Algae



Citrus Greening

It's More Than Solving the Problem; It's Preventing it in the First Place

A Multi-Billion-Dollar Global Problem

Experienced By Carribean & W. African Na	Mexico	Dominican Republic	Jamaica	Barbados	Belize	Antigua & Barbuda	Grenada	St. Lucia	Trinadad & Tobago	W. Africa
Foul Odors & Gasses			X	X	X	X		X		X
Economic Strain	X				X	X				
Tourism Drain	X	X			X	X	X			X
Smothering of Coral Reefs by Blocking Sunlight					X	X	X			X
Heavy Metals Leaking Into Beach Sand						X				
Beach Erosion							X			
Skin Irritations & Respiratory Problems of Local Residents				X			X	X		X
Clogged Boat Propellers and Damaged Fishing Gear				X			X		X	X
Public Health Concerns & Risks	X	X	X							
Reduced Fish Catches		X	X							X
Clogged Seawater Intakes at Power Plants		X								
Sea Moss Farming Halted								X		
Environmental Damage	X									
Past & Present Solutions Being Applied										
Millions Invested In Government Cleanup & Labor	X	X		X						
Floating Containment Barriers	X									
Deployment of Navy Ships	X									
Recycling Efforts		X								
Soliciting International Assistance		X								
Cleanup By Resorts & Local Councils			X							
Use of Heavy Machinery				X						
Harvesting Equipment						X				
Harvesting Seaweed for Biogas				X			X			
Exploring Turning Wastwater Into Sustainable Resource						X				
Designated Disposal Sites							X			
Coast Guard Using Trawl New Systems							X			
Government Monitoring								X		
Emergency Response Clean Up Groups									X	
Vita's Plant Formulation Solution	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
is the Only Formulation in the World That is										
National Organic Program Compliant										
Use it To Spray Onto Beaches										

A Solution to Citrus Greening, also referred to as Canker, has been available to citrus growers for 2 decades.

The following narrative describes in detail Proprietary Technology/Intellectual Property that has successfully applied, with proven results, its scientifically developed plant formulations that solve problems in the specialized branch of horticulture and agriculture called citriculture. The ingenuity and innovative components comprising this plant formulation was developed over four decades by Plant Scientist, William L. Ruth, CEO of Vita Products, Inc. holding BS & MS degrees in Agricultural Economics and Plant Science from Arizona State University.

From the National Academies of Science Journal (PNAS Proceedings of the National Academy of Sciences of the United States of America 2021 Vol.118 No.2 e2002547117): Some governments are taking action to seek out grass roots assistance on a number of issues similar to the one being addressed here. Where and to whom are they looking? ***Citizen Scientists***. William L. Ruth of Vita Products, Inc. and developer of Vita Agri/VPX Booster, the proven plant formulation that mitigates citrus greening disease, is one such Citizen Scientist.

Citrus Greening Issue Points That Lead to its Solution

- Attempting to solve citrus greening through trial after trial, year after year with extraordinary financial cost continues to prove unsuccessful;
- One does not go after the problem by slowing it down or stopping it; the first objective is to get the tree healthy first;
- Several current problem-solving methods may slow doen the greening disease process. But invariably, the trees are still sick;
- Insects can play a vital role in any agricultural enterprise. In the application of Vita Agri/VPX Booster only the chewing insects die;
- Once a tree is healthy, it takes care of its own problems;

The Realities of Sargassum

Are harmful algae blooms?:

- Closing summer beaches;
- Inadvertently swallowing contaminated water or breathing in water droplets that result in:
  - Dermatitis – cause skin rashes, burning and irritation;
  - Digestive – cause nausea, vomiting and diarrhea;
  - Respiratory – cause coughing, or asthma-like reactions;
  - Tearing and redness in the eyes, throat irritations, fever, headaches?
  - Is its smell overbearing?
  - Killing marine life and its varied species by blocking sunlight to coral reefs and sea grasses and depriving the waters of O2?
  - Economic Strain, Tourism Drain, Reduced Fish Catches, Environmental Damage

