VITA PRODUCTS, HORTICULTURE AND FARMING FOR HOLISTIC GROWTH

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Use These Plant Formulations in Smart Agriculture For: THE USE OF ORGANIC NUTRIENT SOURCES THAT BECOME COMPULSORY FOR SUSTAINABLE CROPS

PRODUCTION AND SOIL HEALTH;

IMPROVEMENT IN SEED AND PLANT QUALITY;

IMPROVED SHELF LIFE IN POST-HARVEST

PEST MANAGEMENT METHODS;

WATER HARVESTING/CONSERVATION STRUCTURES;

REDUCED POST-HARVEST LOSSES;

MAKING A DELIBERATE EFFORT TO PUT SPECIFIC STRATEGIES INTO ACTION TO HELP THE

HORTICULTURE INDUSTRY EXPAND AND THRIVE IN THE FUTURE.

SAVINGS ON WATER AND FERTILIZER INPUTS

These Plant Formulations:

FACILITATE HORTICULTURE PRODUCTION EFFICIENTLY AND COST-EFFECTIVELY;

CONSIDER PLANT TECHNOLOGY ADAPTATION AND APPLICATION;

ENHANCE PRODUCTIVITY THROUGH THE USE OF SUPERIOR PLANTING MATERIALS;

INCREASE VOLUME AND COST-EFFECTIVENESS;

DEMONSTRATE A PROVEN TECHNOLOGY THAT BOOSTS HORTICULTURAL PRODUCTIVITY;

APPLY ORGANIC FARMING PRACTICES TO PRODUCE GOODS WITH POSITIVE ENVIRONMENTAL AND FINANCIAL EFFECTS;

AID IN THE PRODUCTION OF FRUITS AND VEGETABLES THAT ARE OF HIGHER QUALITY. IN TURN, THIS WILL INCREASE DEMAND FROM COUNTRIES WORLDWIDE AND BOOST EXPORT ACTIVITY.

These Plant Formulations Maximize the following through Science and Technology Advancement: OLERICULTURE PRODUCTION POMOLOGY PRODUCTION VITICULTURE PRODUCTION FLORICULTURE PRODUCTION: **ARBORICULTURE PRODUCTION** LANDSCAPE HORTICULTURE PRODUCTION AND MAINTENANCE **TURF MANAGEMENT**

Many Nations and Farming Enterprises Face Numerous Regional/National Challenges; A Word About Fertilizers

- They seek to reduce nitrous oxide emissions from fertilizers by 30% in the next eight years in an effort to fight climate change;
- Farmers understand that reducing nitrous oxide emissions cannot be accomplished without reducing fertilizer use;
- They seek to identify and implement innovative steps to help meet their respective emission targets;
- Funding, research and technical support for innovation and new technologies, and transitioning to new practices and approaches in how farming is done and how food is produced is necessary in governmental efforts to meet emissions reduction requirements.
- With fertilizer prices at record highs, farmers are looking for government support for both management approaches and new products that promise to increase efficiency and profitability that do not add to fertilizer costs or usage and that comply with new emissions reduction mandates.

Farmers Face Numerous Global Challenges... They are re-thinking about other ways to do everything...

- Retail fertilizer prices have <u>increased sharply</u> in recent months, leading farmers and ranchers to seek alternate sources for fertilization;
- Forages need nutrients, whether from traditional fertilizer sources or alternatives;
- The price of synthetic fertilizer has more than <u>doubled</u> since 2021, causing great stress in farm country (National Corn Growers Association, 2021);
- In the US, Farmers seek greater USDA and US government support for innovative, nature-based American-made fertilizer to give U.S. farmers more choices in the marketplace.

An Opportunity for a National Department of Ag, Investor Group, Entrepreneur, or Visionary that "Gets It"

- Can a fertilizer producer increase its positive impact on the environment and/or decrease an unintended negative impact on it as farmers are requesting?
- Can a fertilizer producer bring innovation to the world that supports farmers' desire to use more sustainable products while continuing to improve their bottom line?
- With fertilizer prices still at record highs, farmers are looking at both management approaches and new products that promise to increase efficiency and that do not add to fertilizer costs. Can just one fertilizer producer deliver here?

