



Diversity of true bugs from Iguazú National Park, Argentina

María C. Melo, Gimena Dellapé, Leonela Olivera, Pablo S. Varela, Sara I. Montemayor, Pablo M. Dellapé

Universidad Nacional de La Plata, CONICET, División Entomología, Museo de La Plata, Paseo del Bosque s/n B1900FWA, La Plata, Buenos Aires, Argentina.

Corresponding author: María C. Melo, ceciliamelo@fcnym.unlp.edu.ar

Abstract

We list all taxa identified to species level, belonging to 18 families of Heteroptera: Reduviidae (63 species), Tingidae (9 species), Alydidae (6 species), Coreidae (39 species), Rhopalidae (11 species), Largidae (1 species), Pyrrhocoridae (4 species), Acanthosomatidae (1 species), Pentatomidae (58 species), Scutelleridae (3 species), Berytidae (1 species), Blissidae (5 species), Colobathristidae (2 species), Cymidae (1 species), Ninidae (1 species), Lygaeidae (6 species), Pachygronthidae (1 species), and Rhyparochromidae (13 species). Among the listed species, 13 are new country records belonging to the families Reduviidae, Tingidae, Pentatomidae, Coreidae, and Alydidae.

Key words

Cimicomorpha; Coreoidea; Lygaeoidea; Pentatomoidea; Pyrrhocoroidea.

Academic editor: Helcio Gil-Santana | Received 10 January 2017 | Accepted 18 May 2017 | Published 22 September 2017

Citation: Melo MC, Dellapé G, Olivera L, Varela PS, Montemayor SI, Dellapé PM (2017) Diversity of true bugs from Iguazú National Park, Argentina. Check List 13 (5): 479–511. <https://doi.org/10.15560/13.5.479>

Introduction

One of the main concerns in the scientific community is the effect of climate change in the planet, how species will respond to the actual global warming and how it will affect the biodiversity. Even though insects have colonized almost every niche and are the most important group in terms of specific diversity they have been largely ignored in studies dealing with conservation strategies. These studies used to be more focused on charismatic fauna (Stewart 2012), though nowadays more attention is starting to be payed to insects as they have proven to be very good sentinels for environmental and habitat change (New 2012). Insects live in complex ecological webs, connected to other taxa that could be competitors, mutualist partners, food plants and natural enemies. The use of a particular species as a flagship to stimulate the

development of conservation interest have been practical, however for a more thorough conservation plan, wider perspectives, emphasizing guilds, assemblages, communities, biotopes from local sites to broad landscapes should be taken into account (New 2012).

The Iguazú National Park is located between 25°31' S to 25°43' S and 054°08' W to 054°32' W in the Iguazú Department in Misiones Province, Argentina. Its northern limit is the Iguazú River which forms the Iguazú Falls, the largest waterfalls system in the world and an UNESCO World Natural Heritage Site since 1984. The meaning of the word Iguazú, comes from the Guarani with “y” meaning “water”, and “ûasú” meaning “big”, thus “Big Waters” for the native people. The Park protects 67,720 ha of the Paraná Forest, constituting a significant remnant of the Atlantic Forest, one of the largest and most threatened tropical rainforests in the world (Tabarelli et

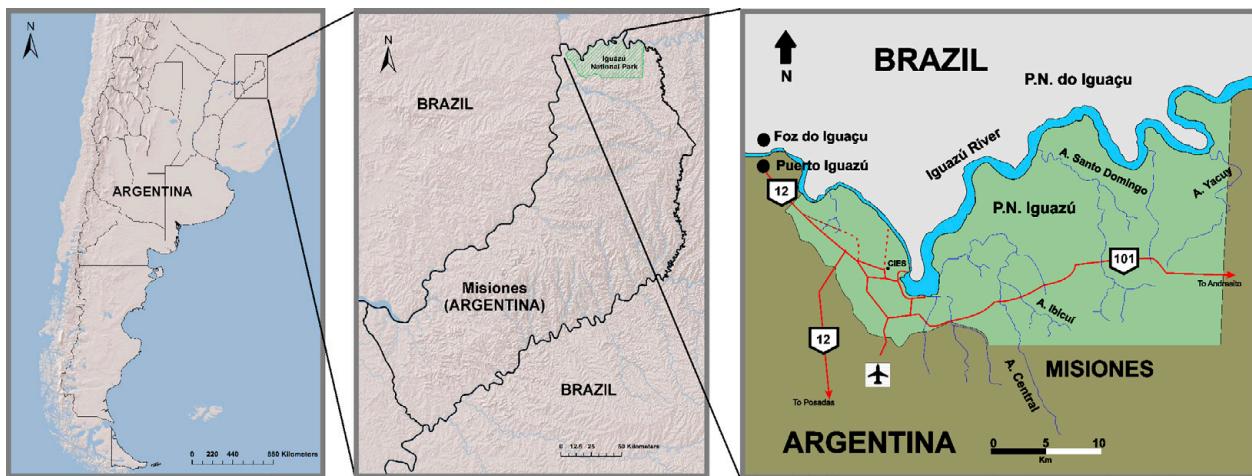


Figure 1. Study area of the Iguazú National Park, Misiones, Argentina ($5^{\circ}31'S - 25^{\circ}43'S$, $054^{\circ}8'W - 054^{\circ}32'W$).

al. 2010). It is the most diverse area in Argentina with ca. 3000 of vascular plants forming a stratified forest that harbors a diverse fauna (Chebez 2005). This National Park is connected to other conservation areas, to the north it limits with the P.N. do Iguaçu National Park (170,000 ha) in Brazil, and to the southeast to the Uruguaí Provincial Park (87,000 ha) and the Private Reserve San Jorge, Salto Yasý and Perobal (20,000 ha), and other nine smaller protected areas (ca. 7000 ha) (Chebez 2005). These protected areas are part of the Green Corridor of Misiones Province guaranteeing the connectivity between protected areas, thus allowing the continuity of the natural processes of migration and seasonal displacements of the wild fauna, and those related to the dispersal and natural replacement of the wild flora of the native forests (Law XVI N° 60 from Provincial Juridical Digest).

Studying the insect fauna and monitoring selected groups is crucial to accompanying conservation efforts (New 2012), and to be able to evaluate and/or forecast the impact of climate change. Knowing the value of the biodiversity and the role that insects play in nature, we aim to study the biodiversity of terrestrial Heteroptera inhabiting in the Iguazú National Park in Misiones Province, Argentina.

Methods

Two field trips of about 10 days each were conducted to the Iguazú National Park (Fig. 1), during October to November 2012 and December 2013. Permits to collect material were provided by Administración de Parques Nacionales (NEA 310 rnv2). Most of the specimens were collected using sweeping and beating nets; complementary collection was done by hand directly on the ground and visual inspection at light traps. Additional specimens were collected using Van Someren-Rydon traps with different attractants; this trap consists of a tube with a height of 30 cm, that it is closed at the top and with a plate attached at the bottom, where a “bait” is placed to attract insects. The bait can be fish, rotten fruit or a chemical attractant. The trap is hanged at different levels

of the forest (2 m, 3 m, 4 m). Specimens were preserved in 96% ethanol, then mounted in the lab, and examined under stereomicroscope.

To confirm the identification of some specimens, the genital capsule of males and genital segments of females were dissected and cleared with a saturated potassium hydroxide solution for observation; dissected genitalia were preserved in microvials with glycerin. The specimens were deposited in the Museo de La Plata, Buenos Aires, Argentina (MLP). We also studied the entomological collections of Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina (MACN), Instituto Miguel Lillo, Tucumán, Argentina (IMLA), and MLP. In the list we also include the species that were previously mentioned from the area even though no specimens were examined. In the cases of the species of Coreoidea and Lygaeoidea a LSID was added, linking with the Species File website of each taxa (Dellapé and Henry, CoreoideaSF Team). Additional specimens of the families Anthocoridae, Nabidae, Miridae, and Thyreocoridae that were collected and not included in the present paper were deposited in MLP. The known distribution of the species refers to the political division of Argentina into provinces; other countries where the species have been recorded in the literature are mentioned.

Results

We present a list of all taxa identified to species level, belonging to 18 families of Heteroptera. The families studied were Reduviidae (63 species), Tingidae (9 species), Alydidae (6 species), Coreidae (39 species), Rhopalidae (11 species), Largidae (1 species), Pyrrhocoridae (4 species), Acanthosomatidae (1 species), Pentatomidae (58 species), Scutelleridae (3 species), Berytidae (1 species), Blissidae (5 species), Colobathristidae (2 species), Cymidae (1 species), Ninidae (1 species), Lygaeidae (6 species), Pachygronthidae (1 species) and Rhyparochromidae (13 species). Among the listed species, 13 are new country records belonging to the families Reduviidae, Tingidae, Pentatomidae, Coreidae and Alydidae.

Cimicomorpha
Reduviidae
Bactrodinae

Bactrodes femoratus (Fabricius, 1803)

Distribution. Argentina: Misiones: Iguazú, Salta, and Tucumán (Wygodzinsky 1949a); Bolivia, Brazil, Colombia, Guyana, and Panama (Coscarón and Melo 2003, Forero 2006).

Cetherinae

Eupheno pallens (Laporte, 1833)

Distribution. Argentina: Misiones (Melo and Coscarón 2004a); Brazil, and Guyana (Wygodzinsky 1949b).

Material examined. 1♀, Pto. Iguazú, I-[19]44, G. Williner S.J. coll., PNI0001 (MACN).

Ectrichodiinae

Brontostoma castaneum Carpintero, 1980 (Fig. 2)

Distribution. Argentina: Misiones: P.N. Iguazú; Paraguay (Carpintero 1980).

Material examined. Holotype ♂, Misiones, P.N. Iguazú, XII-1979, Dr Carpintero coll., (MACN) (Fig. 2); 1♂, CIES, 1-XI-2012, light trap, PNI0002 (MLP).

Brontostoma colossus (Distant, 1902)

Distribution. Argentina: Córdoba, Corrientes, Chaco, Formosa, Jujuy, Misiones: Puerto Iguazú, Salta, Santiago del Estero, and Tucumán (Wygodzinsky 1951); Bolivia, Brazil, and Paraguay (Dougherty 1995).

Material examined. 1♀, P.N. Iguazú, I-[19]44, A. Bridarolli coll., PNI0003 (MACN).

Brontostoma discus (Burmeister, 1835) (Fig. 3)

Distribution. Argentina: Chaco, Corrientes, Formosa, Jujuy, Misiones, Salta, and Santa Fe; Bolivia, Brazil, Colombia, Costa Rica, Panama, Paraguay, Peru, Suriname, Uruguay, and Venezuela (Wygodzinsky 1951, Dougherty 1995, Forero 2006).

Material examined. 2♂, CIES, 7-XII-2013, light trap, P.M. Dellapé coll., PNI0004-5 (MLP); 3♂, CIES, 8-XII-2013, light trap, P.M. Dellapé coll., PNI0006-8 (MLP).

Remarks. Although this species is similar to *B. nanus*, the specimens we have examined are much larger (18.275 mm), with less prominent eyes and shorter antenniferous tubercles. According to Carpintero (1980) *B. nanus* is a much smaller species (15.12 mm), with much more protruding eyes and longer antenniferous tubercles.

Brontostoma mazzai Carpintero, 1980

Distribution. Argentina: Misiones: P.N. Iguazú (Carpintero 1980).

Material examined. Holotype ♂, Misiones, P.N. Iguazú, IX-1953, ex coll. Martinez (MACN).

Brontostoma oglobini oglobini Wygodzinsky, 1951

Distribution. Argentina: Misiones; Brazil and Paraguay (Wygodzinsky 1951).

Material examined. 1♂, Iguazú, XII-1983, Bordon

leg., Martinez coll., PNI0009 (MACN).

Brontostoma oglobini minor Wygodzinsky, 1951

Distribution. Argentina: Misiones and Salta; Bolivia (Wygodzinsky 1951, Carpintero 1980).

Material examined. 1♂, Iguazú, XI-1944, M. Birabén coll., PNI0010 (MLP); 2♂, P.N. Iguazú, X-[1]977, Pepe coll., PNI0011-12 (MACN).

Cricetopareis paraguaya Carpintero, 1980 (Fig. 4)

Distribution. Argentina: Misiones: Parque Nacional Iguazú (Bachmann 1999); Paraguay (Carpintero 1980).

Material examined. Paratype ♂, Misiones, Parque Nac. Iguazú, XI-1953, ex coll. Martinez (MACN) (Fig. 4).

Pothea martinezii Carpintero, 1980 (Fig. 5)

Distribution. Argentina: Misiones: Puerto Iguazú (Carpintero 1980).

Material examined. Paratype, "Allotype" ♀, Misiones, Iguazú, X-1977, Galiano coll. (MACN) (Fig. 5).

Hammacerinae

Homalocoris varius (Perty, 1833)

Distribution. Argentina: Chaco (Maldonado Capriles 1972); Bolivia, Brazil, British Guiana, Honduras, Colombia, El Salvador, Costa Rica, Guatemala, Mexico, Panama, and Venezuela (Maldonado Capriles 1987).

Material examined. 1♂ 1♀, P.N. Iguazú, XII-[19]79, Carpintero coll., PNI0013-14 (MACN).

Remarks. First record for Misiones province.

This species can be distinguished by its pale yellowish annulated black legs, the ochraceous lateral margins of the pronotum, and the variegated hemelytra (Brailovsky 1981).

Microtomus conspicillaris (Drury, 1782)

Distribution. Argentina: Buenos Aires, Corrientes, and Misiones: Iguazú (Coscarón and Giacchi 1987); Brazil and French Guiana (Costa Lima 1935).

Microtomus reuteri (Berg, 1879)

Distribution. Argentina: Buenos Aires, Córdoba, Corrientes, Misiones, Salta, and Santa Fe; Bolivia, Brazil, and Uruguay (Melo and Coscarón 2004b).

Material examined. 1♂, P.N. Iguazú, XII-1979, Carpintero coll., PNI0015 (MACN).

Harpactorinae

Apiomerini

Apiomerus lanipes (Fabricius, 1803)

Distribution. Argentina: from Misiones to Mendoza, and northern provinces (Berg 1879); Bolivia, Brazil, Colombia, Guyana, Mexico, Panama and Venezuela (Costa Lima et al. 1951, Forero and Weirauch 2012).

Material examined. 1♂, Centro de Investigaciones Ecológicas Subtropicales (CIES), 25°40'40.8" S, 054°26'55.9" W, 7-XII-2013, PNI0016 (MLP); 1♂, same locality, 1-XI-2012, S.I. Montemayor coll., PNI0017 (MLP); 1♂ 1♀, P.N. Iguazú, XII-[1]979, Carpintero coll., PNI0018-9 (MACN).

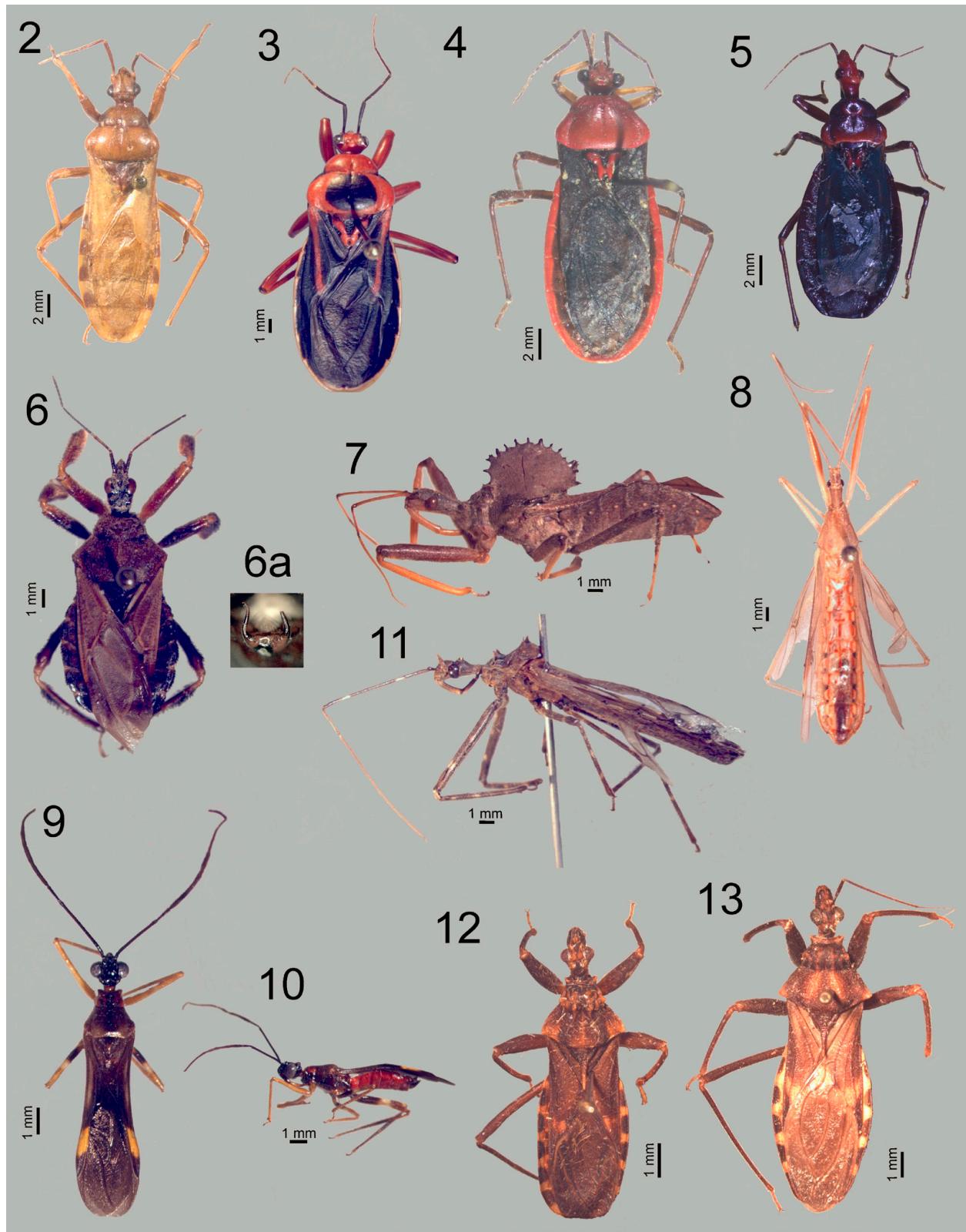


Figure 2–13. Reduviidae. **2.** *Brontostoma castaneum* Carpintero, 1980. **3.** *Brontostoma discus* (Burmeister, 1835). **4.** *Cricetopareis paraguaya* Carpintero, 1980. **5.** *Pothea martinezii* Carpintero, 1980. **6.** *Apiomerus mutabilis* Costa Lima, Campos Seabra and Hathaway, 1951. **6.a.** *A. mutabilis*: median process of pygophore, posterior view. **7.** *Arilus carinatus* (Forster, 1771), new country record. **8.** *Doldina lauta* (Stål, 1860), new country record. **9–10.** *Graptocleptes sanguineiventris* (Stål, 1866), new country record. **11.** *Heza multiannulata* Stål, 1860, new country record. **12.** *Opisthacidius lutzi* (Costa Lima, 1940), first record for Misiones province. **13.** *Opisthacidius pertinax* (Breddin, 1903), first record for Misiones province.

Apiomerus mutabilis Costa Lima, Campos Seabra & Hathaway, 1951 (Fig. 6, 6a)

Distribution. Argentina: Misiones (Costa Lima et al. 1951); Brazil (Maldonado Capriles 1990).

Material examined. 1♂, 17-II-2008, Van Somer trap with fish in Palmital, Zamudio, Colleselli & Gómez de Oliveira colls., PNI0020 (MLP); 1♀, same locality, 25°40'40.8" S, 054°26'55.9" W, 17-XI-2008 Van Somer trap with fruits, PNI0021 (MLP); 4♀, ruta 101, 25°40'25.7" S, 054°16'38.8" W, Sotobosque 1.5 m, attracted with Cineol, L. Alvarez, M. Lucia & P. Ramello colls., PNI0022-5 (MLP); 3♀, ruta 101, 25°22.2" S, 054°21'41.7" W, Dosal 12 m, attracted with Eugenol, L. Alvarez, M. Lucia & P. Ramello colls., PNI0026-28 (MLP); 1♀, P.N. Iguazú, X-1980, PNI0029 (MACN).

Apiomerus nigricollis Stål, 1858

Distribution. Argentina: Misiones: Puerto Iguazú (Costa Lima et al. 1951); Brazil (Maldonado Capriles 1990).

Heniartes annulatus Spinola, 1837

Distribution. Argentina: Misiones: Pto. Iguazú; Bolivia, Brazil (Wygodzinsky 1947).

Material examined. 2♂, Pto. Iguazú, XI-[1]9578, Martinez coll., PNI0030-1 (MACN); 1♂, same locality, XII-[19]83, Martinez coll., PNI0032 (MACN).

Harpactorini

Arilus carinatus (Forster, 1771) (Fig. 7)

Distribution. Brazil, Ecuador, and Peru (Maldonado Capriles 1990).

Material examined. 1♂, P.N. Iguazú, Sendero Macuco, 21-IX-[19]99, PNI0033 (MLP).

Remarks. New country record.

This species can be distinguished by the shape of the pronotal dorsal carinae.

Atrachelus cinereus cinereus (Fabricius, 1798)

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, La Pampa, La Rioja, Mendoza, Misiones, Salta, San Juan, San Luis, Santa Fe, Santiago del Estero, and Tucumán (Dellapé et al. 2015b); Chile, Cuba, Guatemala, Mexico, and Uruguay (Maldonado Capriles 1990).

Material examined. 1♂ 4♀, 25°40'40.8" S, 054°26'55.9" W, 1-XI-2012, S.I. Montemayor coll., PNI0034-8 (MLP); 1♂, same data, 2-XI-2012, PNI0039 (MLP); 2♂, same data, P.M. Dellapé coll., PNI0040-1 (MLP); 1♀, same data, 1-XI-2012, M.C. Melo coll., PNI0042 (MLP); 1♀, same data, 10-XII-2013, light trap, PNI0043 (MLP); 1♂, XI-1944, M. Birabén coll., PNI0044 (MLP).

Cosmoclopius annulosus Stål, 1872

Distribution. Argentina: Chaco, Corrientes, and Misiones (Melo and Coscarón 2004a, Melo et al. 2011, Dellapé et al. 2015b); Brazil (Maldonado Capriles 1990).

Material examined. 6♂, XI-1944, M. Birabén coll., PNI0045-50 (MLP).

Cosmoclopius nigroannulatus (Stål, 1860)

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, La Pampa, Mendoza, Misiones: Iguazú, San Luis, Salta, Tucumán, and Santiago del Estero (Melo and Coscarón 2004a, Melo et al. 2004, 2011, Dellapé et al. 2015b); Bolivia, Brazil, Paraguay, and Uruguay (Melo and Coscarón 2004a).

Material examined. 1♂, XI-1944, M. Birabén coll., PNI0051 (MLP); 2♀, 25°40'40.8" S, 054°26'55.9" W, 1-XI-2012, S.I. Montemayor coll., PNI0052-3 (MLP); 1♀, CIES, 25°40'40.8" S, 054°26'55.9" W, 9-XII-2013, P.M. Dellapé coll., PNI0054 (MLP); 1♀, same data, 12-XII-2013, PNI0055 (MLP); 1♂ 1♀, P.N. Iguazú, XII-1979, Carpintero coll., PNI0056-7 (MACN).

Cosmoclopius poecilus (Herrick-Schaeffer, 1848)

Distribution. Argentina: Corrientes, Misiones, Santa Fe; Paraguay, and Uruguay (Melo et al. 2004).

Material examined. 2♂ 2♀, P.N. Iguazú, XI-1953, Martinez coll., PNI0058-61 (MACN).

Debilia fusciventris Stål, 1859

Distribution. Argentina: Corrientes and Misiones; Brazil (Dellapé et al. 2015b).

Material examined. 1♀, P. Iguazú, X-[19]44, A. Bridarolli S.J. coll., PNI0062 (MACN).

Doldina lauta (Stål, 1860) (Fig. 8)

Distribution. Brazil (Hussey and Elkins 1955).

Material examined. 1♀, CIES, 29-X-2012, P.M. Dellapé coll., PNI0063 (MLP).

Remarks. New country record.

This species can be distinguished by its larger and more robust body and the distinct bisinuous lateral curvature of the anterior femora (Hussey and Elkins 1955).

Graptocleptes sanguineiventris (Stål, 1862) (Figs 9, 10)

Distribution. Guatemala, Mexico, Panama (Maldonado Capriles 1990, Lucas et al. 2016).

