

## Reference Material and Inter-laboratory Quality Control Materials Product Summary

August 2018

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: Plant Material

Product Type	Vetch	Olive Leaves	Maize Flour	Brown Rice	Bay Leaves	Barley	Rice Leaves	Lentils
Product ID	20-C-3	4-C-4	11-C-5	322-C-1	321-C-1	176-C-2	38-C-3	28-C-3
Expiry Date	28 Oct 18	31 Oct 18	31 Oct 18	1 Oct 19	28 Feb 20	31 May 20	19 Jan 21	31 May 21
Sample Size (min)	20g	20g	20g		20g	20g	20g	20g
Aluminium (mg/kg)	115	48.1	1.36		129		63.3	
Boron (mg/kg)	25.7	17.7	2.39				7.07	7.19
Calcium (%w/w)	0.774	0.611	0.0056	0.0099	0.958	0.0303	0.308	0.0647
Carbon (%w/w)		50.5						

<b>Copper (mg/kg)</b>	6.32	7.51	1.52	2.48	6.84	6.05	5.98	8.35
<b>Iron (mg/kg)</b>		51.4	17.4	25.1	119	46.2	119	72.2
<b>Magnesium (%w/w)</b>	0.224	0.0802	0.0931			0.107	0.157	
<b>Manganese (mg/kg)</b>			3.70	21.2				12.3
<b>Nitrogen (%w/w)</b>	3.50	1.85	1.20	1.39		1.87	2.58	3.94
<b>Phosphorus (%w/w)</b>	0.292	0.163	0.295	0.295	0.160	0.288	0.286	0.292
<b>Potassium (%w/w)</b>	2.52	1.57	0.383	0.213	1.03	0.356	2.29	0.901
<b>Sodium (mg/kg)</b>		516	0.0009					
<b>Sulphur (%w/w)</b>	0.193	0.133	0.0887	0.118	0.149	0.137	0.182	
<b>Zinc (mg/kg)</b>	30.4	17.8	21.0	17.0	79.7	19.6	23.7	38.5

**QC Material: Plant Material**

Matrix: Plant Material	Product ID	3258-QC	3167-QC	6212-QC	6211-QC	6111-QC	6561-QC
	Process Run	PR4141	PR4401	PR2858	PR4932	PR6399	PR5366
	Expiry Date	31 Oct 18	31 Oct 19	31 Oct 19	28 Feb 20	31 May 20	31 May 21
	Sample Size(s)	20g		20g	20g		20g
	<b>Aluminium (mg/kg)</b>	1.09	16.2	185	124	3200	13.4
	<b>Boron (mg/kg)</b>	2.36	0.942	46.7	18.2	6.62	7.10
	<b>Cadmium (µg/kg)</b>	3.50	38.3	15.0	368	43.0	8.77
	<b>Calcium (%w/w)</b>	0.0060	0.0100	1.56	0.967	0.512	0.0640
	<b>Carbon (%w/w)</b>	44.0	43.3	44.7	50.0	40.3	43.8
	<b>Chloride (mg/kg)</b>	375	310	745	599	13400	1045
	<b>Cobalt (µg/kg)</b>	5.50	42.4	80.6	81.6	2960	183
	<b>Copper (mg/kg)</b>	1.38	2.44	51.1	6.65	9.45	8.19
	<b>Iron (mg/kg)</b>	17.4	24.8	158	117	3595	73.4
	<b>Lead (µg/kg)</b>	6.50	21.3	208	242	308	18.7
	<b>Magnesium (%w/w)</b>	0.0940	0.123	0.331	0.125	0.356	0.102
	<b>Manganese (mg/kg)</b>	3.66	20.5	14.9	142	153	12.3
	<b>Molybdenum (µg/kg)</b>	133	491	681	140	759	2530
	<b>Nitrate Nitrogen (mg/kg)</b>	6.00	3.13	428	6.90	350	3.65
	<b>Nitrogen (%w/w)</b>	1.20	1.42	3.14	1.82	1.77	3.96
	<b>Phosphorus (%w/w)</b>	0.290	0.287	0.256	0.161	0.340	0.285
	<b>Potassium (%w/w)</b>	0.380	0.213	3.08	0.998	2.18	0.870

<b>Selenium (µg/kg)</b>	27.3	60.3	42.0	31.6	90.0	1435
<b>Silicon (%w/w)</b>	0.0240	0.0180	0.0910	0.0580	0.133	0.0050
<b>Sodium (mg/kg)</b>	0.0010	10.0	0.0080	221	4590	10.6
<b>Sulphur (%w/w)</b>	0.0880	0.113	0.250	0.144	0.246	0.183
<b>Zinc (mg/kg)</b>	21.0	17.0	18.6	77.2	51.5	37.2