

BeCrop / Haney TEST

Samples taken on Strawberry fields between

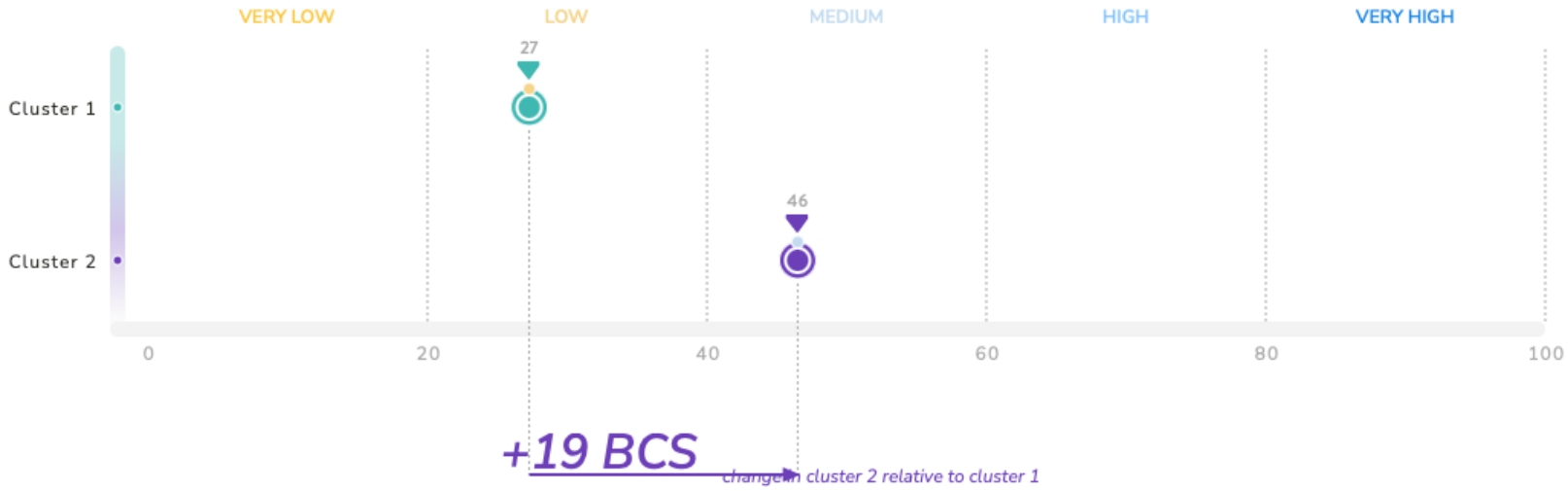
Mar 2022 – Sep 2023

CARBON

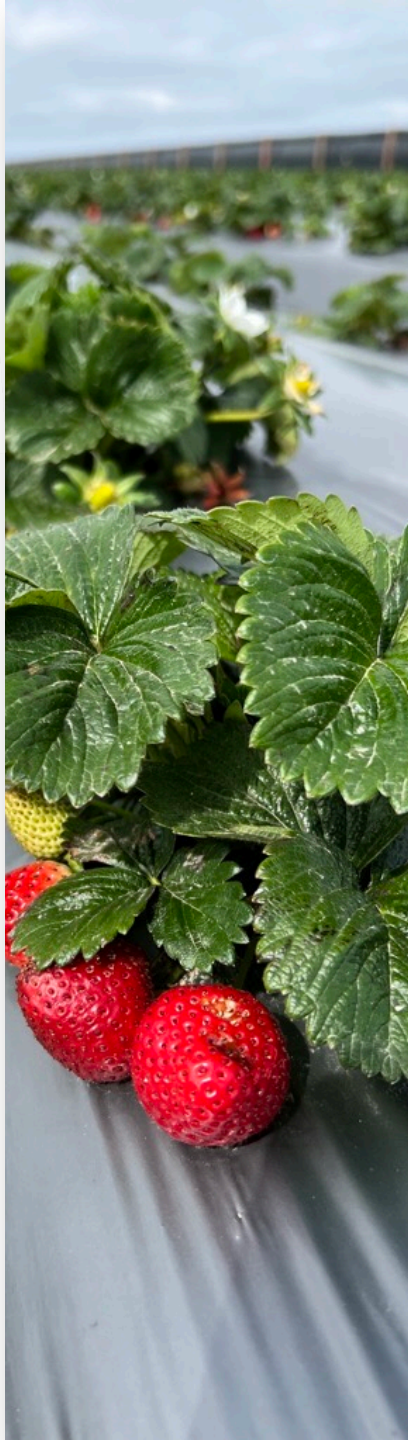
Carbon is the basis of biological soil fertility. It is the main compound in organic matter and an essential source of food for beneficial soil microbes. The presence of organic carbon improves soil health and fertility, increasing crop yields and reducing soil degradation. A low value indicates potential for Carbon Loss from the soil, while high values indicate potential for Carbon Sequestration.

CARBON FIXATION

The conversion process of inorganic carbon to organic compounds by living microorganisms.



