

BIOME
MAKERS 
POWERED BY BECROP

DECODING SOIL BIOLOGY





**The Global effort
to achieve Sustainable Agriculture
Soil health as measured goal**

New Solutions for sustainability Challenges



Difficult to **choose** a product
in a **dense market**



Diversity of products



Difficult to **demonstrate**
effectiveness

Product efficiency

Local Network Properties of Soil and Rhizosphere Microbial Communities in Potato Plantations Treated with a Biological Product Are Important Predictors of Crop Yield

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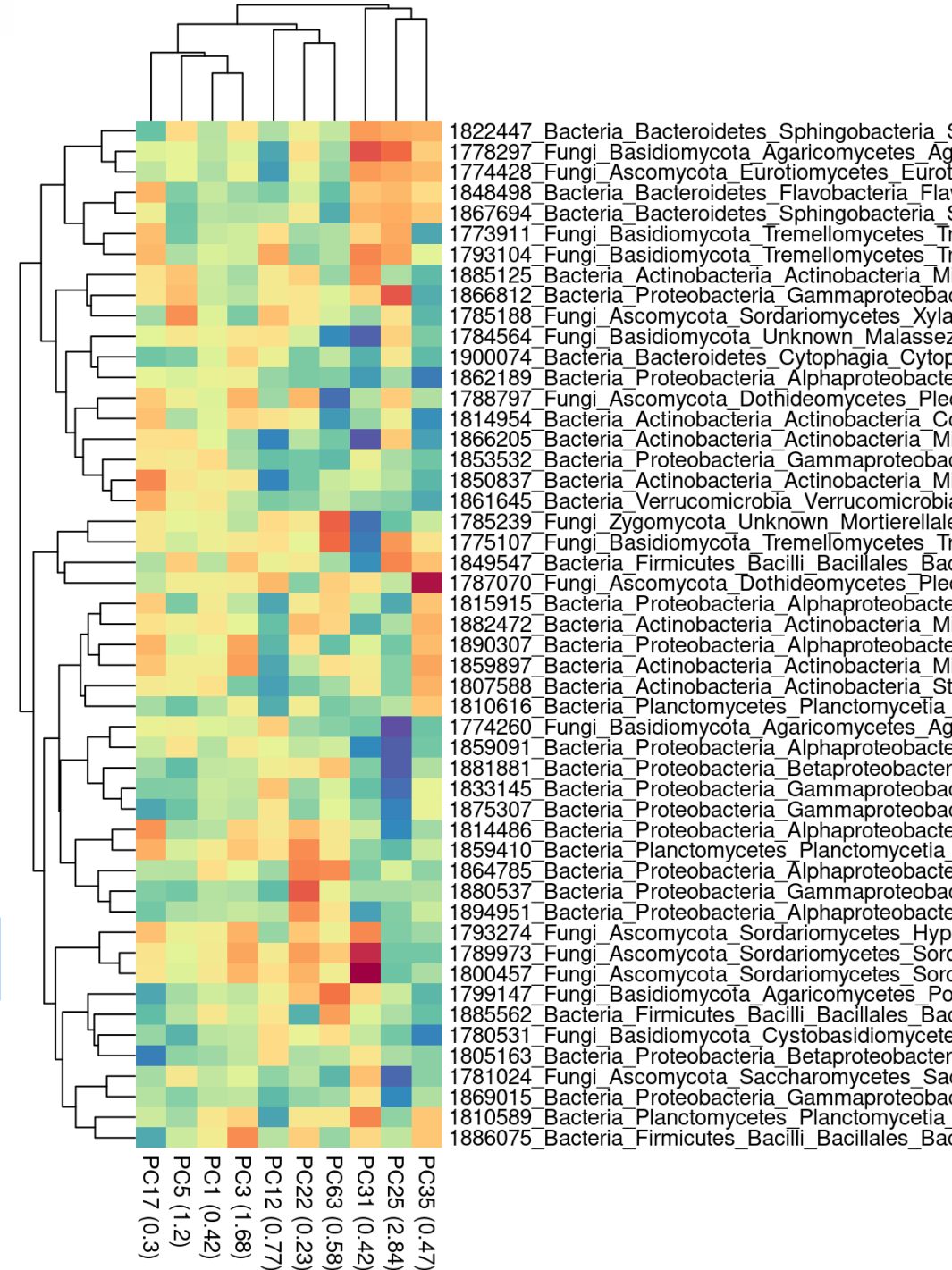
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ABSTRACT Understanding the effectiveness and potential mechanism of action of agricultural biological products under different soil profiles and crops will allow more precise product recommendations based on local conditions and will ultimately result in increased crop yield. This study aimed to use bulk soil and rhizosphere microbial composition and structure to evaluate the potential effect of a *Bacillus amyloliquefaciens* inoculant (strain QST713) on potatoes and to explore its relationship with crop yield. We implemented next-generation sequencing (NGS) and bioinformatics approaches to assess the bacterial and fungal biodiversity in 185 soil samples, distributed over four different time points—from planting to harvest—from three different geographical locations in the United States. In addition to location and sampling time (which includes





