The Leptocorisini (Hemiptera: Heteroptera: Alydidae: Micrelytrinae) of Argentina, with new records, description of a new species, and a key to the species

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Los Leptocorisini (Hemiptera: Heteroptera: Alydidae: Micrelytrinae) de la Argentina, con nuevos registros, descripción de una nueva especie, y una clave de especies

■ **RESUMEN.** *Stenocoris (Stenocoris) schaeferi*, una nueva especie de Alydidae (Micrelytrinae: Leptocorisini) de Argentina, es descripta e ilustrada. *Lyrnessus geniculatus* (Guérin-Méneville) y *Stenocoris (Oryzocoris) furcifera* (Westwood) son citadas por primera vez para la Argentina. Además, se brinda una clave y un mapa de distribución de las especies argentinas de Leptocorisini.

PALABRAS CLAVE. Leptocorisini. Argentina. *Stenocoris*. *Stenocoris schaeferi*. Clave.

■ **ABSTRACT.** *Stenocoris (Stenocoris) schaeferi*, a new species of Alydidae (Micrelytrinae: Leptocorisini) from Argentina, is described and illustrated. *Lyrnessus geniculatus* (Guérin-Méneville) and *Stenocoris (Oryzocoris) furcifera* (Westwood) are registered from Argentina for the first time. A key and a distributional map to the Argentinean Leptocorisini are also provided.

KEY WORDS. Leptocorisini. Argentina. *Stenocoris*. *Stenocoris schaeferi*. Key.

INTRODUCTION

The Alydidae are usually elongate and slender with disproportionately large heads; they are commonly referred to as broad-headed bugs. The family is mainly distributed in the Old World and is poorly represented in the New World. According to Schaefer (2004), the family contains 53 genera of which 22 occur in the New World. Among them, only three are represented in both the Old and New World (ie., *Alydus* Fabricius, *Megalotomus* Fieber, and *Stenocoris* Burmeister). Schaefer (1999) established the following classification: Alydinae and Micrelytrinae, both with two tribes; the first containing Alydini and Daclerini and the second, Leptocorisini and Micrelytrini.

The Leptocorisini has six genera, and is represented in all major zoogeographical regions. Members of the tribe are quite elongate and feed mainly on grasses

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(Schaefer, 1980; Schuh & Slater, 1995); some constitute serious pests of rice in the Old World (Schaefer, 2004). Two genera are known from the New World and are exclusively distributed in the Neotropical Region: *Lyrnessus* Stål, a monotypic genus, and *Stenocoris* Burmeister which is divided into several subgenera. In the Neotropical Region only two subgenera are known: *Stenocoris* (*Stenocoris*) Burmeister with species distributed in Africa and the New World, and *Stenocoris* (*Oryzocoris*) Ahmad only with species in the New World.

Up to now information about Argentinean Alydidae has been fragmentary; the only attempt to present a unified compilation is Kormilev´s (1950) review of the Micrelytrini (formerly Micrelytrinae). To date the only leptocorisine known from Argentina was *Stenocoris (Oryzocoris) fabricii* Ahmad. In this contribution, a new *Stenocoris* is described, new country records are given, and a key and a distributional map to the Argentinean Leptocorisini are also provided.

MATERIAL AND METHODS

The material examined is deposited in the Museo de La Plata, La Plata, Argentina (MLP) and the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, Argentina (MACN). Measurements are given in millimeters. The description and illustrations of the male genitalia correspond to the male paratype from Corrientes.

RESULTS

Leptocorisini
Stenocoris (Stenocoris) schaeferi n. sp.
(Figs 1-8)

Type material. Holotype male, Misiones, Parque Prov. Moconá, S 27° 09.185´´ W 53° 54.080´´, 342 m, 20-III-2011, Dellapé col. (MLP). Paratypes 1 male, Formosa, Isla de Oro, III-1936 (MLP); 1 male, Corrientes, San Roque, II-1920, Bosq col. (MLP); female, Formosa, Isla Oca, 14-VI-1939 (MLP).

