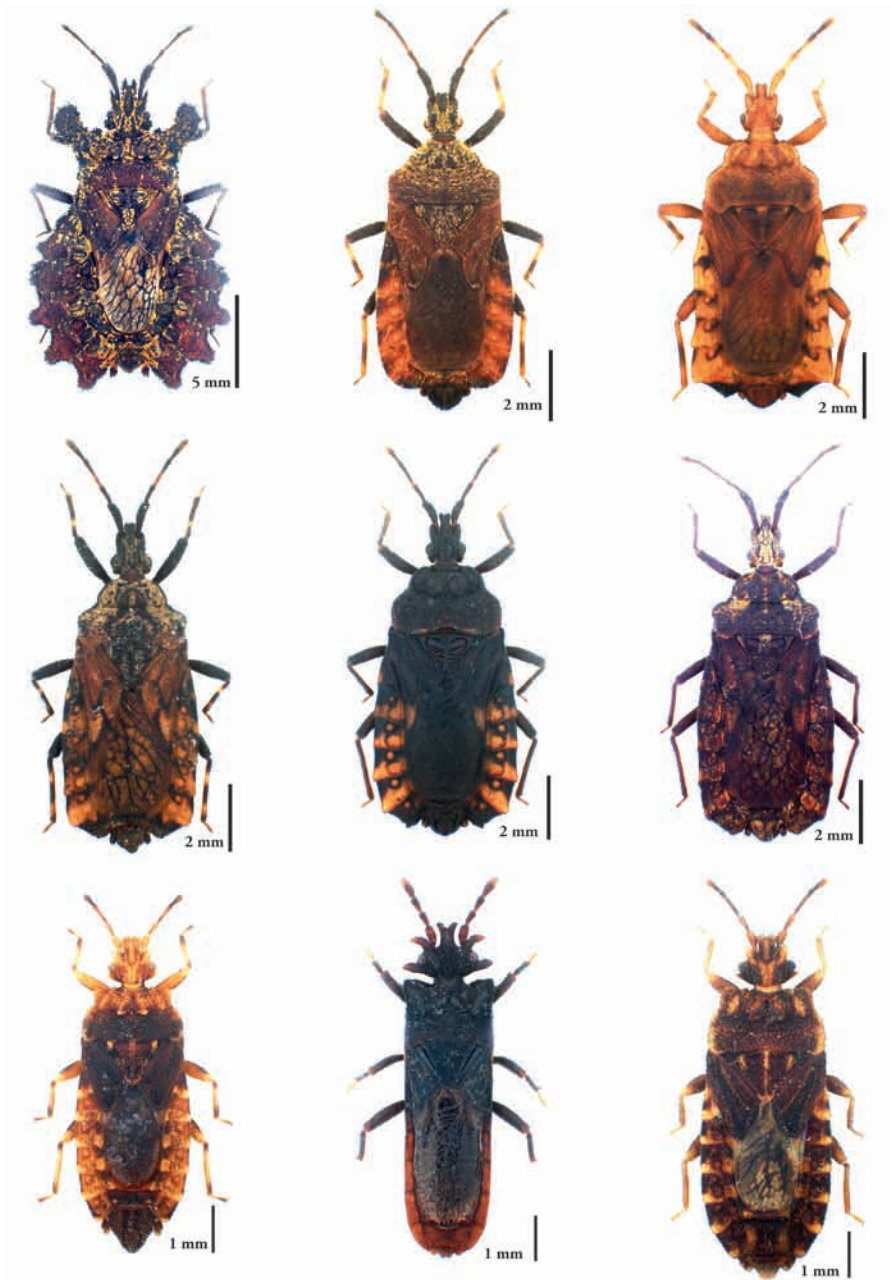


Photo 3. Aradidae of French Guyana 2:

