

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
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
<i>Foraminifera</i>	388	248	262	197	166	278	218	188	119	122	188	25	29	83
<i>Hydromedusae</i>	48	41	44	66	83	139	196	31	25	24	3	13	15	5
<i>Siphonophores</i>	2 036	29 79	2 967	1 447	3 310	1 426	502	104	75	81	104	138	24	41
<i>Ctenophores</i>							44			16				
<i>Polychaete</i> (larvae and adults ?)	606	1 117	1 091	1 184	1 076	1 426	415	125	38	122		125	34	41
<i>Penilia avirostris</i>	24	83	87				22							
<i>Evadne sp.</i>		41	349	66	331	104								
<i>Ostracods total</i>	582	83		197	166	661	458	1.878	476	908		1.000	662	310
<i>Copepods total</i>	16 485	16 552	18 502	32 351	28 469	33 113	18 327	11 019	7 244	10 930	6 5	13 700	4 751	4 034
<i>Cirripede larvae</i>	48		44	132		70	131	10	38	32	47	50	10	
<i>Amphipods</i>	73	41		66		35	262	42		16	38	38	24	26
<i>Isopods</i>						70	22		6			9		
<i>Euphausiids calyptosis</i>							22	42	50	24	28	25	10	10
<i>Euphausiids furcilia</i>		41	44					83	13	32	28	50	15	10
<i>Euphausiids adults</i>												13		
<i>Lucifer zoea</i>	1 624	3 807	1 440	2 564	2 979	1 600	1 004	94	88	114	178	250	83	52
<i>Lucifer mysis</i>	364	910	873	723	1.241	765	676	21	13	16	66	63	39	26
<i>Lucifer mastigopus</i>	24	83	218			70	109	21	6	8	28			
<i>Lucifer adults</i>	24	124			83		44	21	6			13		
<i>Brachyuran zoea</i>		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
<i>Brachyuran megalopa</i>														
<i>Phyllosoma</i> larvae											9			
Others decapod larvae	97	83		132	331	104	218		56	73	47	38	5	16
<i>Heteropods</i>														
<i>Pteropods thecosomes</i>	24	83	218	132		209	218	115	113	146	103	50	49	47
<i>Pteropods gymnosomes</i>														
<i>Gastropods</i> larvae	218	248	349	263	248	1 113	567	240	357	138	169	263	88	67
<i>Bivalves</i> larvae	1 067	1 076	1 091	1 249	1 076	2 330	785	104	88	32	94	75	19	36
<i>Cephalopods</i>										8		13		
<i>Cyphonautes</i> larvae	24							10	6	8	9	13		5
<i>Actinotroch</i> larvae	73	41	175	197	414	139	44							
<i>Brachiopod</i> larvae					248	70	22		13		9			5
<i>Echinoderm</i> larvae	97	166	349	263	497	174	196	10	19	49	38	25	29	21
<i>Chaetognaths</i>	1 842	2 979	3 316	3 156	6 290	4 870	2 444	960	476	908	714	1 150	701	228
<i>Larvaceans</i>	267	207	1 047	395	3 310	1 670	1 047	626	727	357	178	400	331	36
<i>Salps</i>	48	248	567	1 052	414	35	65					38		5
<i>Doliolids</i>							22	10	25	8	19	13	5	
<i>Amphioxus</i> 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
<i>Foraminifera</i>	54	21	37	267	86	25	18	39	20	10	32	10	25	10	4
<i>Hydromedusae</i>	20	16	18	53	15	30	7	9	20	5	27	7	21	45	1
<i>Siphonophores</i>	40	48	27	196	25	45	36	78	54	29	41	30	74	45	16
<i>Ctenophores</i>	7	 	 	 	 	 	 	 	 	 	 	 	 	 	
<i>Polychaete</i> (larvae and adults ?)	74	37	50	89	45	30	47	48	40	19	82	17	35	29	17
<i>Penilia avirostris</i>	 	 	 	 	 	 	 	 	 	 	 	 	 	 	
<i>Evadne sp.</i>	 	 	 	 	 	 	 	 	 	5	 	 	4	6	
<i>Ostracods total</i>	697	321	329	711	263	257	319	314	277	124	237	175	196	149	59
<i>Copepods total</i>	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
<i>Cirripede larvae</i>	40	11	 	89	5	5	 	 	 	 	 	3	 	 	
<i>Amphipods</i>	20	 	5	89	 	5	7	9	5	19	5	 	 	6	1
<i>Isopods</i>	7	 	 	 	 	 	 	4	5	 	 	 	4	 	
<i>Euphausiids calyptosis</i>	 	5	9	391	71	25	80	30	25	29	18	3	25	23	2
<i>Euphausiids furcilia</i>	54	27	18	160	20	5	87	30	 	29	23	13	4	23	5
<i>Euphausiids adults</i>	13	 	9	18	 	 	 	9	 	 	9	 	 	16	5
<i>Lucifer zoea</i>	 	48	46	71	35	 	29	52	5	10	23	 	 	 	
<i>Lucifer mysis</i>	67	32	14	107	10	 	14	17	 	 	5	 	 	 	1
<i>Lucifer mastigopus</i>	13	5	14	36	 	 	 	 	 	 	5	 	 	 	
<i>Lucifer adults</i>	7	 	5	124	 	 	 	4	 	 	 	 	 	 	
<i>Brachyuran zoea</i>	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
<i>Brachyuran megalopa</i>	7						4	4			5				
<i>Phyllosoma</i> larvae															
Others decapod larvae	34	11	5	142	40	5	7	13	5	5	9	3	4	3	1
<i>Heteropods</i>		5					4								
<i>Pteropods thecosomes</i>	54	48	78	107	15	54	90	109	10	71	87	44	46	32	10
<i>Pteropods gymnosomes</i>			5				4	13	15	76	5		7	6	1
<i>Gastropods</i> larvae	54	80	87	551	81	49	51	100	59	29	41	24	56	39	9
<i>Bivalves</i> larvae	13	27	14	142	15	15	43	26	10	14	23	10	7	3	2
<i>Cephalopods</i>											5			6	2
<i>Cyphonautes</i> larvae	13			36		5		4	5					3	
<i>Actinotroch</i> larvae															
<i>Brachiopod</i> larvae							4				5				
<i>Echinoderm</i> larvae	47	21	41	89	25	5	14	4	10	24	23	10	7	33	1
<i>Chaetognaths</i>	617	134	256	782	424	178	261	209	277	667	219	229	196	97	51
<i>Larvaceans</i>	114	166	132	1 422	243	218	681	139	594	100	456	323	351	182	80
<i>Salps</i>	7	5			10		4	22	5	14		13	11		1
<i>Doliolids</i>	13	16	9	53	5	10	14	4	35	14	14	17	14	10	2
<i>Amphioxus</i> 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)