PART 4

ZOOPLANKTON

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ZOOPLANKTON

The zooplankton samples carried out at each station have been used to get an estimation of the zooplankton biomass, settling volume and wet weight (Table 5).

The main taxons have been counted on the whole sample or on an aliquot part (Table 6). The meroplanktonic and neritic holoplankton are dominant in the Inner Bay. The oceanic taxons appear more abundant in the north part of the Bay, perhaps owing to the circulation in the Bay.

ZOOPLANKTON SAMPLES

Station number	Depth of bottom m	Sample number	Local time	Length of wire m	Angle of wire	Volume filtered m^{-3}	Zooplankton biomass	
							Settling volume $ml.10m^{-3}$	Wet weigh $g.10m^{-3}$
1	41	1	16h.05	38	0	9.9		
		2	16h.10	38	0	9.9	59	6.9
2	25	3	17h.00	22	15	5.5		
		4	17h.10	22	15	5.8	68	7.9
3	26	5	17h.50	23	0	5.5		
		6	17h.55	23	0	5.5	105	10.7
4	32	7	18h.30	28	10	5.8		
		8	18h.35	28	10	7,3	120	14.7
5	25	9	19h.10	22	0	5.7		
		10	19h.15	22	0	5.8	137	18.4
6	31	11	20h.10	28	0			
		12	20h.15	28	0	6.9	85	9.4
7	45	13	21h.20	42	10	10.6		
		14	21h.25	42	10	11	60	8.2
8	166 to 200	16	22h.45	170	25	29.2		
		17	23h.00	170	40	46	33	5.3
9	165	18	08h.05	163	5	38.3		
		19	08h.10	163	5		15	1.8
10	75 to 100	20	09h.15	100	35	30.3		
		21	09h.35	100	35	29.6	23	2.7
11	250	22	10h.55	200	25	49.3		
		23	11h.05	200	25	51.1	14	2.2
12	69	24	12h.15	65	20			
		25	12h.20	65	20	12.8	30	3.9

TABLE 5(1): Zooplankton : sampling informations and biomass

ZOOPLANKTON SAMPLES

Station number	Depth of bottom m	Sample number	Local time	Length of wire m	Angle of wire	Volume filtered m^{-3}	Zooplankton biomass	
							Settling volume $ml.10m^{-3}$	Wet weigh $g.10m^{-3}$
13	250	26	14h.15	200	25	51.1		
		27	14h.20	200	25	49.3	10	1.1
14	500	28	15h.45	200	20	48.5		
		29	16h.55	200	20	46.4	11	1.7
15	100 to 200	30	16h.50	150	15			
		31	17h.00	150	15	35.8	14	1.8
16	500	32	18h.25	200	0	44.9		
		33	18h.35	200	0	44.9	9	1.2
17	500	34	20h.00	200	15	52.6		
		35	20h.10	200	15	52.6	8	1
18	60 to 70	36	21h.35	55	25	16.4		
		37	21h.40	55	25	13.5	28	4.2
19	1.000 and +	38	00h.05	200	25	46.4		
		39	00h.15	200	35	47.5	9	1.3
20	1.000 and +	40	09h.10	200	15	47.5		
		41	09h.20	200	20	48.5	7	0.9
21	1.000 and +	42	14h.55	200	15	47.8		
		43	15h.05	200	15	44.2	9	1.3
22	1.000 and +	44	20h.15	200	25	46.4		
		45	20h.25	200	40	55.1	7	1.7
23	1.000 and +	46	08h.30	200	20	50		
		47	08h.35	200	20	48.5	6	0.9
24	1.000 and +	48	14h.30	200	25	48.9		
		49	14h.35	200	25	50.4	6	1.2

TABLE 5(2)(continuation)

ZOOPLANKTON SAMPLES

Station number	Depth of bottom m	Sample number	Local time	Length of wire m	Angle of wire	Volume filtered m^{-3}	Zooplankton biomass	
							Settling volume $ml.10m^{-3}$	Wet weigh $g.10m^{-3}$
25	1.000 and +	50	19h.35	200	25	48.9		
		51	19h.40	200	25	52.6	7	1.1
26	1.000 and +	52	08h.55	200	25	49,3		
		53	09h.00	200	25	47.5	3	0.5
27	1.000 and +	54	14h.25	200	25	45.6		
		55	14h.30	200	25	45.6	4	0.7
28	1.000 and +	56	20h.00	200	5	48.9		
		57	20h.05	200	5	49.3	5	0.6
		58	20h.30	1.000	5	227.4	1	0.2

TABLE 5(3)(continuation)

TAXONS \ SAMPLES	2	4	6	8	10	12	14	17	19	21	23	25	27	29
Foraminifera	388	248	262	197	166	278	218	188	119	122	188	25	29	83
Hydromedusae	48	41	44	66	83	139	196	31	25	24	38	13	15	5
Siphonophores	2 036	29 79	2 967	1 447	3 310	1 426	502	104	75	81	132	138	24	41
Ctenophores							44			16				
Polychaete (larvae and adults ?)	606	1 117	1 091	1 184	1 076	1 426	415	125	38	122	66	125	34	41
Penilia avirostris	24	83	87				22							
Evadne sp.		41	349	66	331	104								
Ostracods total	582	83		197	166	661	458	1.878	476	908	517	1.000	662	310
Copepods total	16 485	16 552	18 502	32 351	28 469	33 113	18 327	11 019	7 244	10 930	6 575	13 700	4 751	4 034
Cirripede larvae	48		44	132		70	131	10	38	32	47	50	10	
Amphipods	73	41		66		35	262	42		16	38	38	24	26
Isopods						70	22		6			9		
Euphausiids calyptosis							22	42	50	24	28	25	10	10
Euphausiids furcilia		41	44					83	13	32	28	50	15	10
Euphausiids adults												13		
Lucifer zoea	1 624	3 807	1 440	2 564	2 979	1 600	1 004	94	88	114	178	250	83	52
Lucifer mysis	364	910	873	723	1.241	765	676	21	13	16	66	63	39	26
Lucifer mastigopus	24	83	218			70	109	21	6	8	28			
Lucifer adults	24	124			83		44	21	6			13		
Brachyuran zoea		83							6	24	9	50	10	

