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REVISION OF THE GENUS *OGMOCORIS* MAYR, 1864 (HETEROPTERA, PENTATOMIDAE, PENTATOMINI)

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ABSTRACT

The Neotropical genus *Ogmocoris* Mayr, 1864 is revised based on morphological characters, particularly the genitalia of both sexes. Formerly monobasic with *O. hypomelas* (Burmeister, 1835), one new species is here described, *O. paranaensis* n. sp. Illustrations of the external genitalia of both sexes are provided.

Key words: Heteroptera, Pentatomidae, Neotropical region, *Ogmocoris*, new species

INTRODUCTION

Burmeister (1835) described *Atelocerus hypomelas* based on a female collected in Rio de Janeiro (Brazil). Mayr (1864) described the genus *Ogmocoris* to include *A. hypomelas*. Mayr (1866) redescribed *Ogmocoris* and considered it similar to *Mecocephala* Dallas, 1851. Walker (1868) described *Ansa distincta* based on a female from Amazon. Stål (1872) considered *A. distincta* as a junior synonym of *Ogmocoris hypomelas*. Costa Lima (1935) described *O. reinigeri* from Porto Alegre, Rio Grande do Sul (Brazil), but this species was deter-

mined to be a junior synonym of *Tibraca limbiventris* Stål, 1860, by Silva (1945). Costa Lima (1947) considered the genus *Ogmocoris* to be a junior synonym of *Tibraca* Stål, 1860, but Fernandes & Grazia (1998) reinstated *Ogmocoris*.

MATERIALS AND METHODS

The types of *Ansa distincta* and *Atelocerus hypomelas* were examined.

The specimens studied belong to the following collections: BMNH - The Natural History Museum, London, England (Dr M. Webb);

Contribution n° 389 of Departamento de Zoologia, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil.

DZUP - Coleção Entomológica 'Pe. Jesus Santiago Moure', Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brazil (Dr L. Marinoni); MCNZ - Museu de Ciências Naturais, Fundação Zoobotânica do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil (Dr H.A.O. Gastal); UFRJ - Coleção Costa Lima, Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro, Brazil (Dr J.R. Pujol-Luz); ZMHB - Museum Für Naturkunde der Humboldt Universität zu Berlin, Berlin (Dr J. Deckert).

Measurements are given in millimeters. The terminology of Dupuis (1970) was adopted for the structure of the genitalia. The only male and female of *O. hypomelas* and only male of *O. paranaensis* n. sp. were not dissected.

TAXONOMIC PART

Genus *Ogmocoris* Mayr, 1864

Ogmocoris Mayr, 1864: 908; Mayr, 1866: 34; Stål, 1872: 30; Lethierry & Severin, 1893: 132; Kirkaldy, 1909: 72; Silva, 1945: 596; Costa Lima, 1947: 312; Fernandes & Grazia, 1998: 1058.

Ansa Walker, 1868: 548.

TYPE SPECIES. - *Atelocerus hypomelas* Burmeister, 1835 (= *Ansa distincta* Walker, 1868).

DESCRIPTION. - Medium size. Body elliptical. Ventral surface more convex than dorsal one. Dorsal and ventral surfaces strongly punctured. Head as long as wide and as long as pronotum. Juga longer than or subequal to tylus. Lateral margins of juga slightly concave and emarginate; dorsal surface of juga and tylus with transverse furrows. Head, in profile, with tylus slightly higher than juga. Antenniferous tubercles with lateral rhomboid spine. Antennal segment I not attaining apex of head; relative length of segments: III \approx V > IV > I > II. Bucculae sinuous in profile, evanescent at base of head with small anterior tooth. Rostral segment I shorter than bucculae. Segments II and III subequal in length, longer than IV; segment I shortest. Segment II arched and flattened laterally. Rostrum surpassing posterior margin of urosternite IV.

Pronotum trapezoidal, anterior 2/3 slightly declivent. Pronotum about three times wider across humeri than long. Anterior angles distinctly toothed. Anterolateral margins slightly concave, anterior half strongly crenulated; posterolateral margins sinuous. Posterior margin rectilinear. Cicatrices concolorous, delimited by punctures, with a few punctures at middle.