1st line: *Dysodius magnus*, *Helenus hesiformis*, *Hesus acuminatus*

2nd line: *Hesus cordatus*, *Hesus flaviventris*, *Hesus humeralis*

3rd line: *Lobocara oblonga*, *Melanosterphus spinosus*, *Mezira barberi*

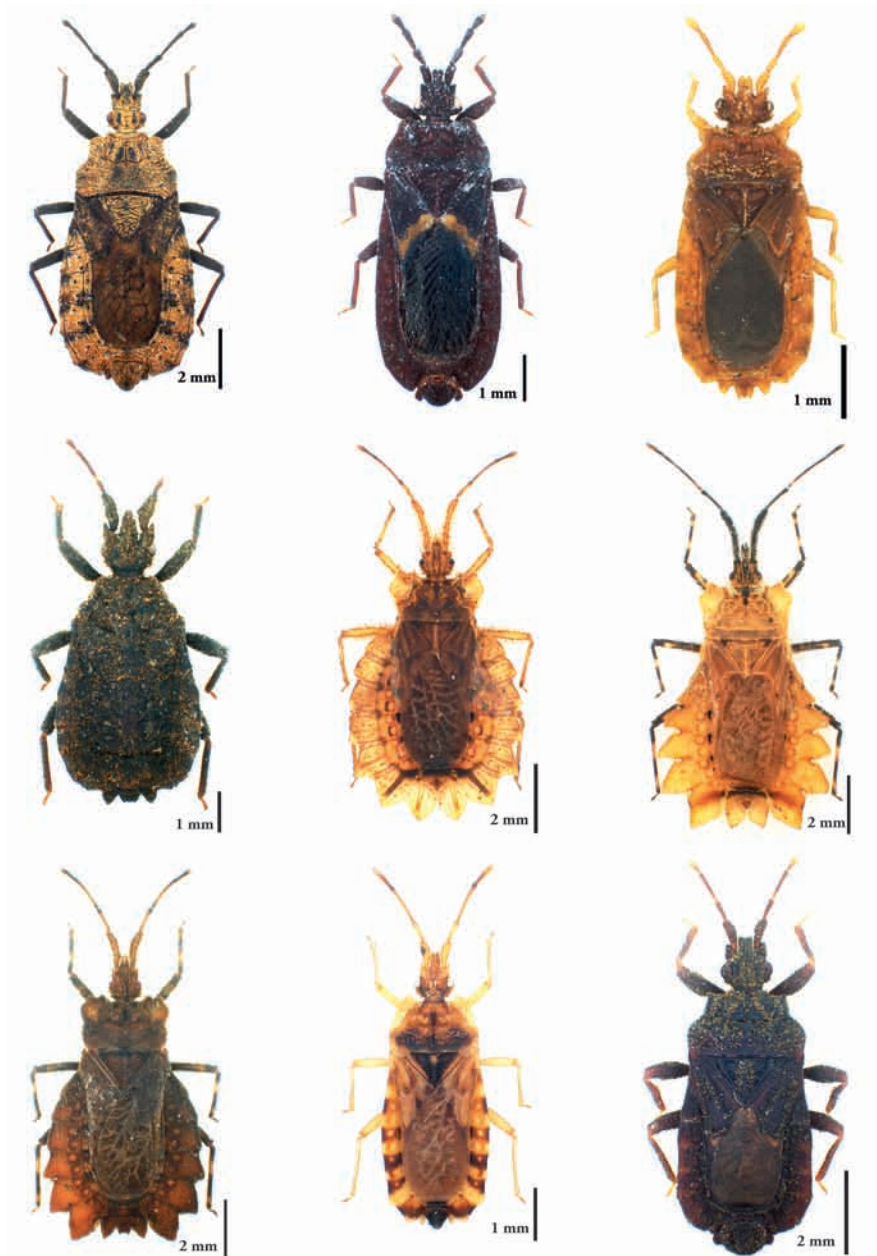


Photo 4. Aradidae of French Guyana 3:

1st line: *Mezira handlirschi*, *Neuroctenus longulus*, *Notapictinus* sp.

2nd line: *Notoplocoris* sp.2, *Phyllotingis eximia*, *Phyllotingis lanceolata*

3rd line: *Phyllotingis* cf. *triangula*, *Placogenys cockerelli*, *Santaremia robusta*

Subfamily A r a d i n a e AMYOT & SERVILE 1843

***Aradus pericarti* HEISS 1994**

L i t e r a t u r e d a t a : described from Surinam.

M a t e r i a l e x a m i n e d : 2♂♂ 8♀♀ Fourgassié near Roura, 16.-30.IX.1995, lg. M. Tržna (CEHI); 1♀ Kourou, Montagne des Singes, 7.X.1997, piège lumineux, lg. G. Moragues (CGMM); 1♀ Sinnamary, 17.IX.1998, piège lumineux, lg. J.M. Bérenger (CGMM).

D i s t r i b u t i o n : So far only known from Surinam and French Guyana.

Subfamily C a l i s i i n a e STÅL 1873

***Calisius ferox* CHAMPION 1898**

L i t e r a t u r e d a t a : described from Panama

M a t e r i a l e x a m i n e d : 1♀ Régina, Montagne de Kaw PK 37.5, 22.VIII.2004, lg. J.A. Cerda (CEHI).

N o t e : Two genera and 19 species are known from the Neotropics, however all are rare and many descriptions are based on single specimens. No key is available.

Subfamily C a r v e n t i n a e USINGER 1950

***Neoproxius gypsatus* (BERGROTH 1898)**

L i t e r a t u r e d a t a : described from Venezuela.

M a t e r i a l e x a m i n e d : 1♀ PK 37.5 Montagne de Kaw, 20.V.2001, piège malaise; 1♀ same locality PK 35, 12.XI.2002, piège malaise, both lg. J.A. Cerda (CGMM).

D i s t r i b u t i o n : Panama, Guatemala, Brazil, Venezuela.

***Neoproxius magdalenae* (KORMILEV 1982)**

L i t e r a t u r e d a t a : described from Nicaragua.

M a t e r i a l e x a m i n e d : 1♂ Forêt de St-Jean du Maroni, 5°405.85N, 54°063.34W, 70m, 1.5km layon en sous bois, Philodendron, J.C. Streito lg. and coll.

N o t e : KORMILEV & FROESCHNER 1987: 85 erroneously indicated Costa Rica as type locality, however in the original description holo- and allotype are reported from Nicaragua. No further records are published since.

***Neoproxius* sp.**

M a t e r i a l e x a m i n e d : 1♀ Régina, Montagne de Kaw PK 37, 8.XII.2001, piège malaise, lg. J.A. Cerda (CEHI).

N o t e : The genus comprises 12 Neotropical and 1 Nearctic species. KORMILEV (1982) keyed 11 species, however this single female does not fit to any of the keyed species.

Subfamily *Mezirinae* OSHANIN 1908

Aphleboderrhis comata CHAMPION 1898

L i t e r a t u r e d a t a : described from Panama.

M a t e r i a l e x a m i n e d : 1♂ Amazon Nature Lodge, 04.33.570N, 52.12.433W, 300m 10-13.VI.2007 lg. J. Eger (CEHI); 1♀ PK 5 piste Coralie, 9.III.1995, lg. J.P.Vesco (CGMM); 1♀ Régina, RN2 PK 125 + 3, 19.III.2007, piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♂ PK 37 Montagne de Kaw, 8.II.2002, à vue; 1♀ same locality PK 37.5, 24.XII.2000, piège malaise; 1♀ 26.XII 2004, à vue, all lg. J.A.Cerda (CGMM); 1♀ same locality PK 12, Fourgassié, 4.IX.2008, piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♀ RN2 PK 22, Montagne des Chevaux, 22.XI.2008, piège vitre d'interception, lg. S. Brulé et P.H. Dalens (CGMM); 1♀ RN2 PK 65, Tibourou, 15.III.2008, lg. S. Brulé & P.H. Dalens (CGMM).

D i s t r i b u t i o n : Ranges from Panama to Brazil and Argentina.

Aphleboderrhis pubescens (WALKER 1873)

L i t e r a t u r e d a t a : described from Brazil.

M a t e r i a l e x a m i n e d : 1♂ Montagne de Kaw PK 37.5 + 2, 18.VIII.2004, à vue, lg. G. Moragues (CGMM); 1♀ Régina, Montagne de Kaw PK 36, malaise trap, 5.I.1998 lg. J.A. Cerda (CEHI)

D i s t r i b u t i o n : Recorded from Mexico, Guatemala, Panama to Brazil.

