Studies on Neotropical Fauna and Environment
2004, Vol. 39, No. 3, pp. 201–205

Taylor & Francis
Taylor & Francis Group

A New Species of *Erlacda* Signoret (Heteroptera: Lygaeoidea: Rhyparochromidae) from Argentina

Pablo Matías Dellapé and María Cecilia Melo

División Entomología, Museo de Ciencias Naturales de La Plata, UNLP, Buenos Aires, Argentina

Abstract

Erlacda argentinensis, a new species of Rhyparochromidae (Heteroptera, Lygaeoidea) is described from Argentina. New locality records of *E. arhaphaeoides* Signoret 1863 are given.

Keywords: Rhyparochromidae, Rhyparochrominae, Myodochini, *Erlacda argentinensis*, new species.

Introduction

The Rhyparochromidae contains two subfamilies and the subfamily Rhyparochrominae has 14 tribes (Henry, 1997). All of these, except Cleradini (some of whose members are blood-feeding), are phytophagous; most feed on seeds. The Myodochini, with 68 genera, and over 300 species in the world, is the most diverse group of rhyparochromids in the Neotropics.

The genus *Erlacda* was erected by Signoret (1863) for *E. arhaphaeoides* from Chile. Porter (1929) included an additional species, *E. signoretti,* also from this country. This genus is characterized by having a short abdominal stridulitrum, chisel-like plectrum, and an emergent mesepimeron (Harrington, 1980). Although she stated that only some male specimens show a distinctive pair of small tubercles or horns on the head behind the ocelli, we recorded this character in all male specimens. In the present paper we describe a new species from Argentina and give new locality records for *E. arhaphaeoides*.

Material and methods

The material examined belongs to the collections of California Academy of Sciences, San Francisco, USA (CAS), Museo Argentino de Ciencias Naturales, Argentina (MACN), Museo de Ciencias Naturales de La Plata, Buenos Aires, Argentina (MLP), and Ohio State University, Columbus, USA (OSUC). Additional material was collected by the authors in Iberá Reserve, Colonia C. Pellegrini (28°32′S, 57°11′W) and in Santa María Reserve, Ituzaingó (27°35′S, 56°42′W), Corrientes, Argentina. A scanning electron micrograph was made from a specimen mounted on a stub, sputter-coated with a gold-palladium alloy, and studied with a JEOL T-100 SEM. Illustrations were made with a drawing tube on a Wild M-5 stereomicroscope. The measurements are given in millimetres.

Results

Erlacda argentinensis sp. n. (Figs. 1–11, Table 1)

Holotype: macropterous male, Santa María Reserve, Ituzaingó, Corrientes, ARGENTINA, 29-IV-2003, Dellapé-Melo col. (MLP). Paratypes: ARGENTINA: *Salta*: 1 female, Río Canapari, 29-III-1949, Kormilev col. (MACN); *Tucumán*: 1 female, 17-XI-1951, Kormilev col. (MACN); *Santiago del Estero*: 1 male, Foires, XII-1894, Bosq col. (MLP); *Chaco*: 1 female (MACN); 1 female, N. Pompeya (MLP); Lapachito, 26-V-1939, Denier col. (MLP); *Catamarca*: 2 females, Concepción de Capayán, II-1958 (MACN); *Corrientes*: 1 male, 1 without abdomen, I-1921, De Carlo col. (MLP); 3 males, 4 females, San Roque, II-1920, Bosq col. (MLP); 1 male, Galarza, IX-2000, P. Dellapé col. (MLP); 1 female, 7-XII-2001, Coscarón col. (MLP); 6 males, 5 females, Reserva Provincial Santa María, Ituzaingó, IV-2003, Dellapé-Melo col. (MLP); 1 male, Iberá Province

Received: 17 November 2003
Accepted: 1 March 2004

Correspondence: P.M. Dellapé, Universidad Nacional de La Plata, Facultad de Ciencias Naturales y Museo, División Entomología, Paseo del Bosque, 1900 La Plata, Argentina; E-mail: pdellape@museo.fcnym.unlp.edu.ar