Prosternum slightly carinate; mesosternum carinate, metasternum shallowly concave. Sternum with white hairs. Ostiolar rugae clavate, length 1/3 of evaporatory area width. Tibiae dorsally sulcate.

Basal angles of scutellum foveate, apex rounded, surpassing middle of connexival segment V. Posterior angle of corium rounded, reaching at least middle of connexival segment VI. Apex of radial vein with or without small pale yellow callus. Hemelytral membrane hyaline, veins brown, sometimes bifurcate.

Connexivum well-exposed, lateral margins emarginate. Posterolateral angles rounded, subcalloused.

Ventral surface of abdomen slightly sulcate medially. Spiracles black, elliptical. Each trichobothrium placed in tiny subcalloused area, separated by imaginary longitudinal line tangential to spiracles.

MALE. - Pygophore subquadrangular, globose, opening dorso-posteriorly. Posterolateral angles auriculate. Dorsal rim (dr) with median 1/3 posteriorly projected, slightly concave. Ventral rim (vr) forming two layers; the superior one expanded in 1+1 cylindrical arms (as) dorsally-directed, each one beside segment X; inferior layer carinate with tooth-like projections (tp). Segment X (proctiger) (X) cylindrical at base, apical half impressed on both sides, forming a single or 1+1 longitudinal carina (cr); apex dorsally projected. Parameres well developed (pa), shape variable in species.

FEMALE. - Genital plates punctured. Spiracles present in laterotergites 8 (la8). Posterior border of laterotergites 8 angulate.

COMMENTS. - Mayr (1866) recognized the similarities in the general aspects between *Ogmocoris* and *Mecocephala*. In *Mecocephala*, the head is longer

than wide, acuminate at apex and the rostrum is very long, surpassing the middle of urosternite VI; parameres are absent (Schwertner et al., 2002). The shorter rostrum and the characters found in male genitalia, mainly the presence of well developed parameres, separate *Ogmocoris* from *Mecocephala*. By the absence of a tubercle at third abdominal sternite *Ogmocoris* belongs to section 1 of Pentatomini (Rolston & McDonald 1984). *Ogmocoris* also belongs to a monophyletic group, now formed by twelve genera (Frey-da-Silva, pers. comm.). They are: *Mecocephala* Dallas, 1851, *Tibraca* Stål, 1860, *Ogmocoris*, *Glypheapomis* Berg, 1891, *Hyapatropis* Bergroth, 1891, *Paramecocephala* Benvegnú, 1968, *Paratibraca* Campos & Grazia, 1995, *Parahyapatropis* Grazia & Fernandes, 1996, *Luridocimex* Grazia et al., 1998, *Amauromelpia* Fernandes & Grazia, 1999, *Stysiana* Grazia et al., 1999, and a new genus being described. The relationships among these genera are under investigation. The states of characters found in male genitalia, shared by these genera, represent the synapomorphies of the group: ventral rim of pygophore forming two layers (one superior, one inferior), the superior one expanded in 1+1 cylindrical arms dorsally directed, each one beside segment X; inferior layer of pygophore carinate, with or without conical projections; parameres reduced to absent (except in *Ogmocoris*); phallosome with 1+1 ventral digitiform processes; conjunctiva with 1+1 lateral processes; vesica with a shield-like dorsal process; 'ductus seminis distalis' long, helicoidal, very delicate. The last three characters were not observed in *Ogmocoris*, since the males, single specimens in both species, are not dissected.

DISTRIBUTION. - Brazil (AM, RJ, PR).

Ogmocoris hypomelas (Burmeister, 1835)

Figs. 1-6

Atelocerus hypomelas Burmeister, 1835: 362.

Ogmocoris hypomelas; Mayr, 1864: 36; Stål, 1872: 30; Lethierry & Severin, 1893: 132; Kirkaldy, 1909: 72.

Ansa distincta Walker, 1868: 548-549.

MATERIAL. - Holotype female with the following labels: a) *hypomelana* [sic] Burm.; b) Rio Jan. Beske.(ZMHB); holotype

female of *Ansa distincta* with the following labels: a) Amaz; b) Saunders/65-13; c) 1. *Ansa distincta* (BMNH); BRAZIL, Rio de Janeiro, Estrada das Paineiras, 1 male, X.1943, H. Monteiro leg. (UFRJ-Col. Costa Lima 0040).

