

microBIOMETER®

Soil Balancing

Cropping

Pasture & Animal

Monitoring Meters and Equipment



Description

Microbial biomass is the best single indicator of soil health (Doran, 2000) – poor fertility soils have very low microbial populations while highly fertile, productive soils have high microbial populations. Soil microbes perform important functions such as nutrient solubilisation, root growth stimulation, atmospheric nitrogen fixation, disease suppression and soil humus building (carbon sequestration). The key goal of regenerative farming is to follow practices which create soil conditions ideal for proliferation of soil microbes, ultimately reducing dependence on chemical inputs.

The ability to conveniently measure microbial biomass gives farmers the power to monitor and track the effects of farming practices, in particular to determine the value of different soil amendments and the efficacy of different cover crops.

The results from the microBIOMETER® are extremely accurate and reproducible, while being considerably faster and less expensive than laboratory testing. This tool has the added benefit of allowing on-farm testing, eliminating the effect of transit time/conditions on microbial levels. This new technology enables consumers to easily test the quality (microbial counts) of commercial and DIY microbial inoculums, to enable informed comparison and determine potential efficacy.

Benefits

- Convenient, easy-to-use and accurate tool to accurately measure soil, compost or compost tea (or specialist inoculum brews) microbial biomass in 10 minutes.
- Microbial biomass is a key indicator of soil health and fertility, directly correlating with crop quality and production.
- A fraction of the cost of a laboratory analysis.
- An essential tool for regenerative farmers to ensure their farming practices are positively affecting microbial activity.
- Smartphone app to digitally analyse and store readings for tracking soil health. Note: Smartphone required (not included).
- Refill kits available (10 tests)

Packaging

700 g



INSTRUCTIONS

- For full instructions, including sampling technique, please refer to the Testing Procedure included with the meter.
- Fill the measuring vial with water and add the water to the extraction tube that contains the extraction powder.
- Whisk the mixture, using the included whisker, to quickly dissolve the powder.
- Measure 0.5 cubic centimetres of soil using the included soil sampler.
- Add your soil sample to the extraction fluid.
- Whisk the mixture for 30 seconds using the included whisker.
- Let sit for 10 minutes. Take a 30 µL sample using the included pipette and apply 3 drops to the centre of the test card window.
- Using the phone app, take a picture of the card. The app will calculate the µg of microbial carbon/gram of soil.

IMPORTANT

- **Readings:**
 <200 very poor
 200 – 300 low
 300 – 400 average
 400 – 500 good
 >500 excellent
- Accurate measurement of the soil and water is critical for an accurate result.
- The extraction powder needs to be used within an hour of water addition.

STORAGE AND HANDLING

Store in a cool, dry area.

