

# Designation of lectotypes from New World reduviid syntypes in the "Institut royal des Sciences naturelles de Belgique" (*Insecta : Hemiptera*)

par J. Maldonado Capriles

## Résumé

Des lectotypes sont désignés pour *Apiomerus binotata* Champion, 1898 ; *Apiomerus vexillarius* Champion, 1898 ; *Gardena americana* Champion, 1898 ; *Ambastus villosus* Stål, 1872 ; *Arius gallus* (Stål, 1872) ; *Atrachelus* (*Phorobura*) *mucosa* (Champion, 1898) ; *Castolus tricolor* Champion, 1898 ; *Corcia columbica* Stål, 1859 ; *Corcia capitata* Stål, 1859 ; *Fitchia nigrovittata* Stål, 1866 ; *Graptocleptes varians* Champion, 1898 ; *Zelus cervicalis* Stål, 1872 ; *Zelus chamaeleon* (Stål, 1872) ; *Leogorrus picturatus* Stål, 1872 ; and *Phirontis languida* (Stål, 1859). Tous ces lectotypes se trouvent à l'IRSNB. Les courtes descriptions originales sont élargies par l'addition de caractères employés par les auteurs récents.

## Summary

The author fixed lectotypes of *Apiomerus binotata* Champion, 1898 ; *Apiomerus vexillarius* Champion, 1898 ; *Gardena americana* Champion, 1898 ; *Ambastus villosus* Stål, 1872 ; *Arius gallus* (Stål, 1872) ; *Atrachelus* (*Phorobura*) *mucosa* (Champion, 1898) ; *Castolus tricolor* Champion, 1898 ; *Corcia columbica* Stål, 1859 ; *Corcia capitata* Stål, 1859 ; *Fitchia nigrovittata* Stål, 1866 ; *Graptocleptes varians* Champion, 1898 ; *Zelus cervicalis* Stål, 1872 ; *Zelus chamaeleon* (Stål, 1872) ; *Leogorrus picturatus* Stål, 1872 ; and *Phirontis languida* (Stål, 1859). All lectotypes are in IRSNB. The original short descriptions have been expanded by adding characters used by modern authors.

The author had the opportunity to study a number of syntypes deposited in the Institut royal des Sciences naturelles de Belgique (IRSNB). The species were described by STÅL (1853, 1872) in *Enumeratio Hemipterorum*, *Enumeratio Reduviinorum America* (1872) and *Till Kaenedomen om Reduviini* (1859), and by CHAMPION in *Biologia Centrali Americana*, Vol. 2 (1898-1901). In the present paper, the original short descriptions are somewhat expanded by adding characters used by modern authors, especially if keys are available. In the harpactorine species characters are added so that generic features of these species can be compared at world level.

The author is grateful to Ir. P. DESSART (IRSNB), for allowing him to study the material. Measurements given below are in millimeters.

## *Apiomerinae*

*Apiomerus binotata* CHAMPION, 1898 : 237 ; lectotype female ; Panama, Volcan Chiriqui, in long-hand written "Binotatus Ch. ♀".

Blackish, sordid yellow subtriangular patch on corium ; membrane same color, opaque. Pygofer produced at apex in a short process that is armed on each side with moderately long upcurved, slightly divergent spine, truncate between spines. Pronotum -anterior lobe with median and lateral sulci ; humeral angles not emarginate ; anterior lobe length 1.0, width 2.2 ; posterior lobe length 1.8, width 3.7. Head - length 2.9, width across eyes 1.7, interocular space 0.7 at narrowest point, anteocular margin 0.9, postocular margin 1.2. Hemelytra surpassing abdomen by 2.0. Antenna -1.3 : 1.1 : 2.3 : 2.1. Length 13.0 mm.

This specimen and another female syntype from the same place were studied by COSTA LIMA in his revision of the genus (1951).

*Apiomerus vexillarius* CHAMPION, 1898 : 234 ; lectotype male, Panama, Buguba, 800-1500 ft., printed label.

