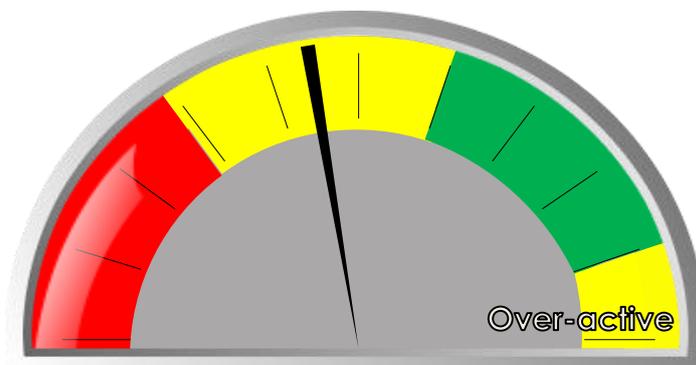


Customer name	Upper Torrens Land Management Project	Date received	23/05/2016
Client name	K Thompson	Agent	Microbiology Laboratories A
Sample name	Keatley Activity	Advisor	
Crop		Authorised by	Microbe Labs Laboratory
Date sampled	13/05/2016	Analysis no.	1160-1-MAWS

Microbial Activity Indicator



Data

	Yours	Guide
Microbial Activity Indicator	49.6	80.0



Key

	Yours	Guide
Soil Basal Respiration (7-28 day)	888.9 mg C/kg soil	1690.0
	3253.3 mg CO ₂ /kg soil	6185.5
Soil Microbial Biomass Carbon	245.8 mg C/kg soil	464.0

Comments

The microbial activity in your sample was fair to good. However, it should 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 (CO₂) 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 CO₂, 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 CO₂ emitted by soil microbes to overcome the often limiting CO₂ 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 for more information.

Disclaimer

Analysis by Microbiology Laboratories Australia Pty Ltd ACN 145 073 481. The information in this report should be used under consideration of particular production conditions. The guide levels are derived from published data and ongoing research carried out by Microbiology Laboratories Australia. They are intended as a general guide only and do not take into account your specific conditions. Comparison of results with those obtained using other methods may be inaccurate, as accurate interpretation relies on specific sampling and analysis methods. Microbiology Laboratories Australia and its employees or agents will not be liable for any loss or damage arising from the use of the information supplied in this report. Please seek specific guidance and recommendations from a qualified agriculture professional.