Geo-Insights

ST Engineering

AgXellence

For Sustainable Farming

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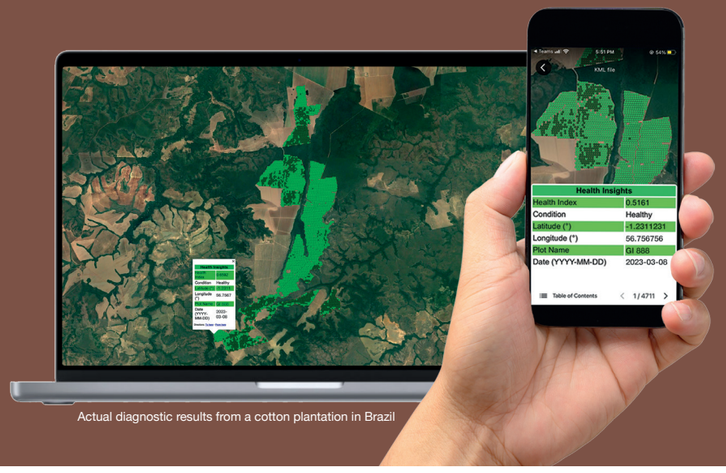
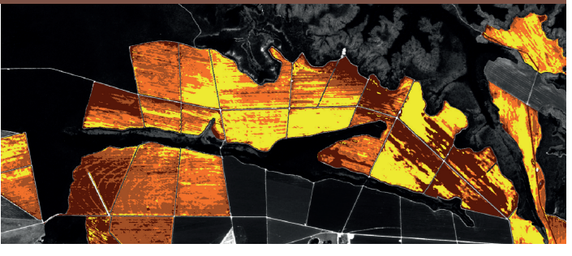
ST Engineering Geo-Insights

ST Engineering Geo-Insights delivers analytics based on geospatial data, utilizing the latest machine learning and artificial intelligence technologies, to provide timely insights and value-added services which empower our customers to make well informed decisions.



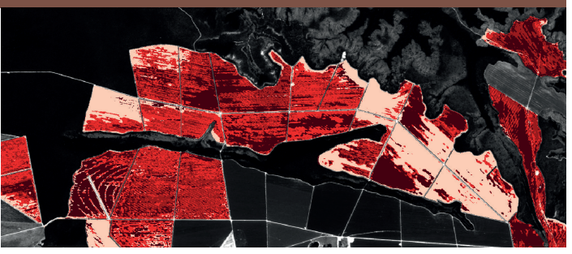
Actual diagnostic results from a cotton plantation in Brazil

NITROGEN INSIGHTS



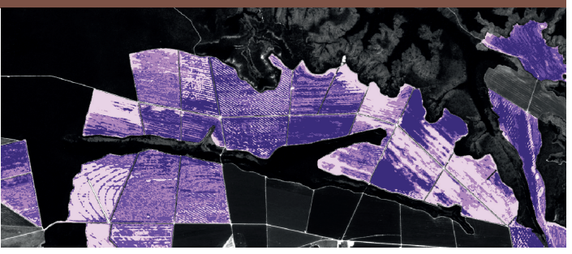
- Low
- Sufficient
- High
- Excess

PHOSPHORUS INSIGHTS



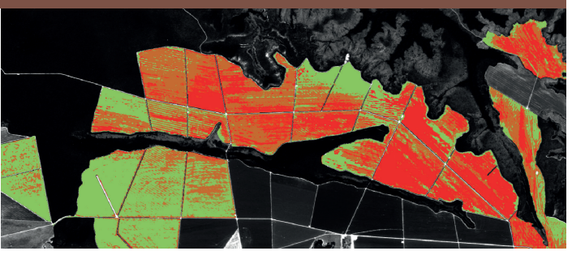
- Low
- Sufficient
- High
- Excess

POTASSIUM INSIGHTS



- Low
- Sufficient
- High
- Excess

FERTILIZER RECOMMENDATION



- Least
- Less
- Planned
- More
- Most

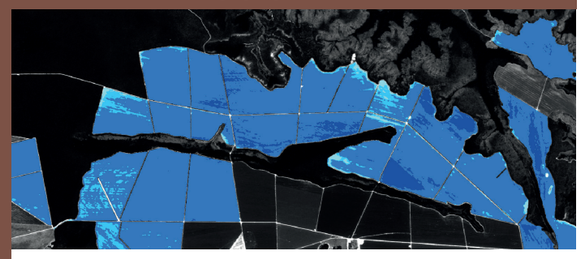
Macronutrients Insights Service

- Nitrogen (N) is considered the most important component for supporting plant growth
- Lack of nitrogen may cause the plant leaves to turn yellow
- Understand the actual levels of Nitrogen (N) with less than 10% of error
- Phosphorus (P) is vital for collecting the sun's energy for growth and reproduction
- Insufficient phosphorus levels impede or hinder the growth of shoots
- Understand the actual levels of Phosphorus (P) with less than 10% of error
- Potassium (K) is considered the most important component for supporting plant growth
- Aids as an activator in important enzymes, such as protein synthesis, sugar transport, and photosynthesis
- Understand the actual levels of Potassium (K) with less than 10% of error

Fertilizer Recommendation

- Quickly visualise the amount of fertilizer to be applied to the entire plantation
- Identify areas of saturation and drought
- Achieve homogenuity in nutrient distribution