Material examined. 1♂, CIES, 8-XII-2013, G. Dellapé coll., PNI0064 (MLP).

Remarks. New country record.

Graptocleptes sanguineiventris can be recognized by the large size of the eyes extending to the ventral region of the head, the short post-antennal tubercle, the abundant seta on the gular region, and the reddish abdomen. This species shows the common black and reddish general coloration, with the hemelytra black or dark brown, with a yellow spot on the external and mid-distal portions of the corium, and the mid- and hind femora with a yellow annulus at the middle. These features mimic some Braconidae and Ichneumonidae (Gil-Santana et al. 2013), a characteristic extended among certain genera of Reduviidae as *Graptocleptes* Stål, *Hiranetis* Spinola and *Parahiranetis* Gil-Santana. The limits of these three genera are not clear and a comprehensive revision is needed (Gil-Santana et al. 2015).

Harpactor angulosus (Lepeletier & Serville, 1825)

Distribution. Argentina: Misiones; Brazil (Wygodzinsky 1946).

Material examined. 1♂, P.N. Iguazú, Secc. Yacuy, 1/5-IX-1977, Gque. P. Dermail coll., PNI0065 (MACN); 2♂, P.N. Iguazú, X-1980, PNI0066-7 (MACN).

Harpactor tuberculatus Stål, 1872

Distribution. Argentina: Misiones: Iguazú, Salta (Pennington 1921, Quintanilla et al. 1981); Bolivia, Brazil, and Uruguay (Maldonado Capriles 1990).

Heza insignis Stål, 1859

Distribution. Argentina: Formosa and Misiones (Dellapé et al. 2015b); Bolivia and Brazil (Maldonado Capriles 1976, 1990).

Material examined. 1♂, CIES, 25°40'40.8" S, 054°26'55.9" W, 8-XII-2013, G. Dellapé coll., PNI0068 (MLP); 1♂ 1♀, Sendero Macuco, 12-XII-2013, G. Dellapé coll., PNI0069-70 (MLP); 1♀, same locality, 11-XII-2013, G. Dellapé coll., PNI0071 (MLP).

Heza multiannulata Stål, 1860 (Fig. 11)

Distribution. Brazil (Maldonado Capriles 1976).

Material examined. 1♂, 2-XI-2012, light trap, PNI0072 (MLP).

Remarks. New country record.

This species is distinguished by the uniform light-brown to yellowish-brown coloration; the three annuli on the scapus; the medium sized sharp spines on the anterior pronotal lobe disc, and the presence of four spined connexiva (Maldonado Capriles 1976).

Isoncondylus elongatus (Lepeletier & Serville, 1825)

Distribution. Argentina: Misiones: Iguazú, Salta; Bolivia, Brazil, Colombia, and Venezuela (Forero 2006, Coscarón et al. 2008).

Material examined. 2♂, P.N. Iguazú, XII-[1]957, Martinez coll., PNI0073-4 (MACN).

Reppta flavicans (Amyot & Serville, 1843)

Distribution. Argentina: Buenos Aires, Chaco, Corrientes, Formosa, and Misiones; Bolivia, Brazil, Colombia, Costa Rica, Cuba, French Guiana, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, and Uruguay (Martin-Park et al. 2012).

Material examined. 1♀, Iguazú, XI-1944, M. Birabén coll., PNI0075 (MLP); 1♂, Iguazú, I-[19]44, A. Bridarolli S.J. coll., PNI0076 (MACN).

Ricolla quadrispinosa (Linné, 1767)

Distribution. Argentina: Entre Ríos and Misiones: Iguazú (Quintanilla et al. 1981); Bolivia, Brazil, Guyana, Paraguay, and Peru (Dellapé et al. 2015b).

Material examined. 1♂ 1♀, Sendero Macuco, 11-XII-2013, P.M. Dellapé coll., PNI0077-8 (MLP); 1♂, same locality, 30-X-2012, P.M. Dellapé coll., PNI0079 (MLP); 2♂ 1♀, same locality, 11-XII-2013, G. Dellapé coll., PNI0080-2 (MLP); 1♂, 31-X-2012, M.C. Melo coll., PNI0083 (MLP); 1♂, 2-XI-2012, P.M. Dellapé coll., PNI0084 (MLP); 1♀, Puerto Iguazú, X-[19]80, Carpintero coll., PNI0085 (MACN); 2♂ 1♀, P.N. Iguazú,

XII-1979, Carpintero coll., PNI0086-8 (MACN).

Sindala granuligera (Stål, 1860)

Distribution. Argentina: Corrientes and Misiones (Melo et al. 2004, Dellapé et al. 2015b); Brazil and Colombia (Maldonado Capriles 1990).

Material examined. 1♂, CIES, Sendero Macuco, 12-XII-2013, P.M. Dellapé coll., PNI0089 (MLP); 1♂, same locality, 8-XII-2013, G. Dellapé coll., PNI0090 (MLP).

Sosius australis Maldonado Capriles & Carpintero, 1993

Distribution. Argentina: Misiones: P.N. Iguazú; Brazil (Maldonado Capriles and Carpintero 1993).

Zelus armillatus (Lepeletier & Serville, 1825)

Distribution. Argentina: Corrientes, Misiones, and Salta (Dellapé et al. 2015b); Bolivia, Brazil, Colombia, Ecuador, Guyana, and Paraguay (Zhang et al. 2016).

Material examined. 1♀, P. Iguazú, I-[19]44, A. Bridarolli coll., PNI0091 (MACN).

Zelus pedestris Fabricius, 1803

Distribution. Argentina: Misiones, Salta, and Tucumán; Bolivia, Brazil, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, and Trinidad and Tobago (Zhang et al. 2016).

Material examined. 1♀, 1-XII-2012, P.M. Dellapé coll., PNI0092 (MLP).

Peiratinae

Melanolestes morio (Erichson, 1848)

Distribution. Argentina: Misiones: Iguazú; Belize, Bolivia, Brazil, British Guiana, Colombia, Costa Rica, Cuba, Ecuador, Mexico, Panama, Peru, Suriname, Trinidad, Venezuela, and USA (Coscarón and Carpintero 1993).

Rasahus brasiliensis Coscarón, 1983

Distribution. Argentina: Misiones: Iguazú; Brazil, Colombia, Costa Rica, Ecuador, Guyana, French Guiana, Panama, Paraguay, Peru, and Surinam (Coscarón 1983, Forero 2006).

Thymbreus ocellatus (Signoret, 1863)

Distribution. Bolivia, Brazil, and Peru (Coscarón 1994).

Material examined. 1♂, Iguazú, XI-1953, Martinez coll., PNI0093 (MACN).

Remarks. New country record.

This species can be distinguished from the other species of the genus by its mostly blackish hemelytra, and the yellowish basal region of the median and posterior femora (Coscarón 1994).

Tydides imitator Lent, 1955

Distribution. Argentina: Corrientes and Misiones: Iguazú (Lent 1955, Lent and Jurberg 1967); Brazil and Paraguay (Lent 1955).

Phymatinae

Macrocephalini

Macrocephalus tuberosus Westwood, 1841

Distribution. Argentina: Chaco and Misiones; Iguazú; Brazil and Paraguay (Kormilev 1951).

Material examined. 2♀, XI-1944, M. Birabén coll., N. Kormilev det., PNI0094-5 (MLP); 1♂, Iguazú, XI-1944, Boero coll., PNI0096 (MACN).

Phymatini

Phymata communis Handlirsch, 1897

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, Mendoza, Misiones: Iguazú, Salta, San Luis, Santa Fe, Santiago del Estero, and Tucumán (Kormilev 1951); Bolivia, Brazil, Paraguay, Peru, and Uruguay (Kormilev 1960).

Phymata birabeni Kormilev, 1950

Distribution. Argentina: Corrientes (Coscarón 2003) and Misiones: Iguazú (Kormilev 1950, 1960).

Material examined. Holotype ♀, Argentina, Misiones, Iguazú, XI-1944, #1514/1 (MLP).

Phymata haywardi Kormilev, 1950

Distribution. Argentina: Corrientes (Coscarón 2003) and Misiones: Iguazú (Kormilev 1950, 1960).

Material examined. Holotype ♂, Argentina, Misiones, Iguazú, 1-III-[19]45, Hayward, Willink & Golbach colls., THEM282 (IMLA); Paratype ♀, Argentina, Puerto Iguazú, Alto Paraná, II/III-45, Hayward, Willink Soloc? colls., THEM283 (IMLA); Paratype ♂, #52174, Misiones: Iguazú, 1-XI-1945, Hayward, Willink & Golbach colls. (MACN).

Reduviinae

Leogorrus litura (Fabricius, 1787)

Distribution. Argentina: Chaco, Formosa, Jujuy, Misiones, Salta, and Santiago del Estero; Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Panama, Paraguay, Peru, Surinam, Trinidad, and Venezuela (Melo 2007).

Material examined. 1♂, Sendero Macuco, 25°40' 40.8" S, 054°26'55.9" W, 29-X-2012, light trap, PNI0097 (MLP); 1♀, Iguazú, PNI0098 (MLP); 1♂ 1♀, P.N. Iguazú, XII-1979, Carpintero coll., PNI0099-100 (MACN).

Opisthacidius lutzi (Costa Lima, 1940) (Fig. 12)

Distribution. Argentina: Buenos Aires, La Rioja, Mendoza, Salta, San Luis, and Santiago del Estero (Lent and Wygodzinsky 1947b).

Material examined. 1♀, P.N. Iguazú, XII-1979, Carpintero coll., PNI0101 (MACN).

Remarks. First record for Misiones province.

This species can be distinguished by the small size (less than 20 mm); the mostly black pronotum and corium, and the dark abdominal sterna (Lent and Wygodzinsky 1956).

Opisthacidius pertinax (Breddin, 1903) (Fig. 13)

Distribution. Argentina: Chaco, Salta, Santiago del Estero, and Tucumán; Belize, Bolivia, Brazil, Brisith

Guiana, Ecuador, and Venezuela (Lent and Wygodzinsky 1966).

Material examined. 1♂, P.N. Iguazú, XII-1979, Carpintero coll., PNI0102 (MACN).

Remarks. First record for Misiones province.

This species can be distinguished by the completely black scutellum, and the concolorous veins of hemelytra (Lent and Wygodzinsky 1956).

Zelurus brunneus (Mayr, 1865)

Distribution. Argentina: Misiones: Iguazú (Lent and Wygodzinsky 1951); Brazil (Lent and Wygodzinsky 1947a, 1951).

Material examined. 1♂ 1♀, Iguazú, XI-1944, M. Birabén coll., Wygodzinsky det., PNI0103-4 (MLP).

Zelurus circumcinctus (Hahn, 1836)

Distribution. Argentina: Misiones: Puerto Iguazú, and Santa Fe (Lent and Wygodzinsky 1945, 1947a); Bolivia, Brazil, Colombia, Mexico, Panama, Paraguay, and Venezuela (Lent and Wygodzinsky 1951, 1957).

Material examined. 1♀, XI-1944, M. Birabén coll., PNI0105 (MLP).

Zelurus lepeletierianus (Kirkaldy, 1909)

Distribution. Argentina: Corrientes, Entre Ríos (Pennington 1921), and Misiones: Puerto Iguazú (Lent and Wygodzinsky 1951); Brazil and Panama (Lent and Wygodzinsky 1947a, 1951).

Material examined. 1♀, P. Iguazú, I-[19]44, A. Bridarolli coll., PNI0106 (MACN).

Zelurus stillatipennis (Stål, 1859) (Fig. 14)

Distribution. Argentina: Misiones: Puerto Iguazú; Brazil (Lent and Wygodzinsky 1947a, 1951).

Material examined. 1♂, 1 without abdomen, Iguazú, XI-1944, M. Birabén coll., PNI0107-8 (MLP).

Zelurus sororius guarani Lent & Wygodzinsky, 1954

Distribution. Argentina: Misiones: Iguazú; Brazil, and Paraguay (Lent and Wygodzinsky 1954).

Zelurus tibialis Stål, 1860

Distribution. Argentina: Misiones: P.N. Iguazú (Carpintero et al. 2006); Brazil (Lent and Wygodzinsky 1947a).

Material examined. 1♂, Argentina, Misiones, P.N. Iguazú, XII-1979, PNI0109 (MACN).

Saicinae

Saica apicalis Osborn & Drake, 1915 (Fig. 15)

Distribution. Argentina: Corrientes; Bolivia, Brazil, French Guiana, Guatemala and Panama (Gil-Santana 2008).

Material examined. 1♀, Misiones, P.N. Iguazú, X-1980, PNI0110 (MACN).

Remarks. First record for Misiones province.

This species can be distinguished by the general red coloration of the body and the hemelytra with three completely closed discal cells (McAtee and Malloch 1923). The specimen we examine fits with the specific diagnosis

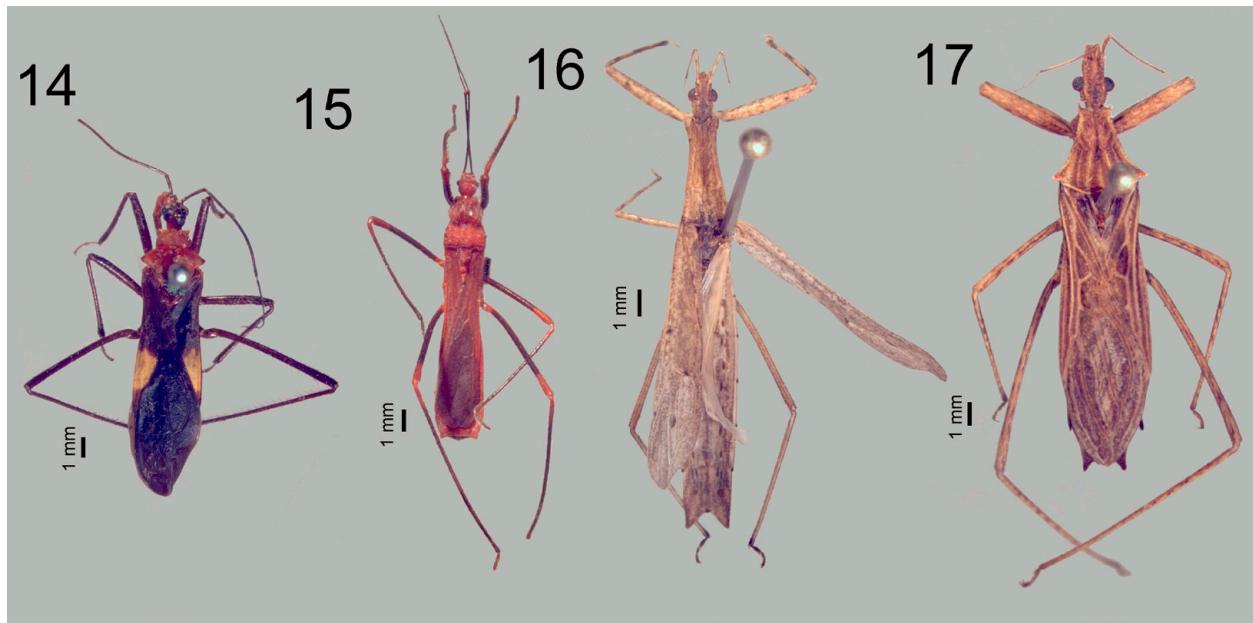


Figure 14–17. Reduviidae. **14.** *Zelurus stillatipennis* (Stål, 1859). **15.** *Saica apicalis* Osborn & Drake, 1915. **16.** *Ctenotrachelus macilentus* Stål, 1872, new country record. **17.** *Ocrioessa cornutulus* (Berg, 1879).

given by McAtee and Malloch (1923) where the posterior pronotal spines are short and acute.

Stenopodinae

Ctenotrachelus macilentus Stål, 1872 (Fig. 16)

Distribution. Brazil (Barber 1930).

Material examined. 1♂, 25°40'40.8" S, 054°26'55.9" W, 2-XI-2012, light trap, PNI0111 (MLP).

Remarks. New country record.

This species can be distinguished by the unarmed lateral margins of the pronotum; pronotum twice longer than head, and over twice as long as wide; the post-ocular region twice as long as the pre-ocular margin of head (Barber 1930).

Ganthobleda toba Giacchi, 1970

Distribution. Argentina: Buenos Aires, Chaco, Entre Ríos, Mendoza, Misiones, Santa Fe, and Tucumán; Bolivia, Brazil, Paraguay, and Uruguay (Giacchi 1977).

Material examined. 1♀, P.N. Iguazú, XII-1979, Carpintero coll., PNI0112 (MACN).

Narvesus minor Barber, 1930

Distribution. Argentina: Misiones and Río Negro; Bolivia, Brazil, Guyana, Paraguay, Puerto Rico, Suriname, and Trinidad (Dellapé et al. 2015b).

Material examined. 1♂ 1♀, P.N. Iguazú, X-[1]977, U. Pepe coll., PNI0113-4 (MACN).

Ocrioessa cornutulus (Berg, 1879) (Fig. 17)

Distribution. Argentina: Chaco (Berg 1879) and Misiones (Giacchi 1985); Bolivia (Barber 1930).

Material examined. 1♂, 25°40'40.8" S, 054°26'55.9" W, 2-XI-2012, light trap, PNI0115 (MLP).

Seridentus latissimus Giacchi, 1988

Distribution. Argentina: Misiones: Iguazú (Giacchi 1988).

Seridentus maculosus (Haviland, 1931)

Distribution. Argentina: Misiones: Iguazú (Diez and Coscarón 2014); British Guiana (Haviland 1931).

Stenopoda cana Stål, 1859

Distribution. Argentina: Misiones, Puerto Iguazú; Bolivia, Brazil, Guyana, and Suriname (Barber 1930, Giacchi 1969).

Material examined. 1♂, CIES, 25°40'40.8" S, 054°26'55.9" W, 9-XII-2013, P.M. Dellapé coll., PNI0116 (MLP).

Stenopoda guaranitica Giacchi, 1969

Distribution. Argentina: Chaco, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, Mendoza, Misiones: Iguazú, Santa Fe, Salta, Santiago del Estero, and Tucumán; Bolivia, Brazil, Paraguay, and Uruguay (Giacchi 1969, 1988, Melo et al. 2011).

Stenopoda lativentris Giacchi, 1969

Distribution. Argentina: Misiones: Puerto Iguazú (Bachmann 1999); Bolivia, Paraguay, and Peru (Giacchi 1969).

Triatominae

Pastrongylus megistus (Burmeister, 1835)

Distribution. Argentina: Corrientes, Jujuy, Misiones: Iguazú, and Salta (Abalos and Wygodzinsky 1951, Lent and Wygodzinsky 1979); Brazil, Paraguay, and Uruguay (Galvão et al. 2003).

Tingidae

Amblystira niborskiana Montemayor, 2010

Distribution. Argentina: Misiones (Montemayor 2010a).

Material examined. 3♂ 3♀, 02-XI-2012, P.M. Dellapé coll., PNI0117-22 (MLP).

Corythaica dellapei Montemayor & Melo, 2012 (Fig. 18)

Distribution. Argentina: Formosa (Montemayor and Melo 2012).

Material examined. 1♀, 01-XI-2012, M.C. Melo coll., PNI0123 (MLP).

Remarks. First record for Misiones province.

Corythucha fuscomaculata (Stål, 1858)

Distribution. Argentina: Corrientes, Jujuy, Misiones, and Tucumán (Montemayor and Coscarón 2005); Bolivia, Brazil, Colombia, Mexico, Paraguay, and Peru (Drake and Ruhoff 1965).

Material examined. 6♂ 1♀, Iguazú, XI-1944, M. Birabén coll., PNI0124-30 (MLP).

Gargaphia decoris Drake, 1931

Distribution. Argentina: Misiones (Montemayor and Coscarón 2005); Brazil (Drake and Ruhoff 1965).

Material examined. 1♂, Iguazú, XI-1944, M. Birabén coll., PNI0131 (MLP).

Gargaphia obliqua Stål, 1873

Distribution. Argentina and Brazil (Drake and Ruhoff 1965).

Material examined. 1♂ 2♀, Iguazú, XI-1944, M. Birabén coll., PNI0132-4 (MLP).

Leptocysta sexnebulosa (Stål, 1858)

Distribution. Argentina: Buenos Aires, Corrientes, and Misiones (Montemayor 2010b); Brazil, Colombia, Paraguay, Peru, and Venezuela (Drake and Ruhoff 1965).

Material examined. 1♀, CIES, 25°40'40.8" S, 054°26'55.9" W, 7-XII-2013, G. Dellapé coll., PNI0135 (MLP); 4♂ 2♀ 1 without abdomen, CIES, 25°40'40.8" S, 054°26'55.9" W, 8-XII-2013, G. Dellapé coll., PNI0136-42 (MLP); 1 without abdomen, Sendero Macuco, 25°40'40.8" S, 054°26'55.9" W, 12-XII-2013, G. Dellapé coll., PNI0143 (MLP).

Teleonemia carmelana (Berg, 1892) (Fig. 19)

Distribution. Argentina: Córdoba, Corrientes, and Mendoza (Montemayor and Coscarón 2005); Bolivia, Brazil, Chile, Paraguay, Peru, and Uruguay (Drake and Ruhoff 1965).

Material examined. 1♂ 2♀, Iguazú, XI-1944, M. Birabén coll., PNI0144-46 (MLP); 1♂, CIES, 25°40'40.8" S, 054°26'55.9" W, 12-XII-2013, P.M. Dellapé coll., PNI0147 (MLP).

Remarks. First record for Misiones province.

Teleonemia prolixa (Stål, 1858)

Distribution. Argentina: Buenos Aires and Misiones (Montemayor and Coscarón 2005); Bolivia, Brazil, British Guiana, Canal Zone, Colombia, Ecuador, Guatemala, Jamaica, Mexico, Panama, Paraguay, Peru, Puerto Rico, Surinam, Trinidad, and Venezuela (Drake and Ruhoff 1965).

Material examined. 4♂ 1♀ 1 without abdomen, Iguazú, XI-1944, M. Birabén coll., PNI0148-53 (MLP).

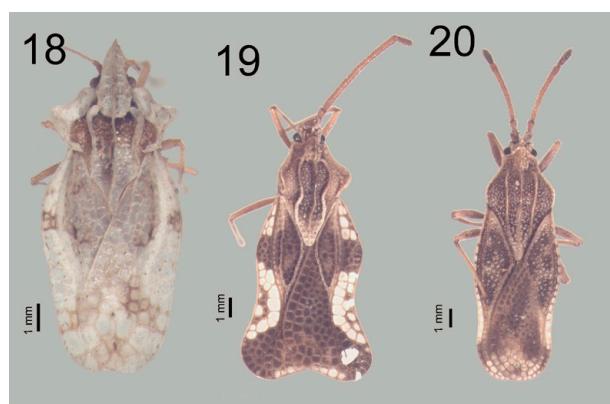
Teleonemia scrupulosa Stål, 1873 (Fig. 20)

Figure 18–20. Tingidae. **18.** *Corythaica dellapei* Montemayor & Melo, 2012. **19.** *Teleonemia carmelana* (Berg, 1892). **20.** *Teleonemia scrupulosa* Stål, 1873, new country record.

Distribution. Antilles, Australia, Brazil, British Guiana, Colombia, Costa Rica, Cuba, Fiji Is., French Guiana, Grenada, Guatemala, Haiti, India, Indonesia, Jamaica, Mexico, Micronesia, Netherlands, Panama, Paraguay, Peru, Trinidad, Republic of Mauritius, Saint Vincent, Venezuela, and USA (Drake and Ruhoff 1965).

Material examined. 2♀ 1♂, 25°40'40.8" S, 54°26'55.9" W, 1-XI-2012, S.I. Montemayor coll., PNI0154-6 (MLP); 19♂ 11♀, CIES, 2-XI-2012, P.M. Dellapé coll., PNI0157-86 (MLP); 4♂ 2♀, CIES, 2-XI-2012 PNI0187-92 (MLP); 1♀, CIES, 8-XII-2013, G. Dellapé coll., PNI0193 (MLP).

Remarks. New country record.

This species can be distinguished by its five cephalic spines, its short hood not reaching the anterior margin of the eyes, its pronotum three carinated, the paranota carinae like, the hemelytra with dark brown "X" pattern and its costal area with one row of rectangular areolae.

Pentatomomorpha

Coreoidea

Alydidae

Alydinae

Apidaurus conspersus (Stål, 1870) (Fig. 21)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:459315>

Distribution. Argentina: Chaco, Formosa, and Tucumán; Bolivia, Brazil, Colombia, French Guiana, Belize, Honduras, Mexico, Nicaragua, Paraguay, USA, and Venezuela (Brailovsky and Zurbia Flores 1979).

