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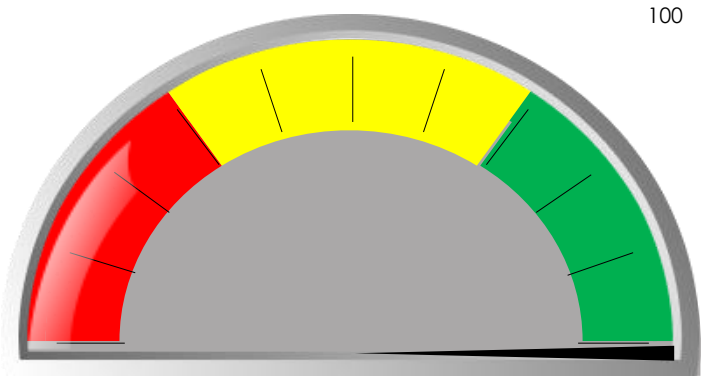
MICROBE WISE FOR COMPOST

Name: **AgVita Analytical** Sample: **Ag Plus Compost** Analysis no.: **650-1** Date: **3/04/2014**

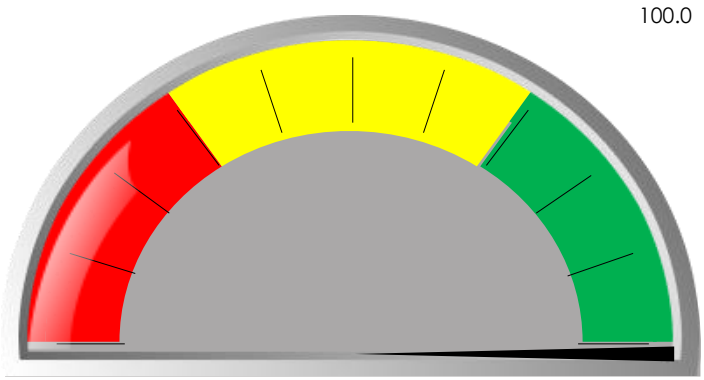
Customer name	AgVita Analytical	**Date received**	3/04/2014
Client name		**Agent**	Agvita Analytical
Sample name	Ag Plus Compost	**Advisor**	0
Crop	Compost	**Authorised by**	Dr Maria Manjarrez
Date sampled	17/03/2014	**Analysis no.**	650-1

Compost Indicators

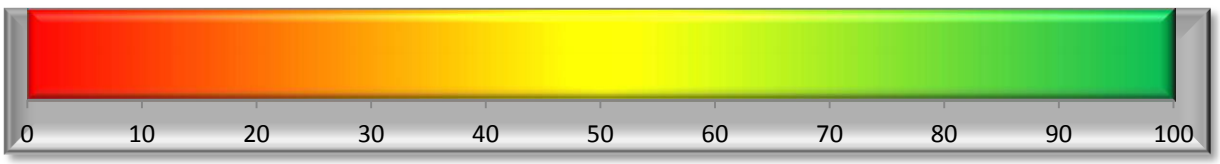
Compost Maturity



Disease Suppression



Overall Microbial Balance



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Key Microbe Groups

Group	Biomass (mg/kg) Yours	Guide
Total microorganisms	**204.1**	50.0
Total bacteria	**66.6**	15.0
Total fungi	**134.2**	33.8
Bacteria		
Pseudomonas	**2.137**	1.000
Actinomycetes	**4.629**	1.000
Gram positive	**57.039**	11.250
Gram negative	**9.552**	3.750
Methane oxidisers	**2.056**	0.500
Sulphur reducers	**BDL***	< 0.005
True anaerobes	**1.367**	< 0.005
Eukaryotes		
Protozoa	**3.359**	1.250
Mycorrhizal fungi (including VAM)	**28.437**	10.000

Useful indicators	Yours	Guide
Microbial diversity	**100.9**	80.0
Fungi : Bacteria	**2.0**	2.3
Bacterial stress	**1.0**	< 0.5

Nutrients held in microbes	Concentration (mg/kg) Yours	Guide
Nitrogen (N)	**15.161**	3.450
Phosphorus (P)	**6.124**	1.500
Potassium (K)	**2.041**	0.500
Sulphur (S)	**2.041**	0.500
Calcium (Ca)	**1.021**	0.250
Magnesium (Mg)	**1.021**	0.250
Carbon (C)	**95.365**	22.688

Key *BDL = Below Detectable Limit (0.001 mg/kg)

Poor **Fair** **Good**

Comments

Total microbial biomass was good. Biomasses of other key desirable microbial groups were also good, including Mycorrhizal fungi (VAM) and Protozoa. VAM fungi require a living plant host to survive, so their presence in this compost is a very good result. Protozoa often appear after composts have aged for some time, and their presence in this compost indicates that it is mature, which is also confirmed by the Compost maturity indicator. True anaerobes were elevated which indicates that this compost could be overwatered and needs more aeration The Fungi to Bacteria ratio was good, indicating a good balance between both groups. Microbial diversity was also good. These results indicate that this compost would be an excellent mendment, particularly to soils with both low bacteria and low fungi.

Explanations

The Microbe Wise test measures the biomasses of key microbial groups directly from your sample. It uses molecular ('DNA type') technology to analyse the unique cell membrane 'fingerprint' of each microbe type to identify and quantify key groups important to soil processes. This method is more accurate and precise than other methods, such as direct microscopy or plate culture, because it uses chemical extraction to remove the maximum amount of microbial material from the sample and is repeatable to 0.01% between replicate analyses. It measures organisms that are alive or recently dead (within a few days). Always compare your results with a control sample. Guide values are included as a help, but because a large number of factors affect microbiology the guide levels may not be optimal for your specific conditions. Visit **www.microbelabs.com.au** for more information.