Even Consider How to Augment Biofertilizer Applications

Consider the following plant formlations –

(both USDA National Organic Program Compliant and Traditional) – as a cutting-edge method <u>Fertilizer Option</u> for Farmers that can reduce the need for and use of fertilizers and contribute by helping farmers meet local, regional and national emission targets and maintain its intensive and technology-led crop cultivation!

Background

Vita Products[™] PROPRIETARY Formulations developed by Plant Scientist, William L. Ruth Vita Planta Pro[™], Vita Agri[™] and Vita Agri Plus[™] (with Hydra Formula) USDA National Organic Program Compliant

Promotes healthy trees, turf, and plants to resist disease and insect attacks
 Promotes root structure to enhance the health and strength of trees and plants in all climates

Reduces shock for heightened success throughout transplanting operations
 Reduces the use of fertilizers thus eliminating the addition of salt to soil

Vita Planta Pro™

Vita Agri™ & Vita Agri Plus™

5.Balances soil pH to allow uptake of soil nutrients blocked by salts enhancing growth and health

6. Their non-toxic formulas bring no harm to pets, birds, fish or bees

- 7. Its proprietary formulation promotes optimum seed germination and superior plant growth - plant seedlings, bedding plants, interior/exterior landscaping plants, trees, shrubs and turf - that contribute to overall profits
 - 8. "Hydra Boost" formula reduces stress and assists in moisture content retention to survive drought conditions

9. Reduces petal drop in blooming plants for greater and longer enjoyment10. Does not clog injector or irrigation systems reducing maintenance time and costs

Purpose

Farming Applications for Plants/Crops

- Use as a watering agent and/or foliar spray
- · Restores vitality to stressed plants by assisting the hydration of plant stem and leaf
 - Aids in transplanting and seed germination
 - No salts to burn plants
- Enables the plant to become healthy and balanced with a strong immune system.
 - Helps reduce antagonisms to the plants to ensure the use available nutrients
 - Numerous Farming Applications
 - Not classified as a fertilizer since it does not have a salt base

nor an N-P-K breakdown.

VITA PLANTA 2000TM, VITA PLANTA PROTM, Vita AgriTM & VITA AGRI PLUSTM

The plant formulations created by William L. Ruth align with farming methods in a number of ways:

- They contribute to environmental regenerative sustainability;
- They protect threatened habitats and species;
- They combat desertification;
- They reduce the use of fertilizers, especially synthetic, and chemicals reinforcing the nonneed for fertilizer overuse;
- They provide a best-practice, scientifically proven methodology for extremely healthy crops for shipment to market to table.

These Plant Formulations are conducive to respecting the environment and climate in an effort to create and maintain sustainable lands/soil for future generations.

Extensive research in the development of these formulations has been conducted over three decades and aligns with commitments by farmers worldwide to advance their own science and knowledge further in crop/food production.

FARMERS SHOULD BE ENCOURAGED TO INVEST IN THIS PLANT FORMULATIONS TECHNOLOGY TO ASSIST IN COST SAVINGS AND OTHER RESOURCE EFFICIENCIES. BUT, A NATIONAL HEAD OF STATE, A FERTILIZER COMPANY, INVESTMENT GROUP OR ENTREPRENEURIAL INDIVIDUAL MIGHT BE IN THE BETTER FINANCIAL POSITION TO MAKE THE INVESTMENT!

The information disclosed throughout this presentation is intended to address the direct application of William Ruth's plant formulations as an OPTION to fertilizer use sought by farmers with the added benefit of the cost savings they bring.

Please know that the information that follows is applicable to the specific needs of national departments of agriculture, municipal parks, golf course managers, nurseries, landscapers, live plant wholesalers, and chemical and fertilizer companies across the globe.

The concluding slides speak to such matters as market trends, worldwide use of fertilizers, costs associated with bringing a new product to market, and what's on the minds of farmers today – data of which you are, assuredly, aware.

