

Reference Material and Inter-laboratory Quality Control Materials Product Summary

August 2017

Version: 1

Assigned Values: Values provided have been generated from an Inter-Laboratory Proficiency Programme (ILPP). The reference material values provided in this summary are the mean of the results after the exclusion of statistical outliers. The Assigned Range provided for the Inter-laboratory QC Materials is the range of test values available for purchase. Each Reference and QC Material comes with a Data Summary Sheet.

Missing Values and Available Tests: For Reference Materials where property values do not meet the statistical criteria, the summary values have not been provided. For this reason, not all tests will be available for every Reference Material of the same matrix. However, if there are 3 or more data points available, an Assigned Value will be provided with the corresponding QC material.

Sample Sizes: Available sample sizes are shown for reference materials.

Reference Materials: Soil Material

Product Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Product ID	29-C-2	39-C-2	111-C-1	112-C-1	41-C-2	124-C-1	40-C-2	125-C-1	43-C-2	42-C-2	51-C-1	126-C-1	119-C-1
Expiry Date	30 Jun 20	30 Nov 20	31 Dec 20	31 Dec 20	31 Mar 21	31 Mar 21	30 Jun 21	30 Jun 21	30 Sep 21	31 Mar 22	31 Mar 22	30 Jun 22	1 Sep 23
Sample Size (min)	150g	150g	150g	150g	150g	150g	150g	150g	150g	150g	150g	150g	150g
Acid P (mg/kg)	134		84.6	32.0	3.63	25.2	372	47.0	213	44.1	962	203	128
Bray P (mg/kg)			36.4	7.79		12.5	18.2	23.1	23.2	14.7	248	36.9	47.7
CaCl ₂ Extractable B (mg/kg)	0.122		0.956	0.461	1.67	0.505	0.430	0.527	2.00	0.781	1.32	2.04	0.214
Colwell P (mg/kg)	4.31	2.98	45.9	21.6	5.01	17.4	45.6	34.7	165	46.6		154	45.9



Electrical Cond (dS/m)	0.0938	0.0151	0.124	0.149	0.226	0.0995	0.0733	0.164	0.116	0.153	0.163	0.113	0.0519
Exch Aluminium (cmol+/kg)	0.0070	0.128	0.0127	0.0070	0.0049	0.0161	0.0071	0.0871	0.0135	0.0079	0.0964	0.0130	
Exch Calcium (cmol+/kg)	8.51	0.119	6.69	3.96	43.2	3.46	25.8	3.52	8.91	27.7	15.0	8.58	2.99
Exch Magnesium (cmol+/kg)	1.16	0.0188	1.59	0.451	9.68	1.10	10.4	0.689	1.83	8.68	2.98	1.78	0.622
Exch Potassium (cmol+/kg)	0.103	0.0142	1.15	0.100	0.650	0.609	0.373	1.39	1.41	1.29	0.659	1.61	0.394
Exch Sodium (cmol+/kg)	0.0496	0.0216	0.275	0.0825	0.868	0.347	0.181	0.0541	0.121	0.0884	0.180	0.0987	0.0479
Ext Copper (mg/kg)	1.88		0.446	0.558	1.08	0.747	1.22	2.03	1.41	1.70	6.69		0.396
Ext Iron (mg/kg)	10.5	5.66	88.8	183	14.7	48.9	30.5	81.1	6.90	32.0	191	9.10	
Ext Manganese (mg/kg)	24.3		8.12	4.55	36.3	127	53.6	299	328		30.6	269	62.4
Ext Sulphur (mg/kg)	8.37	6.45	10.1	11.3	17.9	14.6	10.5	34.0	74.6	22.4	33.4	39.5	6.44
Ext Zinc (mg/kg)	1.02	0.0569	0.936	0.822	0.279	0.532	0.599	0.873	0.602	0.852	181	0.641	14.3
Olsen P (mg/kg)		1.33	20.9	12.4	1.47	6.96	18.8	11.6	45.4		125	43.9	21.6
Organic Carbon (%)		0.102											
Organic Carbon W&B (%)			2.14	0.890		0.960	1.03	2.03			6.79	2.26	1.03
PBI Colwell (L/kg)	47.0	15.4	32.3	86.4	252	49.0	95.1	98.1	608	142	208	546	29.1
pH CaCl2 (pH units)	7.38	4.89	5.27	6.95	7.70	5.05	6.37	4.88	5.95	6.67	4.92		4.95
pH Water (pH units)		5.56			8.22	5.86	7.23	5.52	6.54	7.19		6.37	5.77
Total Carbon (%)	0.462	0.120	2.17	0.804	1.71	1.05	1.11	2.24	2.85	2.56	7.87	2.83	1.13
Total Nitrogen (%)	0.0652			0.0555	0.102	0.0773	0.0917	0.196	0.224	0.219	0.490	0.228	0.0959
Total Organic Carbon (%)	0.446	0.111	2.17	0.795	1.20	1.04	1.08	2.17	2.68	2.50	7.70	2.75	1.09
Total Phosphorus (%)	0.0368		0.0246	0.0080	0.0178	0.0217		0.0498	0.158	0.0458	0.187	0.156	0.0332



Water Ext Cl (mg/kg)	6.24	5.92	50.1		9.45			25.6		15.2			
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