Cinyphus sp.(near *armillatus* BERGROTH 1895 from "America centralis")

M a t e r i a l e x a m i n e d : 1♂1♀ Régina, RN2 PK125 + 3, 28.II.2008; 1♀ 19.IX.2008, piège vitre d' interception, lg. J.L. Giuglaris (CGMM, CEHI); 1♀ Entomotech Lodge, 30km SE Roura on Kaw Rd. 1-12.XII.2002 lg. J. Eger (CEHI); 1♂4♀♀ Organabo, 25.VI.1992 sur *Coccus mucifera*, M. Dollet lg. (coll. J.C. Streito, CEHI).

N o t e : 15 species are assigned to this Neotropical genus, which is distributed from Mexico to Peru (KORMILEV & FROESCHNER 1987). No reliable key is available and a revision of types which are deposited in several institutions would be necessary.

Dysodius equatorianus KORMILEV 1974

L i t e r a t u r e d a t a : described from Ecuador. 1♀ "Cayenne" coll. Signoret in Nat. Hist. Mus. Vienna (Heiss 1990).

M a t e r i a l e x a m i n e d : 1♀ PK route de Cacao, IX.2003, à vue, lg. D. Rignon (CGMM); 1♀ PK 30 Montagne de Kaw, 10.VI.1994, lg. J.P. Vesco (CGMM); 1♂ same locality PK 36, 13.VIII.1994, à vue, lg. G. Moragues (CGMM); 1♀ same locality PK 41, 27.IX.1977, à vue, lg. G. Moragues (CGMM); 1♀ same locality PK 37.5 + 2, 10.VIII.2004, à vue, lg. D. Faure (CGMM); 1♀ 25 km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI).

D i s t r i b u t i o n : Ecuador, Surinam, French Guyana.

Dysodius lunatus (FABRICIUS 1794) (= *D. lunatus vandoesburgi* BLOETE 1965)

L i t e r a t u r e d a t a : described from "America meridionalis"; French Guyana, 1♀ Charvein. II.1914 (HEISS 1990: 282). The subspecies *vandoesburgi* described from Surinam and also recorded from "F.G. Maroni, E. le Moul't" (BLOETE 1965) was synonymised by HEISS (1990).

Material examined: 2♂♂2♀♀ PK 1 route de Cacao, 1/5.II.2000, à vue sur tronc de nuit, lg. G. Moragues (CGMM); 2♂♂2♀♀ PK 3 piste Coralie, 12.II.1993, sous écorce tronc coupé, lg. G. Moragues (CGMM); 1♂1♀ Iracoubo, Rocoucoua, 7.II.1993, sous écorce tronc coupé, lg. G. Moragues (CGMM); 1♀ PK 35 Montagne de Kaw, 6.XII.2007, filet cryldé, lg. J.A.Cerda (CGMM); 1♀ Saint-Laurent du Maroni, PK 19 crique Serpent, 15.VI.2001, à vue, lg. J.A.Cerda (CGMM); 1♀ St. Laurent du Maroni, 12.VIII.2006 and 4♀♀ 25 km NW St.Laurent du Maroni, route de Paul Isnard, 17.I.2007, lg. Snižek (CEHI); 2♂♂1♀ 10 km SSE Roura, 17.I.2006; 1♀ Cacao env., 18.I.2006; 2♀♀ Montsinery, Marigram, 23.I.2006; 3♂♂1♀ Régina env., 25-31.I.2006; 1♂ 20 km SSE Roura, 3.II.2006 all lg. Sárovec & Houška (CEHI); 1♀ RN2 PK 22, Montagne des Chevaux, 31.X.2008, filet cryldé, lg. S. Brulé & P.H. Dalens (CGMM); 1♂ Layon des Boches St. Jean, 5°40'1.89N, 54°08'5.65W 45m, en forêt sous écorces, J.P. Streito lg. and coll.

Distribution: Mexico, Guatemala, Honduras, Panama, Belize, Venezuela, French Guyana, "Brit." Guyana, Surinam, Trinidad, Brazil, Ecuador, Colombia, Bolivia, Peru (HEISS 1990).

Note: specimens in older collections are mixed with *D. magnus* which was recognized as bona species and described only in 1990. A key for the 7 species of this Neotropical genus is given by HEISS (1990).

***Dysodius magnus* HEISS 1990**

Literature data: described from Peru. "Fr.Guyane", Maroni, lg. E. Le Moul (Mus. Leiden); "Cayenne" coll. Signoret in Nat.Hist.Mus. Vienna (HEISS 1990: 286).

Material examined: 2♂♂1♀ Montagne de Kaw 200-300m 28.VI.-12.VII.2007 lg. Puchner (CEHI); 1♂ 33km SE Roura on Kaw Road 18.VI.2007 lg. J. Eger (CEHI); 1♀ Amazon Nature Lodge 04.33.570N, 52.12.433W 300m 18.-23.VI.2007 lg. J. Eger (CEHI); 1♂ PK 4 route de Cacao, 1.III.1996, sous écorce, lg. J.P.Vesco (CGMM); 1♂ PK 15 + 17 piste de Bélizon, 17.II.2007, à vue sur tronc, lg. G. Moragues (CGMM); 1♀ Haute Mana, Saint-Léon, 10.IV.2002, à vue, lg. J.A.Cerda (CGMM); 1♀ Régina, RN2 PK 125 + 3, 11.I.2008; 1♀ 8.IX.2008; 1♀ 1.XI.2008; 1♀ 20.XI.2008, all piège vitre d'interception, lg. J.L.Giuglaris (CGMM); 1♀ PK 32 + 2.5 Montagne de Kaw, 31.VII.2003, à vue sur tronc de nuit, lg. G.Moragues (CGMM); 1♀ same locality PK 36, 27.VIII.1999, filet cryldé; 1♀ 29.X.2001, piège malaise; 1♀ 1/15.VIII.2008, à vue, all lg. J.A. Cerda; 1♀ .XI.2002, piège malaise, lg. O. Morvan; 1♀ 10.VII.2005, à vue; 2♂♂ 7.VIII.2005, à vue; 2♂♂ 7.VIII.2005, à vue; 2♀♀ 22.IX.2005, filet cryldé, all J.A. Cerda (CGMM); same locality PK 37.5, 14.I.2001, à vue; 1♀ 9.IV.2001, à vue; 1♀ 17.I.2005, à vue, all lg. J.A. Cerda (CGMM); 1♀ same locality PK 41, 29.IX.1997, filet cryldé, lg. G. Moragues (CGMM); 5♂♂2♀♀ 25 km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI); 1♀ 10 km SSE Roura, 17.I.2006 and 5♂♂2♀♀ Régina env., 25-31.I.2006 all lg. Sárovec & Houška (CEHI); 1♀ RN2 PK 22, Montagne des Chevaux, 31.X.2008, 1♂1♀ 6.XII.2008, all filet cryldé, lg. S. Brulé & P.H. Dalens (CGMM).

