

**Nutritional & Performance
Solutions for ALL Crops**
formulated by Jerry Brunetti

www.agri-dynamics.com • 877.393.4484



Nutritional & Performance Solutions for ALL Crops

Our liquid line can help solve problems in any crop environment. By building a program that combines the best of foliar and soil nutrients with a powerful carbon base, growers will enjoy more peace of mind knowing that their crop is getting what it needs when it needs it. This can lead to better germination, more production per acre, less plant stress and more money in the pocket.

The entire line of products was formulated and developed by **Jerry Brunetti**, who had over 35 years of experience in the farm industry helping growers build sustainable solutions, before his passing in 2014. We believe these carbon based products are the most complete and effective liquid fertility products on the market. We use multiple forms of carbon for better and quicker absorption by the plant and for a sustained release from the soil. Surfactants are used to maximize leaf and soil uptake. Biologicals help supplement microbial performance in the soil and on the leaf surface. The technology used in the production is state of the art and starts with reverse osmosis water to assure that there are no chemical reactions that could affect performance. All formulations are homogenized for optimal suspension.

*Agri-Dynamics liquid product line
for all crops is designed as a
“whole systems approach” that can
cover all the needs of any grower.*



THE BASICS: PLANT SURE™, MIKRONITE™, CAL-SENTIALS™

PLANT-SURE™

The Growers Choice

Diverse soil systems require fertility programs that provide numerous complex inputs, which usually means several products have to be used to achieve that goal. That is no longer the case. **Plant Sure™** is as close to a fertility program in a single product as it gets. **Plant Sure™** covers all the bases from Ascorbic acid to Zinc sulfate, from major nutrients, micronutrients, trace to ultra-trace elements. By incorporating diverse calcium, magnesium, and silicon minerals, biologicals, and humic substances, **Plant Sure™** provides a convenient way to make sure all of the bases are covered from plant production to plant protection.

Row Crops and Forages: 1-2 gallons/acre, 3-4 applications/year.

Fruits and Vegetables: Fertigate and/or foliar spray 2-4 quarts/acre every 5-7 days as needed.

Gardens: 2-4 oz/gallon water.



MIKRONITE™

Trace Mineral Package

All plants need both micronutrients and trace elements to build cell strength to fight off diseases and insect attacks.

Mikronite™ is a micro and trace nutrient package that includes molybdenum and cobalt, in addition to over 60 beneficial trace elements, and boron, copper, zinc and manganese micronutrients. All of this is formulated in a complex carbon base that helps mobilize the elements for optimum plant uptake. Trace elements are the "spark plugs" that fire the engine for enzyme production needed for photosynthesis that will provide a stronger more resilient plant.

Irrigation: 1-2 pints/acre weekly.

Fruits and Vegetables: 1-2 pints/acre weekly.

Row Crops: 1-2 pints/acre in the row. 1-2 quarts/acre as a foliar.



CAL-SENTIALS™

8% Ca Complex

Calcium is one of the most important basic nutrients in quality crop production and is critical to plant protection. Calcium builds cell walls and strong root systems which provide the support needed for healthy, vigorous growth in all plants. However, it is one of the hardest nutrients to mobilize into the plant. **Cal-Sentials™** is a breakthrough complex of geothermic limestone, kelp, fish meal, ocean water extract teaming with trace elements and organic matter, compost tea, and molasses blended with humic acids to provide a balance of calcium and other nutrients as the basis of a foliar fertility program.

Fruits and Vegetables: 1-2 quarts/acre weekly as a split application between drip and foliar.

Hay: 2-4 quarts/acre 10 days post cutting or tank mix 2 quarts/acre. with **Plant Sure™**.

Row Crops: 1-2 gallons/acre, 3-4 applications/year.



PLANT SURE™

The Growers Choice

Convenient & Complete Fertility Program. Major nutrients, micronutrients, traces and ultra trace. Covers the bases from seedling to harvest.