Material examined. 1♂ 2♀, CIES, 9-XII-2013, P.M. Dellapé coll., PNI0194-6 (MLP); 2♂, 19-XI-2008, Van Somer trap with fish, PNI0197-8 (MLP).

Remarks. First record for Misiones province.

Hyalymenus (Tivarbus) tarsatus (Fabricius, 1803) (Fig. 22)
<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:459065>

Distribution. Argentina, Antilles, Brazil, British Guiana, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama, and USA (Brailovsky and Zurbia Flores 1979).



Figure 21–24. Alydidae. **21.** *Apidaurus conspersus* (Stål, 1870). **22.** *Hyalymenus (Tivarbus) tarsatus* (Fabricius, 1803). **23.** *Hyalymenus (Tivarbus) pulcher* (Stål, 1854) new country record. **24.** *Neomegalotomus parvus* Westwood, 1842.

Material examined. 2♂ 1♀, 25°40'40.8" S, 054°26'55.9" W, 18-XI-2008, Van Somer trap with fish, PNI0199-201 (MLP); 1♀, 19-XI-2008, Van Somer trap with fish, PNI0202 (MLP); 3♂ 1♀, same locality, 12-XII-2008, Zamudio et al. colls., PNI0203-6 (MLP); 1♂, same locality, 9-XII-2008, Zamudio et al. colls., PNI0207 (MLP); 2♂, CIES, 8-XII-2013, G. Dellapé coll., PNI0208-9 (MLP); 1♂ 2♀, Paseo Cataratas, 10-XII-2013, P.M. & G. Dellapé coll., PNI0210-2 (MLP); 1♀, 9-XII-2013, P.M. Dellapé coll., PNI0213 (MLP); 1♀, Sendero Macuco, 31-X-2012, M.C. Melo coll., PNI0214 (MLP).

Remarks. First record for Misiones province.

***Hyalymenus (Tivarbus) pulcher* (Stål, 1854) (Fig. 23)**
<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:459077>

Distribution. Honduras, Mexico, Panama, and USA (Brailovsky and Zurbia Flores 1979).

Material examined. 9♂ 1♀, 18-VII-2008, Van Somer trap with fish, PNI0215-24 (MLP); 1♀, 12-VII-2008, Van Somer trap with fish, on bees, PNI0225 (MLP); 4♂ 1♀, 12-VII-2008, Zamudio et al. colls., PNI0226-30 (MLP); 1♀, CIES, 7-XII-2013, PNI0231 (MLP); 1♂ 1♀, Paseo Cataratas, 10-XII-2013, P.M. & G. Dellapé coll., PNI0232-3 (MLP).

Remarks. New country record.

This species can be distinguished by the long spined humeral angle of the pronotum, the concolorous pleura of the pronotum, and the labium reaching the metacoxa (Brailovsky and Zurbia Flores 1979)

***Neomegalotomus parvus* Westwood, 1842 (Fig. 24)**
<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:459027>

Distribution. Argentina, Barbados, Belize, Bolivia, Brazil, Costa Rica, Ecuador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, St Vincent, Salvador, Tobago, Trinidad, Uruguay, and Venezuela (Schaefer and Ahmad 2008).

Material examined. 1♂, 25°40'40.8" S, 054°26'56.9" W, 19-XI-2008, Van Somer trap with fish, PNI0234 (MLP); 1♀, CIES, Sendero Macuco, 12-XII-2013, G. Dellapé coll., PNI0235 (MLP); 1♀, same data, 9-XII-

2013, G. Dellapé coll., PNI0236 (MLP).

Remarks. First record for Misiones province.

Micrelytrinae

Micrelytrini

***Cydamus femoralis* (Stål, 1860)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:458822>

Distribution. Argentina: Corrientes, Entre Ríos, Formosa, Misiones, and Tucumán; Brazil and Paraguay (Kormilev 1953).

Material examined. 2♂, CIES, 8-XII-2013, P.M. Dellapé coll., PNI0237-8 (MLP); 1♀, 12-XII-2013, G. Dellapé coll., PNI0239 (MLP); 1♂, Sendero Macuco, 31-X-2012, S.I. Montemayor coll., PNI0240 (MLP).

***Cydamus picticeps* (Stål, 1859)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:458826>

Distribution. Argentina: Corrientes, Formosa, Misiones, and Tucumán; Bolivia and Brazil (Kormilev 1953).

Material examined. 1♂, Sendero Macuco, 31-X-2012, S.I. Montemayor coll., PNI0241 (MLP); 1♀, Sendero Macuco, 11-XII-2013, G. Dellapé coll., PNI0242 (MLP); 1♂ 1♀, XI-1944, M. Birabén coll., PNI0243-4 (MLP).

Coreidae

Merophachyinae

Merophachyini

***Hirilcus gracilis* (Burmeister, 1835)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452912>

Distribution. Argentina: Misiones; Brazil and Paraguay (Kormilev 1954, Packauskas 2010).

Material examined. 1♀, XII-1944, M. Birabén coll., PNI0245 (MLP); 1♀, 20-XI-2008, Zamudio & Colleselli Gómez de Olivera colls., PNI0246 (MLP).

***Hirilcus variolosus* (Burmeister, 1835)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452905>

Distribution. Argentina: Misiones; Iguazú; Brazil

and Paraguay (Kormilev 1954, Packauskas 2010).

Spathophorini

Paralytambus misionensis Kormilev, 1954

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452845>

Distribution. Argentina: Misiones; Brazil and Paraguay (Brailovsky 1998, Packauskas 2010).

Material examined. 4♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0247-50 (MLP); 1♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0251 (MLP); 1♀, 11-XII-2013, P.M. Dellapé coll., PNI0252 (MLP).

Coreinae

Acanthocephalini

Acanthocephala latipes (Drury, 1782)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453675>

Distribution. Argentina: Misiones (Pennington 1922, Quintanilla et al. 1981); Antilles, Brazil, Colombia, Guyana, Jamaica, Mexico, Panama, Paraguay, Suriname, and Venezuela (Packauskas 2010).

Material examined. 1♀, 29-X-2012, PNI0253 (MLP); 1♂, 13-XI-2013, P.M. Dellapé coll., PNI0254 (MLP).

Empedocles luridus Brailovsky & Barrera, 1998

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453659>

Distribution. Argentina: Misiones; Brazil (Brailovsky and Barrera 1998, Packauskas 2010).

Material examined. 1♀, 11-XII-2013, G. Dellapé coll., PNI0255 (MLP); 1♀, 11-XII-2013, P.M. Dellapé coll., PNI0256 (MLP).

Acanthocerini

Camptischium niger (Stål, 1870)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453437>

Distribution. Argentina: Misiones (Dellapé et al. 2015b); Bolivia, Brazil, Grenada, and Paraguay (Packauskas 2010).

Material examined. 1♂, Iguazú, PNI0257 (MLP).

Crinocerus sanctus (Fabricius, 1775)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453428>

Distribution. Argentina: Buenos Aires, Misiones: Iguazú, and Tucumán (Pennington 1921, Quintanilla et al. 1981); Bolivia, Brazil, Colombia, Guyana, and Paraguay (Packauskas 2010).

Anisoscelini

Anisoscelis (Anisoscelis) foliaceus (Fabricius, 1803)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:491585>

Distribution. Argentina: Buenos Aires, Entre Ríos, La Pampa, and Misiones; Brazil, Ecuador, French Guiana, Peru, Suriname, and Uruguay (Packauskas 2010,

Brailovsky 2016).

Material examined. 1♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0258 (MLP).

Dalmatomammurius vandoesburgi (Brailovsky, 1982a)
<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457615>

Distribution. Argentina: Misiones: Iguazú; Bolivia, Brazil, Paraguay, Uruguay, and Venezuela (Brailovsky 1990a, Packauskas 2010).

Leptoglossus ingens (Mayr, 1865)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457551>

Distribution. Argentina: Misiones (Dellapé et al. 2015b); Bolivia, Brazil, Ecuador and Paraguay (Packauskas 2010).

Material examined. 2♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0259-60 (MLP); 1♂, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0261 (MLP); 1♂, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0262 (MLP).

Leptoglossus lonchoides Allen, 1969 (Fig. 25)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457461>

Distribution. Brazil and Peru (Packauskas 2010).

Material examined. 2♂, 9-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0263-4 (MLP).

Remarks. New country record.

This species belongs to the *clypealis* species group (Brailovsky 2014) and can be easily distinguished from the other species of the genus by the short labium reaching at most to middle of the third abdominal sternum, the straight lateral margins of the pronotum, the acute humeral angles, and the lanceolate hind tibial dilations, clearly expanded without deep emarginations and occupying 65% length of the hind tibiae (Allen 1969).

Leptoglossus neovexillatus Allen, 1969

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457460>

Distribution. Argentina: Buenos Aires, Chaco, Corrientes, Jujuy, Misiones, Salta, and Tucumán (Dellapé et al. 2015b); Bolivia, Brazil, Paraguay, Peru, and Uruguay (Packauskas 2010).

Material examined. 1♀, 08-XII-2013, P.M. Dellapé coll., PNI0265 (MLP); 2♂, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0266-7 (MLP); 1♂, 08-XII-2013, G. Dellapé coll., PNI0268 (MLP).

Leptoglossus stigma (Herbst, 1784)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457543>

Distribution. Argentina: Isla Martín García and Misiones (Carpintero and De Biase 2011, Coscarón and Pall 2015); Brazil, Colombia, Cuba, Ecuador, Guatemala, Guyana, Honduras, Mexico, Paraguay, Puerto Rico, Suriname, Uruguay, and USA (Brailovsky and Sánchez 1983, Packauskas 2010).

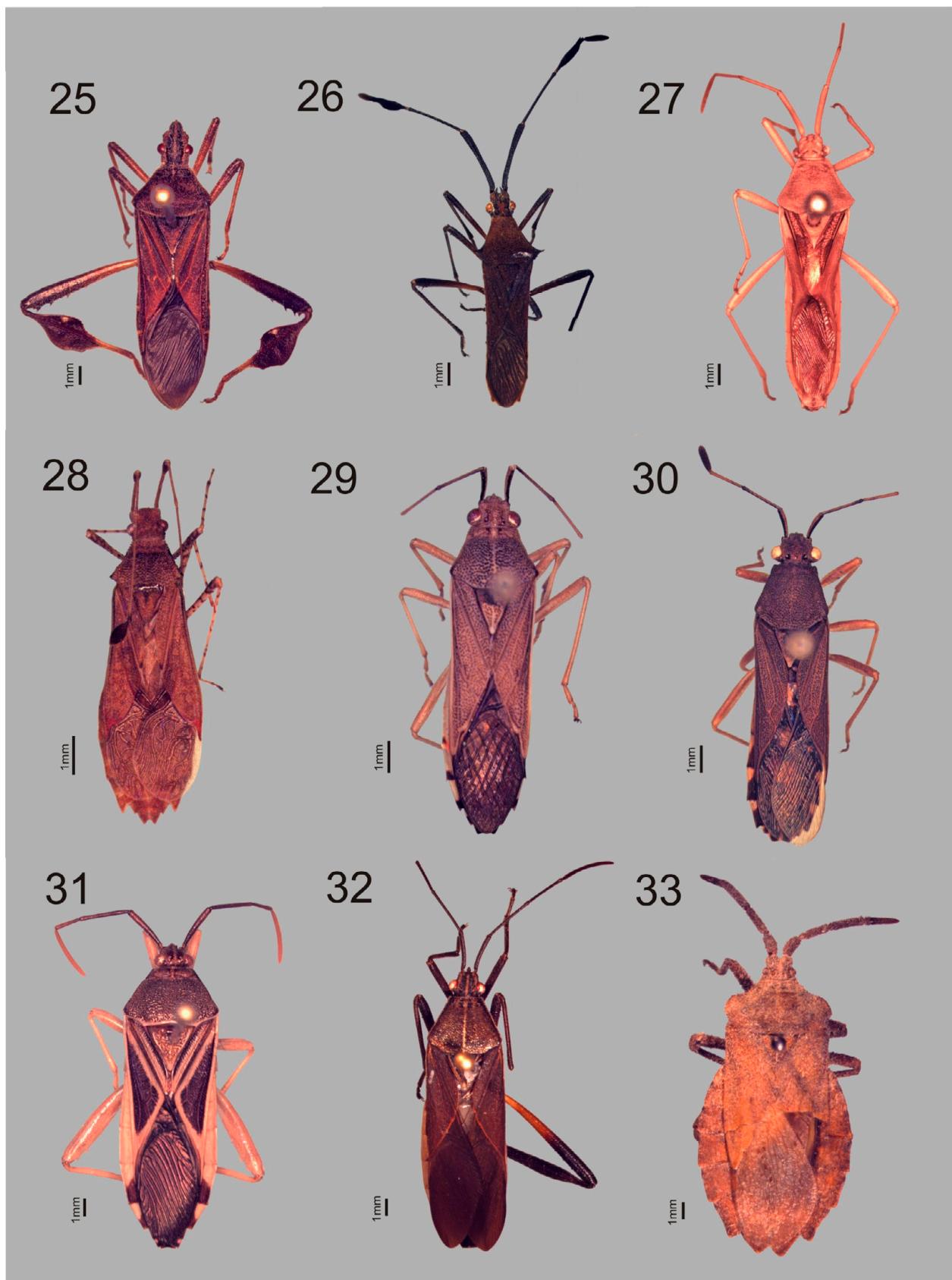


Figure 25–33. Coreidae. **25.** *Leptoglossus lonchoides* Allen, 1969, new country record. **26.** *Chariesterus armatus* (Thunberg, 1825). **27.** *Scamurius marianae* Brailovsky, 1986. **28.** *Madura fuscoclavata fuscoclavata* Stål, 1860. **29.** *Catorhintha divergens* Barber, 1926. **30.** *Catorhintha duplicata* Brailovsky & García, 1987, new country record. **31.** *Quintius dentifer* Stål, 1870, new country record. **32.** *Plaxiscelis pagana* (Burmeister, 1835). **33.** *Spartocera dentiventris* Berg, 1883.

Material examined. 2♀, 17-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0269-70 (MLP); 21♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0271-91 (MLP); 1♀, 3-XI-2012, Zamudio, Colleselli & Gómez de Olivera colls., PNI0292 (MLP); 2♂, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0293-4 (MLP); 1♂, 09-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0295 (MLP); 15♂, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0296-310 (MLP).

Phthiacnemia picta (Drury, 1773)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457389>

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, La Pampa, La Rioja, Mendoza, Misiones: Iguazú, Salta, San Juan, San Luis, Santa Fe, Santiago del Estero, and Tucumán (Dellapé et al. 2015b); Brazil, Colombia, Costa Rica, Cuba, El Salvador, Guyana, Honduras, Mexico, Nicaragua, Paraguay, Puerto Rico, St Martin, Suriname, Uruguay, and Venezuela (Packauskas 2010).

Chariesterini

Chariesterus armatus (Thunberg, 1825) (Fig. 26)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457335>

Distribution. Argentina: Chaco, Tucumán, and Salta (Pennington 1922); Brazil, [New Granada], Paraguay, and Trinidad (Packauskas 2010).

Material examined. 1♂, 08-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0311 (MLP).

Remarks. First record for Misiones province.

This species can be distinguished from the other species of the genus by the humeral spines shorter and not arcuate but directed laterally and slightly upward rather than forward, the tomentum of the pronotum interspersed with erect setae, and the abdominal dorsum rosaceous to sanguineous in the middle and black at base and apex (Ruckes 1955).

Chariesterus cuspidatus Distant, 1892

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457331>

Distribution. Argentina: Misiones: Iguazú (Quintanilla et al. 1981); Central America and USA (Packauskas 2010), Brazil (Barcellos et al. 2008).

Discogastrini

Discogaster circularis Burmeister, 1835

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457991>

Distribution. Argentina: Misiones: Iguazú (Quintanilla et al. 1981); Brazil (Packauskas 2010).

Discogaster dentipes (Stål, 1868)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:457988>

Distribution. Argentina: Misiones (Quintanilla et al.

1981); Bolivia, Brazil, and Paraguay (Packauskas 2010).

Material examined. 1♀, XII-1944, M. Birabén coll., PNI0312 (MLP); 3♀ 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0313-5 (MLP); 1♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0316 (MLP); 1♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0317 (MLP); 2♂, XII-1944, M. Birabén coll., PNI0318-9 (MLP).

Scamurius marianae Brailovsky, 1986 (Fig. 27)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:458003>

Distribution. Argentina: Catamarca and Corrientes (Brailovsky 1986); Brazil and Paraguay (Packauskas 2010).

Material examined. 2♂, 19-XI-2008, Zamudio & Colleselli Gómez de Olivera colls., PNI0320-1 (MLP); 1♂, 11-XII-2008, Zamudio & Colleselli Gómez de Olivera colls., PNI0322 (MLP).

Remarks. First record for Misiones province.

This species belongs to the *vacillans* group characterized by having a slender body, acutely projecting humeral angles, and black or reddish brown claval margin. *Scamurius marianae* can be distinguished by the shape of the postero-ventral edge of the pygophore with a shorter medial notch delimited laterally by two monticular prominences adjacent to the midline to the sides of which there are two longer processes projecting (Brailovsky 1986).

Hydarini

Madura fuscoclavata fuscoclavata Stål, 1860 (Fig. 28)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:458269>

Distribution. Argentina: Santiago del Estero (Brailovsky 1988a); Bolivia, Brazil, Mexico, Paraguay, and Peru (Brailovsky 1988a, Packauskas 2010).

Material examined. 2♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0323-4 (MLP); 2♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0325-6 (MLP); 1♀, 18-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0327 (MLP); 1♀, 11-XII-2013, G. Dellapé coll., PNI0328 (MLP); 1♂, XI-1944, M. Birabén coll., PNI0329 (MLP); 1♂, 18-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0330 (MLP).

Remarks. First record for Misiones province.

This species can be distinguished by its large size, the antennae shorter than the total body length, the distiflagellomere longer and more robust, and the spermatheca filiform and rolled up (Brailovsky 1988).

Hypselonotini

Acidomeria sordida (Berg, 1878)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454063>

Distribution. Argentina: Buenos Aires, Corrientes, Entre Ríos, Misiones, Santiago del Estero, Tucumán, and Martín García Is. (Pirán 1962, Brailovsky 1988b); Bolivia, Brazil, Paraguay, and Uruguay (Brailovsky

1988b, Barcellos et al. 2008, Packauskas 2010).

Material examined. 2♂, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0331-2 (MLP); 1♂, 22-IX-2013, F. Zamudio coll., PNI0333 (MLP).

***Althos obscurator* (Fabricius, 1803)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454391>

Distribution. Argentina: Buenos Aires, Corrientes, Entre Ríos, Jujuy, Misiones, and Tucumán Brazil, Colombia, Costa Rica, Cuba, Dominican, Ecuador, Grenada, Guatemala, Isla Guadalupe, British Guiana, Mexico, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad, Tobago, Uruguay, USA, and Venezuela (Brailovsky 1990b, Packauskas 2010).

Material examined. 1♀, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0334 (MLP); 1♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0335 (MLP); 10♀, 31-X-2012, S.I. Montemayor coll., PNI0336-45 (MLP); 1♂, XI-1944, M. Birabén coll., PNI0346 (MLP); 1♂, 30-X-2012, P.M. Dellapé coll., PNI0347 (MLP); 1♂, 31-X-2012, M.C. Melo coll., PNI0348 (MLP); 18♂, 31-X-2012, S.I. Montemayor coll., PNI0348-66 (MLP).

***Anasa scorbutica* (Fabricius, 1775)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453930>

Distribution. Argentina: Buenos Aires, Córdoba, Misiones, Salta, and Tucumán (Brailovsky 1985); Antigua, Bahamas, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, British Guiana, French Guiana, Galápagos Islands, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Puerto Rico, St John, St Kitts, St Vincent, Suriname, Trinidad, Tobago, USA, Venezuela, and Virgin Islands (Brailovsky 1985, Packauskas 2010).

Material examined. 1♀, 11-XII-2008, Zamudio & Colleselli Gómez de Olivera colls., PNI0367 (MLP); 1♀, Iguazú, PNI0368 (MLP).

***Anasa varicornis* (Westwood, 1842)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452070>

Distribution. Argentina: Misiones (Brailovsky 1985); Bolivia, Brazil, British Guiana, Paraguay, Trinidad, Tobago, and Venezuela (Packauskas 2010).

Material examined. 2♀, 09-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0369-70 (MLP); 1♀, 11-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0371 (MLP); 8♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0372-9 (MLP); 1♀, 18-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0380 (MLP); 2♀, 19-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0381-2 (MLP).

***Catorhintha divergens* Barber, 1926 (Fig. 29)**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454344>

Distribution. Argentina: Chaco, Formosa; Bahamas,

Bolivia, Brazil, Canada, Colombia, Cuba, Ecuador, Nicaragua, Panama, Paraguay, Venezuela, Mexico, and USA (Brailovsky and García 1987, Packauskas 2010).

Material examined. 2♀, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0383-4 (MLP); 1♀, 19-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0385 (MLP); 1♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0386 (MLP); 1♀, 18-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0387 (MLP); 1♂, IV-1966, PNI0388 (MLP).

Remarks. New record for Misiones province

This species belongs to the *inarmata* group, which is characterized by the absence of a spine in the antenniferous tubercles. *Catorhintha divergens* can be easily distinguished by the combination of the following characters: the humeral angles of the pronotum expanded and acute, the scape ocher with a black outer band, thorax ventrally immaculate and with the dorsal segments of the abdomen bright orange with a reddish brown fascia media (Brailovsky and García 1987).

***Catorhintha duplicata* Brailovsky & García, 1987**

(Fig. 30)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454322>

Distribution. Peru (Brailovsky and García 1987, Packauskas 2010).

Material examined. 2♀, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0389-90 (MLP); 3♀, 19-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0391-3 (MLP); 2♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0394-5 (MLP); 1♀, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0396 (MLP); 3♂, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0397-9 (MLP); 1♂, 19-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0400 (MLP); 1♂, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0401 (MLP); 1♂, 08-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0402 (MLP); 1♂, 9-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0403 (MLP); 2♂, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0404-5 (MLP); 2♂, 18-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0406-7 (MLP).

Remarks. New country record.

This species can be distinguished by the external spine of the antenniferous tubercle twisted over the base of scapus and the immaculate abdominal sterna (Brailovsky and García 1987).

***Catorhintha sinuatipennis* Berg, 1892**

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454308>

Distribution. Buenos Aires and Misiones: Iguazú (Pennington 1922, Quintanilla et al. 1981, Brailovsky and García 1987).

Cebrenis cauta Brailovsky, 1995

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454273>

Distribution. Argentina: Catamarca, Corrientes, Mendoza, and Misiones; Bolivia, Brazil, Grenada, Paraguay, Peru, Trinidad, Tobago, and Venezuela (Brailovsky 1995, Packauskas 2010).

Material examined. 2♀, 8-XII-2013, P.M. Dellapé coll., PNI0408-9 (MLP); 1♂, Iguazú, PNI0410 (MLP); 2♂, 11-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0411-2 (MLP); 2♂, 1-XI-2012, M.C. Melo coll., PNI0413-4 (MLP); 1♂, 1-XI-2012, S.I. Montemayor coll., PNI0415 (MLP); 1♂, P.N. Iguazú, 25°40'40.8" S, 54°26'55.9" W, 8-XII-2013, P.M. Dellapé coll., PNI0416 (MLP); 1♂, Iguazú, PNI0417 (MLP).

Hypselonotus bitrianguliger Berg, 1892

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454226>

Distribution. Argentina: Misiones, Salta, and Tucumán (Pennington 1922); Brazil and Paraguay (Packauskas 2010).

Material examined. 2♀, 29-X-2012, P.M. Dellapé coll., PNI0418-9 (MLP); 1♀, 11-XII-2013, P.M. Dellapé coll., PNI0420 (MLP); 1♂, 29-X-2012, P.M. Dellapé coll., PNI0421 (MLP); 1♂, 30-X-2012, P.M. Dellapé coll., PNI0422 (MLP); 1♂, 13-XII-2013, P.M. Dellapé coll., PNI0423 (MLP).

Hypselonotus interruptus Hahn, 1833

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454253>

Distribution. Argentina: Corrientes, Misiones, Salta, and Tucumán (Pennington 1922, Whitehead 1974); Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Trinidad, Tobago, and Venezuela (Whitehead 1974, Packauskas 2010).

