

C.I.P.S. \_

MODELE MATHEMATIQUE

POLLUTION MER DU NORD

4542  
TECHNICAL REPORT

1973-1974/BIOL.02

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/This paper not to be cited without prior reference to the author/

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Production primaire en novembre 1973

Production primaire en 1974 (1ère partie)

par J.P.Mommaerts ,Lab.Ekologie en Systematiek,V.U.B.  
avec l'aide technique de J.Nijs et O.Cromboom

Les valeurs de production primaire présentées ici seront commentées avec la 2ème partie . Nous attirons cependant l'attention sur le fait qu'elles ont été obtenues de manière entièrement différente des années précédentes . En effet , la technique utilisée a été la scintillation liquide et le  $\text{NaH}^{14}\text{CO}_3$  en provenance de l'I.R.E. a été conditionné et standardisé au laboratoire . Le calcul proprement dit comporte des éléments nouveaux tels la correction de quenching , la distinction entre production brute et production nette , le niveau d'éclairement dans l'incubateur et in situ . Les mesures in situ des années précédentes ont permis de dégager les paramètres nécessaires à l'application du modèle de Vollenweider , déjà abordé dans notre rapport de synthèse de 1973 , à savoir  $I'_k$  et les coefficients de photoinhibition . On a utilisé pour  $I'_k$  une fonction de la température qui paraît correspondre aux observations . Cependant , la variation saisonnière d' $I'_k$  ainsi que ses variations nyctémérales et en fonction de la nature du phytoplancton appellent un grand nombre de déterminations supplémentaires pour qu'un modèle valable en soit établi .

Les valeurs de production intégrée/jour se rapportent à un jour moyen (moyenne/décade considérée) plutôt qu'au jour de prélèvement .

NOVEMBRE 1973

LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK , V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

281173

SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.40	1.27	1.13	.19	1.1
PERCENT.	100	54	46	8.0	
GROSS P.OPT	3	2	1		
GROSS P/DAY	44	23	20		
NET P/SOL.DAY	29	15	13		
NET P/24H-DAY	0	0	0		
EXTINCTION COEFF.:	.9				
TRANSMISSION COEFF.:	37.7				
EUPHOTIC DEPTH (M) :	4.7				

JANVIER 1974

LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK, V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

140174                    SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.00	1.68	2.31	.42	.7
PERCENT.	100	43	57	10.5	
GROSS P.OPT	7	3	4		
GROSS P/DAY	44	18	25		
NET P/SOL.DAY	26	11	15		
NET P/24H-DAY	-8	-4	-5		
EXTINCTION COEFF.:	1.5				
TRANSMISSION COEFF.:	21.5				
EUPHOTIC DEPTH (M) :	3				

240174                    SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.91	1.72	2.19	.40	.7
PERCENT.	100	45	55	10.3	
GROSS P.OPT	7	3	3		
GROSS P/DAY	77	34	43		
NET P/SOL.DAY	54	23	30		
NET P/24H-DAY	7	3	3		
EXTINCTION COEFF.:	1.1				
TRANSMISSION COEFF.:	32.7				
EUPHOTIC DEPTH (M) :	4.1				

240174                    SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.52	.48	1.03	.33	.4
PERCENT.	100	33	67	22.0	
GROSS P.OPT	2	0	1		
GROSS P/DAY	77	24	52		
NET P/SOL.DAY	53	17	36		
NET P/24H-DAY	7	2	4		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	64.6				
EUPHOTIC DEPTH (M) :	10.5				

250174

## SAMPLING STATION 16

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.71	.00	2.11	.20	.0
PERCENT.	81	0	100	9.7	
GROSS P.OPT	3	0	3		
GROSS P/DAY	44	0	54		
NET P/SOL.DAY	31	0	38		
NET P/24H-DAY	4	0	4		
EXTINCTION COEFF.:	.8				
TRANSMISSION COEFF.:	42.6				
EUPHOTIC DEPTH (M) :	5.3				

250174

## SAMPLING STATION 20

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.50	.32	1.17	.29	.2
PERCENT.	100	22	78	19.2	
GROSS P.OPT	2	0	2		
GROSS P/DAY	77	16	60		
NET P/SOL.DAY	53	11	41		
NET P/24H-DAY	6	1	5		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	64.8				
EUPHOTIC DEPTH (M) :	10.6				

FEVRIER 1974

LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK , V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

260274

SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	18.62	4.26	14.36	.83	.2
PERCENT.	100	23	77	4.5	
GROSS P.OPT	33	7	26		

260274

SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.44	.00	2.60	1.99	.0
PERCENT.	93	0	100	76.6	
GROSS P.OPT	4	0	4		

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LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK , V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

	TOTAL	NETPL	NANNO	DARK	RATIO
250374 SAMPLING STATION 55					
VITRO	3.35	1.81	1.53	.24	1.1
PERCENT.	100	55	45	7.1	
GROSS P.OPT	5	2	2		

	TOTAL	NETPL	NANNO	DARK	RATIO
260374 SAMPLING STATION 9					
VITRO	3.44	1.29	2.14	.68	.6
PERCENT.	100	38	62	19.9	
GROSS P.OPT	5	2	3		

	TOTAL	NETPL	NANNO	DARK	RATIO
260374 SAMPLING STATION 1					
VITRO	12.93	10.07	2.85	.78	3.5
PERCENT.	100	78	22	6.0	
GROSS P.OPT	20	15	4		

AVRIL - MAI 1974

LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK, V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M<sup>3</sup>/H AND MG C/M<sup>2</sup>/DAY)