Comments: The male paratype from Formosa lacks the left antennae, the right pedicellus, basiflagellomere and distiflagellomere, and the left fore leg; the male paratype from Corrientes lacks the left distiflagellomere, the right basiflagellomere and distiflagellomere, the tibia and tarsus of right fore leg, and the tarsi of the left fore leg and the posterior legs.

Diagnosis. Rostrum reaching middle coxae; scape, first tarsal segment and apices of femora and tibia tinged with red; pronotum uniformly pale yellow; lateral black line faint.

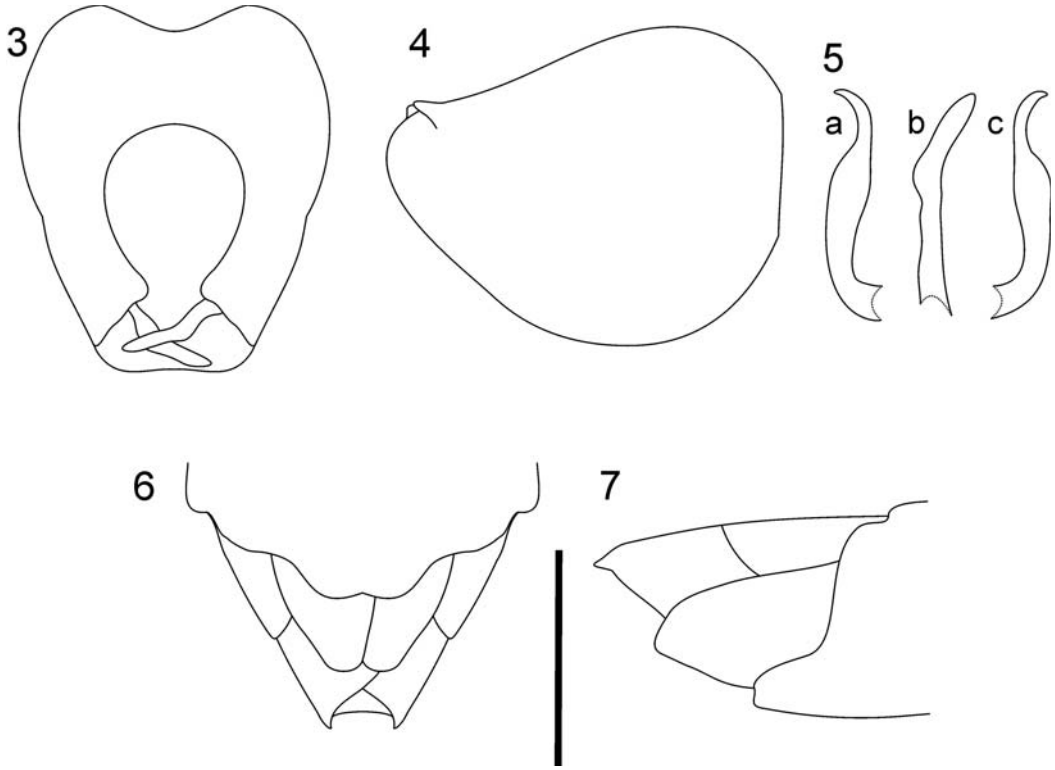
Description (Figs 1-2). General coloration yellow. Head, pronotum, and hemelytra glabrous. Antenna except distiflagellomere with scattered semierect setae, distiflagellomere with abundant, short, decumbent setae. Legs with short, scattered, semierect setae most abundant on distal portion of tibia and tarsi. Abdomen with abundant, very short, decumbent setae. Head with lateral dark band across eyes, extending shortly onto propleuron. Paraclypei about a third of head length. Rostrum yellowish. Rostral segments II, III, and IV darker ventrally. Labrum brown distally. Pronotum uniformly pale yellow. Internal margin of clavus darker. Membrane hyaline, darkened basally. Abdomen ventrally, except for a midline, pale yellowish. Femora and tibia distally and first tarsal segment tinged with red. Second tarsal segment and pretarsus dark brown. Scape reddish distally, dark brown with reddish hues on outer margin. Pedicelle and basiflagellomere brown basally and distally, darker distally. Distiflagellomere dark brown with sub-basal yellowish band occupying approximately one-third of the total length.

