

FOUR NEW RECORDS FOR THE TURKISH FAUNA (HETEROPTERA: GERROMORPHA: LEPTOPODOMORPHA)

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ABSTRACT: During 2000-2002, authors collected aquatic Heteroptera in Turkey. Analysis of that material produced four species of semiaquatic bugs not recorded in Turkey before: *Aquarius najas* (De Geer, 1773), *Gerris gibbifer* (Schummel, 1832) belonging to the family Gerridae, *Saldula fucicola* (Sahlberg, 1870), *Salda morio* Zetterstedt, 1838 belonging to the family Saldidae. With this new records, the number of species and subspecies of Infraorder Gerromorpha and Leptopodomorpha increases to 49.

KEY WORDS: Heteroptera, Gerromorpha, Leptopodomorpha, Turkey, new record.

Aquatic insects are important and conspicuous members of freshwater habitats, mainly concerning semiaquatic Heteroptera. Gerridae is a group of semi-aquatic insects that belong to the order Heteroptera, Infraorder Gerromorpha and Leptopodomorpha. They live on the surface of bodies of water, and are highly specialized for this type of habitat. Although the majority of these insects are to be found on still waters with currents (Andersen, 1982). The Saldidae, commonly called shore bugs, are active predators, usually living on land in damp areas or near water, especially on the edge of rivers, streams, ponds and lakes. They are capable of jumping and readily take flight. Characteristically, they are oval, blackish in colour, with large eyes, 3-segmented rostrum, and with 4 or 5 closed cells in the membrane of the forewings (Scudder, 1997).

Our knowledge of the infraorders Gerromorpha and Leptopodomorpha in Turkey is, at present, still in its infancy, still relying heavily on the mid-20th century works of Hoberlandt (1948, 1955) and supplemented by the catalog of Aukema and Rieder (1995). The recent compilation of a complete list of known taxa by Kiyak and Ozsaraç (2001) provides a foundation for future work. They report 15 species and 7 subspecies gerromorphans in 8 genera in the families Gerridae, Hebridae, Hydrometridae, Mesoveliidae, and Veliidae, as well as 19 species and 4 subspecies leptopodomorphans in 8 genera belonging to the families Saldidae and Leptopodidae. Here we report for the first time two additional Gerridae and two species of *Saldula* (Saldidae) as occurring in

the country, and give detailed records of their known distribution in southwestern Turkey.

METHODS

Samples were collected from the West Mediterranean Region of Turkey (Figures 1, 2) in the years of 2000 and 2001. A circular aquatic net with mesh size about 2 x 2 mm was used to sample aquatic and semiaquatic insects. A variety of habitats were investigated, including water bodies with rocky and muddy bottoms, as well as those with aquatic vegetation, were sampled. Water striders (fam. Gerridae) were collected with the net on the water surface. Material was identified using keys by (Savage 1989; Stichel 1958-1960; Pericart 1990; Poisson 1957). These samples are deposited in Zoological Museum of the Gazi University (=GUZM), Ankara, Turkey.

Abbreviations: L: Lake, V: Village, T: Town, R: River, S: Stream

RESULTS

Infraorder: Gerromorpha
Gerridae Leach, 1815
***Aquarius najas* (De Geer, 1773)**

