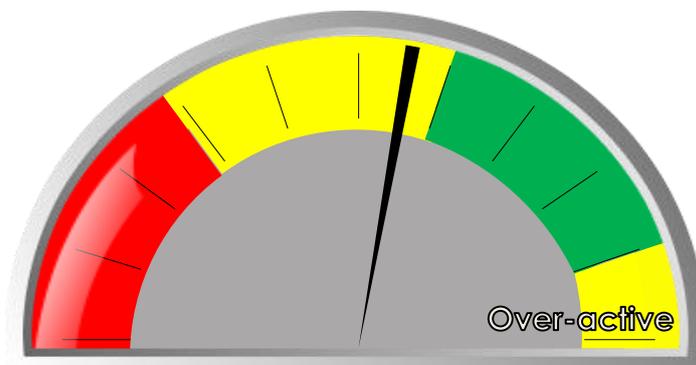


<b>Customer name</b>	Upper Torrens Land Management Project	<b>Date received</b>	23/05/2016
<b>Client name</b>	K Thompson	<b>Agent</b>	Microbiology Laboratories A
<b>Sample name</b>	Randell Activity	<b>Advisor</b>	
<b>Crop</b>		<b>Authorised by</b>	Microbe Labs Laboratory
<b>Date sampled</b>	20/05/2016	<b>Analysis no.</b>	1160-5-MAWS

## Microbial Activity Indicator



## Data

	Yours	Guide
<b>Microbial Activity Indicator</b>	<b>61.9</b>	80.0



### Key

### Comments

The microbial activity in your sample was good. However, it could be increased by adopting management practices that encourage microbial activity. If your soil is low in carbon consider the addition of organic based soil conditioners. If your soil is low in nitrogen consider the addition of N fertiliser. It is very important to take the C:N ratio of your soil into account when adding any fertilisers high in C or N. In most farmed soils it is good practice to aim for a C:N ratio of less than 20:1 (12:1 is optimal for most soils, but may not be practicable for some production systems). Avoid the addition of large amounts of high C fertiliser to soils low in N, and the addition of large amounts of high N fertiliser to soils low in C, as these practices can further deplete Total C and Total N, and microbial activity.

### Explanations

The Microbe Activity Wise test measures the activity of soil microbes directly from your sample. It measures the amount of carbon dioxide (CO<sub>2</sub>) emitted by microbes to calculate Microbial Activity, Soil Basal Respiration (SBR) and Soil Microbial Biomass Carbon (C) (SMBC). Most soil microbes under aerobic conditions convert carbohydrates into energy and CO<sub>2</sub>, which they emit as a waste product, just like animals, plants and humans. This is used to calculate the Microbial Activity Indicator based on known values for soils. Correlations published in scientific journals are used to calculate soil basal respiration (SBR, 7-28 day) and soil microbial biomass C (SMBC). Soil Basal Respiration is the normal, steady rate of respiration in a soil. Soil Microbial Biomass C is the amount of C held in the net microbial biomass. All three values reflect the quantity and quality of soil carbon, and other microbially assistive nutrients in the soil. Plants can use the CO<sub>2</sub> emitted by soil microbes to overcome the often limiting CO<sub>2</sub> in the air around crops. Having a good level of microbial activity in your soil not only helps soil processes, but can also help to improve crop growth. 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](http://www.microbelabs.com.au) for more information.

### Disclaimer

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