Male. Genitalia: pygophore (Figs 3, 4) large, subtriangular in dorsal view, dorsal aperture rounded; posterolateral dorsal angles protruded. Paramere as in figure 5 (a-c).

Female. Genitalia (Figs 6, 7): Posterior margin of VII abdominal segment slightly indented (Fig. 3), gonocoxae I and paratergite VIII exposed, gonocoxae I triangular, overlapped medially.

Holotype measurements. Body length: 15.87; head length: 1.80, width (across

Figs. 1, 2. *Stenocoris (Stenocoris) schaeferi*. 1, dorsal view; 2, lateral view. Scale bars = 1 mm.



Figs. 3-7. *Stenocoris (Stenocoris) schaeferi*. 3-5, male genitalia: 3, pygophore, dorsal view; 4, pygophore, lateral view; 5, right paramere: a, inner view; b, posterior view; c, outer view. 6,7, female genitalia: 6, ventral view; 7, lateral view. Scale bar = 1mm.

eyes): 1.50; distance between ocelli: 0.25, antenna: scape: 3.45, pedicelle: 2.10, basiflagellomere: 2.05, distiflagellomere: 3.75; rostral segment I: 1.45, II: 1.40, III: 0.75, IV: 0.85; pronotum length: 2.90, width: 2.45; hind femora: 6.20, hind tibia: 5.40.

Paratypes measurements (males N= 2 and female N= 1, respectively). Body length: 14.40-14.90-15.70; head length: 1.90-1.73-2.00, width (across eyes): 1.40-1.43-1.40; distance between ocelli: 0.23-0.23-0.21, antenna: scape: 3.40-3.43-3.10, pedicelle: ?-2.36-2.33, basiflagellomere: ?-2.36-2.33, distiflagellomere ?-?-3.55; rostral segment I: 1.57-1.40-1.50, II: 1.53-1.32-1.37, III: 0.77-0.62-0.87, IV: 0.83-0.75-0.75; pronotum length: 2.80-2.70-2.80, width: 2.25-2.17-2.40; hind femora: 6.30-5.90-5.80, hind tibia: 6.50-6.00-6.20. Pygophore length: ?-1.81, width: 1.35-1.40, height: 1.20-1.45.

Etymology. It is a pleasure to dedicate this new species to Prof. Carl Schaefer, in recognition of his outstanding contributions to the systematics of Heteroptera.

Discussion. Prior to this study, only three Neotropical species of the subgenus *Stenocoris (Stenocoris)* were known: *S. (S.) americana* Ahmad, *S. (S.) brasiliensis* Ahmad, and *S. (S.) tipulides* (DeGeer). *Stenocoris* (*S.*) *schaeferi* is most similar to *Stenocoris* (*S.*) *tipulides* but differs in the absence of dark spots in the pronotum. It can be distinguished from the rest of the members of the subgenus by the reddish coloration of the scape, first tarsal segment, and apices of femora and tibia.

Stenocoris (Oryzocoris) fabricii Ahmad

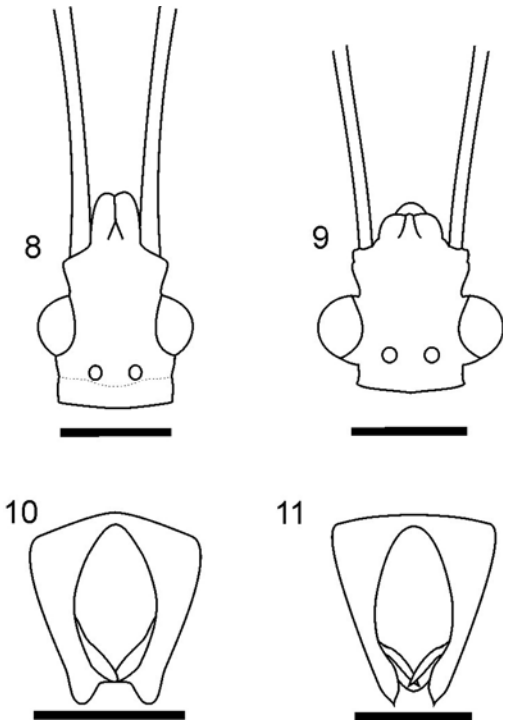
Stenocoris fabricii Ahmad, 1965: 62.