DESCRIPTION. - MALE. - Body length 17.20; abdominal width 9.12; head length 3.44; head width 3.36; length before eyes 2.08; pronotum length 3.44; pronotum width 8.88; scutellar length 5.84; scutellar width 5.60; corium length 7.84; length of antennal segments: I 0.96; II 0.48; III 2.24; IV 1.76; V 2.08; length of rostral segments: I 1.60; II 3.36; III 2.96; IV 2.08.

Dorsal surface reddish-castaneous, densely punctured in dark-castaneous to black punctures; ventral surface dark-castaneous to ferruginous, densely punctured in concolorous punctures.

Punctures on basal half of head castaneous, concolorous apically. Rostrum reddish-castaneous, apical segment piceous, attaining urosternite V. Rostral segment I hidden by bucculae. Antennal segments dark-castaneous; segment I castaneous.

Pronotal punctures dark-castaneous, somewhat confluent on anterior third. Humeri rectilinear. Anterolateral pronotal margins orange and slightly concave; strongly crenulated on anterior half, slightly crenulated apically. Ventral surface of thorax black to castaneous, lateral margins yellowish. Ostiolar rugae reddish-castaneous. Evaporatory areas dark. Mesosternum and metasternum reddish-castaneous. Legs reddish-castaneous; femora and tibiae immaculate and yellowish on apical halves.

Basal third of corium margined with pale yellow. Apex of radial vein without callus.

Connexivum widely exposed; outer half yellow, inner half dark-castaneous. Punctures of connexivum concolorous (Fig. 1).

Ventral surface dark-castaneous to reddish-castaneous with black punctures. Lateral margins pale-yellow with concolorous punctures. Abdominal groove attaining urosternite VI. Spiracles black, callus concolorous. Base of trichobothria yellowish.

Posterolateral angles of pygophore slightly excavated. Genital cup moderately excavated. Segment X (proctiger) with single carina, apex projected dorsad. Cylindrical arms of superior layer of ventral rim short, with rounded apex, not