Material examined. 1♀, 1-XI-2012, M.C. Melo coll., PNI0424 (MLP); 2♀, 1-XI-2012, S.I. Montemayor coll., PNI0425-6 (MLP); 1♀, 8-XII-2013, G. Dellapé coll., PNI0427 (MLP); 2♀, 12-XII-2013, G. Dellapé coll., PNI0428-9 (MLP); 1♀, 12-XII-2013, P.M. Dellapé coll., PNI0430 (MLP); 1♀, Iguazú, PNI0431 (MLP); 1♂, 08-XII-2013, P.M. Dellapé coll., PNI0432 (MLP).

Sethenira testacea Spinola, 1837

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454002>

Distribution. Argentina: Corrientes, Entre Ríos, Salta and Misiones; Brazil, Paraguay, Peru, and Uruguay (Brailovsky 1988b, Packauskas 2010).

Material examined. 1♀, 1-XI-2012, P.M. Dellapé coll., PNI0433 (MLP); 1♂, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0434 (MLP); 2♂, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0435-6 (MLP); 1♂, 10-XII-2013, P.M. & G. Dellapé colls., PNI0437 (MLP); 1♂, 13-XII-2013, P.M. Dellapé coll., PNI0438 (MLP).

Zicca annulata (Burmeister, 1835)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454162>

Distribution. Argentina: Jujuy, Misiones, and Salta; Bolivia, Brazil, Paraguay, and Peru (Brailovsky and Cadena 1992, Packauskas 2010).

Material examined. 1♀, XI-1944, M. Birabén coll., PNI0439 (MLP); 2♂, XI-1944, M. Birabén coll., PNI0440-1 (MLP).

Zicca nigropunctata (De Geer, 1773)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454148>

Distribution. Argentina: Corrientes, Misiones, and Tucumán (Brailovsky and Cadena 1992); Bolivia, Brazil, Colombia, British Guiana, French Guiana, Suriname, Trinidad, and Venezuela (Brailovsky and Cadena 1992; Packauskas 2010).

Material examined. 1♀, 17-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0442 (MLP); 2♂, 17-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0443-4 (MLP); 1♂, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0445 (MLP); 1♂, 12-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0446 (MLP).

Nematopodini

Grammopoecilus flavigornis (Fabricius, 1803)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453281>

Distribution. Argentina: Misiones: Iguazú (Quintanilla et al. 1981); French Guiana and Panama (Packauskas 2010).

Melucha phyllocnemis (Burmeister, 1835)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453304>

Distribution. Argentina: Entre Ríos, Formosa, and Misiones: Iguazú; Bolivia, Brazil, Colombia, Mexico, [New Granada], and Paraguay (Packauskas 2010, Brailovsky and Barrera 2014).

Quintius dentifer Stål, 1870 (Fig. 31)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:453092>

Distribution. Brazil, Bolivia, Colombia, Costa Rica, [New Granada], and Peru (Brailovsky and Barrera 1986, Packauskas 2010).

Material examined. 1♀, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0447 (MLP); 1♀, 11-XII-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0448 (MLP).

Remarks. New country record.

This species can be easily distinguished from the other species of the genus by the armed anterior and medial femora, the obtuse humeral angles; the orange brown with yellowish margins scutellum; and the yellowish claval vein and adjacent areas of hemelytra (Brailovsky and Barrera 1986).

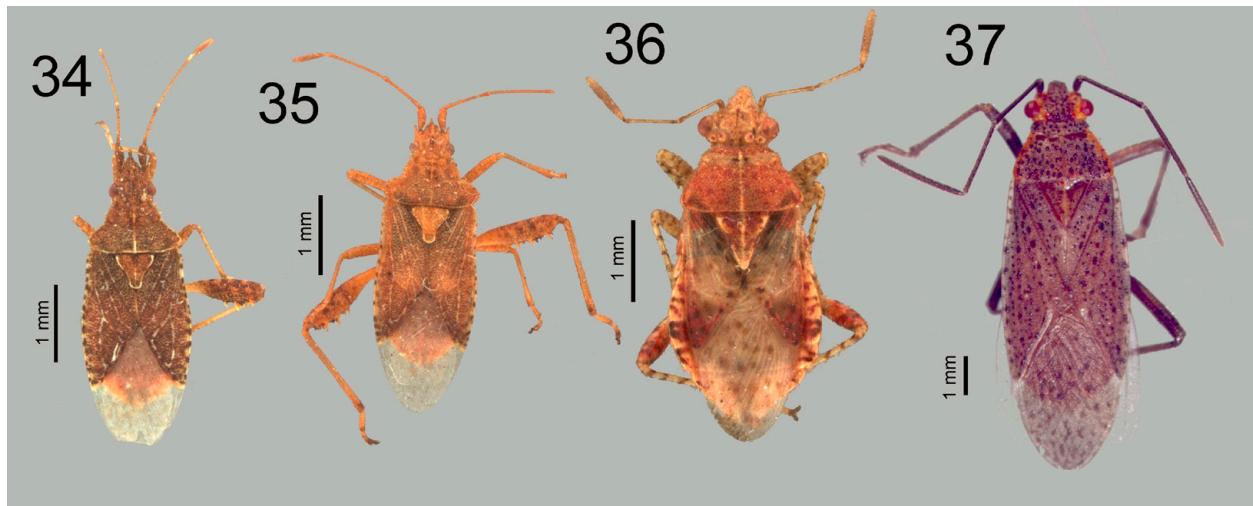


Figure 34–37. Rhopalidae. **34.** *Harmostes gravidator* (Fabricius, 1794). **35.** *Harmostes serratus* (Fabricius, 1775). **36.** *Niesthrea pictipes* (Stål, 1859). **37.** *Jadera coturnix* (Burmeister, 1835).

Placoscelini

Plaxiscelis limbata (Berg, 1892)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454427>

Distribution. Argentina: Misiones; Brazil and Paraguay (Brailovsky and Barrera 2007, Packauskas 2010).

Material examined. 2♀, 17-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0449-50 (MLP); 1♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0451 (MLP).

Plaxiscelis pagana (Burmeister, 1835) (Fig. 32)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:454423>

Distribution. Argentina; Bolivia, Brazil, and Paraguay (Brailovsky and Barrera 2007, Packauskas 2010).

Material examined. 1♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0452 (MLP); 1♂, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0453 (MLP).

Remarks. First record for Misiones province.

This species can be distinguished from the other species of the genus by the unicolorous basi and distiflagellomere, the unicolorous hind tibiae and bicolorous hind femur that is mostly yellow with the blackish apical third, the glabrous pronotal disk, and propleuron, mesopleuron and metapleuron with a large black discoidal spot (Brailovsky and Barrera 2007).

Spartocerini

Spartocera dentiventris Berg, 1883 (Fig. 33)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:458133>

Distribution. Argentina: Buenos Aires (Pennington 1922, Packauskas 2010); Brazil and Mexico (Blöte 1936, Jahnke et al. 2011).

Material examined. 1♂, Iguazú, PNI0454 (MLP).

Remarks. First record for Misiones province.

This species can be easily distinguished by the disti-

flagellomere longer than the scape, and the apical angles of the abdominal segments strongly projected (Pennington 1922).

Rhopalidae

Rhopalinae

Chorosomatini

Xenogenus picturatum Berg, 1883

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452516>

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Jujuy, La Rioja, Misiones, Neuquén, Salta, San Juan, and Santiago del Estero; Bolivia, Brazil, Cuba, Mexico, Puerto Rico, Uruguay, and USA (Melo and Montemayor 2015).

Material examined. 3♂, 1-XI-2012, M.C. Melo coll., PNI0455-7 (MLP).

Rhopalini

Liorhyssus hyalinus (Fabricius, 1794)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452354>

Distribution. Argentina: Buenos Aires, Catamarca, Córdoba, Corrientes, Jujuy, La Rioja, Mendoza, Misiones: Puerto Iguazú, Santiago del Estero, and Tucumán (Melo and Montemayor 2015); Antilles, Antigua, Bermuda, Bolivia, Brazil, Chile, Cuba, Colombia, Dominican Republic, Galápagos Islands, Grenada, Guatemala, Haiti, Jamaica, Nicaragua, Paraguay, Puerto Rico, and Venezuela (Hradil et al. 2007).

Harmostini

Harmostes gravidator (Fabricius, 1794) (Fig. 34)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452620>

Distribution. Argentina: Misiones: Iguazú (Melo and Montemayor 2015); Bolivia, Brazil, Colombia, Mexico, Peru, and Venezuela (Göllner-Scheiding 1978, 1983), Paraguay (Melo and Montemayor 2015).

Material examined. 1♂ 2♀, 25°40'40.8" S, 054°26'55.9" W, 9-XII-2008, Zamudio et al. colls., PNI0458-60 (MLP); 2♂ 2♀, Iguazú, XI-1944, Birabén coll., PNI0461-4 (MLP); 7♂ 1♀, same locality, XI-[19]87, PNI0465-71 (USNM).

Harmostes prolixus Stål, 1860

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:464553>

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Jujuy, La Pampa, La Rioja, Mendoza, Misiones: Iguazú, Salta, San Luis, Santa Fe, Santiago del Estero, and Tucumán (Melo and Montemayor 2015); Bolivia, Brazil, Paraguay, Peru, and Uruguay (Göllner-Scheiding 1978, 1983).

Material examined. 1♀ 1w/ abdomen, Iguazú, XI-1944, Birabén coll., PNI0472 (MLP).

Harmostes serratus (Fabricius, 1775) (Fig. 35)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452631>

Distribution. Argentina: Buenos Aires, Chaco, Córdoba, Corrientes, Formosa, Jujuy, La Rioja, Misiones, Salta, San Juan, Santa Fe, Santiago del Estero, and Tucumán (Melo and Montemayor 2015); Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Venezuela, West Indies, and United States (Florida and Texas) (Göllner-Scheiding 1978).

Material examined. 1♀ 1 without abdomen, Iguazú, XI-1944, Birabén coll., PNI0473-4 (MLP); 2♂ 1♀, 1-XI-2012, P.M. Dellapé coll., PNI0475-7 (MLP); 8♂ 3♀, 1-XI-2012, M.C. Melo coll., PNI0478-88 (MLP); 6♂ 4♀, 1-XI-2012, S.I. Montemayor coll., PNI0489-98 (MLP); 1♀, 25°40'40.8" S, 054°26'55.9" W, 9-XII-2008, Zamudio et al. colls., PNI0499 (MLP).

Niesthreini

Niesthrea pictipes (Stål, 1859) (Fig. 36)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452487>

Distribution. Argentina: Buenos Aires, Chaco, Córdoba, Corrientes, Entre Ríos, Jujuy, La Pampa, Mendoza, Misiones, Salta, Santa Fe, Santiago del Estero, and Tucumán (Melo and Montemayor 2015); Brazil and Paraguay (Chopra 1973, Göllner-Scheiding 1983).

Material examined. 1♂, 2-XI-2012, light trap, PNI0500 (MLP); 1♂, CIES, 10-XII-2013, light trap, PNI0501 (MLP); 1♂, 1-XI-2012, P.M. Dellapé coll., PNI0502 (MLP); 1♂, 1-XI-2012, S.I. Montemayor coll., PNI0503 (MLP); 4♂ 6♀, 1-XI-2012, M.C. Melo coll., PNI0504-13 (MLP).

Niesthrea similis Chopra, 1973

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452484>

Distribution. Argentina: Chaco, Corrientes, and Misiones (Melo and Montemayor 2015); Brazil (Chopra 1973, Göllner-Scheiding 1983).

Material examined. 1♂ 1♀, CIES, 2-XI-2012,

PNI0514-5 (MLP); 3♂, 1-XI-2012, P.M. Dellapé coll., PNI0516-8 (MLP); 2♀, 31-X-2012, S.I. Montemayor coll., PNI0519-20 (MLP); 2♂ 4♀, 1-XI-2012, S.I. Montemayor coll., PNI0521-6 (MLP); 2♂ 2♀, 1-XI-2012, M.C. Melo coll., PNI0527-30 (MLP).

Niesthrea vincentii (Westwood, 1842)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452478>

Distribution. Argentina: Chaco, Corrientes, Misiones, and Santa Fe (Melo and Montemayor 2015); Brazil, Paraguay, Venezuela, and West Indies (Saint Vincent Is.) (Göllner-Scheiding 1983), same countries plus Cuba and Panama (Chopra 1973).

Material examined. 1♂, 1-XI-2012, M.C. Melo coll., PNI0531 (MLP); 1♂ 4♀, 1-XI-2012, P.M. Dellapé coll., PNI0532-6 (MLP); 1♂ 2♀, 2-XI-2012, S.I. Montemayor coll., PNI0537-9 (MLP); 1♀, 8-XII-2013, G. Dellapé coll., PNI0540 (MLP).

Serinethinae

Jadera coturnix (Burmeister, 1835) (Fig. 37)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452699>

Distribution. Argentina (Melo and Montemayor 2015); Jamaica, Mexico, and Panama (Göllner-Scheiding 1979).

Material examined. 1♂, Sendero Macuco, 25°40'40.8" S, 054°26'55.9" W, 12-XII-2013, G. Dellapé coll., PNI0541 (MLP); 1♀, same data, P.M. Dellapé coll., PNI0542 (MLP); 1♂ 2♀, CIES, 8-XI-2013, PNI0543-5 (MLP); 1♂ 1♀, same data, G. Dellapé coll., PNI0546-7 (MLP); 1♂ 6♀, same data, P.M. Dellapé coll., PNI0548-54 (MLP); 2♂ 1♀, Sendero Macuco, 29-X-[20]12, light trap, PNI0555-7 (MLP); 2♂ 4♀, same data, 9-XII-2013, P.M. Dellapé coll., PNI0558-63 (MLP); 2♂ 1♀, Sendero Macuco, 11-XII-2013, G. Dellapé coll., PNI0564-6 (MLP); 3♀, CIES, 7-XII-2013, PNI0567-9 (MLP); 1♀, 1-XI-2012, S.I. Montemayor coll., PNI0570 (MLP).

Remarks. First record for Misiones province.

Jadera obscura (Westwood, 1842)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452687>

Distribution. Argentina: Misiones (Melo and Montemayor 2015); Brazil, Mexico, and Peru (Göllner-Scheiding 1979, 1983).

Material examined. 1♂ 2♀, Sendero Macuco, 8-XII-2013, G. Dellapé coll., PNI0571-3 (MLP); 1♂, CIES, 12-XII-2013, G. Dellapé coll., PNI0574 (MLP).

Jadera sanguinolenta (Fabricius, 1775)

<http://lsid.speciesfile.org/urn:lsid:Coreoidea.speciesfile.org:TaxonName:452679>

Distribution. Argentina: Buenos Aires, Catamarca, Córdoba, Corrientes, Jujuy, Mendoza, Misiones: Iguazú; Salta, Santiago del Estero, and Tucumán (Melo and Montemayor 2015); Puerto Rico and West Indies (St Croix, Culebra, St John, and St Thomas) (Göllner-Scheiding 1979, 1983).

Pyrrhocoroidea
Largidae
Larginae

Largus rufipennis Laporte, 1833

Distribution. Argentina: Buenos Aires, Catamarca, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, La Pampa, La Rioja, Mendoza, Misiones: Iguazú, Río Negro, Salta, Santiago del Estero, and Tucumán; Bolivia, Brazil, Paraguay, and Uruguay (Melo and Dellapé 2013).

Material examined. 1♂ 3♀, Iguazú, 01-XI-1944, Birabén coll., PNI0575-8 (MLP).

Pyrrhocoridae

Dysdercus albofasciatus Berg, 1878

Distribution. Argentina: Bueno Aires, Chaco, Corrientes, Entre Ríos, and Misiones: Iguazú; Brazil, Paraguay, and Uruguay (Melo and Dellapé 2013).

Dysdercus chaquensis Freiberg, 1948

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Corrientes, Entre Ríos, Jujuy, La Rioja, Misiones: Iguazú, Salta, Santa Fe, Santiago del Estero, and Tucumán; Brazil, Bolivia, Ecuador, Paraguay, and Uruguay (Melo and Dellapé 2013).

Dysdercus imitator Blöte, 1931

Distribution. Argentina: Corrientes and Misiones: Iguazú; Bolivia, Brazil, Colombia, Ecuador, Peru, and Venezuela (Melo and Dellapé 2013).

Material examined. 3♂ 1♀, 1-XI-2012, P.M. Dellapé coll., PNI0579-82 (MLP); 3♂ 3♀, 1-XI-2012, M.C. Melo coll., PNI0583-8 (MLP); 2♂ 3♀, 1-XI-2012, S.I. Montemayor coll., PNI0589-93 (MLP); 1♀, 29-X-2012, light trap, PNI0594 (MLP).

Dysdercus ruficollis (Linné, 1764)

Distribution. Argentina: Buenos Aires, Chaco, Córdoba, Corrientes, Formosa, Jujuy, Misiones: Iguazú, Santa Fe, Santiago del Estero, and Tucumán; Bolivia, Brazil, Colombia, Curaçao, Ecuador, El Salvador, British Guiana, Mexico, Paraguay, Peru, Suriname, Trinidad, and Venezuela (Melo and Dellapé 2013).

Material examined. 3♂ 2♀, 1-XI-2012, S.I. Montemayor coll., PNI0595-9 (MLP); 2♂ 2♀, 1-XI-2012, M.C. Melo coll., PNI0600-3 (MLP); 1♂, 1-XI-2012, P.M. Dellapé coll., PNI0604 (MLP); 1♂ 1♀, 2-XI-2012, light trap, PNI0605-6 (MLP); 8♀, 29-X-2012, light trap, PNI0607-14 (MLP); 3♀, 20-XI-2008, Van Somer trap with mixed fruits, PNI0615-7 (MLP); 4♀, 19-XI-2008, Van Somer trap with fish, PNI0618-21 (MLP).

Pentatomoidea
Acanthosomatidae
Blaudusinae

Hellica nitida Haglund, 1868

Distribution. Argentina: Buenos Aires, Córdoba, Corrientes, Formosa, Misiones, Santa Fe, and Tucumán; Brazil and Uruguay (Dellapé 2016).

Pentatomidae
Asopinae

Brontocoris tabidus (Signoret, 1863)

Distribution. Argentina: Buenos Aires, Chubut, Mendoza, Misiones, Santiago del Estero (Dellapé et al. 2003); Brazil, Chile, and Paraguay (Thomas 1992).

Material examined. 1♀, 29-X-2012, light trap, PNI0622 (MLP).

Podisus aenescens (Stål, 1860)

Distribution. Argentina: Buenos Aires, Entre Ríos, and Misiones (Quintanilla et al. 1968, 1981, Carpintero and De Biase 2011); Central and South America (Thomas 1992).

Material examined. 1♀, 11-XII-2013, G. Dellapé coll., PNI0623 (MLP).

Podisus distinctus (Stål, 1860)

Distribution. Argentina: Buenos Aires, Misiones, and Tucumán (Dellapé et al. 2003); Bolivia, Brazil, Colombia, Ecuador, French Guiana, Paraguay, Peru, Uruguay, and Venezuela (Thomas 1992).

Material examined. 1♀, 1-XI-1944, M. Birabén coll., PNI0624 (MLP); 1♀, 1-XI-2012, P.M. Dellapé coll., PNI0625 (MLP); 1♀, 10-XII-2013, G. Dellapé coll., PNI0626 (MLP); 1♀, 12-XII-2013, G. Dellapé coll., PNI0627 (MLP).

Podisus nigrispinus (Dallas, 1851)

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Jujuy, Mendoza, Misiones, Salta, Santiago del Estero, and Tucumán; Bolivia, Brazil, Colombia, Costa Rica, Ecuador, British Guiana, Panama, Paraguay, Peru, Suriname, and Uruguay (Dellapé et al. 2015a).

Material examined. 1♂ 2♀, 29-X-2012, light trap, PNI0628-30 (MLP); 1♀, Iguazú, PNI0631 (MLP).

Tynacantha marginata Dallas, 1851

Distribution. Argentina: Corrientes, Formosa, Jujuy, Misiones, Salta, and Tucumán (Dellapé et al. 2003); Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, and Uruguay (Ruffinelli and Pirán 1959, Thomas 1992).

Material examined. 1♀, 9-XII-2013, G. Dellapé coll., PNI0632 (MLP); 1♀, 16-II/2-III-2011, M. Pocco & E. Castillo colls., PNI0633 (MLP).

Tyranocoris nigriceps Thomas, 1992

Distribution. Argentina: Misiones; Brazil (Thomas 1992).

Material examined. 1♀, 1-XI-2012, light trap, PNI0634 (MLP); 1♀, 2-XI-2012, light trap, PNI0635 (MLP).

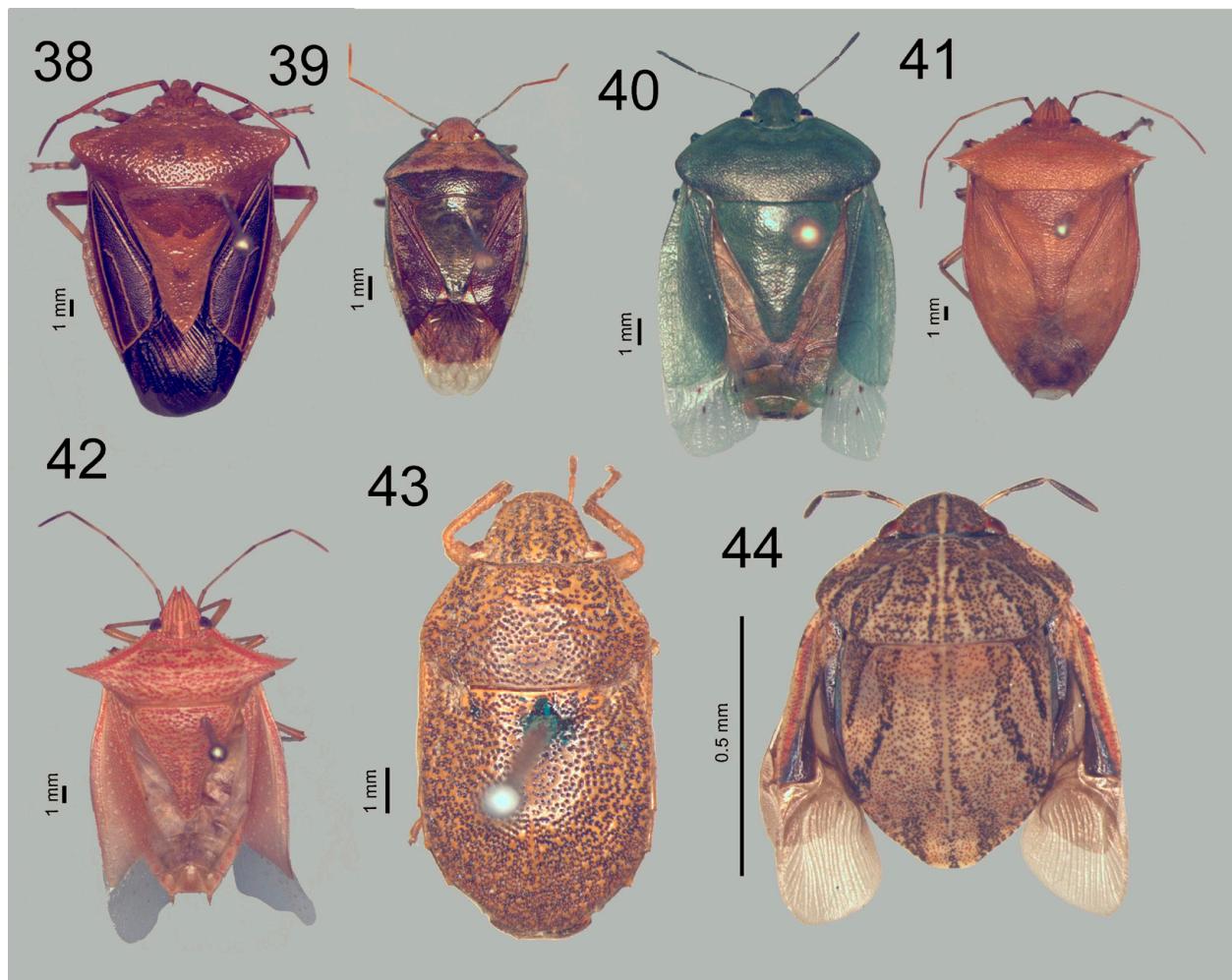


Figure 38–44. Pentatomidae. **38.** *Peromatus sulcifer* Berg, 1892. **39.** *Banasa angulobata* Thomas, 1990, new country record. **40.** *Chinavia obstinata* (Stål, 1860), new country record. **41.** *Loxa virescens* Amyot & Serville, 1843. **42.** *Loxa viridis* (Palisot de Beauvois, 1805). **43.** *Chelycoris lethierryi* (Montandon, 1895). **44.** *Symplylus ramivitta* Walker, 1868.