Market Trends Facing and Affecting Farmers and Associated Businesses

> The growth of the gardening industry expected to reach \$49.3 billion by 2023. Source: Long Island Newsday

Today, for many reasons, including deforestation and erosion, crops simply don't have the same nutritional value. Source: Long Island Newsday

The houseplant trend is still growing strong, especially among younger adults crunched for time, space and money. Source: Long Island Newsday

Horticulture & Garden Market Trends

Greenhouse Horticulture market size to maintain the average annual growth rate of 0.0439150139782 from 14600.0 million USD in 2014 to 18100.0 million USD in 2019 and,

BisReport analysts believe that in the next few years, Greenhouse Horticulture market size will be further expanded and expected by 2024. Source: MarketWatch News July 2020

Houseplants are growing in popularity. Source: Department of Horticulture, Iowa State University, January 2020

Market Trends cont'd

The Fertilizers market is expected to reach over \$245 billion in 2020

NEWS PROVIDED BY MarketResearch.com Aug 02, 2017, 11:29 ET Fertilizer Market Global Report 2017

- Asia was the largest region in the fertilizer market in 2016, accounting for around \$110 billion of demand. Asia is the largest market because of the presence of large farming communities in China and India using fertilizers. The Americas comprised the second largest region, accounting for around \$65 billion. Europe was the third largest region, accounting for around \$18 billion.
- Increase in Demand for Water Soluble Fertilizers is one of the top trends observed in the fertilizer market as
 of 2016. The water soluble fertilizer market is growing rapidly due to increased commercial cultivation of high
 value crops to meet rising demand. These fertilizers are specifically designed to be used in "fertigation"
 systems such as sprinklers and drip irrigation. Increasing awareness among farmers of technology-driven
 agricultural practices in developing nations is driving water soluble fertilizer sales.

Vita Agri[™] Vita Agri Plus[™] and Vita Planta Pro[™] are Water Soluble!

 Imagine the potential income an Organization/Company can generate that owns and inserts the use of these product formulations at a rate of a mere 1% of this multi-billion dollar market to replace fertilizer applications for crop, environmental and profit benefits.

Pesticide Demand and Use Worldwide →

Replace these pesticides with Vita Products[™] Formulations. Their environmental & nonpolluting benefits can slow down or stop the increase of Dead Zones found in the Gulf of Mexico, the Baltic & Black Seas, the Chesapeake Bay and off the coast of

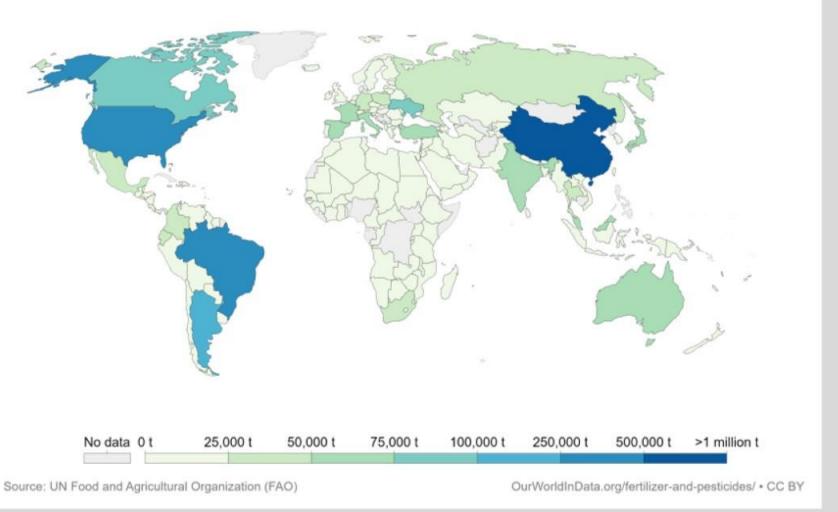
Oregon caused by an **excess of agricultural nutrients** that flow downstream and into surface waters, stimulating harmful algae. <u>If a pesticide is required,</u> <u>Vita's formulations increase</u> <u>the efficacy of its use.</u>

What Farmers and the USDA are Mulling Over (next 3 slides)

Pesticide use, 2017

Total pesticide use measured in tonnes of pesticide consumption per year.





