BIBO
START HACK 2025

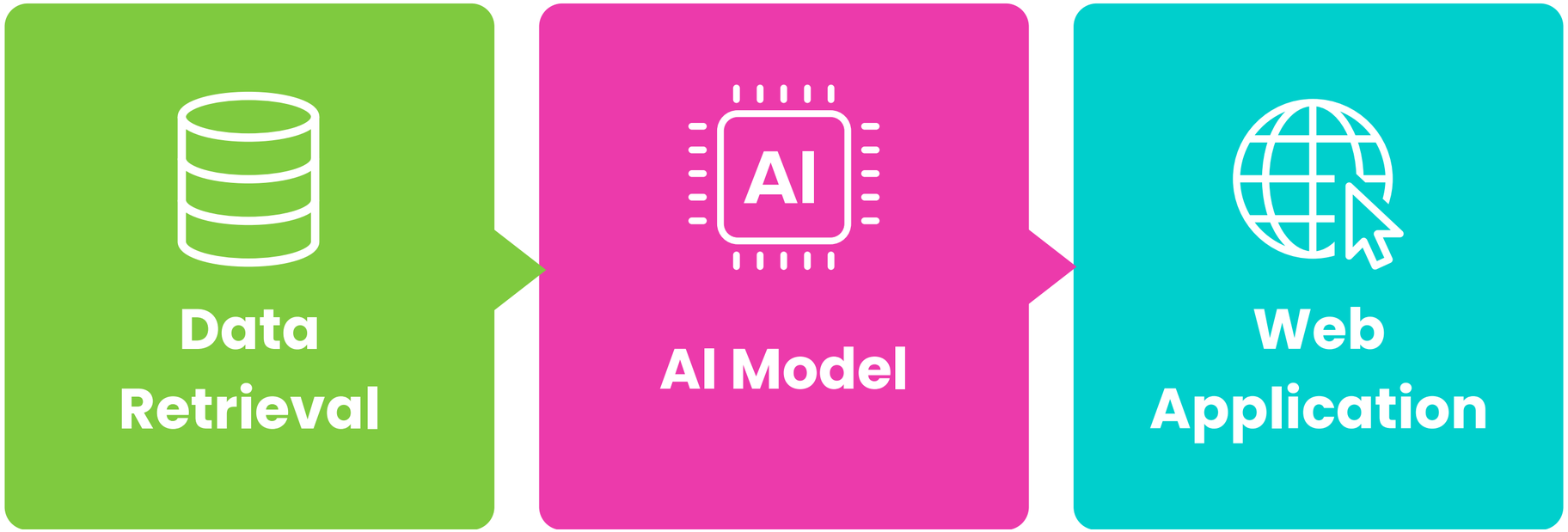
X

syngenta
Biologicals

Welcome to the Smart Farming Era

Farmers struggle to select effective treatments

Our Solution



Not your Grandfather’s Farm Tools:

