THE GENERA ATERGATIS, MICROCASSIOPE, MONODAEUS, PARACTEA, PARAGALENE, AND XANTHO (DECAPODA, XANTHIDAE) IN THE MEDITERRANEAN SEA

BY

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ABSTRACT

A review of the relevant literature and a comparative study of adequate samples from the Mediterranean Sea and the Atlantic Ocean, revealed new key morphological features that facilitate a distinction of the Mediterranean species of Xanthidae. Based on this study, the Mediterranean Xantho granulicarpus Forest, 1953 is clearly distinguished from the Atlantic Xantho hydrophilus (Herbst, 1790) and Monodaeus guinotae Forest, 1976 is identical with Monodaeus couchii (Couch, 1851). For the species studied, additional information is given about their geographical distribution, as well as an identification key based on selected, constant features.

ZUSAMMENFASSUNG


INTRODUCTION

According to d’Udekem d’Acoz (1999) and Türkay (2001), the following nine species of Xanthidae MacLay, 1838 are known from the Mediterranean: Atergatis roseus (Rüppell, 1830); Microcassiope minor (Dana, 1852); Monodaeus couchii

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(Couch, 1851); Monodaeus guinotae Forest, 1976; Paractea monodi Guinot, 1969; Paragalene longicrura (Nardo, 1868); Xantho granulicarpus Forest, 1953; Xantho pilipes A. Milne-Edwards, 1867; and Xantho poressa (Olivi, 1792). However, a consideration of the relevant literature still shows a confusion concerning the genera Xantho and Monodaeus. In particular, some authors (Garcia Raso et al., 1987; d’Udekem d’Acoz, 1999; Reuschel & Schubart, 2006) consider X. granulicarpus a subspecies (or forma) of X. hydrophilus (Herbst, 1790), which is the valid name for X. incisus (Leach, 1814) according to Sakai (1999), while others regard it as a distinct species (Holthuis & Gottlieb, 1958; Koukouras et al., 1992; Türkay, 2001). In respect to Monodaeus, M. guinotae and M. couchii are considered two distinct species, but no reliable distinguishing features have been given for them. Due to the above, the geographical distribution of these species is also uncertain.

This study aims to elucidate the two above problems, as well as to provide more information on the geographical distribution and also facilitate the distinction of the Mediterranean Xanthidae.

MATERIAL AND METHODS

Numerous Mediterranean and Atlantic specimens from various localities were examined. Initially, all the various characters of the studied species were examined, in order to estimate their variability. Then, the most comparable ones for Monodaeus guinotae versus M. couchii and Xantho hydrophilus versus X. granulicarpus were selected and are given in table I and table II, respectively, along with relevant literature data. The following abbreviations are used: CL = maximum carapace length; CW = maximum carapace width; Mxp = maxilliped; P = pereiopod.

For the distinction of X. granulicarpus from X. hydrophilus the following typical, Atlantic specimens of X. hydrophilus were studied: — Atlantic coast of France: 3 ♂♂, 3 ♀♀ (2 ovig.), CW = 4.0 cm, Kerlouan, Finistère, Bretagne, depth 0 m, 14.vii.1991; 1 ♂, CW = 3.7 cm, Ile de Raguenes, Concarneau, Finistère, Bretagne, depth 0 m, 23.i.1992; 1 ♂, CW = 2.9 cm, Roscoff, Finistère, Bretagne, depth 0 m, 24.i.1992; 1 ♂, 1 ♀, CW = 3.5 cm, Ile de Yeu, Vendée, Pays de Loire, depth 0 m, 15.viii.1993; 1 ♂, CW = 2.9 cm, pointe du Bindy, Brest, Finistère, Bretagne, depth 0 m, 23.i.1992.

RESULTS

Monodaeus couchii (Couch, 1851) (fig. 1)

Xantho couchii Couch, 1851: 13.