

DUGESIANA

Revista de Entomología



Julio 2017

Volumen 24

Número 2

Disponible en línea
<http://www.revistascientificas.udg.mx/index.php/DUG/index>



DEPARTAMENTO
DE BOTÁNICA Y
ZOOLOGÍA

Dugesiana, Año 24, No. 2, julio 2017- diciembre 2017 (segundo semestre de 2017), es una publicación Semestral, editada por la Universidad de Guadalajara, a través del Centro de Estudios en Zoología, por el Centro Universitario de Ciencias Biológicas y Agropecuarias. Camino Ramón Padilla Sánchez # 2100, Nextipac, Zapopan, Jalisco, Tel. 37771150 ext. 33218, <http://www.revistascientificas.udg.mx/index.php/DUG/index>, glenusmx@gmail.com. Editor responsable: José Luis Navarrete Heredia. Reserva de Derechos al Uso Exclusivo 04-2009-062310115100-203, ISSN: 2007-9133, otorgados por el Instituto Nacional del Derecho de Autor. Responsable de la última actualización de este número: José Luis Navarrete Heredia, Editor y Ana Laura González-Hernández, Asistente Editorial. Fecha de la última modificación 1 de julio de 2017, con un tiraje de un ejemplar.

Las opiniones expresadas por los autores no necesariamente reflejan la postura del editor de la publicación.

Queda estrictamente prohibida la reproducción total o parcial de los contenidos e imágenes de la publicación sin previa autorización de la Universidad de Guadalajara.

Miscellanea Miridologica IV. Taxonomy and chorology of new or little known taxa of Andean and Neotropical Regions (Heteroptera: Miridae)

Miscelánea Miridológica IV. Taxonomía y corología de nuevos o poco conocidos taxa de las Regiones Andina y Neotropical (Heteroptera: Miridae)

Frédéric Chérot^{1*} and Diego L. Carpintero²

¹Département de l'étude du milieu naturel et agricole, DGO3, Service Public de Wallonie, Av. Maréchal Juin, 23, BE-5030, Gembloix, Belgium, U.E., frédéric.cherot@spw.wallonie.be; ² División Entomología, Museo Argentino de Ciencias Naturales "Bernardino Rivadavia". Av. Ángel Gallardo 470 (1405), Ciudad Autónoma de Buenos Aires, Argentina, e-mail: dcarpint@macn.gov.ar. *Corresponding author.

ABSTRACT

Neogarganus brailovskyi n. gen., n. sp., is described as new genus and new species from Kaw Mountain, French Guyana and *Adnotholopus carapezzai* n. sp. is described as new species from Iquitos, Peru. The female genitalic structures of *Stenoparedra fallax* (Signoret, 1864), *S. scutellata* (Spinola, 1852) and *S. similaris* Carvalho and Dutra, 1961 are briefly described for the first time, the genus diagnosed and keyed, the habitus of both sexes of all included species are illustrated. An observation of necrophagy of *Stenoparedra* on honeybee is briefly discussed. Data on chorology of several species (with geographical coordinates of each new collection events) are also provided, including several new country records: *Anomalocornis tucuruensis* Carvalho, 1984 (French Guyana), *Calocorisca villosa* Distant, 1884 (Ecuador), *Dagbertus insignis* Carvalho, 1977 (Peru), *Eccritotarsus incaicus* Carvalho and Gomes, 1970b (Ecuador), *Fortunacoris castaneus* Carvalho, 1985 (Ecuador), *Garganus insularis* Carvalho and Becker, 1957 (Costa Rica), *Guianella pilosa* Maldonado and Carvalho, 1981 (Peru), *Laemocoridea dispersa* (Carvalho, 1944b) (French Guyana), *Notholopus columbianus* Carvalho, 1975 (Costa Rica and Peru), *N. coreoides* Carvalho, 1975 (Surinam), *Parafulvius amblytyloides* Carvalho, 1954 (French Guyana), *Phytocoris araucanus* Carvalho and Ferreira, 1969 (Argentina), *Polymerus chilensis* Carvalho and Gomes, 1969 (Argentina), *Preposisca frontosa* (Carvalho, 1987) (French Guyana), *Rhinacloa apicalis* (Reuter, 1905) (French Guyana), *R. clavicornis* (Reuter, 1905) (French Guyana), *R. pallidipes* Maldonado, 1969 (French Guyana), *Sericophanes ornatus* (Berg, 1878) (French Guyana), *Stenodema columbiensis* (Carvalho, 1985) (Ecuador), *Taedia compactina* Carvalho, 1975 (Peru) and *Tytthus parviceps* (Reuter, 1890) (French Guyana).

Key-words: Heteroptera, Miridae, distribution, new genus, new species, neotropics, necrophagy.

RESUMEN

Se describe a *Neogarganus brailovskyi* n. gen., n. esp., como un nuevo género y especie proveniente de las montañas Kaw en la Guayana Francesa, y a *Adnotholopus carapezzai* n. esp. como una nueva especie proveniente de Iquitos, Perú. Se describen por primera vez, brevemente, las estructuras genitales femeninas de *Stenoparedra fallax* (Signoret, 1864), *S. scutellata* (Spinola, 1852) y *S. similaris* Carvalho and Dutra, 1961, se ofrece una clave diagnóstica de las especies del género, y se ilustra el hábito de ambos sexos de todas las especies conocidas. Se discute brevemente una observación de necrofagia de *Stenoparedra* en abeja doméstica ó melífera. También datos sobre corología de varia especie, incluyendo varios nuevos registros de país: *Anomalocornis tucuruensis* Carvalho, 1984 (Guayana Francesa), *Calocorisca villosa* Distant, 1884 (Ecuador), *Dagbertus insignis* Carvalho, 1977 (Perú), *Eccritotarsus incaicus* Carvalho and Gomes, 1970b (Ecuador), *Fortunacoris castaneus* Carvalho, 1985 (Ecuador), *Garganus insularis* Carvalho and Becker, 1957 (Costa Rica), *Guianella pilosa* Maldonado and Carvalho, 1981 (Perú), *Laemocoridea dispersa* (Carvalho, 1944b) (Guayana Francesa), *Notholopus columbianus* Carvalho, 1975 (Costa Rica y Perú), *N. coreoides* Carvalho, 1975 (Surinam), *Parafulvius amblytyloides* Carvalho, 1954 (Guayana Francesa), *Phytocoris araucanus* Carvalho and Ferreira, 1969 (Argentina), *Polymerus chilensis* Carvalho and Gomes, 1969 (Argentina), *Preposisca frontosa* (Carvalho, 1987) (Guayana Francesa), *Rhinacloa apicalis* (Reuter, 1905) (Guayana Francesa), *R. clavicornis* (Reuter, 1905) (Guayana Francesa), *R. pallidipes* Maldonado, 1969 (Guayana Francesa), *Sericophanes ornatus* (Berg, 1878) (Guayana Francesa), *Stenodema columbiensis* (Carvalho, 1985) (Ecuador), *Taedia compactina* Carvalho, 1975 (Perú), and *Tytthus parviceps* (Reuter, 1890) (Guayana Francesa).

Palabras clave: Heteroptera, Miridae, distribución, nuevo género, nueva especie, neotrópico, necrofagia.

The recent study of several public and private collections of Miridae (Insecta, Heteroptera) from Central and South America provided taxonomic, biological and chorological data, including new country but also new locality records, on new or poorly known taxa, as detailed hereafter.

MATERIAL AND METHODS

The material used in this work comes mostly from the following collections: ACPI: private collection of Attilo Carapezza, Palermo, Italia; AMPF: private collection of Armand Matocq, Paris, France; ISBN: Institut royal des Sciences naturelles de Belgique, Brussels, Belgium; JGKP: private collection of Jacek Gorczyca, Katowice, Poland; JSMF: private collection of Jean-Claude Streito, Montpellier, France; MACN: Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos-Aires city, Argentina; MNHN: Museum national d’Histoire naturelle, Paris, France; NHM: Natural History Museum, London, United Kingdom (ex BMNH); NMPC: Department of Entomology, National Museum of Natural History, Praha, Czech Republic; USNM: United States National Museum, Washington D.C., United States of America.

In this work, the analyzed taxa are arranged in alphabetical order of their scientific names at each level (subfamily, tribe, genus and species) and the measurements are given in millimeters (mm).

The terminology of genitalic structures, when relevant, partially follows Slater (1950), Davis (1955), Kelton (1959), and Stonedahl (1988) as adapted and summarized by Carpintero and Chérot (2008). The habitus photos were taken with a Canon EOS 300, equipped with a Canon EF 100 mm macro lens. The photos showing morphological details were taken with a Moticam 10MP digital camera.

The geographical coordinates are given as provided on the labels or, if missing, as found in Google Earth or, failing that, in literature as specified in the text. The label data are summarized, a citation *in extenso* being frequently not relevant. Abdomens of some specimens of NMPC were removed and dissected before our analysis, preventing the documentation of their sex (in this case, the corresponding information is replaced by a “?”). The “FC n°” is Chérot’s unique identification number affixed to some of the examined specimens (some specimens from MACN and MNHN, examined in 2013 and 2007 respectively by the first author were not labelled).

RESULTS TAXONOMY

Bryocorinae Barenprung, 1860

Dicyphini Reuter, 1883 *sensu* Namyatova *et al.* 2015

Engytatus lacteus (Spinola, 1852)

Material examined. CHILE: 26♂♂, 38♀♀, 6 nymphs, Valparaíso Region, N(atural) P(ark) La Campana, Sector Ocoa, 0.25 km S(outh) of Park entrance (coordinates provided on label: 32°55.8'S, 71°55.1'W), in xerothermic

bush with *Jubaea* and cacti, sweeping of *Senecio adenotrichus*, 420 m., 19.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 6918-6987) (NMPC); 3♂♂, 3♀♀, Valparaíso Region, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh)-E(ast) of park entrance (coordinates provided on label: 32°56.8'-57.7'S, 71°3.2-4.8'W), 550-870 m., sweeping of trees, shrubs and herbs (*Helenium aromaticum*) in grazed *Acacia caven* bush and dry evergreen forest, 20.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 6997-7001, 7001b) (NMPC).

Discussion. New records. Species endemic to Chile (Carvalho 1959; Schuh 2002-2013).

Remark. Examined male genitalic structures, including branched process of pygophore ventral margin, perfectly conform to Carvalho and Becker (1958: 335, Figs. 4-8) drawings.

Eccritotarsini Berg, 1883 *sensu* Namyatova *et al.*, 2016

Eccritotarsus incaicus Carvalho and Gomes, 1970b

Material examined. ECUADOR: 1♀, 1?, Pichincha province, near Mindo (coordinates provided on label: 00°01'34"S, 78°45'34"W), 1740 m, 23.VI.2008, Maslov D. leg. (FC n°s 6427-6428) (NMPC).

Discussion. New species for Ecuador, described from Peru, Cuzco (Schuh 2002-2013).

Deraeocorinae Douglas and Scott, 1865

Hyalodini Carvalho and Drake, 1943

Antias chilensis Carvalho, 1946

Material examined. CHILE: 9♂♂, 3♀♀, Valparaíso Region, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh)-E(ast) of park entrance (coordinates provided on label: 32°56.8-57.7'S, 71°3.2-4.8'W), 870 m., sweeping of trees, shrubs and herbs (*Helenium aromaticum*) in grazed *Acacia caven* bush and dry evergreen forest, 20.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 7122-7133) (NMPC); 3♂♂, Valparaíso Region, N(atural) P(ark) La Campana, Sector Granizo, Sendero Los Peumos between 2^{do} puente and Mirador La Balmaceda (coordinates provided on label: 32°58.8'S, 71°6.9'W), 740 m., 21.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 7121, 7134-7135) (NMPC); 1♂, Valparaíso Region, N(atural) P(ark) La Campana, Sector Granizo, Sendero El Andista (coordinates provided on label: 32°57'40"S, 71°7'25"W), 1400-1500 m., *Nothofagus macrocarpa* zone, 22.XI.2013, Kment P. leg. (FC n° 7136) (NMPC); 1♂, Valparaíso Region, 2.8 km of Concon (coordinates provided on label: 32°53,8'S, 71°30,3'W), 0-10 m., deciduous *Nothofagus* forest, sweeping and beating of *Nothofagus macrocarpa* and other trees, 23.XI.2013, Fikáček, Kment and Vondráček leg. (FC n° 7120) (NMPC).

Discussion. New records. Species endemic to Chile (Carvalho 1959; Schuh 2002-2013).

Mirinae Hahn, 1833
Mirini Hahn, 1833

***Adnotholopus carapezzai* n. sp.**

Figs. 1, 3-15

<http://zoobank.org/7DEA284B-3ABE-44B9-89CE-FA74EE2D853E>

Description. Male: Measurements (range of three specimens, male holotype in parentheses): Total length (in lateral view): 7.35-7.85 (7.85), width of hemelytra (at level of clavus apex): 2.85-3.05 (3.05), width of vertex in dorsal view: 0.60-0.65 (0.60), width of eye: 0.35-0.38 (0.35), length of left antennal segments I: 1.35-1.50 (1.35), II: 3.40-3.75 (3.65), III: 1.25-missing (1.30), IV: missing (1.35), medial length of pronotum: 1.80-2.05 (2.05), maximum width of pronotum (at humeral angles): 2.55-2.85 (2.80), length of scutellum (mesoscutum excluded): 1.50-1.75 (1.75), anterior width of scutellum: 1.40-1.55 (1.50), length of cuneus: 2.10-2.30 (2.30), width of cuneus 0.60-0.70 (0.60).

External morphology and coloration: Head: Yellowish with reddish brown to black medial stripe running from apex of frons to posterior margin of vertex (Fig. 3), slightly wider posteriorly, forming elongate brown triangle at posterior margin and with a pair of narrower lateral stripes joining eyes. Frons swollen, slightly protruding, separated of clypeus by notch, yellowish, with black, semi-erect, stiff setae, laterally in ranks, obliquely striate, very narrowly and shallowly punctate. Clypeus yellowish, with same setae as on frons (Fig. 4). Vertex neither sulcate, nor marginate posteriorly, yellowish (Fig. 3), almost smooth, very narrowly and shallowly punctate. Maxillary and mandibular plates yellow with dorsal margin shiny black. Maxillary plates protruding, lateral parts visible in dorsal view. Eyes silvery, reddish on inner margins, contiguous with pronotal collar. First antennal segment elongate, wide, slightly curved, incrassate apically, reddish brown, covered with black, semi-erect, stiff setae. Second antennal segment narrower than first, reddish brown in basal half, black apically, with same kind of setae. Third and fourth segments narrower than second, yellowish to orange basally, black apically, setae shorter, white, mainly semi-erect, base of third segment very narrow. Labium short, reaching at most mesocoxae, yellowish basally, reddish brown apically, tip black. Pronotum: Pronotal collar wide, almost smooth, yellowish, with a pair of median black stripes separated by a yellow to orange line, a pair of lateral black stripes and numerous semi-erect to erect, stiff, black setae. Pronotal callosities rounded, medially totally separated and separated of pronotal lateral margins, yellowish tinged with grey, with the same pilosity as on collar. Area between callosities yellow to orange, black stripes present and curved. Pronotal disc smooth (Fig. 6), yellowish basally to greenish-grey apically with a pair of black stripes paramedially, extending stripes of collar and two pairs of fuzzy brown stripes laterally, lateral margins

black, posterior margin yellow, yellow margin limited by transversal fuzzy brown area (Fig. 6). Setae semi-erect to erect, stiff, black, with narrow and shallow puncture at base. Mesoscutum: Exposed (Fig. 7), brownish with yellowish areas, median black stripes separated by yellow to orange line. Scutellum: With same pilosity as pronotal disc, yellow and black, black pattern W-shaped (Fig. 7), apex and two lateral areas yellow. Legs: Coxae and trochanters yellow. Femora yellow (Fig. 8), pilosity elongate, whitish. Tibiae yellowish, apex reddish. Tarsi blackish, first segment basally yellow, claws reddish. Hemelytra (Fig. 9) dark brown with yellow to orange, slightly callose spots, and numerous, recumbent to semi-erect, relatively stiff, short, black setae (silvery under incident light), with narrow and shallow puncture at base, giving a rugose aspect to hemelytra. Claval suture reddish. Inner margin of endocorium and paracuneus reddish. Cuneus elongate, inner margin strongly curved, red, surface dark brown with several yellow spots, largest at inner angle, against paracuneus. Membrane brown with four yellowish to whitish spots and red veins (Fig. 10). Posterior angle of transversal vein acute. Abdomen: Pleura and sterna yellow, each segment with wide, red to black spot and elongate, semi-erect, white setae. Ostiolar peritreme wide (Fig. 5).

Genitalic structures: Left paramere (Fig. 11): Sickle-shaped, with elongate arm and slightly curved primary aphophysis (or shaft), sensory lobe wide, body pilose. Right paramere (Fig. 12): Stout, pilose, with apical concavity. Endophallus: With elongate, narrow spicule-like apical process slightly separated of curved basal process (Fig. 13). Secondary gonopore wide.

Female: Measurements (range of two specimens): Total length (in lateral view): 7.85-8.00, width of hemelytra (at level of clavus apex): 3.10-3.20, width of vertex in dorsal view: 0.65-0.70, width of eye: 0.35-0.40, length of left antennal segments I: 1.45-1.50, II: 3.35-3.65, III: 1.15-missing, IV: missing, medial length of pronotum: 2.05-2.05, maximum width of pronotum (at humeral angles): 2.90-2.90, length of scutellum (mesoscutum excluded): 1.65-1.70, anterior width of scutellum: 1.55-1.60, length of cuneus: 2.10-2.25, width of cuneus 0.75-0.85.

External morphology and coloration: Similar to male, slightly larger.

Genitalic structures: Parieto-vaginal rings (Fig. 14): Wide, almost contiguous. Posterior wall (Fig. 15): With large inter-ramal sclerites (or A-structures), elongate inter-ramal lobes (or E-structures). Lateral lobes (H-structures) absent. Sigmoid process (or median process) separated from dorsal structure, subdivided in two parts. Dorsal structure complex.

Material examined. PERU: Holotype (♂), Loreto, Iquitos, Sinchicuy River (no coordinates on the label, impossible to find via Google Earth), 02-03.XII.1994, Klicha M. leg. (FC n° 7260) (NHM, ex ACPI); paratypes (2♂♂, 2♀♀), same data than holotype (FC n°s 7261-7265) (ACPI).

Other material examined for comparison. *Adnotholopus peruanus* Carvalho, 1990b: **Peru:** Holotype (δ), Loreto, N(orth of) Napo, Exploronapo Camp, 12-19.III.1988, Eger J. E. leg. (FC n° NE41) (USNM).

Etymology. The new species is dedicated to A. Carapezza (Palermo) in recognition for his important contributions to Mediterranean Miridae, especially Tunisian and Turkish Orthotylinae and Phylinae.

Distribution. Peru, Loreto.