Materials: ANTALYA: 5 ♂♂, 9♀♀, Bağışağac (between Bağışağac V. and Kayadibi V.), 22.05.2000; 4 ♂♂, 15♀♀, Kumluca (between Güzören V. and Karaağac V.), 36°28'N 30°20'E, 535 m, 25.06.2000; 2♀♀, Manavgat (Sağırını, Beşkonak, Köprü R.), 37°03'N 31°14'E, 200 m, 25.06.2000; 2♀♀, Manavgat (25. km from Manavgat to Beşkonak, Köprü R.), 37°04'N 31°14'E, 54 m, 25.06.2000; 1♂, Beşkonak (Tazi V.), 37°15'N 31°13'E, 320 m, 25.06.2000; 2 ♂♂, Beşkonak (between Kırkkavak V. and Tazi V.), 37°17'N 31°13'E, 510 m, 25.06.2000; 4 ♂♂, 4♀♀, Beşkonak (Tazi V.), 37°18'N 31°12'E, 470 m, 25.06.2000; 1♂, Beşkonak (between Çaltepe and Değirmenözü, Kanlı S.), 37°20'N 31°13'E, 492 m, 26.06.2000; 9 ♂♂, 4♀♀, Alanya (Gevne S.), 36°51'N 32°29'E, 1585 m, 10.07.2000; 11 ♂♂, 12♀♀, Alanya (Dim S.), 36°33'N 32°11'E, 100 m, 11.07.2000; 3 ♂♂, 4♀♀, Alanya (Payallar V., Deli S.), 36°38'N 31°52'E, 100 m, 11.07.2000; 10 ♂♂, 6♀♀, Alanya (Güney V., Zeytinbükkü S.), 36°40'N 31°53'E, 125 m, 11.07.2000; 2 ♂♂, 2♀♀, Gündoğmuş (Ortakonuş V. near), 36°45'N 32°01'E, 295 m, 11.07.2000; 1♂, 1♀, Gündoğmuş (Alara S.), 36°45'N 32°02'E, 314 m, 11.07.2000; 1♂, 1♀, north of Gündoğmuş, 36°50'N 31°59'E, 920 m, 12.07.2000; 10 ♂♂, 22♀♀, Manavgat (Güçlü V. near, stream), 36°46'N 31°44'E, 195 m, 12.07.2000; 12 ♂♂, 8♀♀, İbradı (Ürünlü T., Altınbeşik cave, Manavgat R.), 37°02'N 31°36'E, 800 m, 03.08.2000; 14♂, 10♀♀, Kemer (Göynük T., Göynük S.), 36°40'N 30°31'E, 65 m, 04.08.2000; 3 ♂♂, 4♀♀, Finike (Akyaka V., Akçay S.), 36°28'N 30°05'E, 345m, 05.08.2000; 1♀, Elmali (Gömbe T., stream), 36°33'N 29°41'E, 1160 m, 05.08.2000; 15 ♂♂, 4♀♀, Alanya (Karapınar V., Gevne bridge), 36°36'N 32°24'E, 1110 m, 12.09.2000; 10 ♂♂, 4♀♀, Gündoğmuş (Güneycik V. near, stream), 36°46'N 31°44'E, 181 m, 13.09.2000; 1♂, 1♀, Alanya (Karapınar V.), 36°36'N 32°23'E, 1160 m, 21.04.2001; 1♀, Alanya (3. km from Karapınar V.), 36°35'N 32°22'E, 1280 m, 21.04.2001; 1♂, Gazipaşa (between Gazipaşa and Kocadere), 36°15'N 32°19'E, 30 m, 26.05.2001; 1♂, 4♀♀, Kemer (Göynük S.), 36°40'N 30°31'E, 67 m, 26.05.2001; 3 ♂♂, 2♀♀, Serik (east of Kayadibi, stream), 37°19'N 30°52'E, 450 m, 21.06.2001; 2 ♂♂, 1♀, west of Gündoğmuş (waterfall), 36°49'N 31°59'E, 910 m,