DOI: 10.1080/01650520412331334421

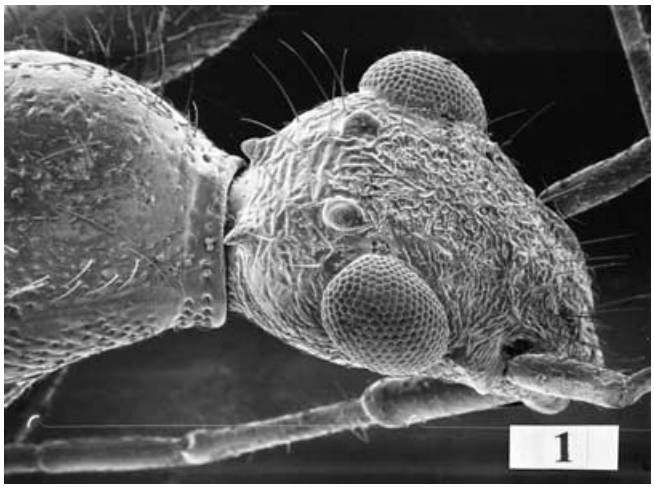
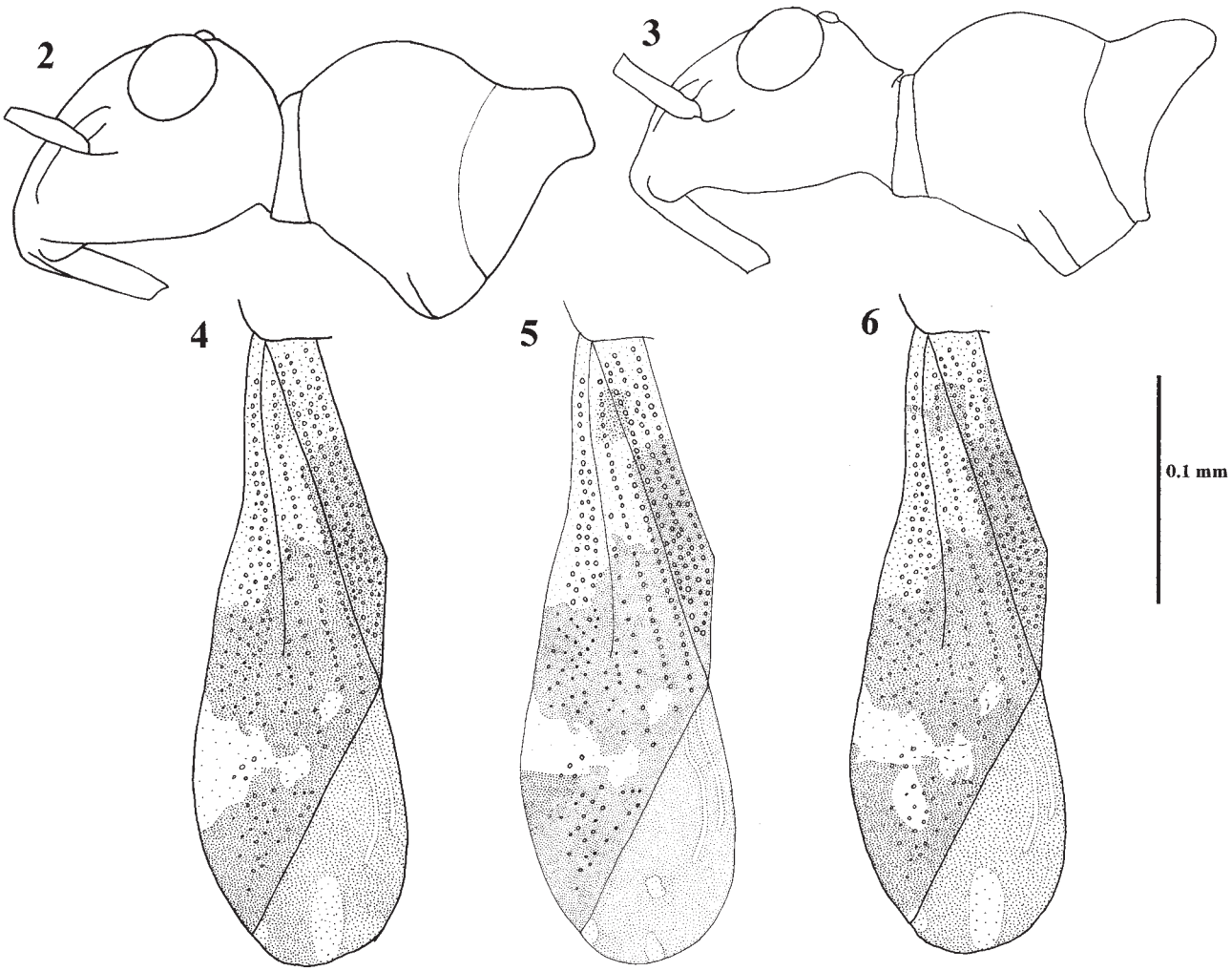
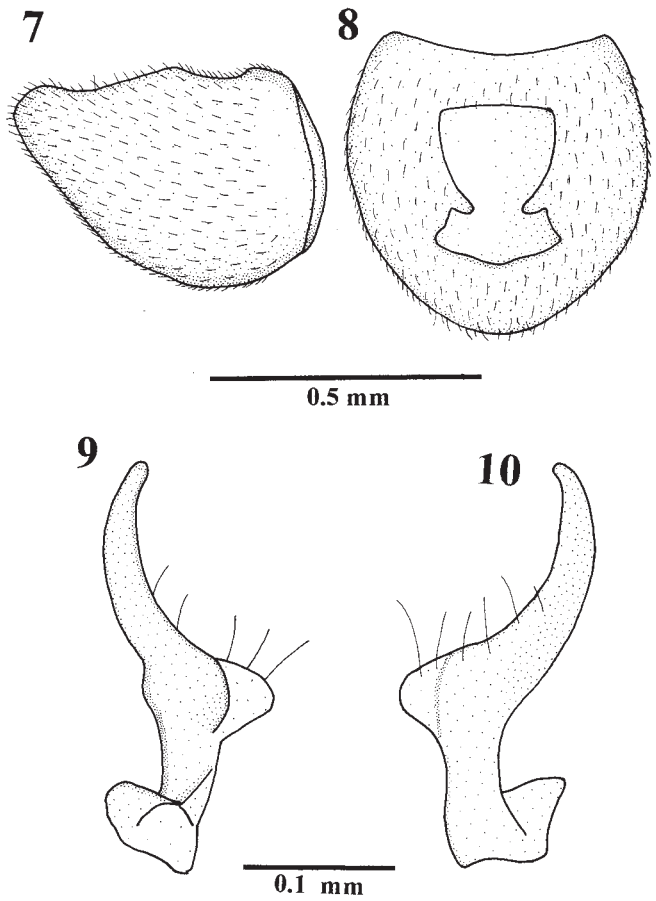


