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An update of the distribution of the stink bugs from Argentina (Hemiptera: Pentatomidae)

Actualización de la distribución de las chinches de Argentina
(Hemiptera: Pentatomidae)

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Abstract: Pentatomidae is one of the largest families within Heteroptera, and it is represented in all zoogeographical regions, although the tropical and subtropical faunas are the most diverse. The field trips carried out in recent years in several localities in Argentina allow to update the distribution of stink bugs in the country. In this contribution, the genera *Cataulax* Spinola and *Grazia* Rolston, and the species *Acedra breviscutata* Breddin, *Banasa peruana* Thomas, *Banasa dolabrata* Thomas, *Cataulax froeschneri* Grazia, Campos & Becker, *Grazia tinctoria* (Distant), *Mayrinia variegata* (Distant), *Mitripus acutus* (Dallas), and *Tylospilus peruvianus* (Horváth), are recorded for the first time from Argentina. The characters used for the identification of these genera and species are provided. In addition, the geographic distribution of other 27 pentatomid species is expanded and new records of host plants are reported for *Alveostethus pseudopolitus* (Ruckes), *Antiteuchus mixtus* (Fabricius) and *Pellaea stictica* (Dallas).

Keywords: New records, Pest species, Phytophagous stink bugs, Predatory stink bugs.

Resumen: Pentatomidae es una de las familias más grandes de Heteroptera, se encuentra en todas las regiones zoogeográficas, aunque las faunas tropical y subtropical son las más diversas. Las colectas a campo realizadas en los últimos años en varias localidades de Argentina permiten actualizar la distribución de las chinches en el país. En esta contribución se registran por primera vez en Argentina los géneros *Cataulax* Spinola y *Grazia* Rolston, y las especies *Acedra breviscutata* Breddin, *Banasa peruana* Thomas, *Banasa dolabrata* Thomas, *Cataulax froeschneri* Grazia, Campos & Becker, *Grazia tinctoria* (Distant), *Mayrinia variegata* (Distant), *Mitripus acutus* (Dallas) y *Tylospilus peruvianus* (Horváth). Se proporcionan los caracteres utilizados para la identificación de estos géneros y especies. Además, se amplía la distribución geográfica de otras 27 especies de pentatómidos y se dan a conocer nuevos registros de plantas huésped para *Alveostethus pseudopolitus* (Ruckes), *Antiteuchus mixtus* (Fabricius) y *Pellaea stictica* (Dallas).

Palabras clave: Chinches depredadoras, Chinches fitófagas, Especies plaga, Nuevos registros.

INTRODUCTION

With 940 genera and almost 5,000 species, Pentatomidae is one of the largest families within Heteroptera (Schuh & Weirauch, 2020), and it is represented in all zoogeographical regions although the tropical and subtropical faunas are the most diverse (Grazia et al., 2015). The pentatomids are known as stink bugs because they produce a disagreeable odor by means of scent glands (Panizzi et al., 2000). More than 1,400

species of stink bugs are represented in the Neotropics, while in Argentina 103 genera and 271 species are recorded (Dellapé G. et al., 2015; Grazia et al., 2015; Dellapé P. et al., 2020; Dellapé G. & Fuentes, in press).

The stink bugs are mostly phytophagous and feed by inserting their stylets into the food source causing injury to plant tissues. During the feeding, they may also transmit plant pathogens, which increase their potential damage (Panizzi et al., 2000). Phytophagous pentatomids are the most economically important group among the Heteroptera, because of their diversity, the wide range of host plants fed upon #from vegetables to trees#, and the frequent damage to agricultural production. The economic importance of these insects varies greatly from species to species, and within a species, depending on the plant attacked (Mc Pherson & Mc Pherson, 2000; Panizzi et al., 2000; Panizzi, 2004). In the Neotropics, more than 20 species of phytophagous pentatomids cause losses or damage in several crops such as cotton, rice, corn, soybeans, sorghum, tomatoes, among others; and practically all these species are recorded in Argentina (Panizzi et al., 2000; Grazia & Schwertner, 2008).

The only pentatomids with predatory habits are the asopines (subfamily Asopinae), whose species have been increasingly studied as potential agents of pest control (De Clercq, 2000, 2004). In the Neotropics, *Podisus nigrispinus* (Dallas) is well studied and has great potential for controlling populations of some phytophagous species (Saini, 1994; De Clercq, 2000). Other species that have been studied and are represented in Argentina are *Alcaeorrhynchus grandis* (Dallas), *Brontocoris tabidus* (Signoret) and *Tylospilus nigrobinotatus* (Berg) (De Clercq, 2000; Grazia & Schwertner, 2008).