Sargassum traps stinging organisms and toxic gasses like hydrogen sulfide. **Are the citizens of your Nation experiencing these harmful effects sargassum and algae impose on them? How long will you be held captive to succumbing to the notion that Sargassum is here to stay? There is a proven method to mitigate it all.**

Concerning Algae, Lethal Yellowing & Texas Phoenix Palm Decline (TPPD)

William L. Ruth is a Plant Scientist whose scientific research has yielded an innovative plant formulation water treatment solution to mitigate both the growth and odor from living and dying sargassum surrounding the coastlines of Island nations and countries with extensive coastlines such as the United States. He has also created innovative plant formulations that can mitigate Lethal Yellowing and Texas Phoenix Palm Decline (TPPD) that affect Palm Trees anywhere in the world.

Call him - 602-524-6008. He understands the negative impact sargassum poses to global coastal environments, tourism & fishing, water quality and a nation’s overall economy, thereby offering a solution to mitigate it.

Concerning Algae, Sargassum, Citrus Greening Disease, Lethal Yellowing & Texas Phoenix Palm Decline (TPPD)

These Innovative Plant Formulations:

- are biodegradable;
- are environmentally safe and harmless to the environment;
- are 99% naturally derived without copper;
- Copper sulfate is denser than ocean water; it settles on the ocean floor and dissolves without solving the issue;
- can eliminate both the growth and **resulting odor** from the dying sargassum and other algae in both fresh water and salt-water environments;

These Plant Formulations are USDA National Organic Compliant

- These formulations are not applied in a manner that inoculates a tree; a time-consuming and expensive application. Instead, they are simply sprayed onto each tree safely and harmlessly to keep each tree healthy resulting in its ability to withstand the infestation brought on by TPPD and Citrus Greening.
- No company, university or individual other than Plant Scientist, William L. Ruth through four decades of research and successful application, can produce what these formulations can do where other attempts have failed and will always fail. ***Just look at the Great Atlantic Sargassum Belt!***

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 time-consuming 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, and Algae 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

William Ruth Algae Control Trial

November 22, 2025, Eloy Arizona

Trial Summary

Daybreak Orchards, Eloy, Arizona was culturing some biological inoculants to apply on their pecan orchard. The biologicals were being cultured in two 800 gallon tubs and then added to the irrigation water. The tubs were overcome with an undesirable blue green algae and filamentous algae. Mr. Ruth. Owner of Vita Products had developed two algaecides that I wanted to experiment with to determine if they were effective to eliminate the algae.

The first product was called algae #1 and was 99% natural.
The second product they called algae #2 and was 50% natural.

