

NOBANIS - Marine invasive species in Nordic waters - Fact Sheet

Monocorophium sextonae

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Bibliographical reference – how to cite this fact sheet:

Jensen, Kathe R. (2015): NOBANIS – Invasive Alien Species Fact Sheet – *Monocorophium sextonae* – From: Identification key to marine invasive species in Nordic waters – NOBANIS www.nobanis.org, Date of access x/x/201x.

Species description

Species name

Monocorophium sextonae, (Crawford, 1937) – a mudshrimp

Synonyms

Corophium sextonae. According to World Register of Marine Species (WORMS), the accepted name is *Monocorophium sextonae*.

Common names

Mudshrimp (corophiids) (UK); Slijkgarnaal (NL); Sextonkrebs (NO).

Identification

This species is only 5 mm long and therefore identification needs microscopic examination. Urosome segments are fused and uropod 1 with lateral spines but no setae. ♂ antenna 2 with long spine distally on peduncle.

Distribution

Native area

New Zealand has been claimed to be the native area because the oldest confirmed specimens are from this area (Hurley, 1954). It has sometimes been claimed to be a native of the NE Atlantic and invasive in New Zealand (Costello, 1993). The earliest record from New Zealand is from 1921 (Wolff, 2005), and hence this may not be the native area either. Thus it should probably be called cryptogenic (Kerckhof et al., 2007).

Introduced area

Monocorophium sextonae was introduced to the UK near Plymouth in the 1930s, where it was described as a new species. It had not been present in that area in previous samples (1895-1911), which is why it was considered introduced already at the time of its description (Hurley, 1954). It was introduced to Ireland in the 1970s (Costello, 1993), and also to Scotland (Moore, 1980). According to Wolff (2005) there is a record from Portugal in 1930. It seems to be common in the Mediterranean (Ponti et al., 2002; Magni et al., 2004; Guerra-Garcia & Garcia-Gomez, 2009). It is

established on the coast of Belgium, where it is associated with shipwrecks (Kerckhof, 2007), on the Atlantic coast of France (Gouilletquer et al., 2002), and in the Netherlands, the first record being from 1952 (Platvoet & Pinkster, 1995; Wolff, 2005). In Germany it has been found at the island Sylt in the Wadden Sea (Nehring & Leuchs, 1999), but it is uncertain whether it is established. It also occurs on the Skagerrak coast of Norway, where it was first reported in 1985 (Brattegard & Holthe, 1997).

Furthermore, it occurs in Tasmania, Australia, though this may be part of its native area.

Vector

Probably hull fouling (Hurley, 1954), but transfer with oysters is another possibility (Nehring & Leuchs, 1999).

Ecology

Habitat

This species is often associated with man-made structures, such as oil platforms or harbours (Ponti et al., 2002; Guerra-Garcia & Garcia-Gomez, 2009). It builds mud-tubes, which are attached to seaweeds, fouling organisms such as sponges and ascidians, or artificial substrates.

Reproduction

Females brood the eggs. The only record mentions 33 eggs in a brood (Hurley, 1954).

Impacts

None described. Interspecific competition seems likely; a native species of *Corophium* decreased in abundance after the introduction of *M. sextonae* in Ireland (Costello, 1993).

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