Since the last work on distribution of Argentinean pentatomids by Dellapé G. et al. (2015), new field trips have been carried out allowing to update the distribution of the stink bugs from Argentina. In this contribution, two genera and eight pentatomid species are recorded for the first time from Argentina; also, the distribution of other previously recorded pest and non-pest species is extended, the economic importance of some species is summarized, and additional information on host plants is provided.

MATERIAL AND METHODS

The material studied comes from field trips carried out by the author, her work group, and other colleagues in several localities of Argentina. Whenever required to confirm identification, 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. All specimens were deposited in the Entomological collection of the Museo de La Plata, Buenos Aires, Argentina (MLP). Furthermore, material deposited in the entomological collections of the Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina, (MACN), Instituto Miguel Lillo, Tucumán, Argentina (IMLA), and MLP was also studied. Photographs of the species

were taken using a Nikon SMZ 745 stereomicroscope and stacked with the Zerene Sacker™ software. The species were listed by subfamily and tribe according to the classification proposed by Rider et al. (2018).

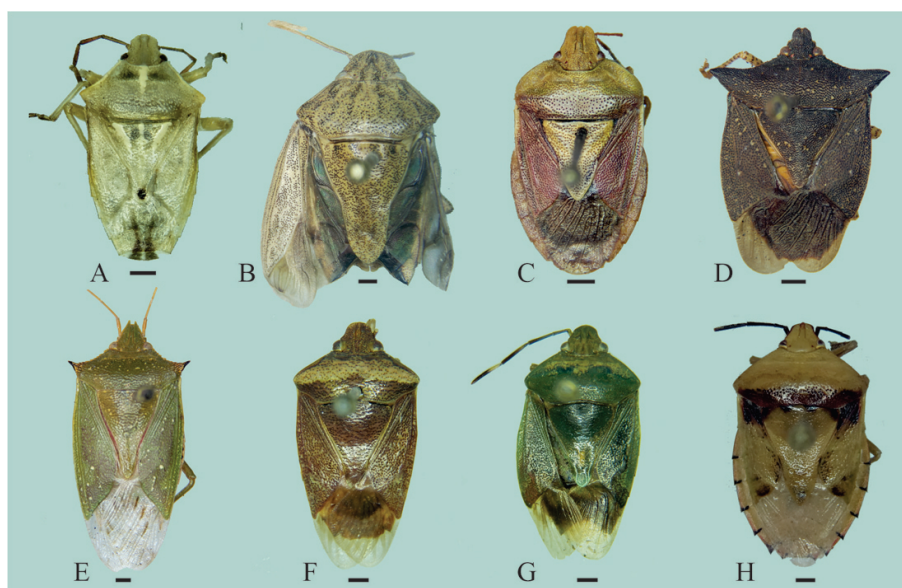


Fig. 1. Dorsal habitus of species of Pentatomidae recorded for the first time in Argentina. A. *Tylospilus peruvianus* (Horváth), B. *Cataulax froeschneri* Grazia, Campos & Becker, C. *Acladra breviscutata* Breddin, D. *Mitripus acutus* (Dallas), E. *Mayrinia variegata* (Distant), F. *Banasa peruana* Thomas, G. *Banasa dolabrata* Thomas, H. *Grazia tinctoria* (Distant)

Scale bar = 1 mm

RESULTS

In this contribution, the genera *Cataulax* Spinola and *Grazia* Rolston, and the species *Acladra breviscutata* Breddin, *Banasa peruana* Thomas, *Banasa dolabrata* Thomas, *Cataulax froeschneri* Grazia, Campos & Becker, *Grazia tinctoria* (Distant), *Mayrinia variegata* (Distant), *Mitripus acutus* (Dallas), and *Tylospilus peruvianus* (Horváth) are recorded for the first time from Argentina. The characters used for the identification of these genera and species are provided. In addition, the geographic distribution of 27 pentatomid species is expanded, and new records of host plants are reported for *Alveostethus pseudopolitus* (Ruckes), *Antiteuchus mixtus* (Fabricius) and *Pellaea stictica* (Dallas). On the other hand, information on the economic importance of pest species in Argentina: *Euschistus heros* (Fabricius), *Chinavia impicticornis* (Stål), *Nezara viridula* (L.), *Arvelius albopunctatus* (De Geer), and *Piezodorus guildinii* (Westwood), is summarized. With the results of this update, 105 genera and 279 species of pentatomids are recorded from Argentina.

Subfamily Asopinae

Brontocoris tabidus (Signoret)

Distribution. Brazil, Chile, Paraguay, and Argentina (Signoret, 1863; Thomas, 1992): Buenos Aires, Chubut, Mendoza, Misiones, Santiago del Estero (Dellapé P. et al., 2003; Melo et al., 2017), and Salta (new record).