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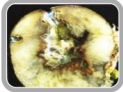
BY BIOME MAKERS

TEST

Show/Hide Result

FUSARIUM DRY ROT

TUBER



WORLDWIDE INCIDENCE

Widely spread

94 out of 100 parcels analysed are affected by Fusarium dry rot

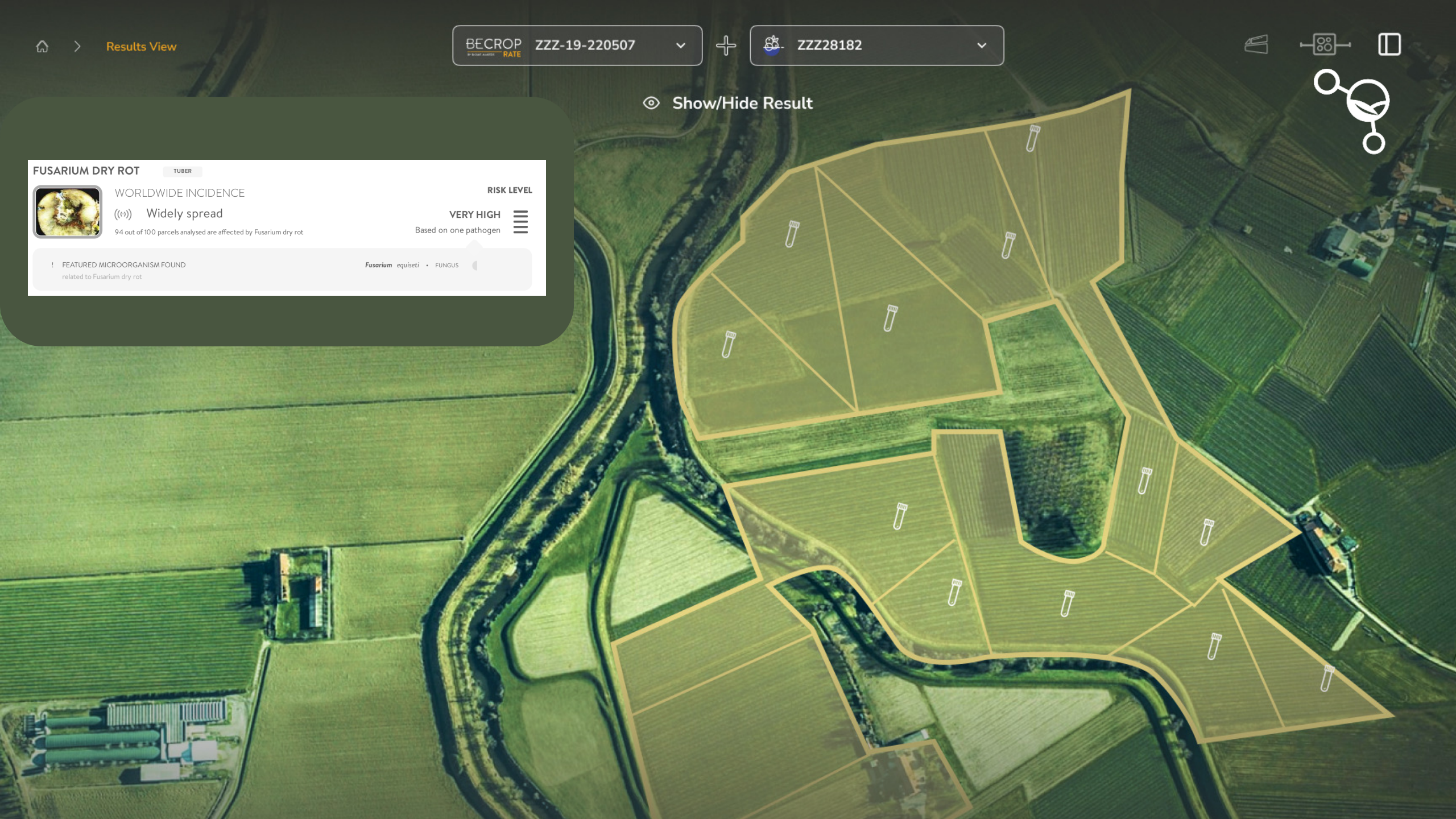
RISK LEVEL

VERY HIGH

Based on one pathogen