From the National Academies of Science Journal

Insect populations outweigh humans 17 times and are essential to earth's ecosystems. <u>Pesticides</u> is a major cause of our world losing 1%-2% of its insects each year.

"Awareness of insect declines in the past two years has led some governments to take action and seek grass roots assistance from <u>citizen scientists</u>." Source: PNAS (Proceedings of the National Academy of Sciences of the United States of America 2021 Vol. 118 No. 2 e2002547117

William L. Ruth of Vita Products, Inc. and developer of Vita's product formulations is one such citizen scientist!

One simple action that can be taken to save insects from global declines: Reduce pesticide and herbicide use.

- Pesticides often harm nontarget, natural insect populations, whereas reduction of their use fosters beneficial arthropods.
- Pesticides have been found far from their application source and, in some regions, are more prevalent in urban streams than in those near agricultural lands.
- Many pesticides are applied for cosmetic purposes, that is, aimed only at improving the appearance of nonagricultural green spaces such as lawns, gardens, or parks. Reduction or elimination of cosmetic pesticide use, already legislatively mandated in Nova Scotia and Ontario, could greatly benefit both terrestrial and aquatic insect communities.
 - When applied to plants, <u>pesticides</u> may not be necessary as a proven fact when using William L. Ruth's product formulations.
 - These formulations can be added to <u>herbicides</u> to: (1)increase their effectiveness and (2) reduce their use.



VITA PLANTA 2000TM, VITA PLANTA PROTM



VITA PLANTA PROTM & VITA AGRI PLUSTM

Costs of Bringing a New Agricultural Chemical to the Market

CropLife International (CLI), CropLife America (CLA) and the European Crop Protection Association (ECPA) commissioned PhillipsMcDougall, an independent consultant specializing in market analysis for the agrochemical industry, to research the cost of bringing a new active ingredient to market.

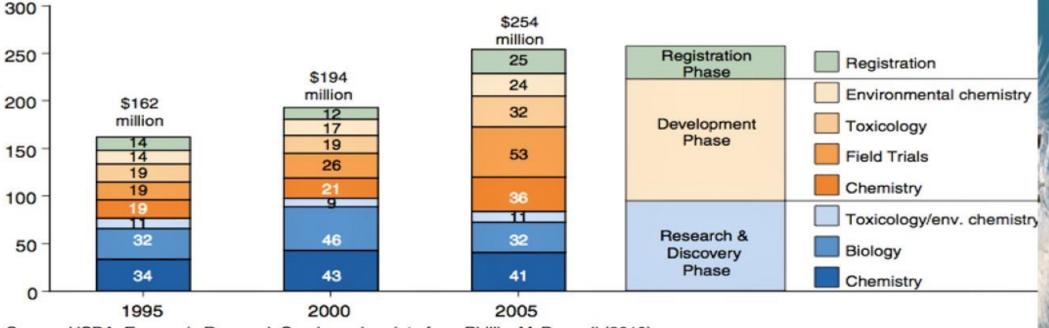
Their findings: Up from 2005 (see chart on next slide), every crop protection product that reaches the market costs \$286 million and takes 11 years of research and development to ensure the highest safety and efficacy standards. And the cost of bringing a new product to market will continue to increase. The report found the industry spent a total of \$2.6 billion on new innovations just 5 years ago (see following slide).

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Figure 3.3

Costs of bringing a new agricultural chemical to the market

Million constant 2006 U.S. dollars



Source: USDA, Economic Research Service using data from PhillipsMcDougall (2010).

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Research Investments and Market Structure in the Food Processing, Agricultural Input, and Biofuel Industries Worldwide / ERR-13 Economic Research Service/USDA

Vita Products™ Formulations Have Already Been Brought to this Market thus Saving an Organization the Research & Development Costs Reflected in the Graphic Above.

