18 January 2024

Unlocking the Potential of Soil DNA Analytics to Increase On-Farm Productivity

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TRACE GENOMICS™
AN ALIVE SCIENCE COMPANY

Booth 302 - 304

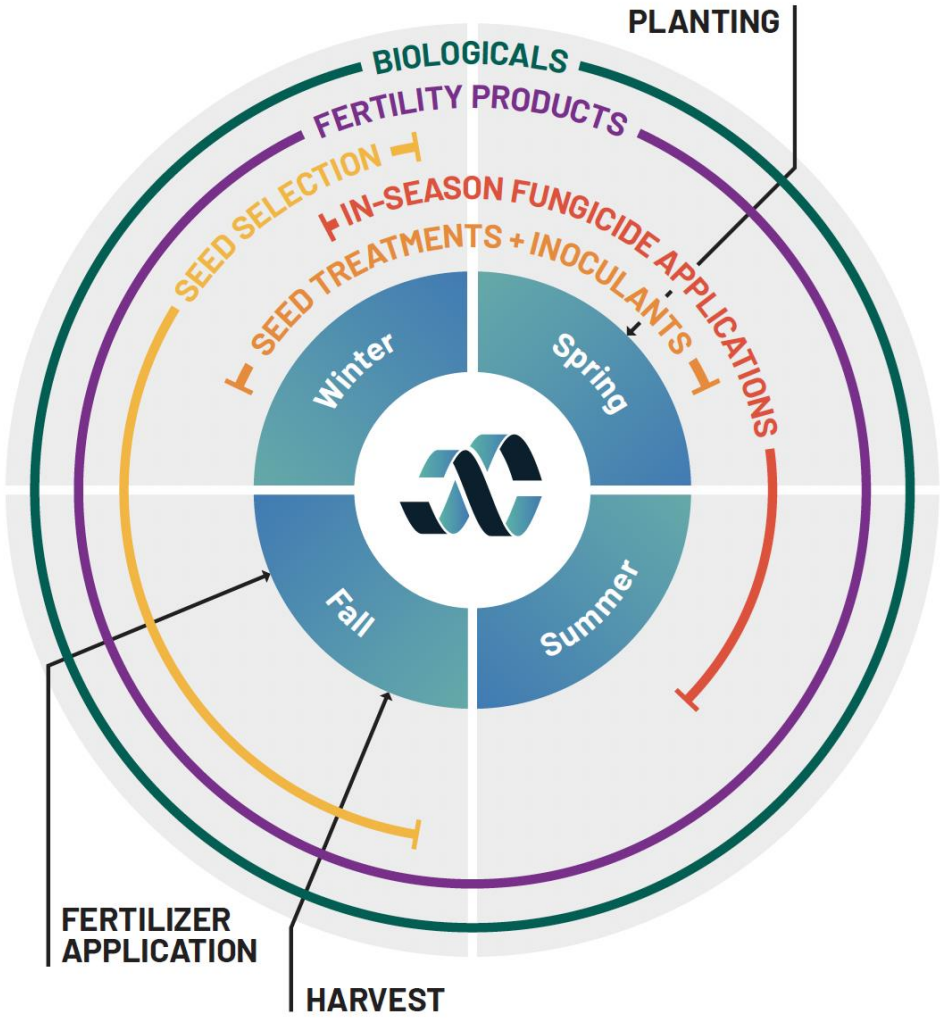
MULTI-YEAR, YEAR-ROUND DECISIONS. ONE SOIL TEST.

225+ Pathogens

70+ Crops

Chemistry- and Biology- Informed Nutrient Data

- Make the most informed agronomic decisions
- Improve product placement
- Make disease testing more convenient
- Promote trust between agronomists and growers



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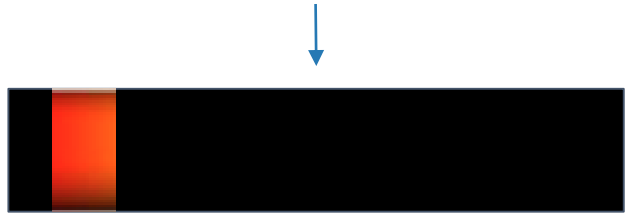
DNA SEQUENCING: LOW-DEFINITION VS. HIGH-DEFINITION

Amplicon (16S)

Fingerprinting Microbe (easy)