Cyrtocorinae

Cyrtocoris egeris Packauskas & Schaefer, 1998

Distribution. Argentina: Misiones and Santa Fe; Bolivia, Brazil, Colombia, Ecuador, Honduras, Costa Rica, Mexico, Panama, Trinidad, and Venezuela (Packauskas and Schaefer 1998, Grazia and Schwertner 2008)

Material examined. 1♂, 11-XII-2013, P.M. Dellapé coll., PNI0636 (MLP).

Cyrtocoris trigonus (Germar, 1839)

Distribution. Argentina: Formosa, Misiones: Iguazú, and Santa Fe; Brazil, Bolivia, Colombia, Costa Rica, Guatemala, Mexico, Panama, and Paraguay (Packauskas and Schaefer 1998, Grazia and Schwertner 2008).

Discocephalinae

Adoxoplatys singularis Dellapé & Dellapé, 2016

Distribution. Argentina: Misiones (Dellapé and Dellapé 2016).

Material examined. 1♀, 29-X-2012, light trap, PNI0637 (MLP).

Alveostethus pseudopolitus (Ruckes, 1957)

Distribution. Argentina: Misiones; Brazil and Para-

guay (Schmidt and Barcellos 2007, Dellapé et al. 2015b).

Material examined. 1♀, 30-X-2012, P.M. Dellapé coll., PNI0638 (MLP).

Antiteuchus tripterus (Fabricius, 1787)

Distribution. Argentina: Formosa and Misiones; Belize, Bolivia, Brazil, British Guiana, Colombia, Ecuador, French Guiana, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad, and Venezuela (Ruckes 1964, Fernandes and Grazia 2006).

Material examined. 1♂, 11-XII-2013, P.M. Dellapé coll., PNI0639 (MLP).

Cromata ornata Rolston, 1992

Distribution. Argentina: Misiones; Brazil (Dellapé et al. 2015a).

Material examined. 1♀, 8-XII-2013, light trap, G. Dellapé coll., PNI0640 (MLP).

Dryptococephala lurida Erichson, 1848

Distribution. Argentina: Corrientes and Misiones; Brazil, British Guiana, and Colombia (Dellapé et al. 2015b).

Material examined. 5♂ 3♀, XI-1944, M. Birabén coll., PNI0641-8 (MLP).

Dryptocephala punctata Amyot & Serville, 1843

Distribution. Argentina: Buenos Aires, Chaco, Misiones, and Tucumán; Brazil, Paraguay, Peru, Uruguay, and Venezuela (Pirán 1948, Dellapé et al. 2015a).

Material examined. 5♂ 2♀, 2-XI-2012, PNI0649-55 (MLP).

Macropygium reticulare (Fabricius, 1803)

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Entre Ríos, Misiones, Salta, and Tucumán; Bolivia, Brazil, British Guiana, Colombia, Guatemala, Mexico, Nicaragua, Paraguay, Trinidad, Uruguay, and Venezuela (Distant 1893, Pirán 1948, Grazia and Casini 1973, Rebagliati et al. 2005, Grazia and Schwertner 2008).

Material examined. 1♀, 7-XII-2013, P.M. Dellapé coll., PNI0656 (MLP).

Neoadoxoplatys haywardi Kormilev, 1956

Distribution. Argentina: Misiones (Kormilev 1956).

Material examined. 1♀, IV-1966, PNI0657 (MLP).

Platycarenus umbraculatus (Fabricius, 1803)

Distribution. Argentina: Misiones (Grazia and Schwertner 2008); Brazil, British Guiana, Colombia, Ecuador, French Guiana, Panama, Peru, Suriname, and Venezuela (Ruckes 1966).

Material examined. 3♂, 30-X-2012, P.M. Dellapé coll., PNI0658-60 (MLP); 1♀, 31-X-2012, M.C. Melo coll., PNI0661 (MLP); 1♂ 2♀, 1-XI-2012, S.I. Montemayor coll., PNI0662-4 (MLP); 3♂, 2-XI-2012, P.M. Dellapé coll., PNI0665-7 (MLP); 1♀, 7-XII-2013, G. Dellapé coll., PNI0668 (MLP).

Edessinae

Edessa grandispina (Perty, 1833)

Distribution. Argentina: Misiones: Iguazú; Bolivia and Brazil (Perty 1833, Pirán 1956).

Edessa polita (Lepeletier & Serville, 1825)

Distribution. Argentina: Misiones (Grazia and Schwertner 2008); Brazil (Lepeletier and Serville 1825).

Material examined. 1♀, 13-XI-2009, F. Zamudio coll., PNI0669 (MLP); 1♀, 8-XII-2013, light trap, G. Dellapé coll., PNI0670 (MLP); 1♀, 19-XI-2008, Van Somer trap, Zamudio, Colleselli & Gómez de Olivera colls., PNI0671 (MLP).

Edessa rufomarginata (De Geer, 1773)

Distribution. Argentina: Buenos Aires, Córdoba, Corrientes, Entre Ríos, Jujuy, Mendoza, Misiones: Iguazú, Salta, Santa Fe, and Tucumán; Belize, Brazil, Colombia, Costa Rica, French Guiana, Guatemala, British Guiana, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, and Uruguay (Dellapé et al. 2015b).

Peromatus notatus (Burmeister, 1835)

Distribution. Argentina: Misiones: Iguazú (Pirán 1948); Brazil (Amyot and Serville 1843).

Remarks: First record for Misiones province.

Peromatus sulcifer Berg, 1892 (Fig. 38)

Distribution. Argentina: Salta (Berg 1892).

Material examined. 1♀, 16-II/2-III-2011, M. Pocco & E. Castillo colls., PNI0672 (MLP).

Remarks. This species can be distinguished by its four segmented antennae, with the pedicel very long, at least three times longer than the scape; and the general color brownish, coppery, with the pronotum processes and hemelytra veins paler (Berg 1892, Grazia et al 2015).

Pentatominae

Arvelius albopunctatus (De Geer, 1773)

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, La Rioja, Misiones, Santa Fe, Santiago del Estero, and Salta; Antigua, Bahamas, Barbados, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, British Guiana, Haiti, Honduras, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad, Uruguay, USA, Venezuela, and Virgin Islands (Dellapé et al. 2015a).

Material examined. 2♂, Iguazú, PNI0673-4 (MLP).

Banasa alboapicata (Stål, 1860)

Distribution. Argentina: Misiones; Bolivia, Brazil, Ecuador, Paraguay, and Peru (Thomas and Yonke 1990, Dellapé et al. 2015b).

Material examined. 1♀, XI-1944, M. Birabén coll., PNI0675 (MLP).

Banasa angulobata Thomas, 1990 (Fig. 39)

Distribution. Brazil, Colombia, Ecuador, Paraguay, Peru, and Venezuela (Thomas and Yonke 1990).

Material examined. 1♂, 1-XI-2012, light trap, PNI0676 (MLP); 5♂ 8♀, 2-XI-2012, light trap, PNI0677-89 (MLP); 1♂ 5♀, 29-X-2012, light trap, PNI0690-5 (MLP); 2♀, 30-X-2012, light trap, PNI0696-7 (MLP); 1♀, 8-XII-2013, light trap, G. Dellapé coll., PNI0698 (MLP).

Remarks. New country record.

This species can be easily distinguished from the other species of the genus by the shape of the pygophore in the males and the first gonocoxae in the females (Thomas and Yonke 1990).

Banasa nigrifrons Thomas, 1990

Distribution. Argentina: Misiones: Iguazú (Dellapé et al. 2015a); Brazil (Thomas and Yonke 1990).

Capivaccius bufo Distant, 1893

Distribution. Argentina: Chubut and Misiones (Dellapé et al. 2015a); from Panama to northern Argentina (Brailovsky and Rolston 1986).

Material examined. 1♂, 30-X-2012, P.M. Dellapé coll., PNI0699 (MLP); 1♀, 9-XII-2013, G. Dellapé coll., PNI0700 (MLP).

Chinavia impicticornis (Stål, 1872)

Distribution. Argentina: Catamarca, Misiones, and Salta (Dellapé et al. 2015a); Bolivia, Brazil, Colombia,

Ecuador, Paraguay, Peru, Suriname, and Venezuela (Schwertner and Grazia 2007).

Material examined. 1♀, 12-XII-2013, G. Dellapé coll., PNI0701 (MLP).

***Chinavia obstinata* (Stål, 1860) (Fig. 40)**

Distribution. Brazil (Schwertner and Grazia 2007).

Material examined. 1♀, 30-X-2012, P.M. Dellapé coll., PNI0702 (MLP).

Remarks. New country record.

This species can be easily distinguished from the other species of the genus by the abdominal spine reaching the anterior limit of the mesocoxae, the lateral jugal margins slightly or not edged in black, and the shape of the first gonocoxae in females (Schwertner and Grazia 2007).

***Chinavia penguie* Rolston, 1983**

Distribution. Argentina: Buenos Aires and Misiones; Brazil and Paraguay (Rolston 1983, Schwertner and Grazia 2007, Carpintero and de Biase 2011).

Material examined. 1♀, PNI0703 (MLP); 1♂ 1♀, 9-XII-2013, P.M. Dellapé coll., PNI0704-5 (MLP).

***Chinavia runaspis* (Dallas, 1851)**

Distribution. Argentina: Misiones; Brazil, Colombia, Ecuador, French Guiana, Suriname, Paraguay, Peru, and Venezuela (Rolston 1983, Schwertner and Grazia 2007).

Material examined. 1♂, 7-XII-2013, P.M. Dellapé coll., PNI0706 (MLP).

***Dichelops furcatus* (Fabricius, 1775)**

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Formosa, Jujuy, La Rioja, Mendoza, Misiones, “Patagonia”, Río Negro, Salta, San Juan, Santa Fe, San Luis, Santiago del Estero, and Tucumán; Bolivia, Brazil, Paraguay, and Uruguay (Pirán 1948, Dellapé et al. 2015b).

Material examined. 1♂ 1♀, XI-1944, M. Birabén coll., PNI0707-8 (MLP); 1♂, 9-XII-2013, P.M. Dellapé coll., PNI0709 (MLP); 1♂, 12-XII-2013, P.M. Dellapé coll., PNI0710 (MLP).

***Dichelops melanacanthus* (Dallas, 1851)**

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Corrientes, Entre Ríos, Formosa, Jujuy, La Rioja, Misiones, Salta, Santa Fe, Santiago del Estero, and Tucumán; Bolivia, Brazil, Colombia, Paraguay, Peru, Uruguay, and Venezuela (Dellapé et al. 2015a).

Material examined. 1♂, 2-XI-2012, S.I. Montemayor coll., PNI0711 (MLP); 1♀, 8-XII-2013, P.M. Dellapé coll., PNI0712 (MLP); 1♀, 8-XII-2013, G. Dellapé coll., PNI0713 (MLP).

***Euschistus cornutus* Dallas, 1851**

Distribution. Argentina: Misiones (Dellapé et al. 2015b); Brazil and Paraguay (Rolston 1982).

Material examined. 1♂ 1♀, XI-1944, M. Birabén coll., PNI0714-5 (MLP).

***Euschistus heros* (Fabricius, 1794)**

Distribution. Argentina: Corrientes, Entre Ríos, and

Misiones; Brazil (Dellapé et al. 2015b).

Material examined. 2♀, 16-II/2-III-2011, M. Pocco & E. Castillo colls., PNI0716-7 (MLP); 1♂, 31-X-2012, S.I. Montemayor coll., PNI0718 (MLP); 1♀, 25-IX-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0719 (MLP); 1♂, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0720 (MLP); 1♀, 7-XII-2013, Dellapé coll., PNI0721 (MLP); 1♀, 28-IX-2016, Alvarez, Lucía & Ramello colls., PNI0722 (MLP).

***Euschistus illotus* Stål, 1860**

Distribution. Argentina: Chaco, Misiones, and Salta; Bolivia, Brazil, and Paraguay (Rolston 1982, Dellapé et al. 2015a).

Material examined. 1♂, 2-IV-2012, light trap, PNI0723 (MLP).

***Euschistus picticornis* Stål, 1872**

Distribution. Argentina: Buenos Aires, Chaco, Córdoba, and Misiones; Brazil and Uruguay (Dellapé et al. 2015a).

Material examined. 1♀, Iguazú, Bosq coll., PNI0724 (MLP).

***Kermana fucosa* (Berg, 1892)**

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Entre Ríos, La Rioja, Misiones: Iguazú, Salta, Santa Fe, Santiago del Estero, and Tucumán; Brazil and Uruguay (Dellapé et al. 2015a).

***Ladeaschistus bilobus* (Stål, 1872)**

Distribution. Argentina: Misiones; Bolivia, Brazil, Paraguay, Peru, and Uruguay (Rolston 1973).

Material examined. 2♂, XI-1944, M. Birabén coll., PNI0725-6 (MLP); 1♂, 29-X-2012, PNI0727 (MLP); 1♂, 30-X-2012, P.M. Dellapé coll., PNI0728 (MLP); 1♀, 31-X-2012, S.I. Montemayor coll., PNI0729 (MLP); 2♀, 8-XII-2013, P.M. Dellapé coll., PNI0730-1 (MLP); 2♂ 3♀, 11-XII-2013, G. Dellapé coll., PNI0732-6 (MLP).

***Loxa deducta* Walker, 1867**

Distribution. Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Jujuy, La Pampa, Mendoza, Misiones: Iguazú, Salta, San Luis, Santa Fe, Santiago del Estero, and Tucumán (Rebagliati et al. 2005, Grazia and Schwertner 2008); Bolivia, Brazil, Chile, Panama, Paraguay, Uruguay, and Venezuela (Eger 1978, Faúndez and Carvajal 2011).

***Loxa virescens* Amyot & Serville, 1843 (Fig. 41)**

Distribution. Argentina (Grazia and Schwertner 2008); Southern Mexico to southern Brazil and Uruguay (Eger 1978).

Material examined. 1♀, 20-IX-2008, Van Somer trap, Zamudio, Colleselli & Gómez de Olivera colls., PNI0737 (MLP); 4♂ 7♀, 29-X-2012, light trap, PNI0738-48 (MLP); 1♂ 1♀, 30-X-2012, light trap, PNI0749-50 (MLP); 5♀, 1-XI-2012, light trap, PNI0751-5 (MLP); 6♀, 2-XI-2012, light trap, PNI0756-61 (MLP); 2♀, 7-XII-2013, light trap, P.M. Dellapé coll., PNI0762-3 (MLP); 1♂ 1♀, 8-XII-2013, light trap, G. Dellapé coll.,

PNI0764-5 (MLP); 2♀, 10-XII-2013, light trap, P.M. & G. Dellapé colls., PNI0766-7 (MLP); 1♂ 2♀, 12-XII-2013, light trap, P.M. & G. Dellapé colls., PNI0768-70 (MLP).

Remarks. First record for Misiones province.

This species can be distinguished from the other species of the genus by the pronotum transverse fascia of rugae between humeri in the pronotum; corium with a discoidal pale spot; and the scape and pedicel with a fine piceus line. In males, the posterior dorsal side of proctiger presents a pair of distinct spines, and the dorsolateral parameral processes projecting laterad, not at all curving mesad. In females the length of first gonocoxae from base at meson to posterior apex is greater than 1.7 mm; and the length of the second gonocoxae at meson is greater than 1.0 mm (Eger 1978).

Loxa viridis (Palisot de Beauvois, 1805) (Fig. 42)

Distribution. Argentina: Buenos Aires (Carpintero and de Biase 2011); Southern USA to southern Brazil and Uruguay (Eger 1978, Ruffinelli and Pirán 1959).

Material examined. 1♀, XI-1944, M. Birabén coll., PNI0771 (MLP); 1♂ 5♀, 29-X-2012, light trap, PNI072-7 (MLP); 1♀, 30-X-2012, light trap, PNI0778 (MLP); 1♀, 2-XI-2012, light trap, PNI0779 (MLP).

Remarks. First record for Misiones province.

In this species the posterior margin of the corium is strongly sinuous, and the lateral angles are produced. In males the posterior dorsal side of the proctiger lack distinct spines, and the dorsolateral parameral processes from caudal view are inclined dorsad and rounded at the apex. In females the length of the first gonocoxae from base at meson to posterior apex is less than 1.5 mm, and the length of the second gonocoxae at meson less than 0.9 mm (Eger 1978).

Mayrinia curvidens (Mayr, 1864)

Distribution. Argentina: Corrientes and Misiones; Bolivia, Brazil, and Paraguay (Dellapé et al. 2015b).

Material examined. 1♀, 13/16-XI-2009, light trap, E. Lestani coll., PNI0780 (MLP).

Mormidea v-luteum (Lichtenstein, 1796)

Distribution. Argentina: Buenos Aires, Corrientes, Entre Ríos, Jujuy, Misiones, Salta, and Tucumán; Brazil, Paraguay, and Uruguay (Dellapé et al. 2015a, Dellapé et al. 2015b).

Material examined. 2♂, XI-1944, M. Birabén coll., PNI0781-2 (MLP).

Mormidea ypsilon (Linné, 1758)

Distribution. Argentina: Entre Ríos, Misiones, and Santa Fe; Brazil, “Caribbean islands”, Colombia, Guatemala, British Guiana, Honduras, Mexico, Nicaragua, Panama, Suriname, and Uruguay (Dellapé et al. 2015b).

Material examined. 1♂ 1♀, XI-1944, M. Birabén coll., PNI0783-4 (MLP); 1♀, 31-X-2012, M.C. Melo coll., PNI0785 (MLP); 1♂ 1♀, 31-X-2012, S.I. Montemayor coll., PNI0786-7 (MLP); 2♂ 1♀, 11-XII-2013, G. Dellapé coll., PNI0788-90 (MLP); 2♂, 12-XII-2013,

P.M. Dellapé coll., PNI0791-2 (MLP).

Nezara viridula (Linné, 1758)

Distribution. Cosmopolitan. Argentina: Buenos Aires, Catamarca, Chubut, Córdoba, Corrientes, Entre Ríos, La Pampa, La Rioja, Mendoza, Misiones: Iguazú, Río Negro, Salta, San Juan, San Luis, Santa Fe, Santiago del Estero, and Tucumán (Pirán 1948, Dellapé et al. 2015b).

Pallantia macula (Dallas, 1851)

Distribution. Argentina: Misiones; Brazil and Paraguay (Dellapé et al. 2015b).

Material examined. 1♀, 2-XI-2012, P.M. Dellapé coll., PNI0793 (MLP); 1♂ 2♀, 9-XII-2013, P.M. Dellapé coll., PNI0794-6 (MLP); 1♂, 9-XII-2013, G. Dellapé coll., PNI0797 (MLP); 1♂ 1♀, 12-XII-2013, P.M. Dellapé coll., PNI0798-9 (MLP).

Pallantia macunaima Grazia, 1980

Distribution. Argentina: Misiones; Brazil and Paraguay (Dellapé et al. 2015a).

Material examined. 1♂, 30-X-2012, P.M. Dellapé coll., PNI0800 (MLP).

Placocoris viridis Mayr, 1864

Distribution. Argentina: Misiones: Iguazú; Brazil (Walker 1867, Pirán 1948, Grazia and Schwertner 2008).

Rio indistinctus Fortes & Grazia, 2000

Distribution. Argentina: Misiones (Dellapé et al. 2015a); Brazil and Venezuela (Fortes and Grazia 2000).

Material examined. 1♀, 29-X-2012, light trap, PNI0801 (MLP); 1♀, 8-XII-2013, light trap, G. Dellapé coll., PNI0802 (MLP); 3♀, 10-XII-2013, light trap, P.M. & G. Dellapé colls., PNI0803-5 (MLP).

Serdia indistincta Fortes & Grazia, 2005

Distribution. Argentina: Misiones; Brazil (Fortes and Grazia 2005).

Material examined. 2♀, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0806-7 (MLP); 1♀, 7-XII-2013, G. Dellapé coll., PNI0808 (MLP).

Serdia maxima Fortes & Grazia, 2005

Distribution. Argentina: Misiones: Iguazú; Brazil and Paraguay (Fortes and Grazia 2005).

Sibaria armata (Dallas, 1851)

Distribution. Argentina: Misiones; Bolivia, Brazil, Ecuador, French Guiana, British Guiana, Paraguay, Peru, Suriname, Trinidad, and Venezuela (Rolston 1975).

Material examined. 1♂, 18-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0809 (MLP); 1♀, 20-XI-2008, Zamudio, Colleselli & Gómez de Olivera colls., PNI0810 (MLP); 1♀, 12-XII-2013, G. Dellapé coll., PNI0811 (MLP).

Thoreyella brasiliensis Spinola, 1850

Distribution. Argentina: Buenos Aires, Catamarca, Córdoba, Misiones: Iguazú, and Santa Fe; Brazil and Uruguay (Rolston 1984, Bernardes et al. 2011).

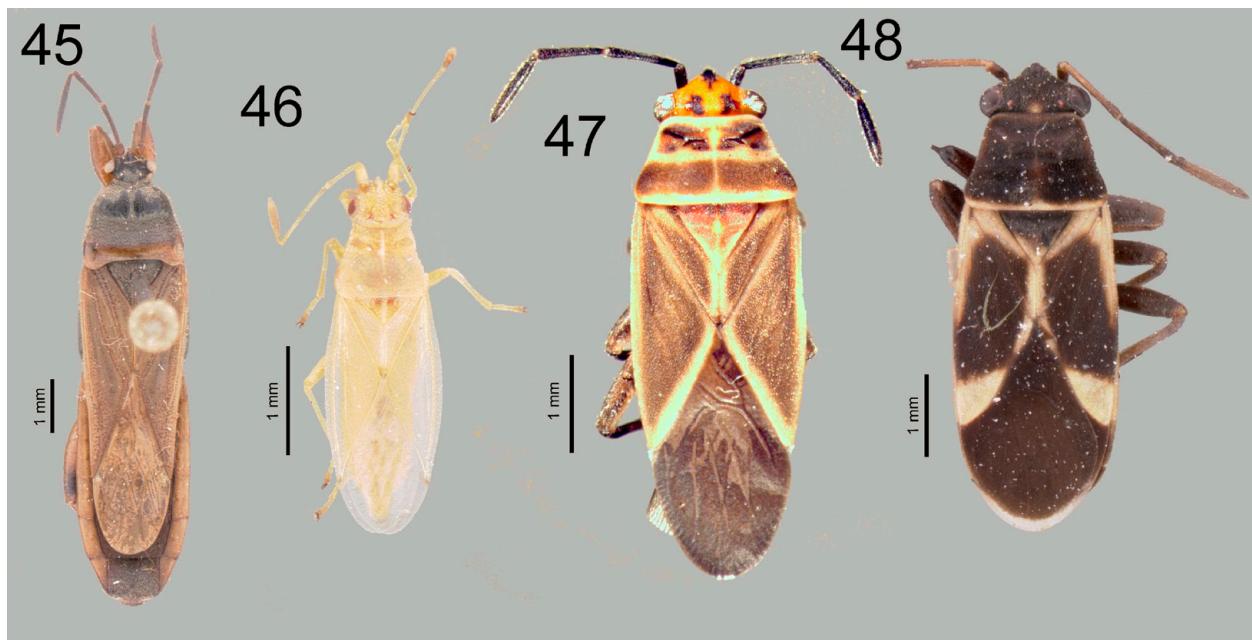


Figure 45–48. Lygaeoidea. **45.** *Patritius laevis* (Stål, 1858). **46.** *Cymodema breviceps* (Stål, 1874). **47.** *Ochrimnus (Phaeochrimnus) limbatipennis* (Stål, 1858). **48.** *Orthochrimnus (Phaeochrimnus) cinctipennis* (Stål, 1858).

Thyanta acuta Ruckes, 1952

Distribution. Argentina: Entre Ríos and Misiones; Bolivia, Brazil and Paraguay (Rider and Chapin 1991, Dellapé et al. 2015a).

Material examined. 1♂, 1-XI-2012, S.I. Montemayor coll., PNI0812 (MLP).

Thyanta brasiliensis Jensen-Haarup, 1928

Distribution. Argentina: Córdoba and Misiones; Bolivia, Brazil, Paraguay, and Peru (Rider and Chapin 1991).

Material examined. 1♀, 22-III-2011, P.M. Dellapé coll., PNI0813 (MLP).

Thyanta humilis Bergroth, 1891

Distribution. Argentina: Buenos Aires, Chaco, Corrientes, Entre Ríos, Formosa, Misiones, and Santa Fe; Bolivia, Brazil, Paraguay, Peru, and Uruguay (Ruffinelli and Pirán 1959, Rider and Chapin 1991).