Distribution: Peru, Brazil, Ecuador, Bolivia, Surinam, French Guyana, "Brit." Guyana.

***Helenus hesiformis* WHITE 1879**

Literature data: described from Brazil.

Material examined: 1♀ Guyana Fr., Les Roches de Kourou, 1907 lg. Le Moul (CEHI ex Mus. Paris); 1♀ 20km E of St. Laurent du Maroni, 12.VIII.2006 lg. Snižek (CEHI). 3♀ Kourou, Montagne des Singes, 12.VIII.2003, à vue, lg. G. Moragues (CGMM); 1♂ Régina, RN2 PK 125 + 3, 6.II.2008, 1♀ 25.VII.2008, 1♂ 1♀ 27.VIII.2008, all piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♂ PK 35 Montagne de Kaw, 26.IV.2008, filet cryldé; 1♂ same locality PK 36, XI.2005, filet cryldé; 1♀ same locality PK 37.5, 7.III.2001; 1♂ 20.V.2001, à vue; 2♀♀ 21.IV.2004, à vue, all lg. J.A. Cerda (CEHI, CGMM); 1♀ same locality, PK 12, Fourgassié, 4.VIII.2008, piège vitre d'interception, lg. J.L. Giuglaris (CGMM).

D i s t r i b u t i o n : Brazil, Costa Rica, French Guyana, Guyana, Panama, Surinam.

N o t e : A second species *H. hirsutus* CHAMPION (1898) was described from Panama mainly based on different colouration. Neither CHAMPION (loc. cit.) nor USINGER & MATSUDA (1959: 370) studied both types and the question if the latter is a valid taxon is still not decided. KORMILEV & FROESCHNER (1987) listed both taxa.

***Hesus acuminatus* (FABRICIUS 1803)**

L i t e r a t u r e d a t a : described from "America meridionalis"; BLOETE (1965): St. Laurent du Maroni XI.1907 E. le Moults.

M a t e r i a l e x a m i n e d : 1♂1♀ Montagne de Kaw, Fourgassié env. 5.VIII.2006 lg. Snižek (CEHI); 1♀ 4.IX.2008, piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♂ Cacao, degrad Kwata sur crique Bagot, 23.VIII.1996, lg. J.P. Vesco (CGMM); 1♂ PK 1 route de Cacao, 4/7.III.2000, lg. D. Rignon (CGMM); 1♂ Saint-Laurent du Maroni, forêt de Saint-Jean, 23.II.2007, à vue, lg. G. Moragues (CGMM); 1♂ Régina, RN2 PK 125 + 3, 28.II.2008, 1♀ 26.VII.2008, 1♀ 19.VII.2008, 1♂ 2.IX.2008, all piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♀ pk 27 Montagne de Kaw, layon Degrad Lalanne, 10.VIII.1996, lg. J.P. Vesco (CGMM); 1♀ same locality PK 35, 31.III.2003, piège malaise; 1♂ 9.VIII.2007, à vue, both lg. J.A. Cerda (CGMM); 1♀ same locality PK 36, 20.VII.1998, à vue, lg. G. Moragues; 1♀ 29.IV.2000, piège malaise, lg. J.A. Cerda 1♀ 20.XI.2002, à vue, lg. O. Morvan; 1♂ 1.V.2004, à vue; 1♂ 14.IX.2004, à vue; 1♀ 23.VIII.2005, à vue, all lg. J.A. Cerda (CGMM); 1♂ same locality PK 37.5 + 2, 1.VIII.2003, à vue; 1♀ 3.VIII.2003, à vue, both lg. J.A. Cerda (CGMM); 1♀ same locality PK 42, 15.V.2005, à vue, lg. J.A. Cerda (CGMM); 1♀ same locality PK 47, 9.II.1994, lg. J.A. Cerda (CGMM); 2♀ 25 km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI); 1♂ Saül, layon des Eaux Claires, abattis en forêt, 3.622° N 53.208°W, 4.IV.2000, lg. J.C. Streito (CEHI). 2♀ Mana River, May 1897 Acc. 6008, Carnegie Museum Pittsburg, USA.

D i s t r i b u t i o n : Ranges from French Guyana, Brazil, Ecuador, Bolivia to Peru.

***Hesus cordatus* (FABRICIUS 1803)**

L i t e r a t u r e d a t a : described from "America meridionalis"; BLOETE (1965): St. Laurent du Maroni XI. 1907 E. le Moults.