Profit Potential Illustration Using One Common Commercial Application (Large Farming) Using Vita Agri™

- A Farmer Growing Multiple Acres of Wheat or Alfalfa, or Lettuce or Soy Beans, etc., Uses a System of Pivots or Boom Sprayers to Irrigate His Crops;
- · Each Pivot irrigates, on average, 140 acres Once a Week or 4 Times Every Month;
- Vita Agri™ is Systematically Injected into the Water Flow for Each Pivot at an Application Rate of 1 Quart Per Acre;
- At a Cost of Only \$25 per Quart Assigned to this Application Rate (compared to what a farmer spends on fertilizers/pesticides on the same acre), multiplied by 140 Acres, 1 Pivot Uses \$3500 of Vita Agri™ per Week, or \$14,000 each Month (beneficials are not harmed);
- Over the Course of 1 Year, each Pivot uses \$84,000 (6 months X \$14,000) of Vita Agri™ (note*: the effectiveness of Vita Agri™ in helping to produce a healthier crop over the course of a calendar year requires half the application time 6 months v. 12 months).
- One Farming Operation that Utilizes Several Hundred Pivot or Boom Systems Makes a Significant Investment in Vita Agri™: Example: 200 Pivots X \$84,000 = \$16,800,000 or \$1,400,000 a month;
- This Financial Investment in One Farming Operation is Chosen Because of Vita Agri™ Effectiveness in: (1) Creating a Healthier Crop,
 (2) Using Less Water, (3) Reducing or Eliminating the Use of Fertilizers/Pesticides, (4) Realizing No Weeds and No Insects, (5) Its
 Organic Formulation!
 - Establishing a price for the cost of **Vita Agri™** to meet what the market will bear (ex: cutting the cost in the example above by ½, even ¼), can be achieved without sacrificing a significant and desired profit margin as experienced over three decades.
- Organic and non-polluting, can be manufactured on site as easy as water flows, uses no powder.

A Word About Patents v. Trade Secrets

With the understanding that a company's intellectual property is its number one asset, William L. Ruth of Vita Product's, Inc. decided at the outset of the creation of his plant and lotion formulations to treat them as trade secrets, thereby foregoing the process of having them patented. Mr. Ruth utilizes a non-disclosure agreement as an added measure to protect his company's trade secrets. The rationale behind this decision includes a number of factors:

- A trade secret enjoys protection under US law;
- The associated costs are significantly lower than that of securing a patent;
- Patents require companies to disclose inventive properties publicly. Their protection is also limited in time, usually lasting no more than 20 years, while trade secrets remain protected indefinitely. William L. Ruth has chosen to follow the path of Coco-Cola, which does not hold a patent on its secret cola-recipe. Consequently, Ruth has chosen to protect his secrets rather than disclose them in a patent application.
- Vita's formulations derive independent economic value by remaining unknown;
- Vita's trade secrets allow the benefit of an indefinite protection period, especially through its long-term interests;
- As long as these trade secrets are kept from public knowledge, Vita Products, Inc. continues to benefit from them without any reporting requirements, including any that require procedural compliance with a government agency;

While we can agree that trade secrets are unique and inventive enough to warrant patent protection, that would require disclosing the information publicly and spending considerable sums obtaining patent protection, i.e., filing and annuity fees, not to mention the timeconsuming efforts involving searches and examination. William Ruth and his company Vita Products, Inc. chose the trade secret path as it offers a better return on investment and fits Vita's overall risk strategy.

Given William Ruth's position here as stated, we envision your organization to be in its own unique position to file a patent for these formulations providing extremely effective protection for the generally accepted 20-year period, thereby giving it the exclusive right to make, sell, and gain a monopoly on them independently. Your company can have exclusive use of these formulations and command the market for 20 years. It can build its own brand recognition and market leadership during that period to remain a top industry player even after the patent expires.

