

***Orbella*, a new harpactorine genus (Hemiptera:Reduviidae)¹**

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ABSTRACT

The new neotropical harpactorine genus *Orbella* is described and three new species are assigned to it. It is allied to *Atrachelus* Amyot and Serville and *Corcia* Stål. The males of *Orbella* lack claspers. A key is provided to separate these three genera.

INTRODUCTION

From material on loan from the museums at Leiden, Paris, and London, I describe the new harpactorine genus *Orbella*. It is allied to *Atrachelus* Amyot and Serville since the males of both share the unusual characteristic of not having genital claspers. In the descriptions that follow, I mention scutellar angles. These are two semicircular projections on the posterior margin of the pronotum, one each side of the base of the scutellum (fig. 5, arrow). The generic characters discussed below are useful at world level. Depositories of types are mentioned in each case. Measurements are in mm.

DISCUSSION

Orbella Maldonado, new genus

Type of genus *Orbella tricolor* Maldonado, new species.

Male—head longer than wide across eyes, shorter than pronotum, anterior lobe slightly longer than posterior, short neck; antenna slender, glabrous, first segment surpassing apex of scutellum, second segment about 1/3 as long as first; short forwardly curved spine behind antennal base; beak: first segment surpassing eye, as long as second and third together; eyes large, not reaching upper or lower surface of head, oval on lateral aspect, semicircular from above; ocelli apart at more than their width, slightly elevated. Pronotum: trapezoidal, anterior lobe with rows of adpressed setae and bare areas between these, anterior angles round,

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unspined; median longitudinal sulcus posteriorly only, deep, reaching posterior lobe; posterior lobe more than twice as long as anterior, in lateral aspect in front of discal spines $1.5 \times$ as deep as anterior lobe, pitted, humeral angles long spined, two long discal spines, posterior margin with short scutellar angles; prosternum not surpassing anterior coxae; mesopleura without plica. Anterior coxal cavities opened behind, only anterior coxae close to each other; trochanters unspined, with mat of sensory hairs; legs long and slender, straight, unspined, meeting surfaces of profemur and protibia with dense mat of sensory hairs; pro- and metafemur of subequal length, mesofemur shorter than either; foretibia with small preapical lobe tipped by a "sensory comb" and a small postapical fossula; tarsi 3-segmented, each successively longer; claws notched. Scutellum with disc elevated, short apical spine slightly pointing upward. Abdomen semicircular as seen from above, deep on lateral aspect; connexivum broad, segments straight, first 3 or 4 apical angles spined, fifth spined or not, last unspined; sterna not keeled. Hemelytra with elongate discal cell, basal cell of membrane almost twice as large as apical, apical vein (end of median) as long as both cells together, apex of membrane well surpassing apex of abdomen. Smaller than female. Genitalia without claspers, median process of hypopygium conical.

Female—abdomen broader, connexivum more flattened, spines as in male; more robust than male, medium sized, 13-15 mm. Both sexes with short, fine, decumbent silvery pilosity.

The generic name refers to the quite circular (*orbi-*) outline of the abdomen of the females as seen from above. Its medium size, hemispherical abdomen on lateral aspect, circular abdomen on dorsal aspect, spiny connexivum, hemelytra well extended beyond apex of abdomen, conical median process of hypopygium, and lack of claspers characterize this genus. It keys out with *Corcia* Stål³ and *Atrachelus* Amyot and Serville.⁴ The basal cell of the membrane is almost twice as large as the apical in *Corcia* and *Orbella*. The males of *Atrachelus* and *Orbella* lack claspers in the genitalia. The circular abdomen and conical median process of the hypopygium separate *Orbella* from *Atrachelus*, which has parallel-sided abdomen and a slender median process. The pronotum is pitted in *Orbella* and smooth in *Corcia*. These three genera can be separated by means of the following key:

1. Basal cell of membrane almost twice as large as apical cell; abdomen oval or subcircular and with broad connexivum 2
- Basal cell of membrane subequal to apical cell; abdomen parallel-sided and narrow connexivum *Atrachelus*

³Stål, C. 1859. Till kanedomen om Reduvini. Ofv. K. Vet.-Ak. Forh. 16:363-86.

⁴Elkins, J. C. 1954. A synopsis of *Atrachelus* (Hemiptera, Reduviidae). Proc. Entomol. Soc. Washington 56 (3): 97-120.

2. Pronotum pitted; connexivum more or less horizontal, broadly exposed outside of margins of forewings; males without claspers *Orbella* new genus
Pronotum smooth; connexivum subvertical, slightly exposed on dorsal aspect; males with claspers *Corcia*

Orbella tricolor Maldonado, **new species**

Male—clavus and corium light reddish brown; membrane translucent, with a stramineous tinge. Head, beak, antennae, last two abdominal segments, and genital capsule stramineous; posterior lobe of head sometimes gray; thorax, scutellum, first 4 abdominal segments black.