Discussion. *Adnotholopus carapezzai* n. sp. perfectly conforms to Carvalho's (1990b) original description of *Adnotholopus* Carvalho, 1990b but can easily be separated from *A. peruanus* Carvalho, 1990b, type species and only other species presently classified in the genus, by the dorsal coloration (compare the Figs. 1 and 2) and male genitalic structures. Head and pronotum of *A. peruanus* are almost unicolorous clear brown, devoid of black stripes, clavus and corium (but embolium) are unicolorous orange, the embolium and cuneus are reddish, the yellowish callose spots being always absent (Fig. 2). Male genitalic structures of both species are structurally similar, differing mainly by the shape of phallic sclerite almost straight in *A. peruanus*, obviously curved in the new species.

Calocorisca altiplana Carvalho, 1986

Material examined. ECUADOR: 2♀♀, Pichincha province, near Mindo (coordinates provided on label: 00°01'34"S, 78°45'34"W), 1740 m, 23.VI.2008, Maslov D. leg. (FC n° 6372) (NMPC).

Discussion. New records. Species described from Ecuador and Peru, at present exclusively known from these countries (Schuh 2002-2013).

Calocorisca villosa Distant, 1884

Material examined. ECUADOR: 1♀, Nanegalito to Quito track (coordinates provided on label: 00°01'13,9"S, 78°40'47,1"W), 2330 m, 17.I.2001, Porco D. and Rougerie R. leg. (FC n° 5770) (AMPF).

Discussion. New species for Ecuador, described from Costa Rica, Guatemala and Panama, also known from Nicaragua and Venezuela (Carvalho 1959; Schuh 2002-2013).

Chileaia uretai Carvalho, 1944a

Material examined. CHILE: 1♂ (?), Region IX, T(e)rm(as) de Tolhuaca (coordinates provided on label: 38°14'162, 71°44'027), 900 m, 12-14.II.2005, Bily S. V. leg. (FC n° 6887) (NMPC); 1♀, Valparaiso Region, N(atural) P(ark) La Campana, Sector Granizo, Sendero El Andista (coordinates provided on label: 32°57'40"S, 71°7'25"W), 1400-1500 m, *Nothofagus macrocarpa* zone, deciduous *Nothofagus* forest, sweeping and beating of *Nothofagus macrocarpa* and other trees, 22.XI.2013, Kment P. leg. (FC n° 6906) (NMPC); 1♂, Valparaiso Region, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh)-E(ast) of park entrance (coordinates provided on label: 32°56.8-

57.7"S, 71°3'2-4.8'W), 550-870 m, sweeping of trees, shrubs and herbs (*Helenium aromaticum*) in grazed *Acacia caven* (= *Vachellia caven*) bush and dry evergreen forest, 20.XI.2013, Fikáček, Kment and Vondráček leg. (FC n° 6917) (NMPC).

Discussion. New records. Species described from Chile, also known from Argentina (Neuquén on *Anthemis* sp.; Carvalho and Carpintero 1993) and Peru (Carvalho 1959; Carvalho and Ferreira 1972; Schuh 2002-2013).

Dagbertus insignis Carvalho, 1977

Material examined. PERU: 1♂, 1♀, Cuzco, Malvinas, Base PlusPetrol (no coordinate on the label, approximate coordinates available via Google Earth for Malvinas: 11°50'25"S, 72°56'47"W), at light, II.2006, Williams J. leg. (without FC n°) (MACN); 1♂, 4♀♀, Cuzco, Nuevo Mundo, Base PlusPetrol (coordinates provided on label: 11°33'02"S, 73°08'30"W), at light, VII.2004, Williams J. leg. (without FC n°s) (MACN); 1♀, Cuzco, Pagoreni (coordinates provided on label: 11°42'22"S, 72°54'07"W), at light, VII.2004, Williams J. leg. (FC n°s 7506-7507) (MACN).

Discussion. New species for Peru, described from Brazil, also known from Argentina (Carvalho 1977), French Guyana and Surinam (Costa, Chérot and Carpintero 2008).

Fortunacoris castaneus Carvalho, 1985b

Material examined. ECUADOR: 1♀, Pichincha province, near Mindo (coordinates provided on label: 00°01'34"S, 78°45'34"W), 1740 m, 23.VI.2008, Maslov D. leg. (FC n° 6372) (NMPC).

Discussion. New species for Ecuador, described and known exclusively until now from Panama (Schuh 2002-2013).

Garganisca itatiaiensis Carvalho, 1990a

Material examined. BRAZIL: 1♀, Rio de Janeiro, Visconde de Maua (coordinates provided on label: 22°18'45"S, 44°35'34"W), 1111 m, 16.III.2015, Votypka J. leg., sweeping of ruderal vegetation (FC n° 6888) (NMPC).

Discussion. New record. Species described and exclusively known until now from Brazil (Schuh, 2002-2013).

Garganus insularis Carvalho and Becker, 1957

Material examined. COSTA RICA: 1♀, Guanacaste, 16 km E(ast) of La Cruz, Hacienda Los Inocentes (no coordinate on the label, coordinates obtained via Google Earth leaving from La Cruz: 10°15'N, 85°26'E), 25.VI.2003 (FC n° 6873) (NMPC).

Discussion. New species for Costa Rica. Species described and exclusively known until now from Brazil (Schuh 2002-2013).

Garganus saltensis (Berg, 1892)

Material examined. ARGENTINA: 3♂♂, Salta, Gran Chaco, Salada river (= Río Salado del Norte), South of Macapillo (no coordinate on the label, approximate coordinates not available via Google Earth, coordinates for Macapillo, in Anta Department: 25°22'00"S, 64°01'00"W), 20.I.2009, Snižek M. leg. (FC n°s 7546, 7548-7549) (ISNB).

Discussion. New records. Described from Argentina, also known from Bolivia and Brazil (Carvalho 1959; Schuh 2002-2013).

Guianella pilosa Maldonado-Capriles and Carvalho, 1981

Material examined. PERU: 1♂, 1♀, Cuzco, Pagoreni (coordinates provided on label: 11°42'22"S, 72°54'07"W), at light, VII.2004, Williams J. leg. (FC n°s 7506-7507) (MACN).

Discussion. New species for Peru, described from Panama, subsequently cited from Bolivia (under the junior subjective synonym *Boliviomiris antennalis* Carvalho, 1987) and from Brazil (under the junior subjective synonym *Pilosicerus rondoniensis* Carvalho, 1992) (for these synonymies, see Chérot *et al.* 2011).

Horciasinus argentinus (Berg, 1878)

Material examined. BRAZIL: 4♀♀, Rio de Janeiro, Visconde de Maua (coordinates provided on label: 22°18'45"S, 44°35'34"W), 1111 m, sweeping ruderal vegetation, 16.III.2015, Votypka J. leg. (FC n°s 6876-6879) (NMPC).

Discussion. New records. Species described from Argentina (Berg, 1878), also known from Bolivia, Brazil and Uruguay (Schuh 2002-2013).

Horciasinus neotropicalis Carvalho and Carpintero, 1992

Material examined. PERU: 5♂♂, 2♀♀, 1?, Ucayali, Kirigueti (coordinates provided on label: 11°38'13"S, 73°07'08"W), at light, VII.2004, Williams J. leg. (FC n°s 7511-7513 and without FC n°s) (MACN); 2♂♂, Cuzco, Nuevo Mundo, Base PlusPetrol (coordinates provided on label: 11°33'02"S, 73°08'30"W), at light, VII.2004, Williams J. leg. (without FC n°s) (MACN).

Discussion. New records. Species described from Brazil (Chavantina, Mato Grosso), subsequently cited from Peru by Carvalho and Jurberg (1976) under the combination *Horciasinus tucumanus* (Berg, 1883) (misidentification; the *nomen novum* for this taxon published by Carvalho and Carpintero 1992).

Remark. Examined male genitalic structures conform to Carvalho and Jurberg (1976: 826, Figs. 37-40) drawings of *Horciasinus tucumanus* sensu Carvalho and Jurberg (1976) *nec* Berg (1883).

Horciasinus signoreti (Stål, 1859)

Material examined. BRAZIL: 1♂, 1♀, Rio de Janeiro, Angra dos Reis (coordinates provided on label: 22°57'25"S, 44°16'34"W), 10 m., sweeping ruderal vegetation, 18.III.2015, Votypka J. leg. (FC n°s 6881-6882) (NMPC); 1♀, Rio de Janeiro, Visconde de Maua (coordinates provided on label: 22°18'45"S, 44°35'34"W), 1111 m, sweeping ruderal vegetation, 16.III.2015, Votypka J. leg. (FC n° 6883) (NMPC); FRENCH GUYANA: 1♂, neighborhood of Cayenne, Montsinéry Monts (no coordinate on the label, approximate coordinates obtained via Google Earth for Montsinéry: 4°52'53"N, 52°29'26"W), II.1902, Geay F. leg. (without FC n°) (MNHN); 1♀, Oyac-Conti-Cacao reach (no coordinate on the label, coordinates not determinable via Google Earth), IX-X.1914, Benoit R. leg. (without FC n°) (MNHN); 1♂, Roura (no coordinate on the label, approximate coordinates obtained via Google Earth for Roura: 4°43'42"N, 52°19'31"W), U.V. light, 15.ix.1979, Rémy leg. (without FC n°) (MNHN, ex ORSTOM).

Discussion. New records. Species widely distributed in South America (Schuh 2002-2013).

Neogarganus n. gen.

<http://zoobank.org/C20105EA-4B63-47C2-A76A-F162E21BADE8>

Description. Middle-sized, elongate, relatively narrow Mirini, with rugose, almost unpunctate pronotal disk bearing numerous elongate, semi-erect to erect, white setae, as head, scutellum and hemelytra. Vertex nor sulcate, neither marginate posteriorly, smooth. Maxillary plates elongate, subdivided in two contrasted parts. Second antennal segment slightly incrassate apically. Labium short, reaching between meso- and metacoxae. Pronotal collar wide, wider than the first antennal segment. Mesoscutum covered. Scutellum rugulose, almost flat. Hemelytra opaque, rugulose, with shallow but relatively wide punctures.

Type-species. *Neogarganus brailovskyi* n. sp.

Neogarganus brailovskyi n. sp.

Figs. 16-29

<http://zoobank.org/849F726B-6BC8-486A-8D3A-519539ADC863>

Description: Male. Measurements (range of n specimens, male holotype in parentheses): Total length (in lateral view): 4.80-5.75 (5.40) (n = 7), maximal width of hemelytra: 1.60-2.00 (1.90) (n = 5), minimal width of vertex between eyes: 0.35-0.43 (0.38) (n = 7), width of eye: 0.28-0.33 (0.33) (n = 7), length of right antennal segments I: 0.63-0.73 (0.73) (n = 7), II: 1.45-1.60 (1.55) (n = 7), III: 0.73-0.85 (0.80) (n = 6), IV: 0.88-1.05 (0.93) (n = 3), maximal width of first antennal segment: 0.10-0.11 (0.11) (n = 7), medial length of pronotum (including collar): 0.93-1.24 (1.24) (n = 7), length of collar in middle: 0.14-0.18 (0.18) (n = 7), maximum width of pronotum (at humeral angles): 1.60-1.78 (1.75) (n = 7), length of scutellum: 0.93-1.03 (1.00) (n = 7), anterior width of scutellum: 0.78-0.85

(0.80) (n = 7), length of cuneus: about 0.68-0.85 (0.80) (n = 7), width of cuneus: 0.28-0.38 (0.38) (n = 7).

External morphology and coloration: Head: Dark brown to black (Figs. 17-19) with elongate, semi-erect white setae. Frons not protruding, slightly separated of clypeus by small notch, black except brown middle, with numerous semi-erect, white setae, surface almost smooth, very narrowly and shallowly punctate and obliquely striate. Clypeus dark brown to black, almost glabrous. Vertex neither sulcate, nor marginate posteriorly, black except middle of posterior margin brown (Fig. 17), almost smooth, very narrowly and shallowly punctate, with numerous, elongate, semi-erect white setae. Maxillary and mandibular plates shiny dark brown almost black, ventral margins narrowly brownish. Elongate maxillary plates subdivided in two parts, posterior part ivory whitish (Fig. 18). Buccula black. Eyes silvery, brownish on outer, posterior and inner margins, contiguous with pronotal collar. Antennal sockets yellow. First antennal segment thick, slightly curved, incrassate apically, with brown, semi-erect, relatively short and very narrow setae; segment yellowish basally, brownish apically and yellow brown with very small red spots medially, with reddish brown to black ring or patch in basal third (Fig. 17). Second antennal segment narrower than first, slightly incrassate apically, brown, with similar setae. Third and fourth segments narrower than second, third yellow with reddish tinge basally, brown apically, fourth yellow basally, brown apically. Labium short, reaching between meso- and metacoxae, yellowish, apex brownish. Pronotum (Fig. 20): Pronotal collar wide, wider than first antennal segment, almost smooth, punctuation very narrow and shallow, surface brown with medial yellowish stripe and numerous elongate, semi-erect to erect, stiff, setae. Pronotal callosities elongate, slightly separated in middle and separated of pronotal lateral margins, yellow, almost glabrous, smooth. Area between pronotal callosities yellow. Area between pronotal callosities and pronotal ring brown, with narrow and shallow punctures and three medial, callose ivory white spots. Propleura dark brown to black, with four callose ivory white relatively wide stripes, most inner easily visible in dorsal view. Pronotal disk rugose, with relatively wide but shallow punctures and elongate, semi-erect to erect, white setae, medially and along posterior margin from humeral angles to middle yellowish, brown laterally. Three small callose ivory white spots present medially, behind pronotal callosities. Mesoscutum: Almost totally covered. Scutellum: With same pilosity as pronotal disc, rugose, yellow and black, tip yellow (Fig. 21). Legs: Coxae and trochanters yellowish. Femora yellow with red brown spots, pilosity semi-erect, relatively elongate, yellow. Tibiae yellowish, with yellow brown patches and yellow spines (Fig. 22). Tarsi yellow, claws reddish. Hemelytra (Fig. 23): Dark brown to black, exocorium and base of endocorium brown, with numerous semi-erect, elongate, white setae (silvery under incident light) and relatively wide but shallow punctures, giving

a rugose aspect to hemelytra. Inner margin of cuneus and paracuneus dark brown. Cuneus yellowish brown. Membrane brown, veins dark brown (Fig. 24). Abdomen: Pleura and sterna yellow with reddish brown stripes and patches and elongate, semi-erect, white setae.

Genitalic structures: Left paramere (Fig. 25): Sickle-shaped, with an elongate arm and slightly curved primary aphophysis (shaft), sensory and tertiary lobes wide, body pilose. Right paramere (Fig. 26): Stout, pilose, with wide primary apophysis (shaft). Endophallus (Fig. 27): With an elongate spiculum.

Female. Measurements (range of n specimens): Total length (in lateral view): 5.30-5.75 (n = 3), maximal width of hemelytra: 2.08-2.28 (n = 3), minimal width of vertex between eyes: 0.40-0.45 (n = 3), width of eye: 0.25-0.33 (n = 3), length of right antennal segments I: 0.73-0.75 (n = 3), II: 1.70-1.75 (n = 3), III: 0.88-0.95 (n = 3), IV: 1.01 (n = 1), maximal width of first antennal segment: 0.11 (n = 3), medial length of pronotum (including collar): 1.13-1.20 (n = 3), length of collar in middle: 0.15-0.16 (n = 3), maximum width of pronotum (at humeral angles): 1.79-1.89 (n = 3), length of scutellum: 0.90-1.03 (n = 3), anterior width of scutellum: 0.85-0.98 (n = 3), length of cuneus: about 0.80-0.86 (n = 3), width of cuneus: 0.38-0.43 (n = 3).

External morphology and coloration: Similar to male, slightly wider, some specimens also more contrasting, with orange tinge.

Genitalic structures: Anterior sac or seminal depository wide, with pair of glandular rings. Parieto-vaginal rings (Fig. 28): Wide, obviously separated, anterior and posterior margins almost straight to slightly sigmoid, latero-outer margins convex, latero-inner margin acute. Dorsal wall membranous. Posterior wall (Fig. 29): With large interramal sclerites (or A-structures) and elongate, narrow sigmoid process (or median process). Lateral lobes (H-structures) absent.

Material examined. FRENCH GUYANA: Holotype (♂), Kaw, P.K. 37.5, malaise trap, 30.VII.-14.IX.2000, *Cerda J. leg.* (FC n° 6196) (MNHN); paratypes, 1♂, same data than the holotype (FC n° 6197) (AMPF); 1♀, Kaw, P.K. 37.5, malaise trap, II.2001, *Cerda J. leg.* (FC n° 6198) (AMPF); 1♂, Kaw, P.K. 37.5, malaise trap, 03.XII.2001, *Cerda J. leg.* (FC n° 6201) (AMPF); 1♂, 1♀, Kaw, P.K. 37.5, malaise trap, I.2002, *Cerda J. leg.* (FC n°s 6202-6203) (AMPF) (no coordinate on the labels, according to Costa, Chérot and Carpintero, 2008, this place lies in Kaw Mountain, along Departmental number 6 to Patawa – at 37.5 km –, approximately at the following coordinates: 04°32'40"N, 52°09'09"W); 1♂, Patawa, malaise trap, 06.I.2002, *Cerda J. leg.* (FC n° 6203a) (AMPF); 1♀, Patawa, P.K. 35, 28.VIII.2002, *Cerda J. leg.* (FC n° 6203a) (AMPF); 2♂♂, Patawa, P.K. 35, 10.XII.2002, *Cerda J. leg.* (FC n°s 6199-6200) (AMPF) (no coordinate on the labels, according to Costa, Chérot and Carpintero, 2008, this place lies in Kaw Mountain, along Departmental number 6 to Patawa – at 35 km –, approximately at the following

coordinates: 04°29'03"N, 52°01'36"W).

Etymology. The new species is dedicated to our esteemed colleague Harry A. Brailovsky for his major contribution to our knowledge of Coreidae, mainly but not exclusively from New World.

Distribution. French Guyana, Kaw Mountains.

Discussion. Among the Andean and Neotropical Mirini with rugose pronotal disk (surface not distinctly punctate, punctures shallow and narrow), vertex unsulcate, second antennal segment slightly incrassate apically and protibia cylindrical (not foliaceous), *Neogarganus brailovsky* n. gen., n. sp. differs from the other genera and species by elongate body shape, subdivided maxillary plates, short first antennal segment relatively to head width, male and female genital structures and dorsal pilosity, particularly the elongate, semi-erect to erect, white setae of the pronotal disk. Elongate body shape of *Garganus* Stål, 1862 is similar to those of *Neogarganus* n. gen., however both genera are easily separated by the dorsal pilosity of pronotal disk (shorter and not erect in *Garganus*), length of first antennal segment (longer in *Garganus*, frequently longer than head width) and genitalic structures of both sexes. *Notholopus* Bergroth, 1922 and *Iridopeplus* Bergroth, 1910 are larger bugs (longer and wider, their total length respectively between 6.0-8.5 mm and between 9-10 mm), *Liliancoris* Carvalho, 1989 and *Horciasinus* Carvalho and Jurburg, 1974 being rounded, the four genera having different dorsal pilosity or being glabrous. Relationships of *Neogarganus* n. gen. in the tribe Mirini require clarification.

Neurocolpus mexicanus Distant, 1883

Material examined. COSTA RICA: 1?, *Guanacaste*, 15 km S(outh) E(ast) of Tilaran (coordinates provided on label: 10°27'N, 84°54'W), 20.I.2007 (FC n°6874) (NMPC).