Distribution in Argentina (Fig. 12). Misiones [San Ignacio Villa, Lutecia]; Santa Fe [Las Garzas] (Ahmad, 1965: 64).

Other countries. Brazil, Guyana, Honduras, Peru (Ahmad, 1965: 64).

New Argentinean records of Leptocorisini:

Stenocoris (Oryzocoris) furcifera (Westwood)



Figs. 8-11. Body details of Leptocorisini spp. 8, Head of *Stenocoris (Stenocoris) schaeferi*; 9, head of *Lyrnessus geniculatus*; 10, dorsal view of pygophore of *Stenocoris (Oryzocoris) furcifera*; 11, pygophore of *Stenocoris (Oryzocoris) fabricii*. Scale bars = 1mm.

Leptocorisa furcifera Westwood, 1842: 18.
Gerris nigricornis Stål, 1870: 218. Syn. by Ahmad, 1965.
Leptocorisa nigricornis: Stål, 1873: 87.
Stenocoris furcifera: Ahmad, 1965: 67.

Material examined (Fig. 12). **Argentina**. **Corrientes**: San Roque, II-1920, Bosq col., 1 male, 1 female (MLP); **Formosa**: Clorinda, IV-1940, 1 male, 1 female (MLP); **Jujuy**: P. N. Calilegua, 10-VI-2007, Montemayor col., 1 male (MLP); **Misiones**: Parque Provincial Moconá 27°09´185´´S 53°54´080´´O 342m, 2-X-2010, P. Dellapé. col, 2 females (MACN); Santa Inés, 13-XII-1941, Birabén Bezzi col., 1 female (MLP); San Ignacio, 8-XII-1941, Birabén Bezzi col., 1 male (MLP); **Santa Fe**: El Rabon, 27-XI-1939, Birabén Bezzi col., 1 male (MLP).