Material examined. Argentina: Salta, San Lorenzo, Hotel Selva Montana, 24°43.573'S, 65°29.883'W, 1450 masl, 16-II-2016, light trap, G. & P. Dellapé cols., 1 ♂ (MLP).

Remarks. This species has been reported attacking larvae of *Heteroperreyia hubrichi* Malaise (Hymenoptera: Pergidae) feeding on Brazilian peppertree (*Schinus terebinthifolia* Raddi; Anacardiaceae) in Misiones, Argentina (Mc Kay et al., 2019).

Comperocoris roehneri (Philippi)

Distribution. Chile (Philippi, 1862, Kirkaldy, 1909) and Argentina: Santa Cruz (Kormilev, 1958) and Chubut (new record).

Material examined. Argentina: Chubut, Paraje El Pajarito, RN25, 43°48'9"S, 69°16'59.8"W, 1 ♀ (MLP).

Remarks. Philippi (1862) describes *Jalla roehneri* from Chile, and one year later Signoret (1863) describes *Asopus cruciatus* in his review of the Chilean Hemiptera. Stål (1867) describes the genus *Comperocoris* to accommodate *A. cruciatus*. Berg (1881) synonymizes *C. cruciatus* with *J. roehneri* and says that he received material from Valdivia (Chile) and writes "Patagonia-Valdivia". Later, Kirkaldy (1909) cites the species in "Chile; S. Patagonia". Pennington (1920) misinterprets the word "Patagonia" from the works of Berg (1881) and Kirkaldy (1909) and cites the species from Argentina. Pennington writes "Sud", referring to the fact that the species is found in the Argentine provinces of Río Negro, Chubut, Santa Cruz and Tierra del Fuego. The first true record of *Comperocoris roehneri* in Argentina corresponds to Estancia "La Cristina", Lago Argentino, Santa Cruz province by Kormilev (1958). Coscarón (2017) also misinterprets the works of Kirkaldy (1909) and Pennington (1920), and mentioned *C. roehneri* from four provinces of the Argentinean Patagonia.

Supputius cincticeps (Stål)

Distribution. Venezuela, Bolivia, Brazil, Chile, Paraguay, and Argentina (Thomas, 1992; Prado, 2008): Entre Ríos, Misiones (Dellapé G. et al., 2015), and Buenos Aires (new record).

Material examined. Argentina: Buenos Aires, Bavio, 2016, E. Rizzo col., 1 ♂ (MLP).

Tylospilus peruvianus (Horváth) (Fig. 1A)

Distribution. Peru, Suriname, Brazil, and Bolivia (Thomas, 1992; Brugnera et al., 2020). Argentina: Jujuy (First country record).

Material examined. Argentina: Jujuy, San Salvador, Los Perales, 18-XII-2016, Ortuño col., 1 ♀, 1 ♂ (MLP).

Remarks. This species can be distinguished from other species of the genus by the longitudinal pale-yellow stripe on clypeus and midline of pronotum; the humeral angles concolour with disc of pronotum; and the humeral angles length subequal to the eye diameter (Brugnera et al., 2020).

Subfamily Discocephalinae

Alveostethus politus (Signoret)

Distribution. Venezuela, Colombia, Peru, Brazil, and Argentina: Misiones, Salta, Tucumán (Montandon & Viaggio del Dott, 1895; Ruckes, 1966; Dellapé G. et al., 2015), and Jujuy (new record).

Material examined. Argentina: Jujuy, Caimancito, 23°44.309'S, 64°35.015'W, 372 masl, 13-II-2016, G. Dellapé col., 2 ♀, 1 ♂ (MLP); Jujuy, RP 56, NE La Mendieta, 24°16.082'S, 64°54.943'W, 669 masl, 15-II-2016, P. Dellapé col., 1 ♀, 1 ♂ (MLP).

Alveostethus pseudopolitus (Ruckes)

Distribution. Paraguay, Brazil, and Argentina: Misiones (Ruckes, 1966; Schmidt & Barcellos, 2007; Dellapé P. et al., 2015), and Entre Ríos (new record).

Material examined. Argentina: Entre Ríos, Concordia, Estación Experimental Agropecuaria INTA, XI/XII-2010, G. Dellapé col., sobre mandarina Nova, 2 ♂.

Host plant. Hybrid tangerine variety “Nova” *Citrus reticulata* Hort. Ex Tan. x (*Citrus Paradise* Macf. x *Citrus tangerine* Hort. Ex Tan.) (Rutaceae) (new record).

