



An annotated catalog of the Iranian Dipsocoromorpha, Enicocephalomorpha, Gerromorpha, Leptopodomorpha and Nepomorpha (Hemiptera: Heteroptera)

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Abstract

A catalog of aquatic and semiaquatic Heteroptera from Iran is provided based on literature reports and field collections. Representatives of 107 species and morphospecies of the infraorders Dipsocoromorpha, Enicocephalomorpha, Gerromorpha, Leptopodomorpha, and Nepomorpha are listed, and are distributed in 18 families including Aphelocheiridae (1 genus, 1 species), Belostomatidae (1 genus, 1 species), Corixidae (8 genera, 29 species), Dipsocoridae (1 genus, 2 species), Enicocephalidae (2 genera, 2 species), Gerridae (6 genera, 18 species), Hebridae (1 genus, 5 species), Helotrephidae (1 genus, 1 species), Hydrometridae (1 genus, 2 species), Leptopodidae (4 genera, 7 species), Mesoveliidae (1 genus, 2 species), Naucoridae (1 genus, 1 species), Nepidae (3 genera, 5 species), Notonectidae (2 genera, 8 species), Ochteridae (1 genus, 1 species), Pleidae (1 genus, 1 species), Saldidae (5 genera, 14 species), and Veliidae (2 genera, 7 species). Synonyms and geographical distribution of all the species are given, together with an identification key of families. According to the actual catalogs and studies eight species are doubtful for Iranian fauna.

Key words: Hemiptera, Heteroptera, Dipsocoromorpha, Enicocephalomorpha, Gerromorpha, Leptopodomorpha, Nepomorpha, Catalog, Iran, Middle East

Introduction

Heteroptera, or true bugs, are a worldwide group of insects inhabiting both terrestrial and aquatic habitats. They have an important ecological role (e.g., Naranjo *et al.* 2010), and represent the most diverse group of Hemiptera with more than 42,000 described species classified in 89 recent families and 7 infraorders (Henry 2009).

Most heteropteran species are terrestrial, but many are found in stagnant or running freshwater habitats, estuaries, and even in open ocean waters (Nieser & Melo 1997; Andersen 1982), including various aquatic environments—saline ponds, high mountain lakes, hot springs, and large rivers (Polhemus 1996). Generally, the aquatic and semiaquatic Heteroptera are predators with an intermediate stage in the food chains of their respective communities; some species may be economically important as predators of mosquito larvae and adults, or as food for fish (Jenkins 1964; Menke 1979; Naranjo *et al.* 2010).

In continuing to catalog the Iranian Heteroptera (Ghahari *et al.* 2009b, c, d, 2010b, c, 2012; Ghahari & Heiss 2012; Ghahari & Moulet 2012, 2013), five infraorders (i.e., Dipsocoromorpha, Enicocephalomorpha, Gerromorpha, Leptopodomorpha, and Nepomorpha) are studied in this paper. In this case the first critical checklist of aquatic Heteroptera (Gerromorpha, Nepomorpha, and Leptopodomorpha) from Iran is presented. In this catalog, the valid genera inside the frames of the relevant tribe and the valid species inside the frames of the relevant genus are given alphabetically. The valid species names are followed by a chronological listing of references to records from Iran. The following data are included: valid taxa names, synonyms, published records with provincial distribution (see Fig. 1), and the general distribution, classification, nomenclature, and distribution data as suggested by Aukema & Rieger (1995) have been followed, and in other situations the related references are given.