



Supplement of

The effect of soil moisture content and soil texture on fast in situ pH measurements with two types of robust ion-selective electrodes

Sebastian Vogel et al.

Correspondence to: Sebastian Vogel (svogel@atb-potsdam.de)

The copyright of individual parts of the supplement might differ from the article licence.

Supplementary Material

Table S1: Measured soil pH values (Mean and Standard deviation) at varying SMCs and soil textures 1.

Soil texture	SMC [Mass %]	Mean, pH [Epoxy-body]	Mean, pH [Antimony]	StdDev, pH [Epoxy-body]	StdDev, pH [Antimony]
Ss	0	4	4.33	0.08	0.06
	2.91	4.2	4.48	0.05	0.05
	5.79	4.4	4.57	0.03	0.03
	8.32	4.65	4.61	0.01	0.01
	10.79	4.75	5.35	0.01	0.02
	13.22	5.19	5.44	0.02	0.02
	15.51	5.23	5.4	0.02	0.01
	15.81	5.17	5.41	0.01	0.01
Su3	0	5.5	4.93	0.16	0.1
	2.95	5.68	5.09	0.02	0.09
	5.78	6.04	5.21	0.01	0.08
	8.32	6.08	5.31	0.01	0.01
	10.90	6.09	5.54	0.01	0.02
	13.32	6.11	5.59	0.01	0.02
	15.54	6.12	5.76	0.01	0.02
	17.47	6.15	6.05	0.01	0.01
	19.61	6.21	6.26	0.01	0.02
	20.18	6.21	6.26	0.02	0.01
Sl4	0	4.95	5.1	0.19	0.16
	2.93	5.25	5.23	0.07	0.04
	5.87	5.56	5.34	0.01	0.04
	8.40	5.93	5.69	0.02	0.02
	11.00	5.99	6.07	0.01	0.02
	13.29	6.01	6.15	0.01	0.02
	15.66	5.97	6.11	0.01	0.01
	17.71	5.98	6.14	0.01	0.02
	19.70	6.02	6.2	0.01	0.02
	20.81	6.03	6.23	0.01	0.02
Ls4	0	4.79	4.94	0.1	0.28
	2.96	6.46	5.32	0.04	0.2
	5.83	6.48	5.73	0.02	0.02

	8.35	6.5	5.89	0.01	0.05
	10.86	6.51	6.38	0.02	0.02
	13.44	6.55	6.42	0.01	0.02
	15.61	6.59	6.46	0.01	0.02
	17.73	6.61	6.44	0.01	0.02
	19.61	6.6	6.41	0.02	0.01
Slu	0	5.12	5.15	0.07	0.11
	2.95	5.75	5.32	0.06	0.08
	5.88	6	5.49	0.01	0.08
	8.5	6.15	5.6	0.01	0.04
	10.91	6.23	5.82	0.02	0.02
	13.36	6.38	6	0.01	0.02
	15.6	6.68	6.08	0.02	0.01
	17.68	6.71	6.37	0.01	0.01
	19.83	6.74	6.56	0.02	0.01
	21.66	6.69	6.69	0.02	0.01
	23.61	6.75	6.68	0.02	0.01
	23.99	6.71	6.63	0.02	0.02

Table S2: Measured soil pH values (Mean and Standard deviation) at varying SMCs and soil textures 2.

Soil texture	SMC [Mass %]	Mean, pH [Epoxy-body]	Mean, pH [Antimony]	StdDev, pH [Epoxy-body]	StdDev, pH [Antimony]
Lt2	0.00	5.25	5.6	0.21	0.32
	3.85	6.44	5.61	0.2	0.15
	7.87	7.01	5.87	0.02	0.01
	10.97	7.04	6.01	0.02	0.03
	14.32	7.1	6.36	0.01	0.02
	17.62	7.11	6.63	0.01	0.01
	20.58	7.14	6.7	0.01	0.02
	23.21	7.24	6.91	0.01	0.01
	25.59	7.4	7.15	0.02	0.01
	27.74	7.43	7.14	0.01	0.01
Lts	0	4.73	4.42	0.05	0.22
	3.88	5.2	5.23	0.02	0.06
	7.61	5.86	5.5	0.02	0.02
	10.9	5.94	5.97	0.01	0.01
	14.18	5.99	6.08	0.01	0.02

	17.04	6.1	6.3	0.01	0.01
	19.87	6.25	6.24	0.02	0.01
	21.41	6.23	6.27	0.01	0.01
	0.00	5.43	5	0.15	0.2
	3.93	5.68	5.53	0.03	0.02
	7.57	5.98	5.83	0.04	0.03
	10.84	6.06	6.24	0.01	0.02
Ts4	14.17	6.1	6.24	0.01	0.02
	16.30	6.27	6.24	0.01	0.02
	18.47	6.3	6.26	0.01	0.02
	20.25	6.33	6.24	0.01	0.01
	20.87	6.38	6.26	0.01	0.01
	0	4.55	4.22	0.2	0.3
	3.84	5.18	4.97	0.04	0.06
	7.64	5.9	5.41	0.02	0.03
	10.92	6.09	5.82	0.02	0.01
	14.1	6.18	6.09	0.01	0.02
TI	17.23	6.26	6.14	0.01	0.02
	19.97	6.21	6.17	0.01	0.02
	22.46	6.23	6.21	0.02	0.01
	25.1	6.27	6.18	0.02	0.02
	28.15	6.22	6.25	0.02	0.01
	0.00	4.24	4.46	0.14	0.27
	3.98	5.87	5.37	0.03	0.03
	7.71	5.98	5.74	0.02	0.02
	10.88	6.12	6.01	0.02	0.02
	14.20	6.35	6.1	0.01	0.02
	17.38	6.5	6.43	0.01	0.01
Tt	20.14	6.57	6.49	0.02	0.02
	22.49	6.58	6.47	0.02	0.02
	24.57	6.64	6.47	0.01	0.01
	26.97	6.65	6.45	0.02	0.01
	28.57	6.66	6.44	0.02	0.01