MIKRONITE™

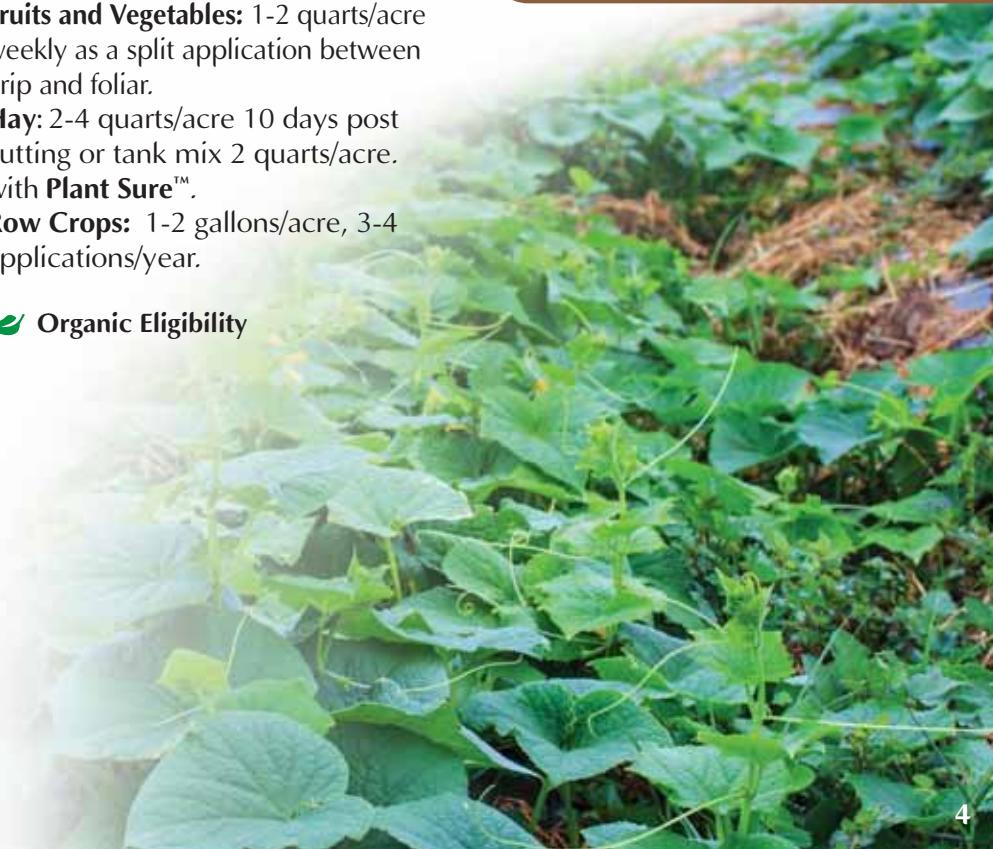
Trace Mineral Package

Trace minerals build cell strength to support disease and insect resistance and are crucial components for enzyme production needed for photosynthesis and growing stronger, more resilient plants.

CAL-SENTIALS™

8% Ca Complex

Foliar calcium improves crop shelf life, Increases yields, Helps fight insect and disease attack, Improves fruit development, Increases root growth.



NUTRITIONAL SUPPORT: PHYTO-MAG™, N-DURE™, FOLIATE-K™

PHYTO-MAG™

7% Magnesium Complex

It is well established that magnesium is the photosynthesis element. It is also needed as a catalyst for the synthesis of high energy sugars, oils and fats, and many other enzyme reactions.

However, magnesium can be very immobile (unavailable) in soils that show high levels of magnesium on a soil test. Magnesium deficiencies can occur during the early growing season long before noticeable color changes in older leaves appear, when it is too late to apply corrective magnesium to improve vigor and reduce plant stress.

Phyto-Mag™ provides a complex of three different sources of magnesium with micronutrients, trace elements and humic acids as an excellent companion to other macro elements such as calcium, phosphorous and potassium that collectively invigorate plant growth. **Phyto-Mag™** is intended to raise tissue levels in crops to overcome magnesium deficiencies, especially where soil magnesium is tied-up from excess soil compaction and poor soil biology.

Fruits and Vegetables: 1-2 quarts/acre as a split application between drip and foliar.

Hay: 2-4 quarts/acre 10 days post cutting or tank mix 2 quarts/acre with **Plant-Sure™**.

Row Crops: 1-2 gallons/acre. 3-4 applications/year.

Gardens: 1-2 oz/gallon water.



