

Table 1. Intracellular ion concentrations ($\text{mg}\cdot\text{ml}^{-1}$) of *Pyrocystis noctiluca* grown near a north window. Results are means of six determinations ($\pm 95\%$ C.L.) except for SO_4^{2-} (two determinations).

	Na^+	K^+	Ca^{2+}	Mg^{2+}	NH_4^+	Cl^-	SO_4^{2-}
Cell sap							
measured*	10.8 ± 0.6	0.7 ± 0.3	0.1 ± 0.02	0.4 ± 0.1	0.1 ± 0.01	18.6 ± 0.9	0.3 ± 0.01
isotonic	11.1	0.7	0.1	0.4	0.1	19.2	0.3
Seawater†	10.32 ± 0.0	0.36 ± 0.01	0.39 ± 0.01	1.27 ± 0.01	1.5×10^{-6}	18.68 ± 0.02	2.6
Concentration factor in isotonic sap	1.08	1.9	0.23	0.31	6.7×10^3	1.03	0.12
		cell sap (measured)			seawater		
		$\text{mg}\cdot\text{ml}^{-1}$	$\text{meq}\cdot\text{ml}^{-1}$		$\text{mg}\cdot\text{ml}^{-1}$	$\text{meq}\cdot\text{ml}^{-1}$	
Σ monovalent ions		11.6 ± 0.5	0.49		10.68 ± 0.02	0.46	
Σ divalent ions		0.8 ± 0.2	0.04		1.67 ± 0.01	0.12	
Σ cations		12.0 ± 0.5	0.53		12.35 ± 0.03	0.58	
Σ anions		18.9 ± 0.9	0.53		21.28 ± 0.02	0.58	
Σ ions		31.0 ± 1.3	1.06		33.63 ± 0.02	1.16	

* Measured concentrations calculated using measurements of protoplast volume and assuming 100% labeling of cell-free space by LiCl without uptake of LiCl into the cell.

† Seawater was the medium in which cells were grown; results means of four samples, $\pm 95\%$ C.L.