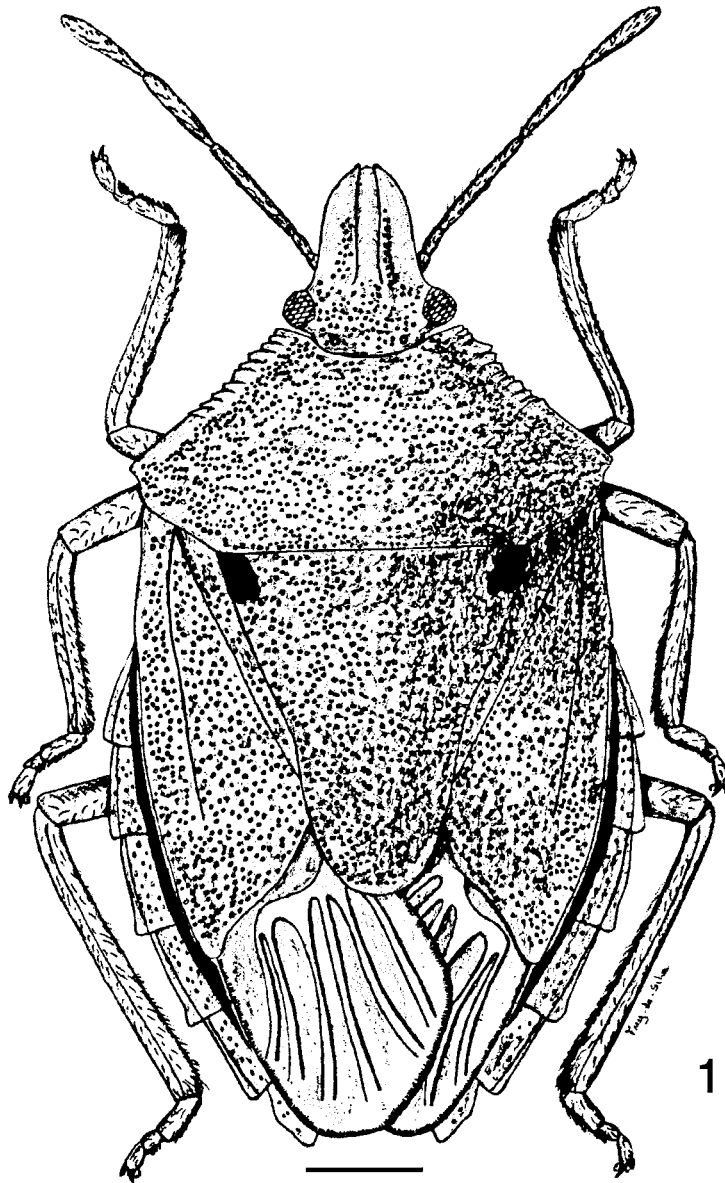


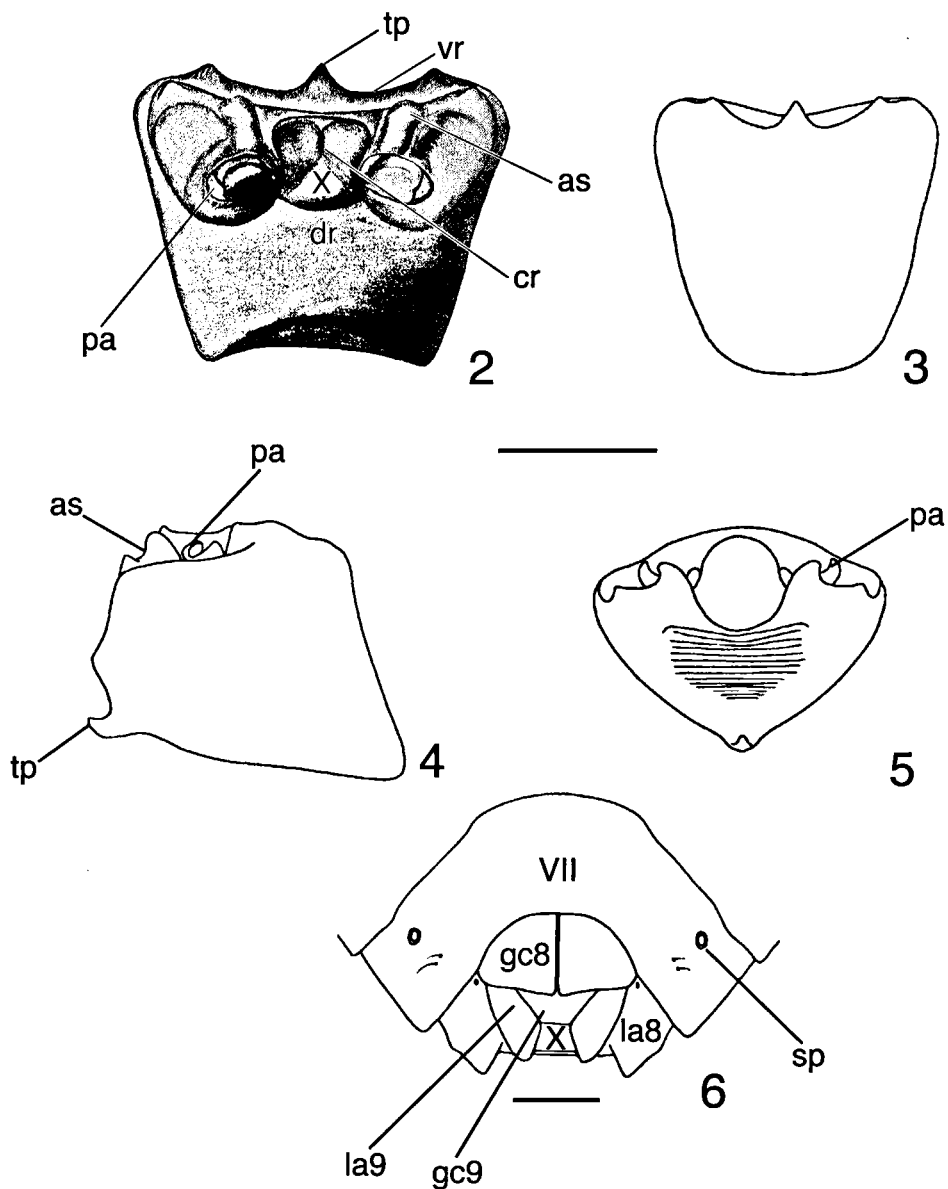
Fig. 1. *Ogmocoris hypomelas*, holotype. Habitus (scale = 1 mm).