Blackish ; hemelytra with corium brownish, membrane smokey. Pronotum with anterior lobe medially and laterally sulcate ; posterior lobe with humeral angles not emarginate. Last tergum with apical margin medially concave, surpassing apex of pygofer. Head - length 4.3, width across eyes 2.35, interocular space 1.1, anteocular margin 1.5 ; postocular margin 2.0, hairy. Pronotum -anterior lobe length 1.6, width 3.6 ; posterior lobe length 3.0, width 6.5. Apex of hemelytra surpassing apex of abdomen. Length 20.0.

This specimen was also studied by COSTA LIMA (1951) for his revision.

## *Emesinae*

*Gardena americana* CHAMPION, 1898 : 167 ; lectotype female ; Panama, Buguba. This brachypterous specimen, as well as another similar syntype, are actually

*Gardena faustina* MCATEE and MALLOCH, 1925. This latter species is identified by the lack of median dorsal sulcus on the base of the pronotum.

#### *Harpactorinae*

*Ambastus villosus* STAL, 1872 : 88 ; lectotype female ; labeled in long-hand "Villosus typ, Colombie, Bogotá (M.H.)".

Mostly black ; connexival segments very slightly undulate, wider than wings, basal 2/3 black, apical third ivory white ; forewings mostly ivory white, humeral angle black, veins brownish ; abdominal sterna 1-3 black, others irregularly ornamented with extensive grayish areas. Head -length 5.0, width across eyes 2.1, anteocular margin 2.1, postocular margin 2.2. Antennae missing. Beak -2.2 : 3.5 : 0.8. Pronotum - anterior lobe length 1.5, width 3.0, long fine grayish pilose ; posterior lobe length 2.2, width 5.5, humeral angles somewhat globose, rounded, with a median globular elevation near posterior margin ; no plica ; legs straight, unspined, long hairy, claws notched. Length 22.0 mm. Genus monotypic.

*Arius gallus* (STÅL, 1872 : 72) ; lectotype female, in long-hand labeled "Gallus St, Bogota (M. H.), typ". STÅL described this species under *Prionotus*, this name is not on the label.

Mostly blackish ; hemelytra brownish black ; apex of profemur, tibiae, first antennal segment (others missing) orange red. Head - length 5.5, width across eyes 2.5, interocular space 1.5 ; eyes small, well separated from superior and inferior margins ; anteocular margin 2.0, postocular margin 3.0 ; antennal segment I 18.6 ; beak - 4.0 : 2.1 : 1.0. Pronotum - median crest high, with 11 spines, some of the spines hairy, apex of crest receded from anterior margin of pronotum ; length from anterior shoulder spine to anterior lateral spine 4.2, from humeral spine to apical lateral spine of crest 5.3 (measurements along a line parallel to median longitudinal axis, that is, in a parasagittal line) ; width of anterior lobe 4.5, width of posterior lobe 9.4 ; margin dilated after posterolateral spine ; projection of pronotum over hemelytra at an acute angle, slightly less than 40°, not parallel to surface of hemelytra ; connexival margin not undulate. Body and legs with short appressed pilosity, head and pronotum also with moderately long, fine pilosity ; ninth tergum of genitalia very scarcely pilose. With plica. Length 35.0 mm.

*Atrachelus (Phorobura) mucosa* (CHAMPION, 1898 : 271) ; lectotype female ; labeled in long hand "mucosa Ch. typ, Panama, Buguba, *Repipta*". This new combination was declared by ELKINS, 1956 : 44. *Atrachelus beieri* ELKINS, 1954, is a junior synonym.

Head and hemelytra brown, pronotum blackish brown, legs stramineous, antennal segment I stramineous, banded with brown basally and apically, II dark brown, III basal half whitish, apical half dark brown. Thorax laterally whitish tomentose. Head -length 1.65, width across eyes 1.45, interocular space 0.45, anteocular margin 0.9, postocular margin 1.5 ; subantennal spine short, sharp, 0.15. Antenna - 4.0 : 1.0 : 1.9 : - ; beak - 0.9 : 0.75 : 0.25. Pronotum - anterior lobe with rows of fine silvery very short hairs, deep median fossa reaching posterior lobe, length 0.6, width 0.9 ; posterior lobe length 1.1, width 1.6, with 2 discal and a similar long fine spine above each humeral angle, posterior margin tomentose ; scutellar spine sharp, horizontal ; without plica. Connexivum unspined. Length 9.3 mm.

