Upogebia pusilla (Petagna, 1792) (Decapoda, Upogebiidae) in the Turkish Black Sea Fauna

Türk Karadeniz faunasında *Upogebia pusilla* (Petagna, 1792) (Decapoda, Upogebiidae)

A. Suat Ateş and Murat Sezgin

Ondokuz Mayıs University, Sinop Fisheries Faculty 57000 Sinop, Turkey

Abstract

The present work is concerned with 1 Upogebiid species, sampled by diving throught a study performed on crustacea decapoda off the Sinop Peninsula coast between June 1995 and July 1996. Collection was carried out from the depths, 0-15 m.

23 species of marine Crustacea Decapoda are now known to occur in the Black Sea coast of Turkey. Of these, *Upogebia pusilla* (Petagna, 1792) is new for the Turkish Black Sea coastal waters.

Key Words: Upogebia pusilla, Upogebiidae, Crustacea Decapoda, Turkish Black Sea.

Introduction

Present knowledge is incomplete for the Turkish Black Sea decapod fauna. Information on the geographical distribution of decapod species which occur in the Black Sea coast of Turkey is not yet available. The decapod crustacean fauna in the Turkish Black Sea has been only partially studied. The composition of decapod communities within benthic ecosystem of the Black Sea is relatively well known (Marion, 1898; Casper, 1957; Bacescu, 1967; Gutu, 1980; Monin, 1984 and Petrescu and Balaşescu, 1995).

The first record and information on Callianassids of the Turkish coastal zone was given by Kocataş (1981) who found three species such as *Upogebia delturata* (Leach, 1815), *Upogebia pusilla* (Petagna, 1792) and *Upogebia tipica* (Nardo, 1869) from the Aegean Sea and the Mediterranean Turkish coast whereas, there is no record on Upogebiid species existing in the Turkish Black Sea shores.

The present study was carried out to obtain knowledge on Callianassid species of Turkish Black Sea coast.

Material and Methods

The coastal area of the province of Sinop which is located in the Western Black Sea region, Turkey was chosen for this investigation. Samples were collected by diving from the shore to 15 meters depth. The duration of the study was thirteen months from June 1995 to July 1996. The subsrate was muddy, covered partially by vegetation, mostly *Cymodocea nodosa* and *Zostera marina* and various algae. The individual samples were preserved in 4 % formalin. The map of sampling area is shown in figure 1. Figure 1. \Rightarrow

Results and Discussion

Upogebia pusilla (Petagna, 1792)

Material examined: Turkish Black Sea, 41° 55' N 35° 7' E, depth 10 m, sandy-oozy grounds, 25 July 1996, 1 specimen, total body length 48 mm.

One single specimen of this species was collected at a depth of 10 m. The investigated specimen agrees with the description given by Noël (1992). This species has been reported in the Mediterranean Sea from the Iberic Peninsula shores by Zariquiey Alvarez (1968) the French waters Noël (1992), in the Aegean Sea Holthuis and Göttlieb (1958), in Northern Aegean Sea Sporades Türkay et. al (1987) and in the Black Sea from the Romanian coast Băcescu (1967) and Gutu (1980).

This species, which makes simple Y-shaped burrows with two or more entrances in mud or sand mud (Holthuis, 1991) has been recorded by Müller (1986) from the Sea of Marmara and Kocataş (1981) the Turkish Aegean Sea and the Mediterranean.

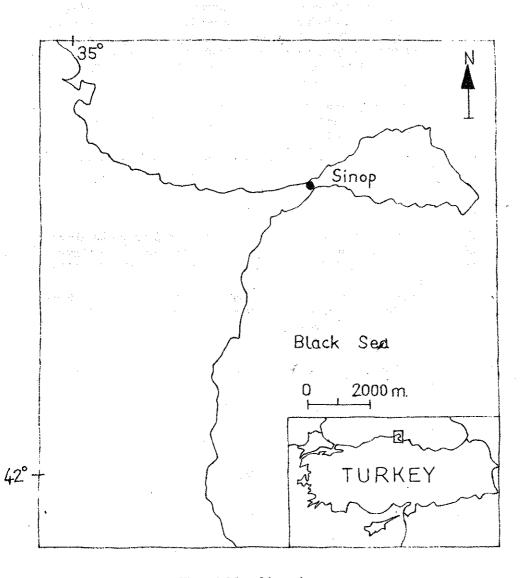


Figure 1. Map of the study area.

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The first study was performed by Holthuis and Göttlieb (1958) on decapod crustaceans of Turkish Black Sea shores. Then, the decapods of Turkish Black Sea were examined by Kocataş (1981) and Holthuis (1987).