170474 SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.88	1.53	2.34	.18	.6
PERCENT.	100	40	60	4.8	
GROSS P.OPT	4	1	2		
GROSS P/DAY	167	66	101		
NET P/SOL.DAY	126	49	76		
NET P/24H-DAY	97	38	58		
EXTINCTION COEFF.:	.7				
TRANSMISSION COEFF.:	46.2				
EUPHOTIC DEPTH (M) :	5.9				

170474 SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	6.66	3.94	2.72	.40	1.4
PERCENT.	100	60	40	6.0	
GROSS P.OPT	8	4	3		
GROSS P/DAY	328	193	134		
NET P/SOL.DAY	247	146	101		
NET P/24H-DAY	190	112	77		
EXTINCTION COEFF.:	.6				
TRANSMISSION COEFF.:	50.9				
EUPHOTIC DEPTH (M) :	6.8				

180474 SAMPLING STATION 20

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.81	2.69	1.11	.27	2.4
PERCENT.	100	71	29	7.2	
GROSS P.OPT	4	3	1		
GROSS P/DAY	469	331	137		
NET P/SOL.DAY	354	250	104		
NET P/24H-DAY	272	192	79		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	76.3				
EUPHOTIC DEPTH (M) :	17				

180474 SAMPLING STATION 19

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	11.20	9.49	1.71	.28	5.5
PERCENT.	100	85	15	2.5	
GROSS P.OPT	14	11	2		
GROSS P/DAY	827	700	126		
NET P/SOL.DAY	624	529	95		
NET P/24H-DAY	480	406	73		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	63.7				
EUPHOTIC DEPTH (M) :	10.2				

180474 SAMPLING STATION 18

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	9.81	7.80	2.01	.50	3.8
PERCENT.	100	80	20	5.1	
GROSS P.OPT	12	9	2		
GROSS P/DAY	603	479	123		
NET P/SOL.DAY	456	362	93		
NET P/24H-DAY	350	278	71		
EXTINCTION COEFF.:	.5				
TRANSMISSION COEFF.:	58.2				
EUPHOTIC DEPTH (M) :	8.5				

180474 SAMPLING STATION 17

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	8.54	6.45	2.09	.73	3.0
PERCENT.	100	76	24	8.5	
GROSS P.OPT	10	8	2		
GROSS P/DAY	525	397	128		
NET P/SOL.DAY	396	299	97		
NET P/24H-DAY	304	230	74		
EXTINCTION COEFF.:	.5				
TRANSMISSION COEFF.:	58.2				
EUPHOTIC DEPTH (M) :	8.5				

180474 SAMPLING STATION 16

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.10	2.20	1.90	.66	1.1
PERCENT.	100	54	46	16.2	
GROSS P.OPT	5	2	2		
GROSS P/DAY	176	94	82		
NET P/SOL.DAY	133	71	61		
NET P/24H-DAY	102	54	47		
EXTINCTION COEFF.:	.7				
TRANSMISSION COEFF.:	46.2				
EUPHOTIC DEPTH (M) :	5.9				



## 190474 SAMPLING STATION 4

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	23.37	15.82	7.55	.64	2.0
PERCENT.	100	68	32	2.7	
GROSS P.OPT	29	19	9		
GROSS P/DAY	1150	778	371		
NET P/SOL.DAY	868	588	280		
NET P/24H-DAY	667	451	215		
EXTINCTION COEFF.:	.6				
TRANSMISSION COEFF.:	50.9				
EUPHOTIC DEPTH (M) :	6.8				

## 190474 SAMPLING STATION 3

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	27.72	15.80	11.91	.71	1.3
PERCENT.	100	58	42	2.5	
GROSS P.OPT	34	19	15		
GROSS P/DAY	1364	778	586		
NET P/SOL.DAY	1030	587	443		
NET P/24H-DAY	791	451	340		
EXTINCTION COEFF.:	.6				
TRANSMISSION COEFF.:	50.9				
EUPHOTIC DEPTH (M) :	6.8				

## 190474 SAMPLING STATION 2

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	26.49	12.86	13.63	.57	.9
PERCENT.	100	49	51	2.1	
GROSS P.OPT	33	16	17		
GROSS P/DAY	652	316	335		
NET P/SOL.DAY	492	239	253		
NET P/24H-DAY	378	183	194		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

## 190474 SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	13.69	9.27	4.42	.57	2.0
PERCENT.	100	68	32	4.1	
GROSS P.OPT	17	11	5		
GROSS P/DAY	252	171	81		
NET P/SOL.DAY	190	129	61		
NET P/24H-DAY	146	99	47		
EXTINCTION COEFF.:	1.7				
TRANSMISSION COEFF.:	16.5				
EUPHOTIC DEPTH (M) :	2.5				

## 220474 SAMPLING STATION 6

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	27.74	21.91	5.82	.37	3.7
PERCENT.	100	79	21	1.3	
GROSS P.OPT	35	27	7		
GROSS P/DAY	681	538	143		
NET P/SOL.DAY	514	406	108		
NET P/24H-DAY	394	311	82		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

## 220474 SAMPLING STATION 5

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	21.71	18.00	3.70	.57	4.8
PERCENT.	100	83	17	2.6	
GROSS P.OPT	27	22	4		
GROSS P/DAY	266	221	45		
NET P/SOL.DAY	201	166	34		
NET P/24H-DAY	154	128	26		
EXTINCTION COEFF.:	2.6				
TRANSMISSION COEFF.:	6.7				
EUPHOTIC DEPTH (M) :	1.7				