FEATURED MICROORGANISM FOUND related to Fusarium dry rot

Fusarium equiseti • FUNGUS



BeCROP
BY BIOME MAKERS TRIALS



BeCrop TRIALS

Partner in Product Innovation

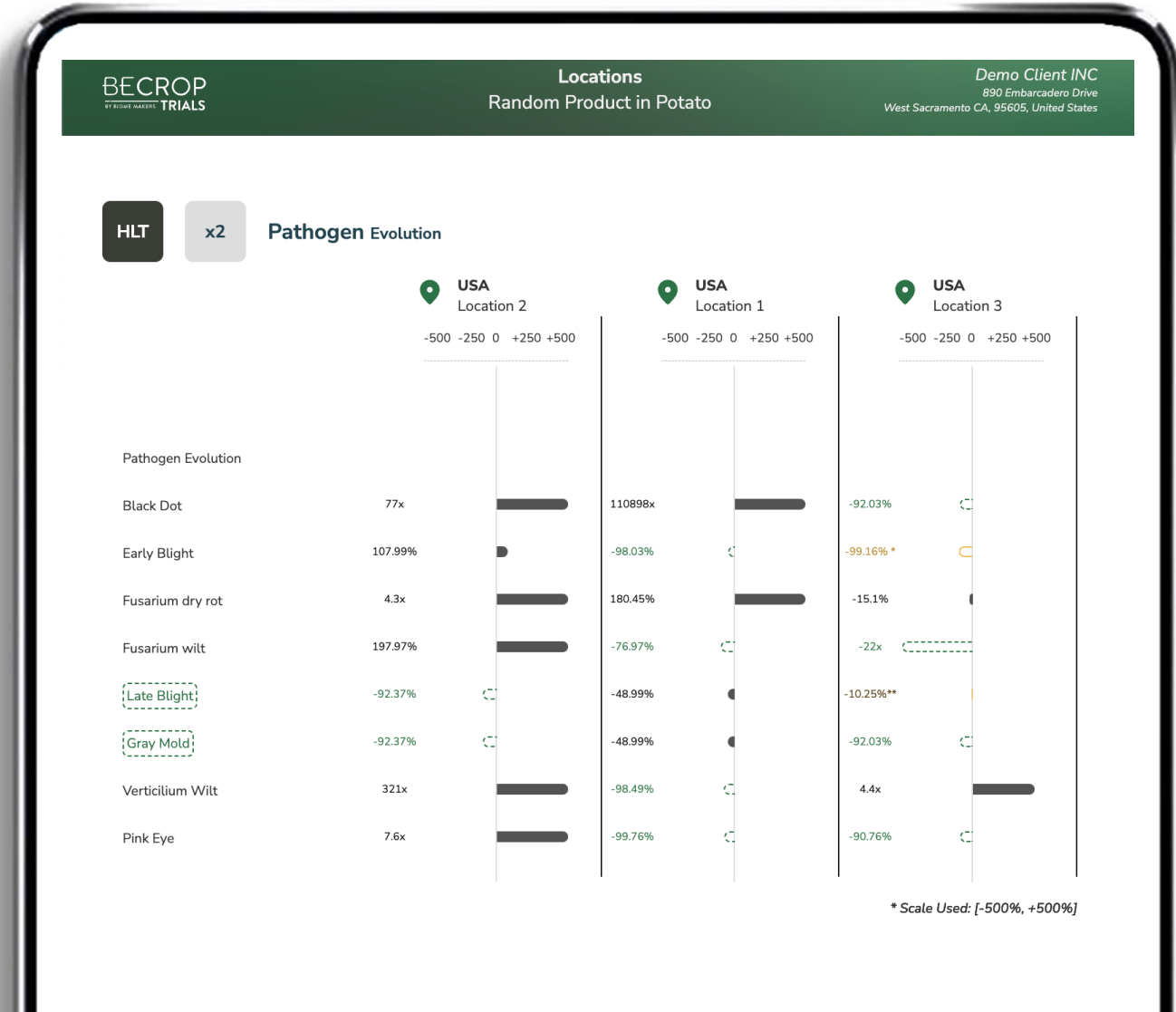
BeCrop® Trials: Results



Highlighting of the most notable trends/effects, followed by a comparative analysis of changes in microbiome functions