29.06.2001; 1♂, 2♀♀, Gündoğmuş (Alara S.), 36°49'N 32°00'E, 800 m, 29.06.2001; 4♂♂, 3♀♀, Gündoğmuş (19 km to Güzelbağ), 36°45'N 32°01'E, 285 m, 29.06.2001; 2♂♂, 2♀♀, Gündoğmuş (between Güneyköy and Soğukpinar, Kargı S.), 36°40'N 31°53'E, 130 m, 29.06.2001; 1♀, Alanya (between Soğukbeli and Payallar, Deli S.), 36°37'N 31°52'E, 115 m, 29.06.2001; 3♂♂, 3♀♀, Gazipaşa (Kahyali V., Delice S.), 36°17'N 32°16'E, 27 m, 29.06.2001; 1♂, 3♀♀, Alanya (Karapınar V., Gevne bridge), 36°36'N 32°24'E, 1100 m, 29.06.2001; 1♂, 2♀♀, Alanya (Tırıllar V. near, Sedre S.), 36°28'N 32°15'E, 145 m, 13.07.2001; 1♀, Merkez (Kurşunlu waterfall), 37°00'N 30°49'E, 85 m, 13.07.2001; 1♂, 1♀, Kemer (stream from Kozluca to Kemer), 36°36'N 30°29'E, 165 m, 14.07.2001; 2♂♂, 3♀♀, Finike (Çatallar, stream), 36°29'N 30°04'E, 330 m, 14.07.2001; 3♂♂, 2♀♀, Alanya (5. km from Demirtaş to Alanya), 36°27'N 32°13'E, 60 m, 18.08.2001; 5♂♂, Alanya (between Beldibi and Fakircalı, small stream), 36°28'N 32°17'E, 520 m, 18.08.2001; 4♂♂, Alanya (Beldibi V.), 36°28'N 32°21'E, 720 m, 18.08.2001; 2♂♂, 4♀♀, Gazipaşa (Yakaçık V., stream), 36°06'N 32°33'E, 15 m, 18.08.2001; 2♂♂, Merkez (Kayadibi V., Aksu S.), 37°13'N 30°48'E, 77 m, 19.08.2001; 1♀, Merkez (Tekke S.), 36°56'N 30°55'E, 30 m, 14.09.2001; 1♀, inymph, Manavgat (Hocalar V., Sarısu bridge), 36°52'N 31°15'E, 28 m, 14.09.2001; 1♂, Kaş (Kasaba T., Ortabağ near), 36°21'N 29°47'E, 175 m, 26.05.2002; AYDIN: 4♂♂, 3♀♀, Bozdoğan (Site V. near, Kemer Dam), 23.05.2000; 1♀, Bozdoğan (Amasya V. near, branches of Akçay S.), 23.05.2000; 2♂♂, 2♀♀, Karacasu (Esençay V., Esen S.), 37°47'N 28°35'E, 250 m, 07.08.2000; 12♂♂, 2♀♀, Kuyucak (Büyükmenderes R.), 37°54'N 28°29'E, 90 m, 07.08.2000; 1♂, Sultanhisar (Malkoç S.), 37°50'N 28°10'E, 110 m, 19.05.2001; 1♀, Karpuzlar (Arapkir, stream), 37°29'N 27°49'E, 380 m, 20.05.2001; 1♂, 1♀, Bozdoğan (between Örmepinar V. and Kakalan, of branches of Akçay S.), 37°35'N 28°18'E, 827 m, 22.08.2001; 4♂♂, Bozdoğan (Kazandere V. near), 37°38'N 28°22'E, 140 m, 12.09.2001; 2♀♀, Karpuzlu (between Hatipkuşları and Çamköy, stream), 37°29'N 27°49'E, 385 m, 23.06.2002; 6♂♂, 3♀♀, Sultanhisar (north of Eskihisar), 37°57'N 28°10'E, 247 m, 15.04.2000; 10♂♂, 4♀♀, north of Güvenlik V., 37°54'N 28°09'E, 247 m, 15.04.2000; 3♂♂, 2♀♀, Söke (road Söke-Yenidogan), 37°37'N 27°22'E, 225 m, 15.04.2000; BURDUR: 3♂♂, 4♀♀, west side of Salda Lake, 37°34'N 29°36'E, 1165 m, 23.05.2000; 5♀♀, Yeşilova (between Yeşilova