

Ostracods surface species in Kagoshima Bay and their distribution

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■ Introduction

Kagoshima Bay is located in the southern part of Kyushu, Japan and is elongate and southward-opening with a length of about 75 km from north to south and a width of about 25 km (Fig. 1). The bay is an area of volcanic activity of Sakurajima volcano under the influence of the Kuroshio Current. Most of the Head environment is occupied by an acidic water mass as result of the submarine fumarolic activity.

Ecological analysis of benthonic foraminifera and sedimentary environments in Kagoshima Bay was reported by Oki (1989). Subsequently, the relationships between ostracod populations and different marine environmental parameters in Kagoshima Bay were published by Bodergat et al. (2002a, b, 2006).

■ Ostracod surface species in Kagoshima Bay

Two years ago, Japanese scientists working on ostracodes requested to us to publish about the number of individuals of species at each station in Kagoshima Bay for comparing with those from the other stations around Japan. Before 2002 we made a table of the occurrence of ostracodes for basic data but it was impossible to show this huge table in the scientific articles mentioned above. So we provide a table of the occurrence of ostracod surface species and their distribution in Kagoshima Bay through this article (Table 1). Sampling stations and brief submarine topography are shown in Figure 1.

The bottom samples used for our studies were collected from 146 stations using the research vessel *Keiten-maru* owned by the Faculty of Fisheries, Kagoshima University. Furthermore other bottom

samples were taken from Kagoshima Bay using *Keiten-maru* and *Nansei-maru* from 1972 to 2015 for researches on the sedimentary environments of the bay. Main articles are shown as follows: Oki and Hayasaka (1978); Oki (1989, 1990, 2001); Tomiyasu et al. (2007, 2015).

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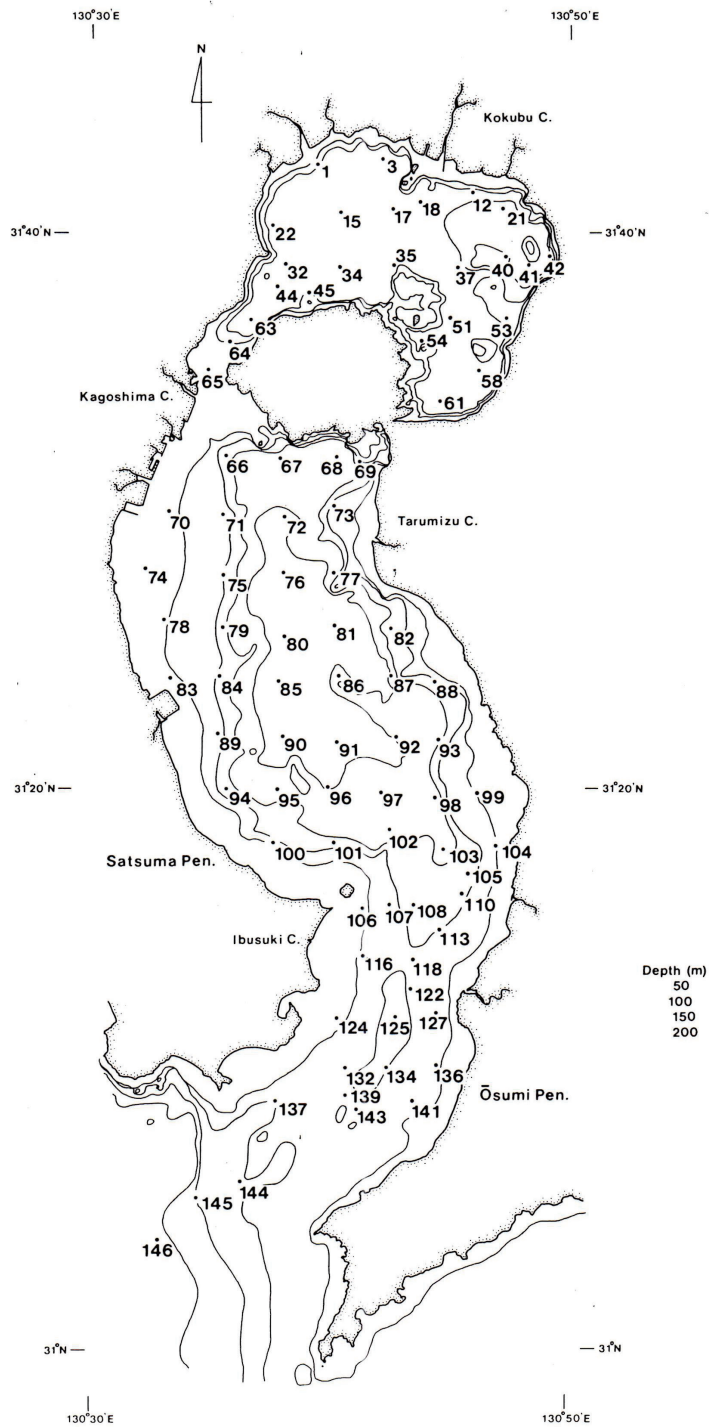