A Word About Clinical Trials

As a research-based company, Vita Products, Inc.'s clinical trials designed expressly for development and evaluation of plant formulations applied to Floriculture, Horticulture, Christmas Trees & Wreaths have been conducted with the public and commercial entities – randomly - whose results are evaluated and published on the Vita Products, Inc. website (www.vitaproducts.com), not with test tubes or control groups.

It must be noted here that these trials have been conducted in a manner where their efficacy is born out through testimonies, photographs and videos – true to life applications in the field driven by William Ruth's research and scientific efforts in plant science. Can there be any better proof of their worth and value to the individuals, companies and organizations using them? So it stands with Vita Planta Pro[™] and Vita Agri Plus[™]. Trials/Testimonies in Other Industries Served by Vita Products:

Research (vitaproducts.com) Testimonies (vitaproducts.com) CONSUMER USE (vitaproducts.com)

Vita Products, Inc - Floriculture, Florist, Gardener, Cut Flowers

The premise underlying Ruth's product formulations and their aim is to focus on improving the health of a plant before any other strategy is executed.

These plant formulations:

- normal amount Are not fertilizers; they are plant & soil amendments - they can be added to a fungicide, herbicide or insecticide to increase their effectiveness 100%. There are no NPK values as the formulations bring the soil's mineral elements to the plant;
- Do not pollute; ٠
- Protect crops (PPP) from insects and plant diseases; ٠
- Do not leave a carbon footprint no shipping of product is required. Manufacturing • is achieved on any site in any temperature for a positive effect on profit margin worldwide;
- Keep both live trees (better chance of survival in drought conditions) and cut trees . moist to resist combustion;
- Modify the behavior of feral animals to deter them from feeding on or trampling ٠ plants;
- Require no grinding to powder; ٠
- Require no mixing;
- **Colorado where the** Includes Vita Flora One-Step (for cut flowers) – the hydration and nutrient solutions This is are combined in its production to save labor and cost.

Add these formulations to your product line

to satisfy options farmers are seeking and to serve additional markets!



Holy Hay!!!!! Another blockbuster yield thanks to::: Vita-Agra Vitaproducts.com Bill you Rock,,,,, I'm On schedule for 5 cuttings.

Vitaproducts.com

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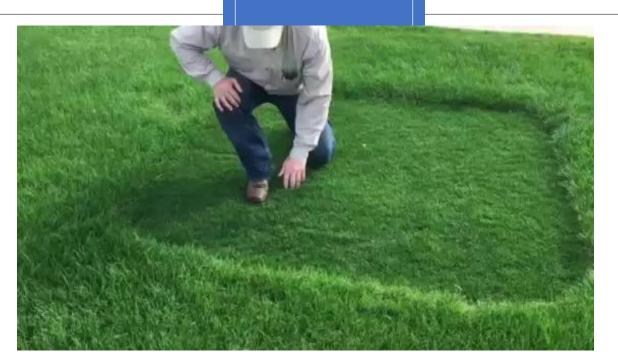
The Testimonials Found Within the Following Links Demonstrate the Science Behind the Development of These Plant Formulations and Illustrate Their Capabilities and Logical Application to Farming. <u>https://vitaproducts.com/professional</u>; <u>The Science Behind the Development of These Plant</u> <u>Formula...</u>; and <u>https://vitaproducts.com/testimonies</u> Here are two examples:



In 1989, as a Landscape & Irrigation Contractor, my company was selected by the National Park Service to install drip irrigation and landscape Indian Gardens in the Grand Canyon. The Government wanted large native plant specimens planted and tagged with Botanical names for all the Hikers to enjoy. Over 950 specimens were brought in by helicopter in an open cage. The trip lasted 30 minutes at a speed of 120 mph. Additionally, it was extremely stressful for the plants to be transported from an elevation of over 7,500 ft. to 3,840 ft .I used Vita Planta and did not lose one plant. Vita Planta was the only product approved by the National Park Service for use in the Grand Canyon!



Lisianthus seed germinating in 30 days at 105° F. Lisianthus will "shut-down" or will not grow past 87° F.