TABLE 6(1): Abundance of the main taxons in the zooplankton samples (per 10 m^{-3})

TAXONS \ SAMPLES	2	4	6	8	10	12	14	17	19	21	23	25	27	29
Brachyuran megalopa														
Phyllosoma larvae											9			
Others decapod larvae	97	83		132	331	104	218		56	73	47	38	5	16
Heteropods														
Pteropods thecosomes	24	83	218	132		209	218	115	113	146	103	50	49	47
Pteropods gymnosomes														
Gastropods larvae	218	248	349	263	248	1 113	567	240	357	138	169	263	88	67
Bivalves larvae	1 067	1 076	1 091	1 249	1 076	2 330	785	104	88	32	94	75	19	36
Cephalopods										8		13		
Cyphonautes larvae	24							10	6	8	9	13		5
Actinotroch larvae	73	41	175	197	414	139	44							
Brachiopod larvae					248	70	22		13		9			5
Echinoderm larvae	97	166	349	263	497	174	196	10	19	49	38	25	29	21
Chaetognaths	1 842	2 979	3 316	3 156	6 290	4 870	2 444	960	476	908	714	1 150	701	228
Larvaceans	267	207	1 047	395	3 310	1 670	1 047	626	727	357	178	400	331	36
Salps	48	248	567	1 052	414	35	65					38		5
Doliolids							22	10	25	8	19	13	5	
Amphioxus larvae														
Fish eggs	121		87	66		35	196	10	6	8				
Fish larvae		166	218	132	331	313	240	63		16	9	13	24	5

TABLE 6(2)(continuation)

TAXONS \ SAMPLES	31	33	35	37	39	41	43	45	47	49	51	53	55	57	58
Foraminifera	54	21	37	267	86	25	18	39	20	10	32	10	25	10	4
Hydromedusae	20	16	18	53	15	30	7	9	20	5	27	7	21		1
Siphonophores	40	48	27	196	25	45	36	78	54	29	41	30	74	45	16
Ctenophores	7														
Polychaete (larvae and adults ?)	74	37	50	89	45	30	47	48	40	19	82	17	35	29	17
Penilia avirostris															
Evadne sp.										5			4	6	
Ostracods total	697	321	329	711	263	257	319	314	277	124	237	175	196	149	59
Copepods total	6 168	3 143	4 289	12 587	4 406	2 256	4 952	5 419	4 731	2 914	3 486	2 776	2 582	2 570	773
Cirripede larvae	40	11		89	5	5						3			
Amphipods	20		5	89		5	7	9	5	19	5			6	1
Isopods	7							4	5				4		
Euphausiids calyptosis		5	9	391	71	25	80	30	25	29	18	3	25	23	2
Euphausiids furcilia	54	27	18	160	20	5	87	30		29	23	13	4	23	5
Euphausiids adults	13		9	18				9			9			16	5
Lucifer zoea		48	46	71	35		29	52	5	10	23				
Lucifer mysis	67	32	14	107	10		14	17			5				1
Lucifer mastigopus	13	5	14	36							5				
Lucifer adults	7		5	124				4							
Brachyuran zoea	20	11	9	36		5		9			5				

TABLE 6(3) (continuation)

TAXONS \ SAMPLES	31	33	35	37	39	41	43	45	47	49	51	53	55	57	58
Brachyuran megalopa	7						4	4			5				
Phyllosoma larvae															
Others decapod larvae	34	11	5	142	40	5	7	13	5	5	9	3	4	3	1
Heteropods		5					4								
Pteropods thecosomes	54	48	78	107	15	54	90	109	10	71	87	44	46	32	10
Pteropods gymnosomes			5				4	13	15	76	5		7	6	1
Gastropods larvae	54	80	87	551	81	49	51	100	59	29	41	24	56	39	9
Bivalves larvae	13	27	14	142	15	15	43	26	10	14	23	10	7	3	2
Cephalopods											5			6	2
Cyphonautes larvae	13			36		5		4	5					3	
Actinotroch larvae															
Brachiopod larvae							4				5				
Echinoderm larvae	47	21	41	89	25	5	14	4	10	24	23	10	7	33	1
Chaetognaths	617	134	256	782	424	178	261	209	277	667	219	229	196	97	51
Larvaceans	114	166	132	1 422	243	218	681	139	594	100	456	323	351	182	80
Salps	7	5			10		4	22	5	14		13	11		1
Doliolids	13	16	9	53	5	10	14	4	35	14	14	17	14	10	2
Amphioxus larvae	13								5		14			3	
Fish eggs	7	5	5	53	15	10	11	4							
Fish larvae	20	5	5	107	30	10	14	17	35	10	27	3	11	3	1

TABLE 6(4)(continuation)