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Check-List of the Brachyuran Crabs of the Turkish Straits System

Türk Boğazlar Sistemi Yengeçleri (Brachyura) Tür Listesi

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Abstract

The aim of this study is to provide a check-list of brachyuran crab species existent in the Turkish Straits System according to available data. It has been determined that 46 brachyuran crab species belonging to 15 families exist in the Turkish Straits System, as a result of the investigation of the studies in that system. These species were presented in a table.

Key words: Brachyura, Turkish Straits System, Zoobenthos.

Introduction

The Sea of Marmara is a small basin size:~ 70 km x 250 km, surface area: 11500 km2, maximum depth 1390 m, located between the continents of Europe and Asia (Beşiktepe et al., 1995), and forms the "Turkish Straits System" along with the Bosphorus and the Dardanelles (Ünlüata et al., 1990), and is connected to the Black Sea through the Bosphorus in the NE and to the Aegean Sea via Dardanelles in the SW.

The first registration about brachyuran crabs in the Sea of Marmara was performed by Forskål (1775). Later studies belong to Heller (1863), Pesta (1918), Holthuis (1961), Georgiadis and Georgiadis

(1974), Balkıs (1994), Palaz et al., (2001). General faunistic researchs including also this group were carried out by Colombo (1885), Ostroumoff (1896), Ninni (1923), Devedjian (1926), Demir (1952), Tortonese (1959), Caspers (1968), Müller (1985), Okuş (1989), Yüksek (1989), Balkıs (1992), Topaloğlu and Kihara (1993), Eryılmaz(1997). Moreover, Kocataş (1981) published a review of the decapod crustacea of all Turkish seas, whereas Müller (1986) of the Turkish Straits System and Balkıs et al., (2002) reported the list of Crustacea fauna of the Bosphorus.

The aim of this study is to provide a check-list of brachyuran crab species existent in the Turkish Strait System according to available data.

Material and Methods

Scientific names of brachyuran crab species reported from the Turkish Straits System are organized according to the last international nomenclature (Udekem d'Acoz C.d',1999) and they are given in Table 1 according to the systematic order.

Results

A total of 46 brachyuran crabs species belonging to 15 families were announced from the Turkish Straits System (18 species from the Bosphorus, 42 from the Sea of Marmara, 20 from the Dardanelles).

Discussion

Ostroumoff (1896), Ninni (1923), Devedjian (1926) and Demir (1952) named Carcinus aestuarii as Carcinus maenas (Linnaeus,1758) wrongly, in their studies. Demir (1952) classified Porcellana platycheles (Pennant,1777) and Porcellana digitalis Heller, 1862 belonging Anomura suborder into Brachyura suborder. In the same study, he reported that he did not encounter the species called Parthenope macrochelos (Herbst,1790) in the Sea of Marmara and the Bosphorus and that he found this species among the bottom material in the store of the Fishery Institute. Therefore, this species was not added to the list. Moreover, he did not mention where Pinnotheres pisum and Nepinnotheres

pinnotheres were obtained, thus, Demir (1952) was not mentioned as the reporter of these two species.

Holthuis and Gottlieb (1958) has reported that five brachyuran crab species (Carcinus aestuarii, Xantho poressa, Eriphia verrucosa, Pachygrapsus marmoratus, Maja squinado) obtained from Istanbul by H.C.Kellers in 1923 are found in the U.S.National Museum, Washington. According to Holthuis (1961), Stimpson (1861) reported the Pachygrapsus marmoratus and Rathbun (1930) the Carcinus aestuarii from the same region. 46 brachyuran crab species have been determined in the Turkish Straits System so far, according to the literatures available. One of these species (Polybius(Necora) puber) has been reported by Devedjian (1926), another one (Callinectes sapidus) by Georgiadis and Georgiadis (1974). Both of them have been reported only from Fishmarket of Istanbul. These species may have been obtained among other water products from other regions except for the Turkish Straits System, especially from the Gulf of Saros for commercial purposes. For this reason, it is doubtful whether these species reported from only Fishmarket of Istanbul are found in the Turkish Straits System.

Kocataş (1981) reported 9 species from the Sea of Marmara and Balkıs et al., (2002) 18 species from the Bosphorus in their check-lists. Müller (1986) reviewed 42 species from Turkish Straits System and added 3 species to the fauna of the Sea of Marmara by his research. In result of the studies carried out in Turkish Straits System, the presence of a total of 46 crab species (18 species from the Bosphorus, 42 from the Sea of Marmara, 20 from the Dardanelles) was detected and these species were organized according to the framework of the modern system by this study.

