



<http://dx.doi.org/10.11646/zootaxa.3794.1.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:765E7F1F-4FF1-4CBA-8010-51E76B481300>

Illustrated key for identification of the species included in the genus *Leptoglossus* (Hemiptera: Heteroptera: Coreidae: Coreinae: Anisoscelini), and descriptions of five new species and new synonyms

HARRY BRAILOVSKY

Instituto de Biología, Universidad Nacional Autónoma de México, apdo. postal 70153, México D. F. 04510.

E-mail: coreidae@ib.unam.mx

Abstract

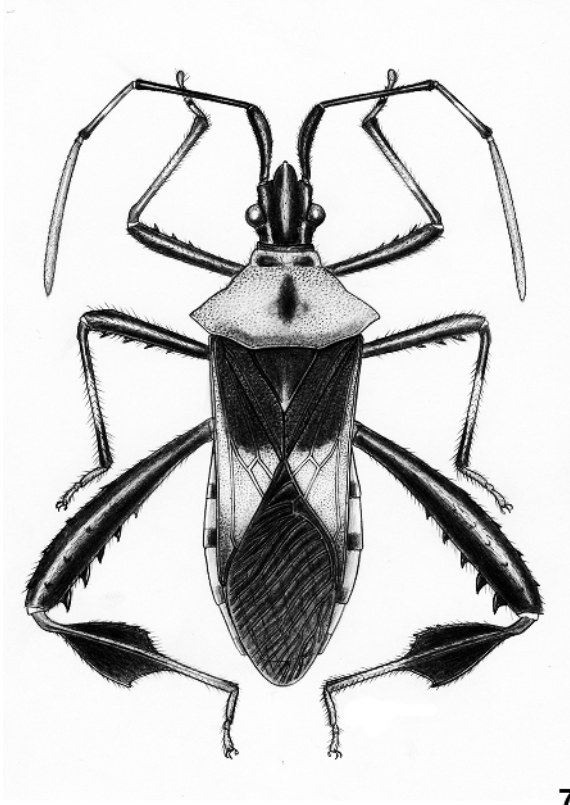
Five new species of *Leptoglossus* are described: *L. caicosensis* from Turks and Caicos Island, *L. egeri* and *L. impensus* from Bolivia, *L. franckei* from Costa Rica, and *L. polychromus* from Ecuador, Cooperative Republic of Guiana (British Guiana), and French Guiana. *Leptoglossus argentinus* Bergroth is synonymized under *L. chilensis chilensis* (Spinola) and *Narnia anaticula* Brailovsky & Barrera under *Leptoglossus occidentalis* Heidemann. Dorsal view drawings and key to the 61 known species and 1 subspecies are included; a complete checklist, and the position of each species within the species-group defined herein, are given except for two species *L. macrophylus* Stål and *L. polychromus* sp.nov., that are *insertae sedis*. The pronotal disk, hind legs, and male genital capsule of the new species here described are illustrated.