and Karamanlı, branches of Karamanlı Dam), 37°25'N 29°40'E, 1217 m, 23.06.2000; 1♀, Gölhissar (Çamköy S.), 37°14'N 29°31'E, 1930 m, 07.08.2000; 3♀♀, Yeşilova (İşıklar V., small stream), 37°33'N 29°46'E, 1170 m, 18.07.2001; 2nn, Gölhissar (Gölhissar L.), 37°07'N 29°36'E, 960 m, 13.09.2001; 1♂, 3♀♀, Bucak (road Isparta-Antalya, branches of Akçay S.), 37°23'N 30°48'E, 310 m, 19.05.2000; 9♂♂, 2♀♀, Bucak (Çobanlar V.), 37°15'N 30°48'E, 135 m, 19.05.2000; DENİZLİ: 1♂, 1♀, Tavas (between Yahşiler and Karahisar, Dünberek S.), 37°39'N 28°54'E, 23.05.2000; 1♀, Tavas (Güzelköy, Dünberek S.), 37°37'N 28°55'E, 910 m, 07.08.2000; 1♂, 1♀, Beyağaç (Geriçam, branches of Akçay), 37°13'N 28°56'E, 715 m, 21.05.2001; 1♂, 1♀, Acipayam (Alaattin V. near), 37°27'N 29°16'E, 1020 m, 22.06.2001; 1♀, Bekilli (Büyükmenderes), 38°11'N 29°23'E, 665 m, 26.06.2001; 2♂♂, 2♀♀, Acipayam (Bedirbey V., Dalaman R.), 37°21'N 29°25'E, 855 m, 27.06.2001; 1♂, Beyağaç (Akçay), 37°13'N 28°51'E, 655 m, 21.08.2001; 3♂♂, 3♀♀, Central (Gürleyik T., Döğüş S.), 37°48'N 28°13'E, 302 m, 22.08.2001; 9♀♀, Çivril (between Yuvaköy and Cumalar), 38°19'N 29°54'E, 880 m, 11.09.2001; 1♂, 2♀♀, Çal (Büyükmenderes R.), 38°06'N 29°55'E, 722 m, 11.09.2001; ISPARTA: 2♀♀, Yalvaç (Yarikkaya V.), 38°77'N 31°02'E, 1500 m, 21.06.2000; 1♂, 1♀, Sütçüler (Kesme-Aşağıyaylabel, branches of Köprü R.), 37°31'N 31°17'E, 892 m, 26.06.2000; 1♂, 1♀, Sütçüler (northwest of Sarıkök, Çay S.), 37°31'N 31°16'E, 870 m, 26.06.2000; 2♀♀, Sütçüler (exit of Belence, stream), 37°37'N 31°07'E, 1074 m, 26.06.2000; 1♂, 2♀♀, Belence (between Belence and Ayvalı), 37°38'N 31°05'E, 1075 m, 26.06.2000; 1♂, Ayvalıpınar (between Ayvalıpınar and Sipahiler), 37°37'N 30°59'E, 1255 m, 26.06.2000; 2♂♂, 5♀♀, Sütçüler (Ayvalıpınar), 37°40'N 31°01'E, 1116 m, 27.06.2000; 1♂, 1♀, Aksu (Dedegöl Mountain, stream), 37°42'N 31°17'E, 1610 m, 13.07.2000; 1♀, Aksu (Aksu S.), 37°49'N 31°06'E, 1340 m, 14.07.2000; 9♀♀, Sütçüler (Ayvalıpınar T., stream), 37°40'N 31°01'E, 1120 m, 14.07.2000; 6♂♂, 5♀♀, 1 nymph, Eğirdir (Kızılıkaya V. near, stream), 37°34'N 30°49'E, 432 m, 15.07.2000; 3♂♂, 4♀♀, Sütçüler (Kovada S.), 37°33'N 30°51'E, 630 m, 10.08.2000; 4♀♀, Sütçüler (Sipahiler T., stream), 37°38'N 30°59'E, 1200 m, 10.08.2000; 6♂♂, 6♀♀, Sütçüler (between Ayvalıpınar V. and Baklan, Köprü R.), 37°41'N 31°01'E, 1145 m, 10.08.2000; 4♀♀, Yenişarbademli, 37°43'N 31°20'E, 1445 m, 10.08.2000; 5♂♂, 2♀♀, Yenişarbademli (Yakaköy near, stream),