attaining middle of segment X (Fig. 2). Inferior layer of ventral rim with three projections: one median tooth-like projection, and 1+1 tubercle on lateral third (Fig. 3). Parameres scoop-shaped. (Fig. 2).

FEMALE. - Body length 20.54; abdominal width 11.02; head length 3.84; head width 3.68; length before eyes 2.40; pronotum length 3.76; pronotum width 10.02; scutellar length 6.96; scutellar

width 6.64; corium length 9.20; length of antennal segments: I 1.04; II 0.56; III 2.48; IV 1.92; V 2.32; length of rostral segments: I 1.76; II 3.84; III 3.68; IV 2.72.

Sutural angles of gonocoxites 8 (gc8) not prominent; posterior border subrectilinear; mesial borders parallel; posterolateral angles subtruncate. Apices of laterotergites 8 projected posteriorly, surpassing laterotergites 9 by 1/3 of their length. Apices of laterotergites 9 (la9) rounded



Figs. 2-6. *Ogmocoris hypomelas*. 2, pygophore, dorsal view. 3, ventral view. 4, lateral view. 5, posterior view. 6, female genital plates, ventral view (as = cylindrical arm; cr = carina of segment X; gc8 = gonocoxite of segment VIII; gc9 = gonocoxite of segment IX; dr = dorsal rim; la8 = laterotergite of segment VIII; la9 = laterotergite of segment IX; pa = paramere; sp = spiracle; tp = tooth-like projections of inferior layer of ventral rim; vr = ventral rim; VII = segment VII; X = segment X). (scale = 1 mm).

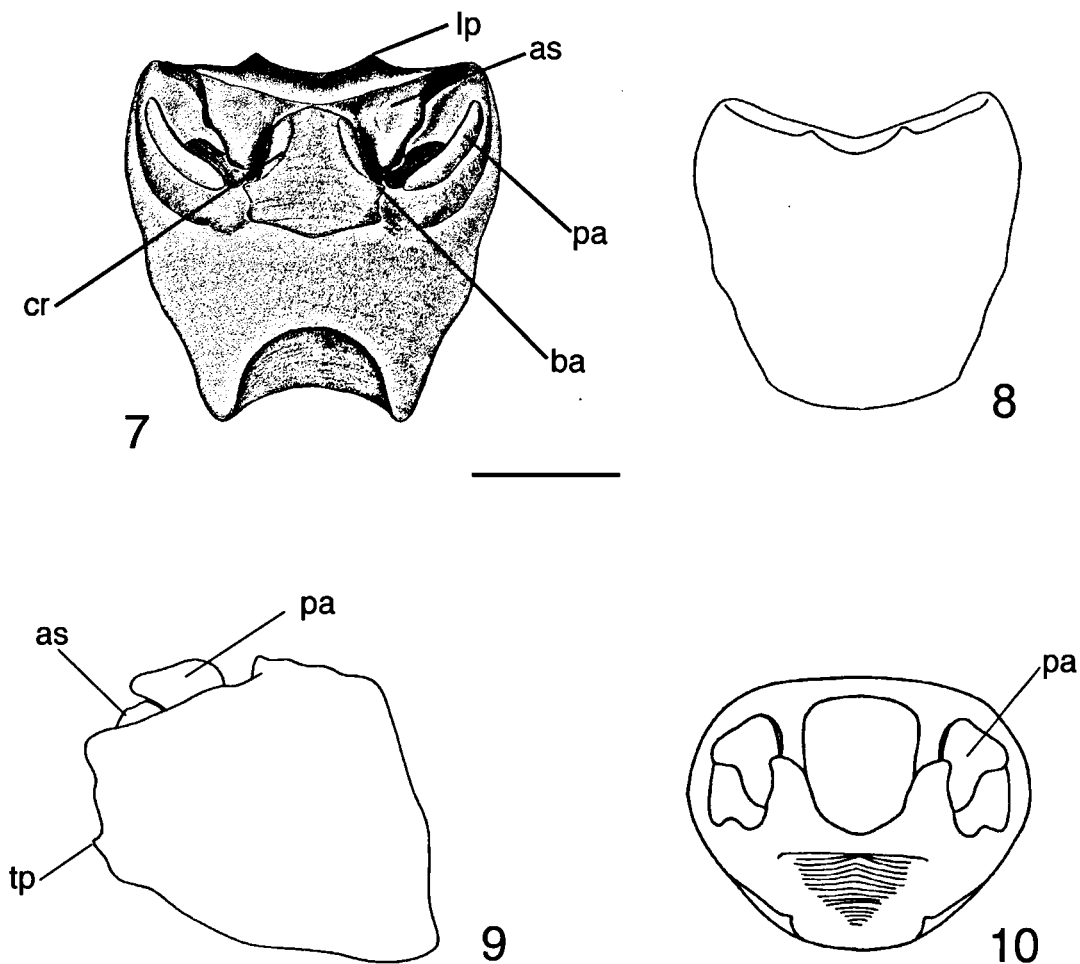
and slightly surpassing posterior margin of last abdominal segment. Gonocoxites 9 (gc9) trapezoidal. (Fig. 6).

