Pelagic Amphipods in Omura Bay.

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Collections were carried out 5 times; May, July, September, October 1954 and March 1955 at 19 stations, occupying 17 inside of the Bay and 2 outside (Haiki Strait and Sukui-no-ura). (Fig. 1) The net used is as follows. Calibre : 1m. Side-length : 3m.

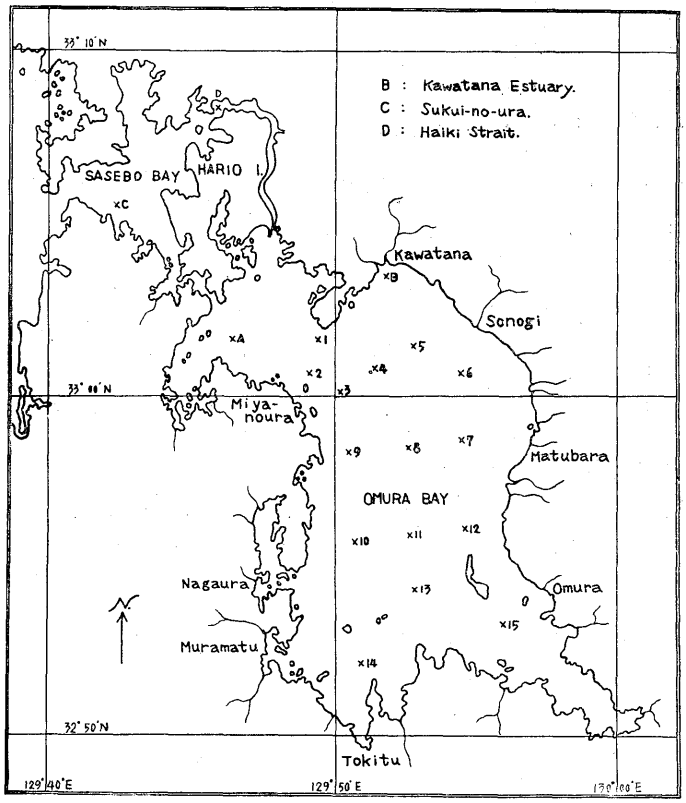

Fig. 1. Stations occupied.

Filtering portion : GG55. It was hauled for 10 minutes at about 2 MPH. Number of species occurred are as follows. (Tab. 1)

Table 1. Number of Species Occurred.

Suborder	Genus	Species
GAMMARIDEA	11	14
HYPERIIDEA	2	3
CAPRELLIDEA	1	3
Total	14	20

Monthly occurrences at each station were as follows, (Tab. 2)

From the Table 2, it will be seen that the number of species occurred was greatest in May. *Amphithoe japonica*, *Biacolina cuniculus* and *Jassa dentex* found in May which were only released from floating brown algae near St. 7 (innermost part of the Bay) and did'nt occur in other months also in free living state. *Amphithoe japonica*, *A. rubricata* and *Corophium acutum* were collected from floating algae and also in free living state.

Among members released from floating algae, *Amphithoe japonica* and *Corophium*

Table 2, Monthly Occurrences at Each Station.

Sub-ord.	Family	Genus	Species		May,'54.	July.'54.	Sept.,'54.	Oct.,'54.	Mar.,'55.
GAMMARIDEA	I. AMPHILOCHIDAE	1. *Amphilochus*	*brunneus*	(1)	St. 5 : 1 Et. 9 : 1 (Fa. : 3)				
	II. GAMMARIDAE	2. *Gammarus*	*marinus*	(2)	St. 8 : 1				
	III. DEXAMINIDAE	3. *Dexamine*	*spiniventris*	(3)			Haiki Strait		
	IV. TALITRIDAE	4. *Hyale*	*Glimaldii*	(4)	St. 8 : 1				
	V. AMPITHOIDAE	5. *Amphithoe*	*Vaillanti*	(5)	St. 4 : 1				
			rubricata	(6)	St. 5 : 1 St. 13 : 3 St. 15 : 1 (Fa. : 1)	St. 3 : 1 St. 9 : 1 St. 13 : 1			
			japonica	(7)	(Fa. : 27)				
		6. *Pleonexes*	*ferox*	(8)	St. 5 : 1 St. 7 : 1	St. 15 : 3		St. 14 : 2	St. 15 : 1
		7. *Sunamphithoe*	*pelagica*(?)	(9)	St. 5 : 1				
		8. *Biacolina*	*cuniculus*	(10)	(Fa. : 10)				
	VI. JASSIDAE	9. *Jassa*	*dentex*	(11)	(Fa. : 1)				
	VII. COROPHIIDAE	10. *Erichthonius*	*brasiliensis*	(12)	Kawatana Estuary : 1				
			Hunteri	(13)		St. 7 : 1			
		11. *Corophium*	*acutum*	(14)	St. 5 : 4 St. 7 : 3 St. 8 : 23 (Fa. : 146)				
HYPERIIDEA	VIII. HYERIIDAE	12. *Hyperia*	*galba*	(15)				St. 2 : 1	
			schizogeneios	(16)				St. 2 : 1 St. 8 : 1	
		13. *Hyperoche*	*medusarum*	(17)	St. 5 : 1 Sukui-no-ura : 1				
CAPRELLIDEA	IX. CAPRELLIDAE	14. *Caprella*	*acutifrons*	(18)		St. 6 : 1	St. 4 : 1		
			Danilewskii	(19)				St. 5 : 1	
			aequilibra	(20)					St. 2 : 1

Remarks : 1) Number at each station showing the number of the animals collected.
2) ( ) in May, '54 showing the number released from floating algae (Fa). near St. 7 (innermost part of the Bay).
3) Sts. A, 1, 10, 11 & 12 have no collections.

acutum were dominant, especially the latter being overwhelmingly abundant and that occurring also in free living state abundantly.

In general, Gammarids occurred in eastern part from the middle to innermost of the Bay, having depths less than 15m and waters being proper to the Bay, while Hyperiids occurred in western part of the Bay, having depths more than 20m and being influenced strongly by the waters outside of the Bay[1]. Moreover, these Hyperiid members, as already reported[2], have rather more wide distribution both geographically and vertically.

Among 14 species of Gammarids, 3 species namely *Jassa dentex*, *Erichthonius brasiliensis* and *E. Hunteri*, were the dominant members among the "Tube-building Amphipods occurring at the 'wakame' grounds of Simabara"[3], and the author surmises they may not essentially be pelagic.

Other species which are not the members released from floating algae, with the exception of *Corophium acutum*, occurred in very small number, each species being within 5 individuals.

After all, as already pointed out[2], Hyperiids occur in overwhelming majority in open sea but Gammarids occur mostly in insular or neritic regions. In the Bay, on the other hand, Gammarids are dominant and Hyperiids are scarce. This phenomena, the author surmises, comes from the characteristic features in the Bay.

REFERENCES :

1) H. IRIE & S. IIZUKA. *Bull. Fac. Fish., Nagasaki Univ.*, 2, 1-7 (1954). (in Japanese with English summary.)

2) H. IRIE. Ibid., 5, 41-52 (1957)

3) H. IRIE. Ibid., 4, 1-6 (1956)