

## Checklist of the freshwater decapod crustaceans from the Orontes River

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### Abstract

The present paper provided an annotated list of decapod crustacean fauna of Orontes River, mainly based on previous study works. It included 6 species (3 Natantia, 3 Brachyura) belonging 3 families.

**Keywords** check-list; Decapoda; freshwater; Orontes River Basin.

### 1 Introduction

The Orontes River is the longest river in the province of Antioche (Turkey) being 380 km in total length, of which around 94 km is in Turkey. It rises east side of Begaa valley near the city of Baalbek, Lebanon, and flows in a northerly direction between the Lebanon and Anti-Lebanon mountains into Syria, and forms part of the borders between Lebanon and Syria and between Syria and southern of Turkey. Two large tributaries the Afrin and Karasu stream reach it in the Amik valley. It flows north to the city of Antakya and falls to the Mediterranean Sea just south of Samandağ (Turkey) (Fig. 1).



Fig. 1 Map of the Orontes River Basin.

Some previous studies reported various aspects of crustaceans in other countries (Cooper et al., 2012; Trivedi et al., 2012; Warburg et al., 2012). The decapod fauna of the Orontes River Basin and the catchment have scarcely been studied. Based on previous literature, the first study on the decapod of river system was

given by Barrois (1893, 1894). The author reported the *Atyaephyra desmarestii* (Millet, 1831) (as *Hemicaridina desmaresti* Millet) and *Potamon fluviatile* (Herbst, 1785) (as *Telphusa fluviatilis* Belon) in the Orontes River east of Horns lake (Syria). The species *Atyaephyra desmarestii* (Millet, 1831) has been reported from the Orontes River system (near the place where it leaves Lake Horns) of Syria part (Bouvier, 1913) and Karasu stream and Orontes River (Hatay, Turkey) (Özcan et al., 2012).

Firstly, Rathbun (1904) described a new species *Potamon (Potamon) setiger* from the former Amik Lake and Orontes River system (Aleppo, Syria). Later, Geldiay and Kocataş (1977) reported the *Potamon setigerum* [*Potamon (Potamon) potamios setiger* (Rathbun, 1904)] from the Amik Lake and adjacent waters and Pretzman (1984) reported the two *Potamon* species from the Hatay province (Turkey); *Potamon potamios* (Olivier, 1804) [as *Potamon (Potamon) potamios potamios* Natio *antiochiensis*] and *Potamon setigerum* Rathbun, 1904 [as *Potamon (Potamon) setiger* Natio *sendschirili*]. One year later, Kinzelbach (1985) reported the *Potamon potamios* (Olivier, 1804) [as *Potamon potamios ghab* n. subsp] from the Orontes River system. Other previous records of decapod species from the Orontes River basin were *Palaemonetes mesopotamicus* and *Palaemonetes antennarius* were known from the Orontes River system part of Syria and Turkey (Pesta, 1913; Sollaud, 1938; Pretzmann, 1973; Özcan et al., 2012).

## 2 Material and Methods

The checklist of Orontes River system decapods was based mainly on reviewed previous literature. Previous literature were begun from 1893 to 2012.

## 3 Results and Discussions

Based on previous literature reviewed, six species of freshwater crustacean decapods (2 *Palaemonetes*, 2 *Potamon* and 1 *Atyaephyra*) are known from the Orontes River system. Two species of *Palaemonetes*: *P. antennarius* and *P. mesopotamicus*; two species of *Potamon*: *P. fluviatile* and *P. setigerum*, and one species of *Atyaephyra*: *A. desmarestii* have been previously reported the Orontes River system (Table. 1).

**Table 1** Decapod species distribution in the Orontes River system.

Species	Lebanon	Syria	Turkey
<b>Palaemonetes</b>			
<i>Palaemonetes antennarius</i> (H. Milne Edwards, 1837)	-	+	+
<i>Palaemonetes mesopotamicus</i> Pesta, 1913	-	+	+
<b>Atyaephyra</b>			
<i>Atyaephyra desmarestii</i> (Millet, 1831)	-	+	+
<b>Potamon</b>			
<i>Potamon fluviatile</i> (Herbst, 1785)	-	+	-
<i>Potamon setigerum</i> Rathbun, 1904	+*	+	+
<i>Potamon potamios</i> (Olivier, 1804)	-	+	+

\*Cumberlidge N. 2008 reported the in Lebanon (in Al-Bika Province).

According to Cumberlidge (2008), the *P. setigerum* near threatened (NT) and the habitat requirements of this species under the threats of loss or degradation and pollution. We believe that more intensive study in the river system will result in a more account of the species of Decapoda occurring and distribution area in the river system.

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