

Microbiome Analysis Report



SOIL

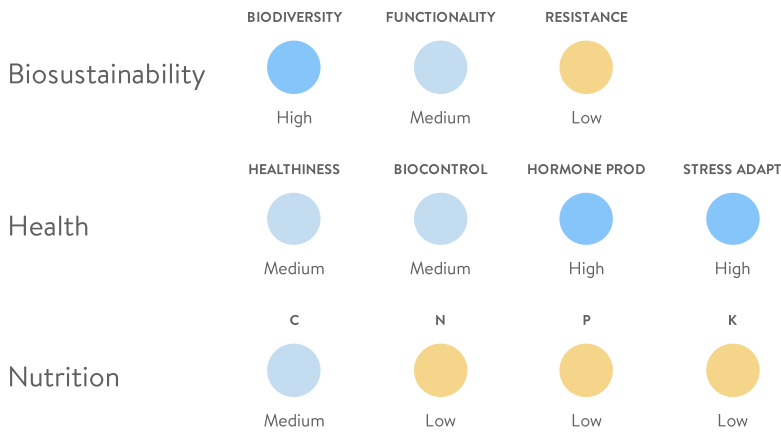
CROP
Soybean

VARIETY
Not defined

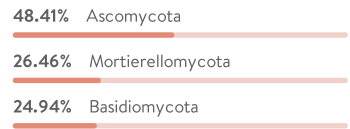
DATE
22-Jun-2021

SUMMARY

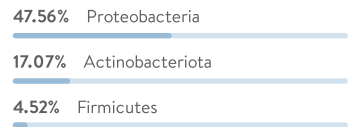
All the information shown in this microbial report is based on the detection presence of **524** different species whose distribution is



FUNGAL PHYLUM DISTRIBUTION



BACTERIAL PHYLUM DISTRIBUTION



LEGEND ● Not Detected ● Very low ● Low ● Medium ● High ● Very High

CONCLUSIONS

- You have a *Low* resistance value. Aggressive management can be affecting your soil biosustainability.
- The *Nitrogen, Phosphorus and Potassium* nutrition values are low.
- The healthiness value is *Medium*.

BIOSUSTAINABILITY



Richness, evenness and equilibrium of microbial species



Capability of soil microbial communities to perform multiple functions



Ability of communities or populations to remain unchanged when stressed by disturbance



HEALTH

HEALTHINESS

Medium

4 Disease Risks found



Crop health according to the pathogens detected

SLIGHT RISK DETECTED



SUDDEN DEATH SYNDROME

||||| LOW Risk level



FROGEYE LEAF SPOT

||||| LOW Risk level



FUSARIUM ROT

||||| LOW Risk level



CHARCOAL ROT

||||| LOW Risk level

NOT DETECTED

- ANTHRACNOSE • LEPTOSPHAERULINA LEAF SPOT • NEOCOSMOSPORA STEM ROT • PHYMATOTRICHUM ROT •
- PHYTOPHTHORA ROT • POD AND STEM BLIGHT • POWDERY MILDEW • PYTHIUM ROT • RED CROWN ROT •
- RED LEAF BLOTCH • RHIZOCTONIA ROT • RUST • SOUTHERN BLIGHT • STACHYBOTRYS ROOT ROT • STEM
- CANKER • STEMPHYLIUM LEAF BLIGHT • TARGET SPOT • WHITE MOLD • WILDFIRE • YEAST SPOT OF PODS
- AND SEEDS • ATERNARIA LEAF SPOT • BACILLUS SEED DECAY • FUSARIUM BLIGHT OR WILT • BACTERIAL
- BLIGHT • BACTERIAL PUSTULE • BACTERIAL TAN SPOT • BACTERIAL WILT • BROWN SPOT • BROWN STEM ROT
- CERCOSPORA LEAF BLIGHT AND PURPLE SEED STAIN • CHOANEPHORA LEAF BLIGHT • DOWNY MILDEW •
- DRECHSLERA BLIGHT

BC-R-0the-IT53-16S4-BPP1-2021-08-06-CBX000-2/5



BIOCONTROL

Medium



Microbial species grouped according to the type of pest they encounter, capable of preventing pathogenic species from taking hold or proliferation

Fungicide agents

MEDIUM

Bactericide agents

NOT DETECTED

Insecticide agents

LOW

Nematicide agents

MEDIUM

HORMONE PRODUCTION

High



Microbial species grouped according to the type of phytohormone they generate

Auxin production (IAA)

CELL DIVISION, STEM ELONGATION

VERY HIGH

Cytokinin production (CK)

CELL PROLIFERATION, CELL DIFFERENTIATION

VERY HIGH

Gibberellin production (GA)

STEM ELONGATION, GERMINATION, FLOWERING

LOW

STRESS ADAPTATION

High



Microbial species grouped according to their relationship with the metabolisms linked to the capability to withstand stress conditions

Exopolysaccharide production

NUTRIENT TRAP, SALINITY PROTECT., DROUGHT PROTECT.

HIGH

ACC deaminase (ACC-d)

PATHOGEN PROTECT., SALINITY PROTECT., DROUGHT PROTECT.