Discussion. New record. Widespread species in the New World, from Southern United States to Venezuela (Schuh 2002-2013).

Notholopus columbianus Carvalho, 1975c

Material examined. COSTA RICA: 1♂, *Puntarenas*, near P(ark) N(ational) Carara, Tarcoles (coordinates provided on label: 09°45'24"N, 84°36'42"W), 12.I.2007, D. M. leg. (FC n° 6884) (NMPC); PERU: 1♀, *Cuzco*, Cashiari (no coordinate on the label, coordinates not determinable via Google Earth, approximate coordinates available in da Silva, 2007: 11°52' S, 72°39'W), at light, 04-22.VII.2005, Williams J. leg. (FC n° 7524) (MACN).

Discussion. New species for Costa Rica and Peru, described and known until now exclusively from Colombia (Schuh 2002-2013).

Remark. Examined male genitalic structures of Costa Rican specimen conform to Carvalho (1975c: 370, 372, Figs. 1-3 and 32) drawings.

Notholopus coreoides Carvalho, 1975c

Material examined. FRENCH GUYANA: 1♀, Antécumépata (=Antécum Pata), Saut Kialo (no coordinate on the label, coordinates available in Costa, Chérot and Carpintero, 2008: 3°17'18"N, 54°04'14"W), 22.XI.1975, *Boulard M.*, *Jauffret, P.* and *Pompanon, P.* leg. (without FC n°) (MNHN); 1♂, Artayé (=crique Artaï) region, Saut Pararé (no coordinate on the label, approximate coordinates obtained via Google Earth: 4°1'28"N, 52°41'21"W), 17.II-06.III.1981, *M. and Ch. Boulard* leg. (without FC n°) (MNHN); 1♀, Massikiri island, Oyapock river (no coordinate on the label, coordinates available in Costa, Chérot and Carpintero, 2008: 2°59'37"N, 52°21'54"W), 17.XI.1969, light trap, *Balachowsky and Gruner* leg. (without FC n°) (MNHN); PERU: 2♂♂, 2♀♀, *Cuzco*, Nuevo Mundo, Base PlusPetrol (coordinates provided on label: 11°33'02"S, 73°08'30"W), at light, VII.2004, *Williams J.* leg. (without FC n°s) (MACN); 1♂, *Cuzco*, Pagoreni (coordinates provided on label: 11°42'22"S, 72°54'07"W), at light, VII.2004, *Williams J.* leg. (without FC n°s) (MACN); SURINAM: 1♀, 1?, Moloko-Iméné (no coordinate on the label, approximate coordinates: 3°37'56"N, 55°49'55"W), 28.XI-01.XII.1975, *Boulard M.*, *Jauffret, P.* and *Pompanon, P.* leg. (without FC n°) (MNHN).

Discussion. New species for Surinam, described from Brazil (Mato Grosso), also known from Peru (Carvalho and Afonso 1977) and French Guyana (Costa, Chérot and Carpintero 2008).

Notholopus cuiabanus Carvalho, 1975c

Material examined. PERU: 1♂, 2♀♀, *Cuzco*, Nuevo Mundo, Base PlusPetrol (coordinates provided on label: 11°33'02"S, 73°08'30"W), at light, VII.2004, *Williams J.* leg. (without FC n° s) (MACN).

Discussion. New records. Species described from Brazil (Mato Grosso), known from Peru (Carvalho and Afonso 1977) and French Guyana (Costa, Chérot and Carpintero 2008).

Notholopus sertanejus Carvalho, 1975c

Material examined. PERU: 1♂, *Cuzco*, Cashiari (no coordinate on the label, coordinates not determinable via Google Earth, approximate coordinates available in da Silva, 2007: 11°52' S, 72°39'W), at light, 22.VII.2005, *Williams J.* leg. (FC n° 7523) (MACN).

Discussion. New record. Species described from Brazil, also known from Peru (Carvalho and Afonso 1977; Schuh 2002-2013).

Remark. Examined male genitalic structures conform to Carvalho (1975c: 376, Figs. 19-23) drawings.

Phytocoris araucanus Carvalho and Ferreira, 1969

Material examined. ARGENTINA: 1♂, (Paraje) Pucará N(acional) P(arque) Lanín, 1961 (40°09'41,56"S, 71°38'09,06"W) (without collector's data) (MACN);

CHILE: 1♂, *Region VIII*, 75 km South East of Villarica, 30 km North of Neltume (no coordinate on the label, coordinates obtained via Google Earth leaving from Neltume: 39°34'S, 71°56'W), 20.I.2004, *Halada M.* leg. (FC n° 7308) (ACPI).

Discussion. New species for Argentina, originally described from Chilean Patagonia (Schuh 2002-2013), collected in Chile on *Lomatia dentata* (Ruiz and Pav.) R.Br. (Proteaceae), *Myrceugenia* sp. (Myrtaceae), *Nothofagus antarctica* (G.Forst.) Oerst., 1871 and *N. dombeyi* (Mirb.) Blume, 1851 (Nothofagaceae) (J. E. Barriga Tuñón coll. and pers. comm. to the second author).

Remark. Examined male genitalic structures of Chilean specimen conform to Carvalho and Ferreira (1969: 604, Figs. 7-9) drawings.

Phytocoris cylapinus Carvalho and Gomes, 1970a

Material examined. ARGENTINA: 4♂♂, Salta, Gran Chaco, Salada River (= Río Salado del Norte), South of Macapillo (no coordinate on the label, approximate coordinates not available via Google Earth, coordinates for Macapillo, in Anta Department: 25°22'00"S, 64°01'00"W), 20.I.2009, Snižek M. leg. (FC n°s 7779-7782) (ISNB); 3♂♂, Buenos Aires, Verónica (Partido de Punta Indio) (35°21'59.38"S, 57°20'12.17"W), XII.1998, at light, Carpintero leg. (MACN); 2♂♂, same locality, II.1999, at light, Carpintero leg. (MACN); 1♂, Buenos Aires, Quilmes (34°44'27.06"S, 58°17'07.36"W) 1.II.2002, at light, Carpintero leg. (MACN); Misiones, 1♂, Puerto Iguazú (25°35'S, 54°34'W), III.2004, at light, CDC trap (MACN).

Discussion. New records. Species described from Paraguay and Argentina (Carvalho and Gomes 1970a), also known from Brazil and Colombia (Schuh 2002-2013).

Remark. Examined male genitalic structures conform to Carvalho and Gomes (1970a: 124, Fig. 21) drawings of endophallic structures.

Phytocoris marmoratus Blanchard, 1852

Material examined. CHILE: 2♂♂, 1♀, Isla of Chiloe, West of Castro (coordinates provided on label: 42°20'S, 73°48'W), 200 m, 09.II.2005, *Halada M.* leg. (FC n°s 7271, 7272, 7278) (ACPI); 1♀, Isla de Chiloe, S(outh)-W(est) of Castro (coordinates provided on label: 42°59'S, 73°45'W), 07.II.2005, *Halada M.* leg. (FC n° 7269) (ACPI); 2♂♂, 5♀♀, *Region X* (Los Lagos), 15 km West of Pargua (coordinates provided on label: 41°45.7'S, 73°33'W), 02.II.2005, *Halada M.* leg. (FC n°s 7281-7282, 7284, 7285, 7287, 7306-7307) (ACPI); 1♂, *Region X* (Los Lagos), 30 km East of Lago Rancho (no coordinate on the label, approximate coordinates obtained via Google Earth 40°12'S, 71°58' W), 01.II.2004, *Halada M.* leg. (FC n° 7309) (ACPI); 1?, *Region X* (Los Lagos), 50 km S(outh)-W(est) of Los Muemos (coordinates provided on label: 41°30.0'S, 73°35.7'W), 150 m, 30.I.2005, *Halada M.* leg. (FC n° 7310) (ACPI).

Discussion. New records. Described from Chile (Carvalho 1959; Schuh 2002-2013), the species is also known from Argentina (Carpintero and Carvalho 1993).

Remark. Examined male genitalic structures conform to Carvalho and Ferreira (1969: 610, Figs. 22-24) drawings.

Phytocoris obsoletus Blanchard, 1852

Material examined. CHILE: 4♂♂, Isla of Chiloe, S(outh)-W(est) of Castro (coordinates provided on label: 42°59'S, 73°45'W), 200 m, 07.II.2005, *Halada M.* leg. (FC n°s 7267, 7270, 7273-7274) (ACPI); 1♂, Isla of Chiloe, West of Castro (coordinates provided on label: 42°20'S, 73°48'W), 200 m, 09.II.2005, *Halada M.* leg. (FC n° 7268) (ACPI); 1♂, 3♀♀, *Region X* (Los Lagos), 15 km West of Pargua (coordinates provided on label: 41°45.7'S, 73°33'W), 50 m., 02.II.2005, *Halada M.* leg. (FC n°s 7279, 7280, 7283, 7286) (ACPI); 3♂♂, *Region X* (Los Lagos), 30 km East of Lago Ranco (no coordinates on the label, approximate coordinates available via Google Earth 40°12'S, 71°58' W), 01.II.2004, *Halada M.* leg. (FC n°s 7290-7292) (ACPI); 2♂♂, Valparaíso Region, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh)-E(ast) of park entrance (coordinates provided on label: 32°56.8-57.7'S, 71°3'2-4.8'W), 550-870 m, 20.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 6988-6989) (NMPC); 2♂♂, Valparaíso Region, N(atural) P(ark) La Campana, Sector Granizo, Sendero Los Peumos between 2^{do} puente and Mirador La Balmaceda (coordinates provided on label: 32°58.8'S, 71°6.9'W), evergreen forest, sweeping of fruiting trees of *Schinus latifolius* (Gill. ex Lindl.) Engler (Anacardiaceae), 21.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 6990-6991) (NMPC).

Discussion. New records. Species described from Chile (Carvalho 1959; Schuh 2002-2013), cited from Chiloe Island by Carvalho and Ferreira (1969), also known from Argentina (Carpintero 1999).

Remark. Examined male genitalic structures conform to Carvalho and Ferreira (1969: 612, Figs. 27-29) drawings.

Phytocoris rionegrensis Carpintero and Chérot, 2008

Material examined. ARGENTINA: 6♂♂, 2♀♀, Catamarca, West of Salinas Grandes, 30 km East of La Guardia (no coordinate on the label, approximate coordinates available via Google Earth leaving from La Guardia: 29°33'S, 65°08'W), 28-29.XI.1989, Zabransky P. leg. (FC n°s 7293-7300) (ACPI).

Discussion. New record. Species recently described from Argentina, until now known exclusively from this country (Carpintero and Chérot 2008).

Remark. Examined genitalic structures conform to Carpintero and Chérot (2008: 254, Figs. 58-64) drawings.

Polymerus chilensis Carvalho and Gomes, 1969

Material examined. ARGENTINA: 1♂, 4♀♀, Neuquén; Cuyín Manzano, Parque Nacional Nahuel Huapi (40°44'01.87"S, 71°09'13.81"W), XII.2010, Carpintero

leg. (MACN); CHILE: 4♂♂, 1♀, Valparaiso Region, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh)-E(ast) of park entrance (coordinates provided on label: 32°56.8'-57.7"S, 71°3.2-4.8"W), 550-870 m, sweeping of trees, shrubs and herbs (*Helenium aromaticum*) in grazed *Acacia caven* bush and dry evergreen forest, 20.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 7098-7102) (NMPC).

Discussion. New species for Argentina, originally described from Chile and cited from Peru (Schuh 2002-2013).

Remark. Examined male genitalic structures conform to Carvalho and Gomes (1969: 479, Figs 2-4) drawings.

Polymerus coccineus (Spinola, 1852)

Material examined. CHILE: 1♂, *Region X* (Los Lagos), 50 km S(outh)-W(est) of Los Muermos (coordinates provided on label: 41°30.0"S, 73°35.7"W), 150 m, 30.I.2005, Halada M. leg. (FC n° 7319A) (ACPI).

Discussion. New record. Endemic to Chile (Carvalho 1959; Schuh 2002-2013).

Remark. Examined male genitalic structures conform to Carvalho and Gomes (1969: 481, Figs. 6-8) drawings.

Polymerus modestus Blanchard, 1852

Material examined. CHILE: 1♀, *Region VI*, 50 km East of Talca, Las Garzas (no coordinates on the label, approximate coordinates available via Google Earth leaving from Talca: 35°24"S, 71°05'W), 15.I.2004, Halada M. leg. (FC n° 7319) (ACPI); 4♂♂, 1♀, *Valparaiso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh)-E(ast) of park entrance (coordinates provided on label: 32°56.8'-57.7"S, 71°3.2-4.8"W), 550-870 m, sweeping of trees, shrubs and herbs (*Helenium aromaticum*) in grazed *Acacia caven* bush and dry evergreen forest, 20.XI.2013, Fikáček, Kment and Vondráček leg. (FC n°s 7093-7097) (NMPC).

Discussion. New records. Species known from Argentina, Chile and Uruguay (Carvalho 1959; Schuh 2002-2013).

Remark. The female specimen FC n° 7319 corresponds to *P. modestus* redescription (Ferreira, 1980) by its measurements but differs by the dorsal (very clear, yellowish) coloration. However, the genitalia (particularly the absence of parieto-vaginal rings and the shape of DLP and PmAp) correspond to the original description of these structures by Fontes (1996).

Polymerus testaceipes (Stål, 1860)

Material examined. BRAZIL: 1♀, *Rio de Janeiro*, Angra dos Reis (coordinates provided on label: 22°57'25"S, 44°16'34"W), 10 m., sweeping ruderal vegetation, 18.III.2015, Votypka J. leg. (FC n° 6880) (NMPC); CUBA: 1♀, La Havane, Lénine Park, 04.III.1982, Gtouacka E. leg. (FC n° 7323) (JGKP); 3♂♂, 2♀♀, La Havane, Bot. (?), 09.XII.1981 and 02.II.1982, Gtouacka E. leg. (FC n°s 7324-

7328) (JGKP); PERU: 2♂♂, *Cuzco*, Pagoreni (coordinates provided on label: 11°42'22"S, 72°54'07"W), at light, VII.2004, Williams J. leg. (FC n°s 7506-7507) (MACN).

Discussion. New records. Species described from Brazil (Rio de Janeiro), widespread in the New World from Florida to Argentina (Almeida and Ferreira 1984; Carvalho 1959; Schuh 2002-2013), cited from Cuba by Hernandez and Henry (2010) and from Peru by Carvalho and Ferreira (1972) and Carvalho and Afonso (1977).

Proba fraudulenta (Stål, 1860)

Material examined. CHILE: 1♀, *Valparaiso Region*, 0.6 km N(orth) of Concon, Reserva Ecologica La Isla (coordinates provided on label: 32°55.0"S, 71°30.3"W), 0-5 m., 23.XI.2013, saltmarsh, ruderal and ornamental vegetation by sweeping, Fikáček, Kment and Vondráček leg. (FC n° 6907) (NMPC).

Discussion. New record. Species described from Brazil (Rio de Janeiro), also known from Argentina, Chile and Peru (Carvalho 1959; Schuh 2002-2013).

Proba vittiscutis (Stål, 1860)

Material examined. PERU: 1♂, *Cuzco*, Malvinas, Base PlusPetrol (no coordinate on the label, approximate coordinates available via Google Earth for Malvinas: 11°50'25"S, 72°56'47"W), at light, II.2006, Williams J. leg. (without FC n°) (MACN).

Discussion: New record. Species widely distributed in Central and South America, mentioned from Peru by Carvalho and Ferreira (1972) and Carvalho and Afonso (1977); recently cited for the first time from French Guyana (Chérot and Carpintero 2016).

Stenoparedra Reuter, 1909

New diagnosis. Middle sized (4.3-7.5 mm) elongate Mirini. Body almost glabrous. Head similar to Resthenini in shape, relatively wide, slightly wider than anterior part of pronotum, with prominent but relatively small eyes, situated dorsally, contiguous to pronotal collar. Ventral margin of antennal fossa at level of eyes ventral margin in lateral view. Frons gently rounded, not protruding, vertex unsulcate, not marginate. Labium middle sized, reaching metacoxae. Pronotal collar convex, wide. Pronotal disk rugose, punctate, punctuation shallow, relatively wide. Pronotal callosities rounded, contiguous to pronotal collar, medially separated. Pronotal lateral margins slightly concave, humeral angles rounded, posterior margin almost straight. Scutellum almost flat, slightly striate. Hemelytra rugose, slightly punctate, punctuation shallow, relatively wide. Hemelytral margins almost parallel to slightly convex (particularly in sub-macropterous *S. fallax* female). Cuneus elongate, about two times longer than wide, its outer margin almost straight.

Discussion. The genus *Stenoparedra* was described in the division Restheniaria Reuter, 1905, upgraded to tribal level by Kirkaldy (1906). It was placed in the tribe

Resthenini in Carvalho's (1959) catalog. However, it differs from "classical" Resthenini by structure of dorsal surface and ostiolar peritreme. Consequently, Schwartz (1987: 57), in his PhD dissertation, wrote "*Stenoparedra* Reuter, 1852 (sic), even though it has strongly convex pronotal collar, does not possess the (...) other diagnostic characters of the Resthenini and is therefore transferred to the Mirini", a placement adopted by Schuh (1995, 2002-2013) and also considered by Schwartz (2008, *in litt.*).

Among the Central- and South-American Mirini with a non-sulcate vertex, second antennal segment not incrassate apically, labium reaching metacoxae, punctate pronotal disk, the punctuation relatively wide but shallow, absent between callosities and collar, rounded humeral angles of pronotum, flat scutellum, hemelytral pilosity reduced and unique, cuneus longer than wide, *Stenoparedra* differs from *Dagbertus* Distant, 1904, *Taylorilygus* Leston, 1952 and *Xavantinisca* Carvalho and Costa, 1992 by the head and body shape and genitalic structures of both sexes.

The species of the genus *Stenoparedra* can be separated by the following key, adapted from Carvalho and Dutra (1961).

