

SHORT COMMUNICATION

A new record for the Turkish Aegean Sea Fauna: *Scalpellum scalpellum* Linnaeus, 1767 (Crustacea: Cirripedia: Thoracica)

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Abstract

Three specimens of *Scalpellum scalpellum* (Linnaeus, 1767) were caught by a commercial bottom trawler (250 - 300 m depths) off the Gökçeada Island coast in the North Aegean Sea of Turkey in March 2008. Although the species had already been reported from the Istanbul Strait and the Marmara Sea; this is the first reported occurrence from the Aegean Sea coast of Turkey.

Key words: Aegean Sea, crustacea, cirripedia, deep sea, fauna

Introduction

The Aegean Sea is considered as a transitional zone between the Black Sea and the Mediterranean Sea. Thirty-four thoracic cirriped species belonging to twenty-three genera have been reported from the Mediterranean Sea. Eighteen thoracic cirriped species have been reported from the Aegean Sea by Koukouras and Matsa (1998). As far as the Turkish coasts are concerned, only eight thoracic cirripeds have been reported by Besir (2010). The thoracic cirripeds from the Turkish coasts have mainly been found in supralittoral and mediolittoral zones due to the fact that mostly shallow zones have been examined up until now.

Scalpellum scalpellum is an Atlanto-Mediterranean species and it was reported from the Marmara Sea coast for the first time by Demir (1952-1954). The thoracic cirriped species on the Greek side of the Aegean coast were recorded by Koukouras and Matsa (1998). Information on thoracic cirripeds from the Turkish seas is still scarce, although Besir (2010) listed the species of thoracic cirripeds for the Turkish seas. In addition, fouling and boring organisms were

studied by Pınar (1974) at five locations: Amasra harbour (Black Sea), Beykoz Bay (Istanbul Strait), Akbaş Harbour (Çanakkale Strait), Gulf of İzmir (Aegean Sea) and Mersin harbour (Eastern Mediterranean). There is, however, no record for *S. scapellum* from the Aegean coasts of Turkey.

Materials and Methods

Three specimens of *Scapellum scapellum* (Linnaeus, 1767) were caught by a commercial bottom trawler off the Gökçeada Island coast (North Aegean Sea, Turkey) from a depth of 250 to 300 meters on March 15, 2008 between the coordinates 40°17'262" N; 25°54'918 E to 40°16'516" N; 25°51'836 E (see Figure 1). The specimens were preserved by 70% alcohol and identified using the diagnostic characteristics according to Lucas (1968). The photographs were taken and morphometric characteristics were measured (see Figure 2). Measurements were made to the nearest 1 mm by a stereomicroscope.

