

## Supplementary Material

**Table S1.** Concentrations of chloride, nitrate, phosphate and sulfate in the nutrient solutions used in experiments 1 and 2 and 3 at the beginning (t1) and end (t2) of the treatment period. TM, artificial sea water Tropic Marine; BW1, brine water location 1 (Bad Saarow); BW2, brine water location 2 (Heiligenstadt); NaCl, sodium chloride solution; †, calculated concentration. BW1\*, t2 (exp. 1) = no data available

Experiment 1										
	t1					t2				
	Cl (g l <sup>-1</sup> )	NO <sub>3</sub> (g l <sup>-1</sup> )	PO <sub>4</sub> (g l <sup>-1</sup> )	SO <sub>4</sub> (g l <sup>-1</sup> )	NaCl <sup>†</sup> (g l <sup>-1</sup> )	Cl (g l <sup>-1</sup> )	NO <sub>3</sub> (g l <sup>-1</sup> )	PO <sub>4</sub> (g l <sup>-1</sup> )	SO <sub>4</sub> (g l <sup>-1</sup> )	NaCl <sup>†</sup> (g l <sup>-1</sup> )
Control	6.44	0.93	0.16	0.19	10.61	6.40	0.87	0.12	0.18	10.55
2.4% TM	12.40	0.89	0.15	1.64	20.43	12.29	0.80	0.13	1.38	20.26
2.4% BW1*	14.56	0.89	0.15	0.44	24.01					
2.4% BW2	13.55	0.96	0.16	0.61	22.34	13.50	0.91	0.12	0.53	22.25
2.4% NaCl	15.03	0.93	0.15	0.20	24.78	14.95	0.87	0.13	0.18	24.64

  

Experiment 2 and 3										
	t1					t2				
	Cl (g l <sup>-1</sup> )	NO <sub>3</sub> (g l <sup>-1</sup> )	PO <sub>4</sub> (g l <sup>-1</sup> )	SO <sub>4</sub> (g l <sup>-1</sup> )	NaCl <sup>†</sup> (g l <sup>-1</sup> )	Cl (g l <sup>-1</sup> )	NO <sub>3</sub> (g l <sup>-1</sup> )	PO <sub>4</sub> (g l <sup>-1</sup> )	SO <sub>4</sub> (g l <sup>-1</sup> )	NaCl <sup>†</sup> (g l <sup>-1</sup> )
Control	6.40	0.99	0.20	0.22	10.56	6.44	0.96	0.17	0.20	10.61
2.4% TM	12.15	0.94	0.19	1.69	20.02	12.21	0.94	0.18	1.68	20.12
2.4% BW1	14.44	1.00	0.15	0.46	23.79	14.46	0.99	0.09	0.45	23.84
2.4% BW2	13.02	0.99	0.19	0.62	21.47	13.04	0.98	0.17	0.61	21.50
2.4% NaCl	15.04	1.02	0.19	0.21	24.78	15.20	1.02	0.17	0.21	25.05

**Table S2.** Content of total chlorophylls and carotenoids, chlorophyll *a*, chlorophyll *b*, lutein and  $\beta$ -carotene in purchased *S. europaea*. Data presented as means  $\pm$  SD, n=4.

Chlorophylls and carotenoids (ng mg <sup>-1</sup> DW)		
Total chlorophylls	2865.12	$\pm$ 258.71
Chlorophyll <i>a</i>	539.50	$\pm$ 53.97
Chlorophyll <i>b</i>	2325.62	$\pm$ 205.29
Total carotenoids	494.99	$\pm$ 65.73
$\beta$ -Carotene	125.65	$\pm$ 6.65
Lutein	192.74	$\pm$ 17.16