1. Head and scutellum yellow, orange, clear red or dark red (Figs. 32-33, 48-49). Body elongate
 - *Stenoparedra jucunda* (Signoret, 1864) group of species
 - Head and scutellum dark brown to black, eventually with yellow pattern. Body elongate or sub-oblong 2
2. Embolium white, contrasting with dark brown to black clavus and corium (Figs. 30-31). Scutellum white or yellowish, basal angles dark (Fig. 61). Generally, medial stripe of frons and vertex missing or almost not visible (Figs 46-47). Sensory lobe of left paramere short, curved inward, devoid of spines; Body devoid of spines on latero-outer margin. Female sub-macropterous (Fig. 31) *Stenoparedra fallax* (Signoret, 1864)
 - Embolium, corium and clavus of same color or embolium slightly clearer than clavus and corium, not or slightly contrasting (Figs. 32-39). Scutellum medially yellowish, laterally dark brown to black (Fig. 65). Medial stripe of frons and vertex present (Figs 50-55). Female macropterous (Figs. 37, 39) or sub-macropterous (Fig. 35) 3
3. Pronotum and hemelytra dark, almost black. Pronotal disk generally devoid of medial stripe (Fig. 60). Medial stripe of frons and vertex generally separated from lateral stripes (Figs. 54-55). Sensory lobe of left paramere obvious, curved and spinous. Female macropterous (Fig. 39)
 *Stenoparedra similaris* Carvalho and Dutra, 1961
- Pronotum and hemelytra brown or greenish-brown, pronotal disk with a medial stripe (Figs. 58-59). Medial stripe of frons and vertex generally related to lateral stripes posteriorly (Figs. 50-51). Sensory lobe of left paramere reduced or devoid of spines. Female macropterous (Fig. 37) or sub-macropterous (Fig. 35) 4
4. Embolium and cuneus yellowish, slightly contrasting with brown corium (Figs. 34-35). Sensory lobe of left paramere developed and pilose but devoid of spines. Primary apophysis of right paramere "foot-shaped", almost perpendicular to body. Female submacropterous (Fig. 34)
 *Stenoparedra penai* (Carvalho and Carpintero, 1987)
- Cuneus and corium globally of same color, greenish-brown (Figs. 36-37), embolium slightly clearer. Sensory lobe of left paramere reduced. Primary apophysis of right paramere pointed, slightly curved, not "foot-shaped". Female macropterous (Fig. 37)
 *Stenoparedra scutellata* (Spinola, 1852)

S. tenuicornis Reuter, 1909 was synonymized, under the incorrect subsequent spelling "*tenuicornis*", with *S. jucunda* (Signoret, 1864) by Carvalho and Dutra (1961: 4, 5), a subjective synonymy omitted by Schuh (1995, 2002-2013). This synonymy should be critically reevaluated and the types of both nominal species compared because, among *Stenoparedra* specimens with yellow or red head and scutellum, there are at least two different pronotal colorations (dark, almost black, except on lateral sides *versus* yellowish, darker apically with black callosities) corresponding to two different ratios of first antennal segment length to head width across eyes (diatone).

The available specimens allow us, for the first time, to illustrate the habitus of both sexes of each described *Stenoparedra* species (Figs. 30-39) and to briefly describe the female genitalic structures for three species, *S. fallax*, *S. scutellata* and *S. similaris* (Figs. 40-45). Structures of male parameres were adequately figured by Carvalho and Dutra (1961: 8, Pr II. Figs A1-3 to D1-3). Their main characters useful in species identification are summarized below for the same three species.

Biology and feeding behavior of *Stenoparedra* species remains poorly known. A specimen of *Stenoparedra scutellata* was observed feeding on a dead honeybee by C. G. Retamales (*pers. comm.* to the second author) (Figs. 67-71, courtesy of Claudio Guzmán Retamales). Scavenging by plant bugs on small arthropods, especially aphids, in laboratory or even in the field is well documented (Wheeler 2001) and includes feeding on dead individuals of their species (for example entrapped in a spider web or even in a insectivorous plant) or totally different species such fungus-killed anthomyiid flies (*op. cit.*). Necrophagy on larger insects is more occasional, observations on vertebrates being very scarce. Wheeler (2001: 321) mentions only the case of a *Fulvius imbecilis* (Say, 1832) on pig carrion in South Carolina. Scavenging could be attributed to low nitrogen levels in host plant for some inflorescence-feeders and could supply amino-acids, minerals, proteins, sugars and vitamins (*op. cit.*).

Such isolated observations do not indicate that *Stenoparedra* species would be primarily scavengers. More probably, they are phytophagous, however their host plants

remain to be identified, even if herbaceous plants mentioned in the material examined sections may indicate potential hosts. Randall Toby Schuh collected numerous specimens of *Stenoparedra* sp. on *Baccharis* sp. (Asteraceae) in Chile (M. D. Schwartz *pers. comm.* to the first author).

Stenoparedra fallax (Signoret, 1864)

Figs. 30-31, 40-41

Material examined. CHILE: 2♂♂, 16♀♀, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 0.25 km S(outh) of Park entrance (coordinates provided on label: 32°55.8'S, 71°5.1'W), in xerothermic bush with *Jubaea* and cacti, sweeping of roadside shrubs and herbs (e.g. *Acacia caven*, *Senecio adenotrichius*), 420 m., 19.XI.2013, *Fikáček, Kment and Vondráček* leg. (FC n°s 7002-7016, 7021, 7025, 7040) (NMPC); 1♂, 2♀♀, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 0.25 km S(outh) of Park entrance (coordinates provided on label: 32°55.8'S, 71°5.1'W), sweeping of trees, shrubs and herbs (*Helenium aromatica*) in grazed *Acacia caven* bush and dry evergreen forest, 550-870 m., 20.XI.2013, *Fikáček, Kment and Vondráček* leg. (FC n°s 7023-7024, 7092) (NMPC); 6♂♂, 4♀♀, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh) E(ast) of Park entrance near La Cascada (coordinates provided on label: 32°56.8-57.7'S, 71°3.2-4.8'W), sweeping of trees, shrubs and herbs in grazed *Acacia caven* bush and dry evergreen forest, 550-870 m., 20.XI.2013, *Fikáček, Kment and Vondráček* leg. (FC n°s 7017-7018, 7020, 7032, 7048, 7051, 7056, 7065, 7074, 7040bis) (NMPC).

Diagnosis. Dorsal coloration and pattern: Medial stripe of frons and vertex missing or almost not visible. Color of pronotal collar and basal margins of pronotal callosities variable from pale to dark brown. Scutellum white to yellowish, the basal angles dark (Fig. 61). Embolium white, contrasting with dark brown to black clavus and corium (Figs 30-31). Genitalic structures. Male: Sensory lobe of left paramere short, curved inward, devoid of spines. Body devoid of spines on its latero-outer margin. Female: Parieto-vaginal ring (Fig. 40) elongate, anterior and posterior margins slightly sigmoid, inner margin short, convex, not covered by a spinose sclerite in dorsal view, outer margin wide. Spinose sclerite relatively elongate. Posterior wall (Fig. 41) with wide median process, A-structures or inter-ramal sclerites fused, E-structures or inter-ramal lobes large, their margins reinforced, H-structures reduced, narrow.

Discussion. New records. Endemic to Chile (Carvalho 1959; Schuh 2002-2013).

Stenoparedra scutellata (Spinola, 1852)

Figs. 36-37, 42-43

Material examined. CHILE: 26♂♂, 19♀♀, 1?, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh) E(ast) of Park entrance near La Cascada (coordinates provided on label: 32°56.8-57.7'S,

71°3.2-4.8'W), sweeping of trees, shrubs and herbs in grazed *Acacia caven* bush and dry evergreen forest, 550-870 m., 20.XI.2013, *Kment P. leg.* (FC n°s 7028-7031, 7033-7034, 7036-7037, 7039, 7041-7043, 7045-7046, 7047, 7049, 7050, 7052-7055, 7055bis, 7057-7058, 7059-7060, 7061, 7063, 7064, 7066-7067, 7069, 7071, 7073, 7075-7079, 7080-7082, 7084-7085) (NMPC); 5♀♀, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 0.25 km S(outh) of Park entrance (coordinates provided on label: 32°55.8'S, 71°5.1'W), xerothermic bush with *Jubaea* and cacti, sweeping of roadside shrubs and herbs (e.g. *Acacia caven*, *Senecio adenotrichius*), 420 m., 19.XI.2013, *Fikáček, Kment and Vondráček* leg. (FC n°s 7027, 7035, 7038, 7046, 7070) (NMPC); 3♂♂, 4♀♀, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Granizo, Sendero Los Peumos between 2^{do} puente and Mirador La Balmaceda (coordinates provided on label: 32°58.8'S, 71°6.9'W), sweeping of roadside vegetation in evergreen forest (*Bielschmiedia miersii*, *Schinus molle*, *Kageneckia*, *Retamillia ephedra*, *Chusque* etc., herbs and grasses), 740 m., 21.XI.2013, *Fikáček, Kment and Vondráček* leg. (FC n°s 7086-7091, 7086bis) (NMPC).

Diagnosis. Dorsal coloration and pattern: Medial stripe of frons and vertex generally related to lateral stripes posteriorly. Color of pronotal collar variable from pale to dark brown. Embolium, corium, clavus and cuneus globally of same color, greenish-brown. Genitalic structures. Male: Sensory lobe of left paramere hardly visible, almost not developed. Body pilose, bearing some dark, stout and relatively short spines on its latero-outer margin, these spines easily visible only in lateral orientation (hardly visible in ventral or dorsal orientations, as in Carvalho and Dutra's (1961) Figs. D-1 and D-2, but rightly mentioned by these authors in their text, the paramere being described as "fortemente serreado"). Female: Parieto-vaginal ring (Fig. 42) elongate, anterior margin slightly sigmoid in its inner part, almost straight in its outer part, posterior margin almost straight in its inner part, wider and slightly convex in its outer part, inner margin covered by a spinose sclerite in dorsal view, outer margin convex. Spinose sclerite wide and slightly curved. Posterior wall (Fig. 43) with wide median process, A-structures or inter-ramal sclerites fused, E-structures or inter-ramal lobes large, their margins reinforced, H-structures reduced, narrow.

Discussion. New records. Endemic to Chile (Carvalho 1959; Schuh 2002-2013).

Stenoparedra similaris Carvalho and Dutra, 1961

Figs. 38-39, 44-45

Material examined. CHILE: 2♂♂, 1♀, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 0.25 km S(outh) of Park entrance (coordinates provided on label: 32°55.8'S, 71°5.1'W), 420 m., 19.XI.2013, *Fikáček, Kment and Vondráček* leg. (FC n°s 6875, 7026, 7093) (NMPC); 1♂, 1♀, *Valparaíso Region*, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh) E(ast) of Park

entrance near La Cascada (coordinates provided on label: 32°56.8-57.7'S, 71°3.2-4.8'W), sweeping of trees, shrubs and herbs in grazed *Acacia caven* bush and dry evergreen forest, 550-870 m., 20.XI.2013, *Fikáček, Kment and Vondráček* leg. (FC n°s 7044, 7068) (NMPC).

Diagnosis. Dorsal coloration and pattern: Medial stripe of frons and vertex generally separated of lateral stripes (Figs. 54-55). Pronotal disk generally devoid of medial stripe (Fig. 60). Embolium slightly clearer than clavus and corium, not or slightly contrasting. This species is the least chromatically variable, head and pronotum being always dark. Genitalic structures. Male: Sensory lobe of left paramere short, curved inward, with some small spines on its margins, except the inward part. Body devoid of spines on its latero-outer margin. Female: Parieto-vaginal ring (Fig. 44) elongate, anterior margin slightly convex, posterior margin slightly sigmoid, inner margin short, pointed, not covered by a pair of spinose sclerites in dorsal view, outer margin covered by the margin of dorso-labiate plate in dorsal view. Both spinose sclerites relatively elongate and narrow. Posterior wall (Fig. 45) with wide median process, A-structures or inter-ramal sclerites fused, E-structures or inter-ramal lobes large, their margins reinforced, H-structures probably absent.

Discussion. New records. Endemic to Chile (Carvalho 1959; Schuh 2002-2013).

Taeda compactina Carvalho, 1975b

Material examined. PERU: 1♀, Cuzco, Nuevo Mundo, Base PlusPetrol (coordinates provided on label: 11°33'02"S, 73°08'30"W), at light, VII.2004, *Williams J.* leg. (FC n° 7515) (DCBA).

Material examined. New species for Peru, described from Mato Grosso (Brazil) (Schuh 2002-2013), also known from Argentina (Carpintero and Carvalho 1993).

Taeda compactoides Carvalho, 1975b

Material examined. PERU: 1♂, Cuzco, Pagoreni (coordinates provided on label: 11°42'22"S, 72°54'07"W), at light, VII.2004, *Williams J.* leg. (without FC n°s) (MACN).

Discussion. New record. Species described from Brazil (Mato Grosso); also known from Argentina (Carpintero and Carvalho 1993), French Guyana (Costa, Chérot and Carpintero 2008) and Peru (Carvalho and Afonso 1977).

Taeda leprosa (Walker, 1873)

Material examined. PERU: 74♂♂, 57♀♀, 1?, Cuzco, Nuevo Mundo, Base PlusPetrol (coordinates provided on label: 11°33'02"S, 73°08'30"W), at light, VII.2004, *Williams J.* leg. (FC n°s 7516-7522, 7521a and without FC n°s) (MACN); 1♂, 2♀♀, Cuzco, Cashiari (no coordinate on the label, coordinates not determinable via Google Earth, approximate coordinates available in da Silva, 2007: 11°52' S, 72°39'W), at light, 04-22.VII.2005, *Williams J.* leg. (without FC n°s) (MACN); 2♂♂, 2♀♀, Cuzco,

Pagoreni (coordinates provided on label: 11°42'22"S, 72°54'07"W), at light, VII.2004, *Williams J.* leg. (without FC n°s) (MACN); 2♂♂, 1♀, Ucayali, Kirigueti (coordinates provided on label: 11°38'13"S, 73°07'08"W), at light, VII.2004, *Williams J.* leg. (without FC n°s) (MACN).

Discussion. New records. Species described from Brazil; also known from Argentina and Peru (Carvalho and Afonso 1977; Schuh 2002-2013).

Taeda signata Carvalho and Gomes, 1971

Material examined. FRENCH GUYANA: 1♂, Saül (no coordinates on the label, approximate coordinates obtained via Google Earth: 3°50'22"N, 53°17'57"W), I.1977, Duranton M. leg. (without FC n°) (MNHN); 1♀, Kaw track, P.K. 38 (no coordinate on the label, coordinates according to Costa, Chérot and Carpintero, 2008: 4°30'47"N, 52°04'56"W), 1.V.1989, de Toulgoët H., Navatte J., Labaume-Casson J. and B. leg. (without FC n°) (MNHN); PERU: 2♀♀, Cuzco, Pagoreni (coordinates provided on label: 11°42'22"S, 72°54'07"W), at light, VII.2004, *Williams J.* leg. (without FC n°s) (MACN); 3♂♂, 1♀, 1?, Cuzco, Cashiari (no coordinate on the label, coordinates not determinable via Google Earth, approximate coordinates available in da Silva, 2007: 11°52' S, 72°39'W), at light, 04-22.VII.2005, *Williams J.* leg. (without FC n°s) (MACN); 3♂♂, 2♀♀, Cuzco, Nuevo Mundo, Base PlusPetrol (coordinates provided on label: 11°33'02"S, 73°08'30"W), at light, VII.2004, *Williams J.* leg. (without FC n°s) (MACN).

Discussion. New records. Species described from Brazil; also known from Argentina (Carpintero and Carvalho 1993), French Guyana, Panama, Peru and Surinam (Chérot and Carpintero 2016).

Taylorilygus apicalis (Fieber, 1861)

Material examined. BRAZIL: 2♂♂, 1♀, Rio de Janeiro, Angra dos Reis (coordinates provided on label: 22°57'25"S, 44°16'34"W), 10 m., 18.III.2015, *Votypka J.* leg. (FC n°s 7112-7114); 1♂, Rio de Janeiro, Lídice (coordinates provided on label: 22°46'44"S, 44°10'20"W), 635 m., 17.III.2015 (FC n° 7115) (NMPC); 1♀, Rio de Janeiro, Visconde de Mauá (coordinates provided on label: 22°18'45"S, 44°35'34"W), 1111 m, 16.III.2015, *Votypka J.* leg. (FC n° 7116) (NMPC); CUBA: 1♀, G. Piedro (?), 26.X.1981, 1200 m, *Gtouacka E.* leg. (FC n° 7329) (JGKP).

Discussion. New records. Widespread species in Africa, North, Central and South America, Asia, Australia, Southern Europe and numerous oceanic islands (Schuh 2002-2013).

Resthenini Reuter, 1905

Eurylomata speciosa (Signoret, 1864)

Material examined. CHILE: 4♂♂, 1♀, Valparaíso Region, N(atural) P(ark) La Campana, Sector Granizo, Cerro La Campana Mt (coordinates provided on label:

32°57'13"S, 71°7'10"W), alpine meadow, 1800 m., 22.XI.2013, Vondráček leg. (FC n°s 6992-6996) (NMPC).

Discussion. New records. Species endemic to Chile (Carvalho 1959; Schuh 2002-2013).

Prepops cruciferus (Berg, 1878)

Material examined. ARGENTINA: 1♀, Salta, East of Coronel Moldes (no coordinate on the label, approximate coordinates available via Google Earth for Coronel Moldes: 25°16'52"S, 65°28'37"W), 23.I.2009, Snižek M. leg. (FC n° 7550) (ISNB).

Discussion. New record. Species widely distributed in North, Central and South America, from Argentina to Cuba and United States of America (Florida) (Schuh 2002-2013).

Prepops persimilis (Reuter, 1907)

Material examined. BRAZIL: 1♂, Parana State, Iguazú falls (no coordinate on the label, approximate coordinates available via Google Earth: 25°41'42"S, 54°26'12"W), 20.VIII.2000, Růžička and Vilimová leg. (FC n°s 6444-6445) (NMPC).

Discussion. New records. Species described from Brazil, also known from Argentina and Bolivia (Carvalho 1959; Schuh 2002-2013).

Prepops procorrentinus Carvalho and Carpintero, 1992

Material examined. ARGENTINA: 10♂♂, 13♀♀, Salta, Gran Chaco, Salada river (= Río Salado del Norte), South of Macapillo (no coordinates on the label, approximate coordinates not available via Google Earth, coordinates for Macapillo, in Anta Department: 25°22'00"S, 64°01'00"W), 20.I.2009, Snižek M. leg. (FC n°s 7747-7769) (ISNB).

Discussion. New records. Species described from Argentina (Buenos-Aires, Corrientes, Salta and Tucuman) and Brazil (Esperito Santo, Goiás, Minas Gerais, Paraná, Rio de Janeiro, São-Paulo) (Carvalho and Fontes 1970).

Remark. Examined male genitalic structures conform to Carvalho and Fontes (1970: 370, Figs. 14-16) drawings for *Prepops correntinus* sensu Carvalho and Fontes, 1970 nec Berg (1878) (see Carvalho and Carpintero 1992).

Prepops tucumanensis Carvalho and Fontes, 1969b

Material examined. ARGENTINA: 1♀, Corrientes, Paraná River (no coordinate on the label, coordinates impossible to determine, available data on label inaccurate, the Paraná River being a long stream of about 4800 km on three different countries) 16.I.2009, Snižek M. leg. (FC n° 7770) (ISNB).

Discussion. New record. Species described from Argentina, Brazil and Bolivia (Carvalho and Fontes 1969b; Schuh 2002-2013).

Preposisca frontosa (Carvalho, 1974)

Material examined. FRENCH GUYANA: 1♀, Saül, Layon Eau Claire (coordinates provided on label: 3,622°N, 53,208°W), forest, 04.IV.2000, Streito J.-C. leg. (FC n° 6018) (JSMF).

Discussion. New species for French Guyana, originally described from Peru (Carvalho 1974).