37°43'N 31°20'E, 1430 m, 14.09.2000; 1♂, Eğirdir (Koysazı S.), 37°50'N 30°53'E, 940 m, 22.05.2001; 5♂♂, 3♀♀, Sütçüler (between Melihler and Çandır), 37°27'N 30°52'E, 310 m, 21.06.2001; 4♂♂, 1♀, Aksu (between Aksu and Yilanlı, stream), 37°48'N 31°00'E, 1215 m, 28.06.2001; 9♂♂, 2♀♀, Sütçüler (between İncidere and Belence, Köprü R.), 37°34'N 31°10'E, 730 m, 23.08.2001; 3♀♀, Sütçüler (between Sütçüler and Belence, Köprü R.), 37°36'N 31°10'E, 920 m, 23.08.2001; 1♀, Sütçüler (between Belence and Ayvalı), 37°39'N 31°04'E, 1100 m, 23.08.2001; 1♂, 6♀♀, Sütçüler (Ayvalıpınar, Köprü R.), 37°41'N 31°01'E, 1120 m, 23.08.2001; 1♀, Ağlasun (Yazır near, Değendere S.), 37°39'N 30°40'E, 771 m, 21.06.2002; 6♂♂, 3♀♀, Eğirdir (Aşağıgökdere V.), 37°33'N 30°47'E, 365 m, 21.06.2002; 6♀♀, Sütçüler (Akbenli V. near), 37°36'N 30°51'E, 1030 m, 19.05.2000; 8♂♂, 10♀♀, Sütçüler (Kovada S.) 37°35'N 30°52'E, 890 m, 19.05.2000; MUĞLA: 6♂♂, Dalaman (Kapıgargın V., Tersakan S.), 36°47'N 28°51'E, 22.05.2000; 4♂♂, 6♀♀, Köyceğiz (Karabögürtlen V. near, Balıklı S.), 37°00'N 28°32'E, 70 m, 18.07.2000; 1♀, Ula (Yaylasöğüt V. near), 37°12'N 28°40'E, 925 m, 18.07.2000; 1♂, Murat V., stream, 37°15'N 28°38'E, 590 m, 22.06.2001; 3♂♂, 2♀♀, Yatağan (Pınarbaşı, stream), 37°18'N 28°07'E, 352 m, 23.06.2001; 2♂♂, 5♀♀, Milas (Yusufça V. near), 37°19'N 27°41'E, 225 m, 23.06.2001; 7♂♂, 4♀♀, Milas (Akgedik Dam), 37°19'N 27°49'E, 90 m, 23.06.2001; 4♂♂, 2♀♀, Milas (north of Yusufça V.), 37°19'N 27°51'E, 175 m, 16.07.2001; 4♂♂, 4♀♀, Kavaklıdere (Dokuzçam V., branches of Kemer), 37°24'N 28°29'E, 645 m, 16.07.2001; 3♂♂, 5♀♀, Köyceğiz (Köyceğiz L. side), 36°57'N 28°41'E, 4 m, 20.08.2001; 1♂, Kavaklıdere (Çayboyu T., stream), 37°28'N 28°20'E, 665 m, 22.08.2001; 1♂, 2♀♀, Milas (between Kayabaşı V. and Yusufça V.), 37°19'N 27°51'E, 225 m, 12.09.2001; 3♂♂, Köyceğiz L., 36°57'N 28°41'E, 16 m, 13.09.2001; 1♂, 1♀, Köyceğiz (Köyceğiz L.), 36°57'N 28°42'E, 26 m, 22.04.2002; 2♂♂, 2♀♀, Beyobası Kasabası (Yuvarlak S.), 36°54'N 28°47'E, 110 m, 22.04.2002; 4♂♂, 8♀♀, Milas (Kayabaşı V.), 37°19'N 27°51'E, 215 m, 23.06.2002; 2♂♂, 1♀, Ortaca (Dalaman R.) 36°48'N 28°48'E, 30 m, 25.06.2002; 1♂, Fethiye (between Göcek and Fethiye), 36°43'N 29°01'E, 50 m, 18.04.2000.