MOISTURE INDEX

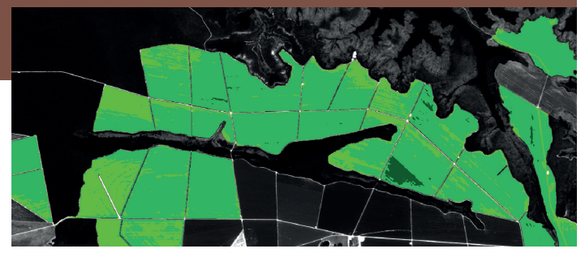


- Extremely Dehydrated
- Dehydrated
- Hydrated
- Extremely Hydrated

Irrigation Insights Service

- Preserve precious resources: Visualize moisture distribution across your entire plantation for better irrigation practices
- Protect your water resources—as every drop of water counts for your plantation's productivity

PLANT HEALTH



- Poor Health
- Moderate Health
- Optimal Health
- Excellent Health

Plant Health Insights Service

- Safeguard against external influences: Evaluate your plantation's health condition every 5 days to identify the early signs of potential infestation, diseases and areas at risk

Powered by Satellites

Gain insights into how capturing finer crop details enables a comprehensive understading of crop health and empowering informed management decisions

SUSTAINABLE DEVELOPMENT GOALS

SDG 2 ZERO HUNGER
Harnessing our insights to enhance food security and promote sustainable agriculture.

SDG 13 CLIMATE ACTION
Take urgent action to combat climate change by reducing your carbon foot print.

SDG 12 RESPONSIBLE PRODUCTION
Ensure sustainable production by reducing the harmful effects of toxic chemicals and waste.

Growing More with Less

Increase Yield and Quality

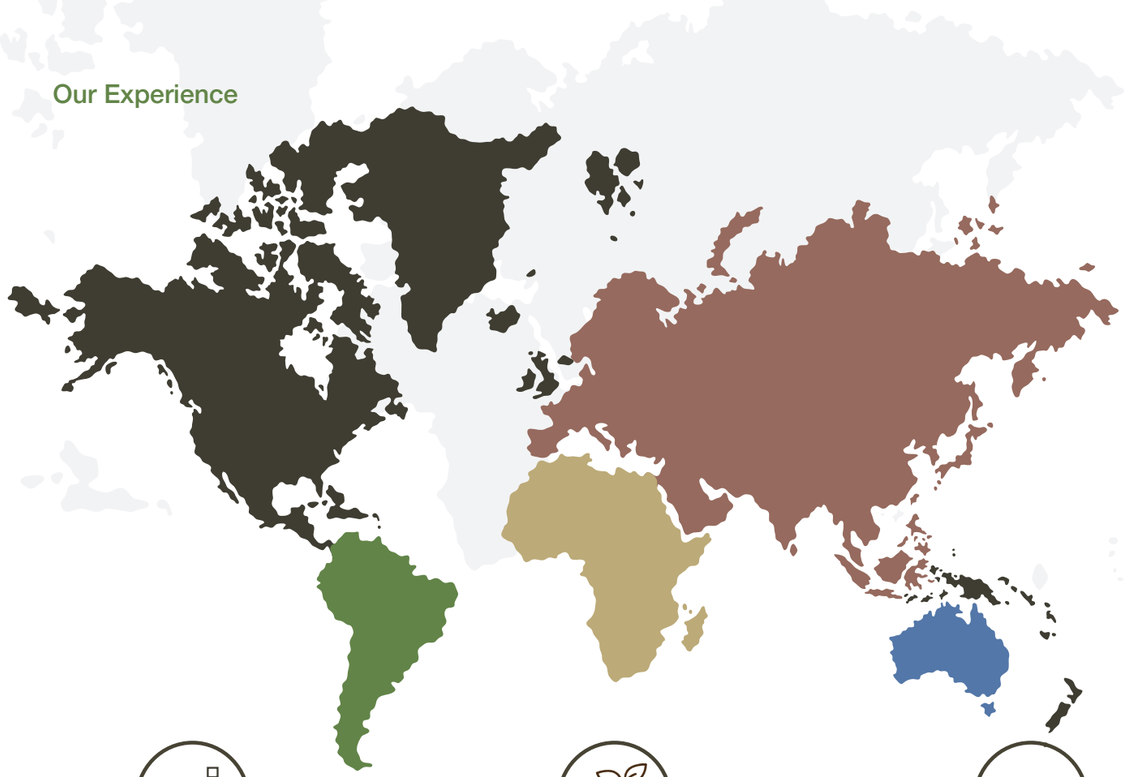
Protect Natural Resources

Reduce Carbon Foot Print

Optimise Resources

Implement Sustainable Operational Practices

Our Experience



Proprietary models continuously refined using AI/ML techniques utilizing more than 6 years of data

Partnering with global plantation operators and agronomists in Asia, Africa Oceania, and the Americas

Actively monitoring 15,000 hectares of active plantations

Making a difference on Climate Change

- Optimize nutrient management while reducing greenhous gases like nitrous oxide N_2O, a substantial contributor to global warming
- Achieve homogenous plantation performance and streamlined operations utilizing the latest technology driven agricultural practices: **Grow more with less**

Prepare
Planting Schedule
Crop Type & Location
Our Initial Assessment

Peak Growth Stage
Gain macronutrients insights as fast as every 5 days in an easy-to-use report

More for less
Increase yield while reducing costs

Diagnose your plantation's health with us today