N-DURE™

Nitrogen Enhancer and Stabilizer

N-Dure™ contains humic acids, liquid fish, worm casting extract, and kelp. They are intended to provide a stable foundation for all plant, soil microbe and earthworm nutrition. The humic substances in **N-Dure™** stabilize nitrogen and other nutrients while providing a buffering effect that can help any grower reduce costly nitrogen applications by increasing nitrogen efficiency. This unique carbon based formula is intended to immobilize nitrogen, keeping it in the root zone to prevent nitrogen from leaching which allows the plant to utilize more nitrogen intra-cellularly, which leads to less nitrogen cost and pollution. **N-Dure™** is compatible with products over a wide range of pH, including urea ammonium nitrate (UAN) solutions. Can be added to manure pits.

Soil: 2-4 quarts/acre yearly.

Added to Liquid Fertilizer:

2 quarts/acre.

Added to Commercial Liquid and Dry Fertilizer: 1 gallon/ton.

Added to Manure: 2 quarts/5000 gallons.

Added to Compost/Pen Pack:

2 quarts/5 tons weekly and before adding new bedding.



FOLIATE-K™

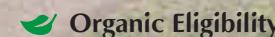
Potassium Plant Booster

Foliate-K™ is a synergistic blend of two sources of potassium with humic acids fish, kelp and micro nutrients to support fruiting and quality of all crops. Potassium and its co-factors are necessary for carbohydrate and sugar synthesis. Potassium is often deficient during mid to late stages of crop growth because many plants take up more potassium than any other nutrient, but there is very little soluble potassium in soil solution, as most of it is tied up with soil minerals. Signs of deficiency occur in older lower leaves and can be easily confused with nitrogen deficiency. Some crops, such as potato, ladino clover, alfalfa, certain beans, cucurbits, and tomato are more sensitive to potassium availability than some other crops, depending on their ability to release potassium from soil through root exudates.

For Hay: 2-4 quarts/acre 10 days post cutting or tank mix 2 quarts/acre with **Plant Sure™**.

Fruits and Vegetables: 1-2 quarts per acre as drip or foliar.

Gardens: 1-2 oz/gallon water.



Phyto-Mag™

7% Magnesium Complex

A foliar or drip magnesium complex of micro and trace nutrients that support photosynthesis, which is the process that is ultimately responsible for reducing plant stress, building carbohydrates that are needed to fight disease and insect attack.

