

## Supplementary Material

Table 1S. Sampling sketch for the 2 experiments performed in June 2008. Water pumping means that sampling was performed at 0, 5 and 10m. Zooplankton sampling: net between 12 m and surface.

<i>P experiment</i>			
June-10	P1	4 pm: water pumping: all mesocosms + outside	sed. trap 1
June-11		9 am: seeding	
	P2	4 pm: water pumping: all mesocosms zooplankton sampling: 'outside'	sed. trap 2
June-12	P3	9 am: water pumping: all mesocosms	
June-13	P4	9 am: water pumping: all mesocosms + outside	sed. trap 3
June-14		no sampling of the mesocosms: bad weather conditions	
June-15	P5	9 am: water pumping: all mesocosms	sed. trap 4
June-16	P6	9 am: water pumping: all mesocosms + outside	
June-17	P7	9 am: water pumping: all mesocosms	sed. trap 4
June-18	P8	9 am: water pumping: all mesocosms + outside zooplankton sampling: 'outside', C2, C3, D2, D3	
<i>Q experiment</i>			
June-20	Q1	9 am: water pumping: all mesocosms + outside 12 am : seeding	sed. trap 1
	Q2	6 pm: water pumping: all mesocosms zooplankton sampling: 'outside'	
June-21	Q3	9 am: water pumping: all mesocosms	sed. trap 2
June-22	Q4	9 am: water pumping: all mesocosms + outside	
June-23	Q5	9 am: water pumping: all mesocosms	sed trap 3
June-24	Q6	9 am: water pumping: all mesocosms	
June-25	Q7	9 am: water pumping: all mesocosms + outside	sed trap 4
June-26	Q8	9 am: water pumping: all mesocosms	
June-27	Q9	9 am: water pumping: all mesocosms + outside zooplankton sampling: 'outside', C1, C2, D1, D2	

Table 2S. Whole data set of p-values. For meaning of label parameters, see section 6.1 *Measured parameters.*

	Time*	sample label	DFe	DIP	Chla	BA1	BA2	N <sub>2</sub> Fix	PP	BR
P_0m	-17	P1	NSO	0.225	0.011	NS	0.169	0.144	0.058	NS
	48	P4	0.919	0.560	0.529	NS	0.118	NSO	NSO	NS
	120	P6	0.015	0.667	0.184	NS	0.317	NSO	NSO	NS
	168	P8	0.333	0.321	0.184	NS	0.484	0.457	0.548	NS
P_5m	-17	P1	NSO	STAT	STAT	0.771	0.021	0.983	0.277	0.764
	48	P4	NSO	0.199	STAT	NA	0.083	NSO	NSO	0.784
	120	P6	STAT	0.423	0.826	0.129	0.205	NSO	NSO	NS
	168	P8	0.270	0.478	0.225	0.558	0.557	0.790	0.492	0.577
P_10m	-17	P1	NSO	0.038	0.317	NS	0.070	NS	NS	NS
	48	P4	0.383	0.596	0.478	NS	0.444	NS	NS	NS
	120	P6	STAT	0.423	STAT	NS	0.561	NS	NS	NS
	168	P8	0.016	STAT	0.338	NS	0.203	NS	NS	NS
Q_0m	-2	Q1	0.154	<DL	0.808	NS	NA	0.160	0.074	NS
	46	Q4	0.846	0.667	0.188	NS	NA	0.839	NSO	NS
	118	Q7	0.120	<DL	0.099	NS	NA	0.068	0.209	NS
	166	Q9	0.353	<DL	0.951	NS	NA	0.257	0.517	NS
Q_5m	-2	Q1	0.015	<DL	0.430	0.637	NA	0.042	0.126	0.971
	46	Q4	0.168	0.667	0.130	0.312	NA	NSO	0.270	0.653
	118	Q7	0.902	<DL	0.506	0.184	NA	0.944	NSO	NSO
	166	Q9	0.423	0.478	0.950	0.497	NA	0.294	0.190	0.423
Q_10m	-2	Q1	0.423	<DL	0.338	NS	NA	NS	NS	NS
	46	Q4	0.624	<DL	0.840	NS	NA	NS	NS	NS
	118	Q7	STAT	<DL	0.321	NS	NA	NS	NS	NS
	166	Q9	0.667	0.423	0.133	NS	NA	NS	NS	NS
		<b>n=</b>	<b>80</b>	<b>48</b>	<b>96</b>	<b>28</b>	<b>48</b>	<b>44</b>	<b>40</b>	<b>24</b>

\*: relative to the time of seeding

NSO: not sampled OUTSIDE

NS: no sampling was performed

NA: sampled but no analysis available

<DL: sampled and analyzed but all below detection limit.

STAT: 2 samples among triplicates having rigorously the same concentration: statis

n= total number of samples considered for each parameter

BA1: bacterial abundance from cytometry

BA2: bacteria abundance from microscopy (dapi stained cells)