

A new species of *Atrachelus* Amyot & Serville (Heteroptera: Reduviidae: Harpactorinae) from Argentina

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Abstract

A new species of Harpactorinae, *Atrachelus* (*Phorobura*) *iberaensis*, is described from specimens collected by the authors in Corrientes, Argentina. The male and female genitalia are figured.

Key words: Reduviidae, Harpactorinae, *Atrachelus* (*Phorobura*) *iberaensis*, n.sp., Argentina

Introduction

The subfamily Harpactorinae comprises a large group of diurnal reduviids distributed in all biogeographical regions. In the neotropics, it is represented by 59 genera and about 390 species (Maldonado Capriles, 1990).

Elkins (1954) made a synopsis of the genus *Atrachelus* Amyot & Serville for two subgenera, *Atrachelus* and *Phorobura*, and gave a key to the species. He considered the first subgenus to be comprised of only one species divided into three subspecies whose range extends from southern United States to Argentina; and the latter subgenus to include eight species, all distributed in North and South America. *Atrachelus* is characterized by the female's sternite VIII extending distally farther over sternite IX, and parameres absent in males.

The subgenus *Phorobura* can be distinguished by the longer postocular part of the head (1.5 to 2 times), the longitudinal conformation of the basal cell of the membrane, the shining body surface beneath the pubescence, and the forefemora feebly incrassate. This subgenus is divided into two groups based on the structure of the *aedeagus*. The *ignobilis* group is characterized by having the chitinous arms of the *aedeagus* fused dorsally over the phallosoma, and two rather large lobes in the endosoma; in the *tenuispinis* group these chitinous arms are not fused and the process of the endosoma is small and bilobate. The

subgenus *Atrachelus* is characterized by the slightly longer postocular part of the head, the transverse conformation of the basal cell of the membrane, the dull body surface beneath the pubescence, and the forefemora noticeably incrassate. Additional contributions on the geographic distribution of Jamaican and Mexican species were made by Maldonado Capriles & Farr (1977) and Maldonado Capriles & Brailovsky (1985), respectively.

In this contribution we describe a new species of *Atrachelus* (*Phorobura*) from Corrientes, Argentina. The specimens were collected at the Iberá Reserve in the locality of Colonia Carlos Pellegrini (28° 32' S–57° 11' W) and in Estancia El Dorado (28°44'34" S–58°08'36" W). They were collected by beating the vegetation with a stout stick and holding a net underneath to catch the falling insects. Measurements are given in millimeters. The holotype and paratypes will be deposited in the entomological collection of the Museo de Ciencias Naturales de La Plata, U.N.L.P., Argentina.

Atrachelus (*Phorobura*) *iberaensis* n.sp

(Figs. 1–7)

Studied material. HOLOTYPE: 1 male, Argentina, Corrientes, Colonia C. Pellegrini, Iberá Reserve, 6-V-2002, Coscarón, M.C. col.

PARATYPES: Argentina, Corrientes, Col. C. Pellegrini, Iberá Reserve, 5-V-2002, 2 females, Chayle, M. col.; 1 female, 8-V-2002, Coscarón, M.C. col.; 1 female, 8-V-2002, Dellapé, P. col.; 2 females, 5-V-2002, Coscarón, M.C. col.; 1 female 1 male, 8-V-2002, Melo, M.C. col.; 1 female, 6-XII-2001, Magnanelli, M. col.; 1 female, 9-V-2002; 1 male, 5-V-2002, Dellapé, P. col.; 1 male, 5-V-2002, Melo, M.C. col.; 1 male, 9-V-2002, Chayle, M. col.; 1 female, 25-XI-2002, Dellapé, P.M. col.; 1 male, 25-XI-2002, Melo, M.C. col.; 1 male, 23-XI-2002, Melo, M.C. col.; 1 female, 16-IX-2003, Melo, M.C. col.; 1 female, 26-IX-2003, Estancia El Dorado, 28°44'34" S–58°7'36" W, Melo, M.C. col.

Description. Body elongate, slender, dark brown. Total length 12.41. Head covered by short decumbent setae longer on anteocular portion, and scattered long setae on postocular portion (Fig. 1). Postocular portion longer than anteocular, interocular sulcus deep, ocelli placed on separate tubercles. Length of head 20.3, width 0.62. Basal antennal spines long, length 0.20. Antenna slender, third antennal segment slightly incrassate; length 12.03, ratio of segment lengths ca. 1:0.29:0.89:0.46. Tylus and jugae elevated. Eyes rounded, not surpassing border of head in lateral view (Fig. 2), width 0.17, interocular distance 0.30. Rostrum length 1.12, ratio of segments length ca. 1:0.98:0.35.

Pronotum trapezoidal, short decumbent setae present (Fig. 1), length 2.22, width 1.90. Thoracic pleura and sterna with short decumbent white setae, sparse long white erect setae present. Scutellum triangular, low Y-shaped carina present, posterior process short, pale brown, slightly elevated with short decumbent setae.