N-DURE™

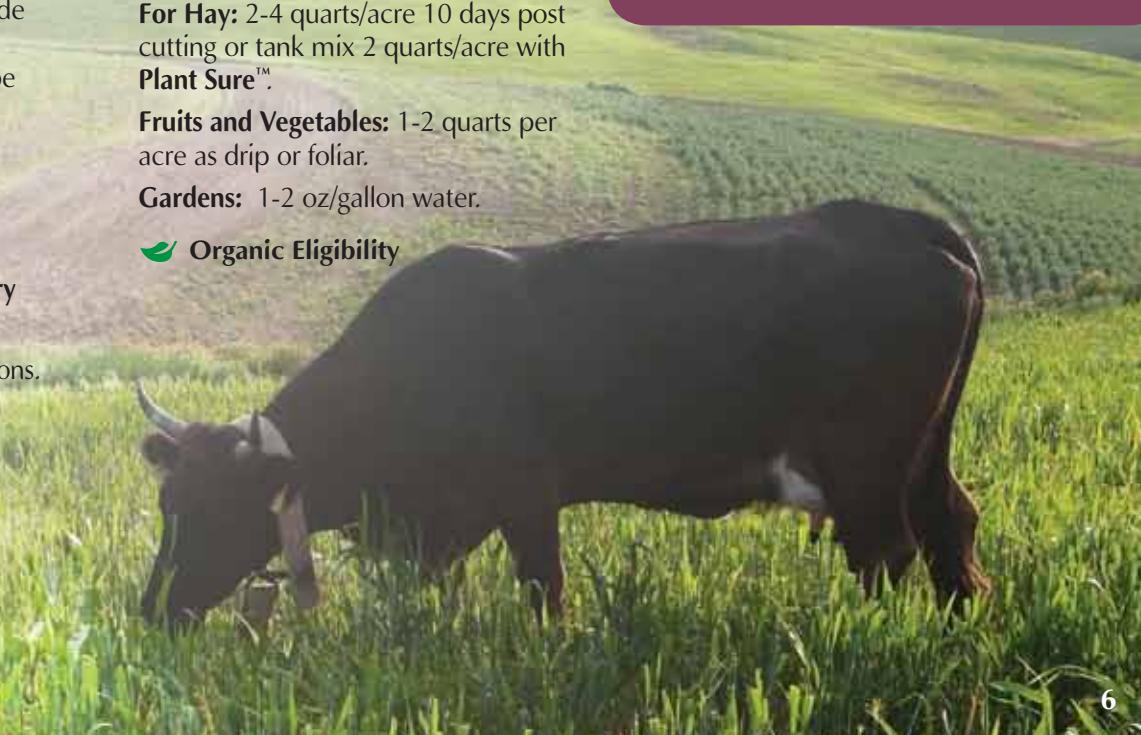
Nitrogen Enhancer and Stabilizer

Saves money by stabilizing and improving nitrogen uptake. Stable nitrogen is needed to support biological activity, to prevent nitrogen leaching, and to support plant vigor and health.

FOLIATE-K™

Potassium Plant Booster

Potassium is needed to Finish fruiting maturity, Increase fruit production, Reduce plant stress, and Improve crop quality.



NUTRITIONAL SUPPORT: FOSCALITE™, ECF BORON™, ECF MANGANESE™, ECF IRON™ ECF MOLYBDENUM + COBALT

FOSCALITE™

Balanced Calcium & Phosphorous For Organic Producers

Although positively charged calcium cations (Ca^{2+}) and negatively charged phosphates (PO_4^{3-}) are two of the most important nutrients for quality crop production and disease resistance, they are generally regarded as being incompatible in aqueous solution. By activating the rock phosphate and combining it with humic acids, fish, sea water, kelp and worm castings, **Foscalite™** provides both phosphorous and two for of calcium.

Row Crops: 1-4 quarts/acre.

Fruits and Vegetables: 1-2 quarts/acre.

Organic Eligibility

ENZYME COFACTORS (ECF)™

Micronutrient Pre-Mixes

Agri-Dynamics ECF products are intended for further blending with fertilizers. As with all products developed by Jerry Brunetti, the **ECF micronutrient pre-mixes** are not “linear products”. In addition to micronutrients, there are numerous complimentary enzyme co-factors that support the diverse soil microbiome that provides bioavailable plant nutrients. This is achieved by adding liquid fish and sea minerals all complexed by hydrophobic fulvic acids or humic acids.

ECF Boron™

Boron is essential to protein and sugar synthesis, but the amount required by each genre of plants varies considerably. Plants usually don't reveal any signs of early stage deficiency of boron.

Application Rate: Soil and/or tissue analysis is strongly recommended and consultation with a professional crop advisor.

ECF Manganese™

Manganese is critical for seed germination and early maturity of plants. It also has a role in metabolism of nitrogen and is needed for the assimilation of carbon dioxide to produce carbohydrates. Manganese is needed to synthesize lignin, the plant protectant against heat, drought, diseases and insects.

All Crops: 1-2 pints/acs.

ECF Iron™

Iron is often present in the soil but unavailable due to alkaline soils, cold and wet soils and sulfur deficiencies. Excesses of other elements can also interfere with iron availability. Foliar feeding of iron is the best way to address an iron shortfall. Iron is often referred to as the “green up” element because it fixes magnesium to the chloroplast.

All Crops: 1-2 pints/acre

ECF Molybdenum + Cobalt™

Molybdenum is absolutely essential for numerous enzymes for energy transfer in biological systems, and nitrogen fixing soil microbes, especially Rhizobium bacteria that fix nitrogen for legumes, such as alfalfa. Cobalt is involved in plant photosynthesis, but more importantly, it is essential to microbial nitrogen fixation processes for legumes, is essential to livestock health, and is a precursor to vitamin B12 production in ruminants.

ECF Zinc™

Zinc is the second most abundant trace element in the Earth's soils, but compared to natural undisturbed soils, it is somewhat depleted in many agricultural soils. As an enzyme cofactor in hundreds of enzymes, it is critical to disease resistance, growth, and nitrogen interactions. Humic acids are part of this product because pH buffering and reducing antagonism from other elements in the rhizosphere, especially phosphorus and magnesium, are critical to zinc bioavailability.

Organic Eligibility

FOSCALITE™

Balanced Calcium & Phosphorous For Organic Producers

Two of the most important nutrients in one convenient product for quality and disease resistance crops.

ECF BORON™

Micronutrient Pre-Mix

Boron is essential for protein and sugar synthesis. Complexed with fulvic acids.