## 230474 SAMPLING STATION 11

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	30.07	22.45	7.62	.84	2.9
PERCENT.	100	75	25	2.8	
GROSS P.OPT	37	28	9		
GROSS P/DAY	369	275	93		
NET P/SOL.DAY	278	208	70		
NET P/24H-DAY	213	159	54		
EXTINCTION COEFF.:	2.6				
TRANSMISSION COEFF.:	6.7				
EUPHOTIC DEPTH (M) :	1.7				

## 230474 SAMPLING STATION 12

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	35.64	29.99	5.65	.60	5.3
PERCENT.	100	85	15	1.6	
GROSS P.OPT	45	37	7		
GROSS P/DAY	875	736	138		
NET P/SOL.DAY	660	555	104		
NET P/24H-DAY	507	426	80		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

## 230474 SAMPLING STATION 13

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	28.59	21.66	6.93	.36	3.1
PERCENT.	100	76	24	1.2	
GROSS P./OPT	36	27	8		
GROSS P/DAY	878	665	212		
NET P/SOL.DAY	662	502	160		
NET P/24H-DAY	508	385	123		
EXTINCTION COEFF.:	1				
TRANSMISSION COEFF.:	33.9				
EUPHOTIC DEPTH (M) :	4.2				

## 230474 SAMPLING STATION 14

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	9.45	7.95	1.49	.69	5.3
PERCENT.	100	85	15	7.3	
GROSS P./OPT	11	10	1		
GROSS P/DAY	348	293	54		
NET P/SOL.DAY	262	221	41		
NET P/24H-DAY	201	169	31		
EXTINCTION COEFF.:	.8				
TRANSMISSION COEFF.:	40.6				
EUPHOTIC DEPTH (M) :	5.1				

## 250474 SAMPLING STATION 7

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	38.67	32.44	6.22	.39	5.2
PERCENT.	100	84	16	1.0	
GROSS P./OPT	48	40	7		
GROSS P/DAY	950	797	152		
NET P/SOL.DAY	716	601	115		
NET P/24H-DAY	550	461	88		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

## 250474 SAMPLING STATION 8

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	17.60	13.82	3.77	.34	3.6
PERCENT.	100	79	21	1.9	
GROSS P./OPT	22	17	4		
GROSS P/DAY	648	509	139		
NET P/SOL.DAY	489	384	105		
NET P/24H-DAY	375	295	80		
EXTINCTION COEFF.:	.8				
TRANSMISSION COEFF.:	40.6				
EUPHOTIC DEPTH (M) :	5.1				

250474 SAMPLING STATION 10

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.27	2.62	.64	.42	4.0
PERCENT.	100	81	19	12.9	
GROSS P.OPT	4	3	0		
GROSS P/DAY	160	128	31		
NET P/SOL.DAY	121	97	24		
NET P/24H-DAY	93	74	18		
EXTINCTION COEFF.:	.6				
TRANSMISSION COEFF.:	50.9				
EUPHOTIC DEPTH (M) :	6.8				

290474 SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	21.97	12.54	9.42	.65	1.3
PERCENT.	100	58	42	2.9	
GROSS P.OPT	27	15	11		
GROSS P/DAY	319	182	136		
NET P/SOL.DAY	240	137	103		
NET P/24H-DAY	184	105	79		
EXTINCTION COEFF.:	2.2				
TRANSMISSION COEFF.:	10.1				
EUPHOTIC DEPTH (M) :	2				

290474 SAMPLING STATION 52

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	23.85	15.31	8.54	1.54	1.7
PERCENT.	100	65	35	6.4	
GROSS P.OPT	30	19	10		
GROSS P/DAY	542	348	194		
NET P/SOL.DAY	409	262	146		
NET P/24H-DAY	314	201	112		
EXTINCTION COEFF.:	1.4				
TRANSMISSION COEFF.:	23.2				
EUPHOTIC DEPTH (M) :	3.1				

290474 SAMPLING STATION 53

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	15.41	12.14	3.27	.58	3.7
PERCENT.	100	79	21	3.8	
GROSS P.OPT	19	15	4		
GROSS P/DAY	383	301	81		
NET P/SOL.DAY	289	227	61		
NET P/24H-DAY	222	174	47		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	26.3				
EUPHOTIC DEPTH (M) :	3.4				

300474 SAMPLING STATION 54

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	52.00	37.36	14.63	.70	2.5
PERCENT.	100	72	28	1.3	
GROSS P.OPT	65	47	18		
GROSS P/DAY	1104	793	310		
NET P/SOL.DAY	833	598	234		
NET P/24H-DAY	639	459	180		
EXTINCTION COEFF.:	1.5				
TRANSMISSION COEFF.:	20.9				
EUPHOTIC DEPTH (M) :	2.9				

300474 SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	32.51	11.74	20.76	.68	.5
PERCENT.	100	37	63	2.1	
GROSS P.OPT	41	14	26		
GROSS P/DAY	690	249	440		
NET P/SOL.DAY	520	188	332		
NET P/24H-DAY	399	144	255		
EXTINCTION COEFF.:	1.5				
TRANSMISSION COEFF.:	20.9				
EUPHOTIC DEPTH (M) :	2.9				

300474 SAMPLING STATION 57

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	10.86	8.10	2.76	.41	2.9
PERCENT.	100	75	25	3.8	
GROSS P.OPT	13	10	3		
GROSS P/DAY	1029	767	261		
NET P/SOL.DAY	776	579	197		
NET P/24H-DAY	596	444	151		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	70.4				
EUPHOTIC DEPTH (M) :	13.1				

300474 SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.06	3.20	.85	.51	3.7
PERCENT.	100	79	21	12.6	
GROSS P.OPT	5	4	1		
GROSS P/DAY	438	346	92		
NET P/SOL.DAY	331	261	69		
NET P/24H-DAY	254	200	53		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	73.5				
EUPHOTIC DEPTH (M) :	14.9				