Table 1:Checklist of brachyuran crabs in the Turkish Straits System (B: Bosphorus, M: Sea of Marmara, D:Dardanelles) 1: Forskål (1775), 2: Heller (1863), 3: Colombo (1885), 4: Ostroumoff (1896), 5: Pesta (1918), 6: Ninni (1923), 7: Devedjian (1926), 8: Demir (1952), 9: Tortonese (1959), 10: Holthuis (1961), 11: Caspers (1968), 12: Georgiadis and Georgiadis (1974), 13: Müller (1985), 14: Müller (1986), 15: Okuş (1989), 16: Yüksek (1989), 17: Balkıs (1992), 18: Topaloğlu and Kihara (1993), 19: Balkıs (1994), 20: Eryılmaz (1997), 21: Palaz *et al.*, 2001.

	DISTRIBUTION		
TAXA	**B**	**M**	**D**
Familia:Dromiidae de Haan, 1833			
Dromia personata (Linnaeus,1758)	4	4,7,8,19	
Familia:Majidae Samouelle,1819			
Eurynome aspera (Pennant,1777)	4	4,15,19	3
Maja squinado (Herbst,1788)	6	7,15,16	
Maja crispata Risso,1827	4	4,8,15,19	3,21
Herbstia condyliata (J.C. Fabricius,1758)		9	
Pisa tetraodon (Pennant,1777)		4,8	
Pisa corallina (Risso, 1816)	4	4	
Pisa nodipes (Leach,1815)		8	
Pisa armata (Latreille,1803)		4,8	3
Acanthonyx lunulatus (Risso, 1816)		8	
Achaeus gracilis O.G.Costa,1839			3
Inachus dorsettensis (Pennant,1777)	4	8,19	3
Inachus leptochirus Leach,1817	4	4	
Inachus thoracicus P.Roux,1830		4,16	3
Macropodia rostrata (Linnaeus,1761)	4,8	4,8,15,16,19	3
Macropodia longirostris (J.C.Fabricius,1775)	8	4,8,15,16,19	3,21
Familia: Dorippidae Mac Leay,1838			
Medorippe lanata (Linnaeus,1767)		8,19	
Familia: Leucosiidae Samouelle,1819			
Ebalia cranchii Leach,1817		4	
Ebalia tuberosa (Pennant,1777)			3
Ilia nucleus (Linnaeus,1758)		4,8	21
Familia:Calappidae de Haan,1833			
Calappa granulata (Linnaeus,1758)		14	
Familia: Atelecyclidae Ortmann,1893			
Atelecyclus rotundatus (Olivi,1792)		8	
Familia:Cancridae Latreille,1803			

Cancer pagurus Linnaeus,1758		7,20	
Familia:Geryonidae Colosi,1923			
Geryon longipes A.Milne- Edwards, 1882		4	
Familia: Portunidae Rafinesque,1815			
Carcinus aestuarii Nardo,1847	8	4,6,7,8,10,15,16,17,19,20	21
Portumnus latipes (Pennant,1777)		14	
Bathynectes longipes (Risso,1816)		4	
Polybius (Necora) corrugatus(Pennant,1777)	4		3
Polybius (Necora) puber (Linnaeus,1767)		7	
Polybius (Polybius) depurator (Linnaeus,1758)	8,9	4,8,15,16,17,19	21
Polybius (Polybius)holsatus(J.C.Fabricius,1798)		4,19	
Polybius arcuatus (Leach,1814)	4,8,11	4,8,13,15,16,17,19	3
Callinectes sapidus Rathbun,1896		12	
Familia:Parthenopidae Mac Leay,1838			
Parthenope massena (P.Roux,1830)		4,9	3,14
Familia: Xanthidae Mac Leay,1838			
Monodaeus couchii (Couch,1851)		4,19	
Xantho pilipes A.Milne-Edwards,1867		19	
Xantho poressa (Olivi,1792)	2,11	4,6,10,15,16,19	21
Xantho incisus Leach,1814	8	6,8,17	
Familia:Eriphiidae Mac Leay ,1838			
Eriphia verrucosa (Forskål,1775)	8	1,5,6,8,10,15,19	21
Pilumnus hirtellus (Linnaeus,1761)	4,8,9,10,11,18	4,8,15,16,19	3
Pilumnus spinifer H.Milne-Edwards,1834			3
Familia: Goneplacidae Mac Leay, 1838			
Goneplax rhomboides (Linnaeus,1758)		8,19	
Familia: Pinnotheridae de Haan,1833			
Nepinnotheres pinnotheres (Linnaeus,1758)		1,19	
Pinnotheres pisum (Linnaeus,1767		4,19	
Familia:Grapsidae Mac Leay,1838			
Brachynotus sexdentatus (Risso,1827)		14,19	
Pachygrapsus marmoratus (J.C.Fabricius,1787)	8,10	4,8,10,19	21

Özet

Bu çalışmanın amacı eldeki literatür bilgisine göre Türk Boğazlar Sistemindeki yengeç türlerinin bir tür listesini sunmaktır. Türk Boğazlar Sisteminde gerçekleştirilen çalışmaların incelenmesi sonucunda 15 familyaya ait 46 yengeç türünün var olduğu belirlenmiştir. Bu türler bir tablo halinde verilmiştir.

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