MICROBIAL CHANGES

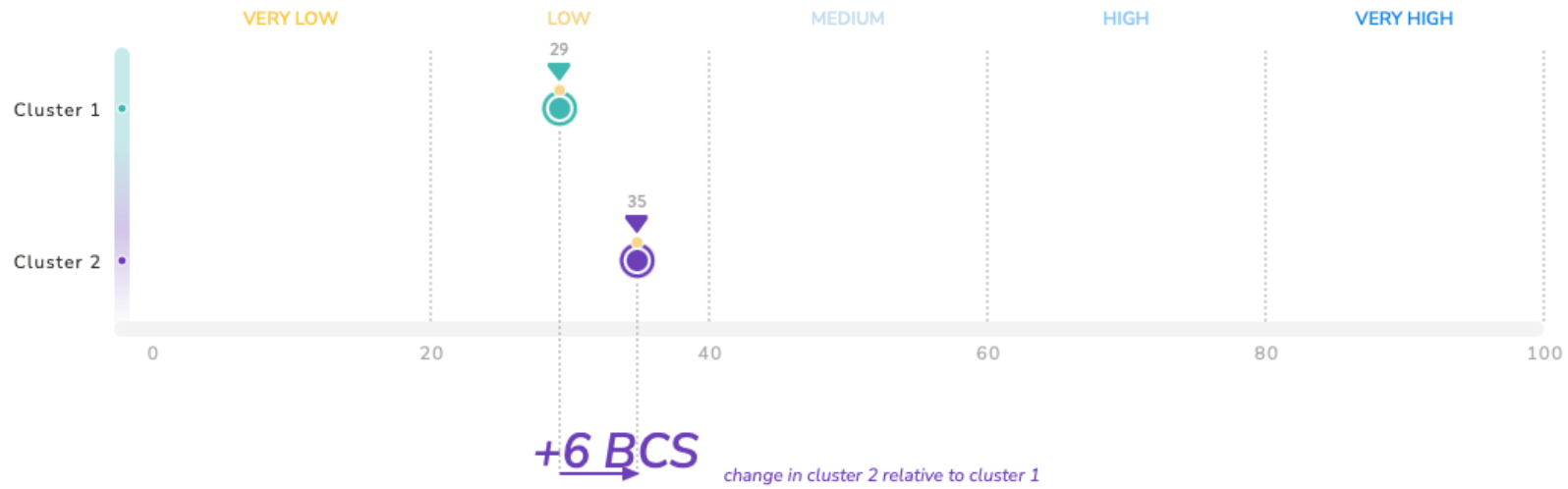


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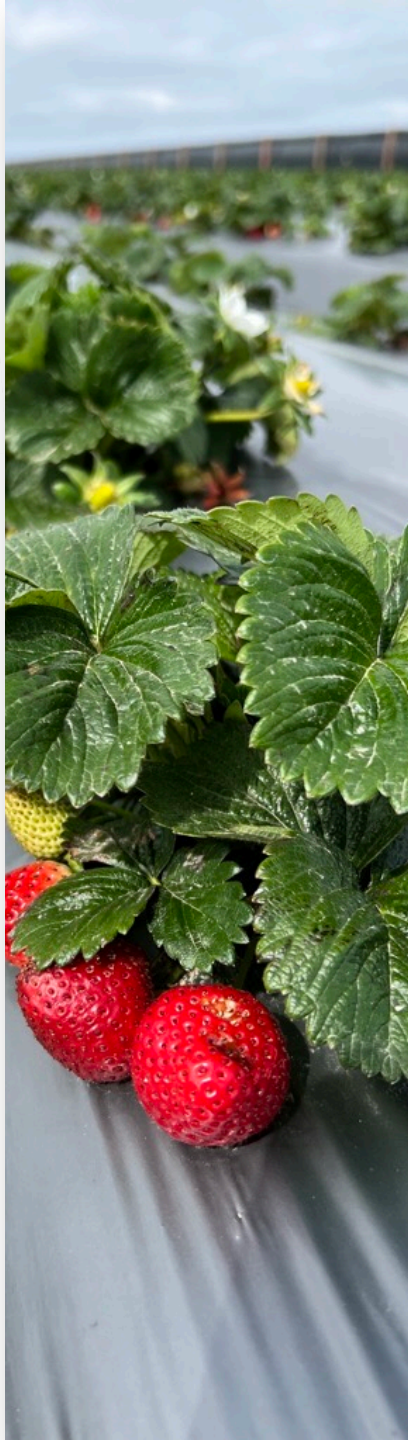
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AEROBIC RESPIRATION

The process in which microbes use organic compounds in oxygenated conditions, releasing CO_2



MICROBIAL CHANGES

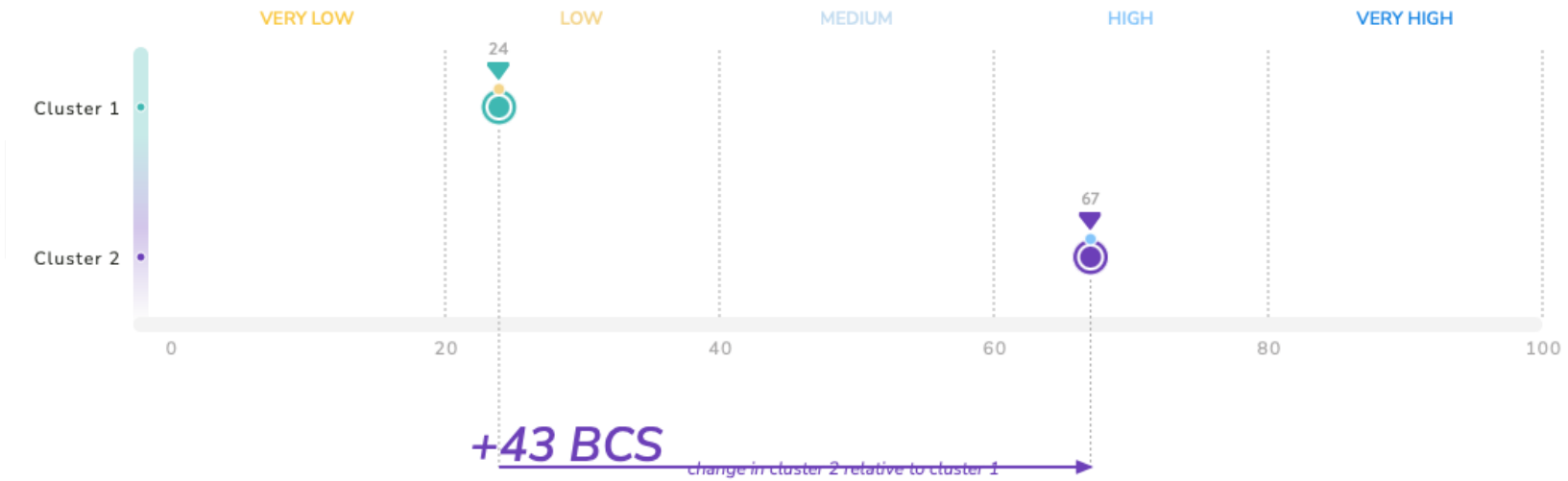


CARBON

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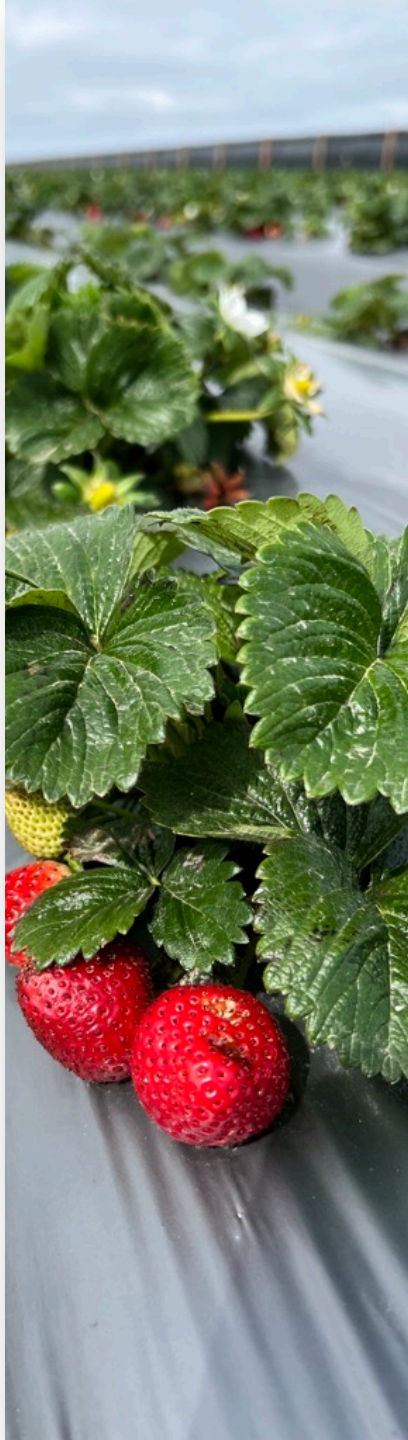
FERMENTATION