Stenodemini China, 1943

Collaria oleosa (Distant, 1883)

Material examined. BRAZIL: 1♂, Visconde de Maua (coordinates provided on label: 22°18'45"S, 44°35'34"W), 1111 m, sweeping ruderal vegetation, 16.III.2015, Votypka J. leg. (FC n° 6889) (NMPC); COSTA RICA: 1?, Alajuela Province, Arenal Volcan, lodge Linda Vista del Norte (coordinates provided on label: 10°25'40"N, 84°44'47"W), 09.IV.2012, Maslov D. leg. (FC n° 6402) (NMPC); 1♂, Guanacaste Province, N(atural) P(ark) Guanacaste, Dos Rios (no coordinate on the label, approximate coordinates available via Google Earth: 10°53'N, 85°22'W), 27.VIII.2002 (FC n° 6890) (NMPC); 1?, Limon Province, 5 km south of Pokora, Las Brisas (coordinates provided on label: 10°08'03"N, 83°36'18"W), 02.IV.2012, Maslov D. leg. (FC n° 6401) (NMPC); 1♂, 2♀♀, Puntarenas, San Vito, Las Cruces (no coordinate on the label, approximate coordinates available via Google Earth: 08°47'28"N, 82°57'15"W), 14.VIII.2002 (FC n°s 6891, 6893, 6895) (NMPC); 1?, Guanacaste Province, near La Cruz, Hacienda Los Inocentes (no coordinate on the label, coordinates obtained via Google Earth leaving from La Cruz: 10°15'N, 85°26'E), 06.II.2004 (FC n° 6894) (NMPC); 1♂, Guanacaste Province, 15 km S(outh)-E(ast) of Tilaran (coordinates provided on label: 10°27'N, 84°54'W), 20.I.2007, D. M. leg. (FC n° 6892) (NMPC); CUBA: 2♀♀, no locality given, 07.I.1982, Gtouacka E. leg. (FC n°s 7320-7321) (JGKP); ECUADOR: 4♂♂, 2♀♀, 1?, Loja Province, Vilcabamba (coordinates provided on label: 04°15'22"S, 79°13'06"W), 04.VII.2008, Maslov D. leg. (FC n°s 6396-6400, 6412-6413) (NMPC); ???: same data, 06.VII.2008 (FC n°s 6414-6415) (NMPC); 1♂, 1♀, ???: Santo Domingo, 33 km West of Santo Domingo, Otongachi Reserve (coordinates provided on label: 00°19'00"N, 78°56'02"W), 13.VII.2008, Maslov D. leg. (FC n°s 6405-6408) (NMPC); 3???: same data, 15.VII.2008 (FC n°s 6409-6411) (NMPC).

Discussion. New records. Widespread species in the New World (Carvalho 1959; Schuh 2002-2013; Morales et al. 2016).

Dolichomiris linearis Reuter, 1882

Material examined. COSTA RICA: 1♀, Guanacaste Province, 15 km S(outh)-E(ast) of Tilaran (coordinates provided on label: 10°27'N, 84°54'W), 20.I.2007, D. M. leg. (FC n° 7106) (NMPC).

Discussion. New record. Widespread species in Africa,

Central and South America, Asia, Australia and numerous oceanic islands (Schuh, 2002-2013), its presence in Southern Europe doubtful.

Neotropicomiris nordicus Carvalho and Fontes, 1969a

Material examined. ECUADOR: 10♂♂, 11♀♀, 1?, Loja Province, Vilcabamba (coordinates provided on label: 04°15'22"S, 79°13'06"W), 04.VII.2008, Maslov D. leg. (FC n°s 6376-6395) (NMPC).

Discussion. New records. Species described from Ecuador and Venezuela, also known from Colombia, Panama and Peru (Carvalho and Afonso 1977; Schuh 2002-2013).

Remark. Examined male genitalic structures apparently conform to Carvalho and Fontes (1969a: 341, Figs. 18-20) drawings.

Porpomiris campinensis Carvalho, 1947

Material examined. ARGENTINA: 2♂♂, 3♀♀, Corrientes, Paraná River (no coordinates on the label, coordinates impossible to determine, available data on label inaccurate) 16.I.2009, Snižek M. leg. (FC n°s 7774-7778) (ISNB).

Discussion. New records. Species described from Argentina and Brazil (Carvalho 1947, 1959).

Remark. The specimens, including male genitalia and particularly right paramere, conform to Carvalho and Fontes (1969a) redescription.

Stenodema andina Carvalho, 1975a

Material examined. ECUADOR: 1♂, 1♀, Tungurahua Province, Baños (coordinates provided on label: 01°24'14"S, 78°25'56"W), 01.VII.2008, Maslov D. leg. (FC n°s 6416-6417) (NMPC).

Discussion. New records. Species described from Argentina, Colombia and Ecuador, also known from Peru (Schuh 2002-2013).

Remark. According to their habitus and left paramere, these specimens could be identified as *S. andina*. The right paramere and phallic structures of male – damaged during dissection – were not analyzed.

Stenodema columbiensis (Carvalho, 1985a)

Material examined. ECUADOR: 2♂♂, PK 46 piste Salcedo-Tera (coordinates provided on label: 00°59'08,6"S., 78°20'30,7"W), 20.I.2001, Porco D. and Rougerie R. leg. (FC n°s 5601-5602) (AMPF).

Discussion. This large *Stenodema*, described by Carvalho (1985a: 7-9) from Colombia under the generic name *Penacoris* Carvalho and Rosas, 1966, is new for Ecuador. It was not mentioned outside Colombia yet (Schuh 2002-2013).

Remark. The specimens, including genitalia, perfectly conform to Carvalho (1985a) original description.

Stenodema dohrni (Stål, 1859)

Material examined. CHILE: 1♂, 1♀, Region X (Los Lagos), 15 km West of Pargua (coordinates provided on label: 41°45,7"S, 73°33,0"W), 50 m, 02.II.2005, Halada M. leg. (FC n°s 7301-7302) (ACPI).

Discussion. New records. Species described from Chilean Patagonia (Carvalho 1959; Schuh 2002-2013), also known from Argentina (Carpintero and Carvalho 1993).

Remark. Examined male genitalic structures conform to Carvalho (1975a: 131, Figs. 27-29) drawings.

Trigonotylus tenuis Reuter, 1893

Material examined. CUBA: 1♀, 1?, La Havane, 02 and 04.ii.1982, Gtouacka E. leg. (FC n°s 7322, 7330) (JGKP).

Discussion. New records. Species widespread around the World (Schuh 2002-2013), cited from Cuba by Hernandez and Henry (2010).

Orthotylinae Van Duzee, 1916

Ceratocapsini Van Duzee, 1916

Laemocoridea dispersa (Carvalho, 1944b)

Material examined. FRENCH GUYANA: 1♀, Terre Rouge, village (coordinates provided on label: 5.44858°N, 54.05003°W), 30.I.2004, Streito J.-C. leg. (FC n° 7796) (JSMF); 1♀, Roura (coordinates provided on label: 4,725°N, 52,327°W), 01.IV.2000, Streito J.-C. leg. (FC n° 7797) (JSMF); 1♂, Matoury (no coordinate on the label, approximate coordinates available via Google Earth: 4°49'57"N, 52°20'40"W), 07.IV.2000, Streito J.-C. leg. (FC n° 7798) (JSMF); 1♂, Grand Santi (no coordinate on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 4°15'55"N, 54°22'35"W), 23.IX.2000, Matocq A. leg. (FC n° 7799) (AMPF); 1♀, Kaw jetty (no coordinate on the label, approximate coordinates available in Costa, Chérot and Carpintero, 2008 for Kaw: 4°29'03"N, 52°01'36"W), 02.X.2000, Matocq A. leg. (FC n° 7800) (AMPF); 2♂♂, 1♀, same locality, 26.IX.2000, Matocq A. leg. (FC n°s 7802-7804) (AMPF); 1♀, Cacao Road (no coordinate on the label, coordinates difficult to determine, available data on label inaccurate), 28.IX.2000, Matocq A. leg. (FC n° 7801) (AMPF); 3♂♂, 1♀, 1?, Sinnamary (no coordinate on the label, approximate coordinates available via Google Earth: 5°22'28"N, 52°57'16"W), 17.IX.1998, Matocq A. leg. (FC n°s 7805-7808, 7810) (AMPF); 1♂, 1♀, Patawa, Degrad Lalanne (no coordinate on the label, coordinates difficult to determine), 10.IX.1998, Matocq A. leg. (FC n°s 7809-7810) (AMPF); 2♂♂, 7♀♀, Kourou, Guatemala marshes (no coordinate on the label, coordinates difficult to determine), 14.IX.1998, Matocq A. leg. (FC n°s 7811-7819) (AMPF); 2♂♂, 4♀♀, Cacao, Les Grosses Roches (no coordinate on the label, approximate coordinates available via Google Earth for Cacao: 4°32'56"N, 52°25'26"W), 12.IX.1998, Matocq A. leg. (FC n°s 7820-7825) (AMPF).

Discussion. New species for French Guyana, described

from Argentina and Brazil, also known from Co-operative Republic of Guyana, Paraguay and Surinam (Schuh 2002-2013).

Remark. Examined male genitalic structures globally conform to Carvalho (1944b: 528, Figs. 22-24) drawings, however the primary apophysis of right paramere is more elongate.

Sericophanes ornatus (Berg, 1878)

Material examined. FRENCH GUYANA: 9♂♂, 7♀♀, Acarouany, Auberge du Bois Diable (no coordinate on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 5°35'18"N, 53°48'44"W), 15.IX.1998, *Matocq A.* leg. (FC n°s 7826-7827, 7829, 7832-7837, 7838-7840, 7861-7863, 7864) (AMPF); 2♂♂, same locality, 27.IX.2000, *Matocq A.* leg. (FC n°s 7850-7851) (AMPF); 1♂, Petit Saut Dam, carbet Maman Lezard (no coordinate on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 5°03'50"N, 53°02'55"W), 14.IX.1998, *Matocq A.* leg. (FC n° 7828) (AMPF); 2♀♀, Galion savannah (no coordinate on the label, approximate coordinates obtained via Google Earth for a Galion road: 4°59'05"N, 52°28'08"W), 19.VIII.1998, *Matocq A.* leg. (FC n°s 7830-7831) (AMPF); 6♂♂, 1♀, 2??, Sinnamary (no coordinate on the label, approximate coordinates available via Google Earth: 5°22'28"N, 52°57'16"W), 17.IX.1998, *Matocq A.* leg. (FC n°s 7841, 7842-7849) (AMPF); 1?, Patawa, P.K. 37.5 (no coordinate on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 4°32'40"N, 52°09'09"W), 03.X.2000, *Matocq A.* leg. (FC n° 7852) (AMPF); 1♂, 1♀, Grand Santi (no coordinate on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 4°15'55"N, 54°22'35"W), 23.IX.1999, *Matocq A.* leg. (FC n°s 7853-7854) (AMPF); 2♂♂, 1♀, same locality, 23.IX.2000, *Matocq A.* leg. (FC n°s 7855-7857) (AMPF); 1♂, 2??, same locality, 24.IX.2000, *Matocq A.* leg. (FC n°s 7858-7860) (AMPF); 2♂♂, Espérance (coordinates provided on label: 5.42954°N, 54.05080°W), carbet garden, 30 m., 30.I.2004, night hunting, at light, *Streito J.-C.* leg. (FC n°s 7865-7866) (JSMF); 1♂, Montsinéry, Bagne des Annamites ("Annamite's prison") (coordinates provided on label: 4.841°N, 52.517°W), secondary forest, 30.III.2000, *Streito J.-C.* leg. (FC n° 7867) (JSMF); 1♂, 1♀, Saül, airport runway (coordinates provided on label: 3.622°N, 53.208°W), 05.IV.2000, night hunting (20:00-04:00), *Streito J.-C.* leg. (FC n°s 7868, 7870) (JSMF); 1♂, Saül, Boucle de Gros Arbre (coordinates provided on label: 3.622°N, 53.208°W), 02.IV.2000, *Streito J.-C.* leg. (FC n° 7869) (JSMF).

Discussion. New species for French Guyana, widely distributed in South America, described from Argentina (Berg, 1878), also known from Bolivia, Brazil, Chile, Co-operative Republic of Guyana, Paraguay and Surinam (Schuh, 2002-2013).

Remark. Examined male parameres conform to Carvalho and Costa (1988: 899, Figs. 1-4) drawings.

Phylinae Douglas and Scott, 1865
Nasocorini Reuter, 1883 *sensu* Schuh & Menard 2013

Rhinacloa clavicornis (Reuter, 1905)

Material examined. FRENCH GUYANA: 1♀, N2 Road, bridge on Comté Stream (no coordinates on the label, approximate coordinates available via Google Earth: 4°39'35"N, 52°21'17"W), 20.IX.1988, *Matocq A.* leg. (FC n° 6385b) (AMPF); 1♂, Acarouany, Auberge du Bois Diable (no coordinate on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 5°35'18"N, 53°48'44"W), 28.IX.2000, *Matocq A.* leg. (FC n° 6385c) (AMPF); 1♀, Saül, airport runway (coordinates provided on label: 3.622°N, 53.208°W), 05.IV.2000, night hunting (20:00-04:00), *Streito J.-C.* leg. (FC n° 6385m) (JSMF); 1♀, Kaw track (coordinates provided on label: 4.544°N, 52.152°W), 31.III.2000, night hunting (20:00-04:00), *Streito J.-C.* leg. (FC n° 6385n) (JSMF); 1♂, 1♀, Espérance (coordinates provided on label: 5.42954°N, 54.05080°W), carbet garden, 30 m., 29.I.2004, night hunting, at light (18:00-23:00), *Streito J.-C.* leg. (FC n°s 6385o, 6385q) (JSMF); 1♀, Sinnamary (no coordinate on the label, approximate coordinates available via Google Earth: 5°22'28"N, 52°57'16"W), 29.I.2004, *Streito J.-C.* leg. (FC n° 6385r) (JSMF).

Discussion. New species for French Guyana, widely distributed in the New World from Argentina to Southern United States of America (Schuh and Schwartz 1985), cited from Brazil and Surinam (Carvalho and Rosas 1965; Schuh and Schwartz *op. cit.*).

Remark. Examined male genitalic structures apparently conform to Schuh and Schwartz (1985: 443, 449 and 451, Figs. 156, 197, 232) drawings.

Rhinacloa apicalis (Reuter, 1905)

Material examined. FRENCH GUYANA: 1♂, Kaw track (coordinates provided on label: 4.544°N, 52.152°W), 31.III.2000, night hunting (20:00-01:30), *Streito J.-C.* leg. (FC n° 7773) (JSMF); 1♀, Saül, airport runway (coordinates provided on label: 3.622°N, 53.208°W), 05.IV.2000, night hunting (20:00-04:00), *Streito J.-C.* leg. (FC n° 7772) (JSMF).

Discussion. New species for French Guyana, known from Brazil, Costa Rica, Panama, Trinidad and Venezuela (Schuh and Schwartz 1985), more recently cited from Argentina (Carpintero and Carvalho 1993).

Rhinacloa pallidipes Maldonado, 1969

Material examined. FRENCH GUYANA: 1♀, Espérance (coordinates provided on label: 5.42954°N, 54.05080°W), carbet garden, 30 m., 31.I.2004, night hunting, at light (20:00-23:00), *Streito J.-C.* leg. (FC n° 6385p) (JSMF).

Discussion. New species for French Guyana, known from northern Argentina and Brazil, central Mexico, Florida and Greater Antilles (Schuh and Schwartz 1985).

Phylini Douglas and Scott, 1865 *sensu* Schuh & Menard
2013

Anomalocornis tucuruiensis Carvalho, 1984

Material examined. FRENCH GUYANA: 2♂♂, Saül (coordinates provided on label: 3.622°N, 53.208°W), carbet, night hunting, at light (20:00-22:00), 03.IV.2000, Streito J.-C. leg. (FC n° 6385u-v) (JSMF); 1♀, Saül, airport runway (coordinates provided on label: 3.622°N, 53.208°W), 05.IV.2000, night hunting (20:00-04:00), Streito J.-C. leg. (FC n° 6385w) (JSMF).

Discussion. New species for French Guyana, described from Brazil, also known from Ecuador and Peru (Costa and Couturier 2000).

Remark. Examined male and female genitalic structures conform to Costa and Couturier (2000: 330, Figs. 4c, e, h) drawings.

Parafulvius amblyloides Carvalho, 1954

Material examined. FRENCH GUYANA: 1♀, Sinnamary (no coordinates on the label, approximate coordinates available via Google Earth: 5°22'28"N, 52°57'16"W), 17.IX.1998, Matocq A. leg. (FC n° 6203b) (AMPF).

Discussion. New species for French Guyana, described from Brazil (Carvalho 1954; Schuh 2002-2013), also known from Argentina (Carpintero and Carvalho 1993).

Semiini Knight, 1923 *sensu* Schuh & Menard 2013

Gonzalezinus squamosus Carvalho, 1981

Material examined. CHILE: 1♀, Valparaíso Region, N(atural) P(ark) La Campana, Sector Ocoa, 2.2-4.7 km S(outh) E(ast) of Park entrance (coordinates provided on label: 32°56.8'-57.7'S, 71°3.2-4.8'W), sweeping of trees, shrubs and herbs (*Helenium aromaticum*) in grazed *Acacia caven* bush and evergreen forest, 870 m., 20.XI.2013, Fikáček, Kment and Vondráček leg. (FC n° 7203) (NMPC).

Discussion. New record. Described and until now exclusively known from Chile (Schuh 2002-2013).

Tytthus parviceps (Reuter, 1890)

Material examined. FRENCH GUYANA: 5♂♂, 7♀♀, Acarouany, Auberge du Bois Diable (no coordinate on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 5°35'18"N, 53°48'44" W), 27.IX.2000, Matocq A. leg. (without FC n°s) (MNHN), (FC n°s 7785-7789) (AMPF); 1♂, Grand Santi (no coordinates on the label, coordinates provided in Costa, Chérot and Carpintero, 2008: 4°15'55"N, 54°22'35"W), 23.IX.2000, Matocq A. leg. (FC n° 7784) (AMPF).

Discussion. Circumtropical species, new for French Guyana, already known from Argentina (Carpintero and Carvalho 1993), Brazil, Co-operative Republic of Guyana and Surinam (Henry 2012).

ACKNOWLEDGMENTS

The authors are grateful to Dr José Luis Navarrete-Heredia (Universidad de Guadalajara, Jalisco, Mexico) for the invitation to contribute to this Festschrift in honor of Harry A. Brailovsky and for his editorial work. M. J. Constant (ISBNB, Brussels, Belgium), Dr J. Goreczyca (Katowice, Poland), Dr T. J. Henry (USNM, Washington D.C., United States of America), Mgr P. Kment (NMPC, Praha, Czech Republic), Mr A. Matocq (Paris, France), Dr D. Pluot-Sigwalt (MNHN, Paris, France), Ir J.-C. Streito (Montpellier, France) and Mr M. Webb (NHM, London, United Kingdom) entrust the interesting material studied in this work to the authors. Dr Michael D. Schwartz (Ottawa, Canada) kindly reviewed a preliminary version of our work. Two anonymous referees improve the manuscript by their constructive remarks.