Fig. 1. *Erlacda argentinensis* sp. n., male. Head and pronotum.

Reserve, Col. C. Pellegrini, 2-XII-2001, Dellapé col. (MLP); 1 female, same locality, 5-XII-2001, Coscarón col. (MLP); 1 male, same locality, 7-XII-2001, Chayle col. (MLP); *La Rioja*: 1 male, 1 female, Ilías, M. Gomez col. (MACN); *Santa Fé*: 1 female, Rosario (MLP); *Entre Ríos*: 2 males, 4 females, Liebig, I-2003, L. Caire col. (MLP); *Córdoba*: 1 female, Cabana, 30-III-1947, Birabén col. (MLP); without abdomen, 22-1-1940, Birabén col. (MACN); 1 male, San Antonio de Arredondo, 14-XI-1940, Birabén col. (MLP); 1 male (MLP); *La Pampa*: without abdomen, Anzoátegui, 25-II-1941, M. Birabén col. (MLP); 2 males, 6 females, Gral. Pico, IV-1934, Bosq col. (MLP); *Buenos Aires*: 1 female, La Plata, Los Hornos, 5-IV-2001, P. Martínez col. (MLP); 1 female, La Plata, 15-III-01, H. Merlo col. (MLP); 1 male, 1 female, Punta Lara, VI-2002, D.L. Carpintero col. (MLP); 1 female, Caseros, XII-1946 (MACN); 1 male, Is. Martín García, 14/19-III-1932, M.J. Viana col. (MACN); 1 male, Delta, Río Chana, 19-I-1919, E.E. Blanchard col. (MLP); 1 male, C. Bruch col. (MLP); 1 male, Las Flores, 10-I-1919, Bosq coll. (MLP).