The process in which cells gain energy from organic compounds in non-oxygenated conditions, releasing CO_2



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MICROBIAL CHANGES

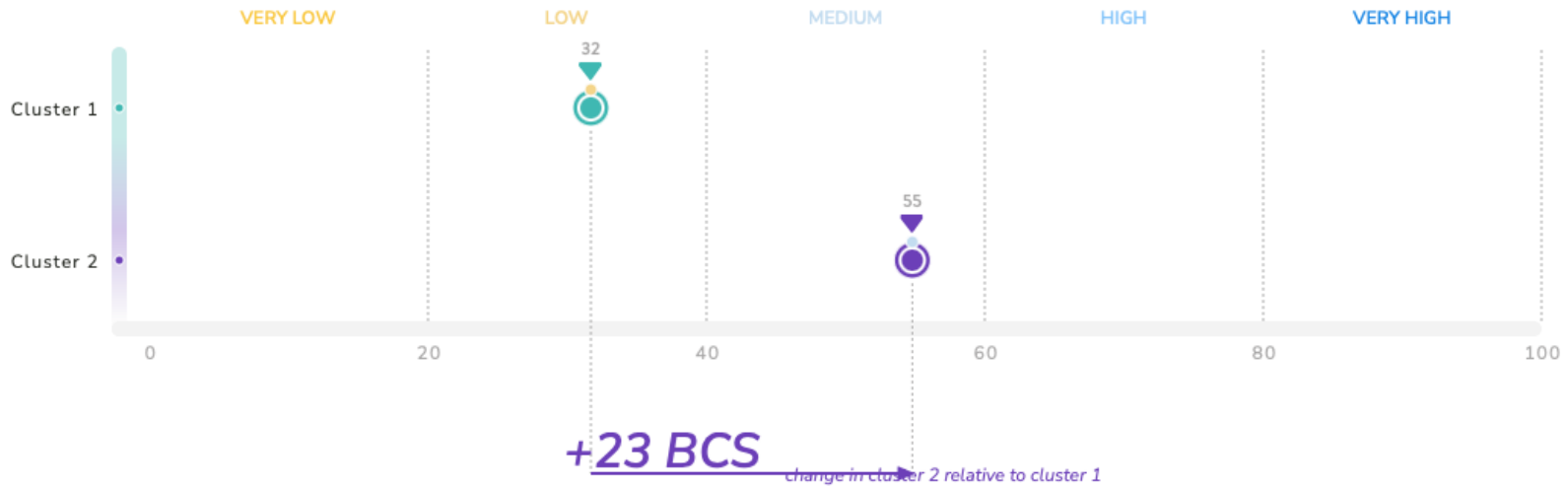


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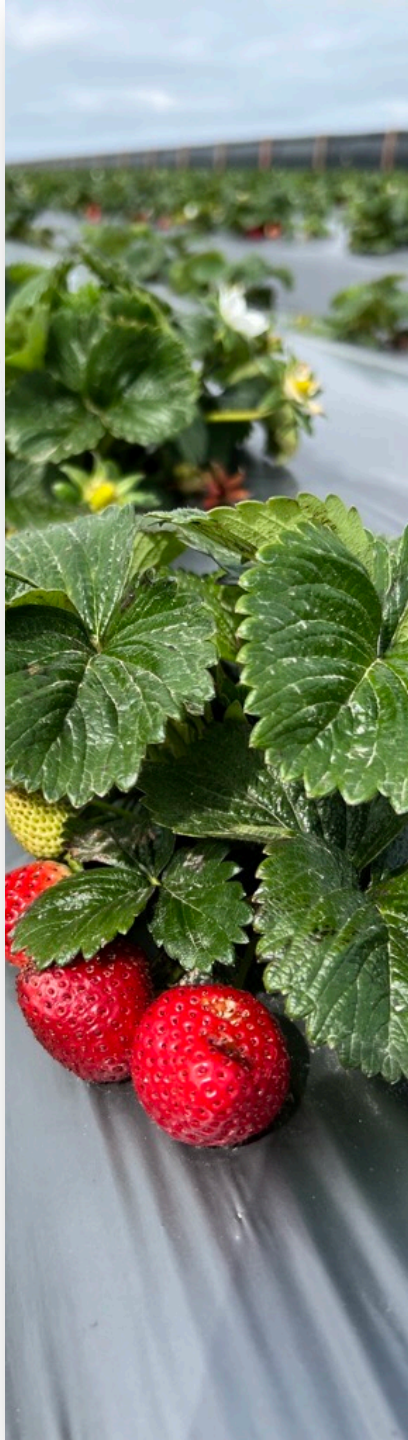
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METHANOGENESIS

The formation of methane (CH_4) by microbes, contributing to the degradation of organic matter.



