

## List of Copepods and Branchiopods (Crustacea) in Uranouchi Inlet, Kochi, Japan

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**Abstract:** Fifty-five copepod species and six branchiopod species are listed from Uranouchi Inlet and the adjacent waters in Kochi, Japan. The number of species tended to decrease from the outside of the inlet to the end of the inlet.

**Key words:** Zooplankton, Copepoda, Branchiopoda, Uranouchi Inlet

### Introduction

Uranouchi Inlet is a semi-enclosed eutrophic inlet and open to Tosa Bay only through a narrow and shallow mouth. Although several plankton studies have been done, there have been few studies of macrozooplankton (Ueta, 1949, 1975, 1976; Ohno *et al.*, 1971, 1984; Matsu-mura *et al.*, 1995; Ueda *et al.*, 1998; Akizawa *et al.*, 1998, Nakamachi and Iwasaki, 1998). We investigated seasonal occurrence of macrozooplankton in Uranouchi Inlet from January 1995 to October 1996. In this paper, a list of copepods and branchiopods is given.

### Materials and Methods

Sampling was carried out at four stations in Uranouchi Inlet and the adjacent waters (Fig. 1). Samples were collected at Stations 1-3 by vertical tows of a Kitahara net (30 cm in diameter and 0.10 mm in mesh size) from the bottom to the surface once a month in 1995. Horizontal tows of the Kitahara net were carried out at the surface layer at all the stations every three months during the period from July 1995 to October 1996. The samples were preserved in 5% borax-buffered formalin. Copepods and branchiopods were identified.

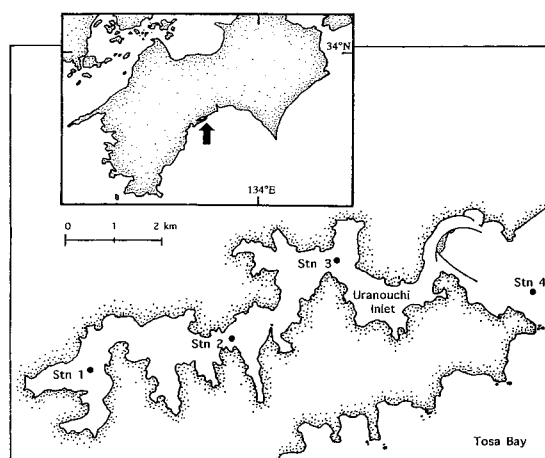


Fig. 1. Sampling locations in Uranouchi Inlet, Kochi, Japan.

**Table 1.** List of copepods and branchiopods at four stations in Uranouchi Inlet, Kochi, Japan. Asterisk indicates species occurred.

Species	Stn 1	Stn 2	Stn 3	Stn 4
Copepoda				
Calanoida				
<i>Acartia erythraea</i>	*	*	*	*
<i>Acartia hudsonica</i>		*	*	
<i>Acartia negligens</i>				*
<i>Acartia omori</i>	*	*	*	*
<i>Acartia sinjiensis</i>	*	*	*	
<i>Acrocalanus gracilis</i>	*	*	*	
<i>Calocalanus gracilis</i>			*	*
<i>Calocalanus pavo</i>				*
<i>Calocalanus pavoninus</i>				*
<i>Calocalanus styliremis</i>				*
<i>Centropages abdominalis</i>	*	*	*	*
<i>Clausocalanus furcatus</i>				*
<i>Delius nudus</i>				*
<i>Eurythemora affinis</i>	*			
<i>Eurytemora pacifica</i>	*	*		
<i>Labidocera japonica</i>			*	*
<i>Paracalanus aculeatus</i>			*	*
<i>Paracalanus crassirostris</i>	*	*	*	*
<i>Paracalanus denudatus</i>				*
<i>Paracalanus parvus</i>	*	*	*	*
<i>Pseudodiaptomus marinus</i>	*	*		
<i>Sinocalanus tenellus</i>	*			
<i>Temora turbinata</i>	*	*		*
<i>Tortanus forcipatus</i>				*
Cyclopoida				
<i>Oithona atlantica</i>			*	*
<i>Oithona attenuata</i>				*
<i>Oithona brevicornis</i>	*	*	*	*
<i>Oithona davisae</i>	*	*	*	*
<i>Oithona decipiens</i>			*	
<i>Oithona fallax</i>				*
<i>Oithona longispina</i>				*
<i>Oithona nana</i>	*	*	*	*
<i>Oithona oculata</i>			*	*
<i>Oithona plumifera</i>			*	*
<i>Oithona rigida</i>		*	*	*
<i>Oithona setigera</i>		*		
<i>Oithona similis</i>	*	*	*	*
<i>Oithona simplex</i>		*	*	*
Poecilostomatoida				
<i>Corycaeus affinis</i>	*		*	*
<i>Corycaeus agilis</i>				*
<i>Corycaeus catus</i>			*	
<i>Corycaeus erythraeus</i>				*
<i>Corycaeus pacificus</i>				*
<i>Corycaeus pumilus</i>				*
<i>Farranula carinata</i>				*
<i>Farranula concinna</i>				*
<i>Farranula gibbula</i>			*	
<i>Oncaea clevei</i>				*
<i>Oncaea media</i>		*	*	*
<i>Oncaea mediterranea</i>				*
<i>Oncaea scottodicarloi</i>				*
<i>Oncaea venusta</i>		*		
Harpacticoida				
<i>Euterpina acutifrons</i>	*	*	*	*
<i>Microsetella norvegica</i>		*	*	*
<i>Microsetella rosea</i>			*	
Branchiopoda				
Cladocera				
<i>Evadne nordmani</i>	*	*	*	
<i>Evadne tergestina</i>	*	*	*	*
<i>Penilia avirostris</i>	*	*	*	*
<i>Podon leuckarti</i>	*	*	*	
<i>Podon polyphemoides</i>	*	*	*	
<i>Podon schmackeri</i>	*	*	*	
Total number of species	24	28	34	44

### Results and Discussion

Fifty-five copepod species and six branchiopod species are listed (Table 1). The number of species tended to decrease from the outside of the inlet (Stn 4) to the end of the inlet (Stn 1). *Eurythemora affinis*, *Eurytemora pacifica*, *Pseudodiaptomus marinus*, *Sinocalanus tenellus*, *Oithona setigera* and *Oncaea venusta* were restricted within the end of the inlet (Stns 1 and 2).

The four most abundant species were as follows. *Paracalanus crassirostris*, *Oithona brevicornis* and *Oithona davisae* in Uranouchi Inlet (Stns 1, 2 and 3); *P. crassirostris*, *Paracalanus parvus* and *O. brevicornis* at Stn 4.

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