

Supplementary information

Inexpensive ion-selective electrodes for the simultaneous monitoring of potassium and nitrate concentrations in nutrient solutions

Marina Miras,^a María Soledad García,^a Vicente Martínez^b and Joaquín Ángel Ortuño^{a*}

^a Department of Analytical Chemistry, University of Murcia, Faculty of Chemistry, Spain.

^b Department of Plant Nutrition, Centro de Edafología y Biología Aplicada del Segura, Consejo Superior de Investigaciones Científicas, Espinardo, Murcia 30100, Spain.

Table S1 Concentration of major ions and ionic strength of nutrient solutions

Sample	K ⁺ (mM)	Na ⁺ (mM)	Ca ²⁺ (mM)	Mg ²⁺ (mM)	NO ₃ ⁻ (mM)	H ₂ PO ₄ ⁻ (mM)	Cl ⁻ (mM)	SO ₄ ²⁻ (mM)	μ (mM)
1	6.97	0.49	4.61	1.16	15.52	0.85	0.35	1.10	37.93
2	6.87	0.48	4.59	1.16	15.98	0.85	0.34	1.08	38.18
3	2.44	0.95	6.61	1.47	13.66	0.34	0.22	1.53	36.82
4	3.14	0.85	6.20	1.40	14.46	0.50	0.24	1.43	37.24
5	3.30	0.86	6.26	1.42	14.17	0.53	0.20	1.44	37.30
6	2.35	0.95	7.09	1.53	13.49	0.49	0.15	1.55	37.77
7	4.19	0.80	6.00	1.41	13.20	0.59	0.20	1.43	36.66
8	4.36	0.79	5.84	1.33	13.05	0.60	0.18	1.32	35.96
9	5.45	0.78	5.43	1.15	13.21	0.70	0.19	1.14	35.79
10	3.79	0.84	6.11	1.30	12.98	0.60	0.15	1.29	35.76
11	6.49	0.70	4.56	1.09	13.04	0.79	0.31	1.03	34.69
12	6.22	0.67	4.64	1.09	13.25	0.78	0.30	1.07	34.83
13	7.06	0.86	5.01	1.15	13.83	0.86	0.34	1.07	37.40
14	4.53	0.97	3.23	0.73	8.72	0.57	0.37	0.68	24.44
15	6.85	0.69	4.62	1.02	13.44	0.86	0.29	0.96	35.34
16	6.38	0.48	3.79	1.03	14.64	0.85	0.33	1.07	34.45
17	4.94	0.47	2.92	0.80	10.86	0.63	0.32	0.82	26.31
18	3.36	0.46	1.98	0.54	6.87	0.41	0.32	0.56	17.58
19	2.35	0.97	5.86	1.38	13.33	0.42	0.16	1.60	34.90
20	2.03	0.98	5.94	1.36	13.51	0.41	0.16	1.63	34.97
21	2.10	0.96	5.85	1.37	12.17	0.41	0.15	1.60	33.42
22	2.75	0.88	5.60	1.32	13.50	0.50	0.17	1.55	34.75
23	3.11	0.87	5.47	1.35	13.59	0.47	0.15	1.59	35.03
24	6.01	0.72	3.81	0.98	13.30	0.77	0.30	1.04	32.78
25	6.06	0.59	3.83	1.03	13.60	0.81	0.32	1.10	33.28
26	6.55	0.87	4.15	1.03	14.49	0.85	0.33	1.10	35.65
27	3.63	1.10	3.79	1.18	16.77	0.37	0.15	1.31	34.59
28	3.92	1.11	2.24	0.74	9.08	0.54	0.30	0.79	22.49
29	5.85	0.99	3.30	1.01	14.71	0.88	0.24	1.05	33.40
30	4.06	0.66	2.22	0.74	9.60	0.58	0.27	0.77	22.63
31	5.79	0.36	3.33	0.76	11.36	0.50	0.21	0.63	27.65
32	4.84	1.05	3.71	0.83	10.42	0.45	0.14	0.70	27.38
33	5.10	1.16	3.83	0.88	11.83	0.46	0.21	0.73	29.63
34	5.59	1.16	3.62	0.86	13.75	0.48	0.13	0.74	31.55
35	6.50	1.34	4.10	1.03	12.01	0.54	0.15	0.72	32.24
36	7.35	1.45	4.31	1.12	13.14	0.51	0.20	0.85	35.20
37	7.04	1.48	4.05	1.12	13.48	0.54	0.13	0.79	34.61