

An Overview on the Fauna of Piesmatidae (Heteroptera) of Turkey with a new record for the Turkish Thrace: *Parapiesma quadratum* (Fieber, 1844)

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ABSTRACT: *Parapiesma quadratum* (Fieber, 1844) was identified in Kırklareli province during field studies in the Turkish Thrace in 2016. This is the first record of *P. quadratum* from the Thrace Region and is also the first finding of the Piesmatidae family in this region. In this study, the distribution informations of *P. quadratum* and other species belonging to the family Piesmatidae in Turkey were given and shown on the map.

KEYWORDS: *Parapiesma quadratum*, new record, Piesmatidae, Heteroptera, Turkish Thrace, Turkey

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INTRODUCTION

The Piesmatidae family is represented by 19 species belong to two genera (*Parapiesma* Péricart, 1974 and *Piesma* Lepeletier & Serville, 1828).

Genus *Parapiesma* has 16 species and genus *Piesma* has 3 species. Six species of Piesmatidae family are known in Turkey and of them four species belong genus *Parapiesma* and two species to genus *Piesma* (Heiss & Péricart, 2001).

The species of *Parapiesma* genus distributed in Turkey are *Parapiesma atriplicis* (Frey-Gressner, 1963), *P. kolenatii* (Fieber, 1861), *P. quadratum* (Fieber, 1844) and *P. salsolae* (Becker, 1867); and all this species are known only from Anatolia (Heiss & Pericart, 2001).

P. atriplicis was recorded from Aksaray province in Central Anatolia and Erzurum (Narman, Kışlaköy, Oltu, Şenkaya),

Kars (Sarıkamış, Karakurt) in Eastern Anatolia.

P. kolenatii and *P. salsolae* have a wider distribution in Anatolia. *P. kolenatii* was reported from Adıyaman (Nemrut Mountain) in Southeast Anatolia, Ağrı (Doğubeyazıt), Kars (Göle, Sarıkamış) and Van province in Eastern Anatolia and Kayseri (Bünyan) and Nevşehir (Cappadocia) in Central Anatolia. *P. salsolae* was recorded from Afyonkarahisar (Köroğlu Passage), Ankara (Hasanoğlan), Çankırı, Eskişehir (Sivrihisar), Kayseri (Pınarbaşı, Yeşilhisar), Kırıkkale (Keskin), Kırşehir (Mucur), Nevşehir (Gülşehir) and Niğde (Çiftelhan, Ulukışla) in Central Anatolia, Erzurum (Narman) and Erzincan (Mercan) in Eastern Anatolia, İzmir (Bornova) in Aegean Region and Samsun in the Middle Black Sea Region.

P. quadratum was given so far only from Gökçeada Island located in the Aegean

Sea in Turkey (Awad & Önder, 1997; Heiss & Pericart, 2007; Yıldırım et al., 2013). (Fig. 2a).

Both euromediterranean species of the genus *Piesma* also are distributed in Anatolia part of Turkey.

Of this species, *Piesma capitatum* was recorded from Afyonkarahisar and Aydın provinces in the Aegean Region of the west Anatolia, Ankara in the Central Anatolia, Kocaeli (Mollafeneri) in Marmara Region and Kars (Centrum, Merdenik) in the Eastern Anatolia.

The other species, *P. maculatum* is known from Bartın, Çankırı, Kastamonu and Samsun provinces in the Western and Central Black Sea Regions and Erzurum (Oltu, Narman, Kışlaköy, Ünlükaya, Şenkaya Turnalı) in the Eastern Anatolia Region (Heiss & Pericart, 2007; Yıldırım et al., 2013). (Fig. 2a).

RESULTS

Family Piesmatidae Amyot & Serville, 1843

Genus *Parapiesma* Péricart, 1974

***Parapiesma quadratum* (Fieber, 1844)**

Material examined: Kırklareli: Lüleburgaz-Dü-ğüncübaşı Village, 270m., 17.07.2016, 1♂ (Fig. 1).

Distribution in Turkey: Çanakkale: Gökçeada (Awad & Önder 1997) (Fig. 2a).

Distribution in Palaearctic: Europa: Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Finland, Germany, Great Britain, Hungary, Ireland, Italy, Macedonia, Poland, Portugal, Romania, Russia (European part), Serbia, Slovakia, Slovenia, Spain, Swedish, Ukraine. **North Africa:** Algeria, Tunisia. **Asia:** Armenia, Azerbaijan, Turkey (Asian part) (Heiss & Pericart, 2001) (Fig. 2b).



Fig. 1. *Parapiesma quadratum* (dorsal view)

DISCUSSION

Parpiesma quadratum was recorded previously in the Gökçeada Island located Çanakkale province of West Turkey. Geologically is Gökçeada actually a part of Anatolia which has been formed with a connection to the mid-Sakarya region (Hacet & Aktaç, 2006).