***Ogmocoris paranaensis* n. sp.**
Figs. 7-10

MATERIAL. - Holotype male. BRAZIL. Paraná: Curitiba,

IX. 1961, col. S. Laroca (DZUP)

DESCRIPTION. - MALE. - Body length 21.04; abdominal width 10.85; head length 3.76; head width 3.76; length before eyes 3.00; pronotum length 3.84; pronotum width 9.36; scutellar length 7.20; scutellar width 5.76; corium length



Figs. 7-10. *Ogmocoris paranaensis* n. sp. Pygophore. 7, dorsal view. 8, ventral view. 9, lateral view. 10, posterior view. (as = cylindrical arm; ba = basal angles of segment X; cr = carina of segment X; pa = paramere; tp = tooth-like projections of inferior layer of ventral rim; scale = 1mm).

9.18; length of antennal segments: I 1.12; II 0.64; III 2.56; IV 2.08; V 2.48; length of rostral segments: I 1.84; II 4.88; III 4.00; IV 2.88.

Dorsal and ventral surface uniformly castaneous, densely punctured in black. Rostrum yellowish-castaneous, apical segment piceous and attaining urosternite V. Rostral segment I not hidden by bucculae. Antennal segments dark-castaneous; segment I yellowish.

Pronotum uniformly punctured in black. Humeri obtusely angulate. Antero-lateral margins concolorous, slightly concave and slightly crenulated on basal half. Cicatrices with 1+1 small pale callus. Ventral surface of torax uniformly castaneous, densely punctured in black. Ostiolar rugae yellowish. Evaporatory area casta-

neous. Mesosternum dark-castaneous; metasternum reddish-castaneous. Legs reddish-castaneous with black punctures.

Apex of radial vein with small pale callus. Connexivum widely exposed, castaneous and densely black punctured; anterolateral angles with a minute black spot, posterolateral angles yellowish.

Ventral surface of abdomen reddish-castaneous. Abdominal groove attaining urostenite VI. Spiracles black, callus yellowish. Base of trichobothria reddish.

Posterolateral angles of pygophore moderately excavated. Genital cup strongly excavated. Segment X (proctiger) with 1+1 carina, apex slightly projected dorsad. Basal angles of segment

X with 1+1 basal processes. Cylindrical arms of superior layer of ventral rim flattened laterally, with acute apex attaining mid level of segment X; lateral margins black (Fig. 7). Median third of inferior layer of ventral rim with 1+1 tooth-like projections (Figs. 7, 8). Parameres well developed into scythe-like structure, posterior surface concave, almost attaining posterolateral angles of pygophore (Figs. 7, 9).

ETYMOLOGY. - Related to the geographical distribution of the species.

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