as a direct result of input applications among locations and time points.

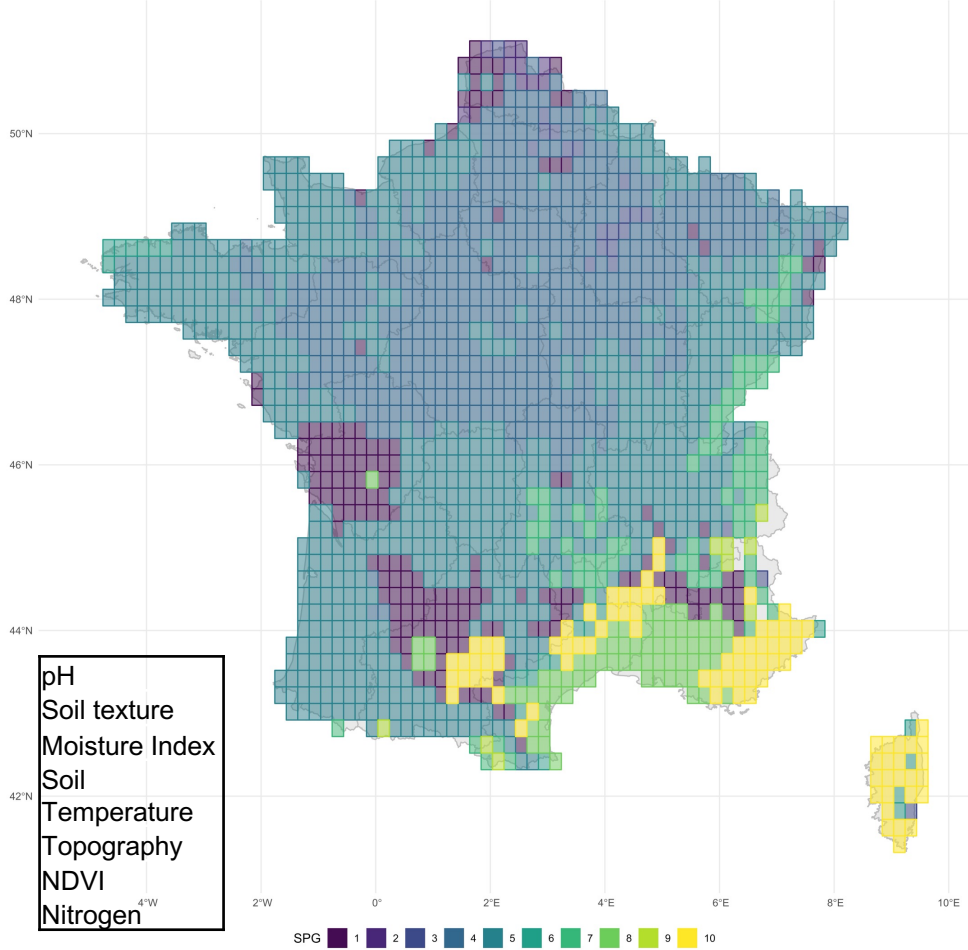
Further details on:

- Summary of the most notable effects, trends, and major changes
- Evolution of nutrient pathways
- Changes in hormone production
- Stress adaptation, disease risk and biocontrol activity changes and much more...