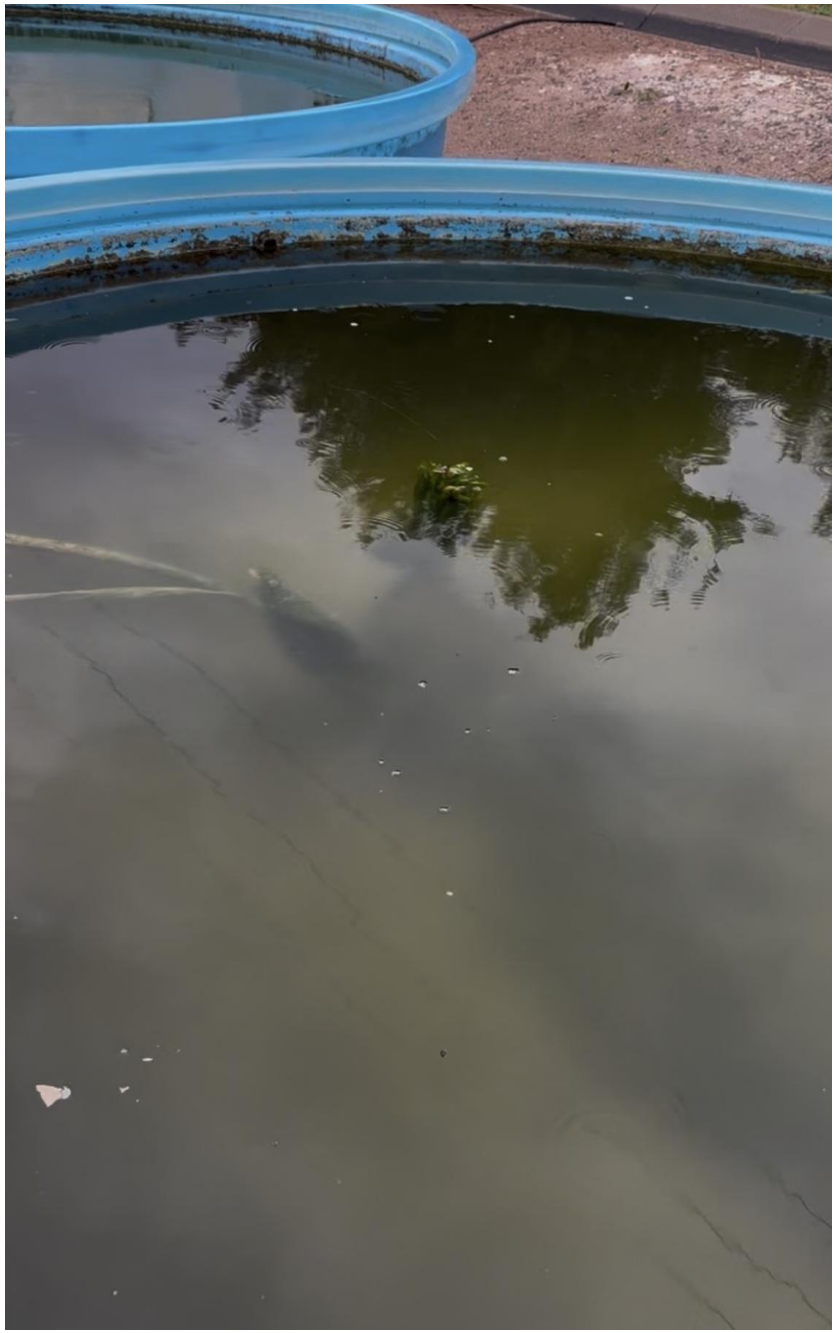
My time in Arizona was limited for a follow up so I applied a pint to each 800 gallon tub for a quicker kill. The algae #1 product resulted in a tan color when applied. The algae #2 product had a blue tint in the water. I agitated both tubs with air to ensure a complete mix and dispersal of the products. The water temperature at the time was 59.4 degrees Fahrenheit.

I returned 2 days later to observe and document the potential control. Both products had a complete kiil of both the blue green algae and the filamentous algae. Product #2 had a light film on the water surface. I removed some of the filamentous algae and to my surprise, there was no foul odor to it. The farmer returned to the site 2 days later and the filamentous algae that I removed still had no foul odor to it.

Conclusion: both algaecides worked for total control of the blue green algae and the filamentous algae as Mr. Ruth predicted.

November, 22 2025

These are the 800 gallon algae tubs that were overrun with the undesirable algae and filamentous algae in Eloy Az.



Nov 22, 2025

The water temperature in the tubs was 59.4 f at 9am.



Nov 22, 2025

The air temperature was 56.5 f at 9 am



Nov 22, 2025

Treatment #1

! Pint was added to this tub and agitated with the aeration system.

! Pint was more than need to control the algae but I only had 2 days to monitor the trial so I applied more than needed to speed up the control process.



Nov 22, 2025

Treatment #2

1 pint added to tub #2, agitated with the aeration system.

! Pint was more than needed to control the algae but I only had to 2 days to monitor the trial so I applied it heavier than needded to speed the process up.