300474

## SAMPLING STATION 58

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	9.17	7.50	1.56	.41	4.4
PERCENT.	100	82	18	4.5	
GROSS P.OPT	11	9	2		
GROSS P/DAY	675	552	122		
NET P/SOL.DAY	509	416	92		
NET P/24H-DAY	391	319	71		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	63.7				
EUPHOTIC DEPTH (M) :	10.2				

10574

## SAMPLING STATION 20

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	5.34	3.76	1.58	.25	2.3
PERCENT.	100	71	29	4.6	
GROSS P.OPT	6	4	1		
GROSS P/DAY	571	402	168		
NET P/SOL.DAY	423	298	125		
NET P/24H-DAY	335	236	99		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	72.8				
EUPHOTIC DEPTH (M) :	14.5				

10574

## SAMPLING STATION 65

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.43	2.61	.81	.23	3.2
PERCENT.	100	77	23	6.9	
GROSS P.OPT	4	3	1		
GROSS P/DAY	374	285	89		
NET P/SOL.DAY	277	211	66		
NET P/24H-DAY	219	167	52		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	73.3				
EUPHOTIC DEPTH (M) :	14.8				

10574

## SAMPLING STATION 64

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	8.62	3.76	4.85	.24	.7
PERCENT.	100	44	56	2.8	
GROSS P.OPT	10	4	6		
GROSS P/DAY	591	258	333		
NET P/SOL.DAY	438	191	247		
NET P/24H-DAY	347	151	195		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	61.1				
EUPHOTIC DEPTH (M) :	9.3				

10574

## SAMPLING STATION 16

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.93	1.96	2.97	.39	.6
PERCENT.	100	40	60	8.0	
GROSS P.OPT	6	2	3		
GROSS P/DAY	470	187	283		
NET P/SOL.DAY	349	139	210		
NET P/24H-DAY	276	110	166		
EXTINCTION COEFF.: .3					
TRANSMISSION COEFF.: 70.1					
EUPHOTIC DEPTH (M) : 13					

10574

## SAMPLING STATION 63

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.55	.68	1.87	.71	.3
PERCENT.	100	27	73	27.8	
GROSS P.OPT	3	0	2		
GROSS P/DAY	222	59	163		
NET P/SOL.DAY	165	43	121		
NET P/24H-DAY	130	34	95		
EXTINCTION COEFF.: .3					
TRANSMISSION COEFF.: 67.8					
EUPHOTIC DEPTH (M) : 11.8					

20574

## SAMPLING STATION 21

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.20	.34	.86	.50	.4
PERCENT.	100	29	71	41.7	
GROSS P.OPT	1	0	1		
GROSS P/DAY	93	26	66		
NET P/SOL.DAY	69	19	49		
NET P/24H-DAY	54	15	39		
EXTINCTION COEFF.: .4					
TRANSMISSION COEFF.: 64.6					
EUPHOTIC DEPTH (M) : 10.5					

20574

## SAMPLING STATION 22

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.46	.42	1.04	.55	.4
PERCENT.	100	29	71	37.5	
GROSS P.OPT	1	0	1		
GROSS P/DAY	114	32	81		
NET P/SOL.DAY	81	23	57		
NET P/24H-DAY	61	17	43		
EXTINCTION COEFF.: .3					
TRANSMISSION COEFF.: 71.7					
EUPHOTIC DEPTH (M) : 13.8					

## 20574 SAMPLING STATION 23

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.69	.88	.80	.32	1.1
PERCENT.	100	53	47	19.3	
GROSS P.OPT	1	0	0		
GROSS P/DAY	202	106	96		
NET P/SOL.DAY	144	75	68		
NET P/24H-DAY	109	57	52		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	80.5				
EUPHOTIC DEPTH (M) :	21.2				

## 20574 SAMPLING STATION 24

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.38	1.89	.48	.37	3.8
PERCENT.	100	80	20	15.5	
GROSS P.OPT	2	2	0		
GROSS P/DAY	132	105	27		
NET P/SOL.DAY	94	75	19		
NET P/24H-DAY	71	56	14		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	62.8				
EUPHOTIC DEPTH (M) :	9.9				

## 20574 SAMPLING STATION 25

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.85	3.57	1.28	.52	2.7
PERCENT.	100	74	26	10.7	
GROSS P.OPT	5	3	1		
GROSS P/DAY	365	269	96		
NET P/SOL.DAY	260	191	68		
NET P/24H-DAY	197	145	52		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	70.9				
EUPHOTIC DEPTH (M) :	13.4				

## 30574 SAMPLING STATION 15

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.21	1.39	.81	.56	1.7
PERCENT.	100	63	37	25.3	
GROSS P.OPT	2	1	0		
GROSS P/DAY	147	92	54		
NET P/SOL.DAY	105	66	38		
NET P/24H-DAY	79	50	29		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	67.8				
EUPHOTIC DEPTH (M) :	11.8				



30574

## SAMPLING STATION 14

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.38	1.91	1.46	.78	1.3
PERCENT.	100	57	43	23.1	
GROSS P.OPT	3	2	1		
GROSS P/DAY	264	149	114		
NET P/SOL.DAY	188	106	81		
NET P/24H-DAY	142	80	61		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	71.8				
EUPHOTIC DEPTH (M) :	13.9				

60574

## SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	38.43	7.03	31.40	.86	.2
PERCENT.	100	19	81	2.2	
GROSS P.OPT	41	7	33		
GROSS P/DAY	183	33	150		
NET P/SOL.DAY	130	23	107		
NET P/24H-DAY	99	18	81		
EXTINCTION COEFF.:	5.3				
TRANSMISSION COEFF.:	.4				
EUPHOTIC DEPTH (M) :	.8				