This species is new to fauna of aquatic Heteroptera of Turkey.

***Gerris gibbifer* (Schummel, 1832)**

Materials: ANTALYA: 1♀, Belen (road Kaş-Elmalı), 36°24'N 29°55'E, 20.05.2000; 2♂♂, Kumluca (between Güzören and Karaağac), 36°28'N 30°20'E, 535 m, 25.06.2000; 1♀, Beşkonak (between Çaltepe and Değirmenözü, branches of Köprü R., Kanlı S.), 37°20'N 31°13'E, 492 m, 26.06.2000; 1♂, 1♀, Korkuteli (branches of Korkuteli Dam), 37°05'N 30°08'E, 1074 m, 22.04.2001; 1♂, 1♀, Elmalı (Göltaşla, Avlan L.), 36°35'N 29°57'E, 1200 m, 26.05.2002; 1♀, Finike (Dam and stream, Alakır), 36°27'N 30°13'E, 144 m, 20.05.2000; AYDIN: 1♂, Köşk (Beyköy, Koçak S.), 37°51'N 28°00'E, 86 m, 27.05.2002; BURDUR: 1♂, between Yeşilova and Karamanlı, branches of Karamanlı, 37°25'N 29°40'E, 1217 m, 23.06.2000; 1♂, Karamanlı (Karataş L.), 37°22'N 29°57'E, 1054 m, 23.06.2000; 1♂, Yeşilova (Saldabeli near), 37°29'N 29°36'E, 1180 m, 16.07.2000; 1♂, Gölhısar (Karapınar V.), 37°05'N 29°31'E, 1005m, 06.08.2000; 2♂♂, Merkez (Boğaziçi V., Eren S.), 37°40'N 30°04'E, 1000 m, 21.06.2001; 1♂, Karamanlı (2. branches of Karamanlı Dam), 37°25'N 29°49'E, 1200 m, 27.06.2001; 1♀, Karamanlı (Karataş L. side, pond), 37°22'N 29°56'E, 1070 m, 27.06.2001; 2♂♂, Merkez (between Askeriye and Gelincik, stream), 37°45'N 30°23'E, 1140 m, 28.06.2001; 1♂, Merkez (Kovacık, stream), 37°42'N 29°58'E, 1206 m, 18.07.2001; 1♂, Karamanlı (branches of Karamanlı Dam), 37°25'N 29°49'E, 1196 m, 20.08.2001; 1♂, Yeşilova (Bayındır V., marshy), 37°39'N 29°45'E, 1040 m, 22.08.2001; 1♂, Yeşilova (Bayındır V.), 37°39'N 29°45'E, 1030 m, 20.06.2002; 1♂, 1♀, Yeşilova (İşıklar V., stream), 37°36'N 28°46'E, 1180 m, 20.06.2002; 1♂, Karamanlı (Karataş L.), 37°22'N 29°57'E, 1060 m, 20.06.2002; 1♂, Çavdır (Söğüt T., stream), 37°02'N 29°50'E, 1420 m, 26.06.2002; DENİZLİ: 1♂, Çivril (Gökgöl V., Ahır S.), 38°11'N 30°03'E, 930 m, 22.06.2000; 1♀, Çameli (Kirazlıyaylı V., Karabayır S.), 36°58'N 29°11'E, 840 m, 16.07.2000; 1♂, 1♀, Çardak (Açı L. side, spring water), 37°49'N 29°25'E, 780 m, 19.07.2000; 1♂, 1♀, Çivril (Sarıbeyli V.), 38°09'N 29°38'E, 825 m, 26.06.2001; 1♂, Honaz (Kaklık T., branches of Aksu), 37°48'N 29°25'E, 572 m, 22.08.2001; 2♂♂, Çivril (between İnceköy and Seraserli, stream), 38°15'N 29°47'E, 845m, 28.05.2002; 2♀♀, Çardak (border