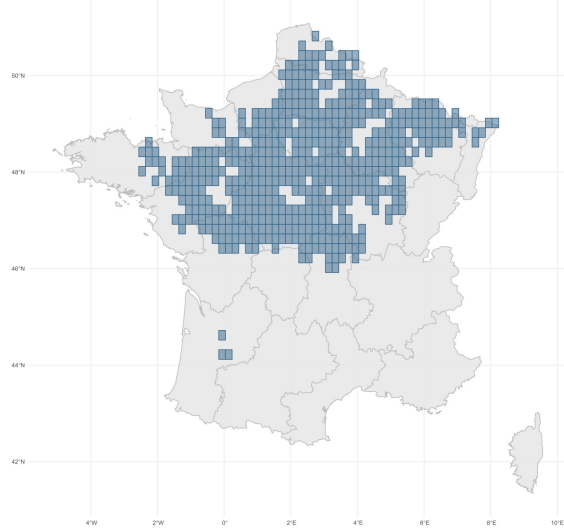


BeCrop® Trials: Process

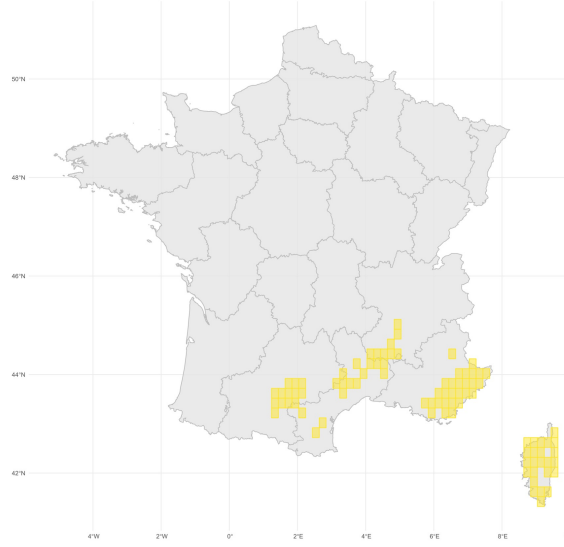
Soil Phenotypic Groups (SPGs), France



SPG 4

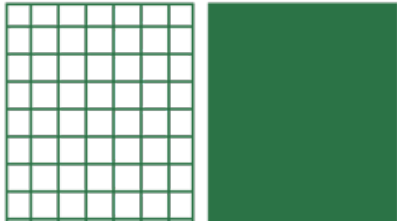


SPG 10



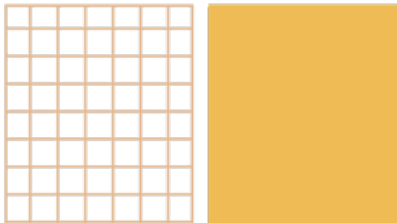
At least 10 locations

Before input



Control zone To be treated