Imagine William Ruth's plant formulations being utilized and applied in the production of food crops!

Click Image to Play Video or, in PDF format, go to Vita Landscape System (vitaproducts.com) and scroll down to Root Structure Forming Imagine results like this on food production efforts, especially – alfalfa, corn, soy beans...



Starr's Mill High School home sideline March 27th 2006 on the left, same sideline on August 15th 2006.

Protocol includes: Aeration (soil penetration), Verticut (stimulate lateral turf development and leveling), Vita Planta Spray, Topdressing, Leveling, and Fertilizer program.

<u>CAN YOU IMAGINE THE IMPACT</u> <u>VITA PRODUCTS CAN HAVE ON</u> FOOD PRODUCTION WORLDWIDE?

How? Its plant formulations eliminate the antagonisms plants experience through current agricultural/farming systems. Is it no wonder that plants are unhealthy due to the toxic additives added to them and the soils that anchor them? Plants have to be made healthy first. Vita's formulations accomplish this. Their result? Plants for food production absorb critical soil and air nutrients from seed to harvest! PROBLEMS WITH PROVEN SOLUTIONS in Varying Geographies, Climates & Soils

Examples of problems that can be resolved with the application of Vita Products[™] organic formulations developed by Plant Scientist, William L. Ruth

Pine Bark Beetle Nematodes

Chinasa Stink

Chinese Stink Bug

Citrus Canker and Greening Disease

Sudden Oak Wilt Disease

Stone Fruit Borer Beatle Tomato Spotted Wilt Virus Texas Phoenix Palm Decline (TPPD) ase Dutch Elm Disease Blue Stain Fungus

Vita Product'sTM Target Markets

Specialty Cut Flower Growers Distributors Floral Brokers Wholesale Floral Industry **Bouquet Makers/Pre-made Arrangements Market Floral Retail (Grocery Store Chains) Cash & Carry Florists Christmas Tree Growers Choose & Cut Farms Retail Tree Lots Catalog Sales to Retail Tree Lots** Wholesale Wreath Makers **Retail Floral Industry and FARMERS**

Plug & Plant Growers Bedding Plant Growers Live Plant Wholesalers Nurseries **Mass Merchandisers Mass** Landscape Industry **Hydro-seeding and Reclamation State Roadside Development City Parks & Landscapes Schools, Athletic Fields** Agriculture **Golf Courses**

Use and Apply the Benefits William L. Ruth's Innovative Formulations Provide the Consumer and Commercial Enterprises in the Horticulture Industry to Capture Greater Market share!

These formulations can be manufactured on site, in the field thereby eliminating transportation costs, reducing or eliminating fertilizer costs to leave no carbon footprint in the process.

Vita Products[™] Proprietary Technology owned by William L. Ruth is for Sale **USDA NATIONAL ORGANIC PROGRAM COMPLIANT** The innovative proprietary technology behind its products are proven to promote water conservation, and increase plant growth and food production worldwide. Many of the particulars related to Vita Products' involvement in the Floriculture, Horticulture and Christmas Tree Industries have been presented here. Contact Carl N. Tichenor, M.Ed. to discuss the next steps to purchase Vita Product's™ Intellectual Property at a fraction of what it would cost to bring this innovative product and its active ingredients to mark Email: carl.tichenor@global-regeneration.com Phone: 602.722.9006

Vita Products Serving the Floriculture, Horticulture & Christmas Tree Industries All are USDA National Organic Program Compliant Go to: www.vitaproducts.com



AGTECH HAS BECOME A BOOMING SECTOR GLOBALLY AND INVITING HIGH INTEREST FROM VENTURE CAPITAL AND PRIVATE EQUITY INVESTORS, INCLUDING VISIONARY COMPANIES. AN ERNST & YOUNG STUDY SEES THE POTENTIAL OF THE AGTECH MARKET TO BE ABOUT \$24 BILLION WORTH BY 2025.

This Proprietary Technology Will Be Sold Only Once. The Purchaser will own this Intellectual Property Exclusively.