70574

## SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	13.37	4.12	9.25	.56	.4
PERCENT.	100	31	69	4.1	
GROSS P.OPT	14	4	9		
GROSS P/DAY	517	159	358		
NET P/SOL.DAY	368	113	255		
NET P/24H-DAY	279	86	193		
EXTINCTION COEFF.:	.6				
TRANSMISSION COEFF.:	51.2				
EUPHOTIC DEPTH (M) :	6.8				

70574

## SAMPLING STATION 56

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	14.66	1.77	12.89	.60	.1
PERCENT.	100	13	87	4.1	
GROSS P.OPT	15	1	13		
GROSS P/DAY	1583	191	1391		
NET P/SOL.DAY	1128	136	991		
NET P/24H-DAY	854	103	751		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	78.7				
EUPHOTIC DEPTH (M) :	19.2				

70574

## SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.93	1.64	3.28	.49	.5
PERCENT.	100	34	66	10.0	
GROSS P.OPT	5	1	3		
GROSS P/DAY	273	91	182		
NET P/SOL.DAY	195	65	129		
NET P/24H-DAY	147	49	98		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	62.8				
EUPHOTIC DEPTH (M) :	9.9				

80574

## SAMPLING STATION 72

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.37	1.63	.74	.44	2.1
PERCENT.	100	69	31	18.6	
GROSS P.OPT	2	1	0		
GROSS P/DAY	234	160	73		
NET P/SOL.DAY	166	114	52		
NET P/24H-DAY	126	86	39		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	76.9				
EUPHOTIC DEPTH (M) :	17.5				

80574

## SAMPLING STATION 71

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.69	1.20	.49	.21	2.4
PERCENT.	100	71	29	12.4	
GROSS P.OPT	1	1	0		
GROSS P/DAY	133	94	39		
NET P/SOL.DAY	95	67	27		
NET P/24H-DAY	72	51	21		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	72				
EUPHOTIC DEPTH (M) :	14				

80574

## SAMPLING STATION 70

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	.78	.20	.58	.25	.3
PERCENT.	100	27	73	32.6	
GROSS P.OPT	0	0	0		
GROSS P/DAY	86	22	63		
NET P/SOL.DAY	61	16	45		
NET P/24H-DAY	46	12	34		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	78.9				
EUPHOTIC DEPTH (M) :	19.4				

## 80574 SAMPLING STATION 69

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.04	.59	2.45	.32	.2
PERCENT.	100	20	80	10.6	
GROSS P.OPT	3	0	2		
GROSS P/DAY	202	39	163		
NET P/SOL.DAY	144	28	116		
NET P/24H-DAY	109	21	88		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	67.8				
EUPHOTIC DEPTH (M) :	11.8				

## 80574 SAMPLING STATION 68

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.85	.86	1.99	.33	.4
PERCENT.	100	31	69	11.8	
GROSS P.OPT	3	0	2		
GROSS P/DAY	115	34	80		
NET P/SOL.DAY	82	24	57		
NET P/24H-DAY	62	18	43		
EXTINCTION COEFF.:	.6				
TRANSMISSION COEFF.:	52.9				
EUPHOTIC DEPTH (M) :	7.2				

## 90574 SAMPLING STATION 16

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.88	1.02	.86	.35	1.1
PERCENT.	100	55	45	18.5	
GROSS P.OPT	2	1	0		
GROSS P/DAY	117	63	53		
NET P/SOL.DAY	83	45	38		
NET P/24H-DAY	63	34	29		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	66				
EUPHOTIC DEPTH (M) :	11				

## 90574 SAMPLING STATION 66

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.77	1.51	1.25	.47	1.2
PERCENT.	100	55	45	17.0	
GROSS P.OPT	2	1	1		
GROSS P/DAY	199	109	90		
NET P/SOL.DAY	142	77	64		
NET P/24H-DAY	107	58	48		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	69.8				
EUPHOTIC DEPTH (M) :	12.8				

90574

## SAMPLING STATION 67

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.99	2.01	.97	.43	2.0
PERCENT.	100	68	32	14.6	
GROSS P.OPT	3	2	1		
GROSS P/DAY	220	148	72		
NET P/SOL.DAY	157	106	51		
NET P/24H-DAY	119	80	38		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	70.4				
EUPHOTIC DEPTH (M) :	13.1				

90574

## SAMPLING STATION 20

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.68	1.55	1.12	.41	1.3
PERCENT.	100	59	41	15.6	
GROSS P.OPT	2	1	1		
GROSS P/DAY	253	146	106		
NET P/SOL.DAY	180	104	75		
NET P/24H-DAY	136	79	57		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	76				
EUPHOTIC DEPTH (M) :	16.8				

90574

## SAMPLING STATION 61

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.21	.33	.87	.52	.3
PERCENT.	100	28	72	42.9	
GROSS P.OPT	1	0	0		
GROSS P/DAY	24	6	17		
NET P/SOL.DAY	17	4	12		
NET P/24H-DAY	13	3	9		
EXTINCTION COEFF.:	1.2				
TRANSMISSION COEFF.:	28.1				
EUPHOTIC DEPTH (M) :	3.6				

100574

## SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	24.12	1.71	22.41	.72	.0
PERCENT.	100	8	92	2.9	
GROSS P.OPT	25	1	24		
GROSS P/DAY	639	45	593		
NET P/SOL.DAY	455	32	423		
NET P/24H-DAY	345	24	320		
EXTINCTION COEFF.:	.9				
TRANSMISSION COEFF.:	37.7				
EUPHOTIC DEPTH (M) :	4.7				