Material examined. 1♀, 31-III-2012, M.C. Melo coll., PNI0814 (MLP); 1♂, 31-III-2012, M.C. Melo coll., PNI0815 (MLP).

Thyanta perditor (Fabricius, 1794)

Distribution. Argentina: Entre Ríos, Jujuy, Misiones, and Salta; from the southern USA to northern Argentina (Rider and Chapin 1991, Dellapé et al. 2015a).

Material examined. 1♂ 1♀, 1-XI-2012, S.I. Montemayor coll., PNI0816-7 (MLP); 3♀, 1-XI-2012, P.M. Dellapé coll., PNI0818-20 (MLP).

Scutelleridae

Pachycorinae

Chelycoris lethierryi (Montandon, 1895) (Fig. 43)

Distribution. Argentina: Córdoba, Salta, and Tucumán; Brazil, Peru and Uruguay (Barcellos et al. 2014, Eger et al. 2015).

Material examined. 1♂, XI-1944, M. Birabén coll., PNI0821 (MLP).

Remarks. First record for Misiones province.

This species can be distinguished by its elongate oval body of about 11 mm or more, and the shape of the pygophore (Eger pers. com.).

Pachycoris torridus (Scopoli, 1772)

Distribution. Argentina: Catamarca, Córdoba, Corrientes, Entre Ríos, Jujuy, Mendoza, Misiones, Salta, and Tucumán; Mexico and California south to Argentina and Brazil (Quintanilla et al. 1975–76, Barcellos et al. 2014, Eger et al. 2015).

Material examined. 1♀, 7-XII-2013, P.M. & G. Dellapé colls., PNI0822 (MLP); 1♂ 2♀, 10-XII-2013, P.M. & G. Dellapé colls., PNI0823-5 (MLP); 3♀, 8-XII-2013, P.M. Dellapé coll., PNI0826-8 (MLP); 4♂ 5♀, 8-XII-2013, G. Dellapé coll., PNI0829-37 (MLP); 1♂ 2♀, 12-XI-2013, G. Dellapé coll., on “guayava” tree, PNI0838-40 (MLP).

Symplymus ramivitta Walker, 1868 (Fig. 44)

Distribution. Argentina: Salta; Belize, Bolivia, Brazil, Ecuador, Paraguay, and Peru (Pirán 1963, Barcellos et al. 2014, Eger et al. 2015).

Material examined. 1♂ 1♀, 1-XII-2012, P.M. Dellapé coll., PNI0841-2 (MLP); 3♂, 18-XI-2008, Van Somer trap with fish, Zamudio & Colleselli Gomez de Olivera colls., PNI0843-5 (MLP).

Remarks. First record for Misiones province.

This species can be distinguished by the coloration pattern with longitudinal stripes (Eger et al. 2015).

Lygaeoidea

Berytidae

Jalysus sobrinus Stål, 1862

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:479829>

Distribution. Argentina: Misiones and Salta (Henry 1997, Dellapé et al. 2015b); Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad, Uruguay, and Venezuela (Henry and Froeschner 1998).

Material examined. 1♂ 1♀, XI-1944, M. Birabén coll., PNI0846-7 (MLP); 1♀, 1-XI-2012, M.C. Melo coll., PNI0848 (MLP); 2♀, 1-XI-2012, P.M. Dellapé coll., PNI0849-50 (MLP); 3♂ 1♀, 8-XII-2013, G. Dellapé coll., PNI0851-4 (MLP); 3♂ 7♀, 10-XII-2013, light trap, PNI0855-64 (MLP); 1♀, Route 101, 29-IX-2016, L. Alvarez, M. Lucia & P. Ramello colls., PNI0865 (MLP).

Blissidae

Heteroblissus anomilis Barber, 1954

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:489003>

Distribution. Argentina: Misiones (Slater and Wilcox 1968, Dellapé et al. 2015b); Brazil (Barber 1954).

Material examined. 1♀, 8-XII-2013, P.M. Dellapé coll., PNI0866 (MLP).

Patritius laevus (Stål, 1858) (Fig. 45)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:488981>

Distribution. Argentina: Chaco and Misiones (Slater and Wilcox 1966a, Dellapé 2014); Brazil (Slater 1964).

Material examined. 1♂ 1♀, Sendero Macuco, 11-XII-2013, P.M. Dellapé coll., PNI0867-8 (MLP).

Patritiodemus dilutipes (Stål, 1858)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:489489>

Distribution. Argentina: Misiones (Dellapé 2014); Brazil and Uruguay (Slater 1964).

Material examined. 1♂, 5/9-XII-1957, Birabén coll., PNI0869 (MLP).

Extarademus collaroides Slater & Wilcox, 1966

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:489445>

Distribution. Argentina: Chaco and Misiones (Slater and Wilcox 1966b, Dellapé 2014); Brazil (Slater and O'Donnell 1995).

Material examined. 5♂ 5♀, Sendero Macuco, 12-XII-2013, P.M. Dellapé coll., PNI0870-9 (MLP); 3♂ 3♀, same data, G. Dellapé coll., PNI0880-5 (MLP).

Riggiella vianai Kormilev, 1949

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:489035>

Distribution. Argentina: Misiones (Kormilev 1949, Dellapé 2014); Paraguay (Slater 1964).

Material examined. 1♂, Pto. Iguazú, XI-[19]82, Carpintero coll., PNI0886 (MLP).

Colobathristidae

Trichocentrus gibbosus Horváth, 1904

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:491419>

Distribution. Argentina: Chaco, Corrientes, Formosa, Jujuy, Misiones, and Salta (Dellapé 2014); Brazil (Horváth 1904).

Material examined. 1♂ 1♀, CIES, 8-XII-2013, G. Dellapé coll., PNI0887-8 (MLP).

Diascopoea debilis Horváth, 1904

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:491530>

Distribution. Argentina: Misiones: Iguazú (Dellapé et al. 2010); Peru (Horváth 1904).

Cymidae

Cymini

Cymodema breviceps (Stål, 1874) (Fig. 46)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:480101>

Distribution. Argentina: Buenos Aires and Corrientes (Melo et al. 2004, Dellapé and Carpintero 2012, Dellapé 2014); Bahamas, British Guiana, Cuba, Mexico, Puerto Rico, St Vincent, Trinidad, USA, and Virgin Islands (Slater 1964).

Material examined. 1♀, XI-1990, D.L. Carpintero coll., PNI0889 (MLP).

Remarks. First record for Misiones province.

Members of this group are small brownish to yellow and coarsely punctate insects that closely resemble the seeds of the sedges upon which they live. *Cymodema breviceps* is the only species of the family recorded from Argentina.

Ninidae

Cymoninus notabilis (Distant, 1882)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:480022>

Distribution. Argentina: Corrientes and Misiones; Bolivia, Brazil, British Guiana, Galápagos Islands, México, Panama, Puerto Rico, and Trinidad (Melo et al. 2004, Dellapé et al. 2015b).

Material examined. 1♀, X-1980, light trap, D.J. Carpintero coll., PNI0890 (MLP).

Lygaeidae

Lygaeinae

Ochrimnus (Phaeochrimnus) limbatipennis (Stål, 1858) (Fig. 47)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:485743>

Distribution. Argentina: Corrientes (Melo et al. 2004); Brazil, Bolivia, Costa Rica, Panama, and Peru (Slater 1964, Brailovsky 1982b).

Material examined. 1♀, 8-XII-2013, P.M. Dellapé coll., PNI0891 (MLP).

Remarks. First record for Misiones province.

The orange head with a dark tylus and the interocellar space with two dark stripes, together with the coloration pattern of pronotum with yellow margins and orange tonalities, allow to separate this species from the others in the genus.

Ochrimnus (Orthochrimnus) cinctipennis (Stål, 1858)
(Fig. 48)
<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:485798>

Distribution. Argentina: Chaco, Corrientes, Entre Ríos and Santa Fe (Melo et al. 2004, 2011); Brazil (Slater 1964).

Material examined. 1♂ 1♀, 8-XII-2013, P.M. Dellapé coll., PNI0892-3 (MLP).

Remarks. First record for Misiones province.

This species can be distinguished by the yellow trochanters and by the dark hemelytra with yellow borders, interrupted after the middle of the costal margin and over the middle of the inner margin.

Orsillinae

Metrargini

Xyonyxius ellipticus (Berg, 1892)
<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:487664>

Distribution. Argentina: Misiones (Dellapé 2014, Dellapé et al. 2015b); Brazil (Slater 1964).

Material examined. 4♂ 5♀, 1-XI-2012, S.I. Montemayor coll., PNI0894-902 (MLP); 10♂ 14♀, 1-XI-2012, M.C. Melo coll., PNI0903-26 (MLP); 1♀, 1-XI-2012, P.M. Dellapé coll., PNI0927 (MLP); 6♂ 10♀, 1-XI-2012, light trap, PNI0928-43 (MLP).

Xyonyxius major (Berg, 1878)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:487675>

Distribution. Argentina: Buenos Aires, Chaco, Misiones, and Salta (Melo et al. 2011, Dellapé 2014, Dellapé et al. 2015b); Brazil and Paraguay (Schaefer 1998).

Material examined. 7♂ 11♀, 1-XI-2012, S.I. Montemayor coll., PNI0944-61 (MLP); 11♂ 16♀, 1-XI-2012, M.C. Melo coll., PNI0962-88 (MLP); 7♂ 10♀, 1-XI-2012, light trap, PNI0989-1005 (MLP).

Nysiini

Nysius simulans Stål, 1859

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:487303>

Distribution. Argentina: Buenos Aires, Chaco, Corrientes, Mendoza, Misiones, and Tucumán; Brazil, Paraguay, and Uruguay (Melo et al. 2004, 2011, Dellapé and Carpintero 2012, Dellapé et al. 2015b).

Material examined. 1♂ 8♀, 1-XI-2012, light trap, PNI1006-14 (MLP); 1♂, 1-XI-2012, M.C. Melo coll., PNI1015 (MLP); 1♂ 1♀, 2-XI-2012, S.I. Montemayor coll., PNI1016-7 (MLP); 1♀, 8-XII-2013, P.M. Dellapé coll., PNI1018 (MLP).

Orsillini

Neortholomus jamaicensis (Dallas, 1852)
<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:487445>

Distribution. Argentina: Chaco, Corrientes, Formosa, and Misiones; Caribbean islands, Mexico and Central America, Brazil, Chile, Peru, Bolivia, Paraguay, USA, and some Pacific islands (Hamilton 1983, Melo et al. 2004, 2011, Dellapé and Montemayor 2012, Dellapé et al. 2015b).

Material examined. 1♂, 1-XI-2012, S.I. Montemayor coll., PNI1019 (MLP); 1♂, 9-XII-2013, G. Dellapé coll., PNI1020 (MLP); 1♂, 12-XII-2013, P.M. Dellapé coll., PNI1021 (MLP).

Pachygronthidae

Oedancala meridionalis Stål, 1874

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:485173>

Distribution. Argentina: Buenos Aires, Entre Ríos, Santa Fe, Chaco, Corrientes, Formosa, Misiones: Iguazú, and Tucumán (Slater 1955, Dellapé 2014); Bolivia, Brazil, Paraguay, and Uruguay (Slater 1964).

Rhynparochromidae

Lethaeini

Bubaces enatus Brailovsky, 1981

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:484831>

Distribution. Argentina: Chaco, Córdoba, Misiones, and Salta (Brailovsky 1981b, Melo et al. 2011, Dellapé et al. 2015c).

Material examined. 5♂ 4♀, 2-XI-2012, light trap, PNI1022-30 (MLP); 2♂ 2♀, 29-X-2012, light trap, PNI1031-4 (MLP).

Cistalia signoreti (Guérin-Méneville, 1857)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:484821>

Distribution. Buenos Aires, Chaco, Corrientes, Córdoba, Formosa, Entre Ríos, Santa Fe, and Santiago del Estero (Melo et al. 2004, Dellapé and Carpintero 2012, Dellapé et al. 2015c); Cuba and USA (Slater 1964).

Material examined. 1♂, 2-XI-2012, light trap, PNI1035 (MLP).

Cryphula affinis (Distant, 1901)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:484810>

Distribution. Argentina: Buenos Aires, Chaco, Córdoba, Corrientes, Entre Ríos, Formosa, Misiones, Salta, and Santiago del Estero (Melo et al. 2011, Dellapé et al. 2015b, b); Brazil, Colombia, Ecuador, Guatemala, Grenada, and Mexico (Slater 1964).

Material examined. 2♂ 4♀, 2-XI-2012, light trap, PNI1036-41 (MLP); 1♀, Sendero Macuco, 29-X-2012, light trap, PNI1042 (MLP).

Petissius spinipes (Stål, 1874)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:484678>

Distribution. Argentina: Misiones and Neuquén (Dellapé et al. 2015c); French Guiana (Slater 1964).

Material examined. 1♀, CIES, 31-XI-2012, on *Phylodendron*, PNI1043 (MLP) (Same specimen mentioned in Dellapé et al. 2015c).

Valtissius distinctus (Distant, 1901)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:484669>

Distribution. Argentina: Chaco, Corrientes, Entre Ríos, Formosa, Misiones, and Santiago del Estero (Melo et al. 2011, Dellapé et al. 2015c); Grenada (Slater 1964).

Material examined. 1♀, 2-XI-2012, light trap, PNI1044 (MLP).

Myodochini

Baranowskobius bimaculatus Dellapé, Melo & Henry, 2016

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:491849>

Distribution. Argentina: Buenos Aires, Chaco, Corrientes, Formosa, Misiones, Neuquén, Salta, Santa Fe, Santiago del Estero, and Tucumán; Bolivia, Brazil, Paraguay, and Uruguay (Dellapé et al. 2016).

Material examined. 1♂ 1♀, 2-XI-2012, light trap, PNI1045-6 (MLP); 2♀, Sendero Macuco, 29-X-2012, light trap, PNI1047-8 (MLP).

Baranowskobius elegans (Walker, 1873)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:491848>

Distribution. Argentina: Misiones; Bolivia, Brazil, Colombia, Guatemala, Ecuador, Paraguay, Peru, Uruguay, and Venezuela (Dellapé et al. 2016).

Material examined. 3♀, 08-1977, D.H. Pepe coll., PNI1049-51 (MACN); 1♀, XI-2004, light trap, PNI1052 (MLP); 1♀, Puerto Iguazú, 12/13-II-2007, E. Lestani, PNI1053 (MLP) (Same specimen mentioned in Dellapé et al. 2015b).

Froeschneria multispinus (Stål, 1874)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:481411>

Distribution. Argentina: Córdoba, Corrientes, Misiones, and La Rioja (Pennington 1921, Melo et al. 2004, Dellapé et al. 2015b); Brazil, Costa Rica, Guatemala, Martinica, Mexico, Panama, Uruguay, USA, and Venezuela (Melo et al. 2004).

Material examined. 1♀, 2-XI-2012, P.M. Dellapé coll., PNI1054 (MLP).

Neopamera bilobata (Say, 1831)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:481241>

Distribution. Argentina: Buenos Aires, Corrientes, Chaco, and Misiones (Melo et al. 2011, Dellapé 2014, Dellapé et al. 2015b); Antigua, Bahamas, Barbados, Ber-

muda, Brazil, British Guiana, Canada, Costa Rica, Cuba, Ecuador, Guatemala, French Guiana, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, Dominican Republic, Uruguay, USA, Venezuela, Cayman Islands, Guadeloupe, and Virgin Islands (Slater 1964, Melo et al. 2004).

Material examined. 1♀, 31-X-2012, Sendero Macuco, S.I. Montemayor coll., PNI1055 (MLP); 2♀, 1-XI-2012, M.C. Melo coll., PNI1056-7 (MLP); 2♀, 2-XI-2012, light trap, PNI1058-9 (MLP); 1♀, 8-XII-2013, P.M. Dellapé coll., PNI1060 (MLP); 1♂, 12-XII-2013, P.M. Dellapé coll., PNI1061 (MLP); 1♀, 7-XII-2013, light trap, PNI1062 (MLP); 1♂, 10-XII-2013, light trap, PNI1063 (MLP).

Pseudopachybrachius concepcioni Zheng & Slater, 1984

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:481192>

Distribution. Argentina: Chaco and Corrientes (Carpintero et al. 2006, Melo et al. 2011); Bolivia, Dominica, Dominican Republic, Grenada, and Trinidad (Slater and O'Donnell 1995).

Material examined. 1♀, 8-XII-2013, light trap, P.M. Dellapé coll., PNI1064 (MLP).

Remarks. First record for Misiones province.

Pseudopachybrachius vinctus (Say, 1831)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:481142>

Distribution. Argentina: Corrientes, Chaco, and Misiones (Melo et al. 2004, 2011, Dellapé et al. 2015b); Antigua, Bahamas, Barbados, Belize, Brazil, Colombia, Cuba, Dominica, Ecuador, Grenada, Guatemala, British Guiana, Haiti, Cayman Islands, Jamaica, Mexico, Panama, Puerto Rico, Dominican Republic, St Croix Is., St Thomas, St Vincent, and USA (Melo et al. 2004).

Material examined. 1♂ 1♀, 1-XI-2012, S.I. Montemayor coll., PNI1065-6 (MLP); 7♂ 8♀, 1-XI-2012, M.C. Melo coll., PNI1067-81 (MLP); 16♂ 10♀, 1-XI-2012, light trap, PNI1082-107 (MLP); 5♂ 7♀, 10-XII-2013, light trap, P.M. Dellapé coll., PNI1108-19 (MLP).

Pseudoparomius bimaculatus Dellapé & Coscarón, 2005

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:491444>

Distribution. Argentina: Corrientes and Misiones; Brazil and Bolivia (Dellapé and Coscarón 2005, Dellapé et al. 2015b).

Material examined. 1♀, 8-XI-2012, G. Dellapé coll., PNI1120 (MLP); 3♂ 3♀, 9-XI-2012, P.M. Dellapé coll., PNI1121-6 (MLP); 1♂, 10-XI-2012, light trap, PNI1127 (MLP); 1♀, 1-XI-2012, S.I. Montemayor coll., PNI1128 (MLP); 1♂, CIES, 25°40'40.8" S, 054°26'55.9" W, 2-XI-2012, PNI1129 (MLP); 1♀, 1-XI-2012, S.I. Montemayor coll., PNI1130 (MLP).

Pseudoparomius linearis (Stål, 1874)

<http://lsid.speciesfile.org/urn:lsid:Lygaeoidea.speciesfile.org:TaxonName:481129>

Distribution. Argentina: Buenos Aires, Chaco,

Corrientes, Entre Ríos, Misiones, Salta, and Santa Fe (Pennington 1921, Dellapé and Coscarón 2005, Dellapé et al. 2015b); Bolivia, Paraguay, and Uruguay (Melo et al. 2004, Dellapé and Coscarón 2005).

Material examined. 3♀, 1-XI-2012, light trap, PNI1131-3 (MLP); 1♀, 1-XI-2012, S.I. Montemayor coll., PNI1134 (MLP); 3♀, 1-XI-2012, M.C. Melo coll., PNI1135-7 (MLP); 6♂, CIES, 25°40'40.8" S, 054°26'55.9" W, 1-XI-2012, PNI1138-43 (MLP); 1♂ 1♀, 8-XI-2012, P.M. Dellapé coll., PNI1144-5 (MLP); 3♂ 1♀, 9-XI-2012, G. Dellapé coll., PNI1146-9 (MLP); 1♀, XI-1944, M. Birabén coll., PNI1150 (MLP).

Discussion

In the present contribution we listed 225 species from Iguazú National Park, 109 species were collected in 2011–2013 field trips using sweeping and beating nets and light trap, this number is increased to 131 species if we also consider the Van Someren-Rydon traps of the 2008 collections. The three most diverse families in our inventory were Reduviidae with 63 species, Coreidae with 39 species and Pentatomidae with 58 species; if we only consider the 2008 and 2011–2013 collections, these numbers drop down to 17, 27 and 41, respectively, representing around 26%, 69%, and 70% of the total number of the inventoried species of each family. The low percentage of Reduviidae collected shows the low efficiency of nets to sample this family, and the low performance of the light trap during the 2011–2013 collections; as pointed out by Lucas et al. (2016), light traps require certain weather conditions to perform better, the daily maximum temperature and the rainfall are negatively correlated with the abundance of reduviids collected at light traps in forest areas. In the case of Coreidae, only 8 species were collected with nets, resulting the Van Someren-Rydon traps a much more efficient method to sample this family. On the other hand, our results indicate that beating and sweeping nets are an efficient method to sample pentatomids with 40 species collected during the 2011–2013 trips.

Our inventory includes 95 species recorded only from the literature or from older specimens in collections, the absence of species in our samples could be explained by the different efficiency and effort of each sampling method used, but also by chance. Another possible explanation is that these species are not actually present in the area. Distributional range shift is the most frequently reported response of insects to climate change (Parmesan, 2001, Musolin and Fujisaki, 2006). This could also be true for the new records found from the area; Musolin (2007) observed that the expansion of distribution range of individual Heteroptera species can enrich local faunas, especially at higher latitudes, and that climate change has accelerated this process.

Although this inventory is far from complete, as evidenced by the comparison of the sources used to build it, and because we do not include all families (some diverse

families such as Anthocoridae, Miridae, Thyreocoridae, etc), it is important to highlight that it is the largest inventory of terrestrial Heteroptera from an Argentine protected area. Another important fact of this inventory is that we present 13 new country records among the 18 studied families.

In the context of the actual climate change and its effect on biodiversity, we believe this could be the starting point for future analysis, in particular monitoring the state of conservation of the protected area. In this case, the best choice could be to select a taxon (e.g. family) and design an efficient protocol to sample the area in a long term period.

Acknowledgements

We want to express our gratitude to the park rangers of the Iguazú National Park for their help and assistance during the collecting trips. We also thank Dr J. Eger for his assistance with the determination of the shield bugs; and, Diego Carpintero and Sebastian De Biase (Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”) for the dorsal habitus of the type specimens of *Brontostoma castaneum*, *Cricetopareis paraguaya* and *Pothea martinezzi*. This study was supported by the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina, through the PIP 0249 (201–2015) grant, and to the Universidad Nacional de La Plata, grant N784.

Authors' Contributions

All authors contributed to write the text; PMD, SIM, MCM, and GD collected the specimens in the field; PSV prepared most of the specimens collected.