Antiteuchus mixtus (Fabricius)

Distribution. Trinidad & Tobago, Venezuela, Guyana, French Guiana, Suriname, Brazil, Bolivia, Paraguay, and Argentina: Formosa, Salta, Tucumán (Fernandes & Grazia, 2006; Grazia & Schwertner, 2008), Buenos Aires and Jujuy (new records).

Material examined. Argentina: Buenos Aires, Villa Urquiza, 2-IX-2015, sobre plátano de sombra, 15 ♀, 15 ♂ (MLP); Salta, San Ramón de la Nueva Orán, 3-XI-1998, A. Becerra col., sobre *Morus nigra* L., 1 ♀, 2 ♂ (MLP); Salta Capital, sobre algarrobo, 1 ♀, 1 ♂ (MLP); Jujuy, 2-VIII-2013, 1 ♀ (MLP).

Host plants. “Hybrid plane” *Platanus . hispanica* Mill. ex Münchh (Platanaceae); “black mulberry” *Morus nigra* L. (Moraceae); “carob tree” *Ceratonía siliqua* L. (Fabaceae) (new records).

Remarks. *Antiteuchus melanoleucus* (Westwood) was also recorded on *Platanus x hispanica* and *P. occidentalis* L. (Bosq, 1937; Quintanilla et al., 1975-76).

Cataulax froeschneri Grazia, Campos & Becker (Fig. 1B)

Distribution. Brazil (Grazia et al., 2000). Argentina: Misiones (First country record of genus and species).

Material examined. Argentina: Misiones, Iguazu National Park, 25°40'40.8"S, 54°26'55.9"W, 2-XI-2012, light trap, 1 ♂ (MLP).

Remarks. The genus *Cataulax* has the following combination of diagnostic characters: body obovate; rostrum with a minute intercalary segment between basal two segments; mesosternum tumid, in a median, elevated, broad calloused ridge; metasternum hexagonal, elevated into a thickened plate, with the apical margin emarginate; third abdominal segment with a median, flat tubercle which fits in apical emargination of the metasternum; and median abdominal furrow broad and shallow,

reaching sixth sternite. *Cataulax froeschneri* can be distinguished from other species of the genus by the structure of the parameres, the pattern of the membrane venation, the presence of bands of fuscous punctures on head and pronotum and arranged in four darkest patches along basal portion of scutellum (Grazia et al., 2000).

Subfamily Pentatominae

Tribe Carpocorini

Acledra bichromocornis Faúndez, Rider & Carvajal

Distribution. Bolivia, Chile, and Argentina: Jujuy, Mendoza, Salta, Tucumán (Faúndez et al., 2014), Catamarca, San Juan and San Luis (new records).

Material examined. Argentina: Catamarca, Los Ángeles, II-1946, Schaefer col., 2 ♂ (MLP); San Juan, Iglesias, 1 ♂ (MACN); San Luis, Carolina, I-1948, S. Beltrán col., 1 ♂ (MACN).

Acledra breviscutata Breddin (Fig. 1C)

Distribution. Bolivia and Chile (Breddin, 1914; Faúndez & Rider, 2014). Argentina: Jujuy (First country record).

Material examined. Argentina: Jujuy, La Quiaca, A. Stevenin col., 1 ♀ (MACN); Jujuy, La Quiaca, Co. Colorado, 13-II-1958, Torres-Ferreya cols., 1 ♀ (MLP).

Remarks. This species can be distinguished from other species of the genus by the second antennomere almost 1.5 times as long as the third; and the scutellum short, less pointed, with a small calloused fleck only near the basal angles (Breddin, 1914).

Acledra fraterna (Stål)

Distribution. Brazil, Chile, Uruguay, and Argentina: Buenos Aires, Mendoza, Tucumán (Stål, 1859; Signoret, 1863; Berg, 1878a; Breddin, 1914; Grazia & Schwertner, 2008; Garbelotto & Campos, 2014), Córdoba, Jujuy, La Pampa, and Santa Fe (new records).

Material examined. Argentina: Santa Fe, Rosario, 3 ♀ (MACN); Córdoba, Río San José, 10-I-55, P.S.I. Riviere col., 1 ♀ (MACN); Córdoba, ciudad, Fritz col., 1 ♀ (MACN); Córdoba, 29-XIII-1925, 1 ♂ (MLP); La Pampa, General Acha, 12-III-2008, P. Dellapé col., 1 ♀; Jujuy, 29-I-58, Torres-Ferreya cols., 1 ♂ (MLP).

Acledra gregalis (Berg)

Distribution. Uruguay and Argentina: Buenos Aires, Santiago de Estero (Berg, 1878a; Torre-Bueno, 1915; Ruffinelli & Pirán, 1959), Misiones, and Chaco (new records).

