NEW RECORDS OF TWO SPECIES OF GNATHIID ISOPODS, 
PARAGNATHIA FORMICA (HESSE, 1864) AND GNATHIA MAXILLARIS 
(MONTAGU, 1804) (ISOPODA, GNATHIIDAE) FROM THE BLACK SEA 

BY

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ABSTRACT

During fieldwork on the southeastern Black Sea coast, in October 2009, two gnathiid isopods were found in their free-living stage, Paragnathia formica (Hesse, 1864) and Gnathia maxillaris (Montagu, 1804). These species are herein reported from the Black Sea for the first time.

RÉSUMÉ

Au cours d’une campagne de terrain sur la côte sud-orientale de la mer Noire, en octobre 2009, deux isopodes Gnathiidae ont été trouvés à leur stade libre, Paragnathia formica (Hesse, 1864) et Gnathia maxillaris (Montagu, 1804). Ces espèces sont signalées ici de la mer Noire pour la première fois.

INTRODUCTION

Gnathiideans are entirely marine, mostly described from shallow waters (Kensley & Schotte, 1989). Adults are non-feeding and found among sponges, in dead corals, barnacle nests, and in polychaete worm tubes (Seed, 1979; Holdich & Harrison, 1980; Cohen & Poore, 1994; Tanaka & Nishi, 2008). There are three larval stages with each stage having two forms, “praniza” and “zuphea”. The praniza larvae are ectoparasites of fish. After feeding, praniza larvae dwell in the benthic substrata to moult (Smit & Davis, 2004). Collection of gnathiids is often difficult because they spend a great deal of time in cryptic habitats (Tanaka & Nishi, 2008).

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Gnathiids have been found in most parts of the world oceans and have been recorded from the intertidal (Tanaka & Aoki, 1999) to abyssal depths (Cohen & Poore, 1994) and currently there are 182 identified species (Kensley et al., 2005). Though many gnathiids have been recorded from the Mediterranean, the Aegean Sea (Monod, 1926; Geldiay & Kocataş, 1972; Kırkım et al., 2006; Sezgin et al., 2007) and the Black Sea (Reshetnikova, 1954; Kononenko, 1985; Öztürk, 1998; Gönlügür, 2003; Gönlügür-Demirci et al., 2004), little is known of their distribution and habitat preferences. In the present study, two gnathiid species are recorded in their free-living stage from the southeastern Black Sea coast. Paragnathia formica (Hesse, 1864) and Gnathia maxillaris (Montagu, 1804) are herein reported for the first time from the Black Sea.

MATERIAL AND METHODS

The gnathiid isopods were collected during fieldwork in October 2009 at the southeastern Black Sea coast (41°27′45.00″N 41°28′16.08″E) (fig. 1). Water depth at the study area was 10-18 m, and most of the coast was covered with gravel interspersed with boulders and rocks. Sea grass beds consisting of Cystoseira barbata (Stackhouse) C. Agardh, occurred about 5 m offshore. At this locality, randomly collected stones (both bare and overgrown by tube worms) were scraped with a spatula, and then the scraped matter was preserved in 4% formalin for

Fig. 1. Map of the southeastern coast of the Black Sea, showing the locations of the new records of Paragnathia formica (Hesse, 1864) and Gnathia maxillaris (Montagu, 1804).