ECF MANGANESE™

Micronutrient Pre-Mix

Manganese is complexed with fulvic acids and blended with fish and sea minerals to support microbial activity and enhance bioavailability.

ECF Iron™

Micronutrient Pre-Mix

Iron is complexed with fulvic acids, fish and sea minerals to support microbial activity and bioavailability.

ECF Molybdenum + Cobalt™

Micronutrient Pre-Mix

Molybdenum and Cobalt are both essential to microbial nitrogen fixation. They also are involved in energy transfer in plants (photosynthesis) and livestock.

ECF Zinc™

Micronutrient Pre-Mix

Zinc is often depleted in agricultural soils and is critical to disease resistance, growth and nitrogen interactions. Buffered with humic acids for increased bioavailability.

SOIL & PLANT SUPPORT: REGENEREX™ RHIZO-SHIELD™, INFILTREX™, INFILTREX-O™

REGENEREX™

Plant & Soil Regenerator

Regenerex™ is a versatile product that can be added to seed treatments, transplant solutions, applied to soils to break down crop residues, augment decomposition of soil residues and compost piles, or as a foundation product to build a fertility program for both plants and soils. Formulated using kelp and fish meal, ocean water extracts, compost tea and fulvic acids, this product supports soil microbial populations, provides trace and macro elements to support plants subjected to heat stress, disease and insect attack.

Seed Treatment: Apply as drip in the furrow at 1-2 quarts/acre.

Transplants: 1-2 quarts/acre.

Fruits and Vegetable: 2-4 quarts/acre applied weekly split between drip and foliar.

Stubble Digestion: 1-2 gallons/acre with **Infiltrex™** or **Infiltrex-O™**.

Compost/Pen Pack Manure: 1-2 gallons/5 tons weekly and before adding new material.



RHIZO-SHIELD™

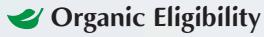
Mycorrhizae Support System

Rhizo-Shield™ is a complex of humic acids, plant nutrients, trace elements and minerals intended to support soil mycorrhizal fungus and bacteria. Endo-mycorrhizae are naturally present in soils that are managed with low-inputs and cover crops. Also known as "VAM", they help increase and strengthen the hairs in the root zone resulting in increased nutrient uptake. Mycorrhizae are renowned for increasing the uptake of phosphorous, zinc, copper, cobalt, iron, manganese, boron and selenium which support stronger and more productive crops. Mycorrhizae also biologically protect roots from pathogenic fungi, bacteria and nematode invasion.

Transplants & In Furrow:
1-2 pounds/acre.

Seed Treatment:
3 oz/100 pounds of seed.

Soil Application and Residue Breakdown: 1-2 pounds/acre.



INFILTREX™

Soil Conditioner

Infiltrex™ is a unique wetting agent that's comprised of three different biodegradable components for maximum performance. When roots are constricted in tightly compacted soils, crop production decreases and so do profits. Loose soils allow roots to move deeper, flush out plant damaging salts, eliminate standing water in poorly drained fields, and relieves anaerobic stress, resulting in fields that are much easier to manage.

Rates: 1-4 pints/acre.

INFILTREX-O™

Soil Conditioner

Infiltrex-O™ is a less complex formula consisting of just two biodegradable components which is suitable for organic growers.

Rates: 1-4 pints/acre.



REGENEREX™

Plant and Soil Regenerator

Versatile product for use as the foundation of a fertility program, for seed and transplanting treatment or for crop residue decomposition.

