

Table 1 Cytoplasmic and vacuolar pH values in a variety of plant materials

	Plant species	Technique used	Cytoplasmic pH	Vacuolar pH	Δ pH	References
Higher plant cells						
Suspension cultures						
	<i>A. pseudoplatanus</i>	^{31}P NMR	7.3–7.5	5.9	1.4–1.6	110
	<i>C. roseus</i>	^{31}P NMR	7.5–7.6	5.4	2.1–2.2	113
	<i>R. damascena</i>	^{31}P NMR	7.5–7.7	5.9	1.7–1.9	121
	<i>L. multiflorum</i>	^{31}P NMR	6.7	4.0	2.7	167
	<i>N. tabacum</i>	^{31}P NMR	7.5	5.9	1.6	193
	<i>P. vulgaris</i>	^{31}P NMR	7.5	5.3	2.2	128
Organs						
roots						
	<i>Z. mays</i>	^{31}P NMR	6.8–7.0	5.5	1.3–1.5	74
		^{31}P NMR	7.0–7.2	5.5	1.5–1.7	1
		^{31}P NMR	7.0–7.2	5.6	1.4–1.6	155
		DMO and cell sap extract	7.7–7.9	5.6	2.1–2.3	108
	<i>R. sativus</i>	microelectrodes	7.2	6.0	1.2	177
	<i>R. fluitans</i>	microelectrodes	7.3	4.8	2.5	47
	<i>S. alba</i>	microelectrodes	7.3	4.6	2.7	37
leaves						
	<i>E. densa</i>	DMO and cell sap extract	7.5	5.3	2.2	107
internodes						
	<i>P. sativum</i>	^{31}P NMR	7.5	5.8	1.7	181
Algal cells						
	<i>N. obtusa</i>	^{31}P NMR	7.3	5.3	2.0	117
	<i>L. populosum</i>	DMO and cell sap extract	7.5	4.9–5.1	1.4–1.6	75