Material examined. Argentina: Misiones, 1 ♂ (MLP); Chaco, Campo del Cielo, I-1934, Bosq col., 2 ♀ (MLP); Chaco, Corzuela, 8-I-1936, 1 ♀ (MLP).

Acledra modesta (Stål)

Distribution. Chile (Faúndez & Verdejo, 2009 as *A. gregalis*), Brazil, Uruguay, and Argentina: Buenos Aires, Entre Ríos, Chubut, Corrientes, Córdoba, Río Negro (Stål, 1859; Berg, 1878a; Breddin,

1897; Pennington, 1920; Quintanilla et al., 1968, 1975-76; Grazia & Schwertner, 2008), La Pampa, Neuquén, and San Luis (new records).

Material examined. Argentina: La Pampa, General Acha, 12-III-2008, P. Dellapé col., 1 ♂ (MLP); Neuquén, I-60, 1 ♀ (MLP); San Luis, Carolina, I-46, Beltrán col., 1 ♀ (MACN).

Euschistus (Euschistomorphus) longiceps Berg

Distribution. Argentina: Catamarca, Chubut, Córdoba, Corrientes, Entre Ríos, Mendoza, Salta, Santiago del Estero, Tucumán (Berg, 1891; Pennington, 1920; Quintanilla et al., 1975-76; Grazia & Schwertner, 2008; Dellapé G. et al., 2015), and San Luis (new record).

Material examined. Argentina: San Luis, S. Jerónimo, I-1974, G.J. Williner col., 1 ♀ (MACN); Santiago del Estero, 13km termas de Río Hondo, 27°22'54.9"S, 64°47'4.5"W, 263masl, G. del Río col., 1 ♀ (MLP).

Euschistus (Euschistus) bicallosus (Pirán)

Distribution. Argentina: Salta, Santa Fe, Santiago del Estero, Tucumán (Pirán, 1959, 1963), and La Rioja (new record).

Material examined. Argentina: La Rioja, 30 km antes de Chiapas Moscasin, 26-III-2007, G. del Río col., 2 ♂, 1 nymph (MLP).

Euschistus (Euschistus) heros (Fabricius)

Distribution. French Guiana, Paraguay, Brazil (Fabricius, 1798; Malaguindo & Panizzi, 1998; Ferreira-Agüero et al., 2018), and Argentina: Chaco, Córdoba, Corrientes, Entre Ríos, Misiones, Santa Fe, Santiago del Estero (Grazia & Schwertner, 2008; Saluso et al., 2011; Molinari et al., 2015; Flores & Balbi, 2018), Salta, and Tucumán (new records).

Material examined. Argentina: Salta, Pichanal, 9-II-2016, T. Henry col., 1 ♂ (MLP); Salta, XII-2012, L.J. Álvarez col., 1 ♀ (MLP); Tucumán, RN 38 Lules, 15-III-2012, G. del Río col., 1 ♂ (MLP).

Remarks. In Argentina, this species attacks leaves, fruits and seeds of soybeans *Glycine max* L., and cotton leaves, *Gossypium hirsutum* L. (SINAVIMO, 2020).

Euschistus (Lycipta) picticornis Stål

Distribution. Brazil, Uruguay, and Argentina: Buenos Aires, Chaco, Córdoba, Misiones (Stål, 1872; Ruffinelli & Pirán, 1959; Rolston, 1982; Dellapé G. et al., 2015), and Entre Ríos (new record).

Material examined. Argentina: Entre Ríos, Isla del Ibicuy, Quinta Arco Iris, 28-X-2012, R. Jensen & A. Lutz cols., 1 ♂ (MLP); Entre Ríos, Río Martinez, X-1952, 1 ♀ (MLP).

Glypheapomis adroguensis Berg

Distribution. Brazil, Uruguay, and Argentina: Buenos Aires, Chaco, Corrientes, Entre Ríos, Santa Fe (Berg, 1891; Pirán, 1956; Campos & Grazia, 1998; Grazia & Schwertner, 2008; Dellapé G. et al., 2015), and Salta (new record).

Material examined. Argentina: Salta, San Lorenzo, 17-XI-1929, 1 ♀ (MLP).

Glypheapomis setigera Kormilev & Pirán

Distribution. Brazil, Uruguay, and Argentina: Buenos Aires, Chaco, Córdoba, Corrientes, Entre Ríos, Santa Fe, Santiago del Estero, Tucumán

(Kormilev & Pirán, 1952; Pirán, 1956, 1963, 1968; Grazia & Schwertner, 2008; Dellapé G. et al., 2015), Salta, and Formosa (new records).