*Castolus tricolor* CHAMPION, 1898 : 279 ; lectotype female ; printed label reading Las Mercedes, 3,000 ft., Champion.

Posterior lobe of pronotum mostly black, margins stramineous ; black transverse band across hemelytra slightly beyond apex of scutellum, thence reddish apical to membrane. Head - length 2.2, width across eyes 1.3, interocular space 0.5, anteocular margin 0.7, postocular margin 1.1, antenna -3.9 : 1.2 : 2.1 : - ; beak - 1.4 : 1.2 : 0.5. Pronotum - anterior lobe length 0.7, width 1.7, median sulcus on basal half and contiguous to posterior lobe ; posterior lobe length 2.0, width 3.0, humeral angles rounded, lateral margins not carinate ; scutellum with apex rounded, horizontal ; no plica. Connexivum unspined, narrow. Legs slender, straight, unspined, short haired, claws notched. Length 14.5 mm.

*Corcia columbica* STÅL, 1859 : 369 ; lectotype female ; labeled in long-hand "Columbica St., Bogotá (M. H.) Typ".

Yellow orange, with brownish stripes as follows : longitudinal on posterior lobe of pronotum, vertical along sides of thorax, and transverse on abdominal sterna ; the latter stripes including the sternal sutures ; connexivum above and below with basal third brownish, these markings extending mesad into terga. Head - smooth, unspined ; length 2.2, width across eyes 1.5, interocular space 0.7 ; postantennal spine 1.0, straight, vertical ; eyes not surpassing lower surface of head ; ocelli well elevated ; anteocular margin 0.7, postocular margin 1.8 and sharply constricted to a narrow neck ; beak - 1.2 ; 1.1 ; 0.4 ; antenna missing (antennal segment I is 4.4 in specimens at hand). Pronotum - anterior lobe deeply sulcate posteriorly and sulcus reaching posterior lobe ; anterior lobe length 0.7, width 1.6 ; posterior lobe length 2.2, humeral width to base of humeral spine 3.3 ; humeral angles rounded below long slender spine, disc with 2 long spines slightly inclined backward ; scutellum ending in a sharp horizontal

spine ; no plica. Connexival margin straight, each apical angle spined. Forewings surpassing apex of abdomen by 3.5, basal cell of membrane 1.5x as wide as apical cell. Length 14.2 mm to tip of wings.

*Corcia capitata* STAL, 1859 : 369 ; lectotype female ; Colombia, in long-hand "Capitata St., Bogota (M. H.), Typ".

Mostly yellow orange, from ocellar elevation to apex of head black, vein from apex of apical membrane cell to apex of wing brown. Head -length 2.9, width across eyes 1.7, interocular space 0.7, postantennal spine 1.0, vertical ; anteocular margin 0.5, postocular margin 0.7 ; antenna missing ; beak - 1.2 : 1.0 : 0.5. Pronotum - anterior lobe length 0.6, width 1.5 ; posterior lobe length 1.35, width 3.1. Other key characters as in *C. columbica* above. Length 12.5 mm.

*Fitchia nigrovittata* STAL, 1866 : 296 ; lectotype apterous male ; United States of America, Carolina meridional, labeled in long-hand "nigrovittata St., Typ". Although not stated so by STAL this is a new name for *F. aptera*.