ML-Powered Results

Training on historical data

Rolling window of two years to consider climate trends

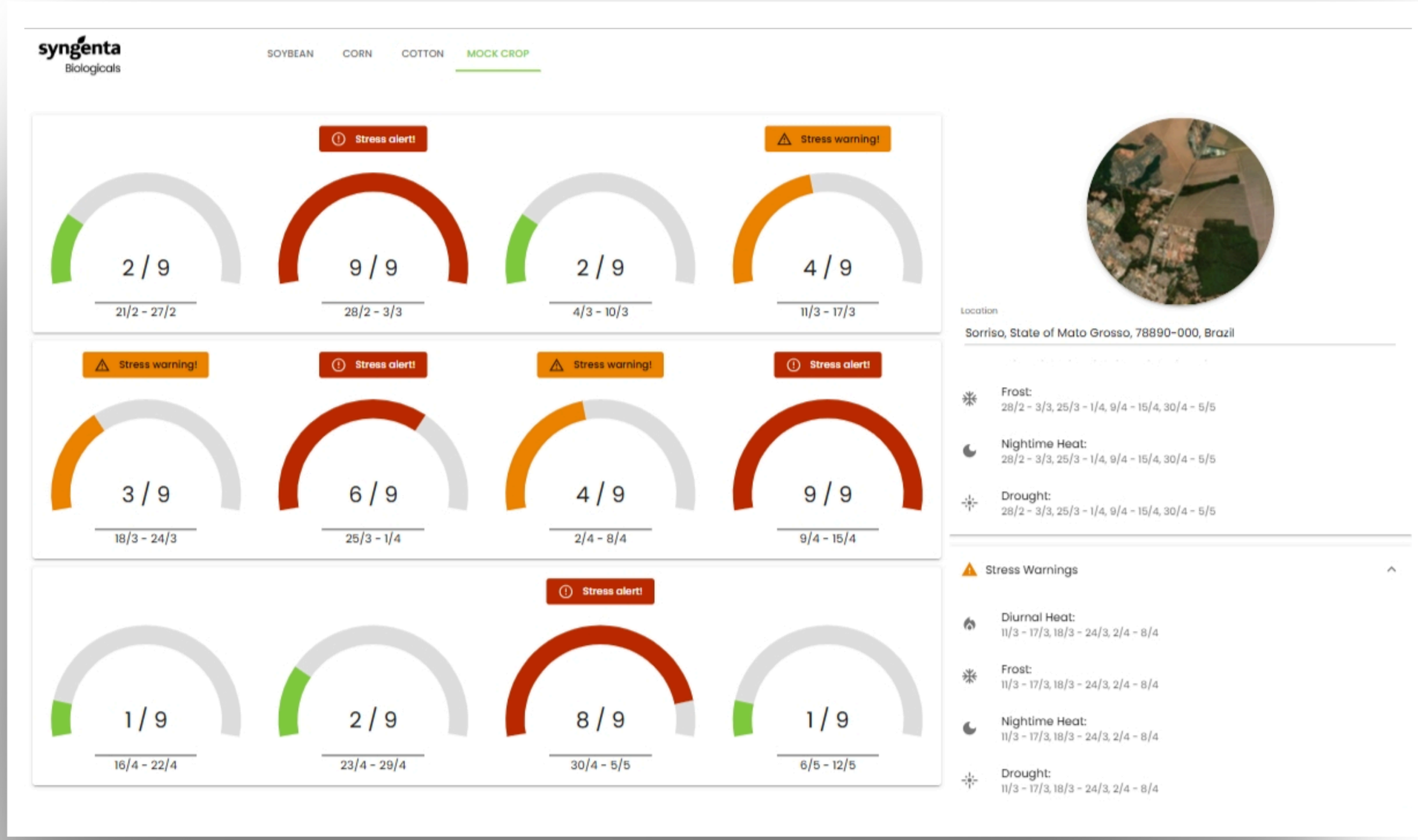
Near perfect accuracy

Prediction of future temperature related stress with >99% accuracy

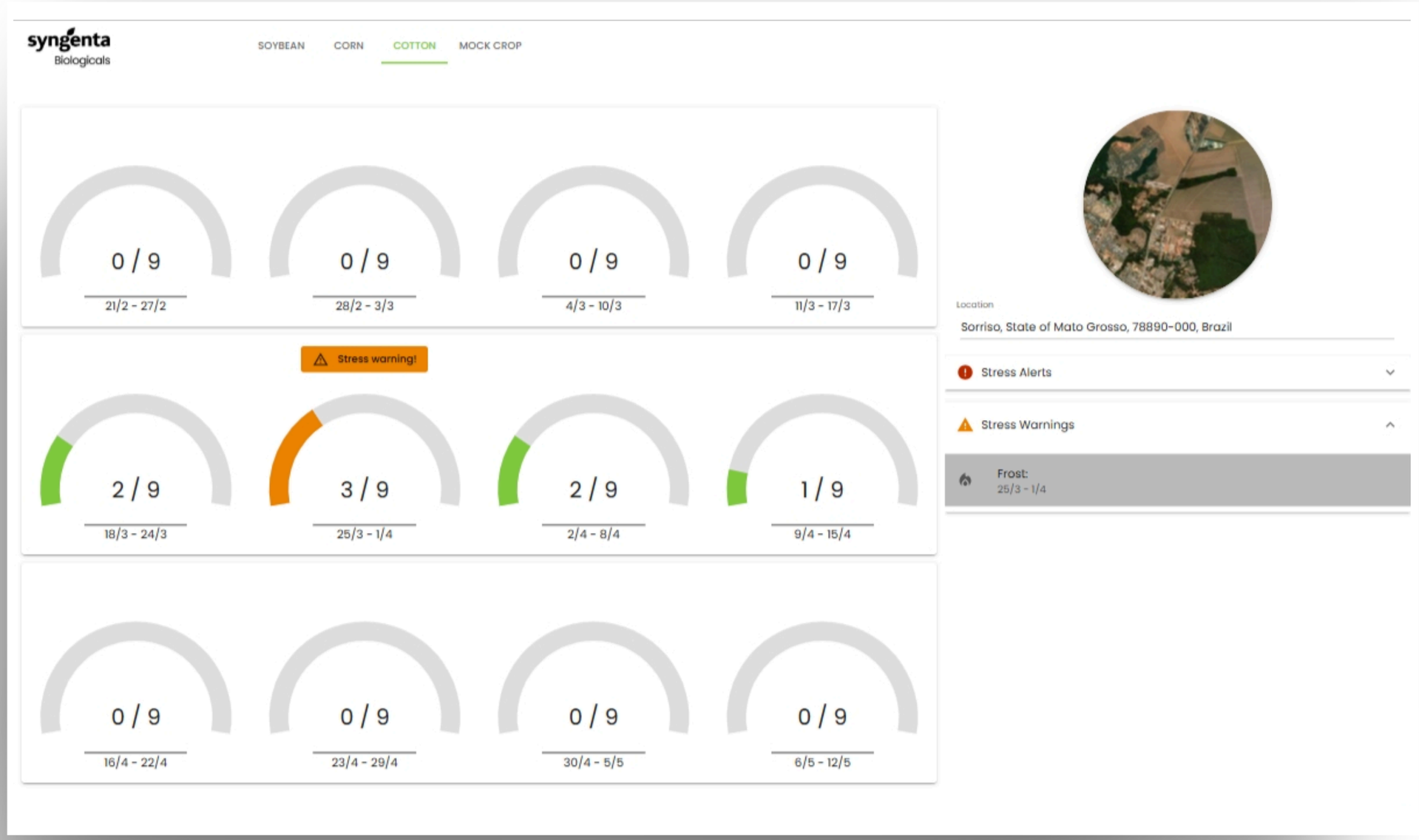
Lighting-fast inference

Lightweight models
Heavy caching

DEMO


syngenta
Biologicals
SOYBEAN
CORN
COTTON
MOCK CROP
Stress alert!
2 / 9
21/2 - 27/2
Stress alert!
9 / 9
28/2 - 3/3
2 / 9
4/3 - 10/3
Stress warning!
4 / 9
11/3 - 17/3
Stress warning!
3 / 9
18/3 - 24/3
Stress alert!
6 / 9
25/3 - 1/4
Stress warning!
4 / 9
2/4 - 8/4
Stress alert!
9 / 9
9/4 - 15/4
Stress alert!
1 / 9
16/4 - 22/4
2 / 9
23/4 - 29/4
8 / 9
30/4 - 5/5
1 / 9
6/5 - 12/5
Location
Sorriso, State of Mato Grosso, 78890-000, Brazil
Frost:
28/2 - 3/3, 25/3 - 1/4, 9/4 - 15/4, 30/4 - 5/5
Nightime Heat:
28/2 - 3/3, 25/3 - 1/4, 9/4 - 15/4, 30/4 - 5/5
Drought:
28/2 - 3/3, 25/3 - 1/4, 9/4 - 15/4, 30/4 - 5/5
Stress Warnings
Diurnal Heat:
11/3 - 17/3, 18/3 - 24/3, 2/4 - 8/4
Frost:
11/3 - 17/3, 18/3 - 24/3, 2/4 - 8/4
Nightime Heat:
11/3 - 17/3, 18/3 - 24/3, 2/4 - 8/4
Drought:
11/3 - 17/3, 18/3 - 24/3, 2/4 - 8/4

DEMO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Location
Sorriso, State of Mato Grosso, 78890-000, Brazil
Stress Alerts
Stress Warnings
Frost:
25/3 - 1/4

DEMO


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30/4 - 5/5
6/5 - 12/5
of Mato Grosso, 78890-000, Brazil
nings
STRESS BUSTER
