



A new species of heterochelous tanaidacean *Tanaissus* (Paratanaoidea: Tanaissidae) from the north-west Iberian Peninsula

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Abstract

A new species of tanaidomorph, *Tanaissus bamberi*, is described from the north-western region of the Iberian Peninsula. Its most remarkable character is the presence of morphologically different right and left chelae in the males. The species occurs sympatrically with *T. lilljeborgi*, mainly in intertidal and subtidal sediments of medium to muddy sands typical of fully marine and estuarine salinities.

Key words: Paratanaoidea, heterochely, Iberian Peninsula, estuary, NE Atlantic

Introduction

The paratanaoidean genus *Tanaissus* Norman & Scott, 1906 is distributed worldwide, with two representatives in the north-east Atlantic (*Tanaissus lilljeborgi* (Stebbing, 1891) and *Tanaissus danica* (Hansen, 1910)), one in the north-west Atlantic (*Tanaissus psammophilus* (Wallace, 1919)), one in south-east Australia (*Tanaissus giraffa* Błażewicz-Paszkowycz & Bamber, 2012) and one in the eastern Mediterranean Sea, that is, *Tanaissus microthymus* Bird & Bamber, 2009 (in Bamber *et al.* 2009). *Tanaissus* species typically occur in shallow subtidal sandy bottoms, where they can be abundant (Bird 2002).

As in most paratanaoidean species, males of *Tanaissus* are identified mainly by antennular and cheliped features, whereas females are morphologically similar and thus hardly distinguishable. In this paper, a new species of *Tanaissus* from Gelfa (north-west of the Iberian Peninsula) is described and identification keys for both males and females are provided. Autoecological information about this new species of *Tanaissus* is also provided and discussed in relation to the other two species of the genus recorded from the north-east Atlantic.

Materials and Methods

Sampling and processing of samples. On the 25th May 2012, shallow subtidal sediment samples were collected from in front of Gelfa Beach, North Portugal (41°46'24"N; 8°52'30"W) (Fig. 1) using a van Veen grab (0.12 m²). Three different sites were sampled and five replicate grabs were taken at each site, representing a total area of 1.8 m². On the 15th August 2012, intertidal samples were taken in two estuaries from the north of Spain at Foz (43°33'37"N; 7°15'25"W) and Barqueiro (43°44'9"N; 7°42'6"W) (Fig. 1). At each estuary, eight cores (0.01 m²) were collected from the low tidal level, representing a total area of 0.08 m² per estuary. Subtidal and intertidal samples were sieved through a 0.5 mm mesh and fixed in 10% formalin neutralised with borax. Samples were sorted and all collected individuals of *Tanaissus* preserved in ethanol 70% to await further study.