Nov 22, 2025

What the tub looked like after treatmenrt #1



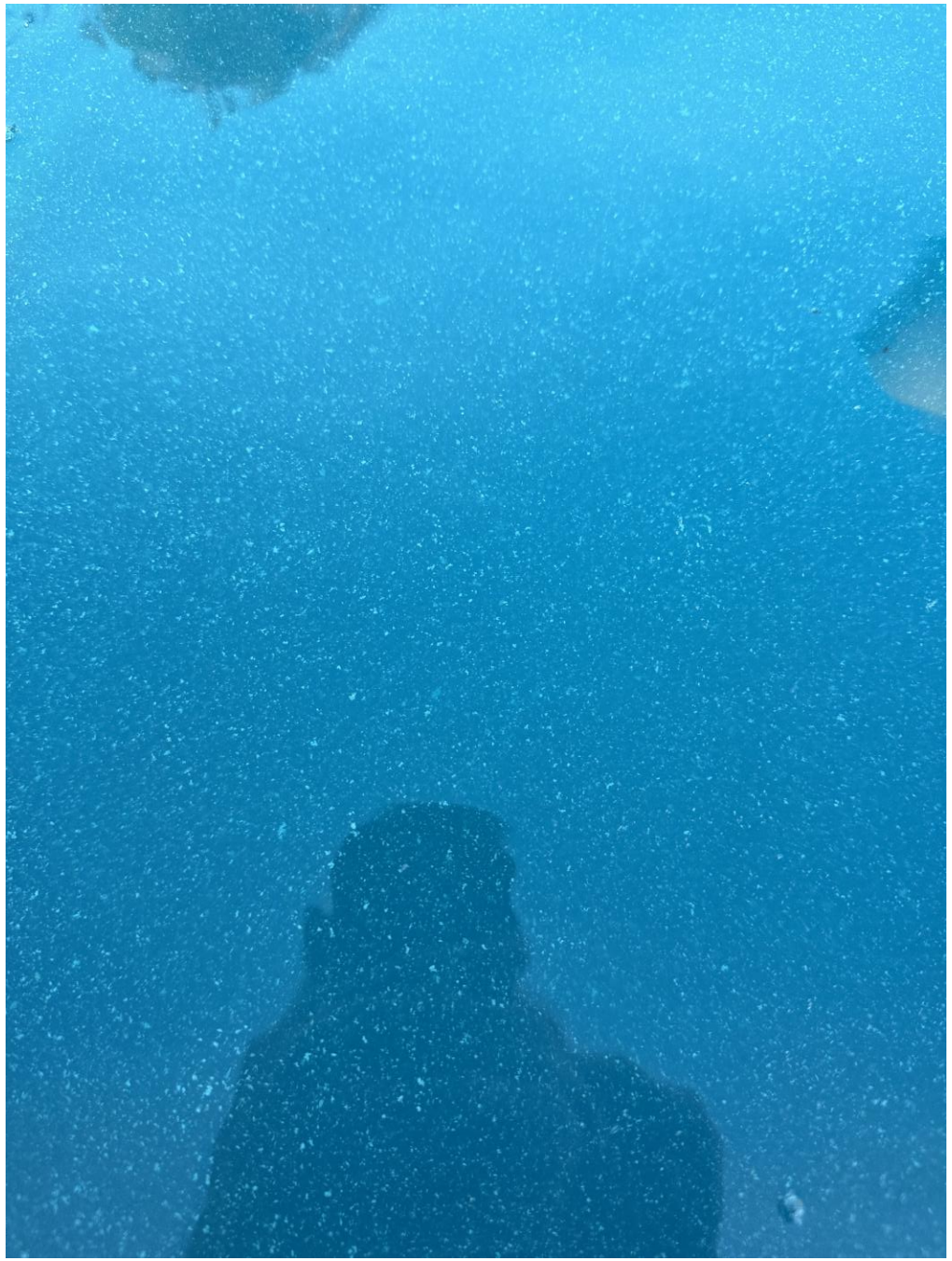
Nov 22, 2025

What tub #2 looked like after the intial treatment and agitation.



Nov 25, 2025, 7:30 am

Visual on tub #2, all algae was dead and a light oily film was on the surface.



