NOBANIS - Marine invasive species in Nordic waters - Fact Sheet

Boccardiella ligerica

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Species description

Species name

Boccardiella ligerica (Ferronnière, 1898) – a polychaete worm (mudworm)

Synonyms

Boccardia ligerica; Boccardia redeki (Horst, 1920); Polydora redeki; (see taxonomic note).

Common names

Mudworm (GB)

Taxonomic note

Boccardia redeki is presently considered a synonym of *B. ligerica*. However, this is not accepted by all specialists. WoRMS (http://www.marinespecies.org/) now consider them synonymous.

Identification

http://www.frammandearter.se/5arter/pdf/Boccardia redeki.pdf

Recently two very similar introduced species of mudworms, *Boccardia proboscidea* and *Boccardiella hamata*, have been detected in the North Sea (Kerckhof & Faasse, 2014). It requires expert knowledge to identify these small mudworms to species level.

Distribution

Native area

Before its synonymisation it was assumed that this was a native species in the North Sea (Kirkegaard, 1996; Främmande Arter, 2008), but introduced into the Baltic Sea. *Boccardiella ligerica* is a cryptogenic species, i.e., its origin is unknown.

Of the two recently introduced similar species, *Boccardia proboscidea* Hartman, 1940 is a native of the Northeast Pacific, and *Boccardiella hamata* (Webster, 1879) has its native distribution in the northwestern Atlantic (Kerckhof & Faasse, 2014).

Introduced area

First record in Britain in the 1970s, Severn estuary (Boyden et al., 1977). In Finland it was first found in the 1960s, and in 1979 it was found in Åland Islands in the Baltic (Bonsdorff, 1981). In Germany it has been known from inland waters since before 1932 (Gollasch & Nehring, 2006). It has also been reported from the western Atlantic and Caribbean, but this may refer to one of the truly marine species.

Boccardia proboscidea was first recorded in European waters in 1996 from the Spanish coast of the Bay of Biscay, and in the southern North Sea in 2001and in northern Scotland in 2011. *Boccardiella hamata* has so far only been found in the southern North Sea in 2013 (Kerckhof & Faasse, 2014).

Ecology

Boccardiella ligerica is considered a brackish water species. It is often associated with *Ficopomatus enigmaticus* (WoRMS: http://www.marinespecies.org/aphia.php?p=taxdetails&id=131114). It was listed as Endangered in the Red List for the Wadden Sea (Petersen et al., 1996).

Boccardia proboscidea and Boccardiella hamata are marine species. They are usually found associated with man-made structures and/or shellfish culture, particularly *Crassostrea gigas*, but it has not been possible to determine whether aquaculture or shipping has been the vector of introduction (Kerckhof & Faasse, 2014).

Impacts

None known for *Boccardiella ligerica*. *Boccardia proboscidea* can form dense mats and smother other invertebrates. *Boccardiella hamata* is known to bore into shells of cultured oysters and abalone (Kerckhof & Faasse, 2014).

References

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