Mostly stramineous ; broad median black band along terga ; abdominal sterna with a narrow median longitudinal line and another slightly broader at middle distance to connexival margin. Head - genae produced forward as short round lobes ; length 2.4, width across eyes 1.2, interocular space 0.6, anteocular margin 0.8, postocular margin 1.0 ; beak - 1.3 : 1.1 : 0.5 ; antenna - 4.2 : 1.9 : 2.8 : 2.1, glabrous. Pronotum - anterior lobe width 1.55, length 1.05, medially sulcate posteriorly only, sulcus reaching posterior lobe ; posterior lobe somewhat rugose, length 0.95, width 1.7, unspined ; mesonotum exposed ; scutellum with apical upcurved sharp spine ; no plica. Legs - profemur slightly incrassate ; other segments slender, unspined, not long-haired, and straight ; claws notched. Length 11.0 mm.

*Graptocleptes varians* CHAMPION, 1899 : 281 ; lectotype female ; printed Buguba, 800 1500 ft., Champion.

Base color stramineous ; head above from ocelli to apex, beak, antennae, and subantennal spine black. Profemur mostly brown, apex and base black ; mesofemur mostly black, middle third stramineous ; metafemur apically and postbasally black, other areas stramineous. Pronotum with black stripe from anterior angle to posterior border, discal and lateral areas stramineous ; basal half of corium, outer cell of corium, and pterostigma black ; apical half of membrane seemingly brownish perhaps due to color of hind wings. Head - length 2.2, width across eyes 1.35, interocular space 0.6, subantennal spine 0.25 and vertical ; anteocular margin 0.7, postocular margin 0.9. Antennal segment I 4.7, others missing ; beak - 1.4 : 1.0 : 0.5. Pronotum unarmed, both lobes

convex, lateral margins not carinate and not produced over wings ; anterior lobe shallowly sulcate anteriorly, deeper basally, length 0.7, width 1.4 ; posterior lobe length 1.5, width 2.6 ; scutellum with horizontal spine ; no plica. Head and tibiae not densely pilose ; femora straight unspined, slender ; claws notched. Connexivum straight. Wings surpassing apex of abdomen by 2.5. Length 13.0 mm.

*Zelus cervicalis* STAL, 1872 : 90 ; lectotype female ; United States of America ; in long-hand "Texas (M. H.), Cervicali St. Typ".

Brownish above, stramineous legs and underside. Anterior pronotal lobe with very few fine setae, nearly bare ; setal tracts well defined ; humeral angles rounded ; eyes not reaching ventral surface of head ; posterior lobe of pronotum with disc unarmed, without median sulcus or depression, and as seen from behind posterior margin horizontal each side of scutellum ; postocular margin 1.4, 1.1x width of head across eyes ; anteocular margin 0.9 ; length of specimen 6x width through humeral angles. Head -length 2.8, width across eyes 1.1, interocular space 0.5 ; antenna - 4.9 : 1.3 : 2.8 : - ; beak - 0.8 : 1.6 : 0.4. Pronotum - anterior lobe length 0.9, width 1.4 ; posterior lobe length 1.45, width 2.1 ; no plica ; profemur slightly thinner than mesofemur (0.3 : 0.4), profemur 5.2, metafemur 4.8 ; claws notched. Connexivum unspined. Length 13.5 mm.

Being a female this specimen can not be compared with all the species in the genus ; the above mentioned characters separate it from a good number of species in HART's key soon to be published by him.

*Zelus chamaeleon* STAL, 1872 : 90) var *lemniscatus* p. 91 ; lectotype female, Colombia ; in long-hand "Bogota (M. H.), Diplodus A. & S. chamaeleon".

Mostly black ; creamy white as follows : head underneath, band across anterior end of posterior lobe of pronotum and another along posterior margin of same ; longitudinal stripe along middle of corium, along base of vein of membrane and almost to tip of pterostigma ; abdominal sterna reddish with black bases ; anterior lobe of head with 1 + 1 inconspicuous triangular grayish spots between eyes and posterior lobe with median longitudinal stripe from between ocelli to apex of collum. Anterior pronotal lobe with relatively fine setae and moderately deep pit posteriorly ; posterior lobe not sulcate anteriorly and without discal elevations, posterior margin as seen from behind slightly sloping downward on either side of scutellum. Head -postocular lobe less than 0.77x width of head across eyes (1.5 : 1.3), anteocular margin 0.8, with long erect setae ; length 2.55 ; antenna -4.8 : 1.2 : 3.5 : - ; interocular space 0.6 ; beak - 1.0 : 1.6 : 0.5. Pronotum - anterior lobe width 1.9, length 0.8 ; posterior lobe length 2.1, width to apex of spines 3.75. Legs missing. Length 15.5 mm.