Fig. 1. Sampling stations in Kagoshima Bay. Isobaths at 50 m intervals.

Tomiyasu, T., Eguchi, T., Yamamoto, M., Anazawa, K., Sakamoto, H., Ando, T., Nedachi, M. and Marumo, K., 2007, Influence of submarine fumaroles on the distribution of mercury in the sediment of Kagoshima Bay, Japan. *Marine Chemistry*, 107: 173–183.

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Table 1. Occurrence of the ostracods in Kagoshima Bay (continued).

Species	Sampling site																																							
	Water depth (m)	146	145	144	143	141	139	137	136	134	132	127	125	124	122	118	116	113	110	108	107	106	105	104	103	102	101	100	99	98	97	96	95							
<i>Loxococoncha sinensis</i>	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
<i>Loxococoncha</i> sp. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Loxococoncha</i> sp. 2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Loxococoncha</i> sp. 3	5	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0		
<i>Loxococoncha</i> sp. B	2	0	0	0	11	0	0	0	0	0	0	3	3	0	0	0	1	0	1	0	4	0	1	0	3	0	0	0	0	0	2	13	0	0	0	0	0			
<i>Loxococoncha tosaensis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0				
<i>Loxococoncha tosamodesta</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Loxococoncha viva</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	2	19	0	0	0	0	0	0			
<i>Loxocorniculum mutsuensis</i>	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<i>Macrocyprina okinawae</i>	8	8	0	0	0	10	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Microcythere</i> sp. 1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Microcythere</i> sp. 2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Moosella tomokoae</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Munseyella</i> cf. <i>reticulosa</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Munseyella</i> sp.	0	0	0	0	1	0	0	0	0	4	0	0	0	2	3	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Neonesidea oligodentata</i>	79	32	6	14	0	0	2	0	0	1	1	3	2	7	2	0	2	0	3	0	2	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0		
<i>Neonesidea</i> sp.	0	0	1	0	3	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Nipponocythere delicata</i>	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0		
<i>Nipponocythere inornata</i>	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Pacambocythere humilioris</i>	0	0	1	2	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Paijenborchella iocosa</i>	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
<i>Paracytheridea minamipponica</i>	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Paracytheridea tschoppi</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Paracytherois</i> cf. <i>extensa</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Paracytherois</i> sp. 1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Paradoxostoma</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Parakrithella pseudadonta</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Parakrithella</i> sp. 1	0	0	0	1	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	
<i>Perissocytheridea bosoenis</i>	4	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0		
<i>Perissocytheridea retiformis</i>	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
<i>Phlyctocythere hamanensis</i>	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pistocythereis bradyformis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pistocythereis bradyi</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Platymicrocythere</i> sp.	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Polycope</i> cf. <i>dispar</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Polycope</i> sp.	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pontocythere</i> cf. <i>miurensis</i>	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pontocythere japonica</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pontocythere sekiguchii</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pontocythere subjaponica</i>	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pontocythere subtriangularis</i>	3	1	2	0	2	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3	1	0	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
<i>Propontocypris</i> cf. <i>paradispar</i>	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Propontocypris crocata</i>	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Propontocypris japonica</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pseudocythere</i> cf. <i>moneroni</i>	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pseudocythere frydli</i>	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Pumilocytheridea</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Robustaurila salebroza</i>	0	0	0	0																																				