Nov 24 2025

The filamentous algae in the tub was also dead.



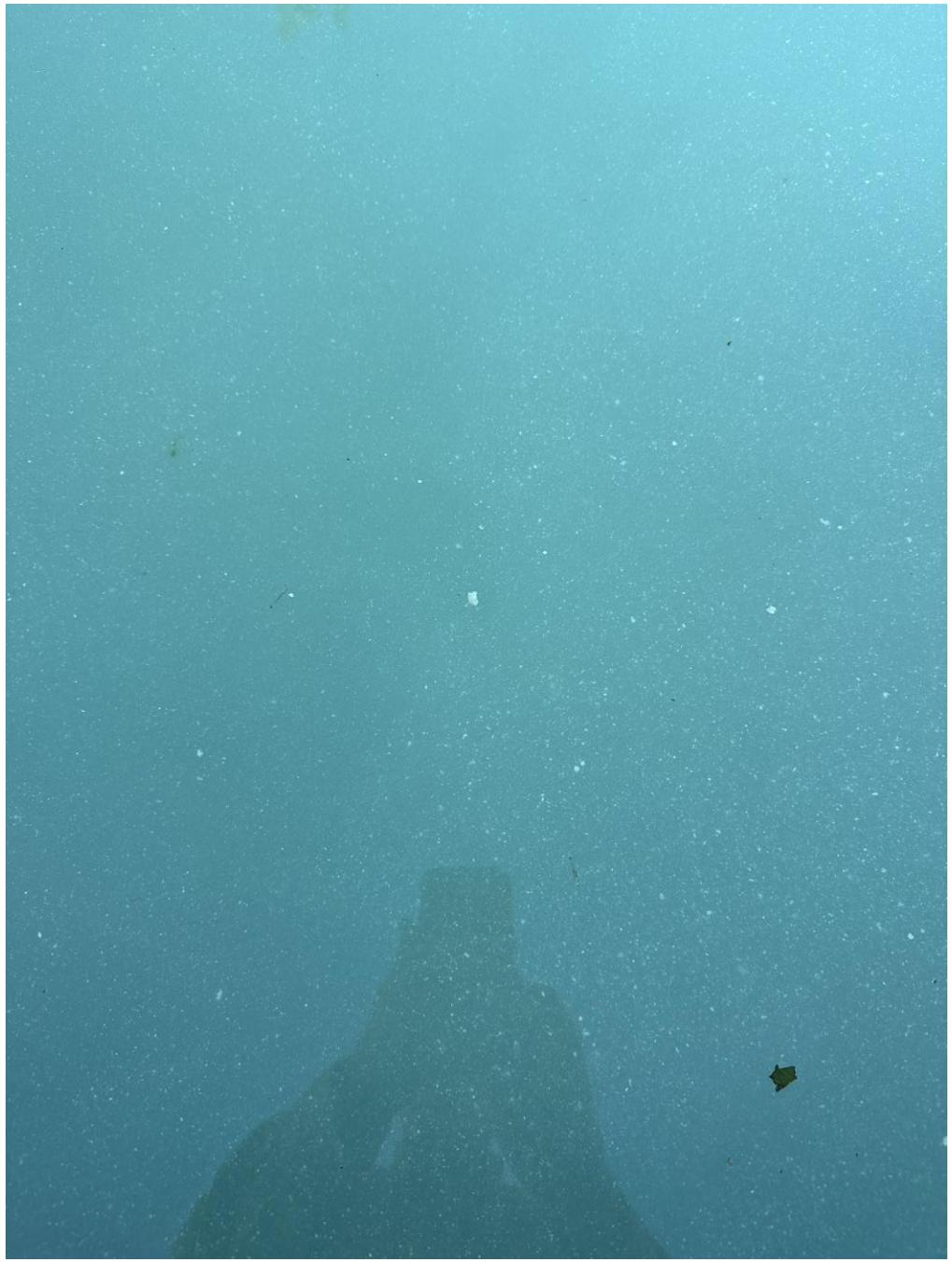
Nov 24, 2024

More evidence that the filamentous algae was dead. I removed a large quantity of the dead filamentous algae and piled it on the ground. The farmer reported that after several days there was no rofor to this pile.



