On the occurrence of blue button, *Porpita porpita* (Cnidaria: Hydrozoa) from Levantine coast of Turkey

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Abstract

The present report is the first record of this species in Levantine Sea since 1842. This sample stranded at the shore of Gazipaşa (Antalya) in the south of Turkey. It was recorded in 14 July 2016. In this study, the description and distribution of the species has been presented.

Keywords:
*Porpita porpita*, the Levantine Sea, Gazipaşa, Hydrozoa, Turkey

Article history:
Received 14 April 2017, Accepted 05 June 2017, Available online 20 June 2017

Introduction

Presently, the apparent increase of hydrozoan has been notified in various areas of the world (Brotz and Pauly, 2012; Chowdhury et al., 2016). So, a large number of new jellyfish have been reported from the Mediterranean and the Aegean coast of Turkey in recent years as well (Çevik et al., 2006; Turan et al., 2010; Brotz and Pauly, 2012; Gürlek et al., 2013; Çınar et al., 2014; Ergüden et al., 2014; Onmuş et al., 2016; Gülşahin et al., 2016). 195 cnidarian species has been reported from 5 classes (Hydrozoa, Cubozoa, Scyphozoa, Straurozoa and Anthozoa) at Turkish coasts in 2014 and

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some of them were alien (Çınar et al., 2014). Hydrozoa had 110 species in total (Gülşahin, 2016), and 56 species were from Levantine Sea (Çınar et al., 2014). These numbers have changed today, because there are new cnidarian records at Turkish coasts day by day. These may be result of anthropogenic impacts or global warming; the reasons may change according to the area or the species.

The present report is the first record of *Porpita porpita* in Levantine Sea since 1842 (Forbes, 1844). In addition, descriptions and distributions of this species are given in this study.

*Porpita porpita* (Linnaeus 1758), usually known as the blue button, is from the family Porpitidae of Hydrozoa. Family Porpitidae (chondrophores) has three genera; the other species of the family are “by-the-wind Sailor” *Velella velella* and *Porpema prunella*. The feeds of *Porpita* are mostly carnivorous copepods, but also can be crab, fish, megalopas, larval fish, larvaeceans, fish eggs and chaetognaths. While *Porpita* hunts active crustaceans, *Velella* prefers passive foods like fish eggs and small larval forms of crustaceans (Bieri, 1970).

*Porpita porpita* has numerous tentacles and polyps. The organism is bright blue color, a round, floating hydroid colony having a large, gas-filled flat disc (Gul and Gravili, 2014). Sail is absent. It is a free-floating pleustonic organism and easily carried to shore primarily by wind and water currents (Chowdhury et al., 2016, Fisner et al., 2008, Pandya, 2013). When it is touched, it may cause irritation to human skin but not powerful (Ramanibai et al., 2014).

This summer the species stranded at the shore of Gazipaşa (36°16'05.7"N, 32°16'48.2"E) in 14 July 2016 (Figure 1). It was put in a plastic cup, taken photographs and videos. The species is identified and there is no new record of it from Turkish coasts. There is only a very old record of this species from Lycia shore in February 1842 as *Porpita glandifera* (Forbes, 1844; Çınar et al., 2014).

The length of disc of our single specimen was 13 mm and the length with tentacles was 30 mm (Figure 1). According to Turkish State Meteorological Service, the temperature of the sea was 27.4 °C in 14 July 2016.

**Figure 1.** The photograph of our specimen *Porpita porpita* captured at the shore of Gazipaşa located at the Levantine coast of Turkey.
As stated in the Global Biodiversity Information Facility (GBIF), there are 161 geo-referenced occurrence data for *Porpita porpita* (Figure 2).

![Occurrence of Porpita porpita in the world map](http://www.gbif.org/species/5185632)

There is only one occurrence in the Mediterranean Sea and it is from a shore between Tarquinia and Civitavecchia in the west of Italy in September 2016 (GBIF, 2017). Because of this, the record in Turkish Mediterranean coast is an important data. It is unknown how and from where the species come to the Mediterranean Sea, is it from Indian Ocean or Atlantic Ocean?

Although there should be more occurrences of *P. porpita* in Indian Ocean, there are first reports of it from Bangladesh and Pakistan newly (Chowdhury et al., 2016; Gul and Gravili, 2014).

Consequently, we should investigate how the new species or jellyfish bloom effect the ecosystem and also fishery. In 2008, CIESM (The Mediterranean Science Commision) started The Jellywatch Programme (http://www.ciesm.org/marine/programs/jellywatch.htm) to gather information about distribution, population size and blooms of jellyfish in Mediterranean Sea. Turkish JellyWatch Programme (www.denizanasi.org) is started in 2010 and data on occurrence and blooms of jellyfish have been accumulated (Turan, 2011). The present data is reported to this programme.

Acknowledgements

We are indebted to Bengisu Aydin for finding this species and inform us.

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