The genus *Upogebia* includes five species (Koukouras et al., 1992). *Upogebia pusilla* (Petagna, 1792), which is found in the Mediterranean and adjacent seas, was reported from the Turkish Mediterranean and Aegean Sea for the first time by Kocataş (1981), the Sea of Marmara by Müller (1986). Whereas, it has not been recorded from the Turkish Black Sea coast by Holthuis and Göttlieb (1958), Kocataş (1981) and Holthuis (1987).

The most obvious explanation of the presence of *Upogebia pusilla* in the recorded areas is that it can have been introduced from the Mediterranean Sea to the Sea of Marmara through the Dardenelles.

Finally, the capture of this specimen represents the first record of this species in the Black Sea coast of Turkey. In this study, *Upogebia pusilla* (Petagna, 1792) is reported for the first time from the Turkish Black Sea coast.

Özet

Bu çalışma Haziran 1995 ve Temmuz 1996 arasında Sinop Yarımadası dekapod krustaseleri üzerine yapılan bir çalışma sırasında, dalma yoluyla örneklenen bir Upogebild türüyle ilgilidir. Örnekleme 0-15 m arasındaki derinliklerde yürütülmüştür.

Denizel krustase dekapod'lardan 23 türün bugün Türkiye'nin Karadeniz kıyılarında ortaya çıktığı bilinmektedir. Bunlardan *Upogebia pusilla* (Petagna, 1792) Türk Karadeniz kıyısal suları için yenidir.

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References

Băcescu, M. (1967). Decapoda. In: Fauna Republicii Socialiste România, *Crustacea* Vol. 4-9: 1-351.

Caspers, H. (1957). Black Sea and the Sea of Azov. Geol. Soc. America Mem. 67 (1): 801-890.

Gutu, M. (1980). Recent Changes in the Decapod Fauna of the Romanian Black Sea Littoral. Tray. Mus. Hist. Nat. Grigore Antipa XXI, 103-109, Bucureşti.

Holthuis, L. B. (1961). Report on a collection of Crustacea Decapoda and Stomatopoda from Turkey and the Balkans. *Zoll. Verh.*, *Leiden*, 47: 1-67.

Holthuis, L. B. (1987). Vrais Crabes. Fisches FAO d'identification des éspèces pour les besoins de la pêche. Mediterranée et Mer Noire. Zone de pêche 37 : 321-367.

Holthuis, L. B. (1991). FAO species catalogue marine lobsters of the world. An annotated and illustrated catalogue of species of interest to fisheries known to date. 13:1292.

Kocataş, A. (1981). Liste préliminaire et repartition des Crustaces Décapodes de eaux Turques. Rapp. Comm. Int. Mer Medit. 27 (2): 161-162.

Koukouras, A. Dounas, C. Türkay, M. Voultsiadou, E. (1992). Decapod Crustacean Fauna of the Aegean Sea: New information, Check List, Affinities. *Senckenbergiana marit.* 22: (3/6), 217-244.

Marion, A. F. (1898). Notes sur la faune des Dardanelles et du Bosphore. *Ann. Mus. Marseille*, 2: 163-181.

Monin, V. L. (1984). A new finding of *Callinectes sapidus* (Decapoda: Brachyura) in the Black Sea. *Zoll. Zh.* 58: 1100-1102.

Müller, G. J. (1986). Review of the hitherto recorded species of Crustacea Decapoda from the Bosphorus, the Sea of Marmara and the Dardenelles. *Certari marine I. R. C. M.*, 19: 109-130.

Noël, P. Y. (1992). Clé préliminaire d'identification des Crustacea decapoda de France et des principales autres especes d'Europe. Collection Patrimones Naturels. 9. Série Patrimoine Scientifique, Paris, 146 pp.

Petrescu, I. Balaşescu, A. M. (1995). Contributions to the knowledge of decapod fauna (Crustacea) from the Romanian coast of the Black Sea. *Trav. Mus. Hist. Nat. Grigore Antipa* XXXV, 99-146.

Türkay, M. Fischer, G. Neumann, V. (1987). List of the marine Crustacea Decapoda of the Northern Sporades (Aegean Sea) with systematic and zoogeographic remarks. *Inv. Pesq.* 51 (suppl. 1): 87-109.

Zariquiey Alvarez, R. (1968). Crustáceos Decápodos Ibéricos. Inv. Pesq. 32: 1-510.

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Figure legend:

Figure 1. Map of the study area.

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