Nov 24, 2025

The algae in tub 1, (treatment #1), was dead and this was the visual. There was no visible film on the surface of the water.



Nov 24, 2025

The fliamnetous alage in treatment #1 was also dead

The farmer and an independent consultant continued to observe these 2 tubs for 2 months after the treatments and no new algae growth was observed.



Mr. Ruth is retiring and has publicly announced that his plant formulations IP is available for exclusive purchase by an individual, corporate, or governmental entity, foreign or domestic.

The purchaser will acquire:

- The technology associated with each plant formulation specific to each industry;
- The services of the Contract Packager;
- Vita Products logos, labeling and package designs;
- Vita's trade secrets;
- Demonstratable profit margins ranging from 80%-98%;
- Inputs that do not change;
- Vita's Christmas Tree & Wreath preservatives and Cut Flowers formulation that are the only organic formulations in the world that are **USDA Organic Program Compliant.**

VITA PRODUCTS, INC.
CHANDLER, AZ 85244
E-MAIL: info@vitaproducts.com WEB SITE: www.vitaproducts.com

WILLIAM L. RUTH – President and CEO

The Developer of Vita Products, Inc. was raised in Yuma, AZ and has an extensive background in the processing of fresh produce. He received his Bachelor of Science Degree in Agricultural Economics and Plant Science from Arizona State University in 1971 and his Masters of Science Degree in Agricultural Economics and Plant Science in 1973 (With Highest Distinction). His Master's Thesis was written on the science of Hydroponics.

He served as a Graduate Assistant at A.S.U. in the following courses: Range Management, Plant Genetics, Weeds & Weed Control, Soil Conservation and Lawns & Greens.

As a four-time recipient of the Western Growers Association Academic Scholarship, Mr. Ruth
was elected to the Fraternity of Alpha Zeta, a National Honorary Agricultural Academic Fraternity in April 1972.

Mr. Ruth's experience in academic teaching, research and scholarship includes employment in Arizona State University's Experimental Farm from 1965 to 1969 in the Plant Science Department and lead instructor of Hydroponics at Phoenix College.

William L. Ruth Bio cont'd:

He was Manager of ABI Hydroponics in Scottsdale, Arizona and was subsequently employed by Hydroculture, Inc. in 1971 as a Researcher in the Research & Development Department.

His expertise includes plant tissue culture, water, and fruit analysis where his primary responsibility was Problem Solving for Hydroponic Growers. He assisted in the development of a hydroponic growing unit and researched poultry cannibalism, i.e., chuckers, pheasants, and chickens, adding certain proteins to their diet to research their cause and effect. Additional research included Hydroponic Shrimp and Insect Control in Hydroponic Greenhouses using various varieties of birds. In March 1974, he published an article on Hydroponics in the American Vegetable Grower Magazine.

As an educator in the public-school system for thirteen years, Mr. Ruth taught Science, Mathematics, and Economics. In 1987, he established a retail Plant Nursery and Floral Shop and was a Landscape and Irrigation Contractor for five years, landscaping Indian Gardens in the Grand Canyon in 1989. The development of his Vita Planta, Vita Christmas Tree & Wreath Preservative, and Vita Flora Cut Flower Preservative formulations began in 1988 with extensive research and trials on flowers, plant nursery stock and landscaping.

Vita Products, Inc. in Industry Publications

"Nursery News Magazine" published an article on the Vita Planta formulation in1995 comparing stressed plants before and after the use of Vita Planta.

"The American Christmas Tree Journal", April, 1999, pg. 48 displayed a picture of a Christmas Tree cut the last week of November, 1998 that was hydrated with Vita Christmas Tree & Wreath Preservative. The tree would not combust on February 6, 1999 in Chandler, AZ.