Material examined. Argentina: Salta, Orán, Vellard, A.A. Pirán col., 1 ♀ (IMLA); Formosa, ciudad, 27-XII-2007/14-I-2008, J. Galván col., 1 ♂ (MLP).

Mitripus acutus (Dallas) (Fig. 1D)

Distribution. Trinidad & Tobago, Peru, Bolivia, and Brazil (Rolston, 1978). Argentina: Chaco (First country record).

Material examined. Argentina: Chaco, Río Negro (35 km of Resistencia), XI-1960, 1 ♀ (MLP).

Remarks. *Mitripus* Rolston was originally described as a subgenus of *Euschistus* (Rolston, 1978), and later raised to genus by Bianchi et al. (2017). *Mitripus* can be distinguished from other genera by the rostrum never surpassing the posterior limit of metacoxae, mandibular plates usually subequal in length to clypeus, unarmed femora, and ivory maculae present at apex of the radial vein. *Mitripus acutus* differs from other *Mitripus* species by the humeral angles spinose (Bianchi et al., 2017).

Prionotocoris suilari Kormilev

Distribution. Bolivia and Argentina: Buenos Aires, Catamarca, Neuquén, Río Negro, Salta (Kormilev, 1955; Pirán, 1958, 1963; Grazia & Schwertner, 2008; Dellapé G. et al., 2015), Mendoza and Chubut (new records).

Material examined. Argentina: Mendoza, 15-XII-2011, 1 ♀, 2 ♂ (MLP); Chubut, Puerto Madryn, 14-IV-2016, D.A. Barrasso col., 1 ♂ (MLP).

Tribe Chlorocorini

Chlorocoris complanatus (Guérin-Méneville)

Distribution. Bolivia, Brazil, Paraguay, and Argentina: Chaco, Corrientes, Misiones (Jensen-Haarup, 1926; Thomas, 1985; Dellapé G. et al., 2015), and Salta (new record).

Material examined. Argentina: Salta, 3km N Orán, RN50 and RP18, 23°04.863'S, 64°19.943'W, 353masl, 6-II-2016, G. Dellapé col., 1 ♀ (MLP).

Mayrinia curvidens (Mayr)

Distribution. Bolivia, Brazil, Paraguay, and Argentina: Corrientes, Misiones (Pirán, 1956; Grazia, 1972), and Buenos Aires (new record).

Material examined. Argentina: Buenos Aires, Salinas Chicas, 8/9-III-2008, P. Dellapé col., 2 ♀, 2 ♂ (MLP).

Mayrinia variegata (Distant) (Fig. 1E)

Distribution. Nicaragua, Costa Rica, Colombia, Venezuela, Guyana, Peru, and Brazil (Grazia, 1972). Argentina: Corrientes (First country record).

Material examined. Argentina: Corrientes, Itá-Ibaté, 1 ♂ (MLP).

Remarks. This species can be distinguished from the other two species of the genus by the humeral spines directed forward, forming an angle of

almost 130° with the anterolateral margin of the pronotum, and the shape of the male parameres (Grazia, 1972).

Tribe Nezarini

Chinavia impicticornis (Stål)

Distribution. Venezuela, Suriname, Colombia, Ecuador, Bolivia, Brazil, Peru, Paraguay, and Argentina: Catamarca, Misiones, Salta, Tucumán (Pennington, 1920; Pirán, 1963; Schwertner & Grazia, 2007; Dellapé G. et al., 2015), and Jujuy (new record).

Material examined. Argentina: Jujuy, 6-XI-2014, E. Contreras col., 1 ♀ (MLP).

Remarks. In Argentina, this species affects the leaves of the “yerba mate”, *Ilex paraguariensis* A. St. Hil. (SINAVIMO, 2020).

Nezara viridula (L.)

Distribution. Cosmopolitan. In South America: Colombia, Venezuela, French Guiana, Brazil, Paraguay, Chile, Uruguay, and Argentina (Maes, 1994; Prado, 2008): Buenos Aires, Catamarca, Chubut, Córdoba, Corrientes, Entre Ríos, La Pampa, La Rioja, Mendoza, Misiones, Río Negro, Salta, San Juan, San Luis, Santa Fe, Santiago del Estero, Tucumán (Grazia & Schwertner, 2008; Bado & Hughes, 2010; Dellapé P. et al., 2015; Melo et al., 2017), Chaco, Jujuy, and Neuquén (new records).

