SHORT COMMUNICATION

KISA ARAŞTIRMA

Presence of the *Mesopodopsis slabberi* (Van Beneden, 1861) (Crustacea: Mysida) from the Mediterranean Sea coast of Turkey

Türkiye'nin Akdeniz Kıyılarında *Mesopodopsis slabberi* (Van Beneden, 1861) (Crustacea: Mysida)'nin varlığı

Tahir Özcan^{1*} • A. Suat Ateş² • Seçil Acar³

¹İskenderun Technical University, Faculty of Marine Sciences and Technology 31200 Iskenderun, Hatay, Turkey D https://orcid.org/0000-0002-9278-4150 ²Çanakkale Onsekiz Mart University, Faculty of Marine Sciences and Technology 17100 Çanakkale, Turkey D https://orcid.org/0000-0002-4682-1926 ³Çanakkale Onsekiz Mart University, Faculty of Marine Sciences and Technology 17100 Çanakkale, Turkey D https://orcid.org/0000-0002-6426-8095 **Corresponding author: tahozcan@yahoo.com*

Received date: 26.12.2019

Accepted date: 12.02.2019

How to cite this paper:

Özcan, T., Ateş, S. & Acar, S. (2019). Presence of the *Mesopodopsis slabberi* (Van Beneden, 1861) (Crustacea: Mysida) from the Mediterranean Sea coast of Turkey. *Ege Journal of Fisheries and Aquatic Sciences*, 36(2), 181-183. DOI: 10.12714/egejfas.2019.36.2.10

Abstract: Mysid, *Mesopodopsis slabberi* (Van Beneden, 1861) was for the first time recorded in İskenderun Bay (eastern Mediterranean). A total of 10 specimens belong to *M. slabberi* was collected at the depths between 0 and 2 m. This paper is on the first record of *M. slabberi* from the Levantine coast of Turkey.

Keywords: Mesopodopsis slabberi, Mysida, Crustacea, İskenderun Bay, eastern Mediterranean

Öz: Misid, Mesopodopsis slabberi (Van Beneden, 1861) İskenderun Körfezi'nde ilk kez kaydedilmiştir. Mesopodopsis slabberi'nin toplam 10 bireyi 0-2 m arasındaki derinliklerden toplanmıştır. Bu makale M. slabberi'nin Türkiye'nin Levantin kıyılarından ilk kayıtı üzerinedir.

Anahtar kelimeler: Mesopodopsis slabberi, Mysidaa, Crustacea, İskenderun Körfezi, doğu Akdeniz

INTRODUCTION

Mysids are common motile peracarid crustaceans at shallow coastal waters and estuaries and play an important role as a food resource for many organisms that use these areas as nurseries (Mees and Jones, 1997; Dauvin and Desroy, 2005; Buji and Panampunnayıl, 2011). Mysid, Mesopodopsis slabberi (Van Beneden, 1861) is classified in the genus, Mesopodopsis Czerniavsky, 1882 (Sardo et al. 2005). The taxonomy of the genus Mesopodopsis Czerniavsky, 1882 and of the species *slabberi* in particular, has been a matter of controversy. Suprabenthic crustaceans are not easily sampled with conventional samplers like van Veen grab. M. slabberi was for the first time recorded in the Bosphorus and the Sea of Marmara for Turkish coasts (Demir, 1952). Then, it was found in Izmir and Sigacik Bay (the eastern Aegean Sea) by Katağan 1985 and Katağan and Ledoyer 1979. However, we present

herein the local record of *M. slabberi* for the Turkish Mediterranean coast.

MATERIAL AND METHODS

Sampling area was İskenderun Bay (the eastern Mediterranean) (Figure 1). Specimens were obtained by means of a Van veen Grab with the surface area of 0.1 m⁻². Samples were collected in three replicates from sandy-muddy bottoms between 0 and 2 m depths. A total of 10 specimens was collected (12.08.2015) at the 1 and 2 stations (Ceyhan River, eastern Mediterranean) (Figure 1). The species was identified based on Wittmann (1992). The nomenclature for this species follows Worms (2018). Sample specimen was photographed, preserved in formalin of 4%, and deposited in the Museum of the Faculty of Marine Sciences and Technology, Iskenderun Technical University, Iskenderun-Hatay, Turkey (Collection of Dr. T. Özcan).

RESULTS AND REMARKS

M. slabberi is easily distinguished and has a slender transparent body. Its eyes are of an uncommon length-twice longer than the diameter of the carapace in the gastric region (Wittmann 1992, Sardo et al. 2005) (Figure 2).

Suprabenthic mysid, *M. slabberi* was found in coastal areas where there is input of freshwater. The species was observed only in summer samples in spite of seasonal sampling strategy. Total body length of specimens (from the tip of the rostrum to the tip of the



Figure 1. Map showing the sampling location (1: plus, +; 2: inverted triangle, ▼)

telson) obtained varied between 2.2 and 8.4 mm. Mysid, *M. slabberi* is common in oligohaline, brackish, coastal marine, and weakly metahaline waters in the salinity range of 1.3-43‰ salinity without unit (Wittmann, 1992; Mees and Jones, 1977; Mouny et al. 2000).