Çardak and Dazkırı), $37^{\circ}49'N$ $29^{\circ}45'E$, 863 m, 20.06.2002; 1♀, Tavas (pond), $37^{\circ}36'N$ $29^{\circ}07'E$, 1080 m, 22.06.2002; ISPARTA: 1♀, Aksu (between Yakaafşar and Elecik V., stream), $37^{\circ}44'N$ $31^{\circ}14'E$, 1402 m, 27.06.2000; 1♂, Aksu (between Yakaköy and Yenişarbademli, stream), $37^{\circ}43'N$ $31^{\circ}16'E$, 1753 m, 27.06.2000; 1♂, 1♀, Yenişarbademli (Gökyaka V. near, stream), $37^{\circ}44'N$ $31^{\circ}25'E$, 1167 m, 27.06.2000; 1♂, Aksu (7. km from road Anamas plateau, stream), $37^{\circ}45'N$ $31^{\circ}14'E$, 1765 m, 14.07.2000; 1♂, Aksu (2. km from road Anamas plateau, stream), $37^{\circ}45'N$ $31^{\circ}14'E$, 1585 m, 14.07.2000; 1♀, Yalvaç (Sultan Mountains), $38^{\circ}15'N$ $31^{\circ}20'E$, 1745 m, 23.04.2001; 1♂, Merkez (between Askeriye and Gelincik, stream), $37^{\circ}45'N$ $30^{\circ}25'E$, 1200 m, 28.06.2001; 1♂, 1♀, Yalvaç (between Bağkonak and Cankurtaran), $38^{\circ}14'N$ $31^{\circ}21'59"E$, 1615 m, 19.07.2001; 1♂, 1♀, Eğirdir (Göktaş, Koysazı S.), $37^{\circ}50'N$ $30^{\circ}53'E$, 3116 ft, 25.05.2002; MUĞLA: 1♀, Köyceğiz (Karabögürtlen V. near, Fethiye S.), $37^{\circ}00'N$ $28^{\circ}30'E$, 90 m, 18.07.2000; 1♀, Kemer (Ceylan V., branches of Esen S.), $36^{\circ}49'N$ $29^{\circ}33'E$, 1140 m, 06.08.2000; 2♀♀, Kemer (between Karahasantaşı and Kemer, branches of Esen S.), $36^{\circ}56'N$ $29^{\circ}38'E$, 1390 m, 06.08.2000; 1♂, road Kale-Köyceğiz, $37^{\circ}06'N$ $28^{\circ}29'E$, 590 m, 21.08.2001; 3♂♂, 1♀, Yatağan (Bozarmut near, Alişar S.), $37^{\circ}17'N$ $28^{\circ}10'E$, 400 m, 27.05.2002; 1♀, Yatağan (Madenler S.), $37^{\circ}20'N$ $28^{\circ}09'E$, 394 m, 27.05.2002.

This species is new to fauna of aquatic Heteroptera of Turkey.

Infraorder: Leptopodomorpha
Saldidae Amyot and Serville, 1843
***Saldula fucicola* (Sahlberg, 1870)**

Materials: ANTALYA: 4♂♂, 8♀♀, Kaş (Gömbe, Girdev L.), $36^{\circ}40'N$ $29^{\circ}40'E$, 1815 m, 24.06.2000; AYDIN: 2♂♂, 2♀♀, Çine (Eskiçine, Söğütçük near), $37^{\circ}30'N$ $28^{\circ}06'E$, 255 m, 27.05.2002; DENİZLİ: 3♀♀, Buldan (Stüleymanlı L.) $38^{\circ}03'N$ $28^{\circ}46'E$, 1170 m, 17.07.2001; ISPARTA: 2♀♀, Sütçüler (Kovada L.), $37^{\circ}40'N$ $30^{\circ}52'E$, 927 m, 19.05.2000; MUĞLA: 1♂, 11♀♀, Köyceğiz (Gölgeli M., Gölgeli L.), $37^{\circ}03'N$ $28^{\circ}48'E$, 1785 m, 15.07.2001.

This species is new to fauna of aquatic Heteroptera of Turkey.

***Salda morio* Zetterstedt, 1838**

Material: ANTALYA: 1♀, Kaş (Gömbe, Girdev L.), $36^{\circ}40'N$ $29^{\circ}40'E$, 1815 m, 24.06.2000.

This species is new to fauna of aquatic Heteroptera of Turkey.

DISCUSSION

While the two species of Saldidae are represented by few records (Figure 2), the distributional records for *Aquarius najas* and *Gerris gibbifer* suggest that these are common species, and they might be expected to occur in adjoining regions of Turkey just as frequently (Figure 1). These data, therefore, suggest that continued intensive collections throughout Turkey would provide additional much needed data on the distribution of Gerromorpha and Leptopodomorpha in the country, and may well yield additional taxa not previously reported from this region.

Aquarius najas occurs on the water surface in both lotic and lentic habitats of Akçay S., Aksu S., Alara S., Büyükmenderes R., Dalaman R., Dalaman R., Deli S., Delice S., Dim S., Döğüş S., Dünberek S., Esen S., Gevne S., Göynük S., Kanlı S., Kargı S., Köprü R., Kovada S., Koysazı S., Sedre S., Tekke S., Tersakan S., Yuvarlak S., Zeytinbüyü S., also Kurşunlu

waterfall, small stream, Köyceğiz L., Gölhisar Lake, Akgedik Dam and Kemer Dam.