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LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK . V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

270574 SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	21.57	7.33	14.24	.97	.5
PERCENT.	100	34	66	4.5	
GROSS P.OPT	23.1	7.8	15.3		
GROSS P/DAY	793	269	523		
NET P/SOL.DAY	588	199	388		
NET P/24H-DAY	485	165	320		
EXTINCTION COEFF.:	.8				
TRANSMISSION COEFF.:	43.5				
EUPHOTIC DEPTH (M) :	5.5				

270574 SAMPLING STATION 2

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	11.40	7.45	3.94	.53	1.8
PERCENT.	100	66	34	4.6	
GROSS P.OPT	12.2	8.0	4.2		
GROSS P/DAY	737	482	255		
NET P/SOL.DAY	546	357	189		
NET P/24H-DAY	451	295	156		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	62.2				
EUPHOTIC DEPTH (M) :	9.7				

270574 SAMPLING STATION 4

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.96	1.72	1.23	.35	1.3
PERCENT.	100	59	41	11.8	
GROSS P.OPT	3.1	1.8	1.3		
GROSS P/DAY	184	107	76		
NET P/SOL.DAY	136	79	56		
NET P/24H-DAY	112	65	46		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	61.1				
EUPHOTIC DEPTH (M) :	9.3				

280574 SAMPLING STATION 20

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.70	.28	1.41	.36	.2
PERCENT.	100	17	83	21.4	
GROSS P.OPT	1.8	.3	1.5		
GROSS P/DAY	375	63	311		
NET P/SOL.DAY	278	47	230		
NET P/24H-DAY	229	38	190		
EXTINCTION COEFF.: .1					
TRANSMISSION COEFF.: 87					
EUPHOTIC DEPTH (M) : 33.1					

280574 SAMPLING STATION 25

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.79	1.49	.29	.21	5.0
PERCENT.	100	84	16	12.0	
GROSS P.OPT	1.9	1.6	.3		
GROSS P/DAY	218	182	35		
NET P/SOL.DAY	162	135	26		
NET P/24H-DAY	133	111	21		
EXTINCTION COEFF.: .2					
TRANSMISSION COEFF.: 77.7					
EUPHOTIC DEPTH (M) : 18.3					

280574 SAMPLING STATION 22

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.41	1.92	2.48	.33	.7
PERCENT.	100	44	56	7.6	
GROSS P.OPT	4.7	2.0	2.6		
GROSS P/DAY	722	315	406		
NET P/SOL.DAY	535	233	301		
NET P/24H-DAY	442	193	249		
EXTINCTION COEFF.: .1					
TRANSMISSION COEFF.: 82.9					
EUPHOTIC DEPTH (M) : 24.6					

290574 SAMPLING STATION 5

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	20.41	12.71	7.69	.35	1.6
PERCENT.	100	63	37	1.7	
GROSS P.OPT	21.9	13.6	8.2		
GROSS P/DAY	276	171	104		
NET P/SOL.DAY	204	127	77		
NET P/24H-DAY	168	105	63		
EXTINCTION COEFF.: 2.2					
TRANSMISSION COEFF.: 10.3					
EUPHOTIC DEPTH (M) : 2					

290574

## SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	5.09	1.45	3.64		
PERCENT.	100	29	71	.55	.3
GROSS P./OPT	5.4	1.5	3.9	10.9	
GROSS P/DAY	420	119	301		
NET P/SOL.DAY	312	88	223		
NET P/24H-DAY	257	73	184		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	69				
EUPHOTIC DEPTH (M) :	12.4				

290574

## SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.15	.29	3.86		
PERCENT.	100	8	92	.35	.0
GROSS P./OPT	4.4	.3	4.1	8.6	
GROSS P/DAY	727	51	676		
NET P/SOL.DAY	539	37	501		
NET P/24H-DAY	445	31	414		
EXTINCTION COEFF.:	.1				
TRANSMISSION COEFF.:	83.9				
EUPHOTIC DEPTH (M) :	26.3				

290574

## SAMPLING STATION 15

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.86	.75	1.10		
PERCENT.	100	41	59	.33	.6
GROSS P./OPT	2.0	.8	1.1	18.0	
GROSS P/DAY	194	79	115		
NET P/SOL.DAY	144	58	85		
NET P/24H-DAY	119	48	70		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	74.5				
EUPHOTIC DEPTH (M) :	15.6				

300574

## SAMPLING STATION 21

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	14.12	2.46	11.66		
PERCENT.	100	18	82	.77	.2
GROSS P./OPT	15.1	2.6	12.5	5.5	
GROSS P/DAY	888	154	733		
NET P/SOL.DAY	658	114	543		
NET P/24H-DAY	543	94	448		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	61.4				
EUPHOTIC DEPTH (M) :	9.4				

300574 SAMPLING STATION 17

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.92	.11	1.80	.45	.0
PERCENT.	100	6	94	23.5	
GROSS P.OPT	2.0	.1	1.9		
GROSS P/DAY	364	21	342		
NET P/SOL.DAY	270	16	253		
NET P/24H-DAY	222	13	209		
EXTINCTION COEFF.:	.1				
TRANSMISSION COEFF.:	85				
EUPHOTIC DEPTH (M) :	28.5				

300574 SAMPLING STATION 11

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	35.14	26.75	8.39	.53	3.1
PERCENT.	100	77	23	1.5	
GROSS P.OPT	37.7	28.7	9.0		
GROSS P/DAY	981	746	234		
NET P/SOL.DAY	727	553	173		
NET P/24H-DAY	600	457	143		
EXTINCTION COEFF.:	1				
TRANSMISSION COEFF.:	33.4				
EUPHOTIC DEPTH (M) :	4.1				