MICROBIAL CHANGES

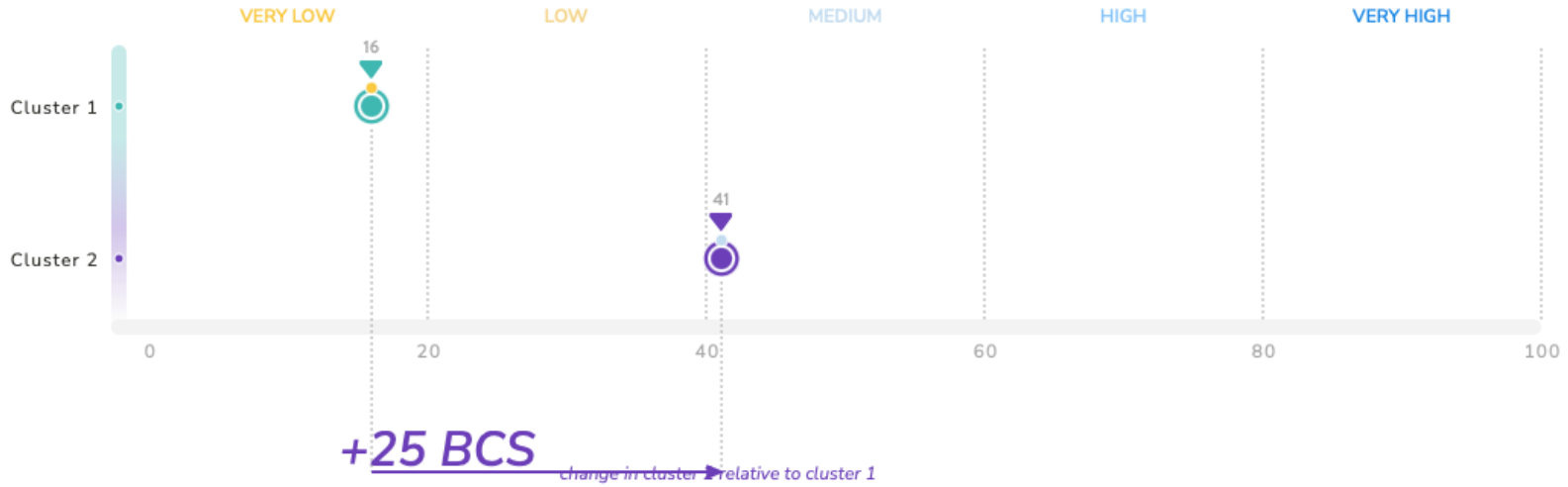


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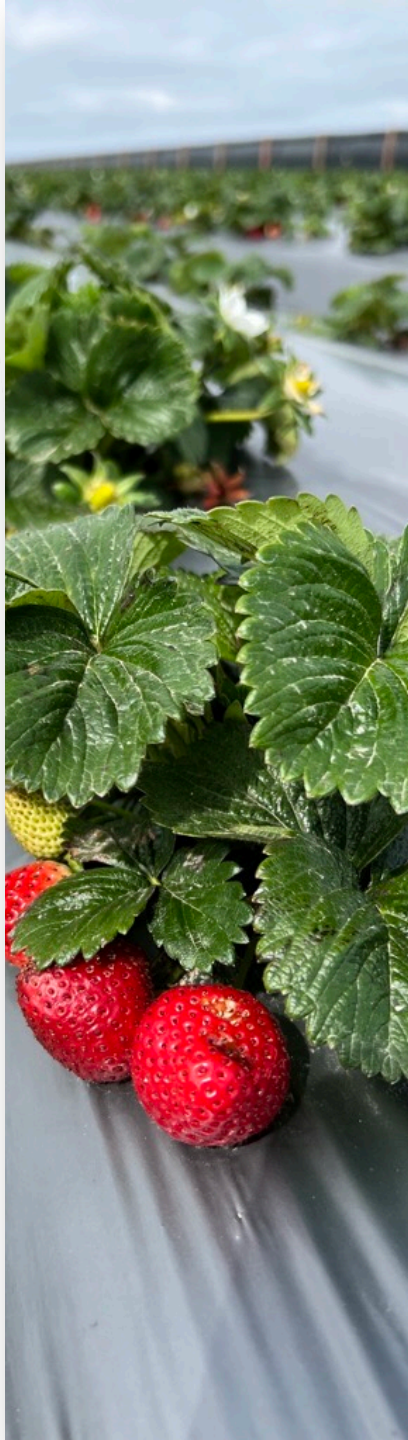
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ORGANIC MATTER RELEASE

The process in which soil microorganisms decompose vegetal debris, releasing diverse mineral nutrients. It is related to soil humification.

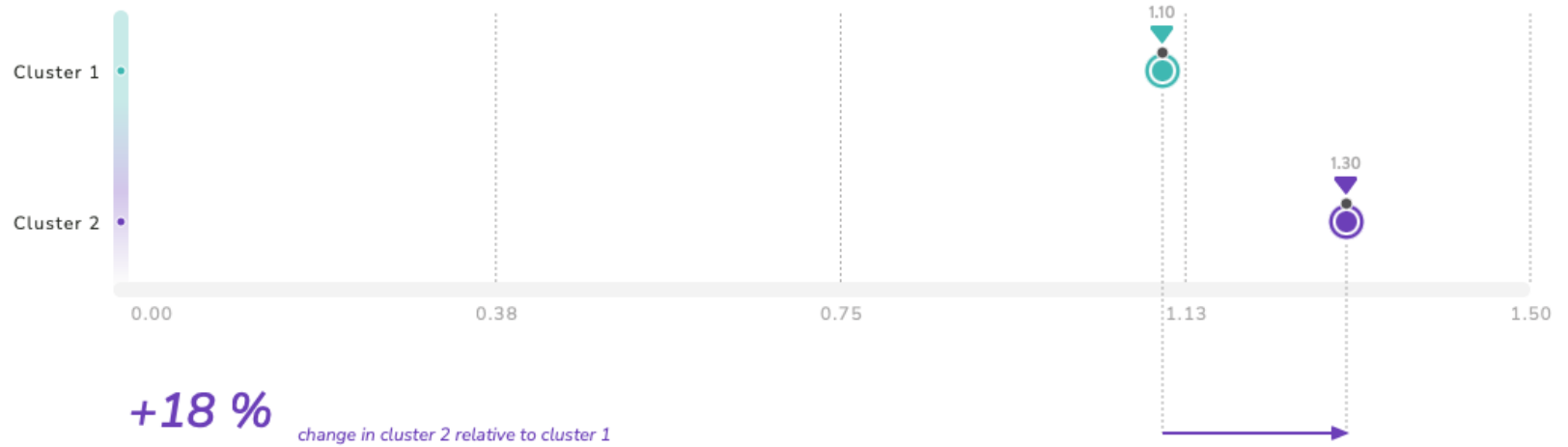


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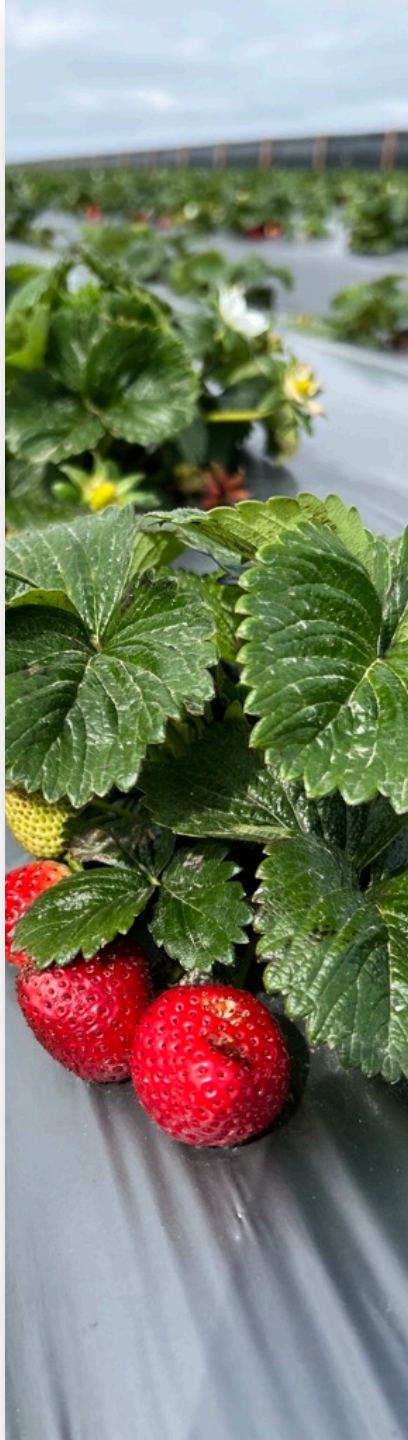


ORGANIC MATTER (%) LOI

This is the total soil organic matter (SOM) expressed as percent loss on ignition (%LOI). SOM is made up mostly of organic carbon, but it also contains all other essential plant nutrients. We think of SOM as the house the microbes live in.



