



Figure S1. Seasonal variation A) Water Temperature and B) Water Salinity of *Ulva rigida* tanks produced by IMTA under different conditions of flow rate, high (○) and low (▲), and of stocking density, high (full lines) and low (dotted lines). Standard deviations are represented as bars (n = 3, in triplicate).

Table S1: Recommended Daily Intakes (%) and Recommended Daily Allowances (g/day) for macro- and microminerals of dry *Ulva. rigida* produced by IMTA under different conditions of flow rate, high (H_{Fr}) and low (L_{Fr}), and of stocking density, high (H_{Sd}) and low (L_{Sd}).

Mineral	Condition	Summer 16'		Autumn 16'		Winter 17'		Spring 17'	
		% RDI	RDA (g/day)	% RDI	RDA (g/day)	% RDI	RDA (g/day)	% RDI	RDA (g/day)
Na	L _{Fr} /L _{Sd}	15.0	61.5	14.8	62.2	16.1	57.1	18.3	50.2
	H _{Fr} /L _{Sd}	16.0	57.7	15.1	61.7	15.9	58.1	18.8	49.1
	L _{Fr} /H _{Sd}	15.1	60.9	15.1	61.3	16.1	57.3	17.1	53.8
	H _{Fr} /H _{Sd}	15.0	61.4	14.4	64.2	15.2	60.7	18.6	49.5
K	L _{Fr} /L _{Sd}	5.6		4.6		6.7		7.2	
	H _{Fr} /L _{Sd}	6.1		5.2		6.1		6.5	
	L _{Fr} /H _{Sd}	5.2		5.2		5.8		5.6	
	H _{Fr} /H _{Sd}	6.4		4.5		5.7		6.1	
Ca	L _{Fr} /L _{Sd}	4.2	569.7	4.2	563.6	3.8	627.8	4.5	528.2
	H _{Fr} /L _{Sd}	3.9	603.3	4.2	572.6	3.7	637.0	4.3	556.3
	L _{Fr} /H _{Sd}	3.7	646.2	4.1	586.6	4.0	600.3	4.4	541.7
	H _{Fr} /H _{Sd}	3.9	606.3	4.1	580.3	3.8	621.7	4.3	550.3
Mg	L _{Fr} /L _{Sd}	73.8	10.9	75.5	10.6	68.0	11.8	87.8	9.1
	H _{Fr} /L _{Sd}	75.6	10.6	74.2	11.0	65.3	12.3	91.2	8.8
	L _{Fr} /H _{Sd}	72.9	11.0	73.4	11.1	65.7	12.2	77.7	10.3

	H _{Fr} /H _{Sd}	74.4	10.8	69.8	11.7	61.6	13.0	83.8	9.5
	L _{Fr} /L _{Sd}	108.8	55.1	93.6	65.7	118.0	51.2	122.4	49.6
Fe	H _{Fr} /L _{Sd}	96.8	62.3	103.6	65.2	113.0	54.2	143.3	43.8
	L _{Fr} /H _{Sd}	63.5	95.2	77.3	91.1	135.1	50.6	117.9	50.9
	H _{Fr} /H _{Sd}	91.9	65.3	76.0	79.6	124.2	48.6	195.6	31.5
	L _{Fr} /L _{Sd}	15.2	105.5	15.2	106.3	7.4	243.7	6.0	266.8
Mn	H _{Fr} /L _{Sd}	12.2	132.9	14.7	108.7	9.4	260.8	10.4	159.2
	L _{Fr} /H _{Sd}	9.6	166.5	10.3	156.4	10.9	149.0	8.9	185.0
	H _{Fr} /H _{Sd}	7.8	207.5	8.8	187.7	11.0	156.4	16.4	97.8
	L _{Fr} /L _{Sd}	12.6	374.2	13.0	365.1	10.7	451.4	5.4	873.9
Cu	H _{Fr} /L _{Sd}	13.1	358.5	12.4	382.2	10.5	456.4	6.6	724.6
	L _{Fr} /H _{Sd}	10.3	457.9	13.0	361.9	10.9	435.5	6.0	798.3
	H _{Fr} /H _{Sd}	13.2	367.3	13.9	340.1	12.3	389.7	8.5	565.1
	L _{Fr} /L _{Sd}	1.0	2643.4	1.1	2523.0	1.0	2718.5	0.6	4824.9
Zn	H _{Fr} /L _{Sd}	1.0	2668.4	1.0	2813.3	0.9	3037.9	0.7	4069.0
	L _{Fr} /H _{Sd}	0.7	3720.8	1.1	2535.4	1.2	2197.1	0.7	3923.4
	H _{Fr} /H _{Sd}	0.6	4254.2	1.1	2459.9	1.2	2244.7	1.1	2509.8

RDI – Recommended Daily Intake for a male adult with a bodyweight of 70 kg according to the World Health Organization (2002); Calculation of RDI is based on a daily intake of 8 g dry weight of seaweed; RDA – Recommended daily allowance based on the established upper limit intake according to National Health and Medical Research Council (2006); Values of RDI and RDA are expressed as mean for summer (Aug 16' + Sep 16'), autumn (Oct 16' + Nov 16'), winter (Jan 17' + Feb 17') and spring (May 17' and Jun 17').