


Your Soil,
Our Expertise:



Unlock Soil Potential with Cropnuts Soil Health Care Program

- ▶ With the **Cropnuts Soil Health Care Program**, your soil isn't just dirt beneath your feet—it's a living and thriving ecosystem that holds the keys to your farming success.

Our **Soil Health Care Program** offers a comprehensive soil health analysis that redefines efficient agriculture. This program transcends traditional soil testing. Explore a comprehensive soil health assessment that includes:



1. Soil Health and Microbiome Analysis: Assesses soil microbial population and activity, its diversity including fungal bacterial ratio. We measure different carbon fractions as the food sources for microbes.

2. Soil Chemistry analysis: Evaluates soil chemistry, including soil acidity, salinity, identification of limiting nutrients and chemistry imbalances.

3. Soil Structure Assessment: We look at soil structure, physical make up, and compaction. We measure aggregate stability as a key indicator of soil structural health.

Benefits Beyond Measure:

- ▶ Experience the full spectrum of benefits from the **Cropnuts Soil Health Care Program**.
 - 1. Reduced Fertilizer Usage:** Balance soil nutrients, boost soil biology and increase nutrient availability. Reduce fertilizer costs while enhancing yields.
 - 2. Sustainable Pest and Disease Management:** Mineral-rich soils deter pests. Enable plants to convert nitrates to defense proteins, reducing reliance on pesticides.
 - 3. Optimized Weed Management:** Balanced soils curtail weed vigor, minimizing herbicide use and promoting crop health.
 - 4. Improved Crop Water Use Efficiency:** Build organic matter for superior soil water retention. Combat extreme weather events such as droughts and floods.
 - 5. Premium-Quality Products:** Nurture superior crops with extended shelf life and nutrient density, commanding premium prices and providing better nutrition.
 - 6. Erosion Control and Sustainability:** Optimal soil structure mitigates erosion, curbing nutrient runoff. Protects the environment.
 - 7. Carbon Sequestration and Climate Action:** Boost organic matter for thriving soil microbes that aid carbon storage and support climate action.

For Those Who Seek More:

- ▶ The **Cropnuts Soil Health Care Program** is perfect for:
 - 1. Growers, Farmers, and Agribusinesses:** Who seek to elevate soil health, boost productivity, save input costs, and foster environmental sustainability.
 - 2. Researchers, International Development Organizations, and NGOs:** Who seek to align with sustainable development goals (SDGs), and make agriculture a positive force for global change.





Our Approach:

► This is how we implement the **Cropnuts Soil Health Care Program**:

1. Design of Soil Health Program: Establishing objectives with our clients, customized design of the service, from sampling, to on farm support, monitoring and continuous improvement.

2. Regular Sampling: Collect soil samples at established sampling points.

3. Cutting-Edge Lab Analysis: Evaluate biological, chemical, and physical soil properties.

4. Data-Driven Strategies: Tailored recommendations for soil fertility, vitality, and efficient fertilizer programs.

5. After-Sales Service Support: Get a dedicated key relationship manager & ongoing agronomy support.

1 Soil Biology Analysis Services

Harness the power of living soil for thriving crops and sustainable farming.

Our Soil Biology Analysis Services reveal the diversity and activity of beneficial microbes that fuel nutrient cycling, support organic matter decomposition, and boost soil vitality.

Our Soil Biology Analysis Services:

1. Soil Organic Carbon Analysis: Reveal the organic carbon content, crucial for soil fertility and water retention.

2. Soil Carbon Stock Analysis: Understand the carbon stored within your soil, contributing to climate change mitigation.

3. Active Carbon Analysis: Gauge the readily decomposable organic matter, fueling microbial activity and nutrient cycling.

4. Microbial Respiration Analysis: Measure microbial metabolism, providing insights into overall soil vitality.

5. Soil Fungal to Bacterial Ratio Analysis: Understand the microbial balance influencing soil health and nutrient cycling.

6. Soil Pathology Screening: Identify and analyze soil-borne pathogens that can affect crop health and productivity.

7. Nematode Analysis: Assess the population and diversity of nematodes, microscopic soil organisms that can impact soil health and plant growth.