Figs. 2–6. *Erlacda argentinensis* sp. n. (2) Macropterous male, head and pronotum, lateral view. (3) Brachypterous female, head and pronotum, lateral view. (4–6) Hemelytra coloration patterns.



Figs. 7–10. *Erlacda argentinensis* sp. n. (7, 8) Pygophore: (7) lateral view; (8) dorsal view; (9, 10) Right paramere: (9) inner view; (10) outer view.

Description

Macropterous male. Total length: 4.75. Body elongate, dorsal surface shiny. Head moderately declivent anteriorly, dark brown, with whitish, short, decumbent, and also sparse, long, erect setae; strongly narrowed behind eyes forming a short neck; antenniferous tubercles parallel. Head length: 1.00; head width: 1.01. Antenna long, slender, pale brown, terete, with short decumbent setae more abundant at apex; first segment shorter than interocular space, ratio of segment lengths about 1 : 2.50 : 2.66 : 3.18. Juga forming distinct shelflike projections above antennal segment I. Clypeus long. Buccular juncture V-shaped, extending posteriorly in low midventral carina. Vertex flattened between eyes. Eyes large, oval, protruded but not stalked. Eyes width: 0.23; interocular distance: 0.53. Ocelli behind an imaginary line passing at the posterior border of eyes. Interocellar distance: 0.28. Rostrum brown, segment II paler; with sparse short semierect setae; rostrum reaching posterior border of procoxa, ratio of segment lengths about 1 : 1.07 : 0.72 : 0.66. A distinctive pair of small tubercles or horns on head behind ocelli (Fig. 1). Anterior pronotal collar demarked posteriorly by linelike groove; brown; coarsely punctate with short decumbent setae. Anterior pronotal lobe rounded, punctated except medially; dark brown with sparse, long, erect, and also short decumbent setae. Pronotal furrow punctate, except medially. Posterior pronotal lobe subtrapezoidal, brown, coarsely punctated, with short decumbent and also sparse long erect setae. Length of collar, anterior pronotal lobe, and posterior pronotal lobe: 0.07, 0.60, 0.33, respectively; width of collar, anterior pronotal lobe, and posterior pronotal lobe: 0.43, 0.83, 0.23, respectively. Scutellum dark brown, apical 2/3