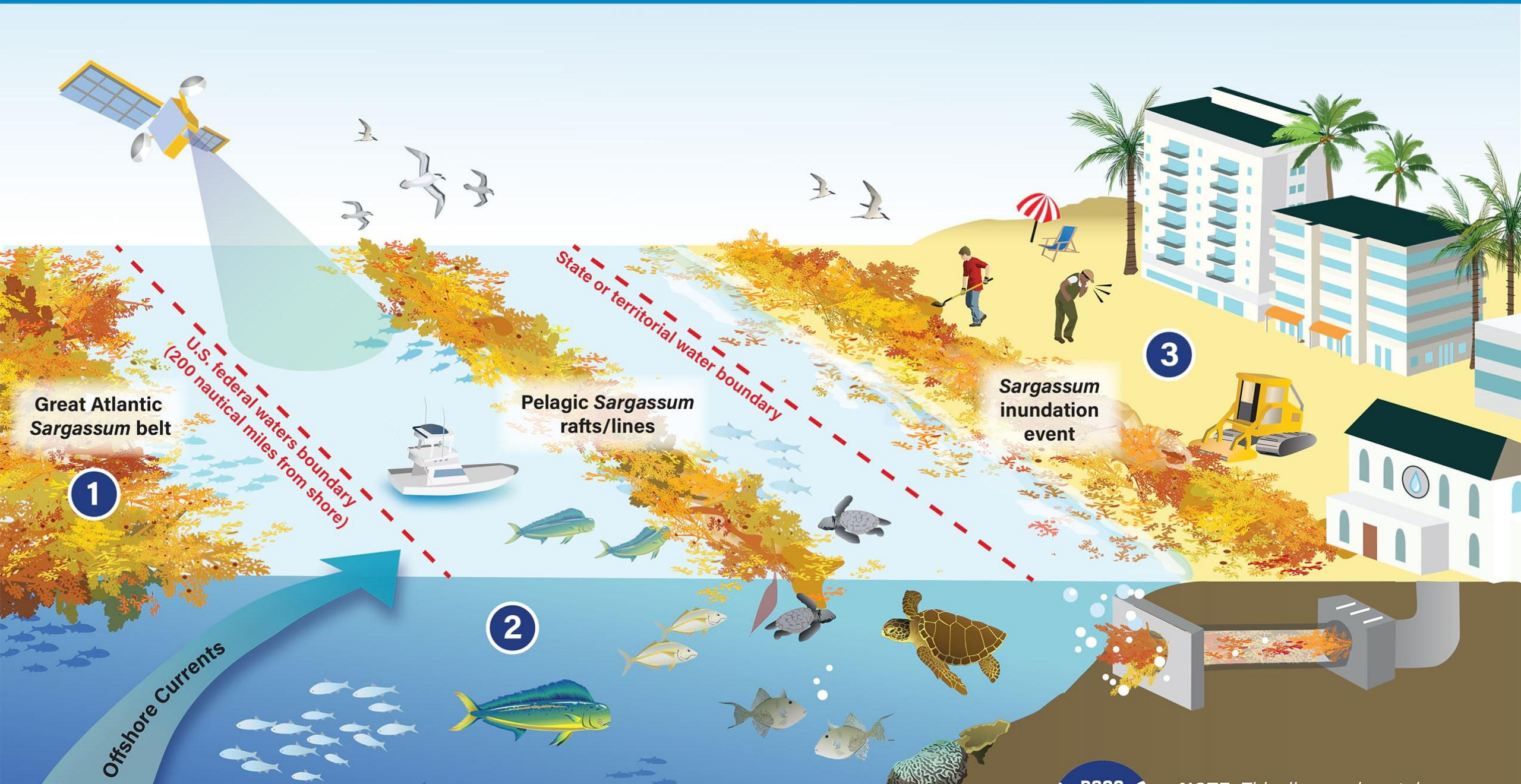
His "Vita Flora Cut Flower Preservative" has been written about in two books: Fresh Flowers: Identifying, Selecting and Arranging by Charles Marden Fitch, Abbeville Press,1st edition, pgs. 33 & 34, and Flowers Are Almost Forever; The Care and Handling of Cut Flowers by Libbey Oliver, Brandylane Publishing. The former describes how Mr. Ruth's Vita Flora extended the life of Gerbera cut flowers seven days longer than three competitive products; the latter explains the advantages of using his Vita Flora Cut Flower Preservative on cut flowers. (As a footnote in her book, Ms. Oliver describes how effective Mr. Ruth's Vita Derma Lotion is in protecting hands from irritants and contact dermatitis).

