

**Table S1.** Environmental factors in BP (large areas) and SP (small areas) ponds during a culture period (Mean ± SD)

<b>Index</b>		<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>	<b>Sept.</b>	<b>Oct.</b>
T	BP	23.90 ± 0.07	28.90 ± 0.3	27.67 ± 0.12	28.80 ± 0.26	25.17 ± 0.32	20.03 ± 0.12
	SP	24.00 ± 0.35	28.63 ± 0.12	27.50 ± 0.30	28.93 ± 0.15	25.43 ± 0.12	20.33 ± 0.12
DO	BP	4.05 ± 0.52	4.36 ± 0.14	1.87 ± 0.57	6.36 ± 1.90	9.85 ± 2.47	2.71 ± 1.16
	SP	4.07 ± 3.16	3.43 ± 1.65	2.14 ± 1.19	5.48 ± 3.28	8.88 ± 1.09	2.27 ± 0.63
pH	BP	7.65 ± 0.08	7.25 ± 0.61	7.56 ± 0.01	7.87 ± 0.24	8.35 ± 0.15	7.85 ± 0.11
	SP	7.61 ± 0.18	7.41 ± 0.20	7.57 ± 0.01	7.81 ± 0.24	8.03 ± 0.18	7.71 ± 0.09
SD	BP	29.00 ± 5.29	32.33 ± 2.89	34.67 ± 4.04	28.00 ± 6.24	27.63 ± 1.15	30.00 ± 0.00
	SP	28.67 ± 7.77	33.67 ± 4.51	23.00 ± 3.61	27.67 ± 1.15	27.33 ± 3.75	29.00 ± 1.00
PO <sub>4</sub> <sup>3-</sup> -P	BP	0.83 ± 0.01	0.78 ± 0.52	0.69 ± 0.47	1.08 ± 0.67	1.02 ± 0.84	1.04 ± 0.38
	SP	0.62 ± 0.34	0.38 ± 0.26	0.40 ± 0.37	0.60 ± 0.37	0.39 ± 0.46	0.57 ± 0.42
TP	BP	2.33 ± 0.11	2.32 ± 0.97	2.16 ± 0.57	2.64 ± 0.91	2.45 ± 1.49	2.43 ± 0.62
	SP	2.17 ± 0.32	1.60 ± 0.53	1.35 ± 0.65	1.77 ± 1.05	1.37 ± 0.76	1.59 ± 0.85
TN	BP	3.83 ± 2.27	2.13 ± 0.84	4.37 ± 0.21	3.07 ± 0.95	1.73 ± 0.06	3.67 ± 1.60
	SP	2.93 ± 0.93	2.40 ± 1.30	5.30 ± 1.51	3.70 ± 0.44	2.60 ± 0.46	7.70 ± 4.81
NH <sub>4</sub> <sup>+</sup> -N	BP	0.39 ± 0.12	0.35 ± 0.52	0.45 ± 0.25	0.23 ± 0.09	0.45 ± 0.28	0.77 ± 1.09
	SP	0.32 ± 0.34	0.77 ± 0.79	1.14 ± 0.39	0.73 ± 0.87	1.77 ± 0.63	1.75 ± 1.58
NO <sub>3</sub> <sup>-</sup> -N	BP	0.27 ± 0.29	0.20 ± 0.10	0.80 ± 0.78	0.57 ± 0.06	0.87 ± 0.06	1.00 ± 0.10
	SP	0.37 ± 0.25	0.67 ± 0.15	0.90 ± 0.66	0.73 ± 0.38	0.90 ± 0.26	1.13 ± 0.75
NO <sub>2</sub> <sup>-</sup> -N	BP	0.06 ± 0.02	0.07 ± 0.03	0.09 ± 0.08	0.05 ± 0.02	0.15 ± 0.11	0.09 ± 0.07
	SP	0.16 ± 0.15	0.09 ± 0.01	0.07 ± 0.04	0.20 ± 0.10	0.21 ± 0.14	0.04 ± 0.04