With the **Cropnuts Soil Health Care Program**, your soil isn't just lifeless dirt beneath your feet - **it's an intricate living ecosystem**, holding the blueprint to your farming prosperity.

2 Soil Chemistry Analysis Services

Maximize plant nutrient uptake, balance soil fertility, and optimize fertilizer costs with soil analysis recommendations.

Our Soil Chemistry Analysis Services focus on nutrient and chemical composition. They evaluate the soil's nutrient availability and pH balance.

Our Soil Chemistry Analysis Services:

1. Soil pH Analysis: Measures the acidity or alkalinity of the soil. pH influences nutrient availability and microbial activity. Most crops thrive in a specific pH range.

2. Soil Nutrient Analysis: Analyzes the concentrations of macronutrients like nitrogen (N), phosphorus (P), potassium (K), sulphur (S), calcium (Ca), magnesium (Mg), and micronutrients such as boron (B), zinc (Zn), manganese (Mn), iron (Fe), copper (Cu), molybdenum (Mo), chlorides (Cl). Adequate nutrient levels are crucial for plant growth.

3. Organic Matter Content Analysis: Determines the organic matter % present in the soil. Organic carbon contributes to soil fertility, water retention, and overall soil structure.

4. Cation Exchange Capacity (CEC) Analysis: Evaluates the soil's ability to retain and exchange essential nutrients. CEC is an indicator of the soil's capacity to hold onto nutrients for plant uptake.

5. Soil Electrical Conductivity (EC) Analysis: Measures the amount of salts, or salinity in the soil. Excess salt hinders plant growth by affecting the soil/water balance.

6. Carbon: Nitrogen (C:N) Ratio Analysis: Measures the mass of carbon to the mass of nitrogen in the soil. This is an important indicator for soil health, microbial activity, and nitrogen availability.

7. Calcium: Magnesium (Ca:Mg) Ratio Analysis: The Ca:Mg ratio is important for soil structure and fertility. A high level of magnesium compared to calcium can dramatically reduce water infiltration into and through the soil.

With the **Cropnuts Soil Health Care Program**, your soil isn't just dirt beneath your feet - **it's a storehouse of essential nutrients** that hold the keys to your farming success.



3 Soil Physical Analysis Services

Create a soil environment where roots flourish, water is conserved, and erosion is curtailed.

Our Soil Physical Analysis Services assess soil physical properties, including soil structure, soil texture, and water-holding capacity.



Our Soil Physical Analysis Services:

- 1. Soil Texture Analysis:** Determines the relative proportions of sand, silt, and clay particles in the soil. Texture affects water drainage, aeration, and nutrient retention.
- 2. Aggregate Stability Analysis:** Evaluates the ability of soil aggregates to resist breakdown when exposed to water. Stable aggregates prevent erosion and improve water infiltration.
- 3. Compaction:** Measures the soil's resistance to penetration. Compacted soil restricts root growth and water movement, negatively impacting plant health.
- 4. Water-Holding Capacity:** Assesses the soil's capacity to retain water for plant use. Adequate water-holding capacity is crucial for sustaining crops during drought periods and mitigating the adverse effects of floods.

With the **Croppnuts Soil Health Care Program**, your soil isn't just dirt beneath your feet - **it's a solid foundation where roots flourish and water is conserved.**

Your Soil, Our Expertise:

► **With the Cropnuts Soil Health Care Program, your soil is:**

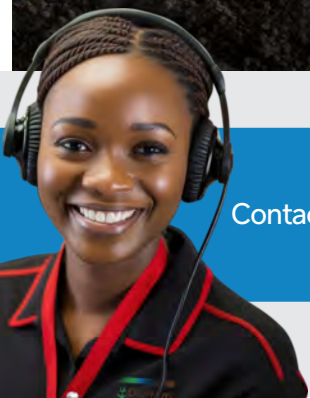
1. An intricate living ecosystem teeming with microbial life.
2. A storehouse of essential nutrients vital to crop health.
3. A solid foundation where roots flourish and, water is conserved.

► **Our expertise offers you:**

1. Optimized yields and input cost savings.
2. Natural pest and disease defenses.
3. Resilience against climate-related challenges.




Revitalize your crop fields, make informed decisions,
and embark on a journey of profitability
and sustainability with the
Cropnuts Soil Health Care Program.



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