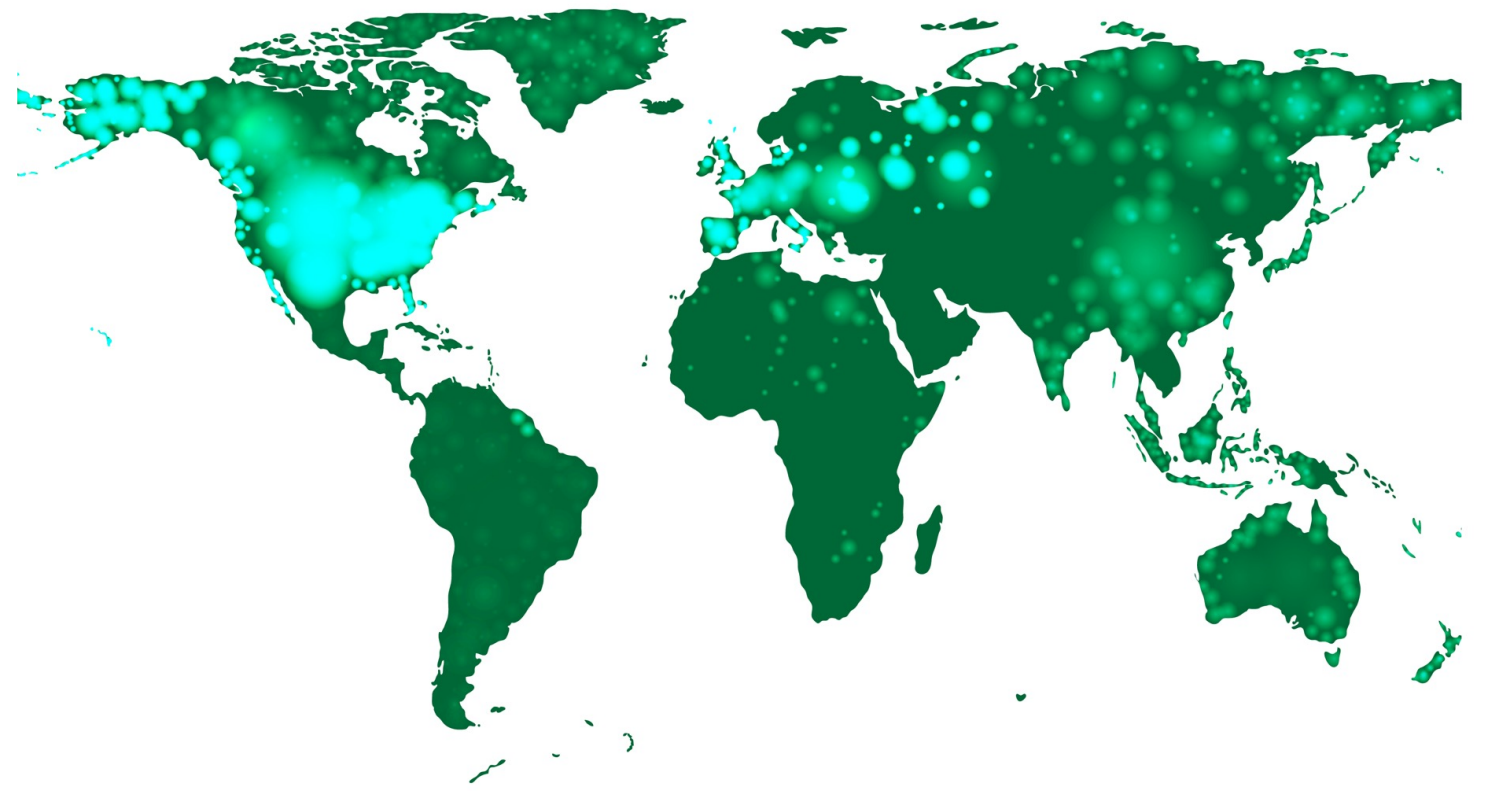
After input



Control zone Treated

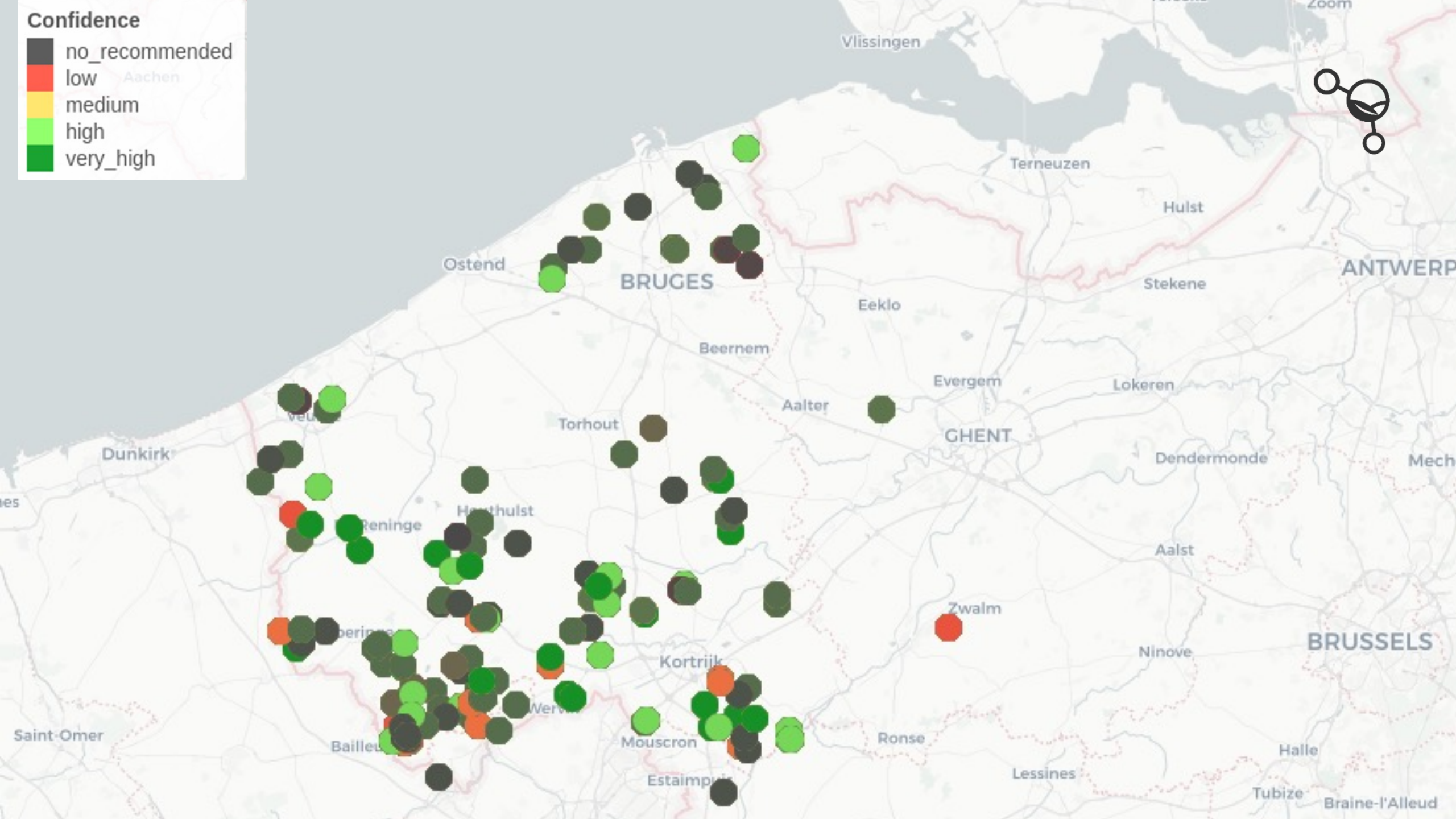


K-Nearest Neighbours



Confidence

- no_recommended
- low
- medium
- high
- very_high



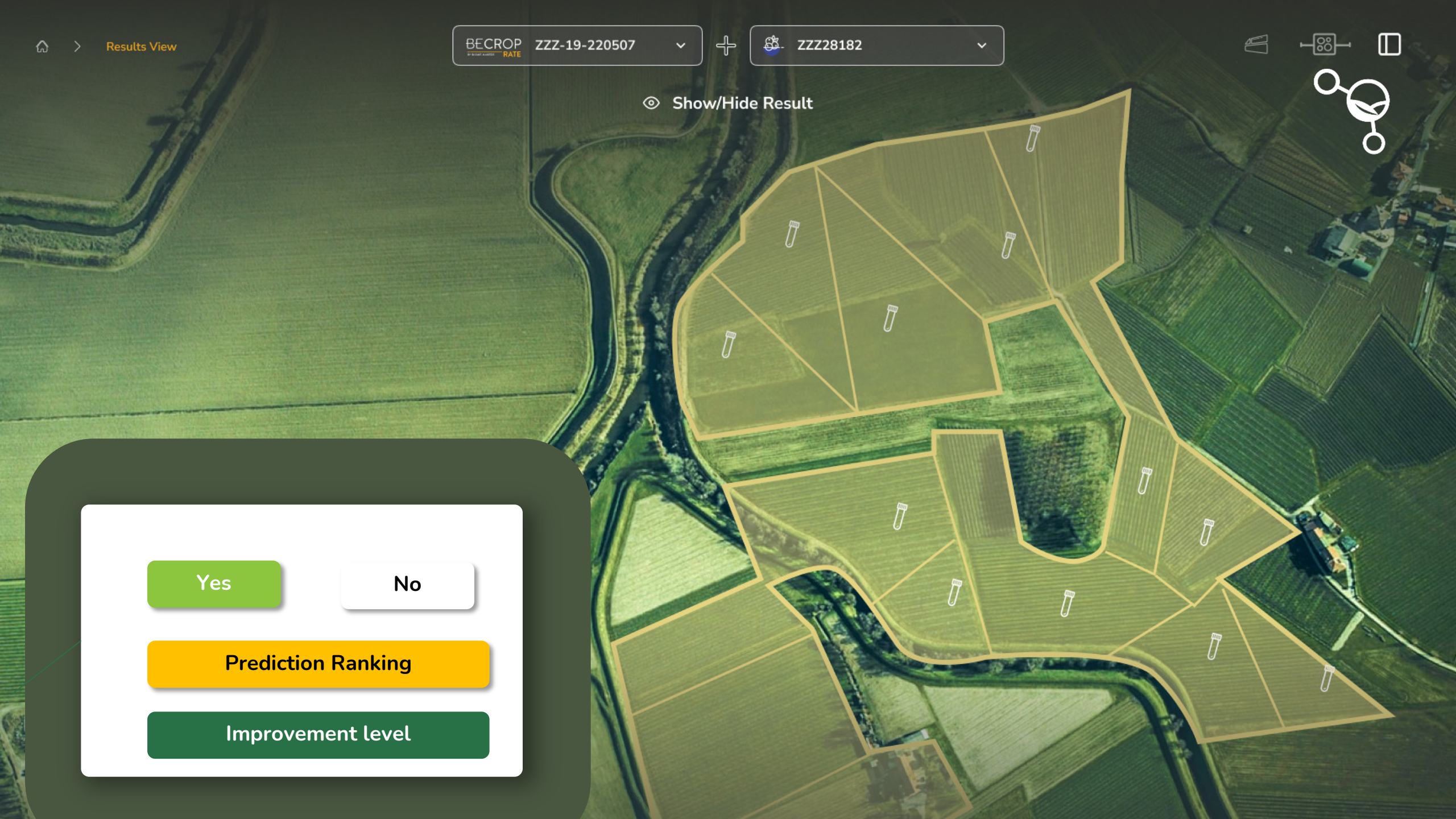
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Yes