Gerris gibbifer occurs on the water surface Ahr S., Alişar S., Eren S., Esen S., Fethiye S., Kanlı S., Karabayır S., Koçak S., Koysazı S., Madenler S., and Avlan L., Karataş L., small stream, spring water, pond and marshy.

Saldula fucicola only occur lakes which are at the edge of Girdev L., Gölgeli L., Kovada L. and Süleymanlı L.

Salda morio species was only collected at the edge of Girdev L.

In this study, *Aquarius najas* and *Gerris gibbifer* was found both lake and river, dam stream, but *Saldula fucicola* and *Salda morio* was only found at the edge of Lake.

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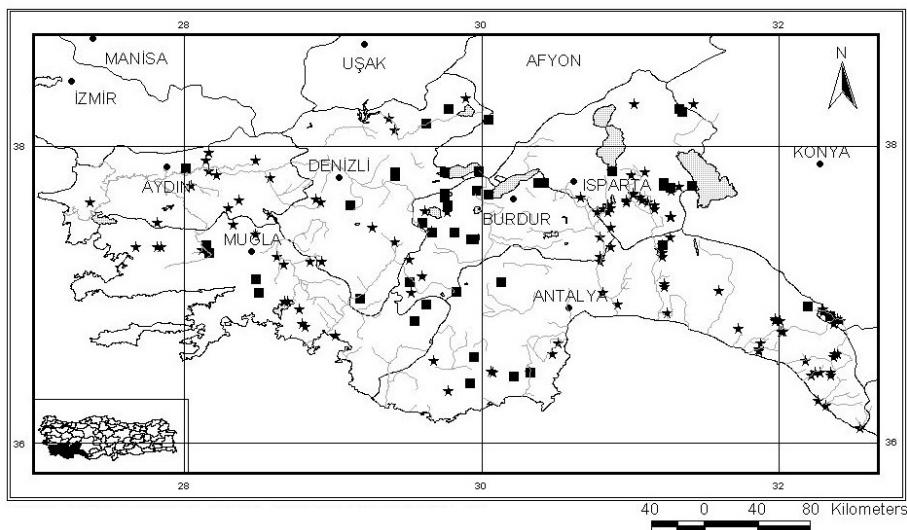


Figure 1. Map of Turkey showing the visited localities and Gerridae species; (★) *Aquarius najas*, (■) *Gerris gibbifer*

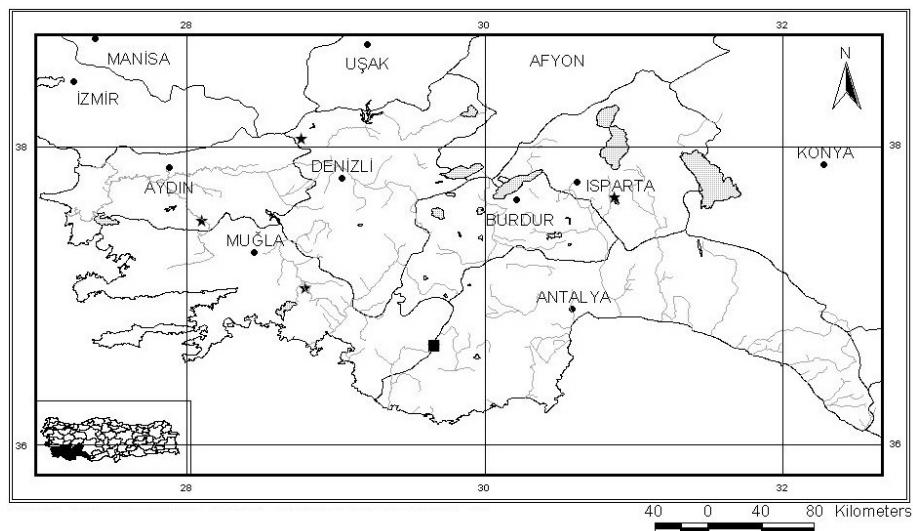


Figure 2. Map of Turkey showing the visited localities and Saldidae species; (★) *Saldula fucicola* (■) *Salda morio*