RHIZO-SHIELD™

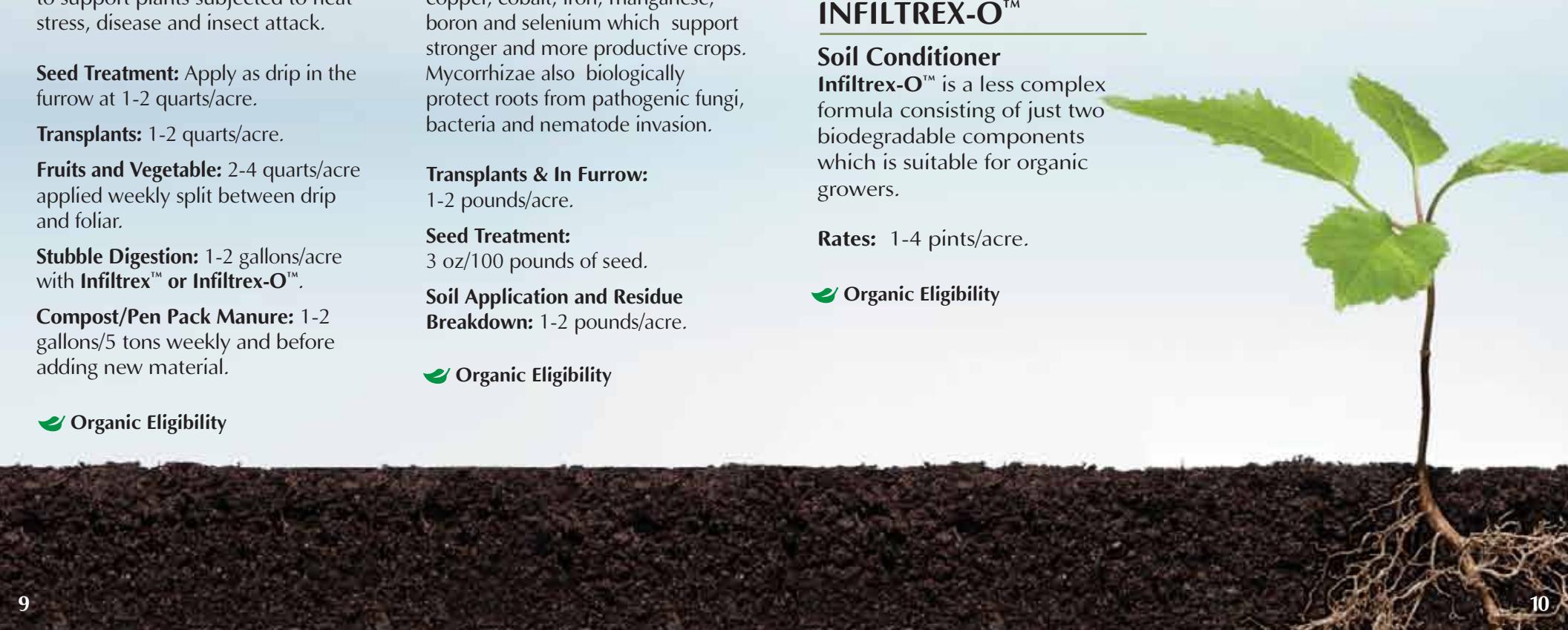
Mycorrhizal Support System

Mycorrhizae fungi can save water, Increase root growth, Improve nutrient uptake, Improve crop and fruit production, and Mitigate pest pressure.

INFILTREX™ & INFILTREX-O™

Soil Conditioner

Tight soils can benefit from biodegradable surfactants by allowing standing water to drain. Promotes root penetration, Helps remove salt build-up, Builds stronger plants.



PLANT PROTECTANTS

PHYTO-GUARD™, SEA-SURE™ & LACTO-SAN™

PHYTO-GUARD™

Foliar Oil Spray

Phyto-Guard™ is a foliar and soil drench or fertigation additive that activates an “immune response” in plants to resist disease and insect challenges. There are no toxic residues and therefore no concerns for field re-entry and harvest. **Phyto-Guard™** is compatible with other foliar sprays including nutritional or pest control products. **Phyto-Guard™** is a homogenized mixture of terpenes and phenylpropanoids which at low dilutions perform as “Induced Systemic Resistance” (ISR) substances that activate a plant immune response.

Treatment Rates: 2-2.5% solution.

Treatment Timing: Every 10-14 days. In case of high stress, spray every 7-10 days.

Prevention Rates: 1% solution in foliar/drip.

Prevention Timing: Weekly.



Ask us how to mix all three products for superior results.

SEA-SURE™

Liquid Seaweed Extract Concentrate

Sea-Sure™ is a carbon and mineral package that utilizes a proprietary European extraction process to provide a balanced nutritional package to support plant health as the front line of defense against disease and pest attack. **Sea-Sure™** includes ascorbic acid and humic acid to stabilize the water-soluble plant micronutrients. There are no trace residues and therefore no concerns for immediate field re-entry or harvesting. **Sea-Sure™** is an effective companion to **Phyto-Guard™** and other nutritional foliar or conventional biocides.

Dilution: Dilute the following recommended amounts of product with 20 gallons of water.