Table 1. *Erlacda argentinensis* sp. n. measurements

	Macropterous				Brachypterous			
	Male ($N = 3$)		Female ($N = 4$)		Male ($N = 3$)		Female ($N = 3$)	
	Mean	Range	Mean	Range	Mean	Range	Mean	Range
Total length	5.59	5.44–5.82	5.76	5.63–5.89	4.90	4.56–5.44	5.84	5.51–6.14
Head length	1.13	1.08–1.18	1.22	1.17–1.27	1.01	0.93–1.13	1.23	1.17–1.27
Head width	1.07	1.05–1.08	1.14	1.13–1.15	1.03	0.98–1.12	1.18	1.12–1.22
Eye width	0.27	0.25–0.30	0.28	0.25–0.30	0.24	0.23–0.25	0.28	0.27–0.28
Interocular space	0.54	0.53–0.55	0.59	0.57–0.62	0.53	0.50–0.58	0.63	0.62–0.67
Interocellar space	0.28	0.28	0.33	0.28–0.37	0.29	0.25–0.33	0.33	0.33
Rostral length	1.96	1.95–1.97	1.95	1.87–2.00	1.90	1.83–1.92	2.08	2.05–2.10
Ratio of rostral segments	1 : 1.05 : 0.68 : 0.59		1 : 1.05 : 0.70 : 0.60		1 : 1 : 0.67 : 0.60		1 : 1.01 : 0.62 : 0.53	
Antennal length	3.55	3.50–3.60	3.47	3.40–3.57	3.34	3.29–3.39	3.44	3.44
Ratio of antennal segments	1 : 2.63 : 2.63 : 3.08		1 : 2.58 : 2.55 : 3		1 : 2.74 : 2.63 : 3.17		1 : 2.55 : 2.45 : 3.03	
Collar length	0.08	0.05–0.10	0.08	0.07–0.10	0.08	0.07–0.10	0.09	0.08–0.10
Ant. pron. lob. length	0.80	0.68–0.92	0.76	0.65–0.85	0.82	0.73–0.97	0.86	0.78–0.98
Post. pron. lob. length	0.44	0.42–0.45	0.45	0.45–0.47	0.29	0.27–0.33	0.35	0.28–0.40
Collar width	0.51	0.50–0.52	0.53	0.48–0.58	0.48	0.45–0.52	0.53	0.50–0.57
Ant. pron. lob. width	0.98	0.88–1.07	0.95	0.93–1.00	0.88	0.85–0.95	1.04	0.95–1.08
Post. pron. lob. width	1.45	1.42–1.52	1.55	1.50–1.60	1.12	1.05–1.23	1.37	1.23–1.45
Abdominal length	2.52	2.43–2.70	2.77	2.73–2.83	2.28	2.00–2.77	2.81	2.257–3.07
Abdominal width	1.31	1.17–1.42	1.53	1.37–1.62	0.98	0.93–1.03	1.62	1.47–1.72

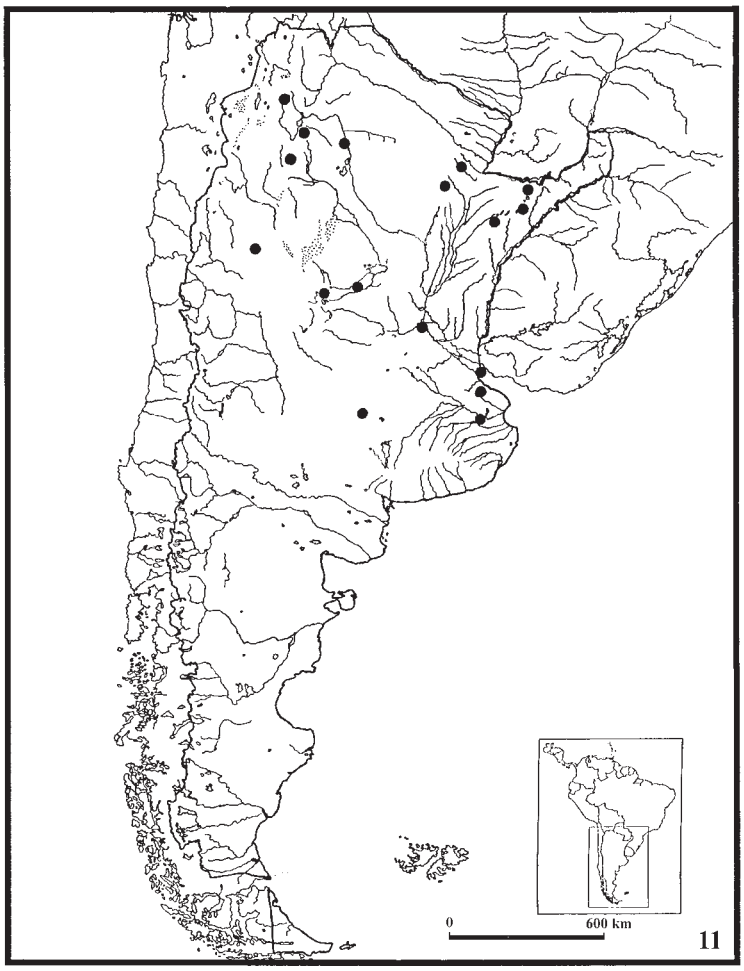


Fig. 11. Geographic distribution of *Erlacda argentinensis* sp. n.