References

- Ábalos JW, Wygodzinsky P (1951) Las Triatominæ Argentinas (Reduviidae, Hemiptera). Anales del Instituto de Medicina Regional Tucumán, Monografía 2: 1–179.
- Allen RC (1969) A revision of the genus *Leptoglossus* Guerin (Hemiptera: Coreidae). Entomologica Americana 45: 35–140.
- Amyot CJB, Serville A (1843) Histoire naturelle des Insectes. Hémiptères. Librairie Encyclopédique de Roret, Paris, 675 pp.
- Bachmann AO (1999) Catálogo de los tipos de Heteroptera (Insecta) conservados en el Museo Argentino de Ciencias Naturales. Revista del Museo Argentino de Ciencias Naturales, n.s., 1 (2): 191–230.
- Barber GW (1926) Notes on Coreidae in the collection of the U.S. National Museum with description of a new *Catorhintha* (Hemiptera-Heteroptera) Journal of the New York Entomological Society 34: 209–216.
- Barber HG (1930) Essay on the subfamily Stenopodinae of the New World. Entomologica Americana 10 (3–4): 149–283.
- Barber HG (1954) Some Neotropical “Lygaeidae”. Revista Brasileira de Biología 14 (2): 215–224.
- Barcellos A, Eger J Jr, Grazia J (2014) Scutelleridae. In: Roig-Juñent S, Claps LE, Morrone JJ (Eds) Biodiversidad de Artrópodos Argentinos. Vol. 3. San Miguel de Tucuman: Editorial INSUE-UNT, Tucuman, 409–415.
- Barcellos A, Schmidt LS, Brailovsky H (2008) Abundance and Species Richness of Coreoidea (Hemiptera: Heteroptera) from Parque Estadual do Turvo, Southern Brazil. Neotropical Entomology 37

- (4): 406–412.
- Berg C (1878) Hemiptera Argentina (continuación). Anales de la Sociedad Científica Argentina 6 (3): 129–141; 6 (5): 223–233; 6 (6): 261–284.
- Berg C (1879) Hemiptera Argentina (continuación). Anales de la Sociedad Científica Argentina 7 (5): 225–236; 7 (6): 262–278.
- Berg C (1883) Addenda et emendanda ad Hemiptera Argentina. Anales de la Sociedad Científica Argentina 15: 241–269.
- Berg C (1892) Nova Hemiptera faunarum Argentinae et Uruguayanis (continuación). Anales de la Sociedad Científica Argentina 33 (1): 5–11, 33 (2): 43–50; 33 (4): 97–104; 33 (5): 151–165; 34 (5): 193–205.
- Bergroth E (1891) Contributions a l'étude des pentatomides. Revue d'Entomologie 10: 200–235.
- Bernardes JLC, Schwertner CF, Grazia J (2011) Review of *Thoreyella* Spinola with the description of two new species from Brazil (Heteroptera, Pentatomidae). Revista Brasileira de Entomologia 55: 299–312.
- Blöte HC (1931) Catalogue of the Pyrrhocoridae in's Rijks Museum van Natuurlijke Historie. Zoologische Mededeelingen 14: 97–136.
- Blöte, HC (1936) Catalogue of the Coreidae in the Rijksmuseum van Natuurlijke Histoire. Part III. Coreinae, 2nd part. Zoologische Mededelingen 19: 23–66.
- Brailovsky H (1981a) Hemiptera-Heteroptera de México V. Revisión de la subfamilia Hammacerinae (Reduviidae). Anales del Instituto de Biología, Univ. Nac. Autón. de Méx. 51: Ser. Zool. (1): 113–122.
- Brailovsky H (1981b) El género *Bubaces* Distant y descripción de dos nuevas especies (Hemiptera-Heteroptera-Lygaeidae-Rhyparochrominae-Lethaeini). Anales del Instituto de Biología de la Universidad Nacional Autónoma de México 51 (1): 205–216.
- Brailovsky H (1982a) Una Nueva especie de *Collatia* Stål (Hemiptera-Heteroptera- Coreidae- Coreini) de Bolivia. Anales del Instituto de Biología de la Universidad Nacional Autónoma de México 52 (1): 247–252.
- Brailovsky H (1982b) Revision del complejo *Ochrimnus* con descripción de nuevas especies y nuevos generos (Hemiptera, Heteroptera, Lygaeidae, Lygaeinae). Folia Entomológica Mexicana 51: 1–163.
- Brailovsky H (1985) Revisión del género *Anasa* Amyot & Serville (Hemiptera-Heteroptera-Coreidae-Coreinae-Coreini). Monografías del Instituto de Biología, Universidad Nacional Autónoma de Mexico 2: 1–266.
- Brailovsky H (1986) A new Discogastrini from South America (Hemiptera: Heteroptera: Coreidae). Annales de la Société entomologique de France 22 (2): 211–214.
- Brailovsky H (1988a) La Tribu Hydarini Stål, en el Continente Americano con descripción de dos nuevos géneros, una nueva especie y una nueva subespecie (Hemiptera-Heteroptera-Coreidae). Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología 58 (2) [1987]: 623–649.
- Brailovsky H (1988b) Dos nuevas especies del género *Sethenira* Spinola y nuevos arreglos nomenclatoriales dentro de *Acidomeria* Stål (Hemiptera-Heteroptera-Coreidae-Coreini). Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología 58 (1) [1987]: 179–198.
- Brailovsky H (1990a) Nuevos arreglos nomenclatoriales y descripción de dos especies nuevas del género *Dalmatomammurius* Brailovsky (Hemiptera-Heteroptera-Coreidae-Leptoscelidini). Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología 61 (3): 343–355.
- Brailovsky H (1990b) Revisión del complejo "Althos" (Hemiptera-Heteroptera-Coreidae). Instituto de Biología de la Universidad Nacional Autónoma de México, Publicaciones Especiales 5: 156 pp.
- Brailovsky H (1995) Revisión del complejo *Cebrenis* (Hemiptera-Heteroptera-Coreidae-Coreinae-Coreini). Instituto de Biología de la Universidad Nacional Autónoma de Mexico, Publicaciones Especiales 15. 124 pp.
- Brailovsky H (1998) A new species of *Paralyctambes* Kormilev from South America (Hemiptera: Heteroptera: Coreidae: Meropachy-
- dinae). Journal of the New York Entomological Society 106 (2–3): 57–63.
- Brailovsky H (2016) The genus *Anisoscelis* Latreille (Hemiptera Heteroptera Coreidae Coreinae Anisoscelini) new species, taxonomical arrangement, distributional records and key. Zootaxa 4144 (2): 195–210. <https://doi.org/10.11646/zootaxa.4144.2.3>
- Brailovsky H, Barrera E (1986) El género *Quintius* Stål con descripción de un subgénero nuevo y tres especies nuevas (Hemiptera-Heteroptera-Coreidae-Nematopodini). Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología 56: 437–452.
- Brailovsky H, Barrera E (1998) The genus *Empedocles* Stål and description of one new species (Hemiptera: Heteroptera: Coreidae: Acanthocephalini). Journal of the New York Entomological Society 106 (4): 143–148.
- Brailovsky H, Barrera E (2007) A new species of *Placoscelis* Stål (Hemiptera: Heteroptera: Coreidae: Acanthocephalini) from Brazil and Suriname, and a key to the known species. Proceedings of the Entomological Society of Washington 109 (1): 29–33.
- Brailovsky H, Barrera E (2014) Revisional notes on the genus *Melucha* (Hemiptera, Heteroptera, Coreidae). Deutsche entomologische Zeitschrift 61 (1): 15–22. <https://doi.org/10.3897/dez.61.7048>
- Brailovsky H, Cadena A (1992) Revisión del género *Zicca* (Hemiptera-Heteroptera-Coreidae-Coreinae-Coreini). Instituto de Biología de la Universidad Nacional Autónoma de México, Publicaciones Especiales 9: 1–101.
- Brailovsky H, García M (1987) Revisión del Género *Catorhintha* Stål (Hemiptera-Heteroptera-Coreidae-Coreinae-Coreini). Monografías del Instituto de Biología, Universidad Nacional Autónoma de México 4: 1–148.
- Brailovsky H, Rolston LH (1986) Dos nuevas especies de Pentatomidos neotropicales (Hemiptera-Heteroptera-Pentatomini). Folia Entomológica Mexicana 68: 29–40.
- Brailovsky H, Sánchez C (1983) Revisión de la familia Coreidae Leach. Parte 4. Tribu Anisoscelidini Amyot & Serville. Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología (1): 219–275.
- Brailovsky H, Zurbita Flores R (1979) Contribución al estudio de los Hemiptera-Heteroptera de México: XVII. Revisión de la Familia Alydidae Amyot y Serville. Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología 50 (1): 255–339.
- Breddin G (1903) Südamerikanische Raubwanzen. Societas Entomologica 18 (15): 114–115.
- Burmeister HCC (1835–1839) Handbuch der Entomologie, Tome 2. T. Enslin, Berlin, part 1 (1835): 1–400; part 2 (1838): 397–756.
- Carpintero DJ (1980) Nuevos Ectrichodiinae americanos (Insecta—Hemiptera—Reduviidae). Acta Scientifica 14: 1–33.
- Carpintero DL, De Biase S (2011) Los Hemiptera Heteroptera de la Isla Martín García (Buenos Aires, Argentina). Historia Natural Tercera Serie 1 (2): 27–47.
- Carpintero DL, Dellapé PM, Melo MC (2006) New records of Heteroptera (Hemiptera) from Argentina. Zootaxa 1129: 1–22.
- Chebez JC (2005) Guía de las reservas naturales de la Argentina, Vol. 3. Nordeste. Editorial Albatros, Buenos Aires, 287 pp.
- Chopra NP (1973) A revision of the genus *Niesthrea* Spinola (Rhopalidae: Hemiptera). Journal of Natural History 7: 441–459.
- CoreoideaSF Team. Coreoidea Species File Online. Version 5.0/5.0. <http://Coreoidea.SpeciesFile.org>. Accessed on: 2016-11-10.
- Coscarón MC (1983) Revisión del género *Rasahus* (Insecta, Heteroptera, Reduviidae). Revista del Museo de La Plata, 13, Zoología 136: 75–138.
- Coscarón MC (1994) Systematics and phylogenetic analysis of *Thymbreus* Stål (Heteroptera: Reduviidae: Peiratinae). Zoologische Mededelingen 68: 221–230.
- Coscarón MC (2003) Anexo 1: Biodiversidad de chinches terrestres (Insecta: Heteroptera) en los Esteros del Iberá: inventario faunístico en la provincia de Corrientes. In: Álvarez BB (Ed.) Fauna del Iberá.

- EUDENE, Corrientes, 359–367.
- Coscarón MC, Carpintero DL (1993) Revision of the genus *Melanolestes* Stål (Heteroptera: Reduviidae: Peiratinae). *Entomologica Scandinavica* 14 (4): 361–381.
- Coscarón MC, Cava MB, Corrona JA (2008) Redescription of *Isocondylus* Amyot & Serville 1843 (Hemiptera: Heteroptera: Reduviidae: Harpactorinae). *Zootaxa* 1846: 55–58.
- Coscarón MC, Giacchi JC (1987) Revisión de la subfamilia Microtominae. III. *Microtomus conspicillaris* (Drury, 1782) (Heteroptera, Reduviidae). *Physis* 45 (109): 59–65.
- Coscarón MC, Melo MC (2003) Revision of the subfamily Bactrodinae (Heteroptera: Reduviidae), with a phylogenetic analysis of genus *Bactrodes* Stål. *Zootaxa* 304: 1–15.
- Coscarón MC, Pall JL (2015) The Tribe Anisoscelini (Hemiptera: Heteroptera: Coreidae) in Argentina. *Zootaxa* 4033 (3): 411–426.
- Costa Lima A da (1935) Genero *Microtomus* Illiger, 1807 (Reduviidae: Microtominae). *Annales da Academia Brasileira de Ciencias* 7 (4): 315–322.
- Costa Lima A da (1940) Sobre as espécies de *Spiniger* (Hemiptera: Reduviidae). *Memórias do Instituto Oswaldo Cruz*, 35 (1): 1–123 + 10 pls.
- Costa Lima A da, Campos Seabra CA, Hathaway CR (1951) Estudo dos *Apiomeros* (Hemiptera: Reduviidae). *Memórias do Instituto Oswaldo Cruz* 49: 173–442.
- Dallas WS (1851) List of the specimens of hemipterous insects in the collection of the British Museum. Part 1. Trustees of the British Museum, London, 368 pp. + 11 pls.
- Dallas WS (1852) Description of a new hemipterous insect forming the type of a new genus. *Annals and Magazine of Natural History* (2) 10: 359–362 + pl. 5A.
- DeGeer C (1773) Mémoires pour servir à l'histoire des Insectes. vol. 3. Pierre Hesselberg, Stockholm, 696 pp.
- Dellapé G (2016) Synopsis of the Acanthosomatidae (Heteroptera) from Argentina. *Revista de la Sociedad Entomológica Argentina* 75 (1–2): 81–90.
- Dellapé G, Dellapé PM (2016) A new species of *Adoxoplatys* Bredin (Heteroptera, Pentatomidae, Discocephalinae) from Argentina. *Revista Brasileira de Entomologia* 60: 15–18. <https://doi.org/10.1016/j.rbe.2015.11.002>
- Dellapé G, Rider DA, Dellapé PM (2015a) Notes on distributions for Argentinean Pentatomidae (Heteroptera: Pentatomidea), with new records in the country. *Revista Brasileira de Entomología* 59: 169–176. <https://doi.org/10.1016/j.rbe.2015.06.001>
- Dellapé PM (2014) Lygaeoidea. In: Roig-Juñent S, Claps LE, Morrone JJ (Eds) *Biodiversidad De Artrópodos Argentinos*, Volumen 3. Editorial INSUE-UTN, San Miguel de Tucumán, 421–438.
- Dellapé PM, Carpintero DL (2012) Relevamiento de los Heterópteros (Insecta: Hemiptera) de las sierras de Tandil, provincia de Buenos Aires, Argentina. *Revista del Museo Argentino de Ciencias Naturales* 14 (1): 125–134.
- Dellapé PM, Carpintero DL, Melo MC (2010) New records of Diplopoda, Cimicomorpha and Pentatomomorpha (Hemiptera: Heteroptera) from Argentina. *Zootaxa* 2436: 57–64.
- Dellapé PM, Coscarón MC (2005) Redescription of *Pseudoparomius linearis* Stål, and description of three new species of *Pseudoparomius* Harrington (Rhyparochromidae: Heteroptera). *Zootaxa* 909: 1–12.
- Dellapé PM, Henry TJ, Lygaeoidea Species File. Version 5.0/5.0. <http://Lygaeoidea.SpeciesFile.org>. Accessed on 2016-9-13.
- Dellapé PM, Martínez AP, Coscarón MC (2003) New distributional records for the asopine pentatomids in temperate South America. *Zootaxa* 318: 1–16.
- Dellapé PM, Melo MC, Henry TJ (2016) A phylogenetic revision of the true bug genus *Heraeus* Stål 1862 (Hemiptera: Rhyparochromidae: Myodochini), with the description of two new genera and 30 new species. *Zoological Journal of the Linnean Society* 177 (1): 29–134. <https://doi.org/10.1111/zoj.12362>
- Dellapé PM, Melo MC, Montemayor SI, Dellapé G, Brailovsky H (2015b) Terrestrial Heteroptera (Hemiptera) from Moconá Provincial Park (Misiones, Argentina). *Check List* 11(3): 1662. <https://doi.org/10.15560/11.3.1662>
- Dellapé PM, Melo MC, O'Donnell J (2015c) Biodiversity and distribution of lethaine seed bugs (Heteroptera, Rhyparochromidae, Lethaeini) from Argentina. *Zoological Studies* 54: 1–21. <https://doi.org/10.1186/s40555-015-0114-y>
- Dellapé PM, Montemayor SI (2012) Description of a new species of *Orsillini* (Hemiptera: Lygaeidae: Orsillinae) from Argentina, with a key to the Argentinean Orsillini. *Zootaxa* 3275: 62–68.
- Diez F, Coscarón MC (2014) The Stenopodainae (Hemiptera, Heteroptera) of Argentina. *ZooKeys* 452: 51–77. <https://doi.org/10.3897/zookeys.452.6519>
- Distant WL (1880–1893) Insecta. Rhynchota, Hemiptera–Heteroptera. In: Goodman FD, Salvin O (Eds) *Biología Centrali-Americana*, Vol. 1. London, xx + 462 pp. + 39 pls; 1882: 169–224; 1892: 353–368; 1893: 329–462.
- Distant WL (1901) Rhynchotal notes. XI. Heteroptera: Fam. Lygaeidae. *Annals and Magazine of Natural History*, Series 8: 497–510.
- Distant WL (1902) Rhynchotal notes XV. Heteroptera: Family Reduviidae (continued), Piratinae and Ectrichodinae. *Annals and Magazine of Natural History* 10 (5): 282–295.
- Dougherty V (1995) A review of the New World Ectrichodiinae genera (Hemiptera: Reduviidae). *Transactions of the American Entomological Society* 121 (4): 173–225.
- Drake CJ (1931) The Cornell University Entomological Expedition to South America 1919 and 1920, scientific results. No. 5. Hemiptera-Tingidae. *Annals of the Entomological Society of America* 24 (3): 510–514.
- Drake CJ, Ruhoff FA (1965) Lacebugs of the World: A Catalog (Hemiptera: Tingidae). *United States Museum Bulletin* 243: 1–634.
- Drury D (1773–1782) *Illustrations of Natural History*. London: B. White, vol. 2 (1773): i–vii, 90 pp. + 50 pls; Vol. 3 (1782): i–xii, 76 pp. + 50 pls.
- Eger JE (1978) Revision of the genus *Loxa* (Hemiptera: Pentatomidae). *Journal of the New York Entomological Society* 86 (3): 224–259.
- Eger Jr J, Barcellos A, Weiler L (2015) Shield Bugs (Scutelleridae). In: Panizzi AR, Grazia J (Eds) *True Bugs of the Neotropics*. Springer, Dordrecht, 757–788. <https://doi.org/10.1007/978-94-017-9861-7>
- Erichson WF (1848) Insecten 3. In: *Reisen in British Guiana in den Jahren 1840–1844. Im Auftrag Sr. Majestät des Königs von Preussen, Ausgeführt von Richard Schomburgk*. J.J. Weber, Leipzig, 553–617.
- Fabricius JC (1775) *Systema entomologiae sistens insectorum classes, ordines, genera, species; adjectis synonymis, locis, descriptionibus et observationibus*. Flensburgi et Lipsiae, xxxii + 832 pp.
- Fabricius JC (1787) *Mantissa Insectorum, sistens species nuper detectas*. Proft, Hafniae, 2: 1–382.
- Fabricius JC (1794) *Entomologia Systematica emendata et aucta, secundum classes, ordines, genera, species, adjectis synonymis, locis, observationibus*. C.G. Proft, Hafniae, 472 pp.
- Fabricius JC (1798) *Entomologia systematica emendata et aucta, secundum classes, ordines, genera, species, adjectis synonymis, locis, observationibus. Supplementum*. Proft et Storch, Hafniae, ii + 572 pp.
- Fabricius JC (1803) *Systema Rhyngotorum secundum ordines, genera, species adjectis synonymis, locis, observationibus, descriptionibus*. C. Reichard, Brunsvigae, x + 335 pp.
- Faúndez EI, Carvajal MA (2011) Catalog of Chilean Pentatominae Leach, 1815 (Hemiptera: Heteroptera: Pentatomidae). *Zootaxa* 2835: 53–60.
- Fernandes JAM, Grazia J (2006) Revisão do gênero *Antiteuchus* Dallas (Heteroptera, Pentatomidae, Discocephalinae). *Revista Brasileira de Entomologia* 50 (2): 165–231.
- Forero D (2006) New records of Reduviidae (Hemiptera: Heteroptera) from Colombia and other Neotropical countries. *Zootaxa* 1107: 1–47.
- Forero D, Weirauch C (2012) Comparative genitalic morphology in the New World resin bugs Apiomerini (Hemiptera, Heteroptera,

- Reduviidae, Harpactorinae). Deutsche Entomologische Zeitschrift 59 (1): 5–41. <https://doi.org/10.1002/mmnd.20120001>
- Forster JR (1771) Novae species insectorum. Centuria I. T. Davies et B. White, London, viii + 100 pp.
- Fortes NDF de, Grazia J (2000) Novas espécies do gênero *Rio* (Heteroptera, Pentatomidae). *Iheringia (Série Zoologia)* 88: 67–102.
- Fortes NDF de, Grazia J (2005) Revisão e análise cladística de *Serdia* Stål (Heteroptera, Pentatomidae, Pentatomini). *Revista Brasileira de Entomologia* 49 (3): 294–339.
- Freiberg MA (1948) Una nueva especie de *Dysdercus* (Hemip. Pyroco.) “chinche tintórea” del algodonero. *Physis* 20: 121–123.
- Galvão C, Carcavallo R, Da Silva Rocha R, Jurberg J (2003) A checklist of the current valid species of the subfamily Triatominae Jeannel, 1919 (Hemiptera, Reduviidae) and their geographical distribution, with nomenclatural and taxonomic notes. *Zootaxa* 202: 1–36.
- Germar EF (1839) Beiträge zu einer Monographie der Schildwanzen. *Zeitschrift für die Entomologie* 1 (1): 1–146 + 1 plate.
- Giacchi JC (1969) Revisión del género *Stenopoda* Laporte, 1833 (Hemiptera, Reduviidae, Stenopodinae). *Physis* 29 (78): 1–26.
- Giacchi JC (1970) Notas y descripciones sobre Stenopodainos de la Argentina. I. *Gnathobleda toba* sp. nov. (Heteroptera, Reduviidae). *Physis* 30 (80): 125–129.
- Giacchi JC (1977) Revisión de los Stenopodainos americanos. IV. El género *Gnathobleda* Stål, 1859 (Heteroptera–Reduviidae). *Physis* 37 (93): 261–274.
- Giacchi JC (1985) Revisión de los Stenopodainos americanos. VII. Redescripción de los géneros *PNIOrontis* Stål, 1859; *Pnohirmus* Stål, 1859; *Ctenotrachelus* Stål, 1868; *Ocrioessa* Bergroth, 1918 y *Kodormus* Barber, 1930 (Heteroptera: Reduviidae). *Physis* 43 (105): 61–70.
- Giacchi JC (1988) Una nueva especie del género *Seridentus* Osborn, 1904 (Stenopodinae, Reduviidae, Heteroptera). *Physis* 56 (130–131): 31–32.
- Gil-Santana HR (2008) New records, and nomenclatural and biological notes on Reduviidae (Hemiptera: Heteroptera) from Bolivia and Brazil. *Zootaxa* 1785: 43–53.
- Gil-Santana HR, Davranoglou LR, Neves JL (2013) A new synonymy of *Graptocleptes bicolor* (Burmeister), with taxonomical notes (Hemiptera: Heteroptera: Reduviidae: Harpactorinae: Harpacitorini). *Zootaxa* 3700 (3): 348–360. <https://doi.org/10.11646/zootaxa.3700.3.2>
- Gil-Santana HR, Forero D, Weirauch C (2015) Assassin Bugs (Reduviidae Excluding Triatominae). Chapter 12. In: Pannizi AR, Grazia J (Eds) True bugs of the Neotropics. Springer, Dordrecht, 904 pp.
- Göllner-Scheiding U (1978) Revision der Gattung *Harmostes* Burm., 1835 (Heteroptera, Rhopalidae) und einige bemerkungen zu den Rhopalinae. Mitteilungen aus dem Zoologischen Museum in Berlin 54 (2): 257–311.
- Göllner-Scheiding U (1979) Die Gattung *Jadera* Stål, 1862. Deutsche Entomologische Zeitschrift 26: 47–75.
- Göllner-Scheiding U (1983) General-Katalog der Familie Rhopalidae (Heteroptera). Mitteilungen aus dem Zoologischen Museum in Berlin 59 (1): 37–189.
- Grazia J (1980) Revisão do gênero *Pallantia* Stål, 1862 (Heteroptera, Pentatomidae). *Revista Brasileira de Entomologia* 24 (1): 15–27.
- Grazia J, Casini CE (1973) Lista preliminar dos heterópteros uruguaios da região nordeste: Pentatomidae e Coreidae (Insecta: Heteroptera). *Iheringia (Zoologia)* 44: 55–63.
- Grazia J, Panizzi AR, Greve C, Schwertner CF, Campos LA, Garbelotto TA, Marin Fernandes JA (2015) Stink Bugs (Pentatomidae). Chapter 22. In: Pannizi AR, Grazim, J (Eds) True Bugs of the Neotropics. Springer, Dordrecht, 904 pp.
- Grazia J, Schwertner CF (2008) Pentatomidae e Cyrtocoridae. In: Claps LE, Debandi G, Roig-Juñent S (Eds) Biodiversidad de Artrópodos Argentinos, vol. 2. Sociedad Entomológica Argentina, San Miguel de Tucumán, 223–234.
- Guérin-Méneville FE (1857) Ordre des Hemipteres Latr., Première Section: Heteropteres Latr. In: Sagra's Histoire physique, politique et naturelle de l'Île de Cuba, Vol. 7. Arthur Bertrand, Paris.
- Haglund CJ (1868) Hemiptera nova. *Stettiner Entomologische Zeitung* 29: 150–163.
- Hahn CJ (1833–1835) Die Wanzenarten Insecten. Nürnberg: C.H. Zeh'schen Buchhandlung (1833) 1: 1: 119–236; (1836) 3: 17–32.
- Hamilton SW (1983) *Neortholomus*, a new genus of Orsillini (Hemiptera-Heteroptera: Lygaeidae: Orsillinae). University of Kansas Science Bulletin 52 (7): 197–234.
- Handlirsch A (1897) Monographie der Phymatiden. *Annalen des Kaiserlich-Königlichen Naturhistorischen Hofsmuseums* 12: 127–230 + pls 4–9.
- Haviland MD (1931) The Reduviidae of Kartabo Bartica District, British Guiana. *Zoologica*, New York Zoological Society 7 (5): 129–154.
- Henry TJ (1997) Monograph of the stilt bugs, or Berytidae (Heteroptera), of the Western Hemisphere. *Memoirs of the Entomological Society of Washington* 19: 1–149.
- Henry TJ, Froeschner RC (1998) Catalog of the stilt bugs, or Berytidae, of the world (Insecta: Hemiptera: Heteroptera). *Contributions of the American Entomological Institute* 30: 1–72.
- Herbst JFW (1784) Kurze Einleitung zur Kenntnis der Insekten, für Ungeübte und Anfänger. In: *Gemeinnützige Naturgeschichte des Thierreichs*. 6: 244–261, pls 37–39B
- Herrick-Schaeffer GAW (1848) Die Wanzenarten Insecten. Nürnberg: C.H. Zeh'schen Buchhandlung 8: 49–100.
- Horváth G (1904) Monographia Colobathristinarum. *Annales Historico-Naturales Musei Nationalis Hungarici* 2: 117–172.
- Hradil K, Kment P, Roháčová M (2007) New records of *Liorhyssus hyalinus* (Heteroptera: Rhopalidae) in the Czech Republic, with a review of its worldwide distribution and biology. *Acta Musei Moraviae* 92: 53–107.
- Hussey RF, Elkins JC (1955) Review of the genus *Doldina* Stål (Hemiptera: Reduviidae). *Quarterly Journal of the Florida Academy of Sciences* 18 (5): 261–278.
- Jahnke SM, Redaelli LR, dos Santos RSS (2011) Caracterização morfológica dos órgãos internos de reprodução de *Spartocera dentiventris* (Berg, 1884) (Hemiptera: Coreidae) em diferentes idades. *Arquivos do Instituto Biológico São Paulo* 78 (1): 31–35.
- Jensen-Haarup AC (1928) Hemipterological notes and descriptions V. *Entomologiske Meddelelsen* 16: 185–202.
- Kirkaldy GW (1909) Hemiptera: new and old. No. 1. *The Canadian Entomologist* 41: 30–32.
- Kormilev N (1949) *Riggiella vianai* n. g. n. sp de la Argentina (Heteroptera: Lygaeidae: Blissinae). *Comunicaciones del Instituto Nacional de Investigación de las Ciencias Naturales anexo al MACN* 1 (11): 3–13.
- Kormilev N (1950) Notes on Neotropical Phymatidae, diagnosis of new species (Hemiptera). *Revista de Entomología* 21 (3): 581–591.
- Kormilev N (1951) Phymatidae argentinas (Hemiptera) con observaciones sobre Phymatidae en general. *Revista del Instituto Nacional de Investigación de las Ciencias Naturales (Ciencias Zoológicas)* 2 (2): 45–110.
- Kormilev N (1953) Revisión de Micrelytrinae Stål de la Argentina. *Revista de la Sociedad Entomológica Argentina* 16: 49–66.
- Kormilev N (1954) Notas sobre Coreidae Neotropicales II. (Hemiptera Merocorinae de la Argentina y países limítrofes. *Revista Ecuatoriana de Entomología* 2: 153–187.
- Kormilev N (1956) Notas sobre Pentatomidea Neotropicales V (Hemiptera). *Acta Scientifica, Instituto de Investigaciones San Miguel* 4: 1–7.
- Kormilev N (1960) Revision of Phymatinae (Hemiptera, Phymatidae). *The Philippine Journal of Science* 89 (3–4): 287–500.
- Laporte FL de (1833) Essai d'une classification systématique de l'ordre des Hémiptères (Hémiptères-Hétéroptères Latr.). *Magasin de Zoologie* 2: 17–75, suppl. 76–88, pls 51–55.
- Lent H (1955) Revisão dos “Piratinae” americanos. I: O gênero “*Tydides*” Stål, 1865 (Hemiptera, Reduviidae). *Revista Brasileira de Biología* 15 (2): 159–176.