Head—lateral and dorsal aspect as in figures 1 and 2; from anterior margin of eye to apex of antenniphore 0.4, from anterior margin of eye to apex of head 0.6, from posterior margin of eye to postocular constriction 0.6, from interocular sulcus to apex of head 1.0, from sulcus to base of head 0.8. Ocelli apart at twice their width. Antenna: I, 5.0; II, 1.50; III, 4+; IV missing. Beak: I, 1.3; II, 0.8; III, 0.45. Pronotum: anterior lobe length 0.65, width 1.31, anterior lateral angles round, median longitudinal sulcus on basal 1/3; posterior lobe length 1.54, width to humeral angles 2.7, width to apex of humeral spines 4.0; discal and humeral spines long (fig. 5), black with yellow apices. Scutellum width 1.0, length 0.61, apical spine sharp, short, slightly inclined upward. Connexival margin as in figures 4 and 6. Hemelytra as in figure 6, surpassing abdomen by 3.0. Femoral lengths: 3.8, 3.1, 3.9; anterior femur basally slightly thicker than third (0.4:0.3). Length of body to apex of hemelytra 10.7. Genitalia: median process of hypopygium as in figures 7 and 8.

Female—coloration as in male. Head: from anterior margin of eye to apex of antenniphore 0.3, from anterior margin of eye to apex of head 0.75, from posterior margin of eye to postocular constriction 0.8, from posterior margin of eye to base of head 1.27, from interocular sulcus to apex of head 1.27, from sulcus to base of head 1.15. Antenna: I, 5.4; II, 0.9; III, 5.7; IV, 0.8. Beak: I, 1.6; II, 1.1; III, 0.6. Ocelli apart at twice their width (0.4:0.2). Spine behind antennal base 0.3. Pronotum: anterior lobe length 0.9, width 1.6, pattern of setae as in male; sulcus on basal 1/3; posterior lobe length 2.2, width across humeral angles 3.8, width to apex of spines 5.7; pits and pilosity as in male. Scutellum: basal width 1.24, length 0.8, shape as in male. Hemelytra: as in male, surpassing apex of abdomen by 2.1. Genital segments as in figure 3. Length to apex of wings 14.4.

Holotype—male, SURINAM, Kaysereberte Expedition, H. A. Beatty collector, Nov. 25-Dec. 14, 1960, S. Moentari leg., at LM. Allotype—female, same data, in LM. Paratypes—3 females: 1 same data as holotype, in JMC, 1 Kartabo, British Guiana, BMNH, and 1, Guyane, Itani, Mission Boulard, Jarffret et Pompan collectors, Nov. 4-5, 1976, in