+18 % *change in cluster 2 relative to cluster 1*



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SOIL HEALTH SCORE

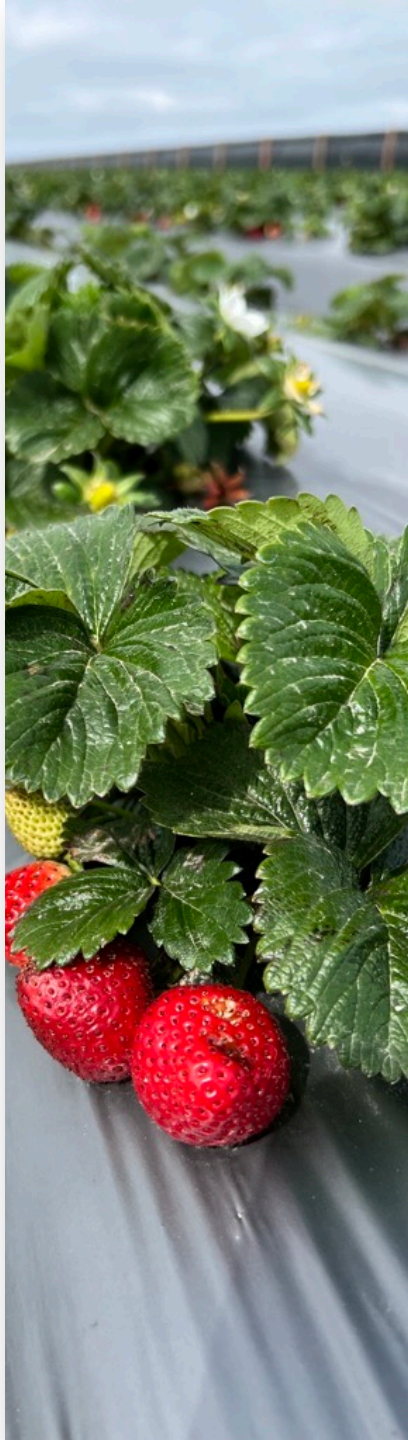
This number is calculated as soil respiration divided by 10 plus a weighted organic carbon and organic N addition. It summarizes the overall health of your system based on the indicators measured in the test.



+23 % *change in cluster 2 relative to cluster 1*

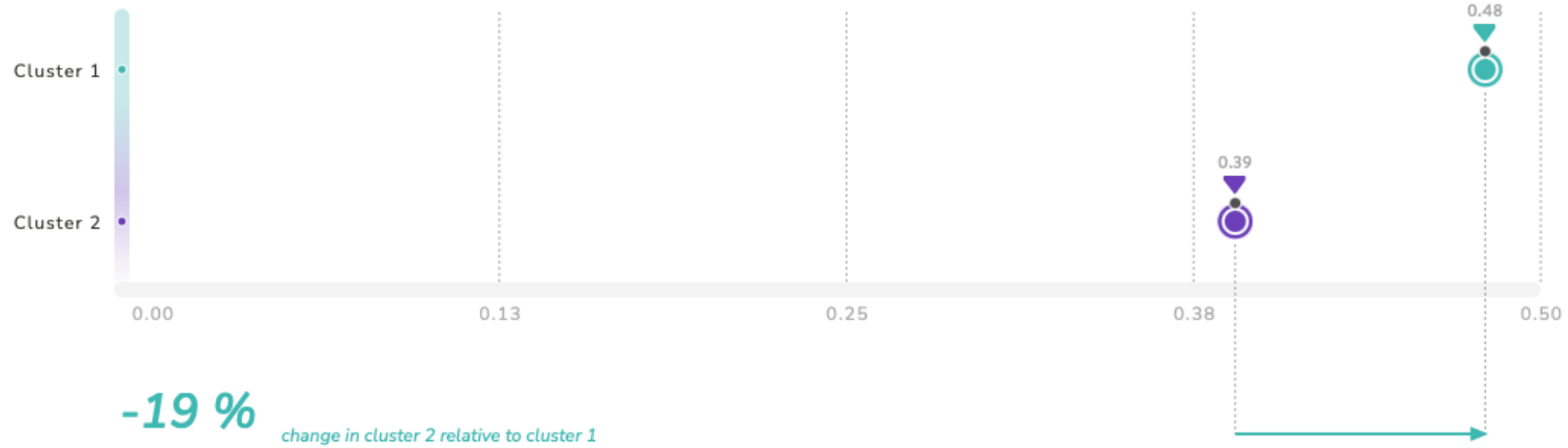
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PHYSICO-CHEMICAL CHANGES

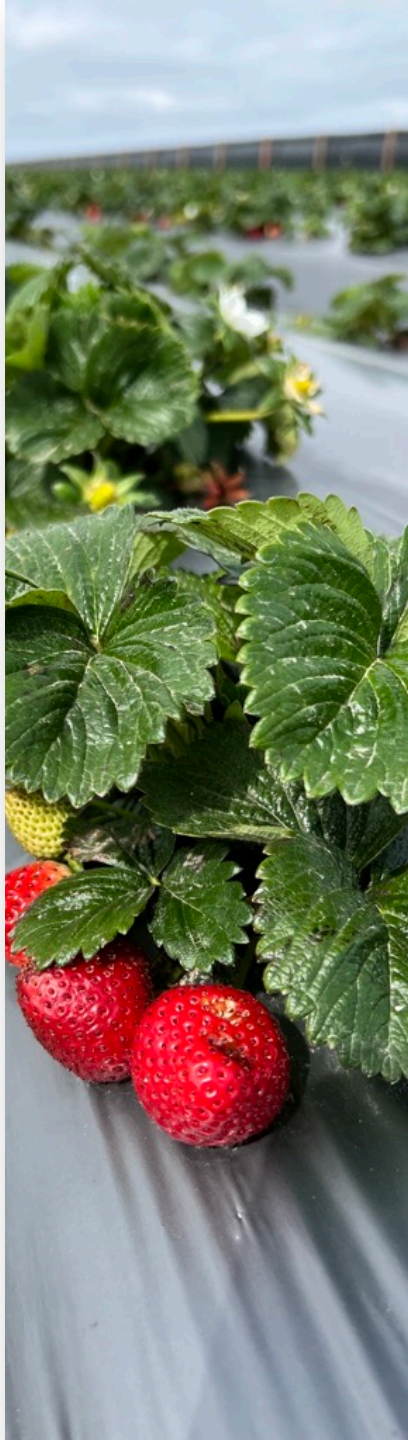


1:1 ELECTRICAL CONDUCTIVITY

A measure of the electrical conductivity (EC) of the soil based on the amount of soluble salts at a 1:1 ratio of soil and water expressed as mmho/cm.