M. slabberi, plays an important role in the trophic food web as it is consumed by many fish species (e.g. sand smelt, common goby, mullet and sea bass) (Greenwood et al. 1989; Delgado et al. 1997; Bartulovic et al. 2004) and therefore it can be considered as an important prey for fishes in the study area. Bartulović et al. (2004) mentioned that *M. slabberi* is an important prey item for fish, *Atherina boyeri* Risso, 1810 on the Crotia coast (the east Adriatic Sea).

According to previous references, approximately 32 mysid species (Turkish Black Sea: 5, the Turkish Strait System: 14, Turkish Aegean Sea: 26, Turkish Mediterranean Sea: 3) are known from the Turkish coast and among these 3 species occurred on the Levantine Sea coast Turkey (Bakır et al. 2014). With this new record, the number of mysid species known from the Levantine Sea coast of Turkey increased to 4. Consequently, this study focuses on the first presence of *M. slabberi* from the Levantine coast of Turkey.

ACKNOWLEDGEMENTS

We would like to thank the vessel "F/V Yağız Kaptan-1" captain-Salim Gangal and crews for their support in sampling and sorting the biological capture.



Figure 2. *Mesopodopsis slabberi* (Van Beneden, 1861), A; Dorsal view B; Telson view, (photographed by Dr. T. Özcan).

REFERENCES

- Bakır, A.K., Katağan, T., Aker, H.V., Özcan, T., Sezgin, M., Ateş, A.S., Koçak, C. & Kırkım, F. (2014). The marine arthropods of Turkey. *Turkish Journal of Zoology*, 38: 765-831. DOI: 10.3906/zoo-1405-48.
- Bartulovic, V., Lucic, D., Conides, A., Glamuzina, A. B., Dulcic, J., Hafner, D. & Batistic, M. (2004). Food of sand smelt, *Atherina boyeri* Risso, 1810 (Pisces: Atherinidae) in the estuary of the Mala Neretva River (middle-eastern Adriatic, Croatia). *Scientia Marina*, 68(4): 597-603.
- Buji, A. & Panampunnayil, S.U. (2011). Population structure and reproductive biology of *Mesopodopsis orientalis* (Crustacea: Mysida) in a tropical mangrove ecosystem in India. *Marine Biodiversity Records*, 4 (e43): 1-9. DOI: 10.1017/S1755267211000273.
- Dauvin, J.C. & Desroy, N. (2005). The Food web in the lower part of the seine estuary: a synthesis synopsis of existing knowledge. *Hydrobiologia*, 540, 13–27.
- Delgado, L., Guerao, G. & Ribera, C. (1997). Biology of the mysid Mesopodopsis slabberi (van Beneden, 1861) (Crustacea, Mysidacea) in a coastal lagoon of the Ebro delta (NW Mediterranean). Hydrobiologia, 357: 27-35.
- Demir, M. (1952). Boğaz ve Adalar Sahillerinin Omurgasız Dip Hayvanları. *Hidrobiyoloji*

Araştırma Enstitüsü yayınlarından, Sayı: 3, İstanbul, Turkey (in Turkish).

- Greenwood, J.G., Jones, M.B. & Greenwood J. (1989): Salinity effects on brood maturation on the mysid crustacean *Mesopodopsis slabberi. Journal of the Marine Biological Association of the United Kingdom*, 69 (3): 683-694. DOI: 10.1017/S0025315400031064
- Katağan, T. (1985). Mysidaces et Cumaces des cotes Egeennes de Turquie. *Rapp. Comm. int. Mer Medit.*, 29 (5): 287-288.
- Katağan, T. & Ledoyer, M. (1979). Crustacea Mysidacea des cotes de Turquie et deux nouvelles especes pour la Mediterranee orientale. *Tethys*, 9: 129-131 (in French).
- Mees, J. & Jones, M.B. (1997): The hyperbenthos. Oceanography and Marine Biology: An Annual Review., 35: 221-255.
- Mouny, P., Dauvin, J.C. & Zouhiri, S. (2000). Benthic Boundary Layer fauna from the Seine estuary (eastern English Channel): spatial distribution and seasonal schanges. *Journal of Marine Biological Assosation U.K.*, 80: 959-968.
- Sardo, A.M., Morgado, F. & Soares, A.M.V.M. (2005). Mesopodopsis slabberi (Crustacea: Mysidacea): can it be used in toxicity tests? Ecotoxicology and Environmental Safety, 60: 81-86.
- Wittmann, K.J. (1992). Morphogeographic variations in the genus *Mesopodopsis* Czerniavsky with descriptions of the three new species (Crustacea, Mysidacea). *Hydrobiologia*, 241: 71–89.
- Worms, (2018). World Register of Marine Species. Accesed with marinespecies.org.