M a t e r i a l e x a m i n e d : 1♂ Montagne de Kaw, Camp Caïman, 7.-12.XI.1995 lg. Snižek (CEHI); 1♀ Fourgassié near Roura, 16.-30.IX.1995 lg. M. Trzna (CEHI); 1♂ PK6 Acarouany, 17.IX.1996, lg. B. Berenger (CEHI); 1♀ Vidal, III.1997, lg. J.P. Vesco. (CEHI); 1♂ 20km E of Saint Laurent du Maroni 4.VIII.2006 lg. Snižek (CEHI); 1♂ Amazon Nature Lodge 04.33.570N, 52.12.433W 300m 18-23.VI.2007 lg. Eger (CEHI); 1♀ Cacao, degrad Kwata sur crique Bagot, .VIII.1995 lg. D. Rignon; 1♂ 23/30.IX.1995, lg. G. Moragues; 1♂ IV.-VII.1996, lg. D. Rignon (CGMM); 1♀ PK 1 route de Cacao, 6.VIII.1999, à vue, lg. G. Moragues; 1♀ 28 larvae 1999, lg. D. Rignon (CGMM); 1♂ PK 3 piste Coralie, 13.II.1993, à vue sur tronc de nuit, lg. G. Moragues (CGMM); 1♀ Sinnamary, barrage de Petit Saut, 8/14.IX.1993, sous écorce tronc coupé, lg. G. Moragues (CGMM); 1♀ Iracoubo, Rocoucua, 7.II.1993, sous écorce tronc coupé, lg. G. Moragues (CGMM); 1♀ Kourou, piste Soumourou, .IX.2002, piège malaise, lg. D. Faure (CGMM); 1♀ Régina, RN 2 PK 125 + 3, 5.XI.2007; 1♂1♀ 24.I.2008; 1♀ 6.II.2008; 1♀ 29.II.2008; 1♂ 19.III.2008; 1♀ 11.VIII.2008; 1♂ 27.VIII.2008; 1♂ 19.IX.2008; 1♀ 8.X.2008, all piège vitre d'interception and lg. J.L. Giuglaris (CGMM); 1♀ Montagne de Kaw, PK 35, 3.VIII.2007, filet cryldé; 1♀ 23.VIII.2007, à vue; 1♀ same locality PK 36, 17.II.1999, piège malaise; 1♀ 15.VIII.2008, à vue; 1♂ same locality PK 37.5 + 2, 25.X.2003, à vue; 1♂ 29.I.2004, à vue, all lg. J.A. Cerda (CGMM); 1♀ same locality, degrad de Kaw, 9.VIII.1996, lg. J.P. Vesco (CGMM); 2♀ 25km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007 lg. Snižek (CEHI); 1♂1♀ Piste des Mines St. Jean, 5°368.10W, 54°064.86W, 60m, sous écorce en sous-bois, 3.II.2004 J.C. Streito lg et coll; 1♂ Forêt St. Jean du Maroni 5°405.85N, 54°063.34W, 70m, 1.5 km layon en sous-bois, 1.II.2004 J.C. Streito lg. and coll..

Distribution: The most common species of the genus, is distributed from Mexico to Brazil and Peru.

***Hesus flaviventris* (BURMEISTER 1835)**

Literature data: described from Brazil.

Material examined: 1♀ 20km E of Saint Laurent du Maroni 24.VIII.2006 lg. Snižek (CEHI); 1♂ Régina, RN2 PK 125 + 3, 9.X.2007; 1♂ 19.XI.2007, 1♀ 28.II.2008, 1♀ 10.VII.2008, 1♀ 18.VII.2008, all piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♂ Montagne de Kaw PK 36, 5.VIII.2001, piège malaise; 1♀ 16.VIII.2003, à vue; 1♂ 24.IV.2007, à vue; 1♂ same locality PK 37.5, 9.IV.2001, à vue; 1♀ 26.XII.2004, à vue; 1♂ same locality PK 37.5 + 2, 21.IV.2004, à vue; 1♀ same locality PK 37.5 + 2.5, 3.VIII.2003, à vue; 1♀ same locality PK 42, 15.V.2005, à vue, all lg. J.A. Cerda (CGMM); 2♂ 2♀ 25km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI).

Distribution: widely distributed from Panama to Colombia and Brazil.

***Hesus humeralis* HEISS 2009**

The reexamination of a larger number of specimens identified as *Hesus cordatus* from various institutions and own collections has shown that there are two distinctive different species involved. The new one is described by HEISS (2009b) and refers to following specimens from French Guyana:

Material examined: 1♀ Route de Cacao PK1, XI.1997, D. Rignon lg. (CGMM); 1♀ Cacao, Degrad Kwata sur crique Bagot, 18.XI.1996 J.P.Vesco lg. (CGMM); 1♀ Montagne de Kaw PK 37, 23.IX.1998 J.M. Berenger lg. (CEHI); 1♂ Kourou, route Sinamary, XI.1992 (unknown collector) (CEHI); 1♂ Kourou, piste Soumourrou 23.XII.2002/6.II.2003, piège malaise, lg. D. Faure (CGMM); 1♀ RN2 PK 22, Montagne des Chevaux, 22.XI.2008, piège vitre d'interception, lg. S. Brulé & P.H. Dalens (CGMM); 1♀ Régina, RN2 PK 125+3, 19.X.2008, piège vitre d'interception, lg. J.L. Giuglaris (CGMM).

***Lobocara oblonga* BERGROTH 1892**

Literature data: described from Argentina.

Material examined: 1♂ Rémire, piste habitation Vidal, 13.VIII.1994, lg. J.P. Vesco (CGMM).

Distribution: Argentina, Peru, Brazil, Colombia, Costa Rica.

***Lobocara ovata* BERGROTH 1892**

Literature data: described from Mexico.

Material examined: 1♀ Régina env. 25-31.I.2006 lg. Sávorec & Houška (CEHI); 1♂ route de Sinamary (3km), II.1992, no collector (CGMM).

Distribution: From Mexico through Central America to Brazil.

***Melanosterphus spinosus* (FABRICIUS 1803)**

Literature data: described from "America meridionalis". 1♀ Guyane Française, Camopi lg. F. Geay 1900, coll. Mus. Paris (KORMILEV 1973).

Material examined: 1♀ Régina, Montagne de Kaw PK 37.5+2 29.I.2004, filet cryldé, lg. J.A. Cerda (CGMM); 1♀ Roura 23.VIII.1981 lg. Berti (CEHI).

Distribution: Very conspicuous but rare species, besides the abovementioned

records it is reported only from Brazil (Para, Chapada, Santarem) by DRAKE & HARRIS 1944 and later by KORMILEV 1962.

***Mezira barberi* KORMILEV 1964**

L i t e r a t u r e d a t a : described from United States.

M a t e r i a l e x a m i n e d : 1♀ Régina, RN2 PK125+3, 6.II.2008; 1♀ 19.III.2008, piège vitre d' interception, lg. J.L. Giuglaris (CGMM)

D i s t r i b u t i o n : USA, Mexico to Peru.