Key words: Heteroptera, Coreidae, *Leptoglossus*, new species, revisional key

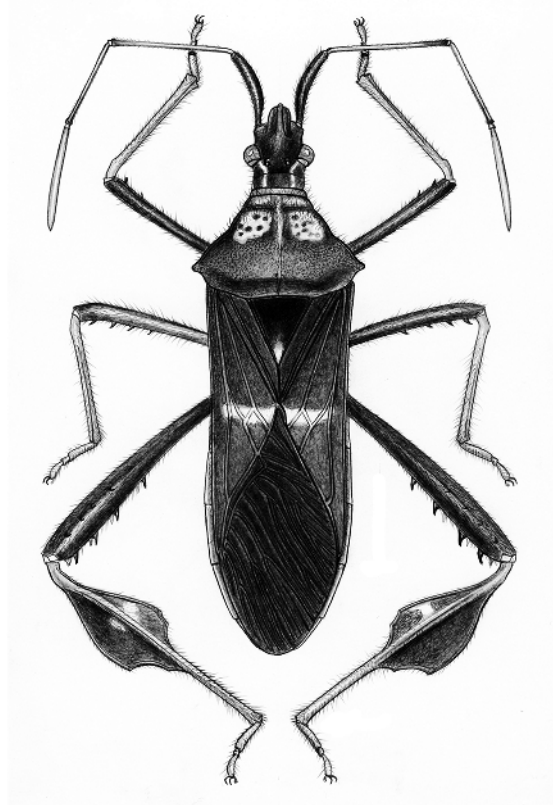
Introduction

The genus *Leptoglossus* Guérin-Ménéville is one of the most diverse and complex taxa of Anisoscelini in the Western Hemisphere and it includes 61 species and 1 subspecies which are widely distributed from southern Canada, throughout the United States, México, the Antilles, Central America, and South America, including Chile and Argentina. *Leptoglossus gonagra* (Fabricius) and *L. occidentalis* Heidemann are the only species of *Leptoglossus* that occur outside of the Western Hemisphere: *L. gonagra* has been recorded in Africa, Southeast Asia, the Pacific Islands, and Australia and *L. occidentalis* in all of Europe (Allen 1969, Brailovsky and Barrera 1998, 2004, Lis, Lis, and Gubernator 2008, Packauskas 2010, Cherot *et al.* 2013, and Gapon 2013). The last complete generic revision of the genus was given by Allen (1969), who described five new species and provided a key to the 37 species and one subspecies known at that time. Since then, 24 new species have been described (Brailovsky 1976, 1990; Alayo and Grillo 1977; Yonke 1981; Brailovsky and Barrera 1994, 1998; Brailovsky & Couturier, 2003, and Schaefer *et al.* 2008). Baranowski and Slater (1986) synonymized *L. australis* (Fabricius) with *L. gonagra* (Fabricius). Hernandez and Grillo (1993) described the males of *L. dearmasi* (Alayo & Grillo) and *L. venustus* (Alayo & Grillo). Packauskas and Schaefer (2001) summarized the historical background of the genus and discussed the treatment given by Osuna (1984). They proposed six species-groups treated in a dichotomous key, and gave a list of species included in these groups. However, they left out nine species that they were unable to examine and overlooked two other species, *L. cartagoensis* and *L. talamancanus* described by Brailovsky and Barrera (1998). Brailovsky and Barrera (2004) included seven of the nine species placed as *incertae sedis* by Packauskas and Schaefer and the two overlooked species in their corresponding species group; on the same paper six new species are described, and the following five species were left as *insertae sedis*: *L. dearmasi* Alayo and Grillo (1977), *L. manausensis* Brailovsky and Barrera (2004), *L. nigropearlei* Yonke (1981), *L. usingeri* Yonke (1981), and *L. venustus* Alayo and Grillo (1977).

With this contribution, the current number of species known in *Leptoglossus* increases to 61, with one subspecies; the species *L. argentinus* Bergroth (1894) is synonymized under *L. chilensis chilensis* (Spinola, 1852);



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FIGURES 76–77. Dorsal view of *Leptoglossus* spp. 76, *L. venustus* Alayo & Grillo (female). 77, *L. zonatus* (Dallas) (male).

Acknowledgements

I thank R. T. Schuh (AMNH), Mick Webb (BMNH), N. D. Penny and V. Lee (CASC), Horacio Grillo (CIAP), Cheryl Barr (CIS), J. Rawlins (CMNH), R. Garrison (C DFA), B. Hubley (CNC), J. Brambila and S. Halbert (FSCA), Betina Neyra Raola (IES), Jesus Ugalde (INBIO), A. L. Henriques and J. A. Rafael (INPA), A. Chacon (IZAV), B. V. Brown (LACM), D. Carpintero (MABR), J. Ledezma (MHNNKM), D. Pluot (MNH), P. Bañar (MMDE), S. Casari (MZSP), G. Lindberg (NHRS), P. Kment (MPC), G. Onore (PUCE), I. D. van Nierop (RMNH), J. C. Schaffner (TAMU), S. L. Heydon (UCDC), R. Sites (UMRM), P. J. Clausen (UMSP), C. Vergara (UNALM), T. J. Henry (USNM), W. J. Hanson (USUL), J. Schuster and E. Cano (UVG), J. Deckert (ZMHU) and K. Schönitzer (ZSMC). Special thanks go to Albino Luna (UNAM) and Cristina Urbina for the dorsal view illustrations, to Ernesto Barrera (UNAM) for the drawings of pronotal disk, legs, and male genital capsule, to Julio Cesar Montero (UNAM) and Diana Martinez Almaguer (UNAM) for the design of the plates, and to Oscar Federico Francke Balle (UNAM) and Carl W. Schaefer for the comments on the manuscript.

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Check list of the known species of *Leptoglossus*

absconditus Brailovsky & Barrera 2004
alatus (Walker) 1871
arenalensis Brailovsky & Barrera 2004
ashmeadi Heidemann 1909
balteatus (Linnaeus) 1771
brevirostris Barber 1918
caicosensis sp. nov
cartagoensis Brailovsky & Barrera 1998
chilensis chilensis (Spinola) 1852
L. argentinus Bergroth 1894 nov. syn.
chilensis concaviusculus Berg 1892
cinctus (Herrich-Schaeffer) 1836
clypealis Heidemann 1910
concolor (Walker) 1871
confusus Alayo & Grillo 1977
conspersus Stål 1870
corculus (Say) 1832
crassicornis (Dallas) 1852
crestalis Brailovsky & Barrera 2004
dearmasi Alayo & Grillo 1977
dentatus Berg 1892
dialeptos Brailovsky & Barrera 1994
digitiformis Brailovsky 1990