-19 % *change in cluster 2 relative to cluster 1*



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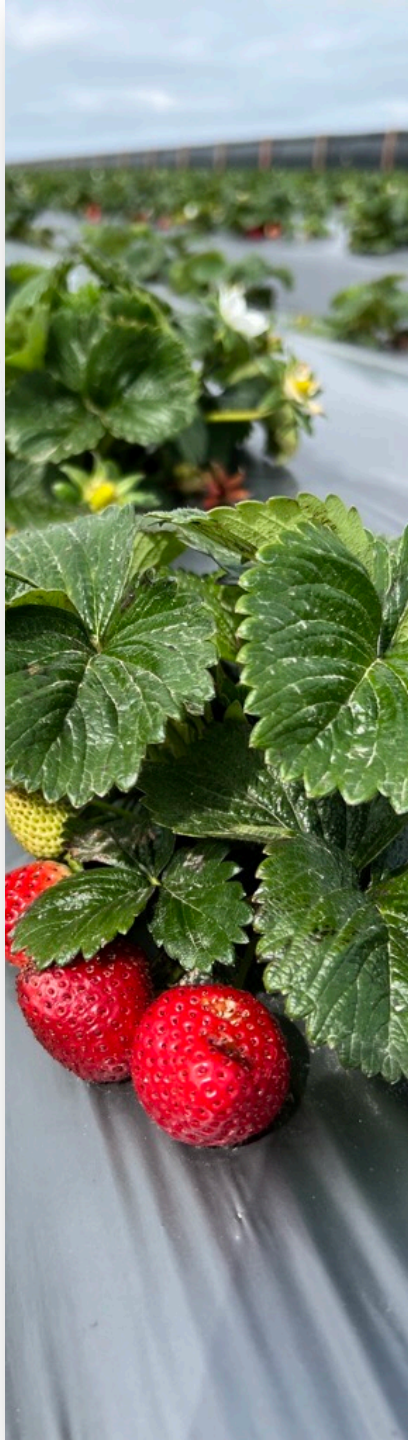
PHYSICO-CHEMICAL CHANGES

1:1 SOIL pH

The pH of the soil using a 1:1 ratio of soil and water.



-2 % *change in cluster 2 relative to cluster 1*

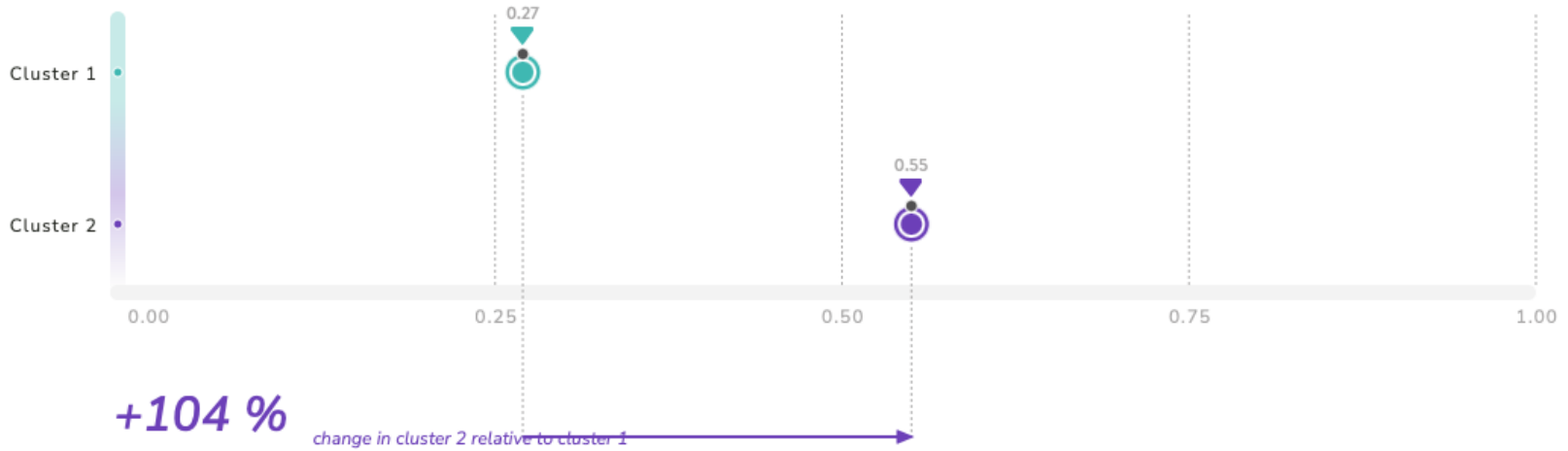


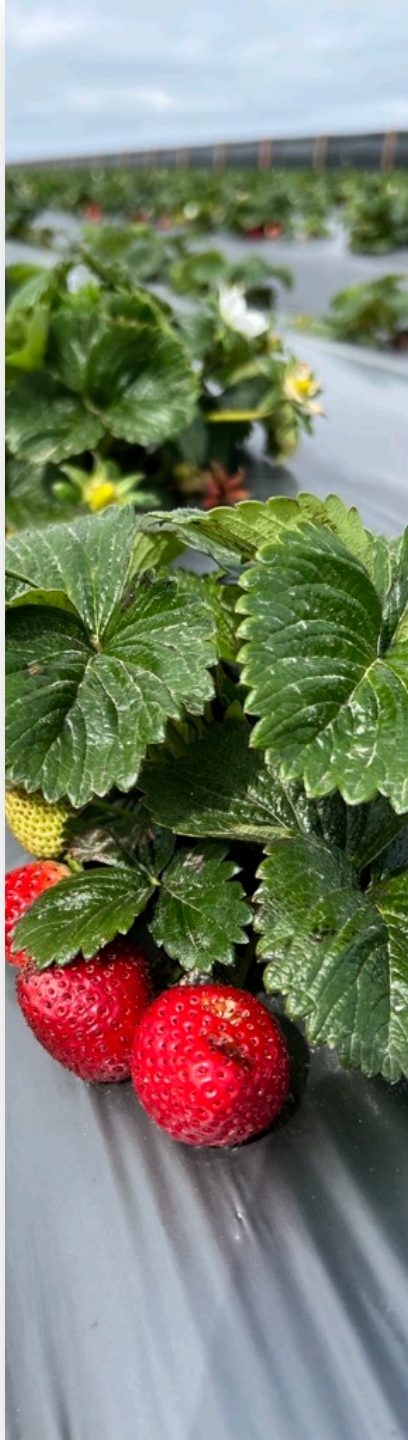
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ORG N: INORG N RATIO

This is the ratio of organic N to inorganic N in your soil. Soils that are reliant on fertilizer inputs typically have a lower amount of organic N and a higher amount of residual inorganic N.