Industry Publications cont'd:

The August, 2001, Vol. 16 No 8, issue of "Nursery News Magazine" features a front-page article written by Vahan Dinihanian, President of Dinihanian Floral Products, Beaverton, OR entitled, "Make Holiday Feelings Last; Preserve Your Christmas Greens". In this article, Mr. Dinihanian writes, ***"William Ruth is the only known scientist*** to develop a preservative that will allow the exchange of oxygen and liquids between the plant material it is applied to and the ambient air. The formulation through contact systemic action actually feeds the still living cut material with minerals and plant extracts that the plant material needs to continue living after it is cut. Plant material treated with Vita Christmas Tree & Wreath Preservative has been known to remain alive and green for up to seven months. These tests have extended through ten years of trials with the same consistent results." (***He is the only known scientist*** to develop plant formulations that solve existing problems in farming, horticulture, and algae. Learn more: VITA PRODUCTS, INC)

The preceding article was also published in the Greens Issue of "Flower News" on October 13, 2001. Dr. Fran Gare, Nutrition Consultant for CBS, was to publish her latest book on healthy anti-aging nutrition that would have included growing food with Vita Planta. Sadly, her assistant passed away and she was unable to finish the book.

What is *Sargassum*, where does it come from, and what happens when it washes ashore?



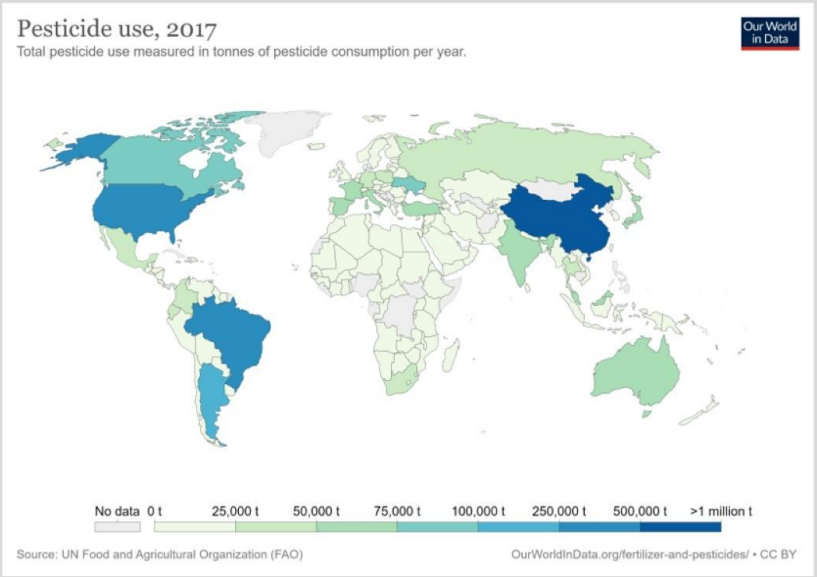


The formulations described in this brief presentation are protected as Proprietary Technology and can be purchased by any interested party (foreign or domestic) to market and promote on a global scale for significant financial gain.

Contact William L. Ruth at:
602-524-6008, billruthphone@gmail.com

Pesticide Demand and Use Worldwide →

Replace these pesticides with Vita Products™ Formulations. Their environmental & non-polluting 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.
If a pesticide is required, Vita's formulations increase the efficacy of its use.



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

But, while profit potential is evident, the intent of this presentation is to present the case for its contribution to solving these persistent diseases and environmental nuisances globally.