***Mezira cf. boliviana* KORMILEV 1962**

L i t e r a t u r e d a t a : described from Bolivia.

M a t e r i a l e x a m i n e d : 3♂♂ 1♀ Iracoubo, Rocoucua, bord de piste, sous écorce de troncs coupés, 7.II.1993, lg. G. Moragues (CGMM); 1♂ Régina, Montagne de Kaw PK 35, 26.VIII.2002, piège malaise, lg. J.A. Cerda (CGMM); 1♀ Régina, RN2 PK125+3, 8.XII.2007, 1♀ 18.VIII.2008, all piège vitre d' interception, lg. J.L. Giuglaris (CGMM); 1♀ Montagne de Kaw, Fourgassié env., 5.III.2006 Snižek (CEHI); 9♂2♀ 25km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI); 1♀ Roura, Montagne des Chevaux, 9.XI.2008, S. Brulé & P.H. Dalens lg.; 3♀♀ Petit Saut, layon en forêt primaire 29.X.1989 H.P. Aberlenc lg. (coll. J.C. Streito).

D i s t r i b u t i o n : Bolivia, Colombia, French Guyana.

N o t e : The specimens were compared with samples from Bolivia identified by Kormilev as *boliviana* and no essential differences were noted. However the key to 89 American species of the genus *Mezira* by KORMILEV (1971) leads to *M. proseni* KORMILEV 1953 from Argentina and not clearly to *M. boliviana*. This key is outdated due to several additional species which were described later. KORMILEV (1974) described *M. surinamensis* from Surinam, which also runs to *M. proseni* in the abovementioned key showing only minor differences. As no comparative material of these 3 taxa is available, their taxonomic status remains unclear and needs revision.

***Mezira handlirschi* (BERGROTH 1898) (= *Hesus angulicollis* BLOETE 1965)**

L i t e r a t u r e d a t a : *M. handlirschi* described from Panama and Cayenne; *Hesus angulicollis* from Surinam.

M a t e r i a l e x a m i n e d : 1♂ PK1 route de Cacao, XI.1997, lg. D. Rignon (CGMM); 1♀ Kourou, piste Soumourou, 13/20.VII.2002, piège malaise, lg. D. Faure (CGMM); 1♀ Régina, RN2 PK 125 + 3, 29.X.2007, 1♀ 19.XI.2007, 1♀ 11.I.2008, 1♀ 24.I.2008, 2♀♀ 6.II.2008, 2♀♀ 6.III.2008, 1♂ 2.IV.2008, 1♂ 2.VIII.2008, 2♂♂1♀ 18.VIII.2008, 1♂ 27.VIII.2008, 1♀ 2.IX.2008, 1♂1♀ 14.IX.2008, 1♂ 19.IX.2008, 1♀ 1.XI.2008, all piège vitre d' interception, lg. J.L. Giuglaris (CGMM); 1♂ Montagne de Kaw PK 35, 4.III.2003, à vue; 1♀ same localilty PK 36, 15.III.1998, filet cryldé, 1♀ 4.IX.2002, à vue; 1♂ same locality PK 37, 22.IV.2002, piège malaise, all lg. J.A. Cerda (CGMM); 1♂ same locality PK 37.5, 9.VIII.1994, lg. G. Moragues, 1♀ 7.XII.2000, piège malaise, lg. J.A. Cerda, 1♂ 1.X.2004, à vue, lg. J.A. Cerda (CGMM); 1♀ same locality PK 37.5 + 2, 21.IV.2004, à vue, lg. J.A. Cerda (CGMM); 1♂ same locality PK 37.5 + 2.5, 30.VII.2003, à vue, lg. G. Moragues, 1♀ 3.VIII.2003, à vue, lg. J.A. Cerda (CGMM); 1♀ same locality, PK 12, Fourgassié, 28.VIII.2008, piège vitre d' interception, lg. J.L. Giuglaris (CGMM); 1♀ RN2 PK 22, Montagne des Chevaux, 9.XI.2008, 1♀ 22.XI.2008, piège vitre d' interception, lg. S. Brulé & P.H. Dalens (CGMM); 1♂1♀ RN2 PK 65, Tibourou, piège vitre d' interception, lg. S. Brulé & P.H. Dalens (CGMM); 1♂2♀♀ 25km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI); 1♂ Amazon Nature Lodge 04.33.570N 52.12.433W 300m 10-18.VI.2007 lg. Eger (CEHI); 2♂♂1♀ Petit Saut, layon en forêt primaire 29.X.1989 H.P. Aberlenc lg. (coll. J.C. Streito); 1♀ Layon des Boches St. Jean 5°401.89N, 54°401.65W, 45m, 4.II.2004 J.C. Streito lg. and coll.

Distribution: Panama, French Guyana, Surinam, Brazil.

Note: The holotype was examined by one of the authors (EH), which proved to be a synonym of *Mezira handlirschi*. The synonymy and additional informations are given by HEISS (2009a).

***Mezira laeiventris* (CHAMPION 1898)**

Literature data: described from Panama. French Guyana, Maroni E. le Moutt (BLÖTE 1965).

Material examined: 1♀ Montagne de Kaw PK 36, 3.XII.1997, 1♂ 3.V.2000, piège malaise; 1♀ same locality PK 35, 23.IV.2003, filet cryldé, 1♂ 31.VII.2007, filet cryldé; 1♂ same locality PK 37.5 + 2, 29.I.2004, à vue, 1♂ 21.IV.2004, à vue, all lg. J.A. Cerda (CGMM); 1♀ same locality PK 38, 13.VIII.1996, lg. J.P. Vesco (CGMM); 1♀ Montagne de Kaw, Patawa PK 36 13.IX.1998 lg. A. Matocq (CEHI); 1♀ Saül 1992 no collector (CEHI); 3♀ Montagne de Kaw, 200-300m, 28.VI.-12.VII.2007 lg. Puchner (CEHI); 1♂ 1♀ Régina, RN2 PK125+3, 19.VIII.2007, 1♀ 19.XI.2007, 1♀ 28.II.2008, 1♀ 27.VIII.2008, 1♀ 19.X.2008, all piège vitre d' interception, lg. J.L. Giuglaris (CGMM); 1♂ "Guyane Fr." 1899 lg. R. Oberthür (CEHI ex Mus.Paris).