Value proposition
Anti-stress and growth activator
Our comprehensive portfolio include biostimulant that contains a complex of selected vegetal extracts derived from selected plants.
When applied in case of abiotic stresses, its synergistic action of different active ingredients, allows the plants to tolerate and quickly overcome the stress, preserving yield.
Applied regularly in normal condition, optimizes plant growth.
DIRECTIONS FOR USE
Crop
Dose
Period of application
Science behind
TRANSCRIPTOMICS
PHENOMICS
METABOLOMICS
Performances on crop groups (ROI*)
Total average yield increase on all crops refers to selected trials done with The Stress Buster
Row crops
+ 0,30 t/ha
3,9:1
Vegetable
+ 2,3 t/ha
11,6:1
Fruit crops
+ 1,2 t/ha
10,5:1
*Return on investment (ROI) is calculated by dividing the profit by the related investment, based on an average value in the European market.
**850 selected trials for the summary, of which 88% were carried out under abiotic stress conditions.
Results on main stress conditons
COLD
% OF EVIDENCES
10
70%
YIELD INCREASE +5%
HEAT
% OF EVIDENCES
26
76,9%
YIELD INCREASE +8,2%
DROUGHT
% OF EVIDENCES
433
70,7%
YIELD INCREASE +5,1%
CLOSE

Results

Data Visualization

Dashboard of incoming risks

Decision Support Tool

Empower the farmer through AI based suggestions, boosting biologicals efficacy

Conversion Funnel

Provide farmers a useful tool resulting in customer fidelization and increased sales