Rates: Fertigate and/or foliar spray 1-2 pints/acre every 5-7 days as needed. Consider tank mixing with **Lacto-San™** and **Phyto-Guard™**. Recommend consulting with crop consultant.



PHYTO-GUARD™

Foliar Oil Spray

Activates plant immune response; Helps fights pest problems; No toxic residues.

SEA-SURE™

Liquid Seaweed Extract Concentrate

Supports plants' natural abilities to fight plant pests and reduce plant stress. No toxic residues.

LACTO-SAN™

Biologically Active Agricultural Yogurt

Supports natural disease resistance; Biologically active; Long shelf life; Cost effective.

LACTO-SAN™

Biologically Active Agricultural Yogurt

Lacto-San™ is a biologically active “industrial yogurt” consisting of proprietary fermentation cultures that stimulate microbial growth in the soil and help any plant material fight disease pressure. Trial results found that concentrations between 4-12% reduced disease severity on several horticultural crops including vegetables, berries and fruit crops. Similar to compost tea, but has a superior shelf life of at least one year. It is an organic product that comes with no toxic residue, field re-entry or harvest concerns.

Rates: Fertigate and foliar spray 1-4 quarts/acre every 7-14 days. Apply with **Plant-Sure™**.



Other Products for Consideration: CAL-PHION PLUS™, CROP MANNA™ & SEA CROP™

CAL-PHION PLUS™

Calcium & Phosphorous Complex 10-3-0.5-6Ca-2S

Calcium builds cell walls and strong roots and phosphorous is a major source of energy for plants. Ironically, these two important nutrients are difficult to mobilize into plants because of their chemical incompatibility when mixed together as fertilizers. As a general rule, calcium and phosphorous are incompatible in solution because positively charged calcium cations readily combine with negatively charged phosphate anions, forming calcium phosphate, which is not immediately plant available. Our chemical and technological achievements have resulted in a breakthrough fertilizer that provides a unique combination of calcium with phosphorous, and three forms of nitrogen in a single product.

For Hay: 2-4 quarts/acre 10 days post cutting or tank mix 2 quarts/acre with **Plant-Sure™**.

Fruit and Vegetables: 1-2 quarts/acre weekly.

CROP MANNA™

Organic Nitrogen Starter 3-3-4-2S

Crop Manna™ is a combination of two sources of nitrogen and kelp, stabilized with fulvic acids to produce an effective organic plant starter fertilizer. It can help jump start all crops and supports better crop production all season long. **Crop Manna™** is rich in organic carbon sources to enhance the entire plant and soil biological systems.

Hay: 2-4 quarts/acre 10 days post cutting or tank mix 2 quarts/acre with **Plant-Sure™**.

Fruits & Vegetables: 1-2 quarts/acre.

Row Crops: 1-2 gallons/acre.

Gardens: 1-2 oz/gallon water.



Organic Eligibility

SEA CROP™ CONCENTRATE

Ocean Mineral Concentrate

Sea-Crop™ is a unique combination of low sodium sea minerals, trace elements, and carbon-rich organic matter cycled by marine microbes from a pristine area of the ocean. The high concentration of trace elements were released from the natural geochemical cycling of the Earth's hydrosphere. Unlike other sea salts, **Sea-Crop™** has never been dried or subjected to heat. Drying can destroy organic compounds, such as mucopolysaccharides, which are very similar to the organic carbons exuded by plant roots into the rhizosphere to feed soil microbes.

Forage Crops, Alfalfa, Pasture, Hay, etc: Apply 1– 3 gallons/acre within 4 -10 days after cutting.

Fruits & Vegetables: Apply 2 - 4 gallons/acre at planting, and 1 quart/acre per week thereafter.

Gardens: 12-20 oz /1000 sq ft. Foliar spray 2-4 oz/gallon once/week.



Organic Eligibility

CAL-PHION PLUS™
Calcium & Phosphorous Complex
10-3-0.5-6Ca-2S
Supports plant immune response
natural defenses to pest problem;
No toxic residues.

CROP MANNA™
Organic Nitrogen Starter 3-3-4-2S
Powerful starter and source of
organic Chilean nitrogen; Jump starts
seed growth; Produces strong plants;
Increases production.

SEA CROP™
Ocean Mineral Concentrate
Low sodium sea minerals with
ocean derived organic matter and
trace elements to enhance crop
production and support vitality.



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