Table S1. NH_4^+ and NO_3^- concentrations (µM, n = 3) in the seawater ten minutes after adding 25 µM of each inorganic DIN forms. Seawater from all aquaria was renewed every 5-7 days (renewal days and nutrient concentrations in the seawater are indicated in **bold**). Data are means ± SE.

Day	Low Light		High light	
	NH_4^+	NO_3^-	NH_4^+	NO_3^-
1	**25 ± 0.65**	**26.87 ± 4.12**	**27.03 ± 0.18**	**24.05 ± 6.67**
4	81.90 ± 4.89	43.09 ± 7.65	40.73 ± 0.79	32.43 ± 9.65
7	131.60 ± 2.18	90.67 ± 10.96	77.30 ± 1.93	29.56 ± 4.44
8	**35.45 ± 1.68**	45.92 ± 1.99	50.41 ± 0.72	37.56 ± 0.56
9	37.15 ± 0.98	**25.47 ± 2.33**	**32.99 ± 2.65**	**25.10 ± 1.23**
11	93.01 ± 3.54	30.95 ± 4.65	72.61 ± 6.62	25.56 ± 0.45
14	161.84 ± 16.18	29.87 ± 3.71	102.60 ± 8.16	67.80 ± 10.21
15	**34.67 ± 2.54**	40.90 ± 8.78	**32.95 ± 1.71**	41.32 ± 6.87
16	39.19 ± 1.46	**32.83 ± 1.49**	38.67 ± 0.98	**28.22 ± 2.61**
18	67.73 ± 12.17	35.76 ± 11.3	25 ± 5.83	71.34 ± 7.65
21	123.87 ± 5.84	40. 13 ± 0.99	26.09 ± 2.84	**31.45 ± 0.65**
22	**31.01 ± 8.21**	**32.56 ± 9.37**	**28.09 ± 1.03**	87.67 ± 54
25	101.44 ± 14.57	38.56 ± 5.43	26.67 ± 7.04	55.93 ± 6.62
28	173.64 ± 12.94	51.32 ± 13.04	33.45 ± 12.40	80.65 ± 13.45
29	**29.36 ± 1.11**	60.54 ± 8.24	**25.5 ± 0.79**	**30.29 ± 0.98**
30	42.15 ± 5.67	**27.89 ± 1.87**	27.11 ± 1.09	35.34 ± 2.04
32	106.37 ± 5.46	79.45 ± 65.5	26.36 ± 12.91	43.07 ± 3.21
34	131.07 ± 18.17	76.24 ± 7.54	36.69 ± 2.34	29.46 ± 5.24
35	**26.56 ± 2.19**	**29.24 ± 3.21**	**31.45 ± 1.53**	**26.13 ± 2.09**
37	58.67 ± 10.34	30.12 ± 3.75	29.10 ± 6.78	40.16 ± 11.54
40	67.45 ± 13.75	38.98 ± 8.34	31.59 ± 4.65	39.16 ± 8.67

Table S2. Results of multivariate MANOVA and univariate PERMANOVA analyses examining the effects of light (L) and dissolved inorganic nitrogen form (DIN) on morphometric and dynamic responses of the seagrass *Zostera noltei*. Bold p-values indicate significant results ($\alpha = 0.05$)

Variable, factor	df	MS	Pseudo-*F*	p
Multivariate response				
Light (L)	1	68.4	4.25	**<0.001**
Nitrogen (DIN)	2	12.29	23.64	**<0.01**
L x DIN	2	4.15	1.43	0.217
Univariate response				
AG/BG				
L	1	2.07	2.42	0.147
DIN	2	1.96	2.28	0.14
L x DIN	2	0.36	0.43	0.657
Maximum leaf length (LL$_{max}$)				
L	1	3.08	5.37	**0.039**
DIN	2	0.91	1.59	0.244
L x DIN	2	2.6	4.52	**0.033**
Maximum root lenght (RL$_{max}$)				
L	1	9.65	25.7	**<0.001**
DIN	2	1.27	3.4	0.063
L x DIN	2	0.15	0.4	0.674
Survival (S)				
L	1	7.1	28.71	**<0.001**
DIN	2	3.03	12.26	**0.002**
L x DIN	2	0.43	1.76	0.209
Net growth rate (NGR)				
L	1	12.12	51.28	**<0.001**
DIN	2	0.93	0.93	**0.046**
L x DIN	2	0.09	0.09	0.682
Shoot appearence rate (SAR)				
L	1	10.42	96.8	**<0.001**
DIN	2	2.63	24.35	**<0.001**
L x DIN	2	0.01	0.05	0.948
Internode appearence rate (IAR)				
L	1	11.99	57.18	**<0.001**
DIN	2	1.05	5.02	0.28
L x DIN	2	0.2	0.94	0.413
Rhizomatic growth rate (RGR)				
L	1	12	44.33	**<0.001**
DIN	2	0.57	2.09	0.18
L x DIN	2	0.31	1.14	0.347

Table S3. Statistical results of Kruskal Wallis and 2-way ANOVA (individual responses) examining the effect of light levels and dissolved inorganic nitrogen (DIN) supply on %N, %C, sucrose and starch (mg gDW^{-1}) concentrations in *Zostera noltei*.

