

Compost Analysis

Sustainable Soil Management with the Mikhail Balance System

FILE NO : 1508113738

LANDTASIA ORGANIC FARMS P/L
PO BOX 116

BUNGENDORE, NSW 2621

SAMPLE ID : 50003

DATE ISSUED : 7/09/2015
DATE RECEIVED : 28/08/2015

CLIENT ID : LAN055
PHONE : 03 6238 0565
REFERENCE :
REFERENCE PHONE :

ANALYSIS REQUIRED : Total, Available
& CEC

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Analysis

ITEM	unit	RESULT
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Basic Measures:

pH (1:5 Water)			7.5
pH (1:5 0.01M CaCl ₂)			7
Electrical Conductivity	EC	μS/cm	5030
TOTAL SOLUBLE SALT	TSS	ppm	16599

Major Nutrients:

TOTAL NITROGEN	N	kg/t	18.3	(Major Nutrients in percentages) 1.83 %
TOTAL PHOSPHORUS	P	kg/t	4.5	0.445 %
TOTAL POTASSIUM	K	kg/t	15.9	1.59 %
TOTAL SULPHUR	S	kg/t	3.3	0.329 %

Total Cations:

TOTAL CALCIUM	Ca	%	2.21
TOTAL MAGNESIUM	Mg	%	0.417
TOTAL SODIUM	Na	%	0.22

Trace Minerals:

TOTAL COPPER	Cu	ppm	50.7
TOTAL ZINC	Zn	ppm	235
TOTAL IRON	Fe	ppm	8150
TOTAL MANGANESE	Mn	ppm	416
TOTAL COBALT	Co	ppm	4.39
TOTAL MOLYBDENUM	Mo	ppm	1.61
TOTAL BORON	B	ppm	17.2

Carbon Content:

TOTAL ORGANIC MATTER		%	32.6
TOTAL ORGANIC CARBON		%	16.3
CARBON NITROGEN RATIO	C:N		8.9
MOISTURE CONTENT	MC	%	37.4

Plant Available Nutrients

ITEM		unit	RESULT
AVAILABLE CALCIUM	Ca	ppm	9620
AVAILABLE MAGNESIUM	Mg	ppm	1908
AVAILABLE SODIUM	Na	ppm	1377.7
AVAILABLE NITROGEN	N	ppm	838
AVAILABLE PHOSPHORUS	P	ppm	594
AVAILABLE POTASSIUM	K	ppm	10413
AVAILABLE SULPHUR	S	ppm	667
AVAILABLE COPPER	Cu	ppm	19
AVAILABLE ZINC	Zn	ppm	174
AVAILABLE IRON	Fe	ppm	40
AVAILABLE MANGANESE	Mn	ppm	111
AVAILABLE COBALT	Co	ppm	1.07
AVAILABLE MOLYBDENUM	Mo	ppm	1.56
AVAILABLE BORON	B	ppm	6.2

Notes: These results represent the proportion of the Total nutrients (page 2) that will be immediately available for plant uptake.

ppm (parts per million) = mg/L (milligram per litre) = mg/kg (milligram per kilogram)
1 % = 10,000 ppm

Exchangeable Cations

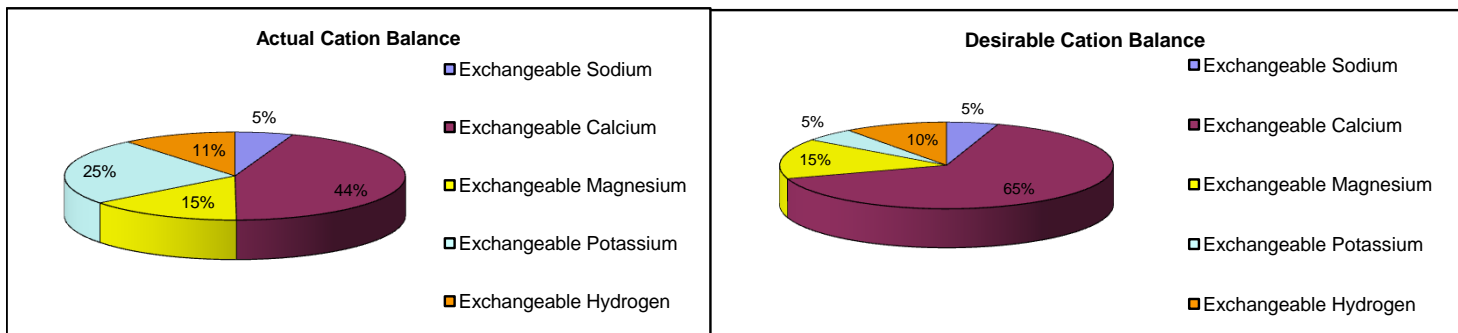
EXCHANGEABLE CATIONS RESULTS

CALCIUM	Ca	meq/100g of sample	22.03
MAGNESIUM	Mg	meq/100g of sample	7.28
SODIUM	Na	meq/100g of sample	2.74
POTASSIUM	K	meq/100g of sample	12.23
HYDROGEN	H	meq/100g of sample	5.40
ADJ. EXCH. HYDROGEN	H	meq/100g of sample	0
CATION EXCHANGE CAPACITY			49.68
ADJUSTED CEC			44.28
SATURATION BASE PERCENTAGE			95

meq = milliequivalent

EXCHANGEABLE CATION BALANCE % OF ADJUSTED CEC DESIRABLE

CALCIUM PERCENTAGE		49.75	65-70%
MAGNESIUM PERCENTAGE		16.44	12-15%
SODIUM PERCENTAGE	ESP	6.19	0.5-5%
POTASSIUM PERCENTAGE		27.62	3-5%
ADJ. HYDROGEN PERCENTAGE		0	<20%
CALCIUM / MAGNESIUM RATIO	Ca/Mg	3.03	2 - 4



CATION BALANCE AMENDMENTS (For optimum effectiveness on application)

GYPHUM REQUIREMENT	1.9 kg/m³			
LIME REQUIREMENT	7.7 kg/m³			
DOLOMITE REQUIREMENT	0.0 kg/m³			
MAGNESIUM SULPHATE	0.0 kg/m³	OR	MAGNESIUM OXIDE	0.0 kg/m³

NB. The effectiveness of the compost may be improved by mixing in the suggested materials (above) prior to application.