300574 SAMPLING STATION 12

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	5.77	1.05	4.72	.45	.2
PERCENT.	100	19	81	7.8	
GROSS P.OPT	6.2	1.1	5.0		
GROSS P/DAY	359	65	293		
NET P/SOL.DAY	266	48	217		
NET P/24H-DAY	219	40	179		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	61.1				
EUPHOTIC DEPTH (M) :	9.3				



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LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK , V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

160774 SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	6.77	4.90	1.87	.30	2.6
PERCENT.	100	73	27	4.4	
GROSS P.OPT	7.6	5.5	2.1		
GROSS P/DAY	350	253	96		
NET P/SOL.DAY	229	166	63		
NET P/24H-DAY	169	122	46		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	62.8				
EUPHOTIC DEPTH (M) :	9.9				

170774 SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.86	2.92	.93	.20	3.1
PERCENT.	100	76	24	5.2	
GROSS P.OPT	4.3	3.2	1.0		
GROSS P/DAY	164	124	39		
NET P/SOL.DAY	107	81	26		
NET P/24H-DAY	79	60	19		
EXTINCTION COEFF.:	.5				
TRANSMISSION COEFF.:	56.8				
EUPHOTIC DEPTH (M) :	8.1				

180774 SAMPLING STATION 20

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.51	.42	2.09	.43	.2
PERCENT.	100	17	83	17.2	
GROSS P.OPT	2.8	.4	2.3		
GROSS P/DAY	124	20	103		
NET P/SOL.DAY	81	13	67		
NET P/24H-DAY	59	10	49		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	61.4				
EUPHOTIC DEPTH (M) :	9.4				

180774

## SAMPLING STATION 16

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.71	2.70	1.01	.28	2.6
PERCENT.	100	73	27	7.7	
GROSS P.OPT	4.1	3.0	1.1		
GROSS P/DAY	152	110	41		
NET P/SOL.DAY	99	72	27		
NET P/24H-DAY	73	53	20		
EXTINCTION COEFF.:	.5				
TRANSMISSION COEFF.:	55.6				
EUPHOTIC DEPTH (M) :	7.8				

190774

## SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.14	.48	.65	.29	.7
PERCENT.	100	43	57	25.7	
GROSS P.OPT	1.2	.5	.7		
GROSS P/DAY	81	34	46		
NET P/SOL.DAY	53	22	30		
NET P/24H-DAY	39	16	22		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	71.3				
EUPHOTIC DEPTH (M) :	13.6				

SEPTEMBRE 1974

LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK, V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

170974

SAMPLING STATION 1

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	20.39	15.63	4.75	.29	3.2
PERCENT.	100	77	23	1.4	
GROSS P.OPT	21.9	16.8	5.1		
GROSS P/DAY	203	156	47		
NET P/SOL.DAY	136	104	31		
NET P/24H-DAY	69	53	16		
EXTINCTION COEFF.:	1.7				
TRANSMISSION COEFF.:	16.5				
EUPHOTIC DEPTH (M) :	2.5				

170974

SAMPLING STATION 2

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	12.18	9.71	2.47	.25	3.9
PERCENT.	100	80	20	2.1	
GROSS P.OPT	13.1	10.4	2.6		
GROSS P/DAY	243	194	49		
NET P/SOL.DAY	163	130	33		
NET P/24H-DAY	82	65	16		
EXTINCTION COEFF.:	.8				
TRANSMISSION COEFF.:	40.6				
EUPHOTIC DEPTH (M) :	5.1				

180974

SAMPLING STATION 20

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.21	2.14	2.06	.19	1.0
PERCENT.	100	51	49	4.7	
GROSS P.OPT	4.5	2.3	2.2		
GROSS P/DAY	196	100	96		
NET P/SOL.DAY	131	66	64		
NET P/24H-DAY	66	33	32		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	67.9				
EUPHOTIC DEPTH (M) :	11.9				

180974 SAMPLING STATION 19

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.27	.00	3.33	.15	.0
PERCENT.	97	0	100	4.7	
GROSS P.OPT	3.5	.0	3.5		
GROSS P/DAY	152	0	155		
NET P/SOL.DAY	102	0	104		
NET P/24H-DAY	51	0	52		
EXTINCTION COEFF.:	.3				
TRANSMISSION COEFF.:	67.9				
EUPHOTIC DEPTH (M) :	11.9				

180974 SAMPLING STATION 18

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.31	.84	2.47	.19	.3
PERCENT.	100	26	74	5.7	
GROSS P.OPT	3.5	.9	2.6		
GROSS P/DAY	198	50	148		
NET P/SOL.DAY	133	33	99		
NET P/24H-DAY	67	17	50		
EXTINCTION COEFF.:	.2				
TRANSMISSION COEFF.:	74				
EUPHOTIC DEPTH (M) :	15.3				

180974 SAMPLING STATION 17

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.81	.05	2.76	.18	.0
PERCENT.	100	2	98	6.4	
GROSS P.OPT	3.0	.0	2.9		
GROSS P/DAY	112	2	110		
NET P/SOL.DAY	75	1	73		
NET P/24H-DAY	38	0	37		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	63.7				
EUPHOTIC DEPTH (M) :	10.2				

180974 SAMPLING STATION 16

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.69	.18	2.50	.18	.0
PERCENT.	100	7	93	6.9	
GROSS P.OPT	2.8	.2	2.6		
GROSS P/DAY	53	3	50		
NET P/SOL.DAY	36	2	33		
NET P/24H-DAY	18	1	16		
EXTINCTION COEFF.:	.8				
TRANSMISSION COEFF.:	40.6				
EUPHOTIC DEPTH (M) :	5.1				