Runs to *chamaeleon*, together with a yet unnamed species from Florida, U.S.A., in HART's key to the species of *Zelus* to be published. The specimen is not labeled var. *lemniscatus* but agrees with STAL's description of this variety.

#### *Reduviinae*

*Leogorrus picturatus* STAL, 1872 : 119 ; lectotype male ; labeled Colombie, in long-hand "picturatus St., Bogota (M. H.)".

Black with golden yellow areas and veins on hemelytra ; these marks diffuse as compared with one syntype. Antennal segments : 1.1 : 2.1 : 2.0 : 2.2 ; first two thicker ; anteocular margin 0.6, postocular margin 1.1, length of eye 0.6 ; depth of head in front of and after eyes 1.0, vertex convex before and after transverse sulcus of vertex ; length of head 2.0, width across eyes 1.4, interocular space 0.8 ; beak - 1.0 : 1.0 : 0.5. Pronotum - anterior lobe length 1.1, width 2.3 ; posterior lobe length 1.4, width 3.5 ; scutellum with sharp horizontal spine. Abdominal sutures 1-4 with crenulations. Metapleura bicarinate above, disc smooth ; metasternum with median carina that extends into first abdominal sternum. Length 11.0 mm. A male syntype has the following outstanding golden yellow pattern on the hemelytra - apical half of clavus, inner apical angle of corium, basal 2/5 of membrane, and pterostigma ; included veins yellowish. This pattern is diffuse and incomplete on the lectotype.

#### *Stenopodainae*

*Pnirontis languida* (STAL, 1859 : 3832) ; lectotype female ; labeled United States of America, Texas, in long hand "Centromelus Fieb., languida St., Texas, typ".

Mostly stramineous ; margins of hemelytra slightly lighter and membranous parts of hemelytra whitish ; connexival segments unmarked. Antennal segment I unspined beneath, length 1.4, apical spine 0.3 ; length

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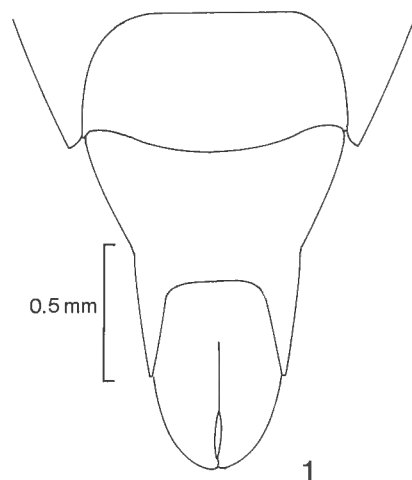


Fig. 1 *Pnirontis languida* (Stål, 1859)  
Genital segments from above

of head to apex of jugae 1.3, width across eyes 1.1, anteocular margin to apex of jugae 0.6, postocular margin 0.6 ; spines of ventrolateral margin behind eyes with 3-4 ramose spines, the first the longest ; gena surpassing base of antennal segment I by 0.3, its lower margin armed with small ramose and globular setigerous spines on basal third. Pronotum - length 2.2, width at humeral angles 2.0 ; longest spine of both series of spines of profemur as long as thickness of segment at their base ; only one series of spines on protibia, the spines 2 to 4 times diameter of segment ; antennal tubercle with short spine-like lateral projection. Genital segments from above as in figure 1. Length 14.5 mm.

Runs without difficulty to *languida* in BARBER's key to the species of *Pnirontis* (1929).

J. Maldonado Capriles

Department of Anatomy, Ponce School of Medicine,  
Ponce, Puerto Rico, 00732