Legs long, slender, dark brown, with black, irregular, longitudinal markings; anterior and median femora with faint band on apical third, hind femora with two faint bands.

Anterior legs with both short and long erect setae, median and posterior legs with abundant short decumbent setae and scattered long erect setae, both lacking spongy fossula. Hemelytra translucent with short decumbent setae on corium, length 8.29.

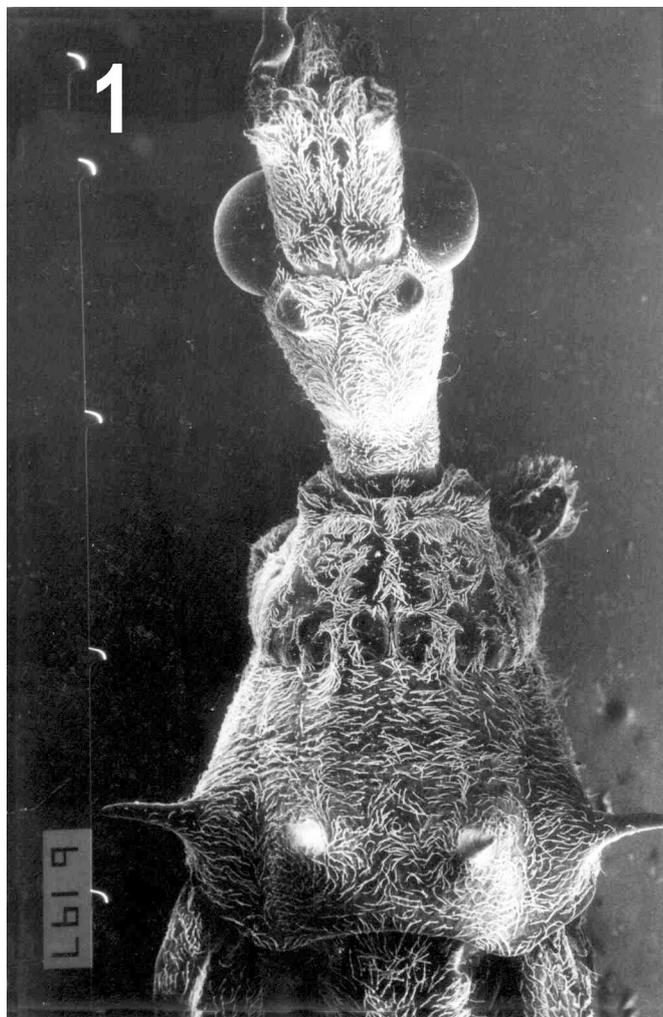
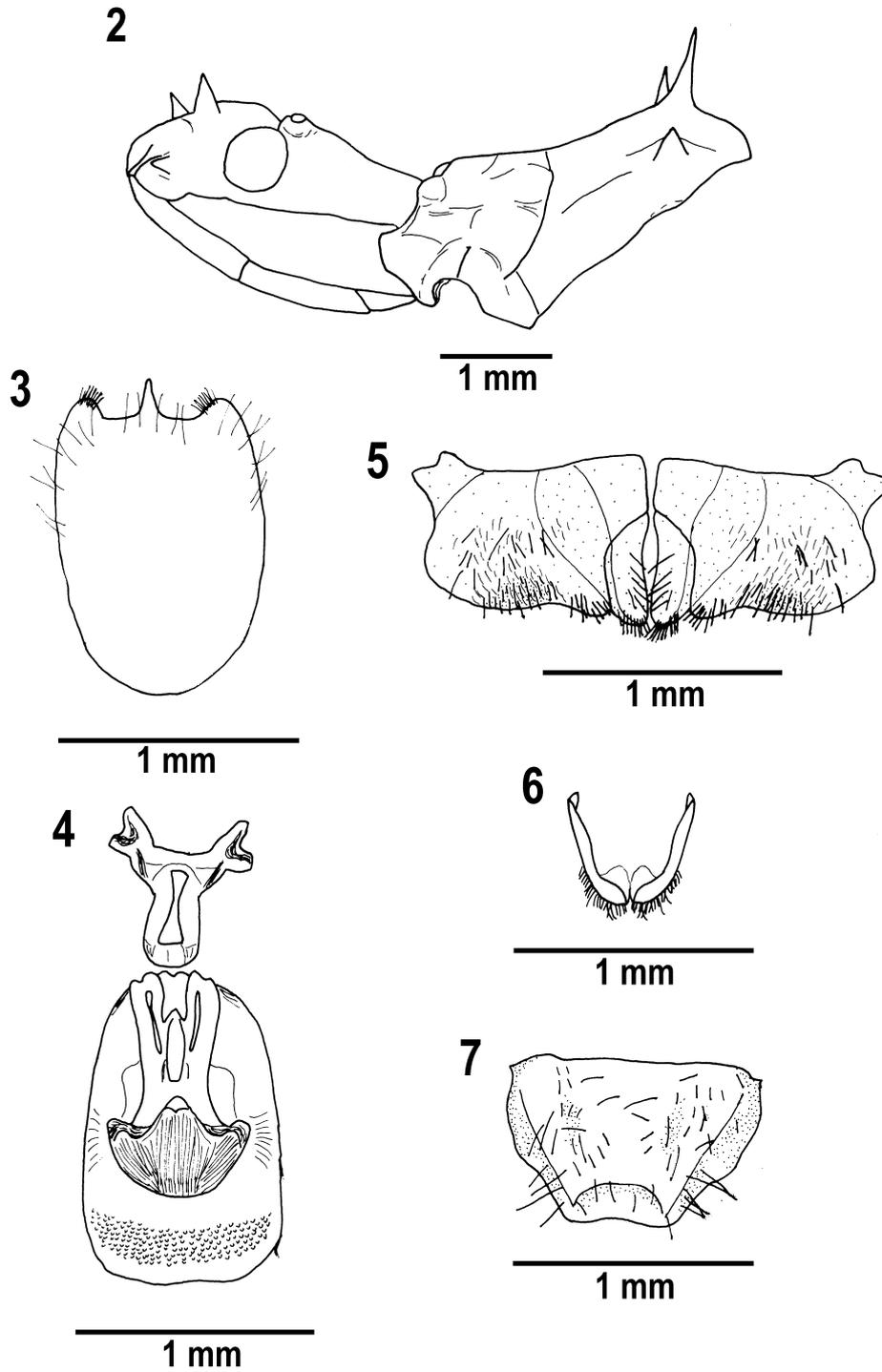