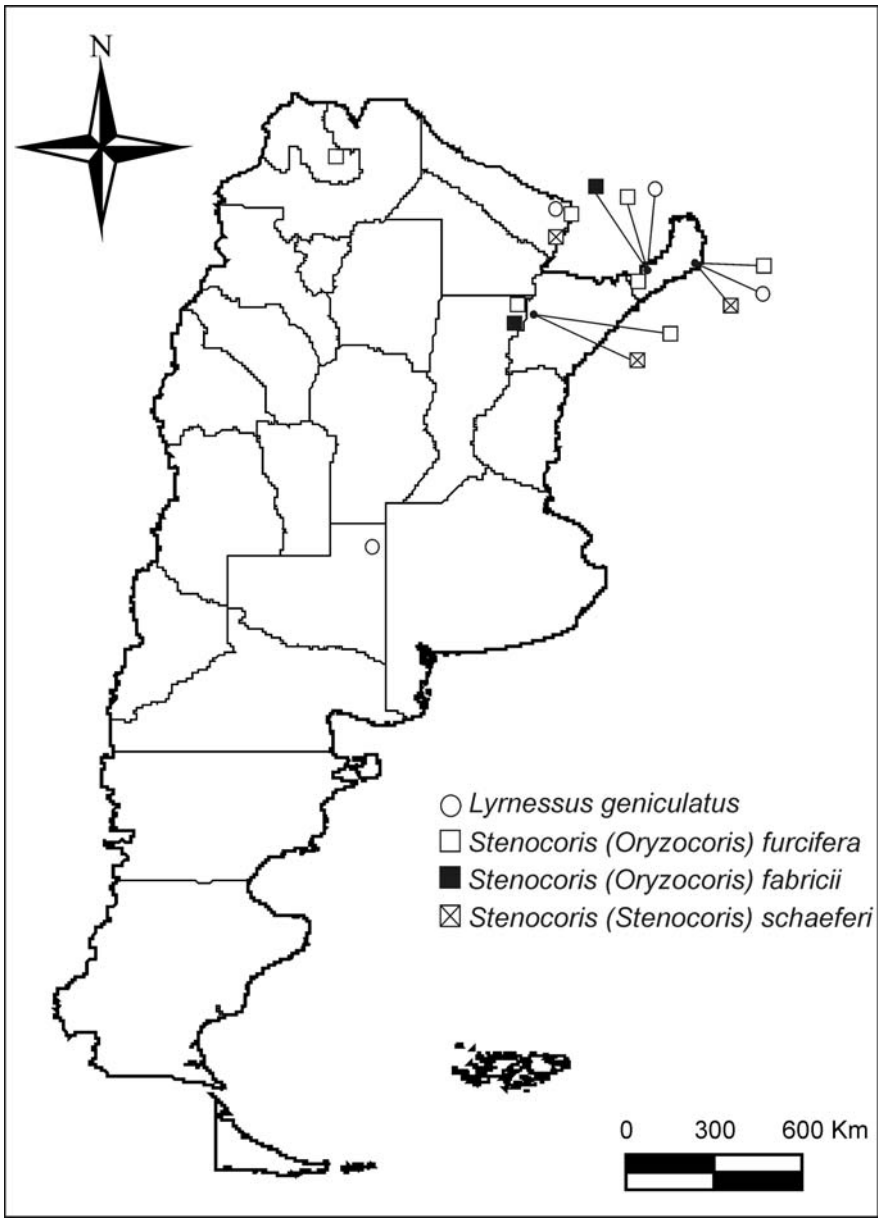


Fig. 12. Geographic distribution of the Leptocorisini from Argentina.

Other countries. Brazil, Guyana, Mexico, Panama, U.S.A., Venezuela (Ahmad, 1965: 67).

***Lyrnessus geniculatus* (Guérin-Méneville)**

Leptocorisa geniculata Guérin-Méneville, 1857: 392.
Paryphes tibialis Stål. 1860: 31. Syn. by Stål, 1870.
Coristenia flavicosta Costa 1863: 261. Syn. by Stål, 1868.
Lyrnessus geniculatus: Stål, 1866: 159.

Material examined (Fig. 12). **Argentina**. **Formosa**: San Juan, 27-I-40, *Leptocorisinae var. genicularis* Guer., 1 female (MLP); **La Pampa**: Pico, 11-46, 1 male (MLP); **Misiones**: San Ignacio, XII-1946, José T. Montes col.,

1 male, 1 female (MLP); Parque Provincial Moconá 27º09´185´´S 53º54´080´´O 342m, 4-III-2010, P. Dellapé col., 1 male (MLP); **Paraguay**. San Pedro, Koalonasky col., 1 female (MLP).

Other countries. Brazil, Cuba, Mexico, Panama, Paraguay, Peru. (Ahmad 1965: 125)

Key to the Leptocorisini species from Argentina

1. Paraclypei long and meeting in front of clypeus (Fig. 8); rostrum short, not surpassing mesocoxae; pronotum yellowish ……..……. 2
1´. Paraclypei short and never meeting in front of clypeus (Fig. 9); rostrum long, reaching metacoxae; pronotum posteriorly tinged with green (sometimes uniformly yellowish), with posterolateral angles brownish black …… *Lyrnessus geniculatus* (Guérin-Méneville)

2. Antennae and legs tinged red; basal portion of membrane darkened; pygophore (Figs 3, 4) posteriorly truncate in dorsal view, posterolateral dorsal angles protruding …… *Stenocoris (Stenocoris) schaeferi* Montemayor & Dellapé
2´. Antennae and legs yellowish; basal portion of membrane hyaline; pygophore elongate, posterolateral margins projected backwards ……...……. 3

3. Abdomen ventrally with a longitudinal red line or fringe; pygophore (Fig. 10) elongate, end of posterolateral margins rounded ……...…… *Stenocoris (Oryzocoris) furcifera* (Westwood)
3`. Abdomen uniformly yellowish; pygophore (Fig. 11) very elongate, strongly narrowing posteriorly, posterolateral margins of pygophore ending in a small spine …….. *Stenocoris (Oryzocoris) fabricii* Ahmad

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