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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

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Abstract

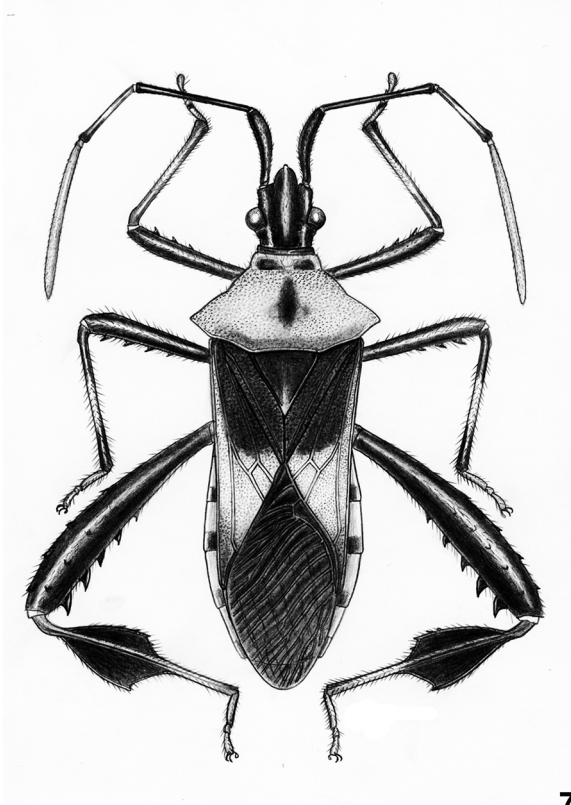
Five new species of *Leptoglossus* are described: *L. caicosensis* from Turks and Caicos Island, *L. egeri* and *L. impensus* from Bolivia, *L. franckei* from Costa Rica, and *L. polychromus* from Ecuador, Cooperative Republic of Guiana (British Guiana), and French Guiana. *Leptoglossus argentinus* Bergroth 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

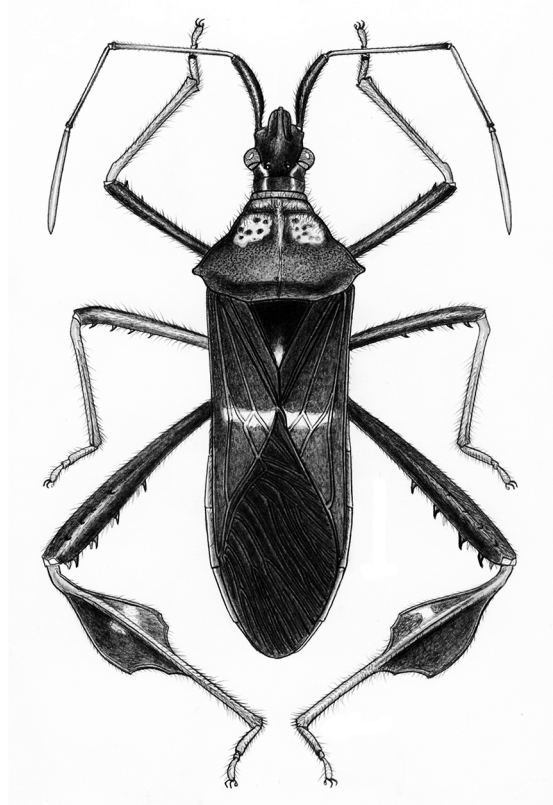
Introduction

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).

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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