

### HUMIC COMPOST - Inoculated with Multikraft Microbalance

Samples supplied by Grassdale Fertilisers on the 6 December, 2019 - Lab Job No. i8676.

Analysis requested by Brad Smith.

91 Mort Street TOOWOOMBA QLD 4350

		Product Name:	Sample 2	Sample 3
		Product Type:	Windrow 6A	Windrow 7A
		Manufacturing Site:	Compost	Compost
		Manufactured Date:	Grassdale Fertilisers	Grassdale Fertilisers
		Application:	26/11/2019	26/11/2019
		Test Applicable:	..	..
			CA-PACK-001	CA-PACK-001
Parameter	Method Reference		i8676/2	i8676/3
Moisture Content (%)	**Inhouse S2 (105°C)		36	34
pH	Rayment & Lyons 2011 - 4A1 (1:5 Water)		5.65	6.29
Electrical Conductivity (dS/m)	Rayment & Lyons 2011 - 3A1 (1:5 Water)		10.57	12.67
Total Carbon (%)	Inhouse S4a (LECO Trumac Analyser)		43.9	36.1
Total Nitrogen (%)			2.71	2.29
Carbon/Nitrogen Ratio	**Calculation - Total Carbon/Total Nitrogen		16	16
Estimated Organic Matter (% OM)	**Calculation - Total Carbon x 1.7		74.6	61.4
Total Calcium (%)			1.71	1.83
Total Magnesium (%)			0.62	0.60
Total Potassium (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia		1.79	1.68
Total Sodium (%)			0.71	0.70
Total Sulphur (%)			0.41	0.39
Total Phosphorus (%)	Rayment & Lyons 2011 - 17C1 Aqua Regia		0.58	0.61
Total Zinc (mg/kg)			154	156
Total Manganese (mg/kg)			171	183
Total Iron (mg/kg)			2,084	3,194
Total Copper (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia		34	34
Total Boron (mg/kg)			21	23
Total Silicon (mg/kg)			789	1,043
Total Aluminium (mg/kg)			693	1,702
Total Molybdenum (mg/kg)			1.65	1.59
Total Cobalt (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia		1.57	2.01
Total Selenium (mg/kg)			<1	<1
Nitrogen/Sulphur Ratio	**Calculation - Total Nitrogen/Total Sulfur		6.6	5.9
Nitrogen/Phosphorus Ratio	**Calculation - Total Nitrogen/Total Phosphorus		4.7	3.7
Nitrogen/Potassium Ratio	**Calculation - Total Nitrogen/Total Potassium		1.5	1.4
Total Cadmium (mg/kg)			<0.5	<0.5
Total Lead (mg/kg)			<1	<1
Total Arsenic (mg/kg)			<2	<2
Total Chromium (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia		3.0	14.7
Total Nickel (mg/kg)			3.3	4.5
Total Mercury (mg/kg)			<0.1	<0.1
Total Silver (mg/kg)			<1	<1
Salmonella spp (Absent in 25 g)			Not Detected	Not Detected
E. coli (MPN/g)	AS4454:2012 Appendix D		Not Detected	Not Detected
Faecal Coliforms (MPN/g)			Not Detected	Not Detected
Total Aerobic Count (CFU/g)			~800,000	~1,600,000
Parameter	Method reference		i8676/2	i8676/3
Humic Acid %	Inhouse method based on 0.5N NaOH - California Department of Food and Agriculture		17	5

**Notes:**

- All analysis is dry weight - Samples reported on an oven dried basis at 105°C (testing conducted on finely ground sample dried at 40°C).
- Methods from Rayment and Lyons, 2011. *Soil Chemical Methods - Australasia*. CSIRO Publishing: Collingwood.
- Indicative guidelines are based on those in AS4454:2012 for a composted product.
- Total Acid Extractable Nutrients indicate a store of nutrients.
- Conversions for 1 mg/kg = 1 ppm; 1 % = 10,000 ppm
- Conversions to kg/ha = mg/kg x 2.24
- The chloride calculation of Cl mg/L = EC x 640 is considered an estimate, and most likely an over-estimate
- Analysis conducted between sample arrival date and reporting date.
- This report is not to be reproduced except in full.
- Analysis sub-contracted - Symbio Laboratories report no. B856698.
- All testing parameters have been facilitated by a NATA accredited laboratory.
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