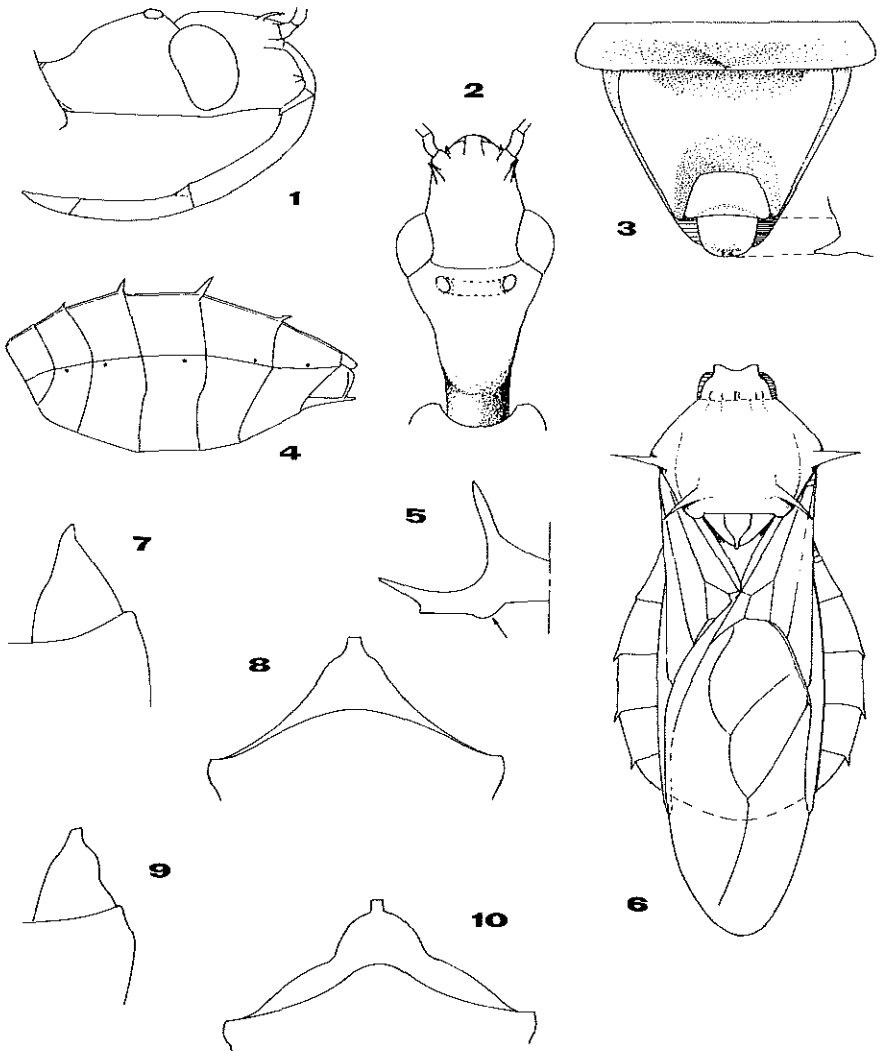


PLATE I.—*Orbella tricolor*, female, 1. head, lateral; 2. head, dorsal; 3. genital segments, caudal; 4. abdomen, lateral; 5. spines of posterior lobe, caudal; 6. habitus. Male, 7. hypopygial spine, lateral; 8. hypopygial spine, caudal. *Orbella adtricolor*, male, 9. hypopygial spine, lateral; 10. hypopygial spine, caudal.

MNHN; 1 male, British Guiana, Berbice, savannas, J. G. Myers collector, in BMNH. The female paratype at Leiden has the metafemur black to its apical fourth and the abdominal sterna stramineous with a round black area ventrally on sterna 3-5. The female paratype at BMNH has a similarly colored abdomen and the black extending to the spiracle of the 4th sternum.

Orbella adtricolor Maldonado, **new species**

Male—coloration much as in *O. tricolor*; first two segments of beak, legs, apical margin of fourth and fifth and sixth abdominal segments stramineous. Third segment of beak brown. Anterior lobe of head brownish, posterior lobe brown. Thorax above and below, scutellum, first 3 and most of fourth abdominal segments black. Hemelytra with clavus and corium stramineous, membrane semitransparent with a pale stramineous tinge. Short decumbent fine silvery pilosity on head, thorax, and abdominal sterna; on both sides of first three sutures of abdominal sterna and on first connexival segments setae more abundant.

Head—length from anterior margin of eye to apex of antennophore 0.3, from anterior margin of eye to apex of head 0.55, from posterior margin of eye to postocular constriction 0.8, from posterior margin of eye to base of head 1.1. Antennae missing; postantennal spine 0.31. Beak: I, 1.4; II, 0.8; III, 0.5. Pronotum—anterior lobe: length 0.8, width 1.5, median sulcus on basal 1/3; posterior lobe: length 1.8, width across humeral angles 3.2, width to apex of humeral spines 4.6. Scutellum width 1.2, length 0.8. Connexivum wide, only first 4 segments with spined apical angles. Hemelytra surpassing abdomen by 2.3. Median process of hypopygium conical, as in figures 9 and 10. Length to apex of wings 18.0.

Holotype—male, BRAZIL, Santarem, No. 5290, BMNH. Paratype—male, BRAZIL, No. 112-57, BMNH. Quite similar to the male of *tricolor* n. sp. The stramineous clavus and corium, spines of pronotum more extensively yellow, and the shape of the hypopygial process distinguish *O. adtricolor* from *O. tricolor*.

Orbella lugubris Maldonado, **new species**

Female—black, apical half of pronotal spines yellowish, concentration of silvery scales on basal half of connexival segments; otherwise, pilosity as in the type species.

Head—length from anterior margin of eye to apex of antennophore 0.25, from anterior margin of eye to apex of head 0.65, from posterior margin of eye to postocular constriction 0.8, from posterior margin of eye to base of head 1.1, from interocular sulcus to apex of head 1.3, from sulcus to base of head 1.1. Antennae missing; postantennal spine 0.2. Beak: I, 1.5; II, 1.0; III, 0.5. Pronotum—anterior lobe: length 0.9, width 1.7, median sulcus on basal 1/4, width across humeral angles 4.05, width to apex of humeral spines 6.0. Scutellum width 1.4, length 0.85. Abdomen on lateral and dorsal aspects, and connexivum as in *O. tricolor*; 1st and 5th posterior angles slightly produced, 2nd to 4th moderately long spined, last unspined. Hemelytra surpassing apex of abdomen by 2.1; length of body to apex of wings 13.8. Male unknown.

Holotype—female, BRAZIL, No. 112-57, BMNH. The uniformly

black coloration separates this species from the other two. The patch of silvery setae on some connexival segments is absent or not so well defined as in the other two species.

RESUMEN

***Orbella*, un nuevo género de harpactorinos (Hemiptera: Reduviidae)**

Se describe el nuevo género de reduviidos *Orbella* al que se asignan tres nuevas especies. El nuevo género está cerca de *Atrachelus* Amyot y Serville y de *Corcia* Stål. Se provee una clave para separar estos tres géneros. Los machos de *Orbella* poseen la poco común característica de no poseer agarraderas en los genitales.