In this study was recorded this species firstly in the Thrace Region and this finding is second record in Turkey.

Palaearctic distribution of *P. quadratum* is very common in Europe. It is distributed in North Africa only in Tunisia and Algeria and in Asia only in Armenia and Azerbaijan (Heiss & Pericart, 2001).

Distributions of other species of Piesmatidae in Turkey are so far only in Anatolia.

They are mostly distributed in Central Anatolia and Eastern Anatolia and partly in Western Anatolia and Black Sea coasts.

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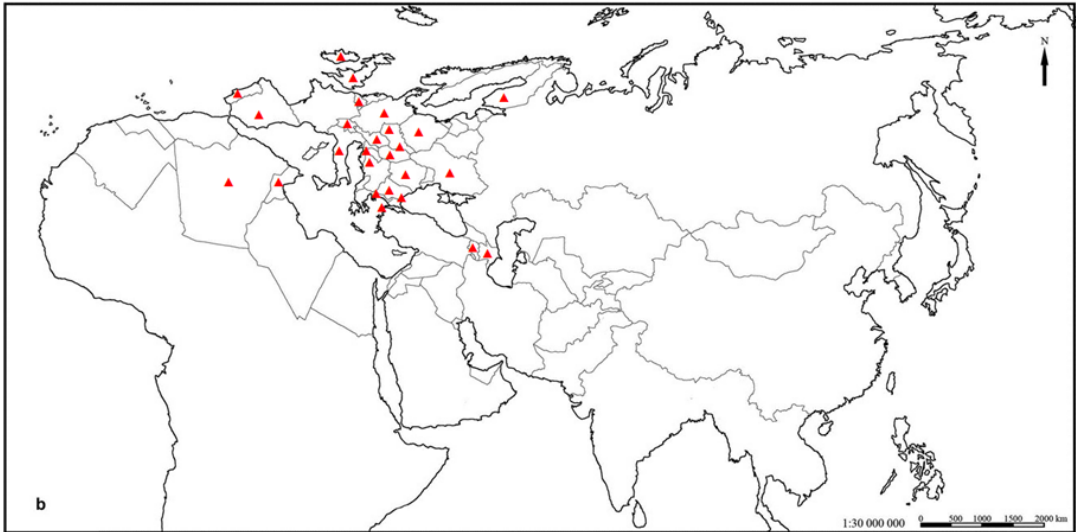
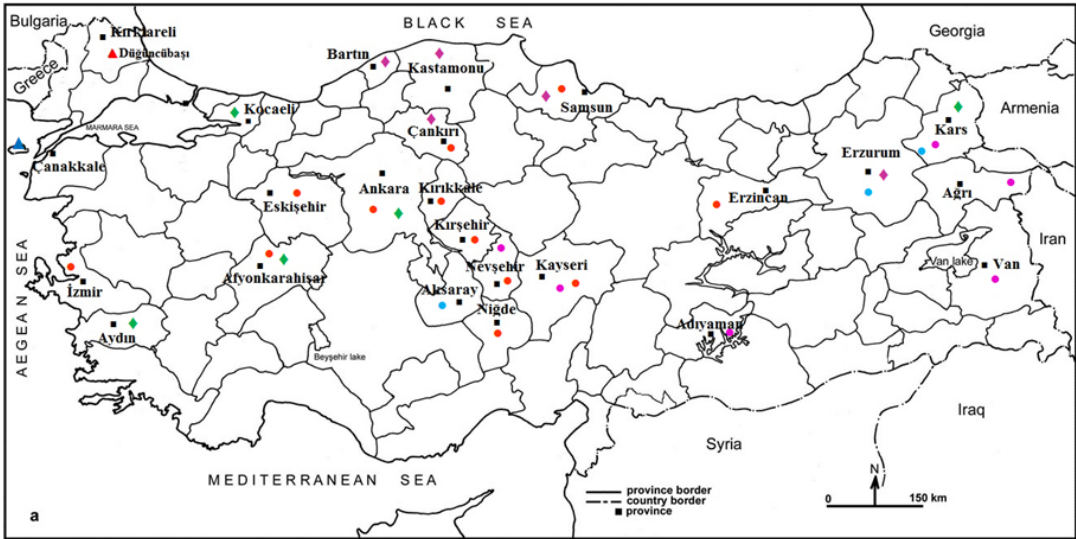


Fig. 2a. Distributions of the species of Piesmatidae in Turkey – *Parapiesma atriplicis* (●), *P. kolenatii* (●), *P. salsolae* (●), *P. quadrata* (▲: new record for the Thrace, ▲: previous record), *Piesma capitatum* (◆), *P. maculatum* (◆)

Fig. 2b. Distribution of *Parapiesma quadratum* in Palearctic Region (▲)