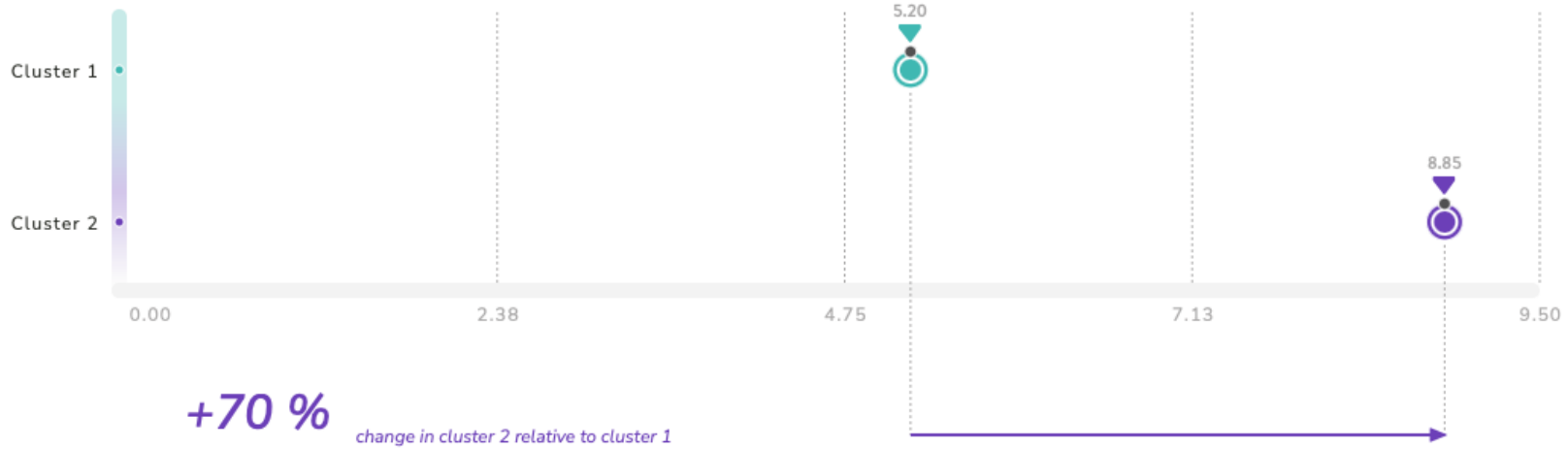


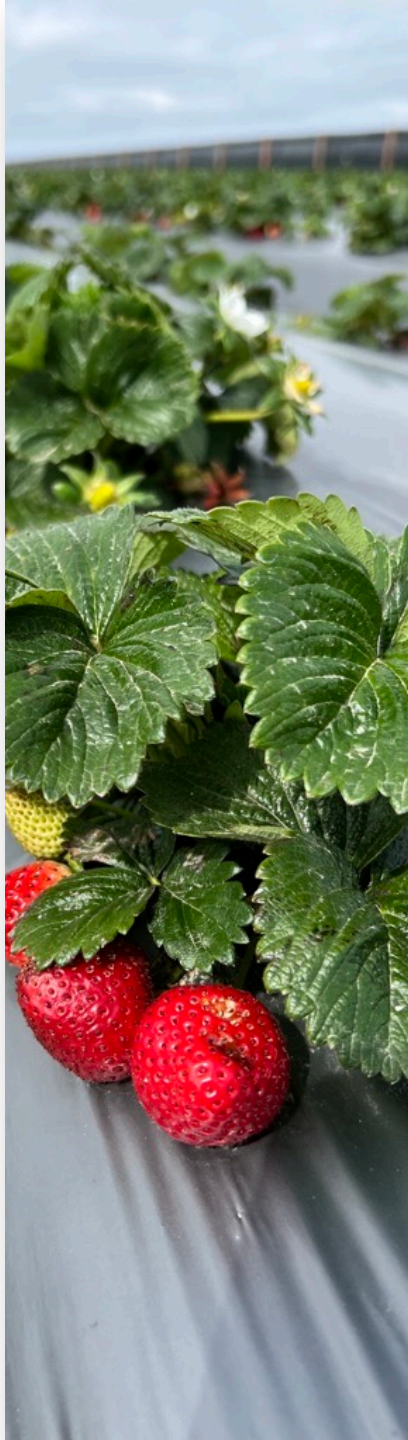
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PHYSICO-CHEMICAL CHANGES

ORGANIC N RELEASE (ppm)

The total amount of nitrogen being released through microbial activity from the organic N pool expressed as ppm N. The N released here is counted as a credit to the next crop and is subtracted from recommendations made on the Haney Test.





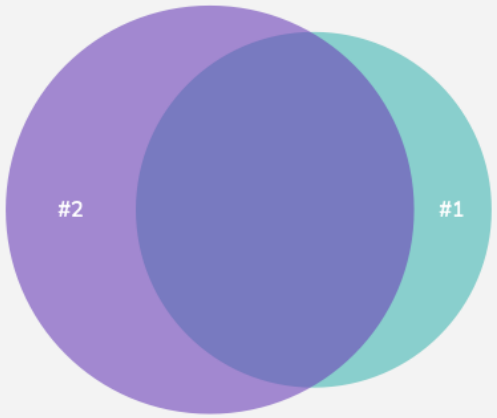
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PHYSICO-CHEMICAL CHANGES

ECO$_2$MIX – BeCrop Results
Strawberry Samples (Mar 2022 – Sep 2024)

BIOME MAKERS
POWERED BY BECROP

Micro Organism Co-Occurrence



Stats

SAMPLE UNIQUENESS
Organisms found in at least one sample of a cluster that are not present in any of the samples of the other clusters

1. Cluster 2 — 517 ORGS
2. Cluster 1 — 227 ORGS

CLUSTER UNIQUENESS
Organisms found in all of the samples of a cluster that are not present in any of the rest of the cluster samples

1. Cluster 2 — 517 ORGS
2. Cluster 1 — 227 ORGS

SPECIES RICHNESS
Total number of organisms found in each cluster

1. Cluster 2 — 1203 ORGS
2. Cluster 1 — 913 ORGS

COMMONALITY
Common organisms present within all samples of each individual cluster