Material examined. Argentina: Chaco, Lag. La Azula, 26-IX-2009, P. Dellapé col., 1 ♀, 1 ♂ (MLP); Chaco, PN Chaco, 26°48'34.1"S, 59°36'21.9"W, X-2009, R. Pfoh col. 2 ♂ (MLP); Jujuy: RP1, 23°53.784'S, 64°28.829'W, 581masl, 12-II-2016, G. Dellapé col., 1 ♀ (MLP); Jujuy: RP1, N Caimancito, 23°41.981'S, 64° 32.985'W, 362masl, 12-II-2016, G. Dellapé col., 1 ♂ (MLP), Neuquén, I-2016, D.A. Barrasso col., 2 ♀ (MLP).

Remarks. In Argentina this species affects the leaves of “safflower” *Carthamus tinctorius* L., “pecán” *Carya illinoensis* (Wangenh.) K.Koch, “quinoa” *Chenopodium quinoa* Willd., “pumpkin” *Cucurbita maxima* Duchesne, “river red gum” *Eucalyptus camaldulensis* Dehnh., “lettuce” *Lactuca sativa* L., “alfalfa” *Medicago sativa* L., “tobacco” *Nicotiana tabacum* L., “kiri” *Paulownia tomentosa* (Thunb.) Steud., and “potato” *Solanum tuberosum* L. *Nezara viridula* also affects flowers, leaves and seed of “chillies or peppers” *Capsicum annum* L., flowers, fruits, leaves and stem of “common hazel” *Corylus avellana* L., flowers, fruits and leaves of “cotton” *Gossypium hirsutum* L., flowers, fruits, leaves and seed of “common bean” *Phaseolus vulgaris* L., flowers and fruits of “maize” *Zea mays* L., fruits, leaves and seed of “wheat” *Triticum aestivum* L., “soybean” *Glycine max* L. and “sunflower” *Helianthus annuus* L., seeds of “flax” *Linum usitatissimum* L., and leaves and stem of “tomato” *Solanum lycopersicum* L. (Rizzo, 1976; SINAVIMO, 2020).

Tribe Pentatomini

Arvelius albopunctatus (De Geer)

Distribution. Antigua, Bahamas, Barbados, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Montserrat, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad & Tobago, Uruguay, USA, Venezuela, Virgin Isl., and Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, La Rioja, Misiones, Salta, Santa Fe, Santiago del Estero, Tucumán (Berg, 1878b; Pirán, 1948; Quintanilla et al., 1968; Maes, 1994; Arizmendi & Thomas, 2003; Dellapé G. et al., 2015), and Jujuy (new record).

Material examined. Argentina: Jujuy, RP1, camino a El Piquete, 23°53.784'S, 64°28.829'W, 581masl, 12-II-2016, G. & P. Dellapé cols., 1 ♂ (MLP); Jujuy, 1.13 km E Caimancito, 23°43.869'S, 64°34.551'W, 363masl, 13-II-2016, G. & P. Dellapé cols., 2 ♀, 2 ♂ (MLP); Jujuy, RP1, N Caimancito, 23°41.981'S, 64°32.985'W, 362masl, 12-II-2016, G. Dellapé col., 1 ♀ (MLP).

Remarks. In Argentina this species affects tomato fruits, *Solanum lycopersicum* L., and “soybean” *Glycine max* L. (Rizzo, 1976; SINAVIMO, 2020).

Banasa peruana Thomas (Fig. 1F)

Distribution. Peru, Ecuador, Bolivia, Colombia, and Brazil (Thomas & Yonke, 1990). Argentina: Misiones (First country record).

Material examined. Argentina: Misiones, San Antonio, XI-1960, 2 ♀, 1 ♂ (MLP).

Remarks. This species can be recognized by the lack of stigmatose spots on the pleura, the shape of the parameres and the emarginate gonocoxae. Most of the specimens show a faded band of yellow traverses the apex of the hemelytra and scutellum (Thomas & Yonke, 1990).

Banasa dolabrata Thomas (Fig. 1G)

Distribution. Mexico through Central America, Ecuador, Peru, and Bolivia (Thomas & Yonke, 1990). Argentina: Misiones (First country record).

Material examined. Argentina: Misiones, San Antonio, XI-1960, 2 ♂ (MLP).

Remarks. This species can be distinguished by the presence of castaneous punctures on the propleura and the dolabrate parameres (Thomas & Yonke, 1990).

Grazia tincta (Distant) (Fig. 1H)

Distribution. Mexico, Cuba, Dominican Republic, Panama, Venezuela, Ecuador, Brazil, and Paraguay (Rolston & Mc Donald, 1981; Grazia et al., 2015). Argentina: Misiones and Salta (First country record of genus and species).

Material examined. Argentina: Misiones, P.P. Moconá, 27°09.185'S, 53°54.080'W, 342masl, 1-IV-2012, M.C. Melo col., 1 ♀ (MLP); Salta, San Lorenzo, 24°43.813'S, 65°29.696'W, 1450masl, 3-II-2016, T. Henry col., 1 ♀ (MLP).