LITERATURE CITED

- Almeida, J.R. and P.S.F. Ferreira. 1984. Distribuição geográfica da espécies de *Polymerus* Hahn, 1831 (Hemiptera: Miridae) na América do Sul. *Anais da Sociedade Entomológica do Brasil*, 13(1): 151-156.
- Baerensprung, F. 1860. *Catalogus Hemipterorum Europae. Hemiptera Heteroptera Europea systematice disposita.* Berlin. (not seen).
- Berg, C. 1878. Hemiptera Argentina. Ensayo de una monografía de los Hemipteros-Heterópteros y Homópteros de la República Argentina. *Anales de la Sociedad Científica Argentina*, 6: 261-284.
- Berg, C. 1883. Addenda et emendanda ad Hemiptera Argentinae (2). *Anales de la Sociedad Científica Argentina*, 16: 5-32.
- Berg, C. 1892. Nova Hemiptera faunarum Argentinae et Uruguayensis. *Anales de la Sociedad Científica Argentina*, 33: 193-205.
- Bergrøth, E. 1910. On some Miridae from French Guiana. *Annales de la Société entomologique de Belgique*, 54: 60-68.
- Bergrøth, E. 1922. On the South American Miridae described by C. Stål. *Arkiv för zoologi*, 14: 1-25.
- Blanchard, E. 1852. Orden VII. *Hemipteros*. In: Gay, G. (ed.). *Historia física y política de Chile*. 7. Paris y Museo de Historia Natural de Santiago. pp. 113-320 (not seen).
- Carpintero, D.L. 1999. Lista de las Miridae (Heteroptera) de los parques nacionales patagónicos argentinos. *Revista de la Sociedad Entomológica Argentina*, 58(3-4): 51-52.
- Carpintero, D.L. and J.C.M. Carvalho. 1993. An annotated list of the Miridae of the Argentine Republic (Hemiptera). *Revista Brasileira de Biología*, 53(3): 397-420.
- Carpintero, D.L. and F. Chérot. 2008. Sur quelques nouveaux *Phytocoris* Fallén, 1814 (Heteroptera: Miridae) de l'Argentine et du Chili. I. *Nouvelle Revue d'Entomologie* (N.S.), 24(3): 221-258.

- Carvalho, J.C.M. 1944a. Mirídeos Neotropicais: Revisão do gênero *Derophthalma* Berg et descrição de um gênero novo da fauna chilena (Hemiptera). *Revista de Entomologia*, 15(1-2): 144–153.
- Carvalho, J.C.M. 1944b. Mirídeos neotropicais: Sobre o gênero «*Sericophanes*» Reuter, com a descrição de uma nova especie. *Revista Brasileira de Biologia*, 4: 517–530.
- Carvalho, J.C.M. 1946. Mirídeos neotropicais, 20: Tres espécies novas dos gêneros *Platytomatocoris* Reuter, *Antias* Distant e *Hyalochloria* Reuter. (Hemiptera). Livro Jubilar R. F. Almeida. pp. 125–132.
- Carvalho, J.C.M. 1947. Mirídeos Neotropicais, XXVII: Gêneros *Porpomiris* Berg, *Lampethusa* Distant, *Cyrtopeltis* Fieber e *Dicyphus* Fieber. *Boletim do Museu Nacional, Zoologia*, 77: 1–41.
- Carvalho, J.C.M. 1954. Neotropical Miridae, 74: Two new genera of Cylapinae from Brazil (Hemiptera). *Proceedings of the Iowa Academy of Sciences*, 61: 504–510.
- Carvalho, J.C.M. 1959. Catálogo dos Mirídeos do Mundo. Part IV. Subfamília Mirinae. *Arquivos do Museu Nacional*, Vol. XLVIII: 1–384.
- Carvalho, J.C.M. 1974. Mirídeos neotropicais, CLXXXI: Estudos sobre a tribo Resthenini Reuter. VIII. - Descrição de *Prepropsella* n. gen. e seis espécies novas (Hemiptera). *Anais da Academia Brasileira de Ciencias*, 46: 303–310.
- Carvalho, J.C.M. 1975a. Mirídeos Neotropicais, CLXXXVIII: On the genera *Dolichomiris* Reuter, *Megaloceroea* Fieber, *Stenodema* Laporte, *Trigonotyliscus* n. gen. and *Trigonotylus* Fieber (Hemiptera). *Revista Brasileira de Biologia*, 35(1): 121–140.
- Carvalho, J.C.M. 1975b. Mirídeos Neotropicais, CLXXXIX: Descrições de Espécies novas de *Poeas* e *Taeda* (Hemiptera). *Revista Brasileira de Biologia*, 35(2): 167–206.
- Carvalho, J.C.M. 1975c. Mirídeos Neotropicais, CXCII: Descrição de do Subgêneros e Espécies novas do Gênero *Notholopus* Bergroth (Hemiptera). *Revista Brasileira de Biologia*, 35(3): 369–378.
- Carvalho, J.C.M. 1977. Mirídeos Neotropicais, CCIX: Descrições de quatro espécies novas e do macho de *Hadronemisca corcovadensis* Carvalho & Gomes. *Revista Brasileira de Biologia*, 37(1): 17–22.
- Carvalho, J.C.M. 1981. Mirídeos Neotropicais, CCXXXII: descrições de dois gêneros e cinco espécies novas (Hemiptera). *Revista Brasileira de Biologia*, 41(1): 11–18.
- Carvalho, J.C.M. 1984. Mirídeos neotropicais, CCLII: Descrições de novos generos e espécies da tribo Phylimi Douglas and Scott (Hemiptera). *Boletim do Museu Paraense Emilio Goeldi, Zoologia*, N.S., 1: 143–206.
- Carvalho, J.C.M. 1985a. Mirídeos Neotropicais, CCXL: Descrições de duas espécies de *Penacoris* Carvalho and Rosas e notas sobre a espécies-tipos de *Araucanophylus* Carvalho (Hemiptera). *Boletim do Museu Paraense Emilio Goeldi*, 2(1): 7–12.
- Carvalho, J.C.M. 1985b. Mirídeos Neotropicais, CCLXI: Descrições de um Gêneros e onze Espécies Novos da América Central e América do Sul (Hemiptera). *Revista Brasileira de Biologia*, 45(4): 653–668.
- Carvalho, J.C.M. 1985c. Mirídeos Neotropicais, CCLII: Descrições de novos gêneros e espécies da tribo Orthotylini Van Duzee (Hemiptera). *Revista Brasileira de Biologia*, 45(3): 249–298.
- Carvalho, J.C.M. 1986. Mirídeos Neotropicais, CCLXI: Gênero *Calocorisca* Distant com descrições de Espécies novas (Hemiptera). *Revista Brasileira de Biologia*, 46(1): 55–77.
- Carvalho, J.C.M. 1987. Mirídeos Neotropicais, CCXXXI: Gêneros *Bolivomiris* novo genus e *Guaicurua* novo genus. (Hemiptera). *Revista Brasileira de Biologia*, 47(4): 593–595.
- Carvalho, J.C.M. 1989. Mirídeos Neotropicais, CCCIV: Novos Gênero e Espécies do Brasil. *Revista brasileira de Biologia*, 49(2): 443–460.
- Carvalho, J.C.M. 1990a. Mirídeos Neotropicais, CCCXXXI: Um Gênero e Três Espécies Novos do Brasil. *Anais da Academia Brasileira de Ciencias*, 62(1): 75–78.
- Carvalho, J.C.M. 1990b. Mirídeos Neotropicais, CCCXLII: Novo Gênero e Novas Espécies da América do Sul. *Anais da Academia Brasileira de Ciencias*, 62(4): 393–400.
- Carvalho, J.C.M. 1992.- Mirídeos Neotropicais, CCCLI: Quatro Gênero e Espécies novos da América do Sul (Hemiptera). *Revista brasileira de Entomologia*, 36(3): 581–588.
- Carvalho, J.C.M. and C.R.S. Afonso. 1977. Mirídeos Neotropicais, CCVIII: Sobre uma coleção enviada para estudo pela academia de ciências da California. *Revista Brasileira de Biologia*, 37(1): 7–16.
- Carvalho, J.C.M. and J. Becker. 1957. Neotropical Miridae, LXXX: On a collection of «Miridae» from Fernando Noronha Islands. *Revista Brasileira de Biologia*, 17(2): 253–256.
- Carvalho, J.C.M. and J. Becker. 1958. Neotropical Miridae, LXXXIII: A new species of “*Cyrtopeltis (Engytatus)*” with notes on related species (Hemiptera, Heteroptera). *Revista Brasileira de Biologia*, 18: 333–336.
- Carvalho, J.C.M. and D.L. Carpintero. 1987. Mirídeos Neotropicais, CCLXXII: Descrição de Sete Espécies Novas da Tribo Resthenini Reuter (Hemiptera). *Revista Brasileira de Zoologia*, 4(1): 19–31.
- Carvalho, J.C.M. and D.L. Carpintero. 1992. Mirídeos Neotropicais, CCCLVIII: Observación de los Tipos de Miridae described por C. Berg (1878-93) con notas y Correcciones Taxonomicas (Hemiptera). *Anais da Academia Brasileira de Ciencias*, 64(1): 87–97.

- Carvalho, J.C.M. and A.A.L. Costa. 1988. Mirídeos Neotropicais, CCXII: Revisão do Gênero *Sericophanes* Reuter na América do Sul e América Central (Hemiptera). *Revista Brasileira de Biologia*, 48(4): 897–909.
- Carvalho, J.C.M. and A.A.L. Costa. 1992. Mirídeos Neotropicais, CCCLXIX: Três Gêneros e Quatro Espécies Novas do Brasil. *Anais da Academia Brasileira de Ciencias*, 64(2): 193–198.
- Carvalho, J.C.M. and C.J. Drake. 1943. A new genus and two new species of Neotropical Dicyphinae (Hemiptera). *Revista Brasileira de Biologia*, 3: 87–89 (not seen).
- Carvalho, J.C.M. and J.A.P. Dutra. 1961. Mirídeos Neotropicais, LXXXVII: Revisão do gênero *Stenoparedra* Reuter, 1909 (Hemiptera, Heteroptera). *Avulso Centro Estudos Zoológicos*, 12: 1–9.
- Carvalho, J.C.M. and P.S.F. Ferreira. 1969. Mirídeos Neotropicais, CXI: Gênero *Phytocoris* Fallén na Fauna Chilena (Hemiptera). *Anais da Academia Brasileira de Ciencias*, 41(4): 601–623.
- Carvalho, J.C.M. and P.S.F. Ferreira. 1972. Mirídeos Neotropicais CXLV: Estudo de duas coleções da República do Peru (Hemiptera). *Revista Brasileira de Biologia*, 32: 177–183.
- Carvalho, J.C.M. and A.V. Fontes. 1969a. Mirídeos Neotropicais, CX: Sobre a posição sistemática de alguns gêneros da tribo Stenodemini China (Hemiptera). *Revista Brasileira de Biologia*, 29: 329–350.
- Carvalho, J.C.M. and A.V. Fontes. 1969b. Mirídeos neotropicais CVI: Estudos sobre o gênero *Preops* Reuter (I), (Hemiptera). *Anais da Academia Brasileira de Ciencias*, 41: 259–275.
- Carvalho, J.C.M. and A.V. Fontes. 1970. Mirídeos neotropicais, CXVI: Estudos sobre o gênero *Preops* Reuter - (III), (Hemiptera). *Anais da Academia Brasileira de Ciencias*, 42: 367–388.
- Carvalho, J.C.M. and I.P. Gomes. 1969. Mirídeos Neotropicais, CXII: Espécies do Gênero *Polymerus* Hahn que ocorrem no Chile. *Revista Brasileira de Biologia*, 29(4): 477–486.
- Carvalho, J.C.M. and I.P. Gomes. 1970a. Mirídeos Neotropicais, CXIV: Algumas Espécies de *Phytocoris* Fallén da Argentina, Brasil, Colômbia e Paraguai. *Revista Brasileira de Biologia*, 30(1): 115–136.
- Carvalho, J.C.M. and I.P. Gomes. 1970b. Mirídeos Neotropicais, CXVII: Sobre alguns espécies de Bryocorini e Clivinemini (Hemiptera). *Revista Brasileira de Biologia*, 30(3): 411–418.
- Carvalho, J.C.M. and I.P. Gomes. 1971. Mirídeos Neotropicais, CXXI: Revisão do Gênero *Taedia* Distant, 1883, na Região Neotropical (Hemiptera). *Anais da Academia Brasileira de Ciencias*, 43(1): 249–286.
- Carvalho, J.C.M. and J. Jurberg. 1974. Neotropical Miridae, CLXXX: On the *Horcias* complex (Hemiptera). *Revista Brasileira de Biologia*, 34(1): 49–65.
- Carvalho, J.C.M. and J. Jurberg. 1976. Mirídeos Neotropicais, CCVI: Revisão do Gênero *Horciasinus* Carvalho & Jurberg (Hemiptera). *Revista Brasileira de Biologia*, 36(4): 811–834.
- Carvalho, J.C.M. and A.F. Rosas. 1965. Mirídeos Neotropicais, XCV: Gênero e Espécies nova do Suriname, com uma lista de Espécies coligidas em Paramaribo. *Revista Brasileira de Biologia*, 25(2): 207–210.
- Carvalho, J.C.M. and A.F. Rosas. 1966. Mirídeos Neotropicais, XCVI: Novo gênero e espécies da fauna Chilena (Hemiptera). *Revista Brasileira de Biologia*, 26: 73–75.
- Chérot, F and D. Carpintero. 2016. New and little known Miridae from French Guyana and neighbouring areas (Insecta, Heteroptera). *Festschrift R. Linnauori, Entomologica Americana*, 122(1-2): 82–96.
- Chérot, F., L. Costa and M. Touchet. 2011. Miscellanea miridologica II. New combinations and new synonymies in the subfamily Mirinae. *Zootaxa*, 3004: 57–62. (free access on Zootaxa's website).
- China, W.E. 1943. Part 8. *The generic names of the British Hemiptera Heteroptera, with a check list of British Species*. Royal Entomological Society, London. (not seen).
- Costa, L.A.A., F. Chérot and D. L. Carpintero. 2008. Hétéroptères Miridae de Guyane française: liste préliminaire, descriptions de taxa nouveaux et données additionnelles. *Annales de la Société entomologique de France*, 44(3): 345–371.
- Costa, L.A.A. and G. Couturier. 2012. Le genre *Anomalocornis* Carvalho and Wygodzinski, 1945 (Heteroptera: Miridae: Phylinae), révision taxonomique, description d'une espèce nouvelle et affinité avec les palmiers néotropicaux. *Annales de la Société entomologique de France* (N.S.), 48(3–4): 323–341.
- da Silva, E.L.C., 2007. Descripción del macho de *Rhoicinus andinus* (Araneae, Rhoicininae, Trechaleidae). *Revista Peruana de Biología*, 14(2): 305–306.
- Distant, W.L. 1883. *Insecta Rhynchota. Hemiptera Heteroptera. vol. I*. In Godman, F. D. and O. Salvin (eds). *Biologia Centrali Americana*. R. H. Porter, London, pp. 225–264.
- Distant, W.L. 1884. *Insecta Rhynchota. Hemiptera Heteroptera. vol. I*. In Godman, F. D. and O. Salvin (eds). *Biologia Centrali Americana*. R. H. Porter, London, pp. 265–304.
- Distant, W.L. 1904. Rhynchotal Notes. Heteroptera. Fam. Capsidae (Part II) - XXI. *Annals and Magazine of Natural History*, Ser. 7, 13: 194–206.
- Douglas, J.W. and Scott, J. 1865. *The British-Hemiptera. Vol. 1. Hemiptera-Heteroptera*. The Ray Society, London.
- Ferreira, P.S.F. 1980. Taxonomia das espécies do gênero *Polymerus* Hahn, 1831 (Hemiptera, Miridae), da região cisandina, América do Sul. *Experientiae*, 26(12): 329–