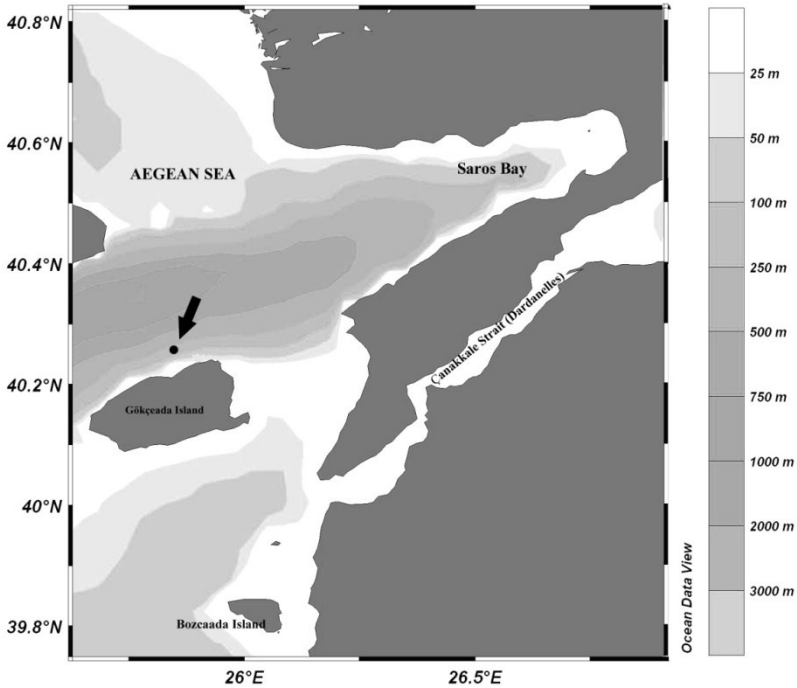


Figure 1. The location of sampling *Scapellum scapellum* specimens.

Results

Thoracic cirripeds occur in different biotopes, within in a large zone; varying in depth from supralittoral zone to the deepest parts of the seas (Rosell 1981).

Eight thoracic cirripeds have been reported from the Turkish coast of the Aegean Sea (Bakir and Katagan 2005; Bakir *et al.* 2010; Cinar *et al.* 2008, 2006; Dogan *et al.* 2005, 2008; Neu 1939; Ergen *et al.* 1994; Mutlu *et al.* 2008; Kocak *et al.* 2000, 2003). Eighteen thoracic cirripeds have been reported from the Greek coast of the Aegean Sea (Antoniadou and Chintiroglou 2005; Kitsos *et al.* 2003, 2005; Koukouras 1985; Young *et al.* 2003) including *S. scalpellum* (Koukouras & Matsa, 1998). Thirty five thoracic cirripeds were reported from the All Mediterranean including Marmara and Black Sea (Koukouras and Matsa, 1998; Kitsos *et al.* 2003; Pınar 1974; Demir 1952-1954; Drensky 1951; Neu 1939; Kalkan *et al.* 2006; Geldiay and Kocatas 1972; Kocak and Kucuksezgin 2000; Cinar *et al.* 2008; Kocak *et al.* 1999; Shemesh *et al.* 2009; Ergen *et al.* 1994; Pannacciulli *et al.* 1997; Dağlı *et al.* 2008; Besir 2010; Young *et al.* 2003) (see Table 1).

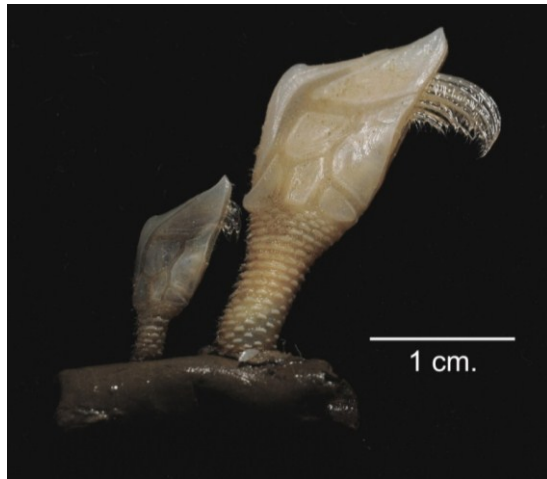


Figure 2. *Scalpellum scalpellum* lateral view.

Although, the *Scalpellum scalpellum* (Linnaeus, 1767) had already been known in the Mediterranean Sea and the Marmara Sea; this is the first report from the Turkish coast of the Aegean Sea. *S. scalpellum* had not been reported from Turkish coast of the Aegean Sea until March 2008 most likely due to the fact that deeper zones of the Aegean Sea had not been studied well. Those three specimens that were examined in this study had capitulum lengths ranging between 0.8 and 1.8 mm. *S. scalpellum* has been known as a Mediterranean and Atlantic species and it was first reported by Demir (1952-1954) in the Marmara Sea. *S. scalpellum* was for the first time reported from the Turkish coast of the Aegean Sea by the present study.

Table 1. Thoracic Cirriped species from the Black Sea (B), Marmara Sea (MA), Aegean Sea (A) and Mediterranean Sea (ME) with Origin of the species (O) (C:Common, AM: Atlanto-Mediterranean, E: Endemic).