MEDIUM

Heavy metal solubilization

BIOREMEDIATION, DETOXIFICATION, ALLEVIATE HEAVY METAL STRESS

MEDIUM

Salicylic acid (SA)

DROUGHT PROTECT., SALINITY PROTECT., ALLEVIATE HEAVY METAL STRESS

MEDIUM

Salt tolerance

SALINITY PROTECT., ROOT GROWTH PROMOTION

VERY HIGH

Abscisic acid (ABA)

GROWTH REGULATION, PLANT RESISTANCE, INCREASE YIELDS

MEDIUM

Siderophore production

IRON AVAILABILITY, BIOFERTILIZER

HIGH

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NUTRITION

Nutritional status based on the microbial mobilization of certain compounds

MAJOR COMPOUNDS

C

Carbon

MEDIUM

N

Nitrogen

LOW

CARBON PATHWAYS

<p>GAIN</p> <p>Carbon fixation — MEDIUM</p> <p>INDIRECT BENEFITS</p> <p>Organic matter release — MEDIUM</p>	<p>LOSS</p> <p>Aerobic respiration — LOW</p> <p>Fermentation — MEDIUM</p> <p>Methanogenesis — HIGH</p>
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NITROGEN PATHWAYS

<p>NUTRIENT SUPPLY</p> <p>Inorganic nitrogen release — MEDIUM</p> <p>INDIRECT BENEFITS</p> <p>Inorganic nitrogen cycle health — MEDIUM</p>	<p>NUTRIENT COMPETITION</p> <p>Inorganic nitrogen consumption — HIGH</p>
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P

Phosphorus

LOW

K

Potassium

LOW

PHOSPHORUS PATHWAYS

<p>NUTRIENT SUPPLY</p> <p>Inorganic P solubilization — LOW</p> <p>INDIRECT BENEFITS</p> <p>Organic P assimilation — MEDIUM</p>	<p>NUTRIENT COMPETITION</p> <p>Inorganic P consumption — MEDIUM</p>
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POTASSIUM PATHWAYS

<p>NUTRIENT SUPPLY</p> <p>Potassium solubilization — LOW</p>	<p>NUTRIENT COMPETITION</p> <p>Potassium consumption — MEDIUM</p>
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MINOR COMPOUNDS

Fe

Iron

MEDIUM
Iron assimilation

Zn

Zinc

MEDIUM
Zinc transport equilibrium

Mn

Manganese

MEDIUM
Manganese transport equilibrium

S

Sulfur

MEDIUM
Sulfur cycle equilibrium

Ca

Calcium

MEDIUM
Calcium transport

Cu

Copper

MEDIUM
Copper export

Mg

Magnesium

MEDIUM
Magnesium transport

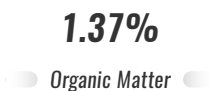
Cl

Chlorine

MEDIUM
Chlorine transport

CHEMICAL FERTILITY RATINGS

General Insights



Buffer pH
7.35
Estimated Nitrogen Release
27 lb/ac



Extractable Elements

MACRONUTRIENTS

Nitrate-Nitrogen **6.94** ppm
N03 NO RATING
N03-N

Ammonium-Nitrogen **1.35** ppm
NH4 NO RATING
NH4-N (KCl)

Phosphorus **51** lb/ac
P MEDIUM
P (M3)

Potassium **150** lb/ac
K MEDIUM
K (M3)

MICRONUTRIENTS

Sulfur **10** lb/ac
S LOW
S (M3)

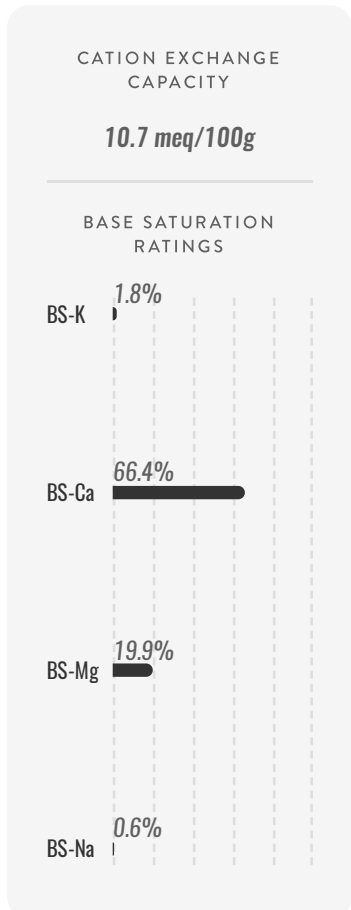
Zinc **9.5** lb/ac
Zn MEDIUM
Zn (M3)

Calcium **2851** lb/ac
Ca VERY HIGH
Ca (M3)

Manganese **137** lb/ac
Mn MEDIUM
Mn (M3)

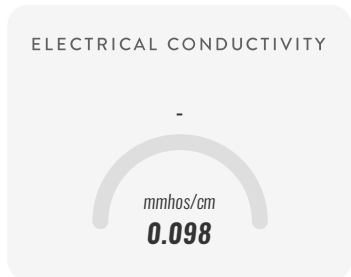
Magnesium **513** lb/ac
Mg VERY HIGH
Mg (M3)

Boron **0.8** lb/ac
B LOW
B (M3)



Detrimental Elements

Sodium **32** lb/ac
Na NO RATING
Na (M3)



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