190974 SAMPLING STATION 5

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	7.13	2.93	4.20	.39	.6
PERCENT.	100	42	58	5.4	
GROSS P.OPT	7.6	3.1	4.5		
GROSS P/DAY	47	19	28		
NET P/SOL.DAY	31	13	18		
NET P/24H-DAY	16	6	9		
EXTINCTION COEFF.:	2.6				
TRANSMISSION COEFF.:	6.7				
EUPHOTIC DEPTH (M) :	1.7				

190974 SAMPLING STATION 55

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.52	1.46	3.05	.19	.4
PERCENT.	100	33	67	4.3	
GROSS P.OPT	4.8	1.5	3.2		
GROSS P/DAY	60	19	40		
NET P/SOL.DAY	40	13	27		
NET P/24H-DAY	20	6	13		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

190974 SAMPLING STATION 8

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.78	1.75	2.02	.17	.8
PERCENT.	100	47	53	4.6	
GROSS P.OPT	4.0	1.8	2.1		
GROSS P/DAY	75	35	40		
NET P/SOL.DAY	50	23	27		
NET P/24H-DAY	25	11	13		
EXTINCTION COEFF.:	.8				
TRANSMISSION COEFF.:	40.6				
EUPHOTIC DEPTH (M) :	5.1				

190974 SAMPLING STATION 9

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.40	.87	1.53	.18	.5
PERCENT.	100	37	63	7.8	
GROSS P.OPT	2.5	.9	1.6		
GROSS P/DAY	80	29	51		
NET P/SOL.DAY	53	19	34		
NET P/24H-DAY	27	9	17		
EXTINCTION COEFF.:	.5				
TRANSMISSION COEFF.:	58.2				
EUPHOTIC DEPTH (M) :	8.5				

OCTOBRE 1974

LABORATORIUM VOOR EKOLOGIE EN SYSTEMATIEK, V.U.B.

PRIMARY PRODUCTION NORTH SEA (MG C/M3/H AND MG C/M2/DAY)

11074 SAMPLING STATION 25

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	.64	.17	.46	.07	.3
PERCENT.	100	28	72	12.1	
GROSS P.OPT	.6	.1	.5		
GROSS P/DAY	8	2	6		
NET P/SOL.DAY	5	1	4		
NET P/24H-DAY	2	0	2		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

11074 SAMPLING STATION 24

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.95	.64	1.31	.20	.4
PERCENT.	100	33	67	10.6	
GROSS P.OPT	2.1	.6	1.4		
GROSS P/DAY	65	21	43		
NET P/SOL.DAY	43	14	29		
NET P/24H-DAY	21	7	14		
EXTINCTION COEFF.:	.5				
TRANSMISSION COEFF.:	58.2				
EUPHOTIC DEPTH (M) :	8.5				

11074 SAMPLING STATION 23

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.55	.78	1.77	.60	.4
PERCENT.	100	31	69	23.6	
GROSS P.OPT	2.7	.8	1.9		
GROSS P/DAY	67	20	47		
NET P/SOL.DAY	45	13	31		
NET P/24H-DAY	22	6	15		
EXTINCTION COEFF.:	.6				
TRANSMISSION COEFF.:	50.9				
EUPHOTIC DEPTH (M) :	6.8				

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## SAMPLING STATION 22

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.13	.30	1.83	.35	.1
PERCENT.	100	15	85	16.3	
GROSS P.OPT	2.3	.3	1.9		
GROSS P/DAY	85	12	73		
NET P/SOL.DAY	56	8	48		
NET P/24H-DAY	28	4	24		
EXTINCTION COEFF.:	.4				
TRANSMISSION COEFF.:	63.7				
EUPHOTIC DEPTH (M) :	10.2				

11074

## SAMPLING STATION 21

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	2.14	.80	1.34	.20	.6
PERCENT.	100	38	62	9.3	
GROSS P.OPT	2.3	.8	1.4		
GROSS P/DAY	28	10	17		
NET P/SOL.DAY	19	7	11		
NET P/24H-DAY	9	3	6		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

21074

## SAMPLING STATION 16

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	1.97	.01	1.95	.22	.0
PERCENT.	100	1	99	11.3	
GROSS P.OPT	2.1	.0	2.1		
GROSS P/DAY	26	0	26		
NET P/SOL.DAY	17	0	17		
NET P/24H-DAY	8	0	8		
EXTINCTION COEFF.:	1.3				
TRANSMISSION COEFF.:	25.9				
EUPHOTIC DEPTH (M) :	3.4				

31074

## SAMPLING STATION 7

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	4.03	.45	3.58	.67	.1
PERCENT.	100	12	88	16.6	
GROSS P.OPT	4.3	.4	3.8		
GROSS P/DAY	134	15	118		
NET P/SOL.DAY	89	10	79		
NET P/24H-DAY	45	5	40		
EXTINCTION COEFF.:	.5				
TRANSMISSION COEFF.:	58.2				
EUPHOTIC DEPTH (M) :	8.5				

31074

## SAMPLING STATION 7

	TOTAL	NETPL	NANNO	DARK	RATIO
VITRO	3.53	.69	2.83	.52	.2
PERCENT.	100	20	80	14.7	
GROSS P.OPT	3.8	.7	3.0		
GROSS P/DAY	23	4	18		
NET P/SOL.DAY	15	3	12		
NET P/24H-DAY	7	1	6		
EXTINCTION COEFF.:	2.6				
TRANSMISSION COEFF.:	6.7				
EUPHOTIC DEPTH (M) :	1.7				