Remarks. The monotypic genus *Grazia* Rolston superficially resembles *Piezodorus* Fieber but differs in having a weak mesosternal carina, in lacking a median projection on the posterior pygophoral surface and by the opening of the genital cup of normal size. The shape of the parameres and the asulcate, or very weakly sulcate tibiae distinguish *Grazia* from *Acrosternum* Fieber (Rolston & Mc Donald, 1981).

Kermana fucosa (Berg)

Distribution. Brazil, Uruguay, and Argentina: Buenos Aires, Catamarca, Chaco, Córdoba, Entre Ríos, La Rioja, Mendoza, Misiones, Salta, Santa Fe, Santiago del Estero, Tucumán (Berg, 1892; Pirán, 1963; Rolston & McDonald, 1981; *Grazia* & Schwertner, 2008; Dellapé G. et al., 2015), and Corrientes (new record).

Material examined. Argentina: Corrientes, Río Sta. Lucía, 28°20'15"S, 58°W, 8-XI-2000, M.C. Coscarón col., 1 ♀, 2 ♂ (MLP); Corrientes, Chavarría, 8-XI-2000, M.C. Coscarón col., 1 ♀ (MLP); Corrientes, 28°57'17"S, 58°34'4"W, 77masl, 8-XI-2000, M.C. Coscarón col., light trap, 1 ♂ (MLP).

Pallantia macunaima **Grazia**

Distribution. Brazil, Paraguay, and Argentina: Misiones (*Grazia*, 1980; Dellapé G. et al., 2015), and Jujuy (new record).

Material examined. Argentina: Jujuy, RP1, 1km Rd to Palma Solas, 12-II-2016, T. Henry col., 1 ♂ (MLP).

Pellaea stictica (Dallas)

Distribution. USA, Mexico, Honduras, Nicaragua, Costa Rica, Panama, Venezuela, Colombia, Ecuador, Guyana, Peru, Chile, Brazil, Paraguay, and Argentina: Jujuy, Salta, Misiones (Henry, 1984; Maes, 1994; Arizmendi & Thomas, 2003; *Grazia* & Schwertner, 2008; Faúndez & Rider, 2014; González et al., 2016), and Entre Ríos (new record).

Material examined. Argentina: Entre Ríos, Concordia, 12-IV-2019, L.J. Álvarez col., sobre Lapacho rosado, 1 ♀ (MLP).

Host plant. “pink ipê” *Handroanthus impetiginosus* (Mart. ex DC.) Standl. (Bignoniaceae) (new record).

Tribe Piezodorini

Piezodorus guildinii (Westwood)

Distribution. USA, Cuba, St. Vincent Is., Haiti, Jamaica, Mexico, Guatemala, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Brazil, Paraguay, Uruguay, and Argentina: Buenos Aires, Chaco, Córdoba, Corrientes, Entre Ríos, Jujuy, Misiones, Santa Fe (Quintanilla et al., 1975-76, 1981; Rizzo, 1976; Maes, 1994; Malaguido & Panizzi, 1998; *Grazia* & Schwertner, 2008; Dellapé G. et al., 2015), Catamarca, La Rioja, and Río Negro (new records).

Material examined. Argentina: Catamarca, 1 ♀ (MLP); Río Negro, Río Colorado, 38°58'S, 64°6.57'W, 20-III-2013, Coscarón, Diez, Pall & Quirán cols., 1 ♂ (MLP); La Rioja, Chilecito, IV-1919, 1 ♂ (MLP).

Remarks. In Argentina, *P. guildinii* affects the leaves of “safflower” *Carthamus tinctorius* L., “alfalfa” *Medicago sativa* L., and “common bean”

Phaseolus vulgaris L., and the spike of “wheat” *Triticum aestivum* L. This species also attacks flowers and fruits of “quinoa” *Chenopodium quinoa* Willd., fruits of “cotton” *Gossypium hirsutum* L. and “lentil” *Lens culinaris* Medikus, and flowers, fruits, leaves and seeds of “soybean” *Glycine max* L. (Rizzo, 1976; SINAVIMO, 2020).

Tribe Strachiini

Murgantia truncatulata Brailovsky & Barrera

Distribution. Bolivia and Argentina: Formosa, Chaco (Brailovsky & Barrera, 1989), Salta, and Jujuy (new records).

Material examined. Argentina: Salta, Pocitos, III-69, 1 ♀ (MLP); Jujuy: N Perico, RP11 and RN66, 24°22.479'S, 65°0.212'W, 877masl, 14-II-2016, G. & P. Dellapé cols., 5 ♀, 4 ♂ (MLP).

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