

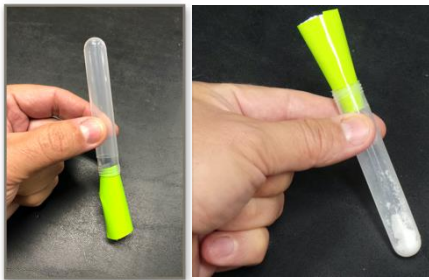
microBIOMETER® Testing Procedure

microBIOMETER® measures the microbial biomass of soil, compost, and compost teas/extracts. It also calculates the fungal to bacterial ratio for soil and compost. This data allows you to track the health of your soil over time. Microbial biomass is calculated and displayed in micrograms of microbial-carbon per gram of soil ($\mu\text{g/g}$) and fungal to bacterial ratio is calculated and displayed as F:B, F% and B%. Instructions can be found directly in the app as well.

U.S. Patents 10,179,926, 9,315,849 and Patents Pending



www.microbiometer.com



1

microBIOMETER® App

Create an account and log in to save data to the cloud as well as your device. (<https://www.prolificearthcloud.com>)

2

ADD EXTRACTION POWDER

Tear the powder packet open and place the extraction vial upside down on top of the open packet. Invert and tap to empty the contents into the vial.

3

ADD WATER (or compost tea or extract)

Use the small capped measurer to add **9.5 ml** of water or compost tea/extract to the extraction vial.

If using compost tea or extract, go to step 6.

4

COLLECT SOIL & SIFT

Obtain a composite sample of **MOIST** soil from the top 2 to 5 inches. Using the included sifter, shake to remove debris and collect the sifted soil in the provided plastic bag.

5

MEASURE SOIL

Fill the soil sampler syringe to **~1ml** with sifted soil. Compress against your finger to **0.5 ml**, remove any excess from the end, and eject into the extraction vial.

The accuracy of your readings depends on the consistency of the soil volume and compaction.



6

MIX

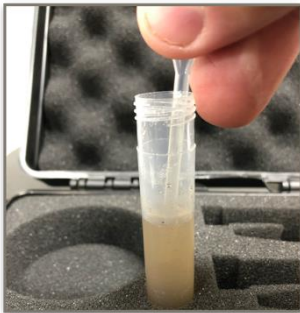
Compacted soil (especially clay) must be broken up using the included metal spatula. Allow the tube to rest in the hole in the kit, insert the whisker, turn on, and allow to mix for **30 seconds**. You do not need to touch the whisker while mixing.



7

SETTLE

This occurs in **2 stages**. After mixing, allow the liquid to rest for **5 minutes**. Tap the bottom of the tube on a hard surface to coax floating debris to settle. Allow to settle for an additional **15 minutes**. Soil particles will settle to the bottom, creating a microbial suspension above.



8

SAMPLE MICROBES

Use a small pipette to draw up liquid from about half an inch below the surface. Squeeze the pipette before entering to avoid blowing bubbles. Avoid any floating debris and foam at the edges.



9

PLACE DROPS ON TEST CARD

Carefully apply **3 drops** to the sample window. Allow each drop to soak in fully before applying the next.

Analyze with the app within **2 minutes**.

10

ANALYZE WITH THE APP

Place the testcard on the appropriate spot on the backing card included in the kit. The app will first ask you to name the sample. Then it will automatically image the testcard and provide a reading. Align the blue square on the screen with the square on the testcard. When correct imaging is occurring the blue square turns green. A sample details screen will appear allowing you to enter sample specific information for your records.