Distribution: Panama, Bolivia, French Guyana.

***Mezira pauperula* KORMILEV 1962**

Literature data: described from Brazil.

Material examined: 3♂ 1♀ Guyane Française Camopi, lg. F. Geay 1900, coll. Mus. Paris and CEHI (ex. coll. Kormilev); 1♀ 2km SSO Sinnamary, Station de Paracou 5°16N, 52°56W 20m, 15.-16.VI.1995, Gusarov lg. (CEHI ex coll. Zool. Inst. St. Petersburg).

***Nannium kormilevi* DOESBURG 1997**

Literature data: described from Surinam.

Material examined: 1♀ Amazon Nature Lodge, 30km SE Roura on Kaw Rd, N 04°33.570', W 52°12.433', 300m, 18-23.IV.2007, UV light trap, lg. J. Eger (CEHI).

Note: This genus contains to date 5 Neotropical species (Brazil, Venezuela, Guatemala) and 1 Nearctic species (USA) and no key is available. However our specimen corresponds to the description of *N. kormilevi*.

Distribution: Surinam, French Guyana.

***Neuroctenus longulus* BERGROTH 1898**

Literature data: described from Cayenne.

Material examined: 1♂ Régina, Montagne de Kaw PK35, 11.XII.2007 lg. Cerda (CGMM); 1♀ RN2 PK22, Montagne des Chevaux, 16.XI.2008, 1♂ 22.XI.2008, piège vitre d'interception, lg. S. Brulé & P.H. Dalens (CGMM); 1♀ RN2 PK 65, Tibourou, 15.III.2008, piège vitre d'interception, lg. S. Brulé & P.H. Dalens (CGMM); 1♀ Régina, RN2 PK 125+3, 29.X.2007, 1♀ 5.XI.2007, 1♂ 19.III.2008, 1♀ 2.VIII.2008, piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♀ "Cayenne", 1827 lg. Hille (CEHI ex Mus. Paris); 1♂ 4♀ Montagne de Kaw, 200-300m, 28.VI.-12.VII.2007 lg. Puchner (CEHI).

Distribution: French Guyana, Surinam.

Note: The pygophore of the male is very similar to *N. punctulatus* BURMEISTER 1835 from Brazil. The key to Neotropical Neuroctenus given by KORMILEV (1963) is outdated due to several additional species which were described later and no genitalic structures were considered.

***Neuroctenus* sp. 1**

M a t e r i a l e x a m i n e d : 2♂♂2♀♀ 22 km N. Kourou bord RN1, 7.II.1993, sous écorce tronc coupé, lg. G. Moragues (CGMM); 2♂♂3♀♀ Roura, Piste Coralie, 12.II.1993, sous écorce tronc coupé, lg. G. Moragues (CGMM); 1♀ 25km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI); 2♂♂ Roura, degrad Corrèze, 4.512N 52.350 W, 8.IV.2000 (CEHI).

N o t e : This genus of a world wide distributon comprises to date about 170 species of which about 45 occur in the Western hemisphere (KORMILEV & FROESCHNER 1987). The key for 26 species of the Neotropics given by KORMILEV (1973) is outdated and due to the lack of good illustrations and genital structures of closely related taxa this species cannot be assigned to one of them.

***Notapictinus* sp.**

M a t e r i a l e x a m i n e d : 1♀ 25km NW St. Laurent du Maroni, route Paul Isnard, 17.I.2007, lg. Snižek (CEHI); 1♂ Régina, RN2 PK 125+3, 26.VII.2008, piège vitre d'interception, lg. J.L. Giuglaris (CGMM).

N o t e : The genus *Notapictinus* USINGER & MATSUDA 1959 contains to date 40 species (KORMILEV & FROESCHNER 1987), all of them from Central- and South America. Most of them were described on single specimens with short descriptions and often lacking figures. Without rich comparative material it is impossible – even with the key for 29 species given by KORMILEV (1967) – to identify our specimens.

***Notapictinus* sp. 2**

M a t e r i a l e x a m i n e d : 1♀ Montagne de Kaw PK36, 24.II.1999, piège malaise, lg. J.A. Cerda (CGMM).

***Notoplocoris* sp.**

M a t e r i a l e x a m i n e d : 1♂1♀ Montagne de Kaw PK 39, 12.VI.2008, à vue, lg. Cerda (CEHI, CGMM).

N o t e : This apterous Neotropical genus comprises 10 species, all described from Brazil. The key given by KORMILEV (1963) for 7 species does not allow to identify the specimen from French Guyana.

***Phyllotingis eximia* (HAGLUND 1868)**

L i t e r a t u r e d a t a : described from Brazil.

M a t e r i a l e x a m i n e d : 1♀ Régina, RN2 PK125+3, 19.IX.2008, piège vitre d' interception, lg. J.L. Giuglaris (CGMM).

D i s t r i b u t i o n : Brazil, Colombia. New for French Guyana. A key to the 5 species of this Neotropical genus is given by HEISS (1993).

***Phyllotingis lanceolata* (FABRICIUS 1803)**

L i t e r a t u r e d a t a : described from "America meridionalis"; 1♂ French Guyana, Cayenne, Alicoto III.1981 lg. León (HEISS 1993).

Material examined: 1♂ Montagne de Kaw PK 36, 17.VII.2000, piège malaise, 1♀ 29.X.2003, à vue, lg. J.A. Cerda (CGMM); 1♂ 2♀ Régina, RN2 PK 125 + 3, 9.X.2007, 1♂ 21.X.2007, 2♀ 19.III.2008, 1♀ 26.VII.2008, 1♀ 19.VII.2008, 1♂ 6.XII.2008, all piège vitre d'interception, lg. J.L. Giuglaris (CGMM).

Distribution: Recorded from Surinam, French Guyana, Brazil and Peru.

***Phyllotingis cf. triangularis* HEISS 1993**

Literature data: described from Mato Grosso in Brazil, only the male holotype is known to date.

Material examined: 1♀ Régina, RN2 PK 125+3, 11.XI.2008, piège vitre d'interception, lg. J.L. Giuglaris (CEHI).