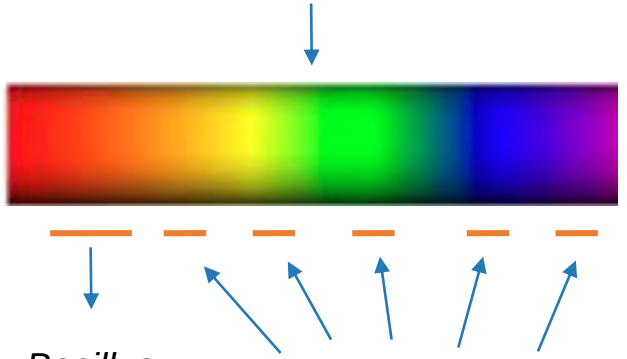


Bacillus amyloliquifaciens (known P solubilizer)

Who You Are

Metagenomics

Sequencing All DNA



Bacillus amyloliquifaciens

Functional genes—not dependent on ID

What You Do

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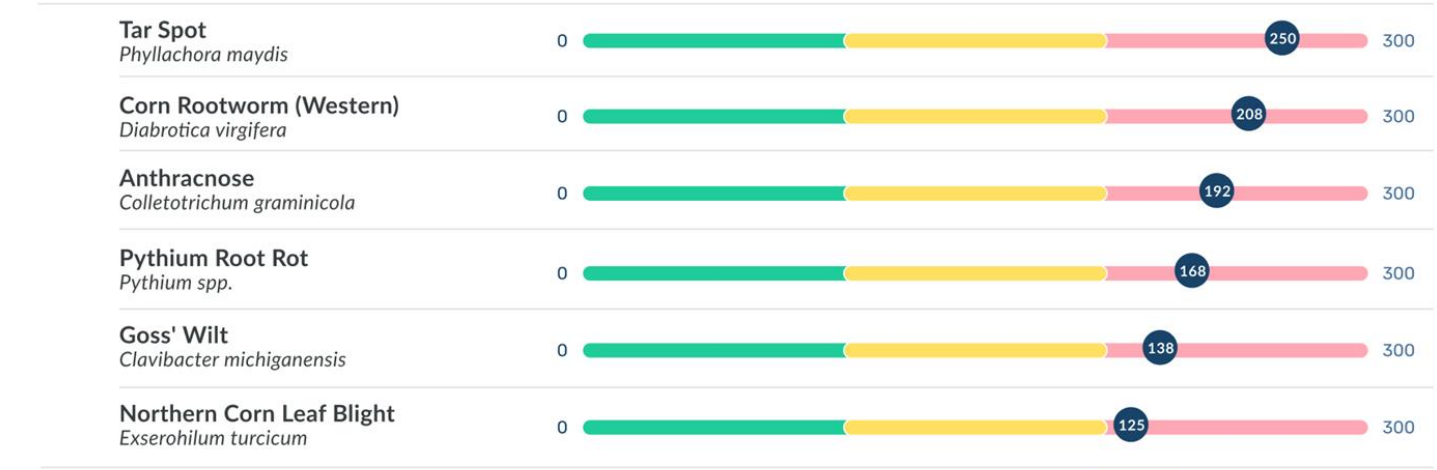
Seed Solution Guide

CROP	GROWER	FARM	FIELD	SAMPLING DATES
Corn	Smith Farms	Smith County	North Quarter	09/25/2023

Highest Peak Pathogen Levels

High · Medium · Low · Measured Value (% percentage) · Regional Smart Benchmark Used



*Other Pathogens: Aspergillus flavus · Aspergillus parasiticus · Bacterial Leaf Streak · Common Rust · Common Smut · Charcoal Rot · Corn/Carbonum Leaf Spot · Diplodia Ear Rot And Stalk Rot · Fusarium Root and Crown Rot · Fusarium Stalk Rot · Gibberella Ear Rot · Seed Rot and Seedling Blight · Gray Leaf Spot · Seedling Blight · Seedling Blight And Root Rot · Southern Leaf Blight · Southern Rust · Stewart's Bacterial Leaf Blight

Field Average Chemistry Levels

CEC	25 meq/100g
pH	7.2
Organic Matter	3.4 %

Notes

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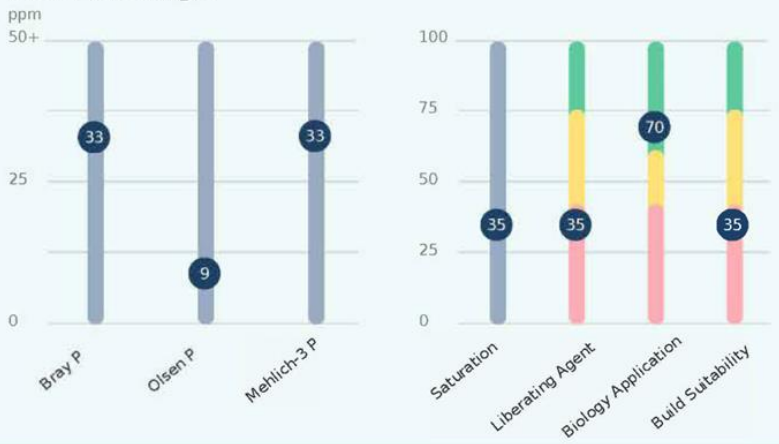
TracePHOS™