No

Prediction Ranking

Improvement level



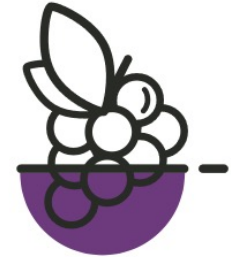
100

Solutions
160 samples each

EU
US/Canada
LATAM

Biome Makers receives \$1.6M for AI development to accelerate global soil restoration

by [Jamie Nix](#) on Oct 20, 2022 10:00:00 AM



100

Solutions
160 simples/each

EU
US/Canada
LATAM

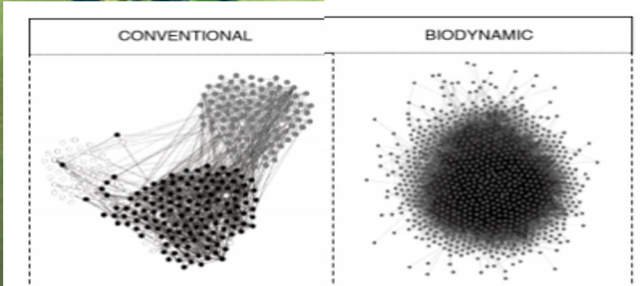
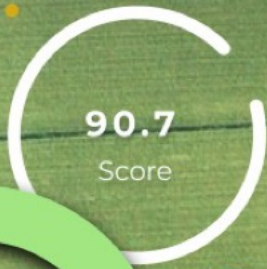


Predictive Regional Report

BeCrop Trials Report

Early Access to AI
BeCrop Portal module

Show/Hide Result





Thank you

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