1. Cluster 2 — 1203 ORGS
2. Cluster 1 — 913 ORGS

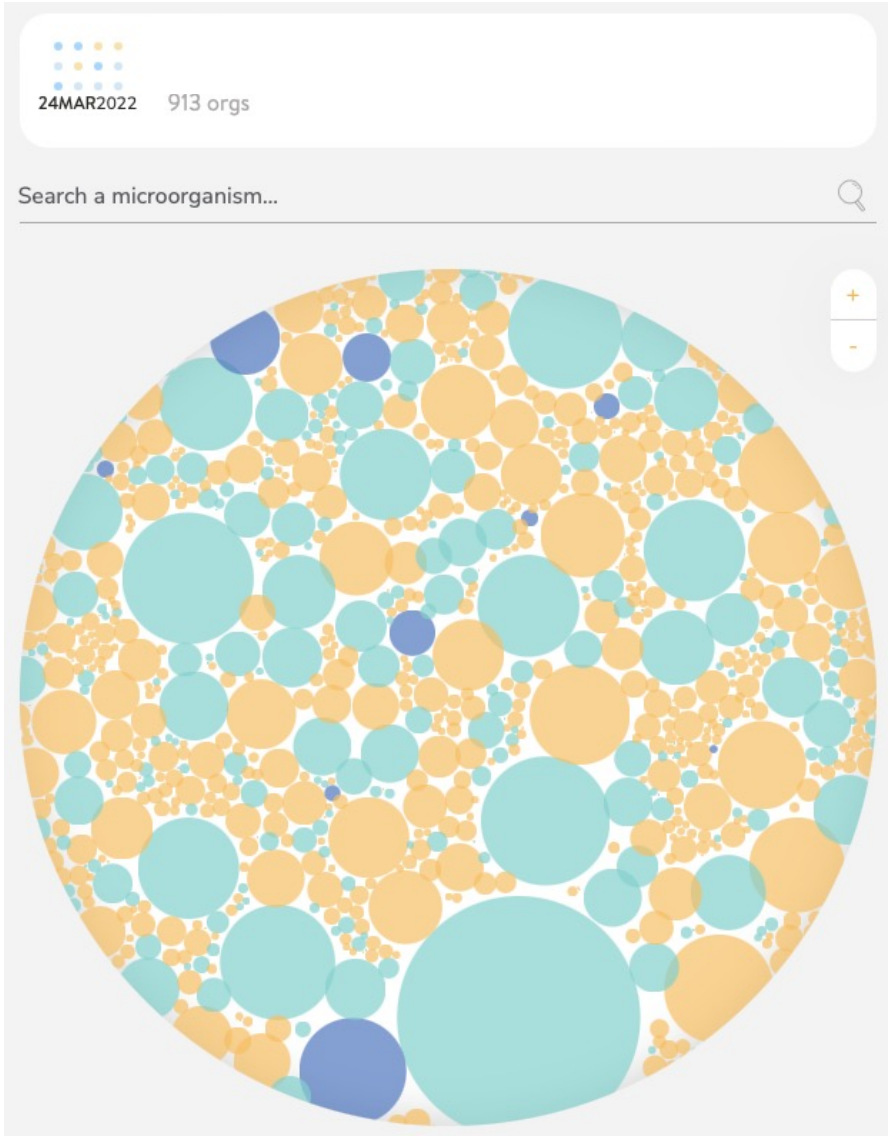
The BeCrop Score reflects how each sample compares to the Biome Makers soil sample database.
Higher scores are indicative of higher levels of microbial functionality

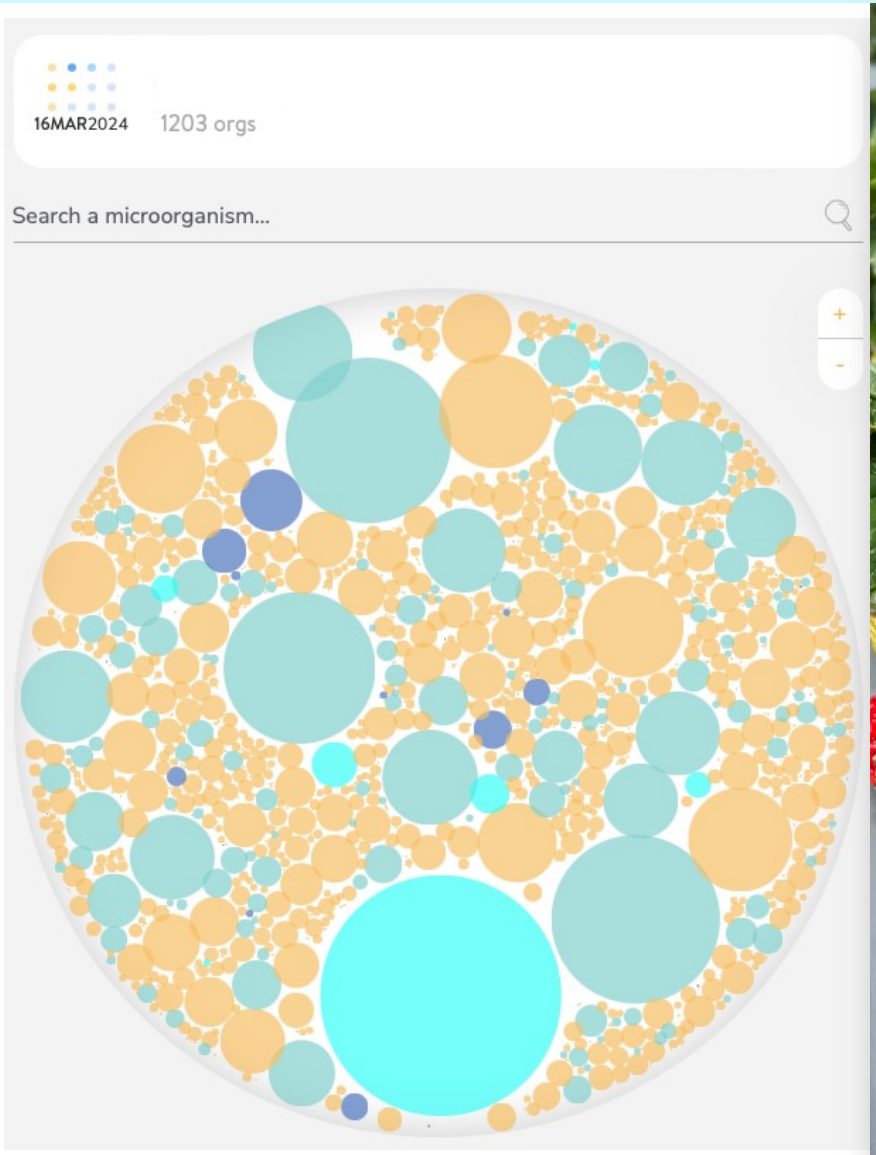


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BIOMEMAKERS
POWERED BY BECROP

Micro Biome Explorer







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