pruinose, elevated anteriorly, punctate except a Y-shaped carina. Hemelytra pruinose, brown with whitish areas, not homogeneously pigmented (Figs. 4–6); with short decumbent setae; clavus brown, 1/3 to 1/2 anteriorly paler; claval punctuation arranged in three regular rows, with scattered punctures between inner and median rows; basal part of corium whitish and with an irregular whitish subapical macula; costal margin slightly concave. Membrane brown except veins and an oval whitish apical spot. Pleuras dark brown, acetabular area of meso- and metapleura and posterior border of metaepisternum pale brown; punctate; setae short, decumbent; mesepimeron enclosed; metathoracic scent gland auricle long, evaporative area extensive covering one-half of the metapleuron and extending narrowly along posterior margin of mesopleuron. Legs pale brown except anterior coxa, trochanters, and femora brown; with short decumbent setae except anterior femora with long erect setae; meso- and metatibia with spiniform setae. Procoxa with a big spine; forefemora incrassate, multispined ventrally, with a double row of spines and minute spines between them. A prominent spine in middle of protibia, numerous small spines on basal half and five spines aligned on distal half. Plectrum formed by three chisel-like projections at base of hind femur. Abdomen brown, with abundant short decumbent setae. Short V-shaped abdominal stridulitrum extending over lateral surface of sterna II and III. Abdominal length: 2.27; abdominal width: 1.08. Pygophore as in Figures 7, 8; claspers with inner margin of shank spatulate (Figs. 9, 10).

Brachypterous male: Similar to macropterous form in most respects, except shorter posterior pronotal lobe and lower lateral view (Figs. 2, 3); the hemelytra covers 1/2–2/3 of the 6th tergum.

Macropterous female: Body larger and broader than male, otherwise similar in general size; with smaller forecoxal spines and foretibia without a large spine medially.

Brachypterous female: Similar to macropterous female in most respects, except characters associated to brachyptery similar to male.

Etymology

The species name, *argentinensis*, refers to the country of collection.

Remarks

In the material studied the coloration varies as follows: collar from brown to pale brown, anterior pronotal lobe from dark brown to almost black and posterior pronotal lobe from brown to dark brown.

Erlacda arhaphaeoides Signoret

Material studied: CHILE: 1 female, Banos Pangue, Coquimbo, 3-XII-1950, 1300 msnm, Ross & Michelbach col. (CAS); 1 female, Quillota, V-1897, H. Osborn col. (OSUC).

Remarks

This species was first described from Chile and no other countries have been recorded since then. Harrington (1980) synonymized *Sphaerobius gracilis* Uhler from the West Indies (St. Vincent Island) under *E. arhaphaeoides*, resulting in a disjunct distributional pattern which suggests a wide range in the Neotropics. Unfortunately, among the material examined from different collections we have not found specimens of this species distributed outside Chile.

Discussion

According to Porter (1929), the two known species can be easily distinguished by the development of the hemelytra, *E. arhaphaeoides* is brachypterous, and *E. signoreti* macropterous; *E. argentinensis* sp n. is both, brachypterous and macropterous, in the two sexes. This species may be distinguished from them by the lighter posterior pronotal lobe, the legs' coloration, and the colour pattern of the hemelytra.

Acknowledgements

We want to express our gratitude to M.C. Coscarón and S. Coscarón (División Entomología, Museo de Ciencias Naturales de La Plata, UNLP) for critical reading of the manuscript. This work was supported by the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) and National Geographic Society grant No. 7104-01.

References

Harrington BJ (1980): A generic level revision and cladistic analysis of the Myodochini of the world (Hemiptera: Lygaeidae: Rhyparochrominae). *Bull Am Mus Nat Hist 167*: 45–116.

Henry TJ (1997): Phylogenetic analysis of family groups within the infraorder Pentatomomorpha (Hemiptera: Heteroptera), with emphasis on the Lygaeoidea. *Ann Entomol Soc Am 90*: 275–301.

Porter CE (1929): El género *Erlacda* en Chile. *Rev Chil Hist Nat 32*: 334–336.

Signoret V (1863): Révision des Hémiptères du Chili. *Ann Soc Entomol Fr 4*: 541–588.