



Soil Health and Nutrition Made easy

Despite growing awareness of soil health's critical role in sustainable agriculture, many farmers face barriers to investing in comprehensive soil management. Economic limitations, fragmented agronomic guidance, and legacy land-use practices often result in fertility loss, microbial degradation, and long-term yield instability. The Great Crops™ program responds to these challenges with a refined, field-tested system that integrates biological, nutritional, and environmental intelligence across the crop lifecycle.

Great Crops™ was developed to provide a precise, affordable, and integrative approach to crop optimization that aligns with modern farming constraints. Each product in the four-part system targets a specific physiological stage of crop development and contributes to soil regeneration through synergistic inputs.

This program minimizes complexity while delivering consistent, measurable results in a range of soil types, cropping systems, and stress environments by delivering enzyme precursors, natural growth regulators, humic and fulvic substances, carbohydrates, and organic acids. These elements ensure low salinity, balanced redox potential, and microbial stimulation. All formulations provide a complete spectrum of micronutrients essential for balanced nutrition and physiological function except for our silicon based product Great Motus™.

1. **GREAT SOLUM™** - Soil and plant stimulator for a strong initial development.
2. **GREAT FLOS™** - Delivers precise nutrients to boost flowering and reproduction.
3. **GREAT MAXIMUS™** - Drives superior yield quality and consistent harvest vigor.
4. **GREAT MOTUS™** - Amends problem soils under stress, drought, and variability.

While the products perform best when applied in their intended sequence, each can also be used independently, offering growers adaptable and scientifically grounded options that accommodate a variety of production systems and resource limitations. With a low salt index and stable redox potential, Great Crops™ works with most fertilization systems and soil types.





Great SOLUM

Soil & Plant Stimulator

1.0 / 0.6 / 0.4

Great Solum™ is a precision soil and rhizosphere enhancer designed to rehabilitate degraded substrates and optimize conditions for early plant growth. It effectively addresses salinity, alkalinity, poor infiltration, and compaction by restoring soil function, increasing cation exchange capacity, stimulating beneficial microbial populations, and improving moisture retention within the root zone.

Trace Nickel is included for its critical function as a cofactor activating urease, accelerating urea hydrolysis to ammonium and enhancing nitrogen availability during root and shoot establishment. Nickel also enriches microbial communities responsible for nitrogen cycling and organic matter mineralization, boosting microbial diversity and activity.

When applied at soil preparation or early vegetative stages, Great Solum™ triggers biological signaling, promotes root proliferation, and increases nutrient accessibility. Its composition of carbon substrates, bioactive catalysts, and trace elements improves soil porosity, regulates electrical conductivity, and mitigates the effects of agrochemical residues and salt buildup. Nickel's influence on redox balance further stabilizes rhizosphere ionic conditions, supporting sustained soil vitality and robust plant development.

- Enzyme Precursors and Stimulants
- Microbial Metabolites
- Natural Plant Growth Regulators
- Carbohydrates
- Organic Acids
- Organic Carbon
- Humic and Fulvic Acids
- Botanical Saponins
- Full Spectrum of Micronutrients
- Trace Nickel
- Low Salt Index (8)
- Positive Redox Potential
- pH of 2.9

Apply 5 to 7 gallons per acre through irrigation before or during crop establishment (Use as a program starter to enhance effectiveness of our subsequent applications)





Great FLOS

Roots & Flowering

1.5 / 2.4 / 0.9



Great Flos™ delivers nutrients in sync with the plant's reproductive cycle. It provides a precise balance of elements to meet the metabolic demands of anthesis. Its natural water-buffering capacity stabilizes pH microgradients in the rhizosphere. These features support uniform floral initiation, improved fruit set, and sustained reproductive vigor across diverse soil conditions.

To meet the high Phosphorus demand during flowering, Great Flos supplies phosphorus as polyorthophosphate. This form transitions from soluble ions to stable mineral fractions, supporting ATP synthesis, nucleic acid formation, and meristematic differentiation as flowers develop.