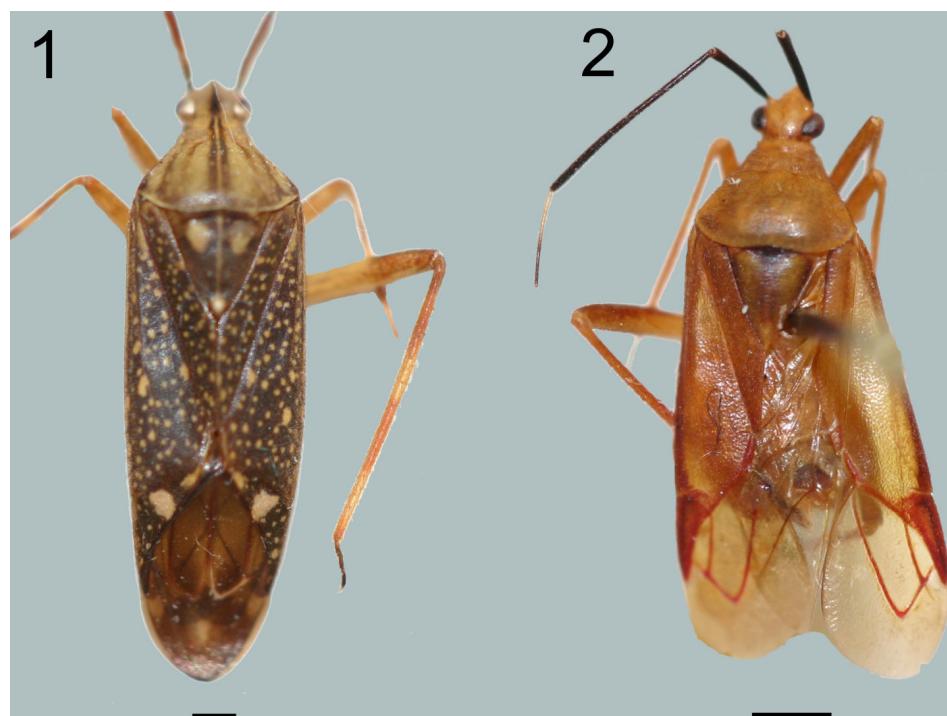
- 386.
- Fieber, F.X. 1861. *Die europäischen Hemipteren. Halbflügler (Rhynchota Heteroptera)*. Gerold's Sohn, Wien. pp. 113–444.
- Fontes, AV. 1996. Contribuição ao estudo da genitália da fêmeas de *Polymerus* Hahn, 1831. *Revista Brasileira de Entomologia*, 40 (2): 137–141.
- Hahn, C.W. 1833. *Die wanzenartigen Insecten*. 1. C. H. Zeh, Nurnberg.
- Henry, T.J. 2012. Revision of the Plant Bug Genus *Tytthus* (Hemiptera, Heteroptera, Miridae, Phylinae). *Zookeys*, 220: 1–114.
- Hernandez, L.M. and T.J. Henry. 2010. *The Plant Bugs, or Miridae (Hemiptera: Heteroptera), of Cuba*. Pensoft Series Faunistica n° 92. Pensoft, Sofia, Moscow.
- Kirkaldy, G.W. 1906. Notes on the classification and nomenclature of the hemipterous superfamily Miroidea. *Canadian Entomologist*, 38: 369–376.
- Knight, H.H. 1923. *Guide to the insects of Connecticut. Part IV. The Hemiptera or sucking insects of Connecticut-Family Miridae (Capsidae)*. State of Connecticut Geological and Natural History Survey, Bulletin no.34, pp. 422–658 (not seen).
- Leston, D. 1952. On certain subgenera of *Lygus* Hahn, 1833 (Hemiptera, Miridae) with a review of the British species. *Entomologist's Gazette*, 3: 213–230.
- Maldonado Capriles, J. 1969. The Miridae of Puerto Rico (Insecta Hemiptera). *Technical paper University of Puerto-Rico*, 45: 1–133.
- Maldonado Capriles, J. and J.C.M Carvalho. 1981. New species of *Guianella* Carvalho from Panama and a key to the species (Hemiptera, Miridae). *Revista Brasileira de Biologia*, 41(2): 389–394.
- Morales, I., Ferreira, P. S. F. and D. Forero 2016. Taxonomic revision of *Collaria* Provancher, 1872 (Hemiptera: Miridae) with the description of a new species from the Afrotropical region. *Zootaxa*, 4138 (2): 201–246.
- Namyatova, A.A., F. Konstantinov and G. Cassis. 2015. Phylogeny and systematics of the subfamily Bryocorinae based on morphology with emphasis on the tribe Dicyphini *sensu* Schuh, 1976. *Systematic Entomology*, 41(1): 1–38.
- Reuter, O.M. 1883. Hemiptera Gymnocerata Europae. Hémiptères Gymnocérates d'Europe, du bassin de la Méditerranée et de l'Asie Russe. III. *Acta Societatis Scientiarum Fennicae*, 13: 313–496.
- Reuter, O.M. 1890. Capsidae novae ex Africa boreali, descriptis. *Revue d'Entomologie*, 9: 255–260. (not seen).
- Reuter, O.M. 1893. [Espèce nouvelles de Miridae]. In: Bergroth, E., Mission scientifique de M. Ch. Alluaud aux Iles Séchelles (mars, avril, mai 1892). *Revue d'Entomologie*, 12: 197–209.
- Reuter, O.M. 1905. Capsidae in Venezuela a D:o D:re Fr. Meinert collectae enumeratae novaque species descriptae. Öfversigt af Finska Vetenskapssocietetens Förhandlingar, 47(19): 1–39.
- Reuter, O.M. 1907. Capsidae in Brasilia collectae in Museo I. R. Vindobonensi asservatae. *Annalen des Naturhistorisches Hofmuseums Wien*, 22: 33–80 (not seen).
- Reuter, O.M. 1909. Genera quatuor nova divisionis Capsidarum Restheniaria. Öfversigt af Finska Vetenskapssocietetens Förhandlingar, 51A (24): 12 pp.
- Say, T. 1832. Descriptions of new species of Heteropterous Hemiptera of North America. New Harmony, Indiana, Dec. 1831. (not seen).
- Schuh, R.T. 1995. *Plant bugs of the world (Insecta: Heteroptera: Miridae). Systematic Catalog, Distributions, Host List, and Bibliography*. Entomological Society of New York. xii + 1329 pp.
- Schuh, R.T. 2002-2013.- *On-line Systematic Catalog of Plant Bugs (Insecta: Heteroptera: Miridae)*. <http://research.amnh.org/pbi/catalog/> (last access: 21/04/2016).
- Schuh, R.T. and K. Menard. 2013. A revised classification of the Phylinae (Insecta: Heteroptera: Miridae). Arguments for the Placement of Genera. *American Museum Novitates*, 3785: 1–72.
- Schuh, R.T. and M.D. Schwartz. 1985. Revision of the plant bug Genus *Rhinacloa* Reuter with a phylogenetic analysis. *Bulletin of the American Museum of Natural History*, 179(4): 379–470.
- Schwartz, M.D. 1987. *Phylogenetic revision of the Stenodemini with a review of the Mirinae (Heteroptera: Miridae)*. Ph.D. City University of New York. U.M.I., Ann. Arbor.
- Schwartz, M.D. 2008. Revision of the Stenodemini with a review of the included genera (Hemiptera: Heteroptera: Miridae: Mirinae). *Proceedings of the Entomological Society of Washington*, 110(4): 1111–1201.
- Signoret, V. 1864. Révision des Hémiptères du Chili. *Annales de la Société Entomologique de France*, 4(3): 541–588.
- Spinola, M. 1852.- *Orden VII. Hemipteros. Hemipteros*. In: Gay, C. (ed.).- *Historia física y política de Chile*. Maulde and Renou, Paris. 7: 113–220 (not seen).
- Stål, C. 1859. Hemiptera. Species novas descriptis. *Kongliga Svenska Fregatten Eugenies resa omkring jorden*, III (Zoologi, Insector). pp. 219–298 (not seen).
- Stål, C. 1860. Bidrag till Rio Janeiro-traktens Hemiptera-fauna. *Kongliga Vetenskapakademiens Handlingar*, 2(7): 1–84.
- Stål, C. 1862. Hemiptera Mexicana enumeravit species novas descriptis. *Stettiner Entomologische Zeitung*, 23: 81–118, 289–325.
- Van Duzee, E.P. 1916. Synoptical keys to the genera of North American Miridae. *University California Publications in Entomology, Technical Bulletin*, 1: 199–216.
- Walker, F. 1873. *Catalogue of specimens of Hemiptera Heteroptera of the British Museum. Part IV*. British

Museum.

Wheeler, A.G. (Jr). 2001. *Biology of the Plant Bugs (Hemiptera: Miridae). Pests, Predators, Opportunists.* Cornell University Press, Ithaca, New York.

Recibido: 7 de abril 2017

Aceptado: 16 de mayo 2017



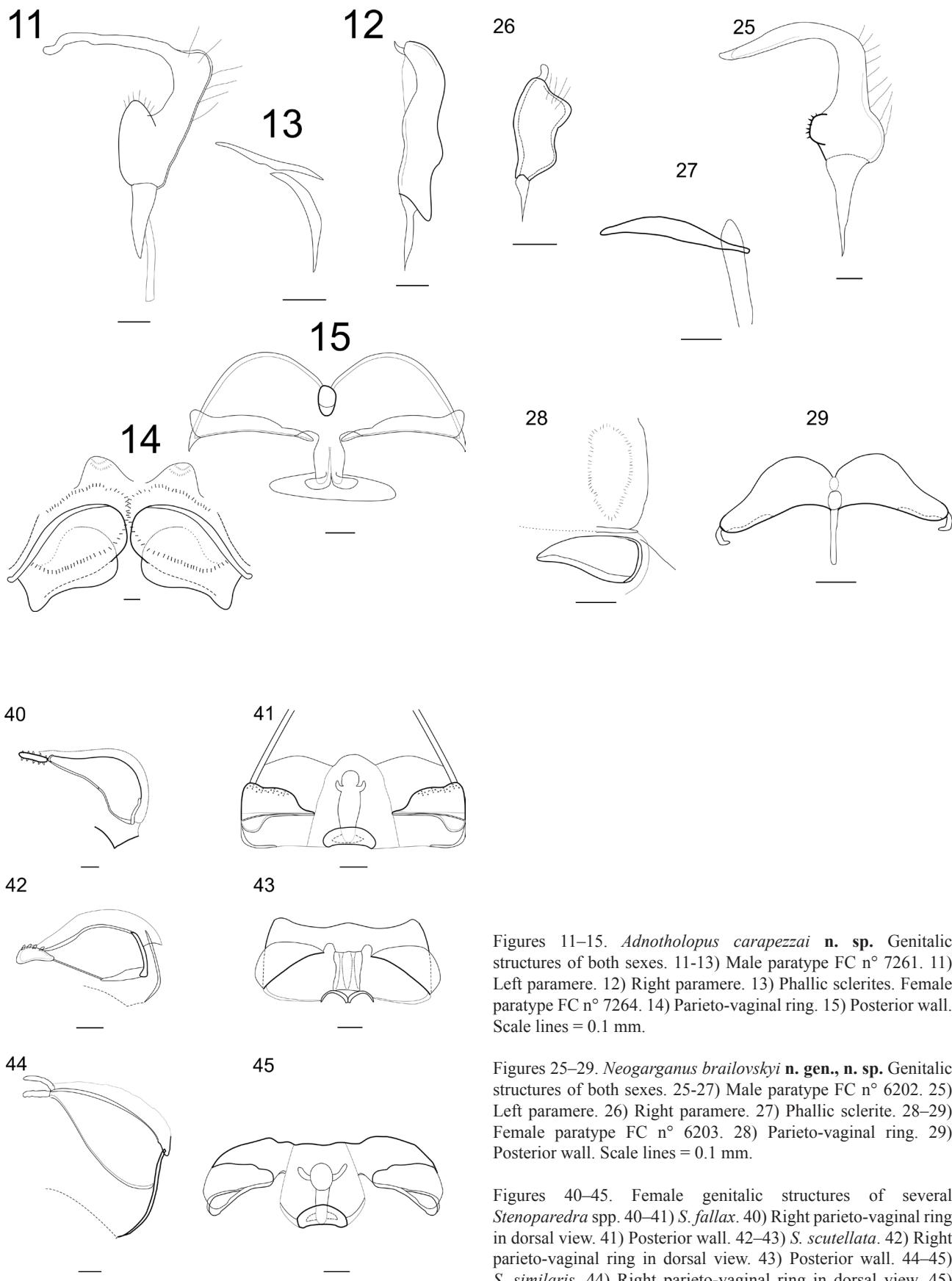
Figures 1–2. *Adnotholopus spp.* habitus in dorsal view. 1) *A. carapezzai n. sp.* Female paratype FC n° 7263. 2) *A. peruanus* Carvalho, 1990b. Male holotype. Scale lines = 1 mm.



Figure 16. *Neogarganus brailovskyi n. gen., n. sp.* Male holotype, habitus in dorsal view. Scale line = 1 mm.



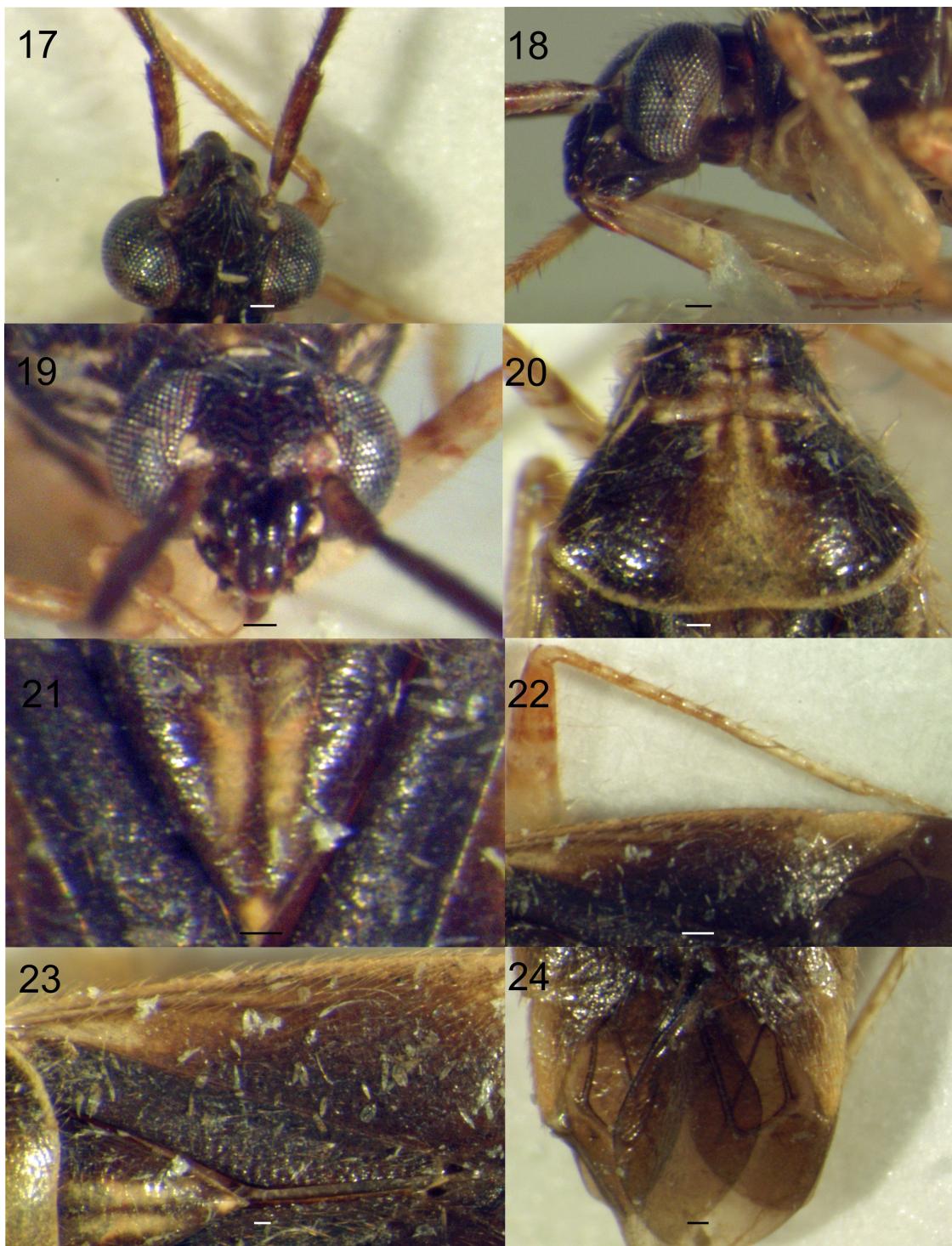
Figures 3–10. *Adnotholopus carapezzai* n. sp. Female paratype FC n° 7264, morphology. 3–4) Head in dorsal and frontal views. 5) Ostiolar peritreme. 6) Pronotum in dorsal view. 7) Mesoscutum and scutellum in dorsal view. 8) Metaleg and body in lateral view (after genitalic dissection). 9) Hemelytra in dorsal view. 10) Detail of membrane. Scale lines = 0.1 mm (Fig. 8 excepted, scale line = 0.3 mm).



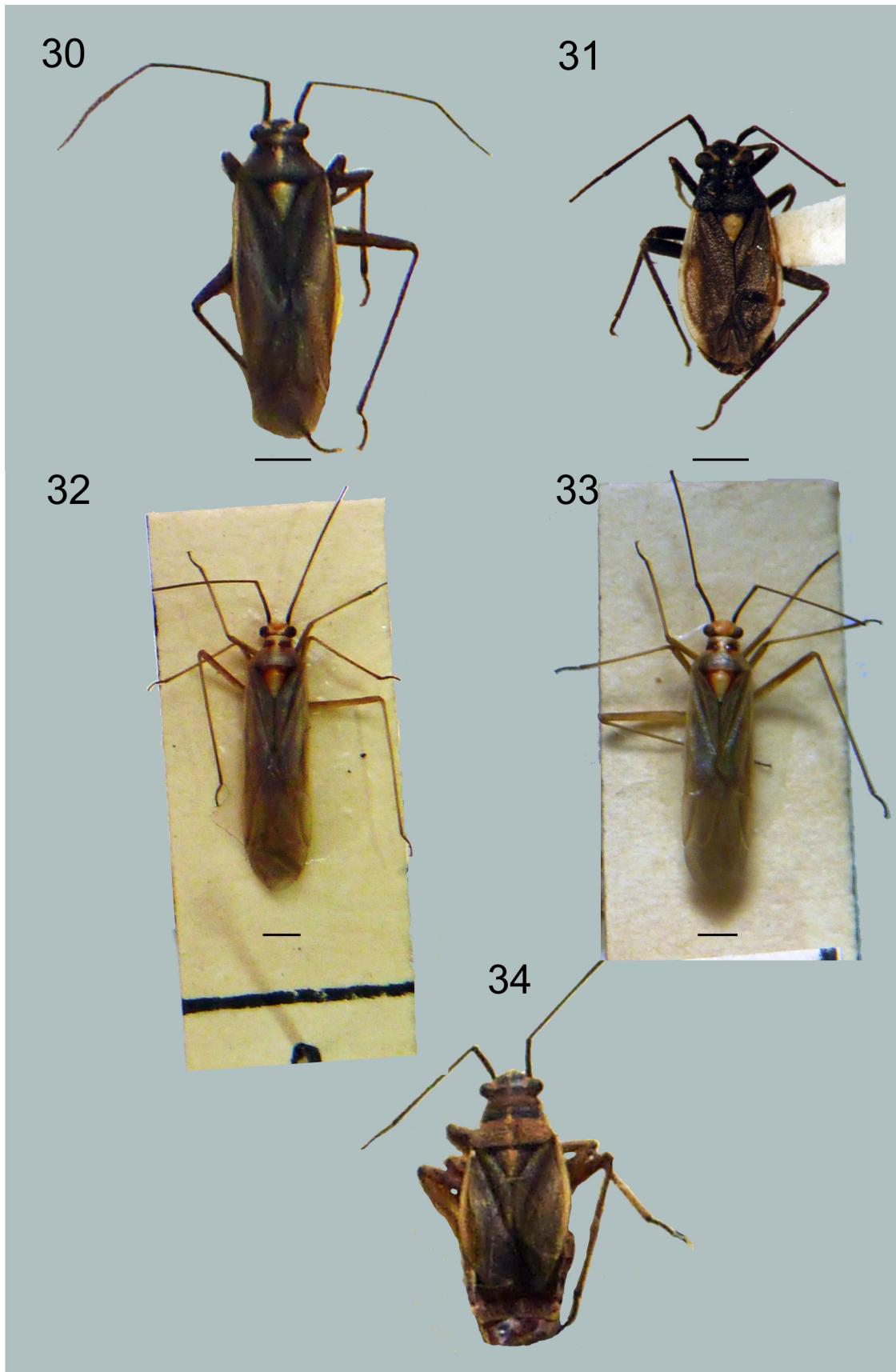
Figures 11–15. *Adnotholopus carapezzai* n. sp. Genitalic structures of both sexes. 11–13) Male paratype FC n° 7261. 11) Left paramere. 12) Right paramere. 13) Phallic sclerites. Female paratype FC n° 7264. 14) Parieto-vaginal ring. 15) Posterior wall. Scale lines = 0.1 mm.

Figures 25–29. *Neogarganus brailovskyi* n. gen., n. sp. Genitalic structures of both sexes. 25–27) Male paratype FC n° 6202. 25) Left paramere. 26) Right paramere. 27) Phallic sclerite. 28–29) Female paratype FC n° 6203. 28) Parieto-vaginal ring. 29) Posterior wall. Scale lines = 0.1 mm.