Variables	df	X$_2$	p	
Kruskal Wallis Analyses				
N (Leaves)				
Light (L)	1	19.237	**<0.01**	
Nitrogen (DIN)	2	4.247	**0.039**	
L x DIN	5	29.346	**<0.01**	
C (Leaves)				
L	1	16.299	**<0.001**	
DIN	2	1.038	0.59	
L x DIN	5	21.167	**<0.001**	

| Variable, factor	df	MS	Pseudo-F	p
2-way ANOVA Analyses				
N (RR)				
L	1	0.346	12.443	**0.001**
DIN	2	0.254	9.147	**<0.001**
L x DIN	2	0.446	16.065	**<0.001**
C (RR)				
L	1	18.433	2.209	0.148
DIN	2	13.229	1.585	0.222
L x DIN	2	2.292	0.275	0.762
Surcrose (Leaves)				
L	1	0.126	4.226	**0.049**
DIN	2	0.986	16.739	**<0.001**
L x DIN	1	0.008	0.286	0.59
Starch (Leaves)				
L	1	0.131	13.436	**0.001**
DIN	2	0.481	24.658	**<0.001**
L x DIN	1	0.081	8.311	**0.007**
Surcrose (RR)				
L	1	3.912	239.14	**<0.001**
DIN	2	1.087	33.23	**<0.001**
L x DIN	2	0.019	0.59	0.561
Starch (RR)				
L	1	0.143	2.053	0.163
DIN	2	1.482	10.638	**<0.001**
L x DIN	2	0.99	7.113	**0.003**
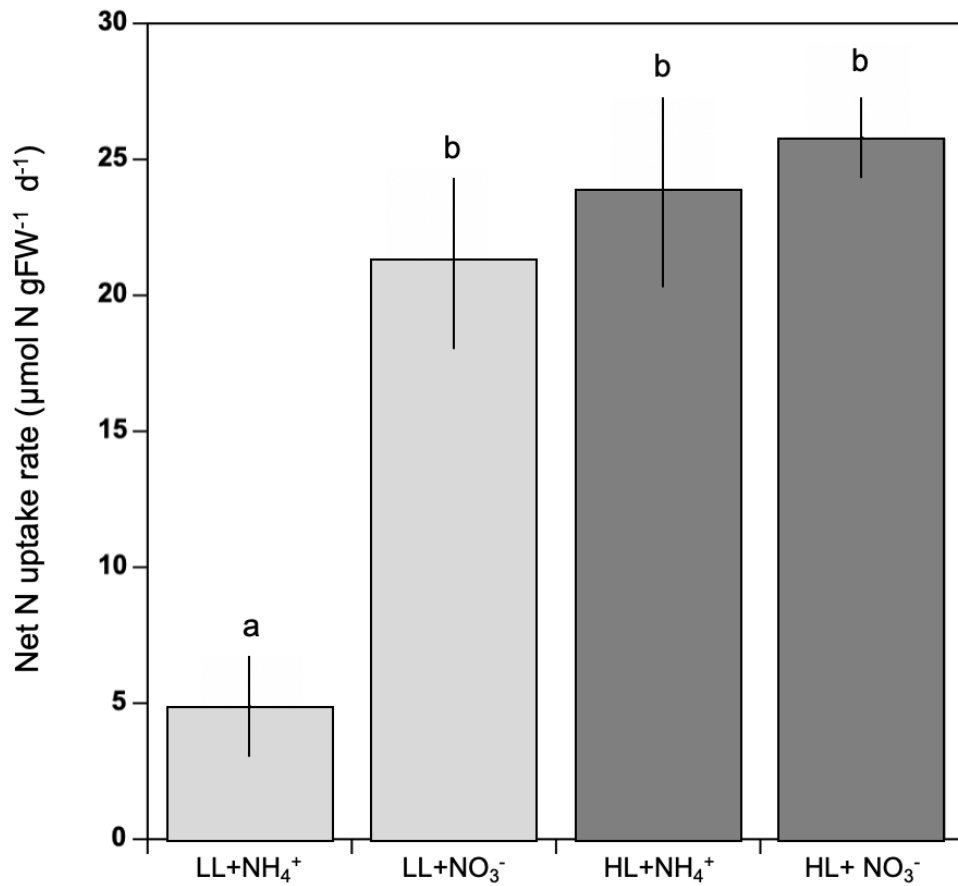
Figure S1. Mean net uptake rates of NO_3^- and NH_4^+ (μmol N gFW^{-1} d^{-1}) on each DIN treatment exposed to two light levels (low light, LL and high light, HL) at the end of the experimental period (40 days). Data are mean ± SE. Letters above the bars represent significant differences among treatments (1-way ANOVA, $p < 0.01$).