Bivalent Zinc (Zn^{2+}) and Copper (Cu^{2+}) are supplied in ionic form for rapid absorption and enzyme activation. Zinc acts as a cofactor in over seventy metalloenzymes, including carbonic anhydrase, which controls stomatal opening and gas exchange, and RNA polymerase, which drives floral meristem differentiation. Copper supports mitochondrial cytochrome oxidase activity, lignin biosynthesis, and oxidative protein cross-linking necessary for pollen tube growth and fertilization.

Great Flos™ supplies Humic and Fulvic substances, rich in organic carbon, balance rhizosphere electrochemistry and increase cation exchange capacity. They stimulate nutrient cycling driven by the soil microbiome. These organic compounds help plants withstand abiotic stress by stabilizing osmotic potential, minimizing ion antagonism, and maintaining nutrient solubility under temperature and moisture extremes.

- Natural Plant Growth Regulators
- Carbohydrates
- Organic Acids
- Organic Carbon
- Botanical Saponins
- Humic and Fulvic Acids
- Low Salt Index (9)
- Positive Redox Potential
- pH of 3.6

Application rates of 5 to 7 gal/ac via irrigation during flowering bud formation or during root flushes or when root growth is weak.





Great MAXIMUS

Yield & Quality

0.9 / 1.2 / 1.3

Great Maximus™ supports the development of fruit, seed, and tubers by delivering nutrients that match the changing metabolic needs of crops during reproductive growth. It fits smoothly into a variety of crop management programs, offering targeted support to optimize late-stage development.

The product's main ingredient, *Ascophyllum nodosum*, contains natural auxins, gibberellins, amino acids, vitamins, and phenolic compounds. These help crops better tolerate stress, promote uniform fruit size, and maintain consistent crop load.

Its NPK balance emphasizes phosphorus and potassium to fuel energy-intensive processes like ATP production and sugar movement, while nitrogen is carefully moderated to avoid excessive leafy vigor during reproductive stages. A full range of micronutrients supports essential functions such as enzyme activity, hormone regulation, photosynthesis, cell wall strength, and stress resilience. Chelated calcium and boron are included in balanced amounts to strengthen cell structure, improve nutrient movement, and support growing points.

Additional ingredients boost soil microbial activity, increase nutrient availability through improved ion exchange, and help maintain moisture in the root zone during periods of high water demand. They also assist plants in balancing water and energy, improving their ability to handle heat, drought, and salinity

- Enzyme Precursors and Stimulants
- Natural Plant Growth Regulators
- Carbohydrates
- Organic Acid
- Organic Carbon
- Humic and Fulvic Acids
- Botanical Saponins
- Low Salt Index (9)
- Positive Redox Potential
- pH of 3.5

Apply 5–7 gallons per acre via irrigation during fruit, seed, or tuber development. (Recommended at least within two weeks of harvest in produce crops.)





Great Motus

H₂O & Photosynthesis

0.2 / 0.0 / 0.1



Great Motus™ is formulated to further enhance crop performance under challenging soil and environmental conditions, including calcareous and sodic soils, drought, and limited water availability. Its bioavailable silicon reduces non-stomatal water loss, improves sap flow, and supports plant function in soils with elevated boron or manganese. Our silicon also strengthens substrate structural integrity, reduces lodging risk, contributes to crop firmness, and supports postharvest quality.

The formulation uses a specialized form of silicon that supports the plant's natural defenses against fungal pathogens and helps regulate internal osmotic balance. It enhances phosphorus solubility and uptake in alkaline soils and aids in maintaining adequate nitrogen levels in plants under low-nitrogen. Great Motus™ helps create a healthy edaphic ecosystem for plant growth.

Sea kelp is included to supply natural auxins, gibberellins, and trace organic compounds that promote enzymatic activity, hormonal balance, and adaptive growth. Great Motus™ integrates smoothly into diverse nutritional programs and is especially effective during reproductive stages or prolonged environmental stress.

Great Motus™ plays a critical role in enabling crop productivity in marginal soils, transforming constraints imposed by alkalinity and micronutrient imbalances into manageable factors.

- Enzyme Precursors and Stimulants
- Natural Plant Growth Regulators
- Carbohydrates
- Organic Acids
- Humic and Fulvic Acids
- Low Salt Index (2)
- Positive Redox Potential
- pH of 11.0

Apply at rates of 3 to 5 gallons per acre through irrigation.
(Use regularly during periods of abiotic stress or when water infiltration is limited.)