- Lent H, Jurberg J (1967) Revisão dos Piratinae americanos. III. As espécies do gênero *Tydides* Stål, com um estudo sobre a genitália. Atas Simposio Biota Amazonica 5: 337–363.
- Lent H, Wygodzinsky P (1945) Contribuição ao conhecimento do gênero *Zelurus* Hahn (*Spiniger* auct.) (Reduviidae, Hemiptera). Memórias do Instituto Oswaldo Cruz 43 (2): 205–269.
- Lent H, Wygodzinsky P (1947a) Sobre algumas espécies de *Zelurus* Hahn (Reduviidae, Hemiptera). Revista Brasileira de Biologia 7 (1): 25–55.
- Lent H, Wygodzinsky P (1947b) Contribuição ao conhecimento dos “Reduviinae” americanos (Reduviidae, Hemiptera). Revista Brasileira de Biologia 7 (3): 341–368.
- Lent H, Wygodzinsky P (1951) Estudos sobre o gênero *Zelurus* Hahn (Reduviidae, Hemiptera). Revista Brasileira de Biologia 11 (1): 1–28.
- Lent H, Wygodzinsky P (1954) Contribuição ao conhecimento das espécies de *Zelurus* do grupo *femoralis* (Reduviidae, Hemiptera). Revista Brasileira de Biologia 14 (4): 407–442.
- Lent H, Wygodzinsky P (1956) Situação atual do gênero *Opisthacidius* Berg, 1879 (Hemiptera, Reduviidae). Revista Brasileira de Biologia 16 (3): 327–334.
- Lent H, Wygodzinsky P (1957) Notas sobre *Zelurus* Hahn (Hemiptera, Reduviidae). Revista Brasileira de Biologia 17 (1): 21–42.
- Lent H, Wygodzinsky P (1966) Os tipos de G. Breddin de *Spiniger* (= *Zelurus* Hahn) (Hemiptera, Reduviidae). Revista Brasileira de Biologia 26 (2): 145–164.
- Lent H, Wygodzinsky P (1979) Revision of the Triatominae (Hemiptera, Reduviidae), and their significance as vectors of Chagas disease. Bulletin of the American Museum of Natural History 163: 123–520.
- Lepeletier ALM, Serville JGA (1825) Hemiptera Heteroptera. In: Olivier GA (Ed.) Encyclopédie méthodique. Agasse, Paris, 1–833 pp.
- Lichtenstein AAH (1796) Catalogus rerum naturalium rarissimarum Hamburgi, auctionis lege distrahendarum. Sectio prima continens mammalia et aves, secunda continens conchylia, item mineralia, tertia continens insecta. Verzeichniss von hochstseltenen Naturalien, etc. 3 sections, Schniebes, Hamburg, 244 pp.
- Linné C (1758) Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Editio decima, reformata. Laurentii Salvii, Holmiae, Hemiptera 1: 434–457.
- Linné C (1764) Museum Ludovicæ Ulricæ Reginæ Svecorum, Gothorum, etc. Holmiae.
- Linné C (1767) Systema naturae per regna tria naturae secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis. Editio duodecima, reformata. Hemiptera 1 (2): 687–743.
- Lucas M, Forero D, Basset Y (2016) Diversity and recent population trends of assassin bugs (Hemiptera: Reduviidae) on Barro Colorado Island, Panama. Insect Conservation and Diversity 9 (6): 546–558.
- Maldonado Capriles J (1972) Neotropical Reduviidae (Heteroptera) in the Museum of Zoology of the University of Helsinki, Finland, with description of new species. Notulae Entomologicae 52: 47–56.
- Maldonado Capriles J (1976) The genus *Heza* (Hemiptera, Reduviidae). Journal of Agriculture of the University of Puerto Rico 60 (3): 403–432.
- Maldonado Capriles J (1987) *Homalocoris punctatus* n. sp. and key to the species in the genus (Reduviidae, Microtominae). Journal Agriculture, University of Puerto Rico 71 (3): 240–253.
- Maldonado Capriles J (1990) Systematic catalogue of the Reduviidae of the World (Insecta: Heteroptera). Caribbean Journal of Sciences, Special edition: i–x, 1–694.
- Maldonado Capriles J, Carpintero DJ (1993) Redescription of the Harpactorine genus *Sosius* Champion, 1899, with the description of a new species (Heteroptera: Reduviidae). Proceedings of the Entomological Society of Washington 95 (2): 223–227.
- Martin-Park A, Delfin-Gonzalez H, Coscarón MC (2012) Revision of genus *Reipta* Stål 1859 (Hemiptera: Heteroptera: Reduviidae: Harpactorinae) with new species and distribution data. Zootaxa 3501: 1–54.
- Mayr GL (1864) Diagnosen neuer Hemipteren. Verhandlungen des Zoologisch-Botanischen Gesellschaft in Wien 14: 903–914.
- Mayr GL (1865) Diagnosen neuer Hemipteren. II. Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien 15: 429–446.
- McAtee WL, Malloch JR (1923) Notes on American Bactrodinae and Saicinae. Annals of the Entomological Society of America 16 (3): 247–254.
- Melo MC (2007) Revision of the Neotropical genus *Leogorras* Stål (Hemiptera: Reduviidae). Insect Systematic and Evolution 38 (1): 51–92.
- Melo MC, Coscarón MC (2004a) New records of Reduviidae (Hemiptera: Heteroptera) from Argentina. Zootaxa 698: 1–4.
- Melo MC, Coscarón MC (2004b) Redescription of *Microtomus reuteri* Berg (Heteroptera: Reduviidae: Hammacerinae) from southern South America. Entomological News 115 (5): 249–254.
- Melo MC, Dellapé PM (2013) Catalogue of the Pyrrhocoroidea (Hemiptera: Heteroptera) from Argentina. Revista de la Sociedad Entomológica Argentina 72 (1–2): 55–74.
- Melo MC, Dellapé PM, Carpintero DL, Coscarón MC (2004) Reduviidae, Miridae y Lygaeoidea (Hemiptera) recolectados en Colonia Carlos Pellegrini (Esteros de Iberá, Corrientes, Argentina). Revista de la Sociedad Entomológica Argentina 63 (1–2): 59–67.
- Melo MC, Dellapé PM, Carpintero DL, Montemayor SI (2011) Heteroptera (Hemiptera) from the Chaco National Park (Argentina). Zootaxa 2999: 1–19.
- Melo MC, Montemayor SI (2015) Biodiversity of the scentless plant bugs (Hemiptera: Rhopalidae) in southern South America. Journal of Natural History 50 (3–4): 163–200. <https://doi.org/10.1080/0022993.2015.1073810>
- Montandon AL (1895) Hémiptères Hétéroptères. Première liste et descriptions d'espèces nouvelles. Bollettino dei Musei di Zoologia ed Anatomia Comparata della R. Università di Torino 10 (219): 1–10.
- Montemayor SI (2010a) Description of a new *Amblystira* (Hemiptera: Heteroptera: Tingidae) from Argentina with a key to the South American species of the genus. Zootaxa 2675: 65–68.
- Montemayor SI (2010b) Review of the genus *Leptocysta* Stål with descriptions of two new species (Hemiptera: Heteroptera: Tingidae) from Argentina. Zootaxa 2641(1): 62–68.
- Montemayor SI, Coscarón MC (2005) List of Argentinian Tingidae (Lepidoptera) with their host plants. Zootaxa 1065: 29–50.
- Montemayor SI, Melo MC (2012) Synopsis of the genus *Corythaica* Stål (Insecta, Heteroptera, Tingidae), with the description of three new species from Argentina. Studies on Neotropical Fauna and Environment 47 (2): 119–130. <https://doi.org/10.1080/01650521.2012.698103>
- Musolin DL (2007) Insects in a warmer world: ecological, physiological and life-history responses of true bugs (Heteroptera) to climate change. Global Change Biology 13: 1565–1585.
- Musolin DL, Fujisaki K (2006) Changes in ranges: trends in distribution of true bugs (Heteroptera) under conditions of the current climate warming. Russian Entomological Journal 15: 175–179.
- New TR (2012) Developing insect conservation: concluding thoughts. In: New TR (Ed.) Insect Conservation: Past, Present and Prospects. Springer, Dordrecht, 419–425.
- Osborn H, Drake CJ (1915) Records of Guatemalan Hemiptera-Heteroptera with description of new species. Ohio Naturalist 15: 529–541.
- Packauskas R (2010) Catalog of the Coreidae, or leaf-footed bugs of the New World. Fort Hays Studies (Fourth Series) 5: 1–270.
- Packauskas RJ, Schaefer CW (1998) Revision of the Cyrtocoridae (Hemiptera: Pentatomidae). Annals of the Entomological Society of America 91 (4): 363–386.
- Palisot de Beauvois AMFJ (1805) Insectes recueillis en Afrique et en Amérique, dans les royaumes d'Oware et de Benin, a Saint-Domingue et dans les États-Unis pendant les années 1786–1797.

- Imprimerie de Fain et Compagnie, Paris, Parts 1–2: 1–40.
- Parmesan C (2001) Detection of range shifts: general methodological issues and case studies using butterflies. In: Walter G-R, Burga CA, Edwards PJ (Eds) *Fingerprints of Climate Change: Adapted Behaviour and Shifting Species Ranges*. Kluwer Academic/Plenum Publishers, New York, 57–76.
- Pennington MS (1921) Lista de los Hemípteros Heterópteros de la República Argentina. Authors edition, Buenos Aires. Part 2: 17–47.
- Pennington MS (1922) Notas sobre Coreidos Argentinos. Physis 20 (5): 125–170.
- Perty M (1833) *Delectus animalium articulatorum, quae in itinere per Braziliam annis MDCCCVII–MDCCXX, jussu et auspiciis Maximiliani Josephi I. Bavariae regis augustissimi peracto, collegerunt Dr J.B. de Spix et Dr C.F.Ph. de Martius*. Perty, Munich, 125–224 + pls 24–40.
- Pirán AA (1948) Contribución al conocimiento de la dispersión geográfica de los Hemípteros neotropicales. Acta Zoologica Lilloana 5: 5–17.
- Pirán AA (1956) Hemípteros raros o poco conocidos y no mencionados para las faunas de Brasil, Uruguay, Argentina, Paraguay y Bolivia. Revista de la Sociedad Uruguaya de Entomología 1: 29–35.
- Pirán AA (1962) Las especies de *Sethenira* (Hemiptera, Coreidae) con la descripción de una especie nueva. Acta Zoologica Lilloana 18: 163–168.
- Pirán AA (1963) Hemíptera neotrópica VII. Algunas especies nuevas o poco conocidas del noroeste argentino. I. Acta Zoologica Lilloana 19: 335–341.
- Quintanilla RH, Margheritis AE, Rizzo HF (1968) Catálogo de hemípteros hallados en la Provincia de Entre Ríos. Revista de la Facultad de Agronomía y Veterinaria, Buenos Aires 16: 29–38.
- Quintanilla RH, Margheritis AE, Rizzo HF (1975–1976) Catálogo de hemípteros hallados en la Provincia de Corrientes. Revista de la Sociedad Entomológica Argentina 35 (1–4): 115–133.
- Quintanilla RH, Rizzo HF, Nuñez AS (1981) Catálogo preliminar de hemípteros hallados en la Provincia de Misiones. Revista de la Facultad de Agronomía 2 (3): 145–161.
- Rebagliati PJ, Mola LM, Papeschi AG, Grazia J (2005) Cytogenetic studies in Pentatomidae (Heteroptera): a review. Journal of Zoological Systematics and Evolutionary Research 43: 199–214.
- Rider DA, Chapin JB (1991) Revision of the genus *Thyanta* Stål, 1862 (Heteroptera: Pentatomidae) I. South America. Journal of the New York Entomological Society 99: 1–77.
- Rolston LH (1973) A new South American genus of Pentatomini (Hemiptera: Pentatomidae). Journal of the New York Entomological Society 81 (2): 101–110.
- Rolston LH (1975) A new species and review of *Sibaria* (Hemiptera: Pentatomidae). Journal of the New York Entomological Society 83 (4): 218–225.
- Rolston LH (1982) A revision of *Euschistus* Dallas subgenus *Lycipta* Stål (Hemiptera: Pentatomidae). Proceedings of the Entomological Society of Washington 84: 281–296.
- Rolston LH (1983) A revision of the genus *Acrosternum* Fieber, subgenus *Chinavia* Orian, in the Western Hemisphere (Hemiptera: Pentatomidae). Journal of the New York Entomological Society 91: 97–176.
- Rolston LH (1984) A review of the genus *Thoreyella* Spinola (Hemiptera: Pentatomidae). Proceedings of the Entomological Society of Washington 86 (4): 826–834.
- Rolston LH (1992) Key and diagnoses for the genera of Ochlerini (Hemiptera: Pentatomidae: Discocephalinae). Journal of New York Entomological Society 100: 1–41.
- Ruckes H (1952) Two new species of *Thyanta* Stål (Pentatomidae: Heteroptera). Bulletin of the Brooklyn Entomological Society 47: 65–68.
- Ruckes H (1957) New species of Pentatomidae from North and South America (Heteroptera) I. Bulletin of the Brooklyn Entomological Society 52 (1): 16–24.
- Ruckes H (1964) The genus *Antiteuchus* Dallas, with descriptions of new species (Heteroptera, Pentatomidae, Discocephalinae). Bulletin of the American Museum of Natural History 127 (2): 47–102.
- Ruckes H (1966) An analysis and a breakdown of the genus *Platycarenus* Fieber (Heteroptera, Pentatomidae, Discocephalinae). American Museum Novitates 2255: 1–42.
- Ruffinelli A, Pirán AA (1959) Hemípteros heterópteros del Uruguay. Boletín de la Facultad de Agronomía, Montevideo 51: 1–60.
- Say T (1831) Descriptions of new species of Heteropterous Hemiptera of North America. New Harmony, Indiana, T. Say, 39 pp.
- Schaefer CW (1998) The taxonomic status of *Xyonysius major* Berg (Hemiptera: Lygaeidae), an occasional pest of sunflower in Brazil. Anais da Sociedade Entomológica do Brasil 27 (1): 55–58.
- Schaefer CW, Ahmad I (2008) A Revision of *Neomegalotomus* (Hemiptera: Alydidae). Neotropical Entomology 37 (1): 30–44.
- Schmidt, L.S. and A. Barcellos. (2007) Abundância e riqueza de espécies de Heteroptera (Hemiptera) do Parque Estadual do Turvo, sul do Brasil: Pentatomidea. Iheringia, Série Zoologia 97 (1): 73–79.
- Schwertner CF, Grazia J (2007) O gênero *Chinavia* Orian (Hemiptera, Pentatomidae, Pentatominae) no Brasil, com chave pictórica para os adultos. Revista Brasileira de Entomologia 51: 416–435.
- Scopoli JA (1772) *Annus historico naturalis*. Annus V. Christ. Gotteos Hilscheri, Lipsiae, 128 pp.
- Signoret V (1863) Révision des Hémiptères du Chili. Annales de la Société Entomologique de France (4) 3: 541–588, + pls 11–13.
- Slater JA (1955) Revision of the subfamily Pachygronthinae. The Philippine Journal of Sciences 84: 1–141.
- Slater JA (1964) A catalogue of the Lygaeidae of the world, Vols. 1 and 2. University of Connecticut, Storrs, 1688 pp.
- Slater JA (1979) The systematics, phylogeny, and zoogeography of the Blissinae of the world (Hemiptera, Lygaeidae). Bulletin of the American Museum of Natural History 165: 1–180.
- Slater JA, O'Donnell JE (1995) A catalogue of the Lygaeidae of the world (1960–1994). New York Entomological Society, New York, 410 pp.
- Slater JA, Wilcox DB (1966a) An analysis of three new genera of Neotropical Blissinae (Hemiptera: Lygaeidae). Annals of the Entomological Society of America 59: 61–76.
- Slater JA, Wilcox DB (1966b) A revision of the genus *Patritius* (Hemiptera, Lygaeidae). University of Connecticut Occasional Papers (Biological Science Series) 1: 25–42.
- Slater JA, Wilcox DB (1968) New genera and species of Neotropical Blissinae (Hemiptera: Lygaeidae). Proceedings of the Entomological Society of Washington 70 (1): 42–52.
- Spinola M (1837) *Essai sur les genres d'insectes appartenants à l'ordre des Hémiptères*, Lin. ou Rhyngotes, Fab. et à la section des Hétéroptères, Dufour. Yves Graviers, Genoa, 383 pp.
- Spinola M (1850) Di alcuni generi d'insetti arthroidignati nuovamente proposit. Modena, 61–138.
- Stål C (1854) Nya Hemiptera. Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar 11(8): 231–255.
- Stål C (1858) Hemipterologiska bidrag. Öfversigt af Kongliga Svenska Vetenskaps-Akademiens Förhandlingar 15 (9–10): 433–454.
- Stål C (1859) Hemiptera. Species novas descripsit. Fregatten Eugenies Resa. Arkiv for Zoologi. Utgivvet af Konglinga Svenska Vetenskaps-Akademien Stockholm. 4: 219–298.
- Stål C (1859) Synopsis specierum Spinigeri generis. Stettiner entomologische Zeitung 20 (10–12): 395–404.
- Stål C (1860–1862) Bidrag till Rio Janeiro-Trakten Hemipter-fauna. Kongliga Svenska Vetenskaps-Akademiens Handlingar 1860: 2 (7): 1–84; 1862: 3 (6): 1–175.
- Stål C (1868) Bidrag till Hemipterernas Systematik. Öfversigt af Konglings Vetenskaps-Akademiens Förhandlingar Stockholm 24 (7): 491–560.
- Stål C (1870–1874) *Enumeratio Hemipterorum*. Bidrag till en företeckning öfver alla hittills kända Hemiptera, jemte systematiska meddelanden. Kongliga Svenska Vetenskaps-Akademiens Handlingar 1870 (1): 9 (1): 1–232; 1872 (2): 10 (4): 1–159; 1873 (3): 11 (2): 1–232; 1874 (4): 12 (1): 1–186.

- Stewart AJA (2012) Where to next? The future of Insect conservation. In: New TR (Ed.) Insect Conservation: Past, Present and Prospects. Springer, Dordrecht, 403–417. <https://doi.org/10.1007/978-94-007-2963-6>
- Tabarelli M, Aguiar AV, Ribeiro MC, Metzger JP, Peres CA (2010) Prospects for biodiversity conservation in the Atlantic Forest: Lessons from aging human-modified landscapes. *Biological Conservation* 143: 2328–2340. <https://doi.org/10.1016/j.biocon.2010.02.005>
- Thomas DB (1992) Taxonomic Synopsis of the Asopine Pentatomidae (Heteroptera) of the Western Hemisphere. Thomas Say Foundation Monograph, 16. Entomological Society of America, Lanham, 156 pp.
- Thomas DB, Yonke TR (1990) Review of the genus *Banasa* (Hemiptera: Pentatomidae) in South America. *Annals of the Entomological Society of America* 83: 657–688.
- Thunberg CP (1825) *Insectorum hemelytrorum tria genera illustrata*. Excudebant Palmblad et C., Uppsala, 10 pp.
- Walker F (1867) Catalogue of the specimens of heteropterous Hemiptera in the collection of the British Museum. Part II. Scutata. E. Newman, London, 241–417.
- Walker F (1868) Catalogue of the specimens of Hemiptera Heteroptera in the collection of the British Museum. Part III. E. Newman, London, 418–599.
- Walker F (1883) Catalogue of the specimens of Hemiptera Heteroptera in the British Museum. Supplement. E.W. Janson, London, 63 pp.
- Westwood JO (1841) Observations upon the hemipterous insects comprising the genus *Syrtis* of Fabricius, or the family Phymatides of Laporte, with a monograph of the genus *Macrocephalus*. *Transactions of the Entomological Society of London* 3: 18–28, + plate 2.
- Westwood JO (1842) A Catalogue of Hemiptera in the collection of the Rev. F.W. Hope. 2: 1–26.
- Whitehead DR (1974) Variation and synonymy in *Hypselonotus* (Heteroptera: Coreidae). *Journal of the Washington Academy of Sciences* 64 (3): 1–224.
- Wygodzinsky P (1946) Sobre um novo gênero de harpactorinae do Brasil, com notas sobre os gêneros *Harpactor* Laporte e *Erbessus* Stål (Reduviidae, Hemiptera). *Revista de Entomologia* 17 (3): 401–417.
- Wygodzinsky P (1947) Contribuição ao conhecimento do gênero *Heniartes* Spinola, 1837 (Apiomerinae, Reduviidae, Heteroptera). *Arquivos do Museu Nacional* 41: 11–64 + 9 pls.
- Wygodzinsky P (1949a) Notas sobre Reduviidae Argentinos (Hemiptera). *Anales del Instituto de Medicina Regional* 2 (3): 325–340.
- Wygodzinsky P (1949b) Elenco sistemático de los reduvíformes americanos. *Instituto Medicina Regional Tucumán, Monografía* 1: 1–120.
- Wygodzinsky P (1951) Notas sobre Ectrichodiinae Neotropicales. *Revista de la Sociedad Entomológica Argentina* 15: 35–52.
- Zhang G, Hart ER, Weirauch C (2016) A taxonomic monograph of the assassin bug genus *Zelus* Fabricius (Hemiptera: Reduviidae): 71 species based on 10,000 specimens. *Biodiversity Data Journal* 4: e8150. <https://doi.org/10.3897/bdj.4.e8150>
- Zheng L-Y, Slater JA (1984) A revision of the lygaeid genus *Pseudopachybrachius* (Hemiptera). *Systematic Entomology* 9 (1): 95–115.