Ordo	Species	B	MA	A	ME	O	
Lepadiformes	<i>Conchoderma auritum</i> (Linnaeus, 1758)				x	C	
	<i>Conchoderma virgatum</i> Spengler, 1789				x	C	
	<i>Lepas anatifera</i> (Linnaeus 1767)			x	x	C	
	<i>Lepas anserifera</i> Linnaeus, 1767				x	C	
	<i>Lepas hilli</i> Leach, 1818				x	C	
	<i>Lepas pectinata</i> Spengler, 1793			x	x	C	
	<i>Octolasmis lowei</i> (Darwin, 1852)				x	C	
	<i>Paralepas minuta</i> (Philippi, 1836)			x	x	C	
	Scalpelliformes	<i>Scalpellum scalpellum</i> (Linnaeus 1767)		x	x	x	AM
		<i>Pollicipes pollicipes</i> (Gmelin, 1790)				x	AM
Sessilia	<i>Acasta spongites</i> (Poli, 1795)			x	x	C	
	<i>Amphibalanus amphitrite</i> (Darwin 1854)	x	x	x	x	C	
	<i>Amphibalanus improvisus</i> (Darwin 1854)	x	x	x	x	C	
	<i>Balanus crenatus</i> Bruguière, 1789		x	x	x	C	
	<i>Balanus eburneus</i> Gould 1841	x	x	x	x	C	
	<i>Balanus perforatus</i> Bruguiere 1789	x	x	x	x	AM	
	<i>Balanus spongicola</i> Brown, 1844				x	C	
	<i>Balanus trigonus</i> (Darwin 1854)			x	x	C	
	<i>Chelonibia caretta</i> Spengler, 1790				x	C	
	<i>Chelonibia patula</i> (Ranzani, 1818)				x	C	
	<i>Chelonibia testudinaria</i> (Linnaeus, 1758)			x	x	C	
	<i>Chthamalus montagui</i> (Soutward 1976)		x	x	x	AM	
	<i>Chthamalus stellatus</i> (Poli 1791)	x	x	x	x	AM	
	<i>Conopea calceola</i> (Ellis, 1758)				x	C	
	<i>Euraphia depressa</i> (Poli 1791)	x	x	x	x	E	
	<i>Megabalanus tintinnabulum</i> (Linne, 1758)			x	x	C	
	<i>Megabalanus tulipiformis</i> (Ellis, 1758)			x	x	AM	
	<i>Megatrema anglicum</i> (Sowerby, 1823)				x	AM	
	<i>Pachylasma giganteum</i> (Philippi, 1836)				x	AM	
	<i>Platylepas hexastylus</i> (Fabricius, 1798)			x	x	C	
	<i>Solidobalanus fallax</i> (Broch, 1927)				x	AM	
	<i>Stomatolepas elegans</i> (Costas, 1883)				x	C	
	<i>Verruca spengleri</i> Darwin, 1854		x	x	x	AM	
	<i>Verruca stroemia</i> (O.F.Muller 1776)	x	x	x	x	AM	
	<i>Xenobalanus globicipitis</i> Steenstrup, 1851				x	C	
	Total number of species		7	11	20	35	

Türkiye Ege Denizi Faunası için yeni bir kayıt: *Scalpellum scalpellum* Linnaeus, 1767 (Crustacea:Cirripedia:Thoracica)

Özet

Kuzey Ege Denizi Türkiye sularında 2008 yılı Mart ayında Gökçeada açıklarında ticari trol avcılığı sırasında 250-300 m derinlikte üç *Scalpellum scalpellum* (Linnaeus, 1767) bireyi örneklenmiştir. Bu tür İstanbul Boğazı ve Marmara Deniz'nden daha önce bildirilmiş olmakla birlikte Ege Denizi Türkiye kıyılarından ilk kez bildirilmektedir.

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