Note: Due to the pronotal structure, the size and the antennal segment II without pilosity, it seems possible that this specimen might represent the unknown female. Unless more material of both sexes is available for a comparative examination, the taxonomic assignment remains uncertain.

***Placogenys cockerelli* USINGER & MATSUDA 1959**

Literature data: described from "British Guyana".

Material examined: 1♂ Fourgassié near Roura 2♂ 8♀ 16.-30.IX.1995 lg. M. Tržna (CEHI); 1♀ Remire E of Cayenne 21.VI.2007 lg. Eger (CEHI); 1♀ Montagne de Kaw PK 37.5, 7.III.2001, piège malaise, lg. J.A. Cerda (CGMM); 2♂ Saint-Laurent du Maroni, forêt de Saint-Jean, 23.II.2007, à vue, lg. G. Moragues (CGMM); 1♀ Saül, layon des Eaux Claires, abattis en forêt, 3.622°N 53.208°W, 4.IV.2000, lg. J.C. Streito (CEHI).

Distribution: Most probably restricted to NE South America.

***Santaremia robusta* KORMILEV 1960 (= *S. armata* KORM. 1974)**

Literature data: described from Brazil. KORMILEV (1974) described a second species *S. armata* from Surinam, differing from *robusta* by "3 teeth on the middle tibiae". As they were overlooked and are also present in a paratype of *S. robusta*, they were synonymised (HEISS 2009a).

Material examined: 1♀ Régina env., 25.-31.I.2006, lg. Sávorec & Houška (CEHI); 1♀ Montagne de Kaw, Camp Caiman env., 24.-31.VIII.2006, lg. Snižek (CEHI); 1♀ same locality PK 12, Fourgassié, 27.VII.2008, piège vitre d'interception, lg. J.L. Giuglaris (CGMM); 1♂ RN2 PK65, Tibourou, 15.III.2008, piège vitre d'interception, lg. S. Brulé & P.H. Dalens (CGMM); 1♀ Régina, RN2 PK125+3, 23.XII.2007, 1♂ 28.II.2008, 1♂ 6.III.2008, 1♂ 1♀ 19.III.2008, 1♂ 2.IV.2008, 1♀ 11.VIII.2008, all piège vitre d'interception, lg. J.L. Giuglaris (CEHI, CGMM); 1♂ 1♀ route de Bélizon, Régina, grumes, sous écorce 4.483N 52.305W, 8.IV.2000, lg. J.C. Streito (CEHI).

Distribution: The only records are from Brazil, Surinam and now French Guyana.

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Zusammenfassung

Die Fauna der Heteropterenfamilie Aradidae (Rindenwanzen) von Französisch Guyana ist noch ungenügend erforscht und war bisher nie Gegenstand spezieller Untersuchungen. In der vorliegenden Arbeit werden alle erreichbaren Funddaten aus institutionellen und privaten Sammlungen einschließlich weiterer Literaturdaten zusammengefasst und damit der aktuelle Kenntnisstand dokumentiert. Bisher sind 36 Arten von 19 Gattungen aus 5 Unterfamilien nachgewiesen worden.

Résumé

La faune des Aradidae de Guyane est insuffisamment connue et n'a jamais fait l'objet d'une étude particulière. Dans le présent article, toutes les données disponibles provenant tant de collections privées et institutionnelles que de la littérature sont compilées et une vue d'ensemble préliminaire des connaissances faunistiques actuelles est donnée. A ce jour, 36 espèces réparties dans 19 genres, appartenant à 5 sous-familles sont répertoriées.

List of recorded Aradidae taxa

Subfamily Aneurinae

- 1 *Iralunelus politus* (SAY 1832)

Subfamily Aradinae

- 2 *Aradus pericarti* HEISS 1994

Subfamily Calisiinae

- 3 *Calisius ferox* CHAMPION 1898

Subfamily Carventinae

- 4 *Neoproxius gypsatus* (BERGROTH 1898)
- 5 *Neoproxius magdalenae* (KORMILEV 1982)
- 6 *Neoproxius* sp.

Subfamily Mezirinae

- 7 *Aphleboderrhis comata* CHAMPION 1898
- 8 *Aphleboderrhis pubescens* (WALKER 1873)
- 9 *Cinyphus* sp. (nr. *C. armillatus* BERGROTH 1895)
- 10 *Dysodius equatorianus* KORMILEV 1974
- 11 *Dysodius lunatus* (FABRICIUS 1794)
syn. *D. lunatus vandoesburgi* BLÖTE 1965
- 12 *Dysodius magnus* HEISS 1998
- 13 *Helenus hesiformis* WHITE 1879
- 14 *Hesus acuminatus* (FABRICIUS 1803)
- 15 *Hesus cordatus* (FABRICIUS 1803)
- 16 *Hesus flaviventris* (BURMEISTER 1835)
- 17 *Hesus humeralis* HEISS 2009
- 18 *Lobocara oblonga* BERGROTH 1892

- 19 *Lobocara ovata* BERGROTH 1892
- 20 *Melanosterphus spinosus* (FABRICIUS 1803)
- 21 *Mezira barberi* KORMILEV 1964
- 22 *Mezira* cf. *boliviana* KORMILEV 1962
- 23 *Mezira handlirschi* (BERGROTH 1898)
syn. *Hesus angulicollis* BLÖTE 1965
- 24 *Mezira laeviventris* (CHAMPION 1898)
- 25 *Mezira pauperula* KORMILEV 1962
- 26 *Nannium kormilevi* DOESBURG 1997
- 27 *Neuroctenus longulus* BERGROTH 1898
- 28 *Neuroctenus* sp.
- 29 *Notapictinus* sp. 1
- 30 *Notapictinus* sp. 2
- 31 *Notoplocoris* sp.
- 32 *Phyllotingis eximia* (HAGLUND 1868)
- 33 *Phyllotingis lanceolata* (FABRICIUS 1803)
- 34 *Phyllotingis* cf. *triangula* HEISS 1993
- 35 *Placogenys cockerelli* USINGER & MATSUDA 1959
- 36 *Santaremia robusta* KORMILEV 1960
syn. *S. armata* KORMILEV 1974

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