Phosphorus Report

CROP	GROWER	FARM	FIELD	SAMPLING DATES
Corn	Smith	Home	Orville North	10/17/2021

Field Average



Guidance

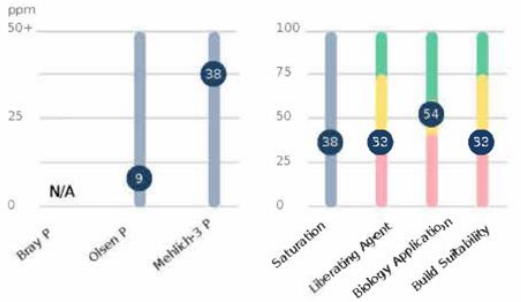
Chelator:
Phosphorus chelating agent is likely to produce a response because a significant proportion of phosphorus is bound in the soil under low saturation conditions.

Biology Application:
The phosphorus soil biology level is high and may not significantly benefit from a biological product or management practice to enhance the soil's capacity to biologically process phosphorus.

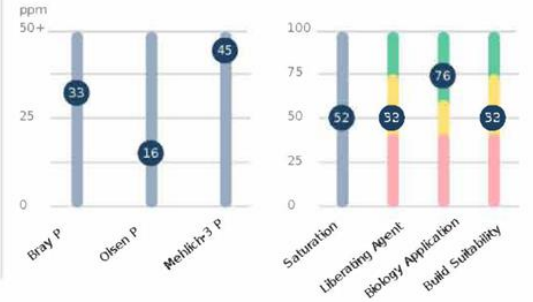
Build Suitability:
The soil is able to hold more phosphorus due to the low saturation level and is suitable for a build strategy, if desired.

Low Medium High Measured Value

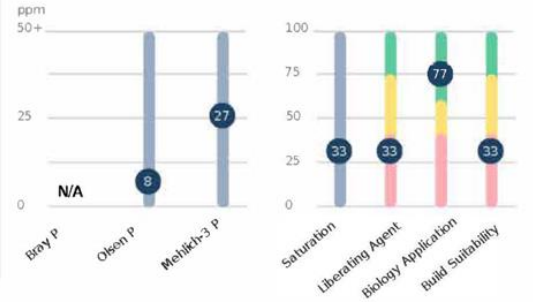
A Zone



B Zone



C Zone



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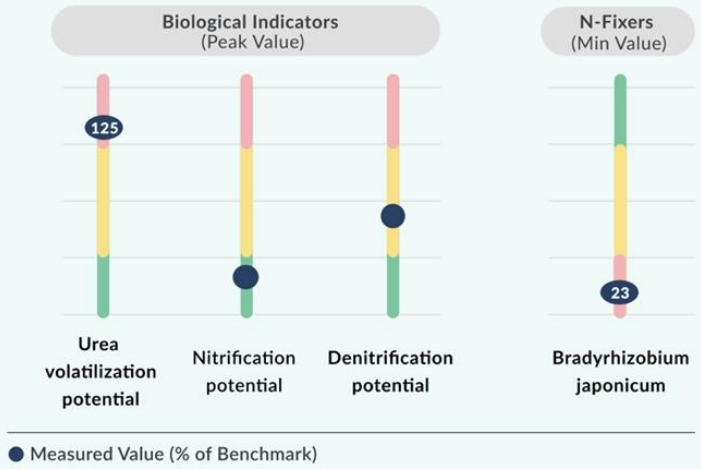
Nitrogen Management Report

CROP Soybean | GROWER Grower 1 | FARM Farm 1 | FIELD Field 1 | SAMPLING DATES 04/18/2023

Field Summary

Regional Smart Benchmark Used



Recommendations

- **Biological Indicators**

Guidance

The use of a urease inhibitor or slow-release nitrogen fertilizers are strongly recommended to reduce the rate of urea decomposition and subsequent N volatilization.

Nitrification Potential
The use of nitrification inhibitors or slow-release nitrogen fertilizers may reduce the rate of nitrification.

Denitrification Potential
Consider the use of nitrification inhibitors, slow-release nitrogen fertilizers and split applications to reduce the risk of N loss from denitrification.

- **N-Fixers**

Inoculant (Bradyrhizobium japonicum)
The use of an inoculant is strongly recommended.

Field Average Chemistry Levels

Ammonium	1.9 ppm
Nitrate	9.4 ppm
CEC	25 meq/100g
Organic Matter	3.4%
pH	7.2

Notes

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