FIGURE 1. *Atrachelus (Phorobura) iberaensis* sp.n. Head and pronotum, dorsal view. X 35.

Abdomen dark brown; abundant short, decumbent, and scattered long erect setae present; posterior angles of connexiva with short spine, spine of 6th segment more developed; spiracles protruded. Abdominal length 7.09, width 1.65.

Male genitalia: Median process of pygophore spiniform, superior posterior border on either side of median process deeply indented (Fig. 3). Basal plate bridge robust; chitinous arms of *aedeagus* fused posteriorly over dorsal aedeagal surface forming tongue-like process; spurs on the ventral surface (Fig. 4). Parameres absent.



FIGURES 2–7. *Atrachelus (Phorobura) iberaensis* sp.n. 2. Head and pronotum, lateral view; 3–4. male genitalia: 3. pygophore, ventral view; 4. aedeagus, dorsal view; 5–7. female genitalia: 5. gonocoxite and gonapophysis VIII, 6. gonapophysis IX, 7. tergites IX–X.

Measurements of paratypes: Total length 11.39–14.43 (mean=13.12). Length of head 1.90–2.22 (mean=2.08), width 0.42–0.68 (mean=0.63). Basal antennal spines length 0.15–0.27 (mean=0.20). Antennal length 11.39–12.60 (mean=11.88), ratio of segment lengths ca. 1:0.29:0.89:0.44. Width of eyes 0.15–0.18 (mean=0.17). Interocular distance 0.28–0.35 (mean=0.33). Rostrum length 1.07–1.32 (mean=1.19). Pronotum length 1.90–2.66 (mean=2.34), width 1.71–2.28 (mean=2.03). Abdominal length 6.65–8.61 (mean=7.73), width 1.33–3.29 (mean=2.19). Hemelytra length 7.03–9.12 (mean=8.32).

Female genitalia: Gonocoxite and gonapophysis VIII wide (Fig. 5), with thin and thick short setae; gonapophysis IX narrow with thin setae apically (Fig. 6).

Some specimens have two pale bands on all femora, and an apical faint band on segment I of the antenna. Females are more robust than males, with a broader abdomen.

Etymology. the name refers to the place where it was found, Iberá.

Geographic distribution. Argentina.

Discussion. This new species should belong to the *ignobilis* group because of the conformation of the *aedeagus*, even though it lacks the process of the endosoma. It is closely related to *A. malaisei* Elkins, but differs in the tongue-like process of the *aedeagus*.

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Literature cited

- Elkins, J.C. (1954) A synopsis of *Atrachelus* (Hemiptera, Reduviidae). *Proceedings of the Entomological Society of Washington*, 56, 97–120.
- Maldonado Capriles, J. (1990) Systematic catalogue of the Reduviidae of the world (Insecta: Heteroptera). *Caribbean Journal of Science* (special ed.), 694 pp.
- Maldonado Capriles, J. & Brailovsky, H. (1985) Mexican Reduviidae, III: The genus *Atrachelus* (Harpactorinae). *Journal of Agriculture University of Puerto Rico*, 69, 185–189.
- Maldonado Capriles, J. & Farr, T.H. (1977) Assassin bugs of Jamaica (Hemiptera: Reduviidae). *Sloanea*, 2, 1–56.