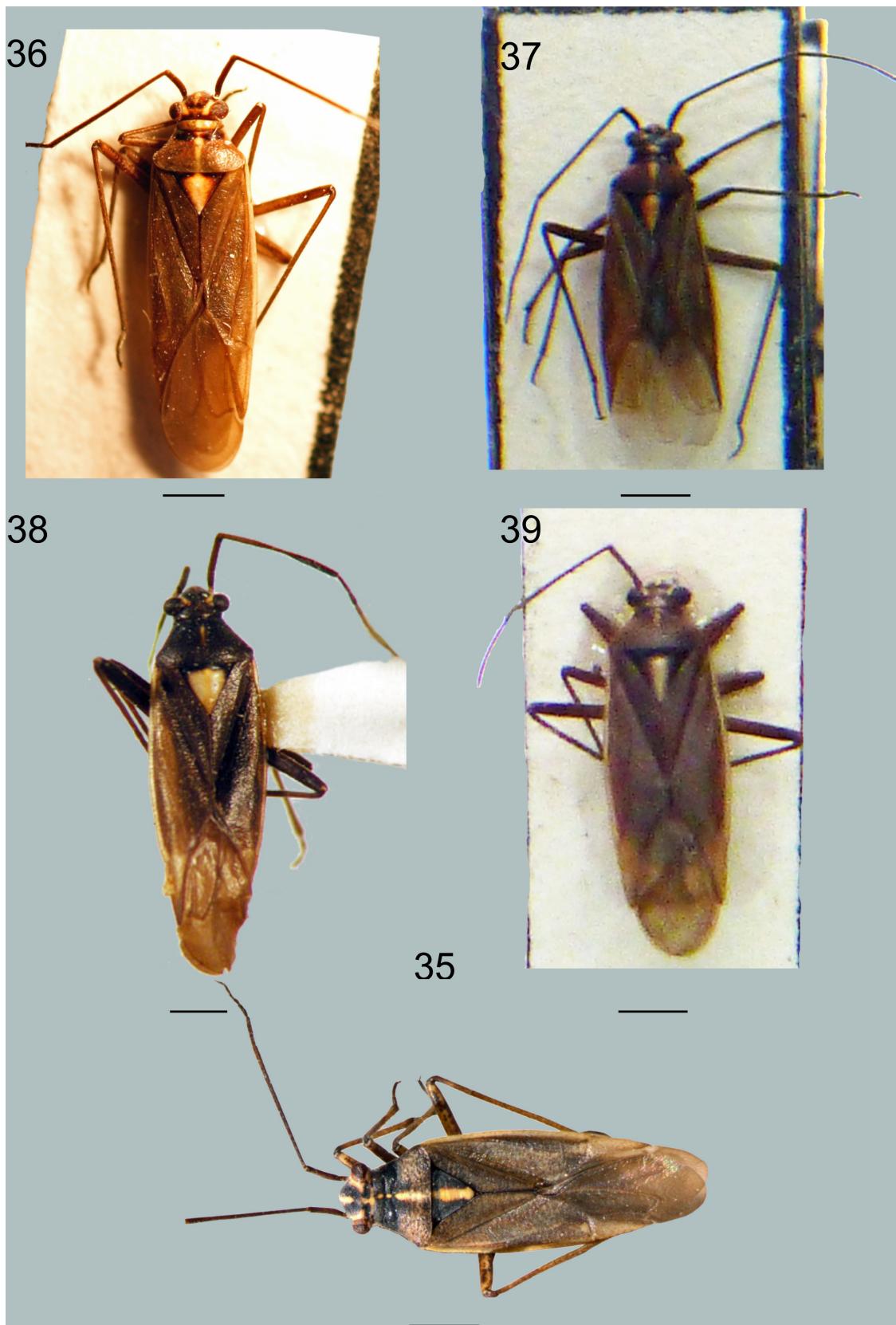
Figures 40–45. Female genitalic structures of several *Stenoparedra* spp. 40–41) *S. fallax*. 40) Right parieto-vaginal ring in dorsal view. 41) Posterior wall. 42–43) *S. scutellata*. 42) Right parieto-vaginal ring in dorsal view. 43) Posterior wall. 44–45) *S. similaris*. 44) Right parieto-vaginal ring in dorsal view. 45) Posterior wall. Scale lines = 0.1 mm.



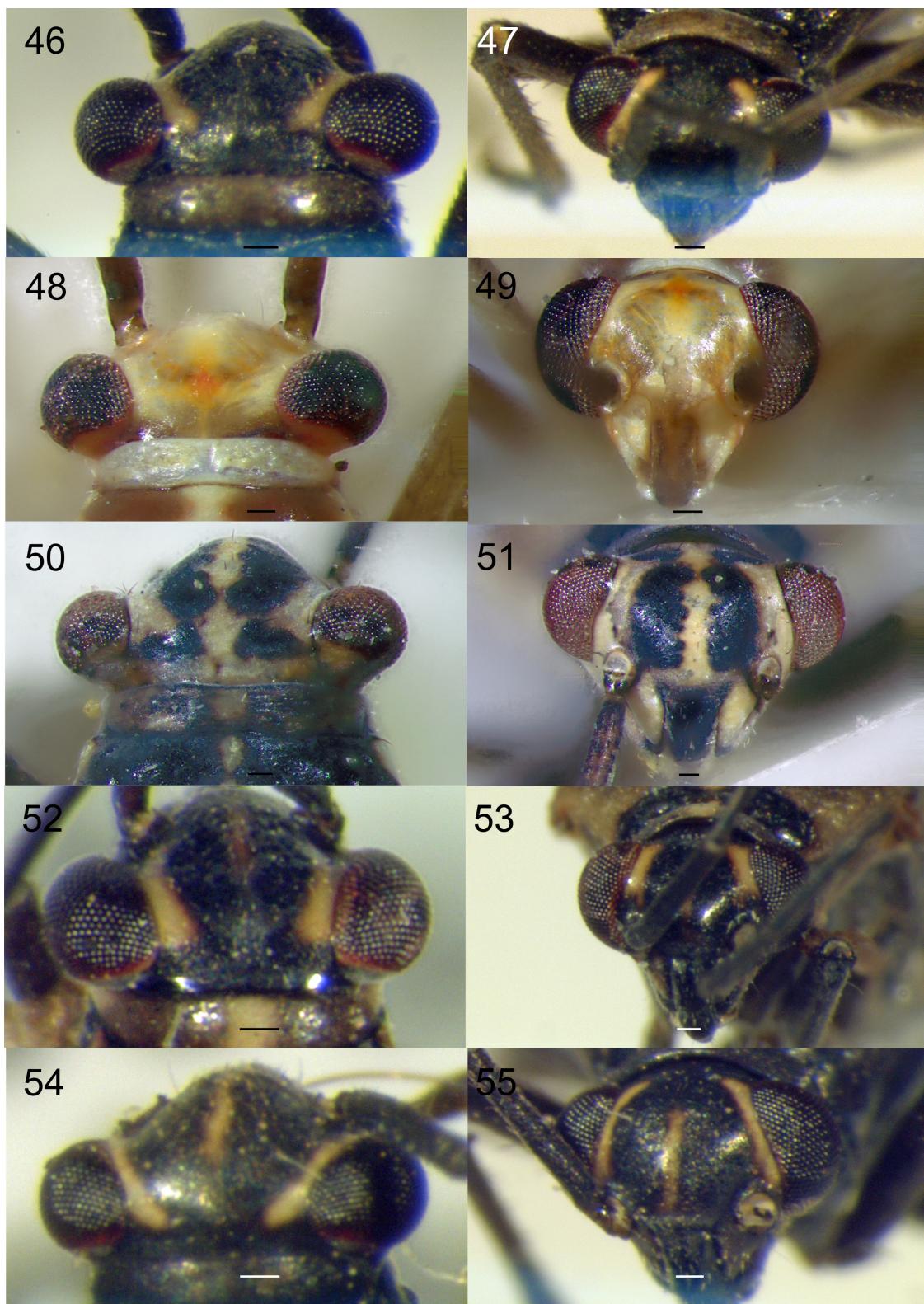
Figures 17–24. *Neogarganus brailovskyi* n. gen., n. sp. Male paratype FC n° 6201, morphology. 17–19) Head in dorsal, lateral and frontal views. 20) Pronotum in dorsal view. 21) Mesoscutum and scutellum in dorsal view. 22) Metaleg. 23) Hemelytra in dorsal view. 24) Detail of membrane. Scale lines = 0.1 mm.



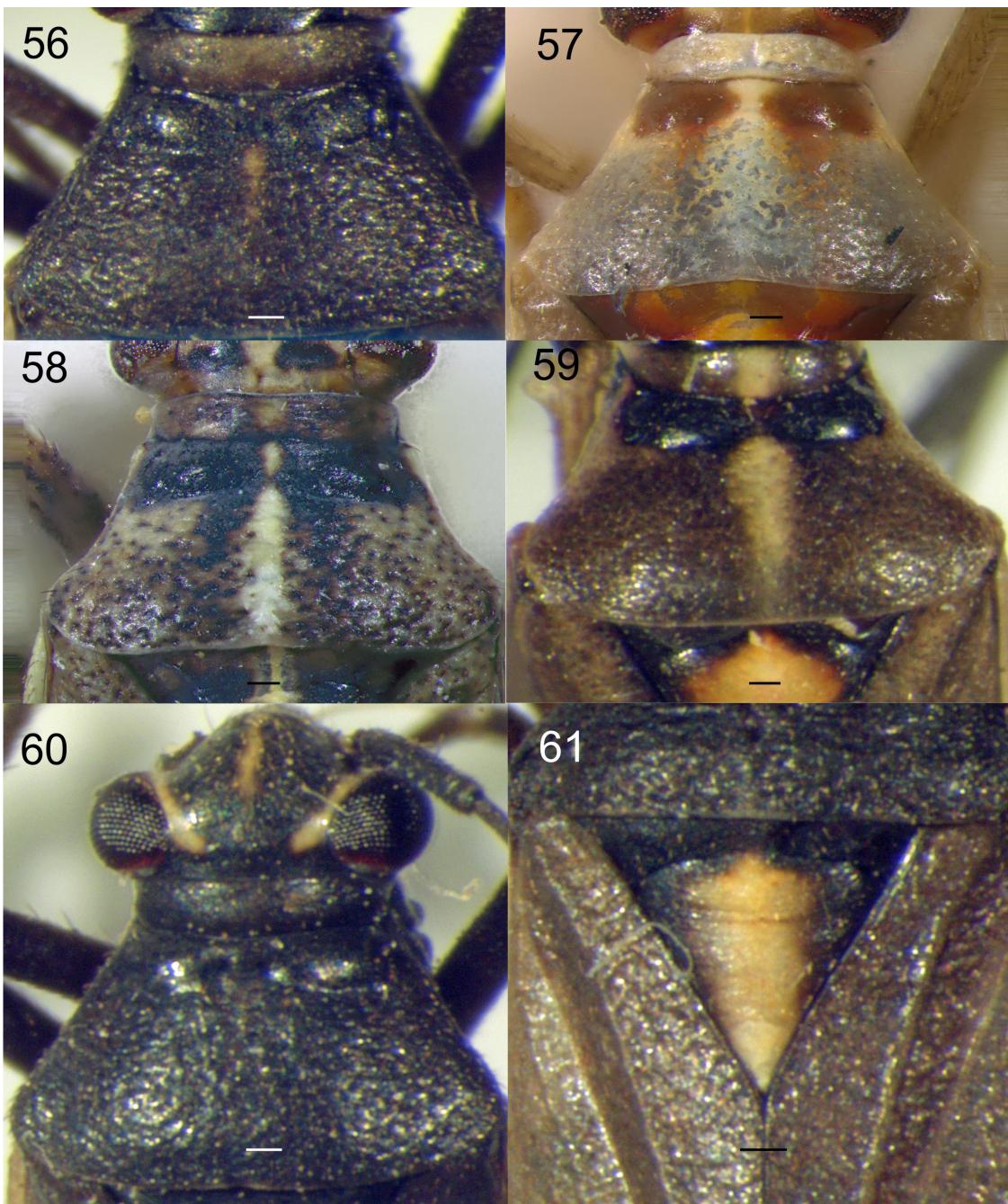
Figures 30–34. Habitus of *Stenoparedra* spp. in dorsal view. 30–31) *S. fallax*. 30) Male. 31) Female. 32–33) *S. jucunda*. 32) Male. 33) Female. 34) *S. penai*. Female. Scale lines = 1 mm.



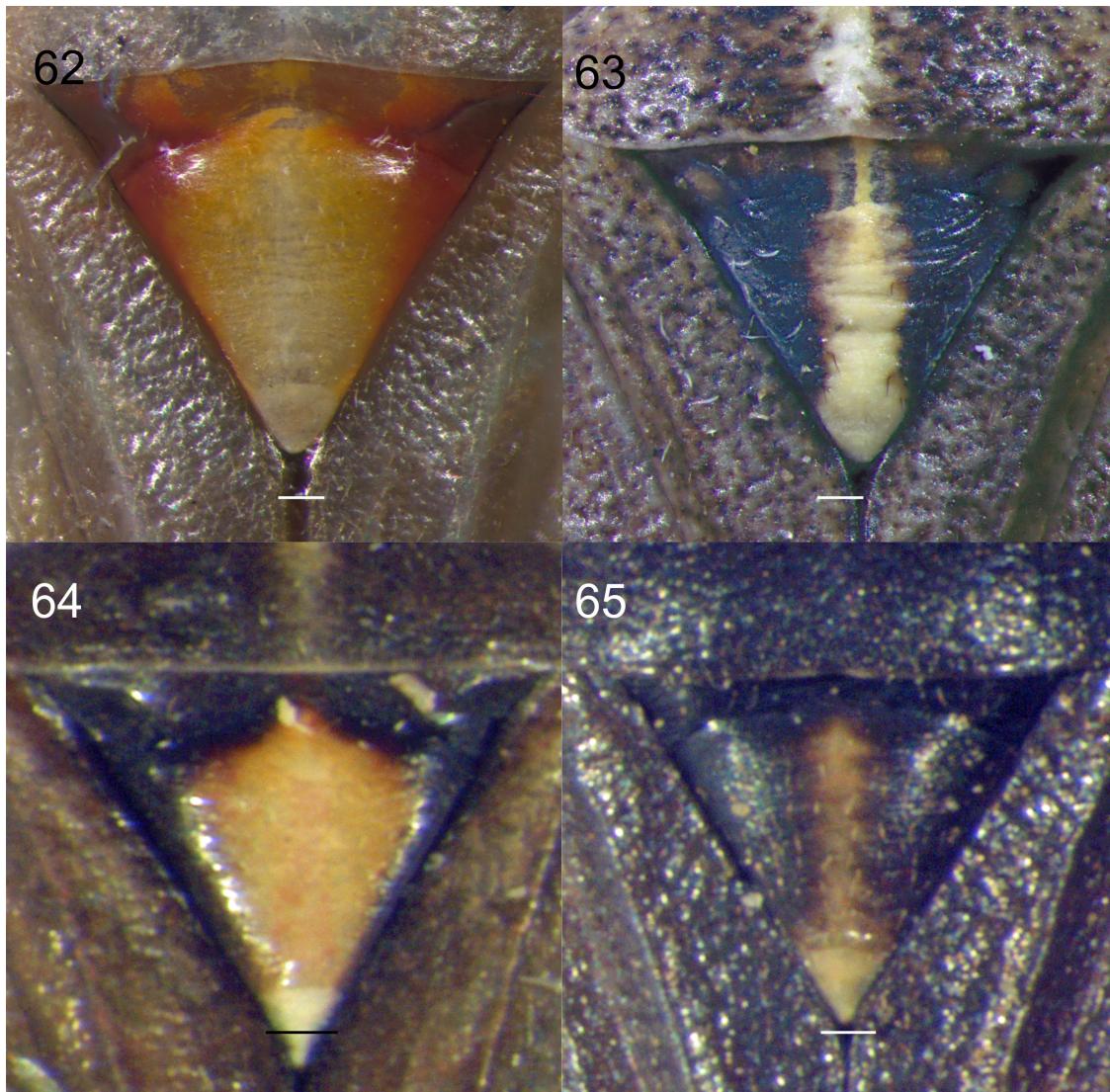
Figures 35–39. Habitus of *Stenoparedra* spp. in dorsal view. 35) *S. penai*. Male. 36–37) *S. scutellata*. 36) Male. 37) Female. 38–39) *S. similaris*. 38) Male. 39) Female. Scale lines = 1 mm.



Figures 46–55. Head of *Stenoparedra* spp. in dorsal view and frontal view respectively. 46–47) *S. fallax*. 48–49) *S. jucunda*. 50–51) *S. penai*. 52–53) *S. scutellata*. 54–55) *S. similaris*. Scale lines = 0.1 mm.



Figures 56–60. Pronotum of *Stenoparedra* spp. 56) *S. fallax*. 57) *S. jucunda*. 58) *S. penai*. 59) *S. scutellata* (Spinola, 1852). 60) *S. similaris*. Figure 61. Scutellum of *S. fallax*. Scale lines = 0.1 mm.

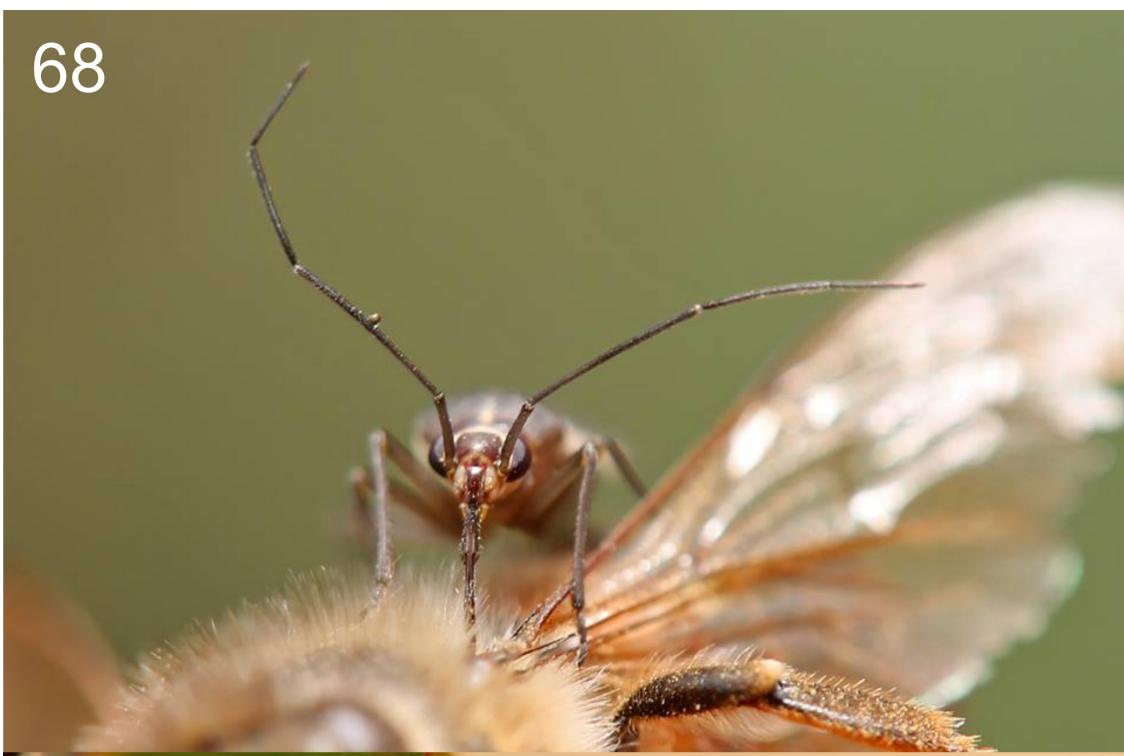


Figures 62–65. Scutellum of *Stenoparedra* spp. 62) *S. jucunda*. 63) *S. penai*. 64) *S. scutellata*. 65) *S. similaris*. Scale lines = 0.1 mm.



Figures 66–67. Feeding behavior in *Stenoparedra scutellata*. A case of necrophagy on honeybee observed by Claudio Guzmán Retamales (on November 07th 2015) (photo @ C. G. Retamales).

68



69



Figures 68-69. Feeding behavior in *Stenoparedra scutellata*. A case of necrophagy on honeybee observed by Claudio Guzmán Retamales (on November 07th 2015) (photo @ C. G. Retamales).