



Healthy soils nourish the crops that feed the world. Yet continuous farming practices deplete soils of essential nutrients and biology. Maintaining soil health in a continuous farming environment comes down to a combination of efforts specific to the type of soil, environmental conditions and soil characteristics.

At Custom Agricultural Intelligence Inc. (CAI), our team brings together the best in soil health science and crop health therapy technology to build bushels and soil health.

Our simplified approach is made possible by the convergence of science and technology.





## Solutions that add real value while building bushels

## **SMARTBOOST TERRA (DUNAMIS)**

SmartBoost Terra (Dunamis) is a liquid or customized formulation of liquid or prilled high organic matter product that can be used on all soils and crops to:

- Help balance soil health and soil life.
- Reduce prevalence of soil and root borne diseases.
- Help activate crop nutrient transportation systems.
- Maximize nutrient uptake efficiency.
- Assist with nitrogen fixation, phosphorus and potassium solubilization.
- Correct soil pH and salinity issues.
- Continuously improves the quality of your soil.
- Build bushels and improve ROI.
- Can be applied in fall and spring.
- Fertilizer blending compatible.

#### STATE-OF-THE-ART LAB

CAl's soil and tissue testing laboratory offers 24 to 48 hour, plant tissue, multi-analysis soil testing for minerals and diseases.

## Soil and Plant Tissue Sampling and Testing Done Right

With our soil testing, we capture all the minerals required for the crop to maximize their genetic potential in their bio-available form. Using our ICP-OES, carbon/nitrogen tester and ion probes, we have the complete solution to listen to what your soil and crops have to say.

## Soil & Crop Borne Microbial Testing (qPCR)

Soil and crop borne microbial testing in our molecular biology lab helps reduce the severity and impact of disease to minimize crop/yield losses.

- Assess spore distribution to determine risk spots in your fields.
- Identify and quantify disease pathogens (e.g. clubroot, sclerotinia, root rot, etc.).
- Identify exact pathogen counts (from very low to high) in soil, root and crop tissues.
- Real-time PCR generates high-quality data specific to individual pathogens.



## MICROBIAL ISOLATION, IDENTIFICATION & CULTURING

Advanced and custom projects for microbial isolation, identification and culturing, including in-house isolation of individual strains from mixed population samples. Our facility supports culturing of beneficial microbes and growing of AMF from lab scale to commercial scale reactors (50 to 1,200 per batch).

## CUSTOMIZED HOMOGENOUS NPKS FERTILIZER PRILL

Customized NPKS fertilizer prill formulation promotes robust growth while encouraging rooting and flowering. Benefits include nutrient uptake efficiency, improved soil structure, mitigation of soil-borne pests and diseases, and increased water relations, pH tolerance, tolerance to drought and salinity, etc.

#### **GIS CROP MONITORING**

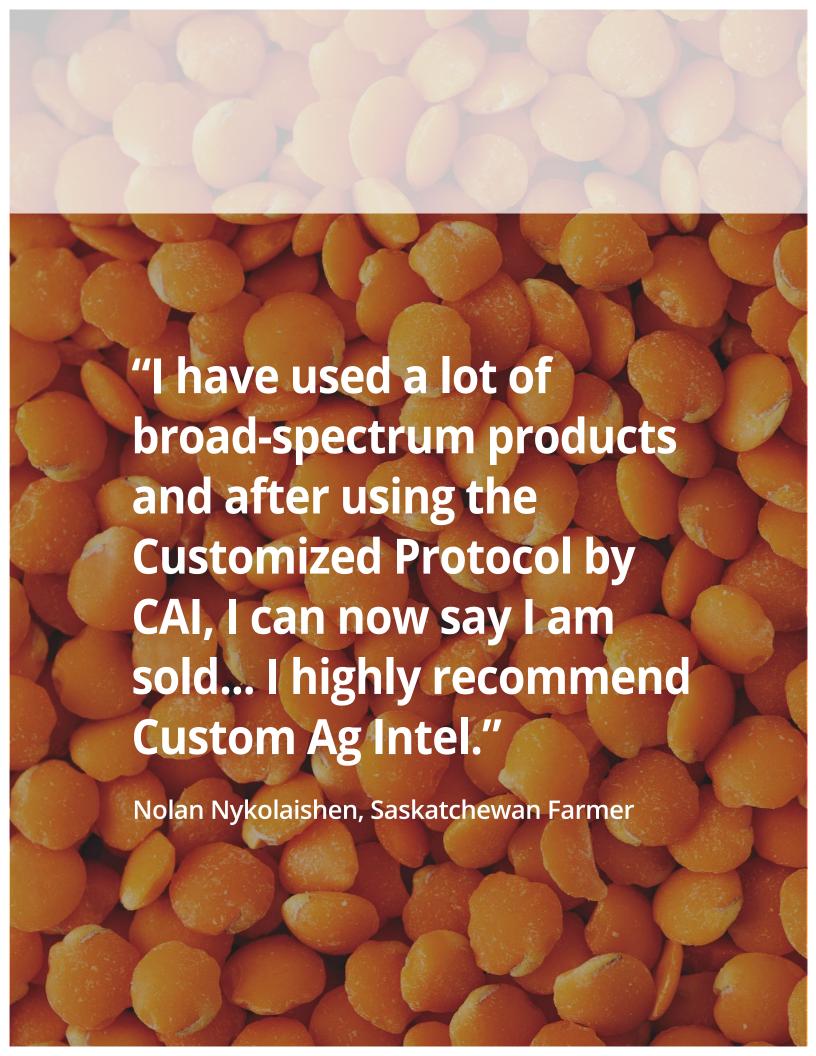
CAl's crop monitoring system is an Al-driven system that provides top-notch analysis and investigation of your fields. We have the ability to:

- Combine NDVI and MSAVI to provide data and reporting specific to these vegetation indexes.
- Determine soil moisture, temperature and evaporation for an entire field.
- Proactively mitigate against soil and crop borne diseases, insects and pests by monitoring variable data over time.
- Provide growers access to a database describing favourable conditions for seeding, spraying and fertilizer application.

#### **AG CARBON FARMING REBATE**

The CAI Carbon Rebate project aims to help you with sequestration of atmospheric C into soils. Since over 10% of all atmospheric carbon dioxide passes through the plant-soil-atmosphere interface each year, the ability of plants to fix  $\mathrm{CO}_2$  has the potential to earn you carbon credits through emission reductions and sequestration.

## Interested? Call +1 (855) 476-4276



# Contact us to add real value to your crops through customized soil health solutions



We work closely with growers and agronomists to formulate customized blends, with a focus on soil health and regenerative agriculture.



Formulations are customized based on your specific crop needs and prevailing environmental factors.



Pro-active Crop scouting using our Aldriven GIS library database to predict favorable conditions for seeding, spraying and crop disease mitigation and fertilizer application.

WOULD YOU LIKE TO KNOW HOW WE CAN ADD VALUE TO YOUR OPERATIONS?

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